

Letter of Interest For
**Statewide On-Call Construction
Engineering and Inspection Services
for locally administered
Local Public Agency (LPA)
Qualifications-Based Contracts**

Submitted to
New Hampshire Department of Transportation





SECTION
1

Introduction Letter



FUSS & O'NEILL

February 2, 2024

C.R. Willeke, PE
Municipal Highways Engineer
Bureau of Planning and Community Assistance
NH Department of Transportation
7 Hazen Drive, PO Box 483
Concord, NH 03302

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

Dear Mr. Willeke,

Municipalities are Fuss & O'Neill's largest market, as we frequently work closely and collaboratively with them to implement their infrastructure projects. Our team continues to work with municipalities and contractors, providing construction services and field inspections to monitor projects and keep them on task and on schedule. Fuss & O'Neill has worked with municipalities on many New Hampshire Department of Transportation (NHDOT) Local Public Agency (LPA) projects and have a great understanding of how projects are completed through this process. By combining our extensive history of working on NHDOT LPA projects, along with the countless improvement projects we have completed with municipalities across New Hampshire, Fuss & O'Neill is well-qualified to provide construction engineering and inspection services to municipalities.

Fuss & O'Neill is a multidisciplinary firm, and our local team has personnel ready to manage construction projects for municipalities. Our firm has worked on many LPA projects during construction for municipalities including Manchester, Nashua, Frankestown, Merrimack, Newmarket, Londonderry-Derry, and Dover. Our team understands the process and can manage LPA projects in an efficient manner.

Our team will be led by JoAnn Fryer, PE, as Principal-in-Charge. Her diverse background in both roadway and bridge projects, which includes extensive construction oversight, makes her an ideal candidate to lead this contract. We have assigned Steve Reichert, PE to be the Project Manager for Roadway Inspection, and Jaime French, PE for Bridge Inspection. JoAnn, Steve, and Jaime are all NHDOT LPA and OFC Certified, and have more than 75 years of collective experience.

Gateway Building
50 Commercial St.
Manchester, NH
03101
t 603.668.8223
800.286.2469
www.fando.com

We frequently serve as a liaison between municipal clients and the NHDOT and have a strong track record of delivering these types of projects. Should you have any questions about our Letter of Interest, please contact the undersigned.

Sincerely,

JoAnn Fryer, PE
Principal-in-Charge
603-222-3469
jfryer@fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

SECTION
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Project Understanding and Approach

Manchester Street Bridge – Merrimack/Nashua, NH

Project Understanding and Approach

Fuss & O'Neill will partner with the Local Public Agencies (LPA) and the New Hampshire Department of Transportation (NHDOT) to ensure compliance with all of the provisions of a project's plans and specifications, and the NHDOT's LPA program. Fuss & O'Neill's construction inspection personnel have provided oversight on a broad variety of federal, state and locally funded transportation projects throughout New Hampshire. We have a deep staff of experienced engineers and technicians who will be available for construction inspection assignments of varying durations and locations.

Fuss & O'Neill will provide construction oversight and inspection services to Local Public Agencies in support of locally administered projects. We will provide an LPA certified professional engineer to be in responsible charge of any inspection staff who will be assigned to perform construction oversight on a day-to-day basis. The assigned engineers or technician inspectors are experienced in construction practices and possess full knowledge of the scope, schedule, specifications, and details for the particular project, and shall either be LPA and OFC certified, or in the process of obtaining this certification.

Fuss & O'Neill will manage the requirements of the LPA program to ease the burden on municipal staff. Through our extensive experience with designing and constructing LPA projects, we understand the level of effort needed to meet all State and Federal funding requirements, and will perform the tasks below to ensure both LPA compliance and a project successfully constructed on-time and on-budget. Fuss & O'Neill can also provide engineering staff with environmental inspection experience to ensure that the project and the Contractor comply with the Environmental Commitments detailed in the Contract Manual. Our team has strong experience performing Stormwater Prevention Pollution Plan (SWPPP) inspections and stormwater monitoring. We also have relationships with subconsultant firms that can provide services such as archaeological inspections if required for a particular project.

Implementation of LPA Requirements

Fuss & O'Neill has been performing construction oversight and inspection of various types of LPA projects for many years, and has developed expertise in complying with all construction related provisions and requirements of the LPA program. Our field staff will work with the Local Public Agency and the NHDOT to successfully administer the project, displaying levels of expertise in the key following project areas:

- **Labor Compliance** – Fuss & O'Neill will work with the Contractor and the NHDOT Office of Federal Compliance (OFC) to ensure that all of Davis-Bacon labor compliance provisions are followed. All personnel assigned to an LPA construction project will receive OFC LPA Labor Compliance certification. Copies of all labor compliance records will be maintained by Fuss & O'Neill through the end of the project. Labor standard interviews of applicable Contractor employees will be conducted by Fuss & O'Neill during project construction, and Fuss & O'Neill will coordinate with the OFC to conduct periodic site visits and record reviews. Fuss & O'Neill will monitor subcontractor approvals by the OFC, ensure that daily sign-in logs are being maintained by the Contractor, and review labor categories to implement requests for additional work classifications as needed.
- **Construction Observation** – Our team will provide full-time or part-time construction observation services as appropriate for the needs of the assignment. Having an on-site presence during construction allows our teams to quickly review compliance with plans, specifications, and environmental commitments, accurate record keeping, and a more collaborative atmosphere to head off any potential issues before they become problems.

- **Materials Testing** – Fuss & O'Neill will retain the services of a qualified materials testing firm to perform sampling and testing of all materials required by a project's Quality Assurance Program and in conformance with NHDOT specifications. We anticipate using S. W. Cole for materials testing in the majority of project locations. We have relationships with additional materials testing companies that may be employed for projects outside of S. W. Cole's effective reach.
- **Meetings** – At the start of construction, Fuss & O'Neill will schedule a Preconstruction Meeting with attendees including municipal staff, the Contractor, the NHDOT Project Manager, the NHDOT's Office of Federal Compliance, along with other officials and interested parties. Items such as proposed construction schedules, abutter impacts, and other special requirements of the project would be discussed. Fuss & O'Neill will also conduct periodic construction progress meetings for the duration of a project. These meetings will include the Contractor, representatives from the Municipality, and other parties as needed. Minutes of these meetings will be prepared and will document schedule status, decisions made, and any directions given, and will be retained in the project records.
- **Payment Requisitions** – Fuss & O'Neill will measure and review installed quantities of materials on a daily basis. These quantities will be agreed to by the Contractor, and would form the basis for the Contractor's monthly payment requisition. We will review this payment requisition for accuracy and compliance with the terms and conditions of the contract, provide our recommendation for payment, and forward this to the Municipality for processing. Our team will keep detailed daily records of pay item quantities and materials in accordance with direction provided in the LPA manual. This documentation will be retained with the project records.
- **Contractor Claims for Extra Work** – Fuss & O'Neill will review any claims for extra work from the Contractor for legitimacy, and prepare responses as appropriate. We will prepare a change order documenting the change and providing the justification, cost, and schedule impact of this change to the work. This change order document will be provided to the Municipality and the NHDOT Project Manager for their concurrence. No additional/changed work will be allowed to be performed prior to Municipality and NHDOT authorization.
- **Buy America** – Fuss & O'Neill will review project shop drawing and materials submittals for compliance with the Buy America provisions in the contract, and will ensure that Certificates of Compliance and other relevant documentation are received from the Contractor. The engineer performing the construction inspection and oversight will ensure that all steel and iron materials being installed have a demonstrated compliance with the Buy America provisions or will not allow them to be installed.
- **Project Closeout** – Fuss & O'Neill will prepare all necessary closeout documentation including but not limited to the following: Punch Lists; Certificate of Substantial Completion; Certificate of Final Completion of Work; Contractor's Release; Consent of Surety Company to Final Payment; Contractor's Final Lien Waiver; Materials Certification; Record Drawings; and Before & After Photo Sheets. We will collect and maintain all project documentation and records throughout the life of the project. These records will be prepared and transferred to the Municipality at the end of a project.

LPA Projects Require Outstanding Teamwork

Fuss & O'Neill coordinates with municipal personnel, the contractor, NHDOT staff, the NHDOT Office of Federal Compliance, and key local stakeholders to ensure collective understanding and process of the project.

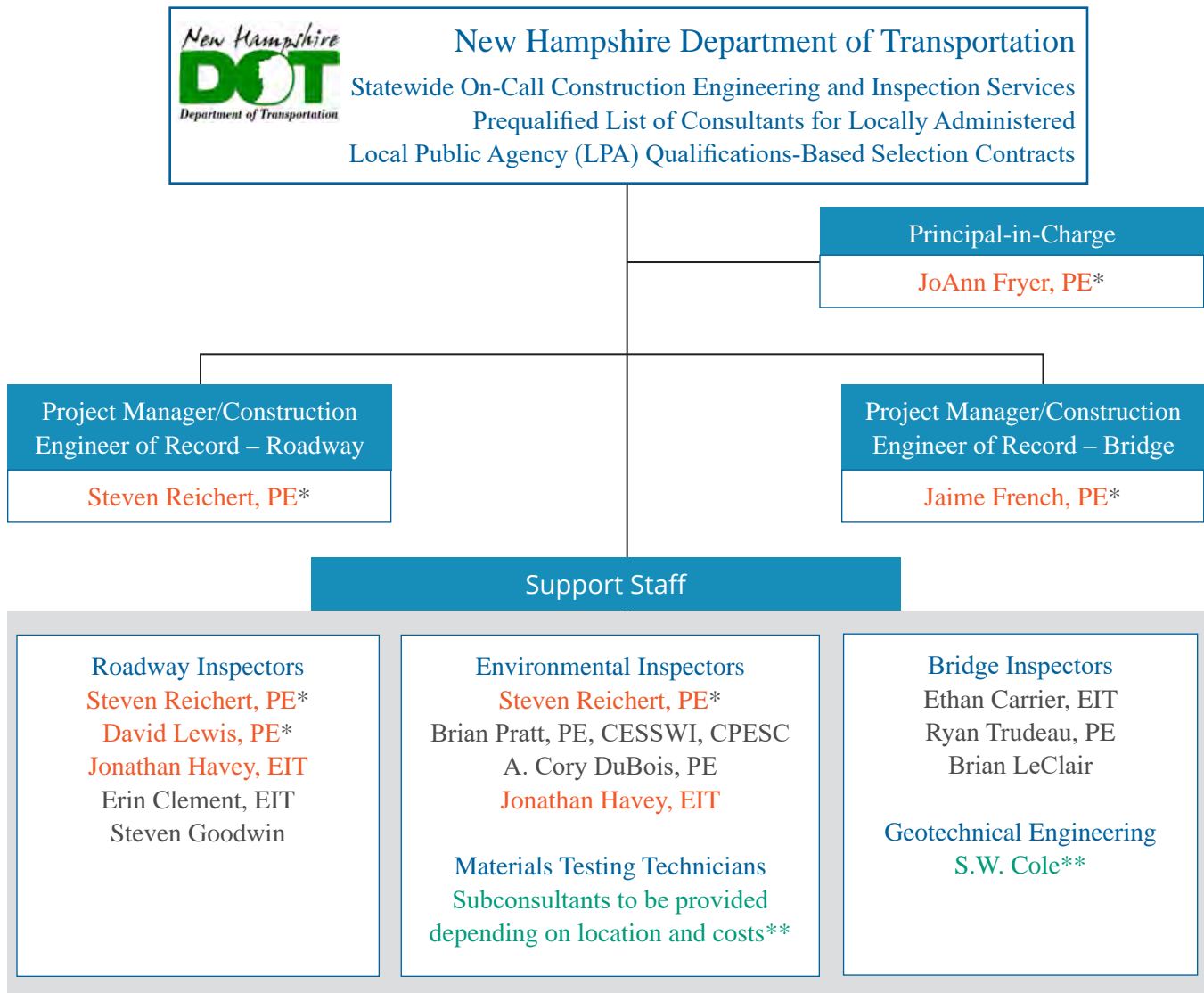


Gaslight District Improvements – Manchester

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Organizational Chart

Organizational Chart



*NHDOT LPA Certified

NHDOT OFC Certified

**Subconsultant

SECTION
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Project Team

Belvedere Road Reconstruction – Keene, NH

Project Team: Experience Table

Fuss & O'Neill presents a strong project team with appropriate levels of experience for the Construction Engineering and Inspection Contract. Our team is diverse, collaborative, and ready to work.

| Key Personnel | Project Role | Years of Experience | Years with Firm | Technician Inspector I | Technician Inspector II | Technician Inspector III | Engineer Inspector I | Engineer Inspector II | Engineer Inspector III | Project Manager/Con. Engineer of Record | Environmental Inspector | NH Licensed PE | NHDOT LPA Certified | NHDOT OFC Certified | CESSWI Certified | CPESC Certified |
|--------------------------------|--|---------------------|-----------------|------------------------|-------------------------|--------------------------|----------------------|-----------------------|------------------------|---|-------------------------|----------------|---------------------|---------------------|------------------|-----------------|
| JoAnn Fryer, PE | Principal-in-Charge | 31 | 31 | | | | | | | | | • | • | • | | |
| Steven Reichert, PE | PM/CEOR – Roadway, Environmental Inspector | 31 | 16 | | | | | | • | • | • | • | • | • | | |
| Jaime French, PE | PM/CEOR – Bridge | 23 | 23 | | | | | | • | • | | • | • | • | | |
| David Lewis, PE | Roadway Inspector | 34 | 24 | | | | | | • | | | • | • | • | | |
| Jonathon Havey, EIT | Roadway/Environmental Inspector | 5 | 5 | | | | • | | | | • | | | • | | |
| Erin Clement, EIT | Roadway Inspector | 10 | 6 | | | | | • | | | | | | | | |
| Steven Goodwin | Roadway Inspector | 13 | 13 | • | | | | | | | | | | | | |
| Brian Pratt, PE, CESSWI, CPESC | Environmental Inspector | 21 | 14 | | | | | | | | • | • | | | • | • |
| A. Cory DuBois, PE | Environmental Inspector | 23 | 18 | | | | | | | | • | • | | | | |
| Ethan Carrier, EIT | Bridge Inspector | 11 | 7 | | | | • | | | | | | | | | |
| Ryan Trudeau, PE | Bridge Inspector | 3 | 2 | | | | • | | | | | | | | | |
| Brian LeClair | Bridge Inspector | 1 | 1 | | | | • | | | | | | | | | |



Project Team Summary

We have assembled a team of highly qualified engineers and technician with experience in their respective fields for this project. This team of seasoned professionals has worked together on numerous projects and is adept at coordinating various tasks seamlessly into the framework of the overall project and achieving project goals. The narrative below summarizes the qualifications of key staff and outlines their roles for this project. Resume information is located in the Appendix.



JoAnn Fryer, PE
Principal-in-Charge

JoAnn is a Senior Vice President and Regional Manager at Fuss & O'Neill, in charge of all Northern New England operations. She leans on her over 30 years of experience on bridge, roadway, environmental and site development projects to ensure the highest quality deliverable on each project she oversees.

JoAnn has a strong construction background, and is NHDOT LPA Certified, giving her great perspective and insight on assigning resources for these types of projects.



Steven Reichert, PE

Project Manager/Construction Engineer of Record - Roadway

Steve has managed numerous projects through the NHDOT LPA process. Having served as a Resident Engineer on a number of projects throughout the State, Steve has a strong blend of project management experience and field inspection insights to understand the intricacies of LPA projects. Steve is currently working on multiple municipal projects both in design and construction.

His design experience is invaluable to streamlining communications and decision making during the construction process.

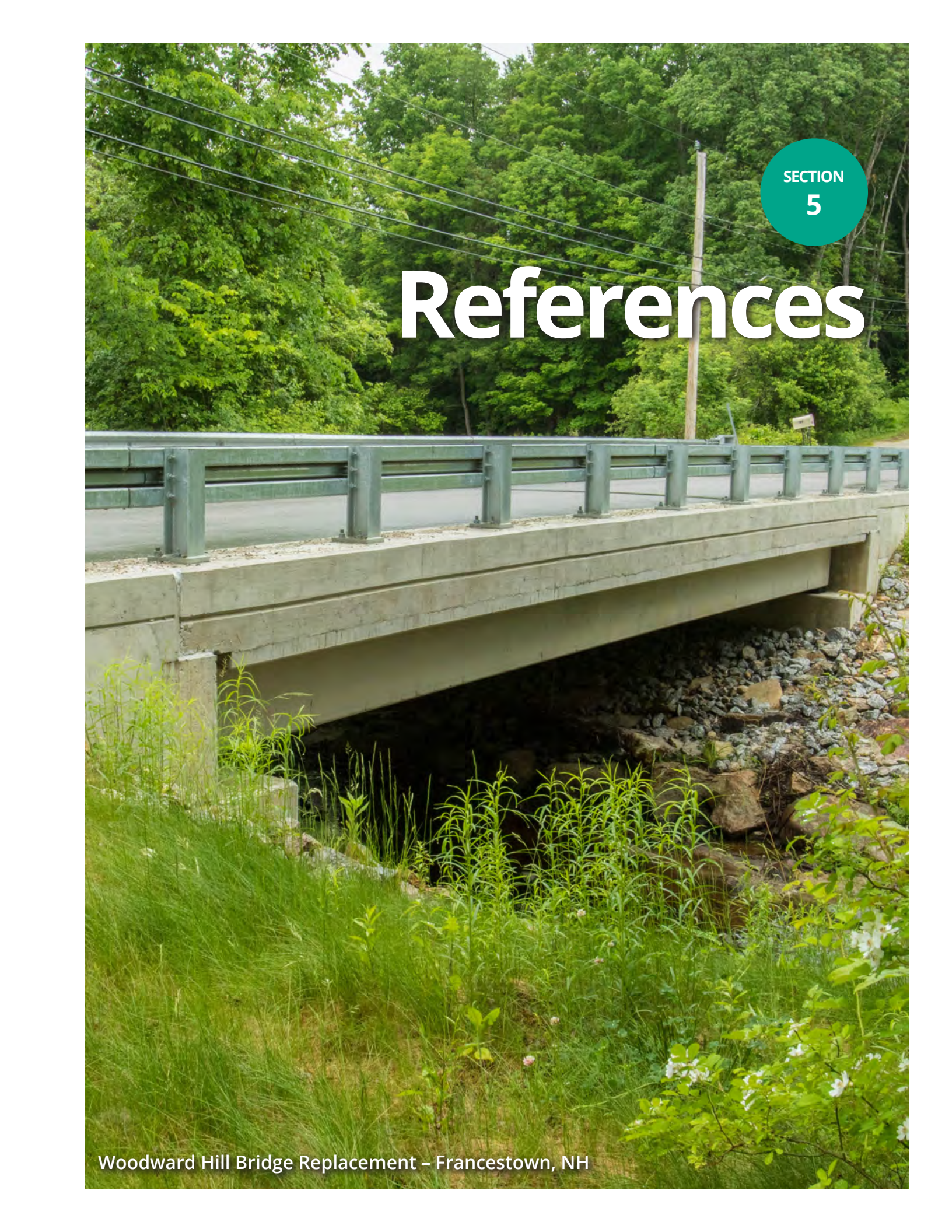


Jaime French, PE

Project Manager/Construction Engineer of Record - Bridge

Jaime manages Fuss & O'Neill's Bridge Team in our Manchester office, and brings over 20 years of relevant experience. She has managed bridge projects for the NHDOT and municipalities throughout the State.

Jaime is NHDOT LPA and OFC certified, is a certified FHWA bridge inspector, and oversees construction activities on virtually all of Fuss & O'Neill's bridge projects in New Hampshire.

A photograph of a concrete bridge with a green metal guardrail, spanning over a rocky stream bed. The bridge is surrounded by lush green trees and vegetation. A utility pole with power lines is visible in the background. The scene is captured from a low angle, looking up at the bridge structure.

SECTION
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References

Woodward Hill Bridge Replacement - Francestown, NH

References

We are proud of the quality of our work and encourage you to contact any of the references listed below.

Gary Paige
Road Agent, Highway Department
Town of Frankestown, NH
603-547-8841

Donna Benton, AICP
City Planner
City of Dover, NH
d.benton@dover.nh.gov
603.516.6462

Elvis Dhima, PE
Town Engineer
Town of Hudson, NH
edhima@hudsonnh.gov
603-886-6008

Appendix



APPENDIX

Resumes





Steven Reichert, PE

Project Manager, Environmental Task Lead, and Construction Engineer of Record – Roadway

“One of the best parts of my job is when someone thanks me for our role in designing and building something that impacts part of their lives, such as a safer roadway or a new sidewalk. It makes all the challenges worthwhile.”

sreichert@fando.com

603.222.3487

EDUCATION

BS, Civil / Environmental Engineering - 1991
Clarkson University

LICENSES & REGISTRATIONS

Professional Engineer NH NHDOT
LPA Labor Comp NH
NHDOT OFC Certified
NHWPCA
NHPWA

EXPERIENCE

31 years Professional Experience

Steve leads Fuss & O'Neill's municipal team, and has more than 30 years of experience designing and constructing public works projects, including: full roadway reconstruction; water, sewer and appurtenance replacement; drainage replacement and erosion and sedimentation controls evaluations; complex sidewalk and roadway grading and ADA evaluation/design; design/constructability quality assurance reviews (prebid, RFIs, field change notices); preparation of contract specifications and bid documents; detailed calculations for quantity take-offs and schedule estimates; as well as resident engineering inspection and administration (inspection, critical review of contractor payment requisitions and extra work claims, invoicing, and closeout). He will be the Engineer of Record on Roadway Projects and will also serve as Environmental Task Lead.

REPRESENTATIVE CONSTRUCTION PROJECTS:

- Project Manager for Lowell Road Widening project, Hudson, NH (LPA)
- Inspector and CEOR for South Street Reconstruction, Milford, NH (LPA)
- Inspector and CEOR for Emerson Road Reconstruction, Milford, NH (LPA)
- Inspector and CEOR for Gaslight District Improvements, Manchester, NH (LPA)
- Inspector and CEOR for Library Park Intersection Improvements, Hudson, NH (LPA)
- Inspector and CEOR for South Main Street Reconstruction, Rochester, NH
- Inspector and CEOR for Brock Street Reconstruction, Rochester, NH
- Inspector and CEOR for Washington Street Reconstruction, Rochester, NH
- Construction Quality Assurance, Waste Management of New Hampshire (WMNH), Rochester, NH



Jaime French, PE

Project Manager/

Construction Engineer of Record - Bridge

“As a bridge engineer, I find it satisfying to figure out how all the pieces of a project fit together, put them on paper, and see a project through construction. I am able to see my ideas come to life in the field.”

jfrench@fando.com

603.222.3464

EDUCATION

BS, Civil Engineering - 2000
Michigan Technological
University

LICENSES & REGISTRATIONS

Professional Engineer NH
NHDOT LPA Labor Comp NH
NHDOT OFC Certified
Professional Engineer VT
Professional Engineer ME
Professional Engineer MA

PROFESSIONAL AFFILIATIONS

Structural Engineers of NH
ACEC - ME

EXPERIENCE

23 years Professional Experience

Jaime is Fuss & O'Neill's Bridge Team Lead in our Manchester, New Hampshire office. Her approach to project management is multifaceted, ensuring client satisfaction, technical excellence, and coordination with the non-structural disciplines associated with projects.

In addition to her design experience Jaime as has been performed construction inspection of bridge projects since 2001. She has also been the contract administrator and construction engineer of record on many municipal projects. She will serve as the Construction Engineer of Record for all bridge projects through this contract.

REPRESENTATIVE CONSTRUCTION PROJECTS:

Inspector and CEOR for Woodward Hill Road Bridge, Frankestown, NH (SBA)

Inspector and CEOR for Juniper Hill Road Bridge, Frankestown, NH (SBA)

Inspector and CEOR for South New Boston Road Bridge, Frankestown (SBA)

Inspector and CEOR for Queen City Bridge Rehabilitation and Preservation, Manchester, NH (SBA)

CEOR for Manchester Street over Pennichuck Reservoir, Merrimack-Nashua, NH (SBA)

Inspector and CEOR for Henri Burque Pedestrian Bridge Repairs, Nashua, NH (SBA)

Inspector and CEOR for Laconia Bridge Repairs, Laconia, NH

Inspector and CEOR for Charcoal Road over Charcoal Brook, Dublin, NH (SBA)

CEOR for Bridge Repairs, Manchester, NH (SBA)

CEOR for Second NH Turnpike over S. Branch of Piscataquog River, Frankestown, NH (SBA)



David Lewis, PE

Roadway Inspector

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

dlewis@fando.com

603.222.3457

EDUCATION

BS, Forest Resource Engineering
- 1988, State University of New York Col- Environment
ME, Construction Management
- 1999, State University of New York Col.-Buffalo

LICENSES & REGISTRATIONS

Professional Engineer NH
NHDOT LPA Labor Comp NH
NHDOT OFC Certified
Professional Engineer ME

EXPERIENCE

34 years Professional Experience

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

REPRESENTATIVE CONSTRUCTION PROJECTS:

Resident Engineer for Lowell Road Widening project, Hudson, NH (LPA)

Inspector and CEOR for Central Square Sidewalk Reconstruction and Safe Routes to School, Troy, NH (LPA)

Inspector and CEOR for Belvedere Road Rehabilitation, Keene, NH

Inspector and CEOR for Washington Street Pump Station, Rochester, NH

Inspector for Drapers Corner Intersection Improvements, Claremont, NH (LPA)

Inspector for South Main Street Pump Station, Rochester, NH

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

Utility Inspector for VT Route 131 Sewer Reconfiguration, Cavendish, VT

Utility Inspector for Segment 6 Water and Sewer Replacement, VTTrans, Town of Brandon, and Brandon Fire District No. 1, Brandon, VT

Appendix: Resumes



JoAnn Fryer, PE
Principal-in-Charge

NHDOT LPA and OFC Certified
Senior Vice President
Company Owner
Regional Manager - North
30+ Years of Experience
BS, Civil Engineering
JoAnn is the past President and founder of the New Hampshire Chapter of Women in Transportation (WTS).

Combining more than two decades of practical, hands-on roadway, bicycle/pedestrian, bridge, and utility project experience in New Hampshire with years of project and resource management, JoAnn is ideally suited to act as Principal-in-Charge for this contract. JoAnn has outstanding communication skills, which leads to efficient and effective coordination with clients, staff, subconsultants, and other stakeholders. This streamlines the management and development of projects to meet budgeting and timeline constraints. As Principal-in-Charge, JoAnn will ensure that staff maintain proper certifications, have appropriate training, and follow requirements of the LPA process. She will work collaboratively with Steve and Jaime to allocate resources to the project to ensure successful completion on schedule and within budget. Examples of relevant experience include:

- Community Trail Phase III Construction, Dover, NH (LPA)
- Community Trail Phase I/Cochecho River Bridge Construction Administration, Dover, NH (LPA)
- Construction Quality Assurance, Rochester Neck Road Relocation for Waste Management, Rochester, NH
- South Street Sidewalks Construction Administration, Troy, NH
- Reed Road Bridge Construction Administration, Alton, NH (LPA)
- Cooperative Way Extension/Route 3/Route 106 Construction Administration, Pembroke, NH
- Boardwalk/Canoe Launch Construction Administration, York, ME (LPA)
- Mill District Pedestrian Bridge over Saco River Construction Administration, Saco, ME (LPA)



Brian A. Pratt, PE,
CESSWI, CPESC
Environmental Inspector

Site Team Leader
20+ Years of Experience
BS, Civil Engineering
Brian leads Fuss & O'Neill's Site Team in Manchester, and wears a number of hats in his role. He has a strong construction background and is very adept at serving as a project liaison between clients, contractors and agencies.

Brian leads our New Hampshire Site Team. His duties include project management, utility coordination, roadway and parking lot design, stormwater infrastructure, sewer and septic system design. He calculates volume estimates and construction costs, as well as performs construction layout surveys. He routinely meets with local and federal regulators for state and local permitting. Brian has a long history of working with both private and public clients, particularly on site aspects of roadway and bridge projects, such as off-site improvements, traffic signals and additional field work.

He will serve as Environmental Task Lead. Recent examples of relevant experience include:

- Brock Street Reconstruction, Rochester, NH
- Sidewalks and Safe Routes to School, Troy, NH
- Private Road Development, Londonderry, NH
- Manning Hill Subdivision Roadway, Manchester, NH
- Market Basket Site Development and Offsite Improvements, Manchester, NH
- Osram Sylvania Redevelopment and Offsite Improvements, Manchester, NH
- Site Plan Design and Construction Layout, Tru by Hilton Hotel, Manchester, NH

Applicable Work Experience



Emerson Road Intersection Design

Milford, NH

The Emerson Road Intersection with NH Route 13 and Armory Road was deficient and lacked dedicated turning lanes. Fuss & O'Neill provided the design, permitting, and construction administration to improve mobility, safety, and efficiency on this NHDOT LPA project.



The intersection was signalized, but lacked the turn lanes to allow the traffic to move through the intersection. There were no existing pedestrian crossings, so the project added a short sidewalk segment and ADA-compliant crossing to move pedestrians away from the intersection. Due to heavy truck traffic using the new right-turn lane in a widened area, we designed and installed pavement reinforcing mesh to minimize separation of any future cracking. In addition, the project has been designed to avoid an existing NHDOT culvert, avoiding additional wetlands permitting. Construction inspection services included securing documentation for and participating in a Federal Highway Administration (FHWA) audit of project records.



Gaslight District Improvements

Manchester, NH

Fuss & O'Neill provided engineering and construction administration services for the Gaslight District/Elm Street infrastructure and pedestrian improvements for the revitalization of a portion of the downtown area. This area is considered the gateway to downtown Manchester.

Services and improvements included stakeholder outreach, design of roadway, sidewalk, street lighting, aesthetic improvements, and landscaping. Challenges during design and construction included incorporating ADA requirements into the project's historic area without adversely affecting any of the historic buildings, providing the necessary traffic control for the project, and ensuring all excavations were performed with an archaeological consultant on site in accordance with environmental commitments. Our team administered the construction of this NHDOT LPA Project, with full-time resident engineering services, subconsultant management, and coordination with City departments.

Dover Community Trail

Dover, NH

The Newington Branch rail line passes through downtown Dover and presented a unique opportunity to create a new bicycle and pedestrian trail. Fuss & O'Neill worked with the City for over a decade on multiple TE/CMAQ/TAP projects to complete preliminary and final design, provide technical assistance to the City in the areas of environmental documentation and permitting, and construction administration.



The crossings of Silver Street (NH Route 9) and the Cocheco River presented challenges. The deck of the former bridge at Silver Street had been removed and the gap filled to create an at-grade roadway. The bridge over the Cocheco River, built in 1908, needed to be assessed and retrofitted before it was ready to serve as a link in the trail system. Following a thorough inspection, Fuss & O'Neill designed a truss rehabilitation with new timber deck and industrial railing for a functional and safe river crossing. The crossing of Silver Street was made with the installation of a cost-efficient, corrugated, aluminum plate underpass structure. The ends of the old bridge granite block walls were left exposed as a reminder of the sites' history. Most recently, our team designed the third phase of the project to connect to the river at the north end, and another section at the south end to connect the Transportation Center to Central Avenue. This project has completed construction.



Library Park Intersection Improvements

Hudson, NH

Fuss & O'Neill worked with the Town to provide improvements to the traffic signals at three busy intersections. Signal upgrades included installation of new traffic loop detectors, control equipment and cabinets, signals, pedestrian signals, and software upgrades and connectivity with Town offices for signal monitoring.

Construction inspection services ensured that curb ramps and sidewalks were constructed to meet ADA requirements, and that the cold planing and overlay of a portion of a high volume local roadway (Derry Street) was planned and performed with minimal traffic disruption. Due to the large traffic volume and unique geometry and interconnective relationship between the three intersections, significant traffic management was required during design and construction, with timing adjustments coordinated after installation to best meet the needs of the Town. This CMAQ funded project was administered under the NHDOT's LPA program.

Charcoal Road over Charcoal Brook Bridge Replacement

Dublin, NH

Fuss & O'Neill provided the design for the complete replacement of an 18-foot span jack arch bridge. The replacement bridge is a 70' single span galvanized steel girder bridge on integral abutments. The bridge was closed to traffic during construction.



Fuss & O'Neill prepared an engineering study that evaluated several bridge types. Due to the need to greatly improve the hydraulic opening, a much longer bridge span was designed. Soft soils in the area required the use of steel h-piles. The roadway profile was also raised in order to improve site distance. Our team provided engineering study, bridge and roadway design, Section 106 Cultural resources, environmental permitting, hydraulic analysis, public participation, utility coordination, right-of-way, contract plans and documents, construction inspection and administration.



Woodward Hill Road over Brennan Brook

Francetown, NH

Fuss & O'Neill was retained by the Town of Francetown to perform the design and construction administration for the complete replacement of a 12-foot span pipe arch.

The existing pipe arch was closed to traffic due to its poor condition. Fuss & O'Neill prepared an engineering study that evaluated several bridge types including a concrete rigid frame, precast concrete NEXT beam, and a timber bridge. Our firm recommended the concrete NEXT beam with a 47-foot span to meet the NHDES Stream Crossing Rules. The project enhanced the overall performance of the structure, highlighted by improved hydraulics and upgraded bridge rail. We provided engineering study, environmental permitting, section 106 cultural resources, bridge and roadway design, hydraulic analysis, public outreach, utility coordination, right-of-way, and construction inspection and administration for this project.

Hands Across the Merrimack (HAM) Bridge

Manchester, NH

Fuss & O'Neill provided the design to replace the existing truss bridge that crosses the Merrimack River and I-293 into a designated pedestrian and bicycle bridge. The Hands Across the Merrimack Bridge was the key feature in the Riverfront Development Plan.



Our team provided the design calculations for the new bridge, including connection of the new bridge to the existing truss and plate girders, pedestrian rail, ramp transition, deck design, overlooks, and substructure modifications. This project was in conjunction with the Riverwalk and Bikeway Master Plan and design, which was the motivating force for the revitalization of downtown Manchester, adding value to increased tourism, and commercial development, as well as addressing recreational and transportation needs. Our team also provided construction inspection and administration services for the project.



Manchester Street Bridge over Pennichuck Brook

Nashua-Merrimack, NH

The City of Nashua and the Town of Merrimack were in need of replacing the narrow jack-arch bridge while minimizing impacts to the reservoir. The reservoir serves as the municipal water supply with the main intake structure only 1,500 feet downstream of the bridge.

Many deficiencies of the existing bridge needed to be addressed, including a poor substructure, pedestrian safety issues, and poor drainage. The new bridge is a three span precast concrete structure with a total length of 124 feet supported on abutments and piers with micro-piles. A longer multi-span bridge was used to keep the construction out of the water which saved significant costs, versus an in-kind replacement. Significant historic and environmental coordination was required as historic and environmental impacts adversely affected each other. During construction, operations needed to be limited to certain times of the year due to an inhabited bald eagle nest within 300 feet of the bridge. We coordinated with personnel from both Nashua and Merrimack to manage this challenge.

Appendix: Applicable Work Experience

Fuss & O'Neill has a strong track record working with municipalities and the NHDOT. This section helps demonstrate our level of expertise on these types of projects.

| Project | LPA or NHDOT Funded | Construction Observation and Administration | Roadway Improvements | Intersection/Signals Improvements | Drainage Improvements | Sidewalks | Trails/Bike Lanes/Complete Streets | Traffic Control | Structures (retaining walls, utility supports) | Bridge Replacement or Rehabilitation | Environmental Monitoring | Geotechnical Inspection or Monitoring | Materials Testing |
|---|---------------------|---|----------------------|-----------------------------------|-----------------------|-----------|------------------------------------|-----------------|--|--------------------------------------|--------------------------|---------------------------------------|-------------------|
| Manchester – Gaslight District Improvements | • | • | • | • | • | • | | • | | | • | | • |
| Milford – South Street Improvements | • | • | • | • | • | • | | • | • | | • | | • |
| Milford – Emerson Road Improvements | • | • | • | • | | • | | • | • | | • | | • |
| Hudson – Library Park Intersection Improvements | • | • | • | • | | • | | • | | | • | | • |
| Hudson – Lowell Road Widening | • | • | • | • | • | • | | • | • | | • | | • |
| Troy – SRTS Sidewalk Project | • | • | • | | • | • | | • | | | • | | • |
| Claremont – Drapers Corner Intersection | • | • | • | • | • | • | | • | | | • | | • |
| Merrimack – Daniel Webster Highway Sidewalks | • | • | | | • | • | | • | | | • | | • |
| Hudson – Derry Street Sidewalks | • | • | | | • | • | | • | | | • | | • |
| Dover – Community Trail Improvements | • | • | | | • | • | • | | | | • | | • |
| Rochester – South Main Street Improvements | • | • | • | • | • | • | | • | • | | • | | • |
| Keene – Belvedere Road Reconstruction | | • | • | | • | | | • | | | • | • | • |
| Rochester – Rochester Neck Road Relocation | | • | • | | • | | | • | • | | • | • | • |
| Rochester – Brock Street Reconstruction | | • | • | • | • | • | | • | | | • | | • |
| Rochester – Washington Street Reconstruction | | • | • | | • | • | | • | • | | • | | • |
| Newmarket - Water & Sewer Utility Improvements | | • | • | | • | • | | • | | | • | | • |
| Rochester – Washington Street Pump Station | | • | • | • | • | • | | • | | | • | | • |
| Manchester – Granite Street Bridge Widening | • | • | • | | • | • | | • | • | • | • | • | • |
| Manchester – Queen City Bridge Preservation | • | • | | | | • | | • | | • | • | | • |
| Manchester – Goffs Falls Bridge Replacement | • | • | • | | • | | | • | | • | • | • | • |
| Manchester – HAM Pedestrian Bridge and Approach | • | • | | | | | • | • | • | • | • | | • |
| Francestown – South New Boston Road Bridge | • | • | • | | | | | • | | • | • | • | • |
| Francestown – Woodward Hill Bridge Replacement | • | • | • | | | | | • | | • | • | • | • |
| Francestown – Juniper Hill Bridge Replacement | • | • | • | | | | | • | | • | • | • | • |
| Hudson – Bridge Replacement | • | • | • | | • | | | • | | • | • | | • |
| Merrimack/Nashua – Manchester Street Bridge | • | • | • | | • | • | | • | | • | • | • | • |
| Unity – Old Cheshire Road Bridge Replacement | • | • | • | | • | | | • | | • | • | • | • |
| Dublin – Charcoal Road Bridge Replacement | • | • | • | | | | | • | | • | • | • | • |



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