

RESPONSE TO REQUEST FOR QUALIFICATIONS FOR

At-The-Ready Consultant Engineering Services for Municipalities

Construction Inspection Services

**Vermont Agency of Transportation
Municipal Assistance Bureau**

March 6, 2020





Stantec has been providing an array of planning, design, engineering, construction inspection, and project management services to VTrans and the municipalities and communities of Vermont for over 65 years.



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A.

COVER LETTER

Burlington Great Streets, Burlington, Vermont



A.

COVER LETTER



Stantec Consulting Services Inc.
55 Green Mountain Drive
South Burlington, Vermont 05403

March 6, 2020

Nydia Lugo

Municipal Assistance Bureau
Vermont Agency of Transportation
219 North Main Street
Barre, Vermont 05641

RE: RFQ for At-The-Ready Consultant Engineering Services for Municipalities

Dear Ms. Lugo:

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind. When we take on a project, we see more than a highway, road, bridge, or pond. At Stantec, we look at every challenge as an opportunity to bring communities together. In the face of ever-increasing budget constraints and the need for an expanding range of services, having a trusted team such as Stantec makes sense for your high priority projects requiring multi-disciplined consultation. Our proposed team of engineers and environmental scientists is broadly skilled and has extensive experience with the design, project management, and construction inspection services typically required for projects administered through the VTrans Municipal Assistance Bureau (MAB).

Our staff are recognized regional leaders in transportation and stormwater projects and have worked hand-in-hand with Vermont communities for many years. We have the experience and capacity to provide the highest level of service to our communities for the following reasons:

We Know the VTrans Project Development Process: The results speak for themselves. Our team members have provided design, project management, and construction inspection services for over 40 MAB funded transportation and stormwater projects over the last 10 years. Our team knows what it takes to move a project from concept to 100% design and into construction. It is one reason why Stantec has been repeatedly selected by our existing clients.

We understand Financial Constraints Facing Vermont Municipalities: Vermonters deserve high-quality services delivered in a reasonable amount of time to avoid unnecessary schedule delays and change orders during construction. First-rate work from a firm that is experienced with state and federally funded projects can result in tens or even hundreds of thousands of dollars saved during construction. Our team has a successful record of doing this for Vermont municipalities. It is our primary goal for every project we work on.

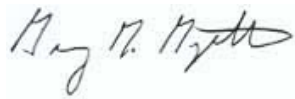
We Know State and Federal Regulations: We have knowledge of state and federal regulations. Over 95% of the work done by this team is state and federally funded, meaning these projects meet their requirements and follow their processes. Unique requirements typically include NEPA documentation, state and federal permitting and clearances, and right-of-way acquisition procedures.

We Are Committed to Vermont: Living and working in Vermont, and having worked with VTrans and many Vermont municipalities for over 65 years, we are passionate about helping our communities. We believe the best way to do this is to provide quality, innovative, and responsive service. That is our commitment.

We emphasize the depth of our in-house resources, our specific knowledge of MAB projects and processes, and our ability to respond both timely and in sufficient detail to sustain progress and maintain the project schedules. We look forward to continuing to contribute our enthusiasm and skills to improve Vermont's infrastructure and environmental footprint. Thank you for your consideration.

Sincerely,

Stantec Consulting Services Inc.



Greg Goyette, PE
Principal, Transportation
(802) 497-6403
Greg.Goyette@stantec.com



Gary Santy, PE
Senior Principal, Transportation
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B.

GENERAL FIRM INFORMATION

Winooski River Walk, Winooski, Vermont



GENERAL FIRM INFORMATION

Introduction to Consultant

Communities are fundamental. Whether around the corner or across the globe, they provide a foundation, a sense of place and of belonging. That's why at Stantec, we always design with community in mind.

We care about the communities we serve—because they're our communities too. This allows us to assess what's needed and connect our expertise, to appreciate nuances and envision what's never been considered, to bring together diverse perspectives so we can collaborate toward a shared success.

We're designers, engineers, construction inspectors, scientists, and project managers, innovating together at the intersection of community, creativity, and client relationships. Balancing these priorities results in projects that advance the quality of life in communities across the globe. Projects that we're proud to be a part of and stand behind.

Company Information

Projects will be completed out of our South Burlington, Vermont office as Stantec Consulting Services Inc., a division of the Stantec group of companies.

FIRM NAME

Stantec Consulting Services Inc.

BUSINESS ADDRESS/PHONE/EMAIL

55 Green Mountain Drive
South Burlington, Vermont 05403
P: (802) 864-0223 | F: (802) 864-0165
E: Greg.Goyette@stantec.com | Gary.Santy@stantec.com

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES

Stantec Inc. was formed in 1954 in Canada. Stantec Consulting Services Inc., however, was originally incorporated in 1929 as Manhasset Civil Engineers and was eventually acquired by Stantec Consulting Group Inc. in 2004 (later renamed to Stantec Consulting Services Inc. that year). Stantec Consulting Services Inc. established the South Burlington, Vermont office in 2006 following the acquisition of Dufresne-Henry.

Stantec & Vermont

For 65+ years Vermont municipalities have been, and continue to be, very important clients to our team. We have a strong desire to be involved in our communities and are prepared to commit the necessary resources to help you succeed. Our deep and talented team offers Vermont municipalities the support of our many local staff who have established relationships with various local, regional, and state officials. As local and experienced staff, we can readily provide the closeness, accessibility, responsiveness, project area familiarity, and local contact to streamline the work and provide successful projects on your schedule.

Firm's Capabilities to Perform the Work

Our local team of planning, design, and engineering professionals has decades of first-hand experience in Vermont. The South Burlington office staff will lead these services. When needed, support from other regional offices can be readily solicited. These regional offices have over 2,000 staff members who can handle virtually any assignment. The result of this connected team's resources, knowledge, and experience is an unmatched commitment to meet your project's needs.

Understanding of the Work Required

Through our involvement with the MAB over the last 18 years and working with VTrans on over 15 retainer type contracts that date back to 1992, Stantec team members understand what it takes to successfully plan, design, and construct projects that receive funding through the MAB program. We have worked with MAB and municipal staff to move over 20 projects into construction over the last 10 years, and are currently working on over 15 projects that are in varying stages of project development.

A successful project is the result of identifying project issues and working together to find solutions. This includes the ability to anticipate issues and methods to expedite the project development process. Stantec team members have done this consistently for MAB projects. They understand that team work with municipal representatives and VTrans are paramount to successfully delivering projects. Our team members have a great understanding of not only how to find solutions for design and construction challenges,



but also of issues that require early coordination such as utility relocations, environmental permitting, and right-of-way acquisition. The team members shown on the organization chart include specialists in ROW plan and document development, utility coordination and relocation design, and environmental permitting including stormwater, wetlands, Act 250, and local review. Stormwater permitting is a complex issue in Vermont. Team members are very knowledgeable on how requirements apply to transportation projects. We have helped VTrans and ANR develop the Transportation chapter for the recently released and revised Vermont Stormwater Management Manual and are at the forefront of innovative stormwater practices that help municipalities not only meet their regulatory obligations but also improve water quality for our communities.

Team members are also familiar with the “Municipal Assistance Bureau Local Project Guidebook for Locally Managed Projects”. This document is used by Stantec as a framework for developing a detailed scope of work for each assignment and for helping municipalities navigate requirements associated with state and federally funded projects.

Past experience has also proven that having knowledge of the local area and established local relationships are a great benefit. Having worked in Vermont for over 65 years, our team has these qualities and resources. From our experience with working with the VTrans MAB program, we also understand the value of having a team with a wide range of capabilities, experience, and resources. For

instance, when VTrans needed specialty public relations material for a number of concurrent construction projects in the Waterbury area, including the municipally managed roundabout at the intersection of US Route 2 and VT Route 100, Stantec’s graphic artists were available to assist and quickly produce a widely used presentation that was positively received by the community.

Having worked on numerous projects administered through the Municipal Assistance Bureau, our project team understands the constraints our communities are often working with. Project funding is often based on cost estimates prepared during the scoping phase. This project funding is typically capped and any design and construction costs over the budgeted amount often become the responsibility of the municipality. Our team has had numerous successes working with Vermont communities to move these types of projects into construction and within their allotted budgets.

How to Work with Stantec

The organization chart on page 15 includes Stantec’s personnel that are available to support your projects. If a municipality elects to work with Stantec on their project, they can notify Stantec’s Program Manager, Greg Goyette. Greg will then discuss the project with Assignment Managers and assemble the team that has the qualifications and availability to complete the work. The Assignment Manager will then work closely with the appropriate municipal staff to develop a scope of work and fee that fits expectations and budget.



Subconsultants Vermont Survey & Engineering (VSE) | Survey Services

FIRM NAME

Vermont Survey and Engineering, Inc.

BUSINESS ADDRESS/PHONE/EMAIL

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

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES

Vermont Survey and Engineering, Inc. (1982)

Vermont Survey and Engineering, Inc. (VSE) is a New England-based Land Surveying firm, first incorporated in 1982. VSE's client base encompasses Federal, State, and Municipal agencies as well as commercial, industrial, and residential developers. 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 construction layout

surveys, geodetic control and topographic, hydrographic, boundary retracement, and ALTA/ACSM.

Their extensive experience working on all types of VTrans and municipal projects have included projects for highway, bridges, shared-use paths, 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.

S. W. Cole Engineering | Construction Materials Testing Services

FIRM NAME

S. W. Cole Engineering, Inc.

BUSINESS ADDRESS/PHONE/EMAIL

55 Leroy Road, suite 15
Williston, Vermont 05495
P: (802) 391-4542
E: info@swcole.com

YEAR FIRM WAS ESTABLISHED/ FORMER FIRM NAMES

S. W. Cole Engineering, Inc. (1979)

Established in 1979 in Bangor, Maine, S. W. Cole Engineering, Inc. is a geotechnical engineering, geo-environmental consulting and construction materials testing firm serving private and public sector clientele across New England with offices in Maine, New Hampshire, Massachusetts, and Vermont. Their team of engineers, scientists and technicians provide services on more than 1,800 projects each year.

Their services include:

GEOTECHNICAL ENGINEERING: Their licensed engineers provide sensible geotechnical solutions for foundations, earthwork and pavements associated with building, site development and infrastructure projects in New England. Services include:

- Geotechnical Feasibility Studies
- Subsurface Investigations
- Spread Footing Design Parameters
- Deep Foundation Engineering and Design
- Ground Improvement Engineering
- Excavation and Dewatering Consulting
- Retaining Wall and Slope Stability Analyses
- MSE Retaining Wall Design
- Pavement Engineering and Design
- Geotechnical Laboratory Testing

GEO-ENVIRONMENTAL SERVICES: Their geologists provide services from pre-construction evaluation of a project to exploring ways to protect the land and groundwater after its development. Services include:

- Phase I and Phase II Environmental Site Assessments
- Geothermal Ground Source Investigations
- Groundwater Monitoring and Soil Sampling Resistivity and Conductivity Testing
- Underground Storage Tank Site Assessments
- Water Resource Evaluations
- Construction Blasting Assessments
- Subsurface Stormwater Soil Assessments
- Third-Party Inspection Services
- Environmental Compliance Monitoring

CONSTRUCTION MATERIALS TESTING & SPECIAL INSPECTIONS:

Their certified technicians provide field and laboratory testing for soil, concrete, masonry, steel, fireproofing and asphalt construction materials, including:

- Construction QA / QC Programs and Monitoring
- Earthwork Observations and Compaction Testing
- Reinforced Concrete Testing and Special Inspections
- Soil / Aggregate Sampling and Testing
- Structural Masonry Testing and Special Inspections
- Structural Steel Testing and Special Inspections
- Spray-Applied Fireproofing Testing and Special Inspections
- Pavement Evaluation and Testing
- IBC Special Inspection Coordination
- Slab Flatness and Moisture Testing

S. W. Cole has the staff and resources needed to complete projects under these contracts cost effectively and on schedule. The size and resources of their company and the capabilities of their staff allow them to balance large and small projects with varying schedules. Their staff size has grown regularly since 1979, in response to the needs of our clients. They have experienced low turnover of their staff, enabling them to provide continuity of their personnel while demonstrating their commitment to their clients' projects. S. W. Cole currently serve on average about 1800 projects per year and are in a position to start providing services immediately. They have demonstrated their ability to meet their client's needs for over 40 years.

Program Manager

| | | |
|---------------------------|--------------|--------------------------|
| Greg Goyette, PE * | 802.497.6403 | greg.goyette@stantec.com |
|---------------------------|--------------|--------------------------|

Design Services

Assignment Managers

| DESIGN SERVICES | | |
|-----------------------------|--------------|----------------------------|
| Gary Santy, PE * | 802.497.6421 | gary.santy@stantec.com |
| Greg Goyette, PE * | 802.497.6403 | greg.goyette@stantec.com |
| Greg Edwards, PE * | 802.497.6398 | greg.edwards@stantec.com |
| Mike Fowler, PE * | 802.497.6395 | michael.fowler@stantec.com |
| Israel Maynard, PE * | 802.497.6415 | israel.maynard@stantec.com |
| Marc Foisly, PE * | 802.497.6399 | marc.foisly@stantec.com |
| Erik Alling, PE* | 802.497.6004 | erik.alling@stantec.com |
| Amanda Ludlow* | 802.497.6435 | amanda.ludlow@stantec.com |

Lead Engineers

| | | |
|------------------------------|--------------|-----------------------------|
| Karl Richardson, PE * | 802.497.6420 | karl.richardson@stantec.com |
| Todd Duguay, PE * | 802.497.6397 | todd.duguay@stantec.com |
| Dave Youlen, PE * | 802.497.6428 | dave.youlen@stantec.com |
| Glenn Burgmeier, PE * | 802.497.6328 | glenn.burgmeier@stantec.com |
| Thad Luther, PE * | 802.497.6412 | thad.luther@stantec.com |
| Chris Gendron, PE * | 802.497.6402 | chris.gendron@stantec.com |
| Dave McNamara, PE * | 603.263.4653 | david.mcnamara@stantec.com |
| Lauren Meek, PE * | 207.887.3440 | lauren.meek@stantec.com |
| Marie Sullivan, PE * | 781.221.1246 | marie.sullivan@stantec.com |
| Walt Woo, PE * | 781.221.1294 | walt.woo@stantec.com |

Subconsultant Support

| SURVEY | | |
|---|--------------|------------------------|
| Vermont Survey & Engineering, Inc. | 802.229.9138 | info@vermontsurvey.com |

| ARCHEOLOGY / HISTORIC | | |
|---|--------------|----------------------|
| Hartgen Archeological Associates | 802.387.6020 | tjamison@hartgen.com |

Municipal Project Management Services

Assignment Managers

| MUNICIPAL PROJECT MANAGEMENT | | |
|------------------------------|--------------|----------------------------|
| Gary Santy, PE * | 802.497.6421 | gary.santy@stantec.com |
| Greg Goyette, PE * | 802.497.6403 | greg.goyette@stantec.com |
| Greg Edwards, PE * | 802.497.6398 | greg.edwards@stantec.com |
| Thad Luther, PE * | 802.497.6412 | thad.luther@stantec.com |
| Rick Bryant, PE * | 413.387.4502 | rick.bryant@stantec.com |
| Mike Fowler, PE * | 802.497.6395 | michael.fowler@stantec.com |

Construction Inspection Services

Assignment Managers

| CONSTRUCTION INSPECTION SERVICES | | |
|----------------------------------|--------------|--------------------------|
| John Little,* | 802.497.6411 | john.little@stantec.com |
| Greg Edwards, PE * | 802.497.6398 | greg.edwards@stantec.com |
| Dave Youlen, PE * | 802.497.6428 | dave.youlen@stantec.com |

Construction Inspectors

| | | |
|--------------------------------|--------------|----------------------------|
| Bernie Gagnon, PE* | 802.497.6432 | bernie.gagnon@stantec.com |
| Doug Campbell, PE* | 802.497.6391 | doug.campbell@stantec.com |
| Deron Barnes* | 802.497.6323 | deron.barnes@stantec.com |
| Caela Waite* | 802.497.6426 | caela.waite@stantec.com |
| Todd Duguay, PE | 802.497.6397 | todd.duguay@stantec.com |
| Justin Laperle, EIT | 802.864.0223 | justin.laperle@stantec.com |
| Rachel Galus | 802.864.0223 | rachel.galus@stantec.com |
| Richard Baker, NICET II | 518.218.5851 | richard.baker@stantec.com |
| John Huston, NEICT II | 518.452.4358 | john.huston@stantec.com |

Subconsultant Support

| MATERIAL TESTING | | |
|-------------------|--------------|-----------------|
| S. W. Cole | 802.391.4542 | info@swcole.com |

| SURVEY | | |
|---|--------------|------------------------|
| Vermont Survey & Engineering, Inc. | 802.229.9138 | info@vermontsurvey.com |

Additional Technical Support / Discipline Leads

| PAVEMENT DESIGN | | |
|--|--------------|---------------------------------|
| Mike Fowler, PE * | 802.497.6395 | michael.fowler@stantec.com |
| TRAFFIC MANAGEMENT / CONSTRUCTIBILITY | | |
| Dave Youlen, PE * | 802.497.6428 | dave.youlen@stantec.com |
| Bernie Gagnon, PE | 802.497.6432 | bernie.gagnon@stantec.com |
| BIKE / PEDESTRIAN / COMPLETE STREETS | | |
| Aleece D'Onofrio, PE | 781.221.1126 | aleece.donofrio@stantec.com |
| Erik Alling, PE* | 802.497.6004 | erik.alling@stantec.com |
| Mike Rutkowski, PE | 919.277.3106 | mike.rutkowski@stantec.com |
| TRAFFIC SIGNAL DESIGN | | |
| Thad Luther, PE* | 802.497.6412 | thad.luther@stantec.com |
| Walt Woo, PE* | 781.221.1294 | walt.woo@stantec.com |
| David DeBaie, PE | 603.206.7533 | dave.debaie@stantec.com |
| RIGHT-OF-WAY | | |
| Harry Petrovs, LS | 802.497.6423 | harry.petrovs@stantec.com |
| Lori Buxton | 802.497.6390 | lori.buxton@stantec.com |
| TRAFFIC SAFETY & OPERATIONS | | |
| Vichika Iragavarapu, PE | 856.234.0800 | vichika.iragavarapu@stantec.com |
| GEOTECHNICAL | | |
| Trey Dykstra, PE | 603.206.7552 | trey.dykstra@stantec.com |
| Brian Foley, PE | 781.221.1201 | brian.foley@stantec.com |
| STRUCTURES | | |
| George Bogue, PE | 802.497.6325 | george.bogue@stantec.com |
| Jared Grigas, PE | 802.864.0223 | jared.grigas@stantec.com |
| LIGHTING DESIGN | | |
| Maegan Crowley | 207.887.3826 | maegan.crowley@stantec.com |
| LANDSCAPE DESIGN | | |
| Bob Corning, RLA, LEED | 617.654.6018 | bob.corning@stantec.com |
| STORMWATER DESIGN / ANALYSIS | | |
| Amanda Ludlow* | 802.497.6435 | amanda.ludlow@stantec.com |
| Chris Gendron, PE* | 802.497.6402 | chris.gendron@stantec.com |
| Bernadette Callahan, PE | 215.665.7181 | bernadette.callahan@stantec.com |
| HYDRAULICS / CULVERT DESIGN | | |
| Israel Maynard, PE * | 802.497.6415 | israel.maynard@stantec.com |
| Gerard Fortin, PE | 603.206.7544 | gerard.fortin@stantec.com |
| VISUALIZATION / CADD / BIM / 3D MODELING | | |
| Audrey Cropp | 617.654.6022 | audrey.cropp@stantec.com |
| John Barone | 303.565.6172 | john.barone@stantec.com |
| Steve Magoon | 802.497.6413 | steve.magoon@stantec.com |

| ENVIRONMENTAL (CONTAMINATED SOILS, NEPA, PERMITTING) | | |
|---|--------------|---------------------------------|
| Jeff Sterritt | 802.383.8724 | jeff.sterritt@stantec.com |
| Leigh Anne Sapienza | 603.206.7564 | leigh-anne.sapienza@stantec.com |
| Kevin Walsh | 857.415.3921 | kevin.walsh@stantec.com |
| Polly Harris | 802.497.6407 | polly.harris@stantec.com |
| UTILITIES (WATER / SEWER, TUNNELING / TRENCHLESS, RELOCATION) | | |
| Doug Campbell, PE* | 802.497.6391 | doug.campbell@stantec.com |
| Julian Prada, PE | 802.497.6419 | julian.prada@stantec.com |
| Dave Youlen, PE * | 802.497.6428 | dave.youlen@stantec.com |
| RAIL | | |
| Tom Knight, PE | 802.497.6409 | tom.knight@stantec.com |
| Mike Fowler, PE * | 802.497.6395 | michael.fowler@stantec.com |
| Ryan Raske, PE | 612.712.2118 | ryan.raske@stantec.com |
| SAFETY | | |
| Tom Knight, PE | 802.497.6409 | tom.knight@stantec.com |
| ASSET MANAGEMENT | | |
| Ramandeep Josen | 781.221.1203 | ramandeep.josen@stantec.com |
| Bill Scarpati | 781.221.1165 | william.scarpati@stantec.com |
| GRANT WRITING | | |
| Heidi Peper | 320.529.4370 | heidi.peper@stantec.com |
| Greg Edwards, PE * | 802.497.6398 | greg.edwards@stantec.com |
| ENGINEERING/TECHNICAL SUPPORT | | |
| Caela Waite* | 802.497.6426 | caela.waite@stantec.com |
| Justin Laperle, EIT | 802.864.0223 | justin.laperle@stantec.com |
| Rachel Galus | 802.864.0223 | rachel.galus@stantec.com |
| Sean Neely | 802.497.6433 | sean.neely@stantec.com |
| Joe Burke | 502.238.1774 | joey.burke@stantec.com |
| Peter Armata | 802.497.6005 | peter.armata@stantec.com |
| Derek Draper | 802.497.6396 | derek.draper@stantec.com |
| Deron Barnes* | 802.497.6323 | deron.barnes@stantec.com |
| Jamie Burke | 802.497.6408 | jamie.burke@stantec.com |
| Greg Barrett | 802.497.6324 | greg.barrett@stantec.com |
| Lori Buxton | 802.497.6390 | lori.buxton-myrick@stantec.com |
| Geoff Merkle | 802.497.6417 | geoff.merkle@stantec.com |
| Sarah Borenstein | 781.221.1064 | sarah.borenstein@stantec.com |
| Alanna Gerton, EIT | 603.206.7542 | alanna.gerton@stantec.com |

* Resume included for key staff in Section D.

Availability Chart

The following chart details availability of key staff members to devote to municipal projects over the next 6 months and an estimate of how much time each staff member has historically worked on municipal projects. It's important to note that, no matter the firm, staff availability will likely change over the life of the prequalification due to new assignments, staff turnover, promotions, and other factors. Stantec's unique depth, breadth, and quality of design professionals in Vermont uniquely positions us to absorb these changes without sacrificing the quality of design services that our clients have come to expect from us. In addition, we have had a very low turnover rate of key staff over the last 10 years, which leads to our clients receiving quality service on a consistent basis.

6 - Month Outlook

| Team Member | Project Role | Estimated Hours Available Over the Next 6 Months | % Time Typically Spent on Municipal Projects |
|---------------------|--|--|--|
| Greg Goyette, PE | Program Manager, Assignment Manager – Design, MPM | 500 | 50% |
| Gary Santy, PE | QA/QC, Assignment Manager - Design | 500 | 20% |
| Dave Youlen, PE | QA/QC, Assignment Manager – Construction Inspection, Lead Engineer, Traffic Management/Constructability, Utilities | 500 | 60% |
| Greg Edwards, PE | Assignment Manager – Design, MPM, Construction Inspection, Grant Writing | 500 | 20% |
| Mike Fowler, PE | Assignment Manager – Design, Pavement Design, Rail | 400 | 30% |
| Israel Maynard, PE | Assignment Manager – Design, Hydraulics/Culvert Design | 500 | 30% |
| Marc Foisy, PE | Assignment Manager - Design | 500 | 50% |
| Erik Alling, PE | Assignment Manager – Design, Bike/Ped/Complete Streets | 500 | 85% |
| Amanda Ludlow | Assignment Manager – Design, Stormwater Design/Analysis | 500 | 50% |
| Thad Luther, PE | Assignment Manager – MPM, Lead Engineer, Traffic Signal Design | 500 | 50% |
| Rick Bryant, PE | Assignment Manager – MPM | 500 | 50% |
| John Little | Assignment Manager – Construction Inspection | 500 | 50% |
| Karl Richardson, PE | Lead Engineer | 500 | 50% |
| Todd Duguay, PE | Lead Engineer, Construction Inspection | 500 | 50% |
| Glenn Burgmeier, PE | Lead Engineer | 500 | 50% |
| Chris Gendron, PE | Lead Engineer, Stormwater Design/Analysis | 500 | 70% |
| Dave McNamara, PE | Lead Engineer | 500 | 50% |

6 - Month Outlook - Continued

| Team Member | Project Role | Estimated Hours Available Over the Next 6 Months | % Time Typically Spent on Municipal Projects |
|------------------------|--|--|--|
| Lauren Meek, PE | Lead Engineer | 500 | 40% |
| Marie Sullivan, PE | Lead Engineer | 500 | 50% |
| Walt Woo, PE | Lead Engineer, Traffic Signal Design | 500 | 40% |
| Caela Waite | Engineer/Technical Support, Construction Inspection | 500 | 60% |
| Bernie Gagnon, PE | Construction Inspection, Traffic Management/Constructability | 500 | 50% |
| Doug Campbell, PE | Construction Inspection, Utilities | 500 | 75% |
| Deron Barnes | Engineer/Technical Support, Construction Inspection | 500 | 50% |
| Andrew McQueeney | Vermont Survey & Engineering | 500 | 50% |
| Stephen Fraser, LS | Vermont Survey & Engineering | 500 | 50% |
| Jason Riley | Vermont Survey & Engineering | 500 | 50% |
| Elise Manning-Sterling | Hartgen Archeological Associates | 150 | 30% |
| Thomas Jamison | Hartgen Archeological Associates | 100 | 20% |
| Walter Wheeler | Hartgen Archeological Associates | 100 | 20% |
| Alan Brown | S.W. Cole Engineering | 550 | 10% |
| Scott Harmon | S.W. Cole Engineering | 500 | 10% |
| Thomas Morgan, PE | S.W. Cole Engineering | 500 | 15% |

C.

CONSTRUCTION INSPECTION SERVICES

Shared-Use Path, Montpelier-Berlin, Vermont





CONSTRUCTION INSPECTION SERVICES

Qualifications and Experience

CONSTRUCTION INSPECTION

Since 1954, Stantec has provided a full range of construction engineering and inspection services to state and municipal clients. We have a local Vermont staff of over 60 people which makes us one of the largest employers of consulting engineers in our state. We have been providing construction services to municipalities in Vermont for over 35 years. Just in the last ten years, Stantec has completed over 20 construction inspection assignments for various municipalities. These projects include full road reconstruction, streetscape, sidewalk, curb, shared-use path, retaining wall, drainage, paving, lighting, landscape, water, sewer and stormwater construction. Since 1956, Stantec has provided a full range of construction engineering and inspection services to state and municipal clients. Most of these projects have utilized the VTrans Standard Specifications for Construction, so our team is very familiar with them. Because we also do a tremendous amount of design work for municipalities and VTrans, those standards are like second nature to our staff. Our construction staff frequently provides constructability reviews for our designers and the interaction and clarifications that follow provide our designers with a better product and our construction staff with an even more in-depth knowledge of these standards. They understand there is a significant amount of responsibility in providing resident engineer services on a municipal project. Through their experience, they realize these projects require more responsibility in the administration, coordination and issue resolution of the project and they look forward to these projects and the additional responsibility. This group has a significant record of successfully getting local projects managed through construction.

In addition to our work on municipal projects, since 2001, we have been assigned nine VTrans term agreements for construction inspection. On these projects, we have provided a wide range of construction inspection services including but not limited to: earthwork; drainage; stormwater management; pavement milling; joint repair; crack sealing; asphalt and concrete paving; pavement markings; intersection improvements; sidewalks; retaining walls; roadway lighting; traffic signal systems; intelligent transportation systems (ITS) equipment installation; sign and sign structure replacement; installation of appurtenances such as guide railing, median barrier, and fencing; and landscaping. Our assignments have varied in

duration and the number of inspectors was adjusted to meet the project need. The projects we worked on also included traffic management strategies such as construction phasing, lane closure restrictions, detours, night and weekend work, critical path method schedule provisions, and involvement with local communities.

TUNNELING AND TRENCHLESS SOLUTIONS

Aging buried culverts that allow flow of surface water form part of today's roadway infrastructure that could potentially create significant problems if the culvert lining were to fail. Once a degraded section of a culvert cracks or opens, the soil backfill above the culvert may flow into the structure that could ultimately result in roadway settlement causing a safety concern for the traveling public. Furthermore, increased stream flow associated with climate change and resultant flow from major storm events are an additional concern where culverts are degraded or inadequately sized to carry the volume of flow. The need to rehabilitate or replace deteriorated or undersized culverts is exacerbated for major roadways that cannot be closed or where the depth of the culvert is not practical for open cut replacement. The Stantec team can assist the municipality in constructing these creative solutions to mitigate hazards through assistance with the development of trenchless design documents and with construction management of replacement culverts.

Tunneling and trenchless solutions allow infrastructure to be constructed while maintaining stream flow as well as traffic. Stantec's Tunneling and Trenchless Practice is experienced in developing and constructing innovative technical solutions to minimize disruption to the public for rehabilitation of the existing infrastructure or installation of a new utility. A wide variety of trenchless technology solutions are available including microtunneling, horizontal directional drilling (HDD), pipe jacking or sequential excavation methods to name a few. The team can assess the ground conditions to determine a cost effective, optimal trenchless solution to either rehabilitate the existing culvert or construct a new culvert. The Stantec team is also experienced in construction management of the full range of available trenchless technologies and working together with the municipality we will make sure the project is built in accordance with the design documents and with adequate construction documentation to support design validation.



Richmond Bridge Painting, Richmond, Vermont

BRIDGE PAINTING

Stantec has more than 25 years of experience providing bridge coatings inspection. We can leverage this experience to better serve VTrans. Currently, we provide similar services on five statewide on-call agreements: Massachusetts Department of Transportation (MassDOT), South Carolina Department of Transportation (SCDOT), North Carolina Department of Transportation (NCDOT), West Virginia Department of Transportation – Division of Highways (WVDOT-DOH), and Maryland State Highway Administration (MSHA). We also provide similar services on individual projects for Florida Department of Transportation (FDOT), Virginia Department of Transportation (VDOT), Pennsylvania Department of Transportation (PennDOT), Connecticut Department of Transportation (ConnDOT), Maryland Transportation Authority (MDTA), and other transportation agencies throughout the eastern US.

We have a reputation for our expertise in providing on-call, lead-based paint abatement and paint inspection services on bridges. Our inspectors are among the most qualified and experienced in their fields and are trained by the NACE and other nationally recognized organizations, as well as SSPC.

Our full-service coatings/corrosion engineering group, along with our environmental scientists, can offer your project broad-based expertise for bridge painting projects involving lead-based paint removal. Transportation agencies throughout the eastern US call on our unique services and reputation as an industry leader for some of the most difficult lead removal and bridge painting projects. Currently, we are providing these services as part of the \$255 million Longfellow Bridge rehabilitation project, located in downtown Boston, Massachusetts. With the environmental sensitivity of this project spanning the Charles River and close proximity of local businesses, including restaurants, we are providing critical surveillance and testing during the removal of lead-based paint from the structure. Our environmental and bridge coatings experts are making sure Massachusetts EEA, DEP, and federal EPA regulations are being complied with for this high-profile project.

Understanding of the Work Required

Through our involvement with over 40 municipal projects through the VTrans MAB process, Stantec team members understand the goals for these contracts. These goals include providing construction management services related to construction activities, including but not limited to project management, construction administration, resident engineering, construction oversight, materials sampling and testing, public outreach, quality assurance services for design-build projects, and specialty services related to construction projects. Past experience has also proven that having knowledge of the local area and established local relationships are a great benefit. Having worked in Vermont for over 60 years, the Stantec team is excited to have the opportunity to bring our extensive local municipal project construction experience to the table to VTrans and the municipalities of Vermont.

The construction of municipal projects often includes curb extensions, sidewalk, ADA accessible ramps, drainage work, rain garden, paving, lighting and landscaping. Often these projects are in residential neighborhoods where the existing sidewalks are heavily used. With projects adjacent to homes, parks and playgrounds, special attention to the safety of the residents is paramount. Therefore, traffic control and the safe passage of vehicles and pedestrians through the work zones is very important. Staff members are well versed in the Manual on Uniform Traffic Control Devices (MUTCD) and will ensure that the contractor follows this guidance.

A key aspect of urban construction is the constructed sidewalks and pedestrian facilities needed to meet the United States Access Board's Public Rights-of-Way Accessibility Guidelines (PROWAG). These guidelines are to ensure that access for persons with disabilities is provided wherever a pedestrian way is newly built or altered, and that the same degree of convenience, connection, and safety afforded the public generally is available to pedestrians with disabilities. Having been involved with reconstructed sidewalks and ramps on more than 40 projects, team members are keenly aware of the requirements and

potential solutions. Our proposed team's experience includes the construction of literally hundreds of sidewalk ramp reconstructions and helped develop solutions to meet the PROWAG. Although the contractor is ultimately responsible, team members are prepared to work with the contractor and designer, when needed, to point out anticipated issues early on and discuss solutions.

One major aspect of municipal construction projects is working closely with adjoining property owners. There are often abutting properties along the various locations in the project and it is paramount that the Contractor adhere to the restrictions surrounding access and impact to those properties. Stantec has had great success with the coordination and communication with property owners on previous projects. For example, on a recent urban project, the Municipality, Contractor and Stantec had a public meeting, inviting property owners for a brief overview of the project. The scope and approximate schedule were discussed, questions answered, and property owners were given an opportunity to leave their email addresses in order to receive weekly updates from Stantec outlining the upcoming work, etc. The result was minimal calls or complaints to the Municipality, and overall, a positive relationship between those on the project and the property owners. Although this exact approach may not be necessary on all projects, if desired by the Municipality, Stantec is prepared to implement an approach for public outreach that best fits the project.

Another major aspect when reconstructing pedestrian facilities is the ability to control pedestrians and others who try to use the facility when it is closed. Stantec understands the importance of maintaining positive public relations while ensuring the safety of the public as well as those working on the project. All questions or comments from the public will be addressed immediately and when that is not possible, they will be discussed with the MPM.

The prevention of erosion and the control of sediment is an important part of every project to ensure that it does not enter the Municipality's stormwater system or adjacent waterways. There are typically items and details in the design plans outlining the requirements for the contractor to follow. Stantec is very experienced in the oversight of this work and has a vast knowledge of the permit requirements for various types of projects. Even on low-risk projects, the contractor is required to follow EPSC management techniques detailed in the VTrans Low Risk Handbook and the Vermont Standards & Specifications for Erosion Prevention & Sediment Control. The implementation of measures will be important to monitor on a regular basis and ensure that the contractor follows all requirements.

Often urban projects require tree protection and root pruning. This requires the contractor to have an arborist on the project, or to work with the municipality's arborist if they have one, to oversee the root pruning to ensure the protection of the trees. Stantec often assists with the coordination of these efforts.



Most municipalities have numerous underground existing utilities. Stantec understands the importance of making sure the contractor contacts Dig Safe as well as the local Public Works, Water and Wastewater Departments and any private utilities to ensure that the utilities are well marked prior to construction starting.

Our team is prepared to provide a quality project by addressing these and other items as they come up throughout construction. Site safety is paramount and all Stantec employees are aware of potential issues associated with their jobs and are provided with the necessary training, equipment and tools to carry out those roles.

From our experience with the VTrans Construction Services program, we also understand the value of having a team with a wide range of capabilities, experience and resources. With over 22,000 staff company-wide, Stantec has virtually every service needed by our transportation clients covered. For the construction oversight assignments, this includes providing various levels of staff including chief inspectors, office engineers, and inspectors. This also includes providing assistance to the Finals Unit, quality assurance services for design-build contracts, administrative services to the Independent Assurance Unit at the materials certifications and testing facility, and media/public outreach expertise, including website maintenance and support. Requests may come for assistance with 'specialty services' related to construction and/or training activities, for example in the fields of schedule analysis and/or claims analysis, or providing construction quality assurance services for design-build projects, including a Quality Assurance Manager and/or other team members. Our team can also provide trenchless technology support, paint/coating inspection services, water/wastewater oversight, aviation and rail project support, landscape support, and others.

Providing a wide variety of qualified personnel is key to assisting municipalities in covering their broad need for inspection services with appropriately trained staff. As shown in our organization chart on page 15, our team has this variety and can cover nearly all aspects of construction oversight services. We offer highly trained staff, including professional engineers, as well as others certified by the New England Transportation Technician Certification Program (NETTCP), and the American Concrete Institute (ACI). We have inspectors trained to oversee railroad crossings and signal construction, airport construction services, traffic signals, river restoration, and more.

Over the years, Stantec has always received high praise from Resident Engineers for our willingness to step up and consistently perform at the level of expectations outlined on any given project. Our ability to assist the municipality with the process required to successfully produce a quality project includes a thorough understanding and knowledge of the VTrans MAB Local Projects Guidebook for Locally Managed Projects, the VTrans Construction Manual, Standard Specifications for Construction, General Special Provisions, Supplemental Specifications, project

Special Provisions, Materials Sampling Manual, the Manual on Uniform Traffic Control Devices (MUTCD), as well as VOSHA's 29 CFR 1926/1910 Safety and Health Standards for Construction. Having this understanding and knowledge allows our team members to perform with confidence and fully compliment the Resident Engineers on their projects. Stantec also ensures that all staff are adequately equipped to perform their duties safely and accurately. This is what we do, and we do it well.

Project Examples



↑ **MONTPELIER SHARED-USE PATH, MONTPELIER, VERMONT**

Stantec provided resident engineer, construction inspection, environmental monitoring and project management services for this \$5 million project. Responsibilities included the observation of construction for compliance with plans and specifications, distribution and tracking of shop drawing submittals and requests for information, development and independent cost analysis of change orders, measurement and independent verification of all contractor submitted quantities, approval of all contractor payment requests and the documentation and recording of erosion control protection and permit compliance. Stantec tracked and recorded the project quantities, costs, change orders and payment requisitions using the APPIA project management program for infrastructure construction projects.

The project consisted of the construction of a 1.93-mile long multi-use path. Work performed under this contract included the relocation of approximately 900 feet of active railroad line, a new 10'x10'x30' concrete box culvert, relocation of a City-owned water main, relocation of a privately owned sewer line, a new sewage pump station, construction of eight precast-block retaining walls, drainage, subbase, paving, landscaping, fencing, signage and pavement markings.

CONTACT

Tom McArdle
City of Montpelier, VT 05602
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E: tmcardle@montpelier-vt.org

BURLINGTON TAP TA15(1), BURLINGTON, VERMONT

Stantec provided resident engineer, construction inspection and project management services for this pedestrian safety improvements project. Responsibilities included the observation of construction for compliance with plans and specifications, distribution and tracking of shop drawing submittals and requests for information, development and independent cost analysis of change orders, measurement and independent verification of all contractor submitted quantities and approval of all contractor payment requests. Stantec tracked and recorded the project quantities, costs, change orders and payment requisitions using the APPIA project management program for infrastructure construction projects.

The project consisted of the construction of five new locations for pedestrians to safely cross a major street in the City of Burlington, VT. This included new sidewalk and curb replacements, new traffic calming curbed bulb outs and new ADA accessible ramps. The locations chosen are predominantly in residential neighborhoods where the sidewalks are heavily used. This meant that the construction was adjacent to homes, parks and playgrounds and therefore required special attention to the safety of the pedestrians/residents. Traffic control was closely monitored to help ensure the safe passage of vehicles and pedestrians through the work zones.

CONTACT

Olivia Darisse
City of Burlington
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E: odarisse@burlingtonvt.gov

BURLINGTON STP BP13(6), BURLINGTON, VERMONT

Stantec provided resident engineer, construction inspection and project management services for this pedestrian safety improvements project. Responsibilities included the observation of construction for compliance with plans and specifications, distribution and tracking of shop drawing submittals and requests for information, development and independent cost analysis of change orders, measurement and independent verification of all contractor submitted quantities and approval of all contractor payment requests, including certified payroll compliance. Stantec tracked and recorded the project quantities, costs, change orders and payment requisitions using the APPIA project management program for infrastructure construction projects.

The project consisted of the construction of three new raised intersections at locations where many children and other pedestrians frequently cross busy city streets to access a local school, a popular park and other destinations. These crossings needed to be compliant with the Americans with Disabilities Act (ADA), a key component when providing safe pedestrian access. Along with the raised intersections, the project included the revision of the existing drainage features, new sidewalk, new curb, revised signing and

pavement markings, traffic control and the efforts needed for the project to stay in compliance with local and state permits.

CONTACT

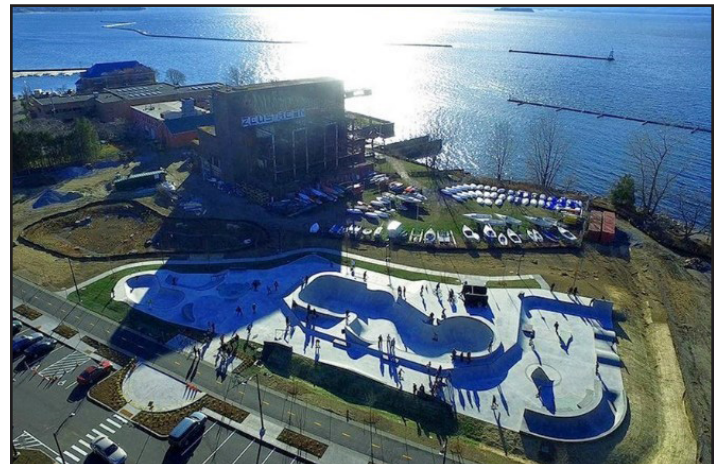
Olivia Darisse
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CHURCH STREET MARKETPLACE ELECTRICAL AND STREET LIGHTING IMPROVEMENTS PROJECT, BURLINGTON, VERMONT

Our team provided resident and construction administration services for this \$2 million project. Work includes complete replacement of the street's electrical infrastructure including new lighting and electrical feeds for street vendors, and a street tree irrigation system. Also included is a substantial amount of paver brickwork and a new type of duct bank that incorporates HDPE piping to enclose conduit instead of traditional concrete duct bank.

CONTACT

David Allerton
Formerly of City of Burlington
P: (802) 893-6030
E: dallerton@miltonvt.gov



↑ WATERFRONT ACCESS NORTH PHASE II, BURLINGTON, VERMONT

Stantec provided project management and construction inspection services for this \$5.1 Million project which was one of the City of Burlington's highest profile projects. The project included extending Lake Street north along the west side of the Genesee & Wyoming Railroad, the construction of two gravel wetland stormwater treatment facilities, a world-class skate park and covered pavilion, realignment of the Burlington Bikeway multi-use path, new street lighting, tracking multiple levels of contaminated soil, underground utilities, landscaping and other incidental items.

Responsibilities included overseeing staffing and resources, tracking the payment of items through 23 different funding sources, attending biweekly project team meetings, invoicing

and coordination between the city, state, FHWA, the design team and Stantec.

CONTACT

David Allerton
Formerly of City of Burlington
P: (802) 893-6030
E: dallerton@miltonvt.gov



↑ WILLIAMSTOWN STP WALK (18), WILLIAMSTOWN, VERMONT

We provided construction administration and inspection services for the VT Route 14 sidewalk and pedestrian bridge construction in Williamstown, Vermont. Construction of this project included 1,600 lf of Bituminous Concrete Pavement sidewalk, two pedestrian bridges, and lighting.

“John and Erik were an excellent project manager-resident inspection team. They were superb in all areas. We felt they really looked out for the town’s best interest.” ~ Garret Earls

CONTACT

Garret Earls
Town of Williamstown
P: (802) 433-6671
E: twnmgr@williamstownvt.org

BURLINGTON WATERFRONT CONSTRUCTION, BURLINGTON, VERMONT

Our team provided construction observation services for this \$900,000 project which consisted of the construction of a 1,500 lf multi-use path connecting pedestrians and bicyclists at the City’s largest public park. This project also consisted of work near the waterfront including deck replacement, sidewalks, and a retaining wall.

CONTACT

Norm Baldwin
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ROBERTS ROAD OVER GULFSTREAM BROOK BRIDGE #49 REPLACEMENT, WOODSTOCK, VERMONT

Stantec provided resident and construction administration services to the town of Woodstock for the replacement of this crossing that was critically damaged by Tropical Storm Irene. Stantec also provided preliminary and final design for this 62 lf single lane wide precast concrete bridge structure using accelerated bridge construction.

CONTACT

Phil Swanson
Town of Woodstock
P: (802) 457-3456
E: phil@townofwoodstock.org

BRIDGE STREET RAILROAD BRIDGE OVER BRIDGE STREET (TH#2) HARTFORD, VERMONT

Stantec provided construction oversight services associated with the replacement of Bridge Street Railroad Bridge that carries New England Central Railroad over Bridge Street (TH #2). The project involved multiple facets of construction including traffic control, utility work, removal and disposal of contaminated soil, new drainage and drainage modifications, roadway and sidewalk construction, but the major challenge was the short work period for replacement of the railroad bridge. The new bridge was founded on a micro-pile foundation that was drilled from the top of the rail bed. Piles were later cutoff below grade and a pile cap was placed. The contractor was allowed a maximum of 48 hour track closure to remove the existing superstructure and replace it with a new precast beam bridge.

CONTACT

Richard Menge, PE
Town of Hartford
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VTRANS WACR BRIDGE 501 TROPICAL STORM IRENE, EMERGENCY REPAIRS, HARTFORD, VERMONT

Stantec provided design, permitting and construction administration for the emergency work in response to this disaster. WACR Bridge 501 in White River Junction, suffered severe damage due to Tropical Storm Irene. The southern pier of this 375 foot long, three span structure was undermined during the storm and the pier settled nearly six feet and listed upstream nearly five feet. The middle span of the structure nearly slipped off the pier and into the river. Construction administration included extended periods of 24/7 construction staffing and around the clock on call design services for coordination with work in the field, as well as continuous coordination with the contractor to complete this construction manager/design build effort.

CONTACT

Mladen Gagulic
VTrans
P: (802) 828-6405
E: mladen.gagulic@vermont.gov



↑ **GAZO AVENUE OUTFALL REPAIR, BURLINGTON, VERMONT**

Stantec provided on-site construction inspection, project management, and construction administration services for this project which included installation of 350 feet of new storm drainpipe, 4 new stormwater structures, a scour pool, as well as slope stabilization and over 4,000 CY of fill. Services also included close coordination with the adjoining property owners as this project was literally in their back yards.

CONTACT

Martin Lee
Burlington Dept. of Public Works
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E: mlee@miltonvt.gov

BURLINGTON CALAHAN PARK ATHLETIC FIELD RECONSTRUCTION, BURLINGTON, VERMONT

Our team provided resident construction phase services for this \$115,000 project for reconstruction of an existing soccer field located at Calahan Park including stripping, stock piling and testing the existing athletic field topsoil; amendment of the existing topsoil with imported organic matter, replacement of approximately 385 lf of existing 15" brick sanitary sewer with new 18" PVC sanitary sewer pipe and two precast concrete sanitary sewer manholes due to unknown field conditions; spreading and re-grading the amended topsoil to new finish grade contours; installation of a new irrigation system; temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil and establishment of growth to athletic field standards.

CONTACT

John Adams-Kollitz
Burlington Parks, Recreation & Waterfront
P: (802) 540-0363
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BURLINGTON LEDDY PARK SOFTBALL FIELD RECONSTRUCTION, BURLINGTON, VERMONT

We provided resident construction phase services for this \$163,000 project for reconstruction of the existing softball

field located at Leddy Park including stripping and stock piling the existing athletic field topsoil; importation of approximately 3,500 cubic yards of washed screened sand; spreading, compacting, and re-grading the stockpiled topsoil to new finish grade contours; installation of new subsurface 6" PVC perforated underdrain piping; performing layout for the new softball field geometrics including fencing, bases, pitching mound, and coaching boxes; installation of new 4' and 6' high chain link fencing, access gates, and 16' high backstop; installation of new temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil, infield mix and conditioner, and establishment of growth to athletic field standards.

CONTACT

John Adams-Kollitz
Burlington Parks, Recreation & Waterfront
P: (802) 540-0363
E: jadamskollitz@burlingtonvt.gov

Key Personnel

Stantec offers the diversity of a large North American firm which is locally rooted to better serve our New England transportation clients with offices throughout New England and the Tri-State area. Our team offers truly local delivery with global expertise.

The Stantec team is prepared to dedicate the project team illustrated in the organization chart on page 17 for this contract. The Stantec team has the expertise to execute all aspects of this construction contract and has worked together in that capacity on numerous transportation projects throughout New England, including numerous past MAB assignments with many different Municipalities over the past 15 years, as well as under previous VTrans Construction Inspection contracts over the past 35 years. This ability offers our clients a firm that has demonstrated consistent, reliable construction services offered before, during and after the construction phase if needed. It also allows us to respond in a more timely manner to any needs during construction administration.

Assignment Managers

JOHN LITTLE, CPESC | ASSIGNMENT MANAGER:

John is based in our South Burlington office, and will be the primary contact for services under this program. As a leader in our Transportation Division's Construction Management group, John will have overall responsibility for Stantec services including allocation of staff and resources, client satisfaction, and quality control. In addition, John will assist with construction inspection and construction management projects and lead the construction staff. He has over 39 years of engineering and construction management experience, all with Stantec. His recent experience includes Program Manager/Construction Administrator for all construction services, and Project Manager for the Montpelier Shared-Use Path and several municipal projects for the city of Burlington.



Burlington Bike Path Slope Repair, Burlington, Vermont

RELEVANT PROJECTS: Montpelier Shared Use Path, Burlington North Ave. Unsignalized Crosswalks, Williamstown Sidewalk & Pedestrian Bridges, Burlington Waterfront Access North Phases I & II, Burlington Champlain Elementary Pedestrian Improvements, South Hero Bike Ferry and Causeway Improvements, Burlington Church Street Electrical and Lighting Improvements, Burlington Gazo Ave. Outfall Repair, Hartford Railroad Bridge over Bridge Street.

GREG EDWARDS, PE | ASSIGNMENT MANAGER, GRANT WRITING: Greg is based in our South Burlington office, and will be responsible for contractual matters and assist John with staffing, resources, and quality control. He has over 30 years of engineering experience, with a focus on highway and traffic engineering. Over these years, he has been involved with hundreds of transportation projects with over 50 in Vermont alone. His experience includes the planning, scoping, permitting, design, and construction of a wide range of transportation projects from the Bennington Bypass new construction to the reconstruction of Church and St Paul Street in Burlington. Through this experience, he is very familiar with the VTrans project development process and specification and methods to expedite the process while meeting VTrans procedures, standards and specifications.

RELEVANT PROJECTS: Burlington Church and St. Paul Street Reconstruction, Bristol VT 116/North Street/South Street Reconstruction, South Burlington US 2 Staples Plaza Reconstruction.

DAVE YOULEN, PE | ASSIGNMENT MANAGER, TRAFFIC MANAGEMENT/CONSTRUCTABILITY, UTILITIES: Dave has worked as a transportation engineer for the last 18 years on numerous roadway, bridge, culvert, railroad and intersection projects, on both the construction inspection and design side, funded through the VTrans and MAB. He has a thorough knowledge of VTrans Standard Construction Specifications and developing traffic management and traffic control plans, as well as Special Provisions. He has utilized his years of experience in

construction to perform plan and constructability reviews. He also has experience providing services in the Quality Assurance Unit at VTrans.

RELEVANT PROJECTS: Winooski Downtown Redevelopment project, Burlington North Street Revitalization project, Colchester Campus Connector project, Richford TH 3 bridge replacement, Fairfield TH 1 and TH 47 bridge replacements, Middlebury to Burlington US Route 7 multiple paving projects, Addison VT 17 and VT 125 Overlay and Crown Point Historic Site Restoration, Washington County Railroad Bridge 501 emergency bridge stabilization project, Winooski West Canal Street Reconstruction, New Haven US Route 7 railroad crossing project, Bennington Route 279 North bypass project, Essex Susie Wilson Road culvert project, Essex Colbert Street Swirl Separator Project, Richmond-Williston I-89 culvert lining project.

Additional Key Construction Inspection Staff

BERNIE GAGNON, PE | CONSTRUCTION INSPECTION, TRAFFIC MANAGEMENT/ CONSTRUCTABILITY: Bernie is an experienced engineer with over 30 years of engineering experience in project design, preparation and review of contract documents, bid solicitation, contract administration experience in the areas of contaminated site cleanup, road design, water supply, wastewater treatment, stormwater, and site design for residential and commercial developments. His expertise lies in contracting and in the solicitation, evaluation, and selection of design and construction contractors. He has experience in construction phase services including resident engineering, shop drawing review, response to requests for information, and on-site construction inspection and documentation on Federal, State, and Local projects. Bernie also provided Section 406 Hazard Mitigation support to FEMA to reduce or eliminate long-term risk to people and property from natural hazards and their effects. In this role, he evaluated proposed mitigation measures for cost-

effectiveness, technical feasibility, and compliance with Environmental laws, regulations, and Executive Orders. In addition, he ensured that the mitigation proposed did not negatively impact the facility's operation or surrounding areas or create susceptibility to damage from another hazard. Work involved conducting site visits to identify damage and technically feasible mitigation alternatives, cost estimating, and writing Hazard Mitigation Plans.

RELEVANT PROJECTS: Montpelier-Berlin Shared Use Path, South Catherine Street Reconstruction (Plattsburgh, NY), Burlington International Airport- Construct, Mark, and Light Parallel Taxiway "G/K", Phase I, Burlington International Airport, Air Carrier Apron- Glycol Treatment System Improvements, FEMA Stafford Act Section 406 Hazard Mitigation Support.

DOUG CAMPBELL | CONSTRUCTION INSPECTION, UTILITIES: Douglas has over 27 years of design experience in construction phase engineering services, resident engineering overseeing construction, general civil engineering including civil/site design, process design, drainage systems and stormwater design, stormwater systems management, roadway design, and design of water distribution and sewer collection systems, and computer modeling of watershed and river characteristics.

RELEVANT PROJECTS: Burlington Waterfront Access North, Phase II, Burlington Calahan Park Athletic Field Reconstruction and Burlington Leddy Park Softball Field Reconstruction.

DERON BARNES | CONSTRUCTION INSPECTION, ENGINEER/TECHNICAL SUPPORT: Deron has over 26 years of experience as a technician with emphasis on highway design, computer-aided drafting, assisting in the surveying, design and construction inspection of highways, utilities and site work. His duties include geometric and drainage design, signing and pavement marking designs, use of computer aided drafting software including AutoCAD and MicroStation for the development of plans, and use of computer software for the takeoff of quantity and development of construction estimates. Construction assignments duties include inspection of the installation of storm drainage, water systems, sewer systems and the new construction and reconstruction of roadways. His responsibilities have included resident inspection, daily reporting, shop drawing processing and review, change orders, payment requests, project closeouts, claims resolutions and coordination between owner, contractor and designer. Deron has also provided quality assurance/quality control services to the VTrans Quality Assurance Unit.

RELEVANT PROJECTS: South Hero Island Line Trail Improvements, Winooski Downtown Development Infrastructure Improvements, BTV Taxiway G Phase 1B, Burlington Wayfinding Improvements and Colchester Sidewalk Improvements.





Champlain Elementary Pedestrian Improvements, Burlington, Vermont

CAELA WAITE | CONSTRUCTION INSPECTION, ENGINEER/TECHNICAL SUPPORT: Caela has over seven years of experience working on engineering projects in Maine and Vermont, including over three years of roadway reconstruction inspection. She is a Certified Hot Mix Asphalt Paving Inspector, from the NorthEast Transportation Training and Certification Program. Her construction inspection experience includes construction oversight of paving crews, sidewalk and safety improvement projects. Caela has also served as lead designer on multiple state highway resurfacing and reconstruction projects. These have included upgrading all crosswalks to meet ADA and PROWAG requirements. She has worked with diverse multidisciplinary teams on projects ranging from field inventory data collection and management, to developing plans, cost estimates, and special provision documents. Her responsibilities have included plan design and review, quantity calculation and review, financial estimates and review, and assembling special provision documents.

RELEVANT PROJECTS: North Avenue Unsignalized Pedestrian Crosswalks and Champlain Elementary Pedestrian Improvements projects for the City of Burlington; LCP (Light Capital Paving) inspection for the Maine DOT.

TODD DUGUAY, PE | CONSTRUCTION INSPECTION: Todd has over 17 years in transportation design including roadways and interchanges, stormwater management and drainage systems. As a Senior Transportation Engineer, he is responsible for the preparation of preliminary, final and contract design plans and documents for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations, estimating and specifications. Todd has extensive experience and formal training with CADD software including MicroStation, InRoads, and Civil 3D. His proficiency with software and his knowledge of various

client's standards, make him a great asset to any team. He has also worked as a construction inspector on both highway and aviation projects.

RELEVANT PROJECTS: Butler Farms Stormwater Pond, Starksboro-Hinesburg Paving, Oak Creek Subdivision, Church Street Marketplace and West Canal Street Reconstruction.

JUSTIN LAPERLE, EIT | CONSTRUCTION INSPECTION, ENGINEER/TECHNICAL SUPPORT: Justin has three years of experience as a civil engineer and construction inspector. He has assisted in the development of studies analyzing alternatives for truck routes in Vermont, design and CADD support for an intersection realignment project, and construction inspection.

RELEVANT PROJECTS: Montpelier-Berlin Shared-Use Path, LAXNESS Engineered Wetlands Rehabilitation, I-89 Shared-Use Path, VT 22A Vergennes Truck Route Study, West Lakeshore Road/Prim Road Intersection.

RACHEL GALUS | CONSTRUCTION INSPECTION, ENGINEER/TECHNICAL SUPPORT: Rachel is a civil designer in Stantec's South Burlington, Vermont office. Working primarily with the transportation industry, she focuses on stormwater design and engineering, environmental site assessments, and GIS mapping. Rachel is proficient in ArcGIS Pro and MicroStation.

RELEVANT PROJECTS: South Burlington Market Street Roundabout Design, Jericho Town-Wide Pavement Study, Processes Glass Aggregate Testing.

D.

RESUMES

Diverging Diamond Intersection, Colchester, Vermont



D.

RESUMES

Key Staff Resumes

On the following pages we've included resumes for our key staff and our subconsultants key staff. Our local team of transportation planning, design, and engineering professionals has decades of first-hand experience in Vermont with design, project management and construction inspection services. Our South Burlington office staff will lead these services and when needed, support from other regional offices can be readily solicited. These regional offices have over 2,000 staff members, many with transportation engineering and traffic management expertise, and environmental specialists who can handle virtually any assignment. The result of this connected team's resources, knowledge, and experience is an unmatched commitment to meet your project's needs.



John Little

Assignment Manger

John has over 39 years of transportation design, construction services, and survey experience. As the program manager for the Construction Division, he is responsible for contract administration, allocation of staff and resources, subconsultant coordination, client satisfaction and quality assurance.

As a Project Manager on design projects, he is responsible for overseeing the preliminary and final designs as well as preparation of final contract plans including design layout, intersection design, horizontal and vertical alignment computations, drainage design and layout, as well as quantity computation estimating and maintaining a smooth operation between design and CADD personnel. He has obtained his Certified Professional in Erosion and Sediment Control (CPESC) certification.

As the Program Manager for the resurfacing program, he is responsible for the day-to-day management, allocation of staff and resources, subconsultant coordination, client satisfaction and quality assurance.

YEARS WITH STANTEC

39

EDUCATION

Associate in Applied Science, Vermont Technical College, Randolph, Vermont, 1980

REGISTRATIONS

Licensed Class B Designer (formerly known as a Certified Site Technician) #222, State of Vermont

Certified Professional in Erosion and Sediment Control #2642, CPESC, Inc.

MEMBERSHIPS

HAZWOPER 24-hour Certification, Occupational Safety & Health Administration

Member, International Erosion Control Association

RELEVANT EXPERIENCE

Montpelier-Berlin Shared Use Path | Montpelier, Vermont

Project Manager responsible for observation of construction for compliance with plans and specifications; distribution and tracking of shop drawing submittals and requests for information; change orders; measurement and independent verification of all contractor submitted quantities; and approval of all contractor payment requests. The project is reported and recorded with the APPIA project management program for infrastructure construction projects. The Montpelier-Berlin Shared Use Path Project is a VTrans funded project consisting of construction of a 1.93 mile long multi-use path. Work to be performed under this contract includes relocation of approximately 900 feet of active rail line; construction of a new concrete box culvert; relocation of a City owned watermain; relocation of a privately owned sewer line and construction of a new sewage lift station; construction of new unit block retaining walls; grading; drainage; subbase; paving; landscaping; and signage.

Williamstown STP WALK(18) | Williamstown, Vermont

Project Manager for the construction observation of the VT Route 14 sidewalk and pedestrian bridge construction. Responsibilities included project coordination, pay requisition review, processing change orders, and running project meetings.

Waterfront Access North Phase II | Burlington, Vermont

Project Manager for this \$5.1 M project which consisted of providing construction services for one of the City of Burlington's highest profile projects. The project included extending Lake Street north along the west side of the Genesee & Wyoming Railroad, the construction of two Gravel Wetland Stormwater Treatment Facilities, a concrete Skate Park and covered Pavilion, Realignment of the Burlington Bikeway Multi-use Path, new Street Lighting, tracking multiple levels of Contaminated Soil, Underground Utilities, Landscaping and other incidental items. Responsibilities included overseeing staffing and resources, tracking the payment of items through 23 different funding sources, attending biweekly project team meetings, invoicing and coordination between the City, State, FHWA, the design team and Stantec.

Lamoille Valley Rail Trail | Morrisville to Cambridge, Vermont

Resident Engineer / Construction Administrator for this \$1.5 Million rail to trail conversion project which consists of the reconstruction of 17 miles of trail from Morrisville to Cambridge along the abandoned Lamoille Valley Railroad line. This project also includes, drainage improvements, the rehabilitation of all bridges including superstructure and substructure, cattlepass replacement or rehabilitation, and culvert construction, rehabilitation or replacement. Some of the more complex features included the permitting, the sensitivity to adjacent landowners, and the coordination and documentation of town and volunteer donated work.



Greg Edwards,

PE, ENV SP

**QA/QC, Assignment
Manager, Grant Writing**

YEARS WITH STANTEC

32

EDUCATION

B.S., Civil Engineering,
University of Vermont,
Burlington, Vermont

REGISTRATIONS

Envision™ Sustainability
Professional (ENV SP),
Institute for Sustainable
Infrastructure

Professional Engineer
#5842, State of Vermont

Professional Engineer
#7247, State of Maine

Professional Engineer
#6765, State of New
Hampshire

MEMBERSHIPS

Past Board Member and
Past President, American
Council of Engineering
Companies (Vermont)

Past President & Board
Member, Society of
Engineers, State of Vermont

Member, Institute of
Transportation Engineers

Greg has over 30 years of engineering experience including the planning, design, permitting, quality control, construction and rehabilitation of transportation facilities. He is an effective project manager and excellent facilitator, promoting the expediency of successful projects. He has managed multi-disciplined teams for projects up to \$60 million construction cost. Over the course of his career, Greg has managed hundreds of transportation planning, design and construction projects ranging from resurfacing, roadway, bridge, and roundabout designs to traffic studies and alternatives analyses. He and his staff have also designed a number of unique projects including a series of “park-and-ride” facilities, several recreation paths, a river restoration, and town and city Main Street reconstructions. As the leader of the firm’s New England Transportation and Traffic Division, his clients include such large organizations as Burlington International Airport and the state transportation departments of Maine, New Hampshire, New York, and Vermont. He has also worked for a variety of municipalities, including the cities of Portland, Maine and Burlington and Rutland, Vermont.

RELEVANT EXPERIENCE

VTrans 1-89 Culvert Design Build, South Burlington-Georgia, Vermont

Proposal leader and assistant project manager for the replacement of six culverts under interstate 89 in South Burlington and Georgia, VT using the Design Build project delivery process. This \$15 million project included Environmental Permit Applications, Geotechnical investigations, Traffic Control, Hydrology and Hydraulic analysis and report, culvert layout and design, Traffic Control, and design of a tunnel under 1-89 for installation of pre-cast concrete arches in Georgia under 35’ of fill. Project involves close coordination with environmental Regulators to inform them of the project and to get their input prior to submitting Permit applications, thereby accelerating the permit process.

US 2 / I-89 Exit 14 Improvements Design, South Burlington, Vermont

Project Manager for the final design for the construction of a third eastbound lane of US Route 2, an urban arterial with over 40,000 vehicles per day, from the Sheraton Staples intersection to the I-89 southbound on-ramp. Project elements include utility relocations, stormwater treatment, interconnected and coordinated signal system, traffic control for highway widening, decorative street lighting, and landscaping. Stantec services will also provide NEPA documentation, contract plans, construction cost estimates and permitting meeting VTrans LTF procedures. Considerations included *Complete streets” approach with pedestrian, bicycle, and transit facilities.

Winooski Downtown Development Infrastructure Improvements, Winooski, Vermont

Principal-in-Charge responsible for this \$14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, over 8,900 linear feet of storm and roof drainage systems, 2,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 32,000 linear feet of conduit, a comprehensive stormwater management system, extensive landscaping, parks, and ornamental lighting.

VT Route 7 A/11/30 Roundabout, Manchester, Vermont

Principal-in-Charge for the final design, permitting, and contract plans for a proposed modern roundabout at the intersection of VT Route 7 A/11/ 30 and a mini-roundabout at the adjacent intersection of VT Route 7 A/30 in the village/commercial downtown area of Manchester Center, Vermont.

Burlington Great Streets, Burlington, Vermont

Greg was the Principal-in-Charge responsible for this redesign of two streets, Bank and Cherry, in downtown Burlington, Vermont. The redesign prioritized pedestrian safety and movement and maintained the on-street parking needed for the small business. The design incorporated raised intersections, bicycle racks, parklets, seating areas outside popular business and restaurants, green stormwater infrastructure, and public art.



David Youlen, PE

**QA/QC, Assignment
Manager, Traffic
Management/
Constructability, Utilities**

YEARS WITH STANTEC

16

EDUCATION

BS, Civil Engineering,
Clarkson University,
Potsdam, New York, 1999

REGISTRATIONS

Professional Engineer
#8831, State of Vermont

David is a professional engineer and has over 20 years of experience with an emphasis on traffic management, quality control and quality assurance, construction administration and inspection. His technical background includes highway and bridge design, utility and signal design, traffic management plans, and construction. With his construction experience, he plays an important role in the quality of constructability review of projects. Prior to joining Stantec, David worked for the State of New Hampshire Department of Transportation as a Civil Engineer in the Bureau of Construction. His responsibilities have included resident inspection; daily reporting; shop drawing processing and review; change orders; payment requests; project closeouts; claims resolutions; and coordination between owner, contractor, and designer. David has completed over 10 construction inspection assignments for VTrans bridge, roadway, and paving projects under a retainer contract. He has several certifications including NETTCP (Paving Inspector, and Driven Pile Foundation), and ACI.

RELEVANT EXPERIENCE

Colchester Exit 16 Diverging Diamond Interchange Project, Colchester, Vermont

Performed a constructability review for Vermont Agency of Transportation for the Exit 16 Double Diamond Interchange construction project along Route 2/7 corridor in Colchester, Vermont. This included constructability of the project, as well as review of notes, traffic management and identifying potential conflicts and plan issues in constructing the project. The existing interchange is a grade separated tight diamond interchange with Interstate 89 crossing over US Routes 2/7 via two bridges and was redesigned as a Diverging Diamond Interchange as well as incorporating other improvements such as the construction of dedicated pedestrian and shared pedestrian/bicycle facilities.

Williston Road/Industrial Avenue Intersection, Williston, Vermont

Senior Transportation Engineer for the development of traffic management strategies and traffic control plans. Responsibilities included investigating various traffic management alternatives, developing and presenting traffic management alternatives to the client, and the development of traffic control plans for this project in a high traffic volume area where abutters are predominantly commercial properties.

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79), Guilford, Vermont

Senior Engineer for the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.

US Route 2, Main Street Project, Waterbury, Vermont

Transportation engineer responsible for Constructability and Traffic Management for the development of final and contract plans and documents. Responsibilities include constructability plan review, erosion prevention and sediment control design, quality control plan reviews and quantity calculations and review for this \$20+ million construction of US Route 2 through Downtown Waterbury. This 1 mile long, 2-lane roadway included full depth of urban street reconstruction and street scape work, new water and sewer mains and services, new stormwater systems, and the undergrounding of utilities. Services included design for highway, stormwater treatment, traffic signals, right-of-way, utilities and lighting.



Bernie Gagnon,

PE

**Construction Inspection,
Traffic Management/
Constructability**

YEARS WITH STANTEC

6

EDUCATION

M.S., Engineering
Management, University of
Alaska, Anchorage, Alaska,
1993

B.S., Civil Engineering,
University of Vermont,
Burlington, Vermont, 1979

M.S. Environmental Quality
Engineering, University of
Alaska, Anchorage, Alaska,
1984

REGISTRATIONS

Professional Engineer, State
of Vermont

MEMBERSHIPS

Member (Past President of
Local Chapter), American
Society of Civil Engineers

Member, Massachusetts
Highway Association

* denotes projects completed with
other firms

Bernie is an experienced engineer with over 30 years of engineering experience in project design, preparation and review of contract documents, bid solicitation, contract administration experience in the areas of contaminated site cleanup, road design, water supply, wastewater treatment, stormwater, and site design for residential and commercial developments. His expertise in contracting and in the solicitation, evaluation, and selection of design and construction contractors. He has experience in construction phase services including resident engineering, shop drawing review, response to requests for information, and on site construction inspection and documentation on Federal, State, and Local projects.

RELEVANT EXPERIENCE

Montpelier-Berlin Shared Use Path | Montpelier, Vermont

Resident engineer responsible for observation of construction for compliance with plans and specifications; distribution and tracking of shop drawing submittals and requests for information; change orders; measurement and independent verification of all contractor submitted quantities; and approval of all contractor payment requests. The project is reported and recorded with the APPIA project management program for infrastructure construction projects. The Montpelier-Berlin Shared Use Path Project is a VTrans funded project consisting of construction of a 1.93 mile long multi-use path. Work to be performed under this contract includes relocation of approximately 900 feet of active rail line; construction of a new concrete box culvert; relocation of a City owned watermain; relocation of a privately owned sewer line and construction of a new sewage lift station; construction of new unit block retaining walls; grading; drainage; subbase; paving; landscaping; and signage.

South Catherine Street Reconstruction | Plattsburgh, New York

On-site resident engineer for \$4.3 million dollar road reconstruction project in Plattsburgh, NY. Project involved the complete reconstruction of approximately one mile of two lane highway including abandonment of existing water main and construction of new water main; abandonment of existing sewer main and construction of new sewer main; construction of new stormwater treatment infrastructure; new concrete curb and sidewalk; paving; and site landscaping. Responsible for review and approval of all shop drawing submittals; change orders; and approval of all contractor payment requests. Supervised three construction inspectors and approved daily reports and all project quantities. All work was reported and recorded with the APPIA project management program for infrastructure construction projects.

Burlington International Airport- Construct, Mark, and Light Parallel Taxiway "G/K", Phase I | South Burlington, Vermont

Resident Engineer responsible for construction phase services for this \$2.6 million project for construction of a new taxiway. Project included 1,500' long x 75' wide new bituminous concrete paved taxiway with 30' shoulders on each side; FAA compliant edge lighting, signage, and pavement markings; new stormwater drainage collection system; grading, topsoil, and hydroseeding. Responsible for review and approval of shop drawing submittals; all change orders; and approval of all contractor payment requests. All work was reported and recorded with the APPIA project management program for infrastructure construction projects.



Doug Campbell,

PE

**Construction Inspection,
Utilities**

YEARS WITH STANTEC

31

EDUCATION

B.S. / Civil Engineering,
University of Vermont,
Burlington, Vermont, 1994

REGISTRATIONS

Professional Engineer
#7421, State of Vermont

MEMBERSHIPS

HAZWOPER 40 Hour
Certification, Occupational
Safety & Health
Administration

Confined Space Entry
Certification, Occupational
Safety & Health
Administration

Member, American Society
of Civil Engineers

Doug has over 27 years of design experience in construction phase engineering services, general civil engineering including civil/site design, process design, drainage systems and stormwater design, stormwater systems management, roadway design, and design of water distribution and sewer collection systems, and computer modeling of watershed and river characteristics.

RELEVANT EXPERIENCE

Burlington Calahan Park Athletic Field Reconstruction | Burlington, Vermont

Project Engineer responsible for resident construction phase services for this \$115,000 project for reconstruction of an existing soccer field located at Calahan Park including stripping, stock piling and testing the existing athletic field topsoil; amendment of the existing topsoil with imported organic matter, replacement of approximately 385 LF of existing 15" brick sanitary sewer with new 18" PVC sanitary sewer pipe and two precast concrete sanitary sewer manholes due to unknown field conditions; spreading and re-grading the amended topsoil to new finish grade contours; installation of a new irrigation system; temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil and establishment of growth to athletic field standards.

Burlington Leddy Park Softball Field Reconstruction | Burlington, Vermont

Project Engineer responsible for resident construction phase services for this \$163,000 project for reconstruction of the existing softball field located at Leddy Park including stripping and stock piling the existing athletic field topsoil; importation of approximately 3,500 cubic yards of washed screened sand; spreading, compacting, and re-grading the stockpiled topsoil to new finish grade contours; installation of new subsurface 6" PVC perforated underdrain piping; performing layout for the new softball field geometrics including fencing, bases, pitching mound, and coaching boxes; installation of new 4' and 6' high chain link fencing, access gates, and 16' high backstop; installation of new temporary and permanent erosion prevention and sediment control measures; site restoration including placement of topsoil, infield mix and conditioner, and establishment of growth to athletic field standards.

VTrans - Waterbury Main Street Reconstruction - Waterbury F EGC F 013-4(13) | Waterbury Village Historic District, Vermont

Water/Wastewater Engineer on the reconstruction of Main Street in Waterbury, Vermont. Stantec provided preliminary and final engineering services, as well as right-of-way plan development for the reconstruction of this one mile of roadway in the historic village of Waterbury. The location of the new water and sewer mains were thoughtfully sited so that the existing mains could remain active while the new mains were constructed. By carefully considering the location of the new water and sewer infrastructure, Stantec's efforts allowed the contractor to methodically construct the project in segments with enough room to maneuver their equipment safely. This project is currently in construction and is expected to be completed in the Spring of 2021.

Winooski Downtown Development Infrastructure Improvements | Winooski, Vermont

Served as the Lead Inspector for this \$14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, 16,500 linear feet of concrete and brick sidewalks, 16,500 linear feet of granite curb, over 13,000 linear feet of storm and roof drainage systems, 3,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 15 miles of conduit, a comprehensive stormwater management system, extensive landscaping, parks and ornamental lighting.



Deron Barnes

**Construction Inspection,
Engineer/Technical Support**

YEARS WITH STANTEC

27

EDUCATION

Associate in Applied
Science, Vermont Technical
College, Randolph Center,
Vermont, 1990

Deron has 25 years of experience as a technician with emphasis on highway design, computer-aided drafting, assisting in the surveying, design and construction inspection of highways, utilities and site work. His duties include geometric and drainage design, signing and pavement marking designs, use of computer aided drafting software including AutoCAD and MicroStation for the development of plans, and use of computer software for the takeoff of quantity and development of construction estimates.

Construction assignments duties include inspection of the installation of storm drainage, water systems, sewer systems and new construction and reconstruction of roadways. His responsibilities have included resident inspection, daily reporting, shop drawing processing and review, change orders, payment requests, project closeouts, claims resolutions and coordination between owner, contractor and designer.

RELEVANT EXPERIENCE

BTV Taxiway G Phase 1B | Burlington, Vermont

Provided construction inspection services for Phase 1A & 1B of the relocation of Taxiway "G", a full length taxiway parallel to the primary runway. This included covering several construction crews on any given day, observing, reporting, measuring and reconciling quantities, tracking work done on a time & material basis, communicating issues to resident engineers, and documenting daily project events.

Winooski Downtown Development Infrastructure Improvements | Winooski, Vermont

Inspector for this \$14.2 million urban redevelopment project. Project elements included 9,100 linear feet (1.7 miles) of new and reconstructed roadways, 16,500 linear feet of concrete and brick sidewalks, 16,500 linear feet of granite curb, over 13,000 linear feet of storm and roof drainage systems, 3,200 linear feet of new sewer mains and laterals, 4,200 linear feet of water mains and laterals, three signal systems, traffic control plan for 23,000 vehicles per day, undergrounding of the existing utilities with over 15 miles of conduit, a comprehensive stormwater management system, extensive landscaping, parks and ornamental lighting.

South Hero Island Line Trail Improvements | South Hero, Vermont

Construction Inspector for this \$989,000 rail trail improvement project. This project included the widening of this shared use path, construction of emergency vehicle turnaround accommodations, and the replacement of existing ferry docks with new docks, gangways and wave attenuators. Responsibilities included daily observation of construction activities, documentation of labor and equipment, verification of quantities, photo documentation of all activities, and attending project team meetings.

US Route 2 Reconstruction | Danville, Vermont

Design Technician responsible for providing support to the design team for this \$4.5 million, 0.8-mile two-lane rural arterial road through the town center. Was also involved in the development of Right-of-Way Plans.

VTrans U.S. Route 7 Bypass | Bennington, Vermont

Design Technician responsible for CAD and quantity work on this \$43 million construction of new U.S. Route 7 circumventing Bennington. This 3.85 mile long, two-lane limited access highway included two interchanges (a systems interchange and Vermont's first single point diamond interchange), eight new structures, considerations for future four-lane construction, utility relocations, and one mile of urban street reconstruction. Services include conceptual, preliminary, and final design for highway, structure, stormwater treatment, traffic signals, right-of-way, utilities and lighting.



Caela Waite

**Construction Inspection,
Engineer/Technical Support**

YEARS WITH STANTEC

4

EDUCATION

B.S., Civil Engineering,
Norwich University,
Northfield, Vermont, 2016

REGISTRATIONS

Certified Hot Mix Asphalt
Paving Inspector, NorthEast
Transportation Training and
Certification Program

MEMBERSHIPS

Member, Women's
Transportation Seminar

Member, Burlington Young
Professionals in
Transportation

Caela has over seven years of experience working on engineering projects in Maine and Vermont, including over three years of roadway reconstruction inspection. She is a Certified Hot Mix Asphalt Paving Inspector, from the NorthEast Transportation Training and Certification Program. Her construction inspection experience includes construction oversight of paving crews, sidewalk and safety improvement projects. Caela has also served as lead designer on multiple state highway resurfacing and reconstruction projects. These have included upgrading all crosswalks to meet ADA and PROWAG requirements. She has worked with diverse multidisciplinary teams on projects ranging from field inventory data collection and management, to developing plans, cost estimates, and special provision documents. Her responsibilities have included plan design and review, quantity calculation and review, financial estimates and review, and assembling special provision documents.

RELEVANT EXPERIENCE

Mansfield Avenue Shared Use Path and Traffic Calming | Burlington, Vermont

Project engineer was responsible for the horizontal alignment, vertical alignment, and cross section development for the new sidepath, design of traffic calming alternatives, plan development, quantities, estimate, and bid documents. This street is an important link in a major east-west bicycle corridor (North Street and Colchester Avenue), linking Burlington's waterfront, and northern neighborhoods to UVM, it's Medical Center; Winooski and beyond. It also hosts the Mater Christi School, with ages preschool to eighth grade. Although Mansfield Avenue has a conventional bike lane in one direction and shared-use lane in the other direction, its importance, and high use suggested making the street safer for all users by considering the addition of a low-stress shared use path and numerous traffic calming features.

Burlington STP BP13(6) | Burlington, Vermont

Resident engineer for this pedestrian safety improvements project. Responsibilities included the observation of construction for compliance with plans and specifications, distribution and tracking of shop drawing submittals and requests for information, development and independent cost analysis of change orders, measurement and independent verification of all contractor submitted quantities and approval of all contractor payment requests, including certified payroll compliance.

The project consisted of the construction of three new raised intersections at locations where many children and other pedestrians frequently cross busy city streets to access a local school, a popular park and other destinations. These crossings needed to be compliant with the Americans with Disabilities Act (ADA), a key component when providing safe pedestrian access. Along with the raised intersections, the project included the revision of the existing drainage features, new sidewalk, new curb, revised signing and pavement markings, traffic control and the efforts needed for the project to stay in compliance with local and state permits.

VTrans - Guilford I-91 Welcome Center Pavement Rehabilitation - Guilford Rest Area IM 091-1(79) | Guilford, Vermont

Project engineer responsible for the development and design of a pavement rehabilitation strategy and generate contract documents for the rehabilitation of the Guilford I-91 Welcome Center, a 114-space car parking area, 23-space truck parking area and more than 1/2 mile of circulating and access roads. Most of the rehabilitation was a cost-effective asphalt mill and overlay. Approximately 700 feet of an access road with more than 10% grades required a reclaimed stabilized base with 5 inches of new asphalt. One of the more challenging aspects of the project was the maintenance of traffic during construction. Working with the facility operators, we developed a performance specification that allowed ramp access closures during a designated 4-hour period and provided an alternative site for truck parking while the car parking was relocated to the truck parking area.



Todd Duguay, PE

Lead Engineer, Construction Inspection

YEARS WITH STANTEC

13

EDUCATION

B.S., Civil Engineering,
University of Hartford, West
Hartford, Connecticut, 2003

REGISTRATIONS

Professional Engineer
#59592, State of Vermont,
7/31/2012

MEMBERSHIPS

Member, Vermont Society
of Engineers

Member, American Society
of Civil Engineers

Since beginning his career in 2003, Todd has designed roadways and interchanges, stormwater management and drainage systems. As a Senior Transportation Engineer, he is responsible for the preparation of preliminary, final and contract design plans and documents for various transportation projects. This work includes field reviews, design layout, drainage design, quantity computations, estimating and specifications. Todd has extensive experience and formal training with CADD software including MicroStation, InRoads, and Civil 3D. His proficiency with software and his knowledge of various client's standards, make him a great asset to any team. He has also worked as a construction inspector on both highway and aviation projects.

RELEVANT EXPERIENCE

VTrans Winooski Circulator Improvements - VTrans Winooski HES 5100(13) | Winooski, Vermont, United States

Project Engineer responsible for roadway, curbing and raised island layout and grading and design of the drainage improvements due to the roadway reconstruction. Stantec provided engineering and design services to VTrans to address safety concerns at Vermont's #1 ranked High Crash Location, the Winooski Circulator. Stantec evaluated the safety improvements identified by the Chittenden County Regional Planning Commission (CCRPC) and the City of Winooski. We analyzed additional improvements utilizing VISSIM, recommended design modifications, and developed final construction plans. The selected improvements included, improving visibility between pedestrians and drivers, reducing weaving within the Circulator, relocating signalized pedestrian crossings to a safer location with refuge islands, and improving bicycle facilities.

VTrans Newport STP 1343(22) Ro | Newport, Vermont

Senior Engineer responsible for permitting, preliminary design of horizontal and vertical alignment, cross sectional design, drainage system design and guardrail design on this roadway reconstruction and slope stabilization project along VT Route 191 in Newport City, Vermont. Stantec developed the Contract Plans, estimate, special provisions, and bid documents and was responsible for designing access to this remote area, site grading, and providing the electrical infra-structure to power the wells and SCADA monitoring system. Additionally, we addressed the sagging mainline profile and designed the reconstruction of VT Route 191. A large culvert was also replaced with a new 42 inch pipe approximately 35 feet below the surface of the roadway.

Manchester Roundabout | Manchester, Vermont

Project Engineer responsible for taking the project from the Preliminary Design through Construction of the project. Work included responding to client comments, revising the signing design to complying with the latest version of the MUTCD, revising the quantity computations to comply with the current version of the VTrans Construction Specifications. Completing Contract Plans and Construction documents. Assisted project manager during construction engineering services phase of the project with any roadway or drainage questions or issues.

Waterbury Roundabout | Waterbury, Vermont

Staff Engineer responsible for complete horizontal and vertical design of Routes 100 and 2, and a newly designed parking lot for the US Route 2 and VT Route 100 intersection. Other responsibilities included cross sectional design, drainage design, construction phasing, a complete quantity computation and estimate as well as building InRoads templates and roadway model for this intricate roundabout design. The proposed improvement will be a single lane roundabout. Services provided included preliminary and final design through contract plans and bid services. This project included an extensive public participation and training program on the education of roundabouts.



Justin Laperle

**Construction Inspection,
Engineer/Technical Support**

YEARS WITH STANTEC

2

EDUCATION

Bachelor of Science,
Norwich University,
Northfield, Vermont, 2018

REGISTRATIONS

Engineering Intern
#017.0134145, State of
Vermont

MEMBERSHIPS

Member, American Society
of Civil Engineers

Member, Tau Beta Pi
Engineering Honor Society

Member, Chi Epsilon
National Civil Engineering
Honor Society

* denotes projects
completed with other firms

Since graduating Norwich University in 2018 Justin has worked for Stantec as a designer and inspector on projects including roadway, pedestrian paths, culverts and stormwater. His recent experience Inspection experience includes work on the 1.93 mile Montpelier-Berlin Shared Use Path and inspection services for retrofit of two engineered Wetland Treatment Systems at the Lanxess Manufacturing Plant in El Dorado, Arkansas. This project consisted of excavation of the existing systems, construction of the clay berms, installing distribution piping, effluent control structures, and filling the treatment cells with stone, pea gravel and compost media mixture.

RELEVANT EXPERIENCE

VTrans Montpelier Runaround Track | Montpelier, Vermont

Staff engineer responsible for hydraulic analysis on the redevelopment of over a mile of abandoned railbed on the Washington County Railroad line and use it as the new main track. Stantec was selected to develop the design and contract documents associated with rehabilitation of the old railbed that included new ballast, ties, rail, drainage and structure improvements and a new highway-rail crossing. Our services also included assessment of natural resources, identification of permitting, analysis of alternative alignments, and cost estimating.

I-89 Exit 12 Shared Use Path | Williston, Vermont

Phase 1 of the proposed interchange improvements at exit 12 of Interstate 89 in Williston, Vermont involves the extension of the existing shared use path through the interchange to a new park-and-ride facility. Mr. LaPerle was responsible for developing alignment alternatives and InRoads models to determine the impacts. This information will be used to decide which side of Route 2A the shared use path should be constructed.

Norwich University Steel Bridge Competition* | Norwich, Vermont

Helped his team of five other seniors at Norwich University design and construct a steel bridge that was taken to compete in the New England Regional Student Steel Bridge Competition. Design was completed using Risa 2D. Construction was done at Jeffords Steel in Plattsburg, NY where the team learned how to weld, 85% of the bridge fabrication was done at Jeffords. Aside from the competition the team developed reports and presented the design.

Waterbury Stowe Street Bridge Study* | Waterbury, Vermont

Assisted senior engineers in field work and developing a technical report for the functionality of the Stowe Street Bridge in Waterbury, VT. Field work included site visits and traffic counts.

VT22A Vergennes Truck Route Study*

Assisted senior engineers in developing a report that analyzes alternatives for managing truck traffic through the city of Vergennes Vermont. The alternatives include constructing a bypass around the city and directing heavy truck traffic traveling North on VT 22A to VT Route 17 where they would intersect US Route 7 to continue North.

West Lakeshore Road/Prim Road Intersection* | Colchester, Vermont

Design and CADD support for this intersection realignment project that involves adding two turning lanes and a signal to the intersection of West Lakeshore Drive and Prim Road. The re-alignment of the intersection requires a new closed drainage system, and bio-retention stormwater treatment area. The new roadway also features a new signalized intersection, lighting, sidewalk, and shared use paths. The project will allow for more efficient travel for people travelling from Malletts bay area to Downtown Burlington as well as improve safety at this busy intersection.

Rachel is a Civil Designer in Stantec's South Burlington, VT office. Working primarily in the transportation industry, she focuses on stormwater design and engineering, environmental site assessments, and GIS mapping. Rachel is proficient in ArcGIS Pro and MicroStation.

Racehl Galus

**Construction Inspection,
Engineer/Technical Support**

YEARS WITH STANTEC

1

EDUCATION

Bachelor of Science,
Environmental Engineering,
University of Vermont,
Burlington, Vermont, 2020

* denotes projects
completed with other firm
or while in school

RELEVANT EXPERIENCE

Rutland Community Aquatic Center Brownfield Site Development Design* | Rutland, Vermont

Green stormwater infrastructure lead for addressing increase in stormwater runoff from site development in senior capstone project. Stormwater system consists of a green roof, permeable concrete, a dry swale, and a gravel wetland due to the infeasibility of high amounts of infiltration with site contamination. (Project completed for undergraduate coursework.)

Phosphorus Removal from Bioretention System* | Burlington, Vermont

Designed a cost-effective phosphorus removal plan for the bioretention system at ECHO through the usage of drinking water treatment residuals due to the incorrect compost mix inputted in the stormwater system for final course project. (Project completed for undergraduate coursework.)

Processed Glass Aggregate Testing* | Williston, Vermont

Conducted various soil testing procedures on processed glass aggregate from Chittenden Solid Waste District for final laboratory course project in order to determine potential uses of the material that aligned with Vermont standards on material quality. (Project completed for undergraduate coursework.)

Town-Wide Pavement Study* | Jericho, Vermont

Project lead for the 2019 Jericho Pavement Study which included data collection, QA/QC, GIS buildout, and mapping related deliverables to be used by the town for future pavement planning.

Digitization of New Stormwater Infrastructure* | Colchester, Vermont

GIS lead for the buildout of new stormwater infrastructure in the town of Colchester consisting of catch basins, outfalls, storm lines, etc. which were integrated with the existing GIS dataset.

Mapping CO2 Concentrations from Drone Flights near an Anaerobic Digester* | Randolph, Vermont

Mapped CO2 concentrations taken from two K30 sensors attached to a DJI Phantom drone during its flights around an anaerobic digester for final course project. Gas concentrations were mapped to their spatial location and linked with second-by-second drone velocity, direction, altitude, distance, and distance from flare. (Project completed for undergraduate coursework.)

Market Street Roundabout Design* | So. Burlington, Vermont

Redesigned the intersection of Dorset Street and Market Street into a roundabout for final course project to improve air quality and reduce health effects in nearby sensitive populations. Air quality modeling was done in MOVES2014b and CALINE4. (Project completed for undergraduate coursework.)



Alan I. Brown

Construction Services Manager

Education:

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

Certifications:

ACI Field Technician Level 1

Precast / Prestressed Concrete Institute (PCI) Quality Technician, Grade III (Permanent)

ICC Reinforced Concrete Special Inspector, Soils Special Inspector, Fireproofing Special Inspector, Structural Steel and Bolting Special Inspector and Welding Special Inspector

ICC Master of Special Inspections

NETTCP Concrete Technician, HMA Plant Technician, HMA Paving Inspector and Soils and Aggregate Inspector

Certified Nuclear Densometer Operator

Ground Penetrating Radar Inspector

Hellier Magnetic Particle and Ultrasonic Inspector

American Welding Society (AWS)

Certified Welding Inspector

ASNT Level III, UT, PT and MT

DipStick Floor Flatness Operator

Safety Certifications:

OSHA 10-Hour Construction Safety & Health Certified

OSHA Hazardous Materials Certified

Troxler Radiation Safety Officer

Affiliations:

Board of Directors, International Code Council, Vermont Chapter

WHITE RIVER JCT. OFFICE

Alan Brown joined S. W. Cole Engineering, Inc. in 2013 as a construction services manager for the firm’s White River Junction office. Prior to working for S.W.COLE, Alan held the position of Vice President of New England Operations with Advance Testing Company, Inc. for four years and was also Vice President of New England Testing Company, Inc. for eight years.

Alan has more than 25 years of experience in field and laboratory inspection of construction materials, including soil, concrete, prestressed concrete, bituminous concrete, steel reinforcing, fireproofing, paint thickness gauging and non-destructive testing of metals. He is a Master of Special Inspections as prescribed by the International Code Council (ICC) and holds a number of desirable certifications and registrations from the American Concrete Institute (ACI), ICC, NorthEast Transportation Technician Certification Program (NETTCP) and other reputable organizations.

Alan’s responsibilities at S.W.COLE include contract and business development, project management and assisting with testing services such as soil density, concrete, masonry, and performing special inspections and associated laboratory testing.

Project Experience:

Dartmouth College, Hanover, New Hampshire: Alan has served as Project Manager on a variety of materials testing projects for Dartmouth for more than ten years. He has been responsible for coordinating and performing construction materials testing and inspection services, as well as Special Inspection services, on many campus-wide projects. Alan performed the inspection of Fire Stopping Systems for the 60,000 sf Williams Translational Research building at DMHC Campus. He was also responsible for the documentation of penetrations and the wall fire stopping system and performing non-destructive and visual inspection of the installation.

Dartmouth Hitchcock Medical Center, Hanover, New Hampshire: Alan served as Project Manager on this project and was responsible for installing and managing a mobile laboratory facility for a new campus with nine buildings.

Kendal at Hanover, Hanover, New Hampshire: On this three year parking garage project, Alan performed impact-echo testing on approximately 300 columns to determine the presence and extent of delamination caused by corroding reinforcing steel.



Scott L. Harmon

Construction Services
Operations Manager

Education:

B.A., Public Administration,
University of Maine

Certifications:

ACI Certified Concrete Strength
Testing Technician

ACI Certified Concrete
Laboratory Technician, Grade 1

ACI Certified Concrete Field
Technician, Grade 1

ACI Certified Aggregate Testing
Technician, Level 1

Specialized Training:

OSHA 40-Hour Hazardous
Waste Site Worker Course

OSHA 10 Hour Construction
Safety & Health Certified

Troxler Certified Nuclear
Densometer Concrete Masonry
Testing Technician

Scott Harmon was born in Dover, New Hampshire and was raised in Berwick, Maine. He attended the University of Maine, where he earned a B.A. in Public Administration. Scott worked for a concrete contractor during high school and college, which provided the experience and interest that led him to his career. After graduating from college, Scott worked for seven years for R. W. Gillespie & Associates in Maine and New Hampshire as an engineering technician and construction materials testing manager.

Scott joined S.W.COLE in March 1999. He has over 30 years experience in the construction field, including over 23 years of construction materials testing experience. He has worked on a large variety of project types, including Federal Aviation Agency and Maine and New Hampshire Department of Transportation QC / QA work, which included soils, concrete and asphalt work. He has also worked on landfill construction and closures, retail malls, military facilities, schools, wastewater treatment facilities, power plants and roadway construction projects. He is experienced in concrete and asphalt mix designs, rock anchor testing, pile drive monitoring and concrete batch plant procedures.

Scott's field experience is complemented by his knowledge of associated laboratory testing and his management experience. His responsibilities at S.W.COLE include contract development and negotiations as well as project management. In 2020, Scott was promoted to Construction Services Operations Manager. He is recognized by our clients for his communication and customer service skills. He enjoys working with people and being part of successful project teams. When not at work, Scott prefers to spend his time participating in outdoor activities with his family.

Project Experience:

Scott has performed on, or actively managed, hundreds of construction testing projects. While with S.W.COLE, he has worked on projects including:

- Epping Crossing and Brickyard Square, Epping, NH
- Exeter High School, Exeter, NH
- QC testing on numerous NHDOT projects
- Wentworth Douglass Hospital Additions, Dover, NH
- Federal Prison, Berlin, NH
- Numerous Projects at Phillips Exeter Academy, Exeter, NH
- Numerous Projects at the University of New Hampshire, Durham, NH
- QA/QC for NHDOT at the Memorial Bridge, Portsmouth, NH / Kittery, ME
- QA/QC for MassDOT at the Whittier Bridge, Amesbury, MA

SOMERSWORTH OFFICE

Thomas J. Morgan, P.E.
Geotechnical Engineer



Education:

B.S., Civil Engineering Rensselaer Polytechnic Institute

M.S., Civil Engineering, University of New Hampshire

Registrations:

Professional Engineer: Maine,
New York, Vermont

Affiliations:

Member, American Society of Civil Engineers

Member, Hudson-Mohawk Geotechnical Chapter of ASCE

Publications:

Development of an Alternative Laboratory Compaction Method for Granular Fill Materials, M.S. Thesis for University Of New Hampshire, Durham, NH, May 2005.

Joint Author for Instrumentation and Performance of a Liquefaction Mitigation Program by Compaction Grouting, 4th International Conference On Grouting and Deep Mixing, New Orleans, LA, February 2012.

Tom Morgan received his B.S. in Civil Engineering from Rensselaer Polytechnic Institute in 2001 and his M.S. in Civil Engineering from the University of New Hampshire in 2005. While completing his Master's degree, Tom acted as a teaching assistant for Soil Mechanics and Foundations at the University of New Hampshire, and decided to pursue his career in geotechnical engineering.

Working for C.T. Male Associates Engineering, Surveying, Architecture & Landscape Architecture, D.P.C., Tom worked his way from geotechnical engineer to senior geotechnical engineer. Tom's responsibilities included field inspection of numerous subsurface investigation programs; the preparation of geotechnical engineering reports presenting foundation recommendations, allowable foundation bearing pressures, expected total and differential settlements of structures; slope stability analyses; seismic considerations including determination of seismic design parameters, performance of dynamic site response analyses and liquefaction analyses; design of site pavements; and design of excavation support and retaining walls (sheeting/shoring, soil nail walls, mechanically stabilized earth slopes, gravity walls, and segmental block walls).

Joining the S.W. Cole Engineering team in June 2017, Tom is looking forward to continuing as a geotechnical engineer and serving our clients throughout New England.

Select Project Experience

Main Street Reconstruction, Winooski, VT : Reconstruction of Route 2 required replacement of the existing domestic water and sanitary systems as well as the road surface improvements. S. W. Cole performed 13 test borings used to collect data and Tom provided recommendations for a new pavement section based upon subsurface conditions.

Shelburne Public Library, Shelburne, VT: S. W. Cole obtained subsurface information at the site in order to develop geotechnical recommendations relative to foundations and earthwork associated with the proposed construction of a public library. The new building will be completed after the demolition of the existing library, and will be two stories with approximately 6,200 square feet of public space. Nine (9) test borings were performed and Tom made geotechnical recommendations for design and construction of the new library based on the data gathered.

Lague Street Water Line and Slope Stabilization, Montpelier, VT : This project involved the replacement of a water main in a residential area, that also required remedial measures to provide slope stabilization to the area adjacent to Lague Street. S. W. Cole performed eight (8) test borings and Tom provided a subsurface conditions report to assist the City Engineering Department in design.



VERMONT SURVEY and ENGINEERING, INC.

SURVEYORS and CIVIL ENGINEERS

79 RIVER STREET, SUITE 201 • MONTPELIER, VERMONT 05602
(802) 229-9138 • FAX (802) 229-9130 • E-mail: Info@VermontSurvey.com

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

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

Number of years with firm: 14

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: 29

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:

Structures Projects

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

Roadway Projects

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

Professional Affiliations/Education

A.A.S. Surveying and Forestry - Paul Smith's College



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

VT LS #59686

Number of years with firm: 16

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)
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Ryegate IM CULV(28)
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Roadway Projects

Andover-Chester STP 016-1(28) SC
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Rutland-Killington NH 020-2(36)
South-Hero STP HES 028-1(22)
St. Johnsbury-Lyndon IM 091-3(50)
Stockbridge-Bethel STP 2910(1)
Waterbury FEGC F 013-4(13)
Williston STP HES 5500(12)
Windsor IM 091-1(64)
Woodstock STP 0241(40)

Professional Affiliations/Education

A.A.S. Surveying and Forestry - Paul Smith's College
Vermont Society of Land Surveyors