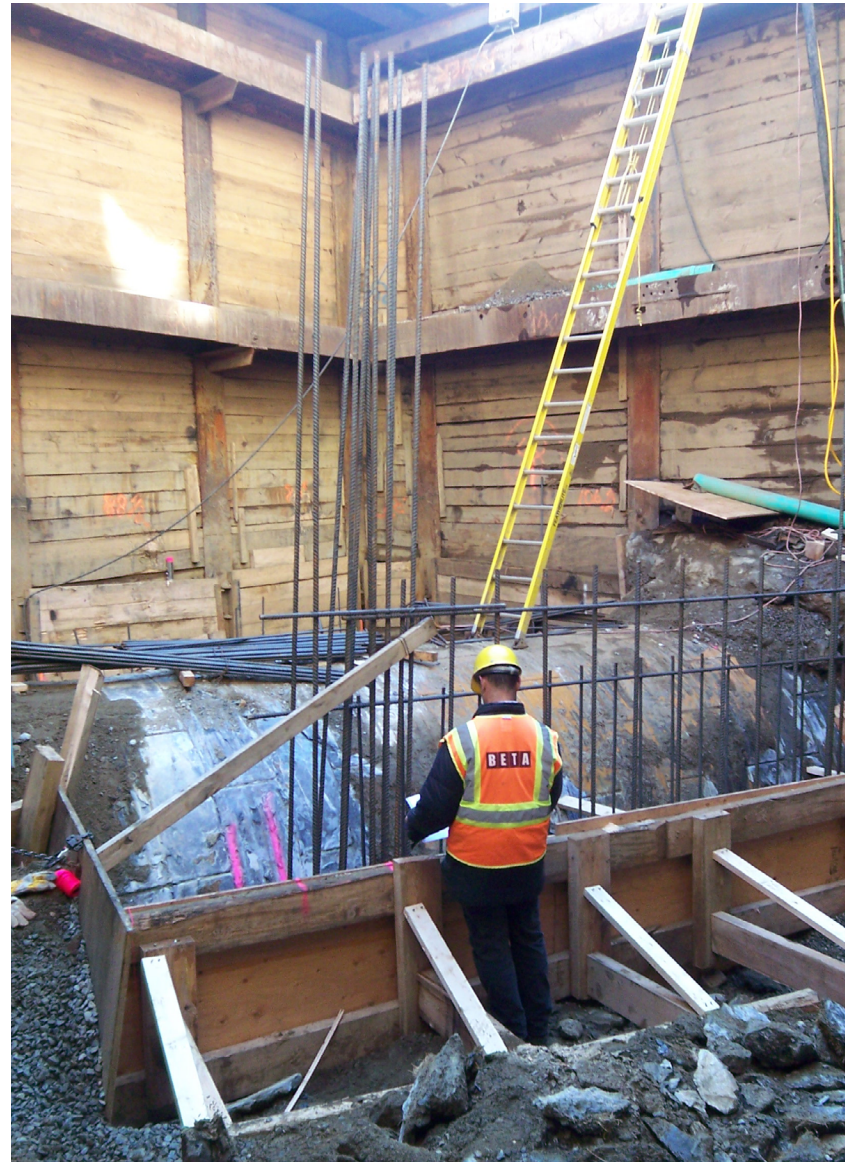




Response to Request for Proposals

**Statewide On-Call Construction Engineering & Inspection Services
Prequalified List of Consultants for LPA Qualifications-Based
Selection Contracts**

New Hampshire Department of Transportation



Submitted by:

BETA Group, Inc.

889 Elm Street

Manchester, New Hampshire 03101

844.800.2382 x7148

February 1, 2023

TABLE OF CONTENTS

1	Cover Letter	
2	Project Understanding & Approach	
	Project Understanding	2-1
	Project Approach	2-1
3	Organizational Chart	
	Organizational Chart	3-1
4	Project Team	
	Company Overview	4-1
	Our Team	4-1
	Key Personnel	4-1
	Project Team Matrix	4-2
5	References	
	References	5-1
6	Appendix	
	Resumes	
	Project Experience	



February 1, 2024

Mr. C.R. Willeke, PE, Municipal Highways Engineer
NH Dept. of Transportation
The Bureau of Planning & Community Assistance
7 Hazen Drive, PO Box 483
Concord, NH 03302-0483

RE: Letter of Interest - Statewide On-Call Construction Engineering and Inspection Services
Prequalified List of Consultants for locally administered Local Public Agency (LPA) Qualifications-Based
Selection Contracts - 2024

Dear Mr. Willeke,

BETA Group, Inc. (BETA) is pleased to submit our Letter of Interest for the Construction Engineering and Inspection Services Prequalified List for locally administered Local Public Agency projects. It is our understanding that this prequalified list may also be used for the short listing of consultants for State Aid Bridge (SAB) projects.

Improving Communities Together

At BETA, we believe the most successful projects are those developed in close collaboration with the community we are serving. As such, we work closely with municipal staff to understand their issues and understand their goals; and we work closely with the community at large through public engagement designed to gain input from and inform all of the project stakeholders of how the construction project will affect them. BETA has been providing construction engineering, construction observation services, and roadway, bridge, traffic, and permitting services to our municipal clients throughout New England for over 40 years.

Our Team

Our team will be led by our Project Manager/Construction Engineer of Record **John Byatt, PE**. John is LPA certified and has been overseeing the design and construction of bridge and transportation projects for over 30 years. **Christopher Turgeon, PE** will also manage projects and will be the Lead Engineer Inspector. John and Chris will be supported by our many Engineer Inspectors including **Bruce Temple, PE and David Stuczynski**. We also offer several certified **Traffic Signal Inspectors** who ensure traffic signals are working properly. These skills of our signal inspectors, including Dennis Flynn, PE, PTOE, IMSA, **Jaklyn Centracchio, PE, PTOE, IMSA** and **Kien Ho, PE, PTOE, IMSA**, make BETA well-suited for any projects with traffic signals, particularly CMAQ projects. They will all also have the support of our 160 professional engineers, planners, scientists, and other professional resources.

We are confident the Department will find our extensive experience, expertise, depth of resources, and specialty consultant team members more than qualified to be on the list of LPA consultants. Please let me know if you have any questions or require any additional information.

BETA Group, Inc.

John Byatt, PE
Project Manager
Vice President
JByatt@BETA-Inc.com

Mark R. Gershman, PE
Principal-In-Charge
Senior Vice President/COO
MGershman@BETA-Inc.com



2 Project Understanding and Approach

BETA has been providing Construction Engineering and Inspection Services to municipalities throughout New England for over 40 years. We have provided these services for a wide variety of projects such as transportation and bridge projects, water and wastewater projects, and environmental mitigation projects.

Project Understanding

Projects receiving federal funding through NHDOT will need to follow the Local Public Agency (LPA) and the Office of Federal Compliance (OFC) guidelines and requirements. State Aid Bridge (SAB) projects follow a similar but less extensive process. BETA staff have the experience and knowledge to lead the municipality through this process. Our Project Managers/Construction Engineers of Record are LPA and OFC certified as are several of our Engineer Inspectors.

Record keeping is vitally important in managing a federally funded construction project. We understand the record keeping requirements of the LPA and OFC programs and we maintain the required on-site files to allow for a successful OFC field audit.

BETA staff are well versed in the NHDOT Standard Specifications for Road and Bridge Construction. All LPA projects and most SAB bridge projects are developed using this document which specifies material requirements, construction requirements and the basis of payment for all items.

Project Approach

Assigned construction projects administered through this RFP will be led out of our Manchester, NH office. For each project, BETA will furnish a Project Manager/Construction Engineer of Record (PM) and Lead Engineer Inspector (LEI) to provide a combination of onsite and office related construction administration, allocate project related resources, coordinate onsite testing and laboratory analysis, maintain budgetary controls and coordinate with our field staff throughout the duration of the Project.

In general, our PM and LEI will work together in providing the following project related services:

Review of the Contract Plans and Documents: The PM and LEI will review the Contract Documents including design plans, technical specifications, and Contract Agreement information. Developing a clear understanding of the documents is critical to being able to deliver a successful project. Our PMs and LEIs, in addition to their construction experience, have experience developing Contract Documents and have an inherent understanding of them.

Pre-construction Meeting: BETA will facilitate this meeting to discuss roles and responsibilities, emergency contacts, coordination between the LEI and the contractor, utilities and ROW, environmental requirements, schedule, traffic control, the quality control program, and Federal Compliance requirements.

Schedules: We will review the CPM schedule, sequencing of the work, schedule of shop drawings, and related submissions as prepared by the contractor and consult with the municipality concerning their acceptability.

Traffic Control Plan: In addition to our construction staff, BETA can call upon our experienced in-house traffic design team to review the contractor or design engineer provided traffic control plan to ensure it will provide safety for the traveling public and the construction workers and will not add unnecessary delays to the traveling public. Safety is the highest priority at BETA.

Public Outreach: It is often important to alert the public to a construction project that will affect them. This could be a traveler who might be delayed commuting to work or an abutter who may be affected by construction noise. BETA will work with the Town to provide information for distribution in their preferred outlet. Measures that BETA has implemented successfully in the past include pre-construction public meetings, and the posting of construction updates to social media.



Meetings: We will schedule and administer bi-weekly progress meetings, and other job conferences with the municipality and the contractor, as necessary. BETA will prepare agendas for the meeting in coordination with the municipality and the Contractor and will lead the meetings. BETA will then prepare meeting minutes for distribution documenting summary of discussions, action items, and assignment of responsibility.

Resident Observation: The LEI and other inspectors assisting the LEI will perform “Close to Full Time” inspection of the work being performed by the contractor. We will provide consultation and advice on construction matters to the municipality including the progress and quality of the executed work by the contractor, and to determine if the work being conducted is in general accordance with the requirements of the individual Contract Documents. The LEI will perform the requirements of the Office of Federal Compliance including reviewing sign-in sheets, interviewing workers to determine their classifications, and maintaining required records.

Environmental Regulatory Observation: BETA will provide on-site environmental observation as needed. This may include ensuring the contractor is adhering to the requirements of the Storm Water Pollution and Prevention Plan (SWPPP), ACOE requirements and NHDES permits such as Dredge and Fill, Alteration of Terrain or Shoreland.

Contract Administration: These tasks to be performed by the PM and LEI include:

- Review and certify monthly applications for payment as submitted by the contractor for work completed under the individual construction contracts.
- Review contractor extra work requests and claims. In coordination with the municipality and contractor, prepare the required documentation for construction related change orders.
- Review and approve or reject shop drawings, diagrams, illustrations, samples and schedules, results of tests and inspections, and other data which the contractor is required to submit to demonstrate conformance with the Contract Documents.
- Daily field reports will be developed and item quantities installed will be documented following LPA criteria.

Material Quality Assurance: BETA will organize and oversee the quality assurance program which will follow the “NHDOT Quality Assurance Program for Municipally Managed Federal Aid Projects.” We also use this program for non-federal aid projects such as State Aid Bridge Projects. We will acquire the services of a local accredited materials testing firm on a project-by-project basis.

Solving Issues in the Field: Sometimes unforeseen conditions and issues can arise in the field. Our PM and LEI will work closely with the municipality and contractor to review the conditions and develop a mutually agreeable solution. If necessary, our BETA engineering design staff can assist with preparation of supplementary designs, sketches or quantity takeoffs as needed to facilitate field changes.

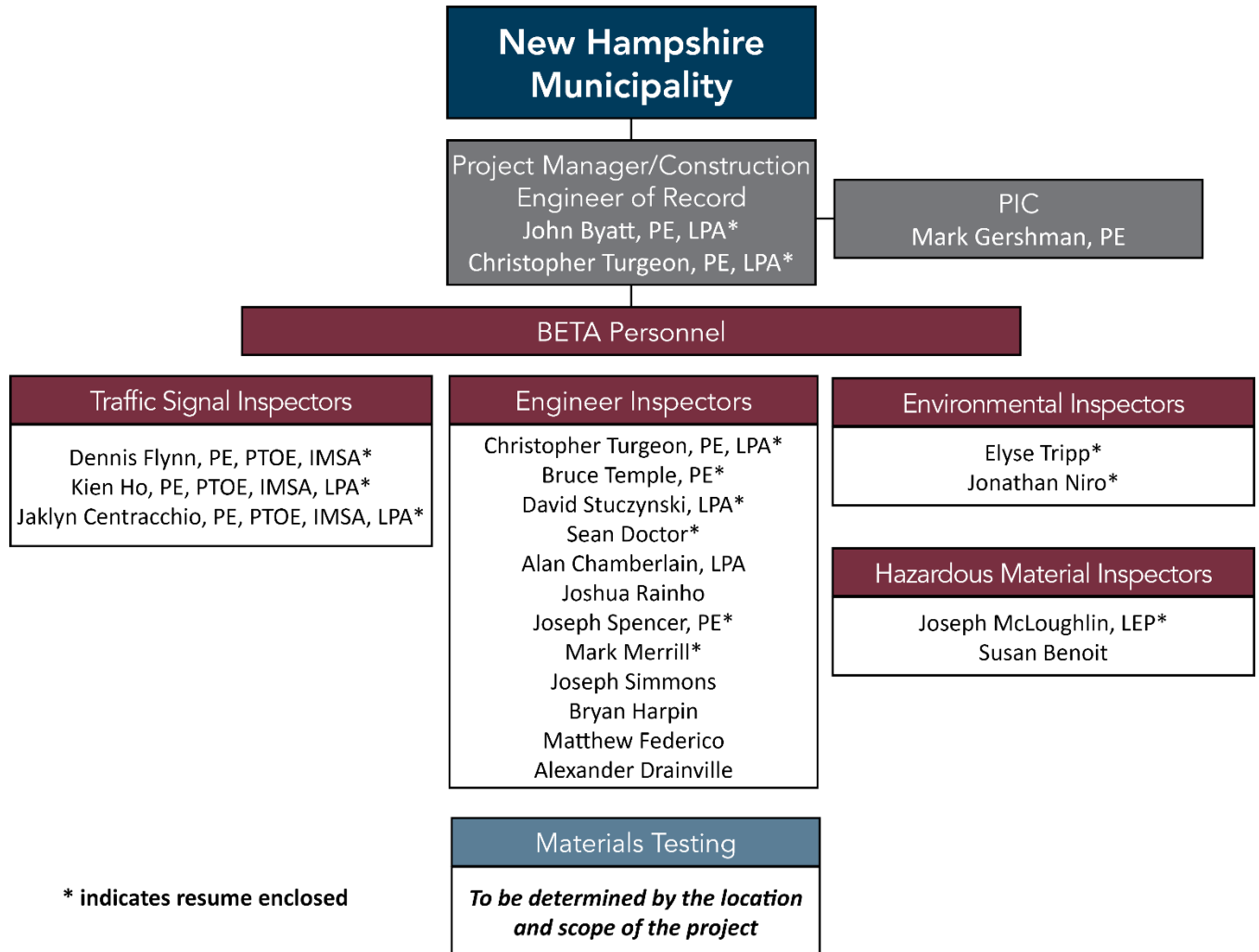
Substantial Completion and Final Inspections: After substantial completion has been reached, BETA will organize the final walkthrough with the contract, municipal staff, and DOT representatives. A punch list of uncompleted or unsatisfactory items is developed for the contractor to complete before Final Completion.

Project Close-Out: Final Completion is achieved when all outstanding items have been satisfactorily addressed and the project has been completed in accordance with the requirements of the contract. BETA will prepare close-out paperwork in conformance with LPA and Office of Federal Compliance requirements.



3 Organizational Chart

Organizational Chart



4 Project Team

Company Overview

For over 40 years, BETA has provided integrated solutions that improve the communities where we live and work. Our multi-disciplinary approach offers the ability to take projects from ideas to implementation under one roof. We have over 160 engineers, landscape architects, planners, construction managers, and support personnel. Ranked as a “Top 500 Design Firm” by *Engineering News Record*, BETA has a strong track record of working successfully with state DOTs and our municipal clients. Our technical services include traditional roadway/highway design, bridge/structure design, construction observation and administration, and traffic engineering services. Our clients include both municipalities as well as Departments of Transportation throughout New England.

Our Team

The multi-disciplined team put forth by BETA was developed to address the variety of potential projects that may arise from the LPA Program, State Aid Bridge (SAB), or any other projects receiving State and/or Federal funding. BETA has **six LPA certified** engineer inspectors and project managers. BETA also has specialized **traffic signal inspectors** who are on-site to ensure signal timing and performance is working properly and efficiently. In-field adjustments can be needed to ensure traffic delays are minimized and traffic is flowing as efficiently as possible. CMAQ and other projects that have signalized intersections will require these specialized and certified inspectors. We also have in-house environmental inspectors for **erosion control, stormwater management and hazardous materials oversight**.



BETA will also utilize the services of subconsultants for specific services. Qualified material testing firms, experienced in the LPA Quality Control process, will be selected on case-by-case basis. Factors in selecting these subconsultants will include project location and area of expertise of the subconsultant in relation to the specific scope of the project. The combination of in-house staff and specialized subconsultants provides a team that can undertake any potential assignment.

Key Personnel

The BETA team will be led by **John Byatt, PE** who has over 30 years of bridge, transportation and construction experience, including over 25 years working with New Hampshire municipalities. He is the Construction Project Manager for the **Souhegan River Trail in Merrimack** and has been the construction project manager on many municipal bridge projects over the last 25 years.

Christopher Turgeon, PE, ENV SP has significant construction observation and management experience. Chris was the Construction Project Manager of the **Lebanon – Spencer Street Improvement Project** and is currently the Construction Project Manager for the **Washington Street Signal Optimization Project in Claremont**.

David Stuczynski, PE is currently the Lead Engineer Inspector for the **Souhegan River Trail in Merrimack**. **Bruce Temple, PE** performed construction observation duties on the **Lebanon – Spencer Street Improvement Project**.

Our Traffic Signal Inspection team will be led by **Dennis Flynn, PE, PTOE, IMSA** and. Dennis is currently working on the construction services and signal timing for the **Claremont – Washington Street Signal Project**. Adding to our signal inspection depth is **Kien Ho, PE, PTOE, IMSA, and Jaklyn Centracchio, PE, PTOE, IMSA**.

Our team will be assisted by many experienced and qualified Engineer Inspectors including **Joseph Simmons**, who is the manager of our Construction Services group and Senior Engineer Inspectors **Joseph Spencer**, and **Mark Merrill**.



In addition to the key individuals noted above, the following table depicts the engineering services to be provided and all of the individuals who will provide those services for potential projects.

Construction Engineering and Inspection Services in Support of LPA Projects		Years of Experience	Years with Firm	Project Management/CEOR	Technician Inspector - Level I	Technician Inspector - Level II	Technician Inspector - Level III	Engineer Inspector - Level I	Engineer Inspector - Level II	Engineer Inspector - Level III	IMSA Traffic Signal Inspector	Environmental Inspector	NH Licensed Professional Engineer	CPESC Certified	NETTCP Certified	LPA Certified
Key Personnel	Project Role															
BETA Group, Inc.																
John Byatt, PE, LPA	Project Manager/CEOR	32	3	x						x			x			x
Christopher Turgeon, PE, LPA	PM/CEOR/Engineer Inspector	14	14	x					x				x			x
Bruce Temple, PE	Engineer Inspector	3	41						x							
David Stuczynski	Engineer Inspector	5	5					x								x
Sean Doctor, EIT	Engineer Inspector	19	8						x							
Dennis Flynn, PE, PTOE, IMSA	Traffic Signal Inspector	26	3						x		x					
Kien Ho, PE, PTOE, IMSA, LPA	Traffic Signal Inspector	38	20						x		x		x			x
Jaklyn Centracchio, PE, PTOE, IMSA, LPA	Traffic Signal Inspector	20	15						x		x		x			x
Joshua Rainho, PE	Engineer Inspector	11	7					x								
Alan Chamberlain	Technician Inspector	6	2		x											*
Joseph Simmons	Manager Construction Services	28	27						x							
Joseph Spencer, PE	Sr. Engineer Inspector	28	12						x							
Mark Merrill	Sr. Engineer Inspector	19	19						x							
Bryan Harpin	Sr. Engineer Inspector	24	15						x							
Matthew Federico	Engineer Inspector	6	6						x						x	
Alexander Drainville	Engineer Inspector	2	2					x								
Jonathan Niro	Environmental Inspector	8	4									x				
Elyse Tripp	Environmental Inspector	7	2									x				
Joseph McLoughlin, LEP	Hazardous Materials Inspector	32	20									x				
Susan Benoit	Hazardous Materials Inspector	37	4									x				



5 References

References

There is no better benchmark on the quality of services provided by our staff than feedback and testimonials from our clients. BETA is pleased to provide the following list of references for your consultation.

Dawn B. Tuomala, PE, LLS, CWS

Town of Merrimack
6 Baboosic Lake Road
Merrimack, NH 03054
603.424.5137

Nancy Merrill

Department of Planning and
Development
City of Claremont
14 North Street
Claremont, NH 03743
603.542.7008
nmerrill@claremontnh.com

Brian A. Vincent, PE

City Engineer, DPW
City of Lebanon
193 Dartmouth College Hwy
Lebanon, NH 03766
603.448.3112 x1515
brian.vincent@lebanonnh.gov

Tom Ryder, PE

Town Engineer
5000 Dedham Street
Needham, MA 02492
781.455.7550

Louis Taverna, PE

City Engineer
1000 Commonwealth Ave
Newton Centre, MA 02459
617.796.1020

6 Appendix: Resumes



Education

MS, Civil Engineering –
University of New Hampshire
BS, Civil Engineering –
University of New Hampshire

Registrations/Certifications

Professional Engineer: NH, VT,
ME, RI, MA
NH Local Public Agency Cert.

John Byatt, PE, LPA

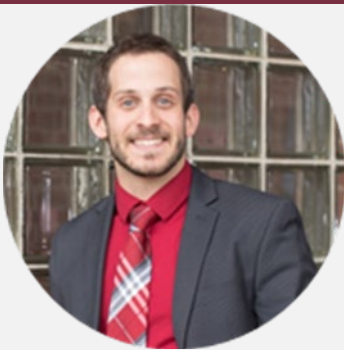
Project Manager / Construction Engineer of Record

Mr. Byatt is a Vice President and Manager of BETA's Manchester, NH office. He possesses over 30 years of experience in project management, construction administration, and transportation and structural engineering within northern New England.

John is also a Bridge Engineer, where he is a project manager, construction administrator, senior engineer, and QA/QC manager. He has been the construction project manager and administrator for many New Hampshire Municipal bridge projects through his career.

Project Experience

- Souhegan River Pedestrian Trail, Merrimack, NH
- Spencer Street Roadway Improvements, Lebanon, NH
- Manchester Street over Pennichuck Reservoir, Merrimack-Nashua, NH
- Wiswall Road Bridges over Lamprey River, Durham, NH
- 2nd NH Turnpike over South Branch Piscataquog River, Frankestown, NH
- Hands Across the Merrimack Pedestrian Bridge, Manchester, NH
- Pelham Road over Second Brook, Hudson, NH
- Old Cheshire Road Over Spring Brook, Unity, NH



Education

BS, Civil Engineering –
University of New Hampshire
(2010)

Registrations

Professional Engineer: NH, MA
NH Local Public Agency Cert.

Christopher Turgeon, PE, LPA

Project Manager / Construction Engineer of Record / Engineer Inspector

Mr. Turgeon is a Project Manager and Construction Engineering Inspector and Contract Administrator with 14 years of experience. He has a wide variety of construction and highway engineering experience including: construction observation, contract administration, highway design, drainage calculations, and preparation of assorted environmental permit application.

Project Experience

- Washington Street Signal Optimization, Claremont, NH
- Spencer Street Roadway Improvements, Lebanon, NH
- Route 125 Roadway Improvements, Epping, NH
- Legacy Farms Street and Utility Development - Hopkinton MA
- Cooks Farm Street and Utility Development, Franklin MA
- WL French Site Development - Billerica MA
- Maple Hill Subdivision Street and Utilities, Franklin MA
- Lakeland Farms Street and Utility Development, Norfolk MA
- Acorn Place Street and Utility Development, Millis MA



Education

Master of Engineering,
University of Florida (1983)

Registrations

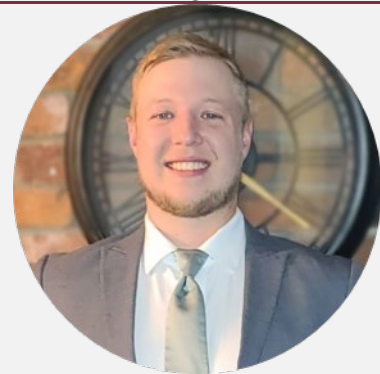
Professional Engineer: VT

Bruce Temple, PE
Senior Engineer Inspector

Mr. Temple is a Senior Construction Engineer Inspector with over 40 years of experience. He has a wide variety of construction and public works experience including as a contractor, engineer, and public works official.

Experience

- Spencer Street Roadway Improvements – Lebanon, NH
- Assistant Director of Public Works – Lebanon, NH
- Director of Public Works – Claremont, NH
- Morrill Construction
- Frank W. Whitcomb Construction



Education

BS, Civil Engineering –
University of Massachusetts -
Lowell (2019)

David Stuczynski, LPA
Engineer Inspector

Mr. Stuczynski is an Engineer Inspector and Engineering Designer with 5 years of experience. His experience includes on-site peer reviews of construction developments for several municipalities.

Experience

- Souhegan River Pedestrian Trail, Merrimack, NH
- The Home Depot Distribution Center Drainage and infiltration systems, Billerica, MA
- Trails at Legacy Farms: installing sewer main, drainage installation, and surface runoff control, Hopkinton, MA
- ADA Trail - Post construction review and data collection, Needham, MA
- Installing Water Main and Sewer Main Air Test observation at Glen Ellen, Millis, MA



Education

MS, Civil Engineering –
Northeastern University (2007)
BS, Civil/Environmental
Engineering – Pennsylvania
State University (1998)

Dennis J. Flynn, PE, PTOE, IMSA
Traffic Signal Inspector

Mr. Flynn has 26 years of experience in performing and leading all aspects of traffic planning, analysis, modeling, and design. He has worked with MassDOT, DCR, MBTA, RIDOT, and various municipalities on their transportation projects including complete streets, bridge replacements, intersection and interchange improvements, bicycle and pedestrian studies, and safety analyses. Dennis is an IMSA certified signal inspector.

Project Experience

- Washington Street Signal Optimization, Claremont, NH
- Wire Road Intersection Improvements, Merrimack, NH
- Route 125 Upgrade/Reconstruction – Epping, NH (NHDOT)
- Valley Street Complete Streets Improvements - Manchester, NH
- Canal Street Reconstruction – Salem, MA

Registrations

Professional Engineer: MA



Education

BS, Civil/Environmental Engineering – University of Rhode Island (2002)

Registrations

Professional Engineer: NH, RI

Jaklyn Centracchio, PE, PTOE, IMSA, LPA
Traffic Signal Inspector

Ms. Centracchio has over 19 years of experience in traffic engineering including traffic signal inspection. She has developed a diverse background in many phases of transportation engineering. Her background includes traffic analysis, traffic calming, traffic design, and design for roadway. Jaklyn is proficient in VISSIM, HCS, SYNCHRO, AutoCAD, Petra, and Quest applications. Jaklyn is an IMSA certified signal inspector.

Project Experience

- Wire Road Intersection Improvements, Merrimack, NH
- Route 140 and Maple Street Intersection Improvements – Bellingham, MA
- Worcester Central Business District Streetscape Improvements – Worcester, MA
- Quincy Shore Drive and Sea Street Traffic Improvements – Quincy, MA
- Lake Street at Pulaski Boulevard Signalization – Bellingham, MA
- Adaptive Traffic Signal Project on Route 109 – Westwood, MA



Education

MSCE, Northeastern University
BSCE, Cleveland State Univ.

Registrations

Professional Engineer: NH, MA

Kien Ho, PE, PTOE, IMSA, LPA
Traffic Signal Inspector

Mr. Ho has over 37 years of experience specializing in all aspects of highway and transportation design and engineering including traffic signal inspection. Kien performs the designs for and manages various transportation projects, preforms QA/QC reviews, traffic management plans, and installation of Intelligent Transportation and other advanced signal systems. Kien is an IMSA certified signal inspector.

Project Experience

- Washington Street Signal Optimization, Claremont, NH
- Route 140 and Maple Street Intersection Improvements – Bellingham, MA
- Traffic Control Operations Center & Advanced Traffic Signal System – Worcester, MA
- Hancock Street Corridor Improvements, Quincy, MA
- Downtown Improvements – Framingham, MA
- Signal On-Call – Lexington, MA



Years of Experience

BETA: Since 2016
Total: Since 2005

Sean Doctor
Engineer Inspector

Mr. Doctor has 19 years of experience involving roadway and drainage design, construction phasing, construction inspection, utility coordination, and cost estimation. In addition, he has experience in design of irrigation water systems, storm drain systems, sewer systems, and domestic waterlines. Sean is proficient in the use of AutoCAD, MicroStation, Land Development Desktop, InRoads, and more. Sean works out of BETA’s Manchester, NH office.

Project Experience

- Cook’s Farm; Union Meadows; Rolling Brook; South Hill Estates; 656 King Street, 0 Pond Street construction observation, Franklin, MA
- New England Ice Cream, 20 Commerce Way construction observation, Norton, MA

Education

BS, Civil Engineering,
University of Arizona (2005)

- Iron Horse construction observation, Billerica, MA
- Legacy Farms construction observation, Hopkinton, MA



Joseph Spencer, PE
Senior Engineer Inspector

Mr. Spencer has over 27 years of construction engineering and survey experience. Joe has been involved with utility and roadway infrastructure improvement projects in municipalities throughout New England. His experience includes a variety of design and construction projects where he has been responsible for resident inspections, field investigations, utility and topographic surveys and the calculation of construction quantities.

Years of Experience

Total: Since 1994

Education

BS, Civil Engineering –
University of Massachusetts
Lowell (1993)

Project Experience

- Route 140 and Maple Street Intersection Improvements – Bellingham, MA
- Boston Road (Route 3A) Traffic and Roadway Improvements – Billerica, MA
- High and Church Street Streetscape Improvements Project – Clinton, MA Water Street Promenade – Plymouth, MA
- Nantasket Ave Roadway Improvements Project – Hull, MA



Mark Merrill
Senior Engineer Inspector

Mr. Merrill is a Senior Engineer Inspector with 18 years of experience in providing onsite construction services and observation. His versatility and in-depth knowledge of roadway and utility related design and construction has benefitted BETA on various engineering projects. Mark is known for his practical approaches in resolving construction related problems, as well as his communication, coordination, and public relations skills.

Years of Experience

Total: Since 2003

Education

BS, Civil Engineering
Technology – Wentworth
Institute of Technology (2003)

Project Experience

- Union Avenue Utility Improvements – Framingham, MA
- Roadway and Sidewalk Rehabilitation Program – Framingham, MA
- Main Street Improvements – Easton, MA
- Dedham Square – Dedham, MA
- Tanyard Brook Culvert Replacement Project – Bristol, RI



Elyse Tripp
Environmental Inspector

Ms. Tripp is a Staff Scientist for BETA with over 5 years of experience in the Environmental Sciences field. During this time, she has assisted communities as a wetland scientist performing ecological restorations, coastal shoreline cleanups, SWPPP inspections and removal of invasive species. Ms. Tripp took the NHDES course on “Protecting Surface Water Quality on Construction Sites.”

Project Experience

- Souhegan River Pedestrian Trail, Merrimack, NH
- Environmental Construction Monitoring, MBTA Facility, Rochester, MA
- City Pier Floating Docks, City Pier, Fall River, MA
- Route 27 & West Street, Medfield, MA
- Peer Review – 13 Acton Road, Chelmsford, MA

Years of Experience

BETA: Since 2022

Total: Since 2017

Education

BA, Environmental Studies -
Stonehill College (2017)

**Years of Experience**

BETA: Since 2020

Total: Since 2016

Education

BA, Geography/Environmental Studies – Framingham State University (2015)

Jonathan Niro

Environmental Inspector

Mr. Niro is an Environmental Scientist in the environmental services group at BETA. Through applying varied experiences in wetland science, environmental regulation, land surveying, and stormwater management, Mr. Niro serves as a field-to-finish lead on several large-scale infrastructure and environmental projects. In addition, Mr. Niro’s experience lends itself to providing expert peer review services for municipalities. Mr. Niro took the NHDES course on “Protecting Surface Water Quality on Construction Sites.”

Project Experience

- Environmental Monitoring/Construction Oversight, Millis, MA
- Washington St. Signal Optimization, Claremont, NH
- Valley Street Complete Streets Improvements, Manchester, NH
- Yarmouth Riverwalk Park, Yarmouth, MA
- Route 1 Reconstruction, Plainville, MA

**Years of Experience**

BETA: Since 2004

Total: Since 1992

EducationMS, Water Resources, Stanford University (1992)
BS, Civil Engineering, Worcester Polytechnic Institute (1991)**Joseph McLoughlin, LSP**

Hazardous Materials

Mr. McLoughlin has over 30 years of experience in the environmental consulting field providing a wide range of environmental services to clients across New England. Mr. McLoughlin directs a diverse staff of scientists, engineers, and risk assessors conducting environmental assessments, site remediation, Brownfields assessments, soil management, regulatory compliance, and indoor air quality assessments.

Project Experience

- Souhegan River Pedestrian Trail, Merrimack, NH
- Brownfields investigations at petroleum and hazardous materials properties under an U.S. EPA Brownfields Assessment grant, Fall River, MA
- Investigation of soil and groundwater along an 800-foot corridor for the installation of a flood-control culvert for Cobb Brook, containing hazardous waste disposal sites, Taunton, MA
- Licensed Site Professional for several brownfields properties owned by the City of Taunton, Taunton, MA



Souhegan River Pedestrian Trail

Merrimack, New Hampshire

REFERENCE

Dawn B. Tuomala, PE, LLS, CWS
DPW Director
Town of Merrimack
6 Baboosic Lake Road
Merrimack, NH 03054
603.424.5137

SERVICES PROVIDED

- Resident Observation
- Construction Administration
- Erosion Control Inspection
- Hazardous Materials
Excavation Monitoring

PROJECT STATUS

Ongoing

PROJECT COST

Total Construction Cost \$1.6M

PROJECT BENEFITS

- ✓ Pedestrian Infrastructure
- ✓ Trail Network Connectivity

This project consists of the construction of a pedestrian trail along the Souhegan River and through a former dam and mill complex. The trail also crosses under the existing arch bridge which carries US Route 3 over the Souhegan River. Approximately 200 feet of the trail will consist of a concrete boardwalk structure. The trail also passes over an area containing contaminated soils. This project is receiving federal funding through a Transportation Alternatives Program (TAP) grant administered through the NHDOT Local Public Agencies (LPA) program.

BETA is providing complete construction engineering services for this project. These services include full time resident observation and construction administration. Construction observation is performed in accordance with NHDOT standards, including daily field reports and daily quantity book calculations. Construction administration includes pay requisition reviews and approvals, facilitating bi-weekly meetings and construction schedule reviews. BETA is following all of the Office of Federal Compliance procedures including payroll reviews, worker interviews, and ensuring Davis-Bacon wage rates are used.

BETA personnel are also reviewing the Stormwater Pollution Prevention Plan, Invasive Species Control Plan, weekly erosion control reports, and conducting field visits to inspect the erosion control.

Specially trained BETA personnel are also monitoring the excavation and filling of the areas with known hazardous soils materials to ensure safe compliance with the hazardous waste specifications and permits.





Washington Street Signal System Optimization

Claremont, New Hampshire

REFERENCE

Nancy Merrill
Director
Department of Planning and
Development
City of Claremont
14 North Street
Claremont, NH 03743
603.542.7008
nmerrill@claremontnh.com

SERVICES PROVIDED

- Resident Observation
- Construction Administration
- Traffic Signal Inspection

PROJECT STATUS

Ongoing

PROJECT COST

Construction \$750k (est.)

PROJECT BENEFITS

- Increased Roadway Capacity
- Improved Safety
- Establishment of Central Signal Communication Center

Washington Street is a prime example of a corridor that is experiencing “typical” traffic problems that accompany retail and commercial development demands placed on a roadway network. Recognizing the need to address these concerns, the City was awarded a Congestion Mitigation Air Quality (CMAQ) Grant from the New Hampshire Department of Transportation. These funds are being administered through their Local Public Agency (LPA) Program.

The City’s signal optimization of the Washington Street corridor will consist of optimizing 10 intersection signal systems coupled with the implementation of remote access availability from the fire station which will serve as the central operational command center. Improvements will entail upgrading/retrofitting existing traffic signal control equipment, communication, GPS emergency vehicle pre-emption and traffic software at the ten existing signalized intersections located along Washington Street. The implementation will include traffic signal controller upgrades, data communication interfaces, remote central operation capability, advanced traffic management system software, system level vehicle detection, and a full peer-to-peer traffic control system. Video feed of live traffic conditions will be included as part of the remote traffic monitoring center at the fire station. For communication interface, wireless communication technology is proposed for the signal system.

BETA is providing complete construction engineering services for this project. These services include full time resident observation and construction administration. Construction observation is performed in accordance with NHDOT standards including daily field reports and daily quantity book calculations. Construction administration includes pay requisition reviews and approvals, facilitating bi-weekly meetings and construction schedule reviews. BETA is following all of the Office of Federal Compliance procedures including payroll reviews, worker interviews and ensuring Davis-Bacon wage rates are used.





Spencer Street Improvements

Lebanon, New Hampshire

REFERENCE

Brian Vincent, PE
City Engineer
Office of Public Works
193 Dartmouth College Highway
Lebanon, NH 03766
603.448.3112 x1515
brian.vincent@lebanonnh.gov

SERVICES PROVIDED

- Construction Observation
- Construction Administration
- ADA & Accessibility

PROJECT STATUS

Completed

The Spencer Street corridor in Lebanon, NH has traditionally served industrial and single-family homes directly abutting or accessed by the corridor. In recent years, the roadway has experienced significant growth with the construction of several commercial and multi-unit residential developments. Additionally, the City has accepted a proposal from a private entity for the redevelopment of the former DPW site on Spencer Street. These projects, coupled with the potential future development, have necessitated a significant upgrade to the Spencer Street corridor.

BETA was contracted by the City to provide services associated with the Preliminary and Final Design of the improvements. As part of the Preliminary design, BETA developed and evaluated several design alternatives to accommodate the multitude of users of the roadway. This required that the design utilize a “Complete Streets” approach when developing the improvements options. The option selected includes a complete roadway reconstruction, new drainage, new utility connections, sidewalks, and landscaping. The project also included the reconfiguration of the Taylor/Spencer Street intersection. There was a stop condition westbound traffic on Spencer Street. As this is the predominant movement in the intersection, the proposed design re-aligned Taylor Street to form a “T” with Spencer Street.

BETA provided resident construction inspection and contract administration services for the project. Our team worked very closely with the contractor and the City to ensure the project was built in conformity to the plans and of the highest quality.





APWA
Project of
the Year
2019 Award
Winner

Central Avenue/Elliot Street Bridge Rehabilitation

Needham/Newton, Massachusetts

REFERENCE

Tom Ryder, PE
Town Engineer
5000 Dedham Street
Needham, MA 02492
781.455.7550

Louis Taverna, PE
City Engineer
1000 Commonwealth Ave
Newton Centre, MA 02459
617.796.1020

SERVICES PROVIDED

- Construction Observation
- Construction Administration

PROJECT STATUS

Completed 2017

PROJECT COSTS

Construction Cost \$3.59M

PROJECT BENEFITS

- Historical Preservation
- Structural Integrity

The Town of Needham and the City of Newton jointly own the bridge carrying Central Avenue / Elliot Street over the Charles River, which serves as the border between the two municipalities. The bridge is a historic three-span stone masonry arch bridge constructed in 1857 and widened in 1897.

The municipalities chose to rehabilitate the bridge by using a concrete arch saddle. This rehabilitation method replaces the soil gravel fill over the arches with reinforced concrete, essentially creating a new concrete arch bridge within the existing stonework. Major elements of the rehabilitation also included drilling concrete-filled micro piles through the piers and abutments to underpin them, stone masonry repairs, replacing an independent sidewalk superstructure that had been added to the north side of the bridge in 1970, and replacing the bridge railings to meet crash testing requirements. The north spandrel wall was replaced by forming that side of the arch saddle with a custom form liner that resembled the original stonework. After the form liner was removed, the concrete was hand-stained to match the appearance of the surrounding stonework. This same liner and staining technique was used to add a veneer to the concrete piers that supported the abutting sidewalk bridge, helping to better blend the appearance of the two structures.

BETA provided complete construction engineering services for this project. These services include full-time resident observation and construction administration. Construction observation included daily field reports and daily quantity book calculations. Construction administration included pay requisition reviews and approvals, facilitating construction meetings, and construction schedule reviews.



Kendrick Street/Nahanton Street Bridge Rehabilitation

Needham/Newton, Massachusetts

REFERENCE

Tom Ryder, PE
Town Engineer
470 Dedham Street
Needham, MA 02492
781.455.7538

Lou Taverna, PE
City Engineer
1000 Commonwealth Avenue
Newton Centre, MA 02459
617.796.1020

SERVICES PROVIDED

- Construction Observation
- Construction Administration

PROJECT STATUS

Completed

PROJECT COST

Total Construction Cost \$185K

The Town of Needham and the City of Newton jointly own the bridge carrying Kendrick Street/Nahanton Street over the Charles River, which serves as the border between the two municipalities. The bridge is a three-span continuous rolled steel beam bridge originally constructed in 1959 and re-decked in 1988.

The repair program included partial-depth repairs to the concrete deck, repairs to steel cover plates, replacement of deck joints, replacement of bridge bearings, repainting of structural steel, and repairs to riprap slope paving.

BETA provided complete construction engineering services for this project. These services include full time resident observation and construction administration. Construction observation included daily field reports and daily quantity book calculations. Construction administration included pay requisition reviews and approvals, facilitating construction meetings and construction schedule reviews.





Rhode Island
Massachusetts
Connecticut
New Hampshire

www.BETA-Inc.com

