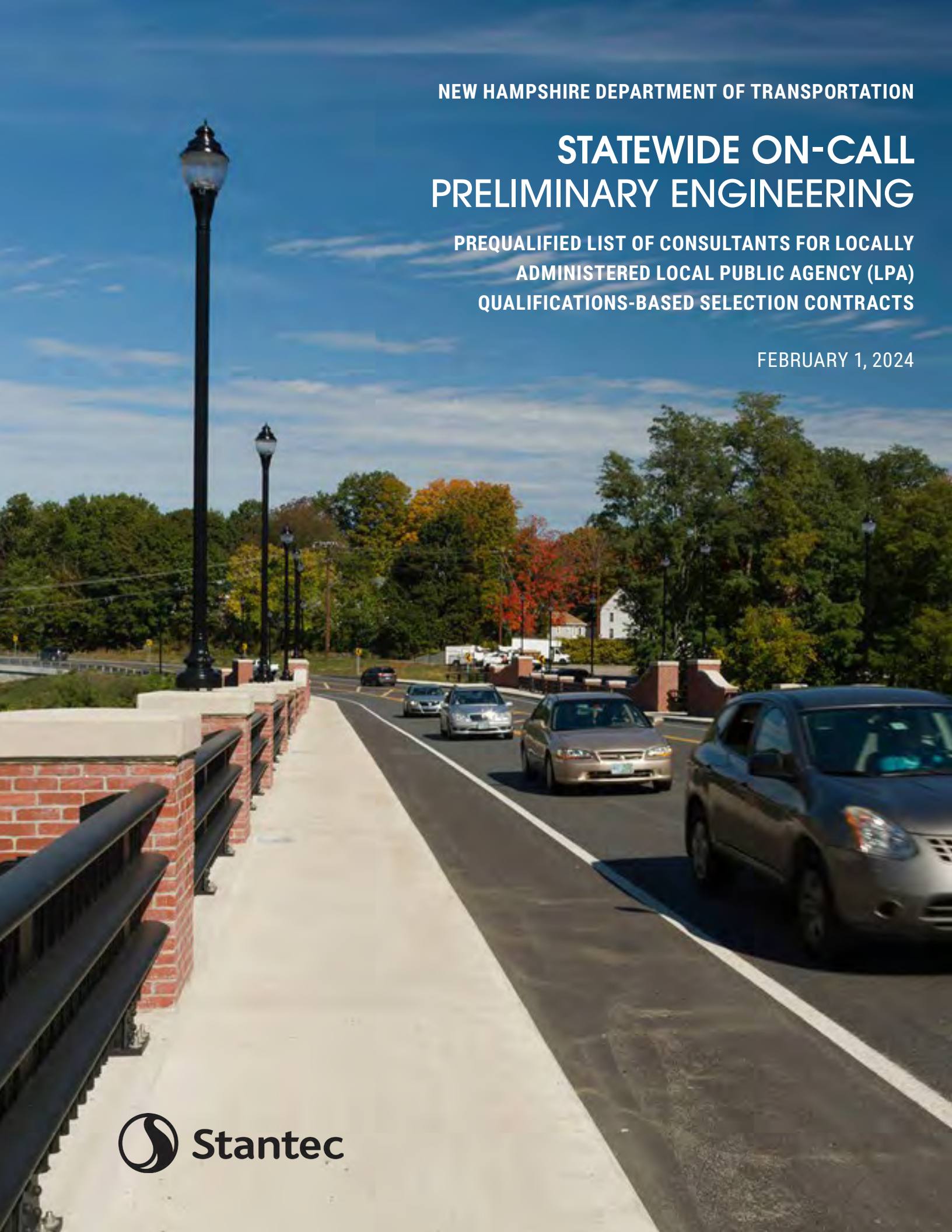
NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

STATEWIDE ON-CALL PRELIMINARY ENGINEERING

PREQUALIFIED LIST OF CONSULTANTS FOR LOCALLY ADMINISTERED LOCAL PUBLIC AGENCY (LPA) QUALIFICATIONS-BASED SELECTION CONTRACTS

FEBRUARY 1, 2024



Stantec

What's inside

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INTRODUCTION LETTER


LAUNDROMAT

Stantec Consulting Services Inc.
5 Dartmouth Drive, Suite 200 | Auburn, NH 03032

C.R. Willeke, P.E.
Municipal Highways Engineer
NH Dept. of Transportation
The Bureau of Planning & Community Assistance
John O. Morton Building
7 Hazen Drive, PO Box 483
Concord, NH 03302-0483

February 1, 2024

RE: Solicitation for the NHDOT Statewide On-Call Preliminary Engineering Prequalified List of Consultants for locally administered LPA Qualifications-Based Selection Contracts

Dear Mr. Willeke and Members of the Selection Committee:

Our Stantec team is thrilled to submit qualifications for the Statewide On-call for Preliminary Engineering Prequalified List of Consultants. Any assignments that may arise under this program would be managed from our local Auburn, NH office, which specializes in transportation engineering and related infrastructure and environmental services. Our deep portfolio of work is largely comprised of projects for NHDOT and area municipalities and includes delivery of numerous projects under the department's LPA program. Our work on state funded projects has included programs such as TAP, TE, CMAQ, SRTS, State Highway, and State Bridge Aid assignments.

We are experienced, knowledgeable, and exceptionally qualified to provide planning and design phase engineering services in accordance with the LPA manual. Our LPA certified staff have completed recent projects in Gilford, Lebanon, and Wolfeboro, among other LPA projects. We maintain a team of practitioners that share years of collaboration internally and connections with NHDOT and municipal personnel. Our repeat work with the department and communities across the state is a testament to our rapport as a true partner to the communities we serve as well as our continued delivery of timely, cost effective, and responsive services—compliant with respective local, state, and federal programs.

Gerard Fortin, PE, (Jerry) will be your Principal-in-Charge. He will provide you with the same meaningful, efficient, and pragmatic approach that you have become familiar with. Jerry is based in our Auburn office and has more than 200 transportation-focused staff members located in eight offices throughout New England that can provide support as needed. David McNamara, PE, will serve as Project Manager and brings 24 years of highway and roadway design, and construction experience, which is almost exclusively with New Hampshire municipalities and NHDOT.

Stantec looks forward to the chance to be included on the department's prequalification list for LPA preliminary engineering phase services. Our existing depth of technical knowledge for NHDOT procedures, the LPA program, and in the industry at large, as well as our long-standing working relationships across local municipalities, the Bureau of Planning and Community Assistance, and Office of Federal Compliance leave us well positioned to assist with future LPA projects.

Sincerely,
STANTEC CONSULTING SERVICES INC.

Gerard Fortin, PE | Principal-in-charge
(603) 669-8672 | gerard.fortin@stantec.com

David McNamara, PE | Project Manager
(603) 263-4653 | david.mcnamara@stantec.com

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2 UNDERSTANDING + APPROACH

UNDERSTANDING + APPROACH

Founded in 1954, Stantec provides professional design and consulting services in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management and project economics for transportation, infrastructure, and facilities projects. Continually striving to balance economic, environmental, and social responsibilities, we are recognized as a world-class leader and innovator in the delivery of sustainable solutions. We support public and private clients at every stage, from initial concept and financial feasibility to project completion.

Any projects undertaken through the LPA program will be managed and designed out of our local Auburn, NH office. Our local team of about 50 is focused in transportation and structural engineering, water and wastewater systems design, wetland sciences, geotechnical engineering, and hazardous materials expertise.

Stantec's capabilities make us highly qualified for this type of work. Outside of the potential need for specialty subconsultants for survey and historic or archaeological documentation, we're capable of completing all other aspects of this project in-house, with local New Hampshire-based employees.

The following paragraphs describe our services in several key areas pertinent to the LPA Program. Much of our key staff's collective skill was gained through successful projects for a client base consisting of New Hampshire municipalities and state agencies and work within the LPA program.

ROADWAY ENGINEERING

Our design experience encompasses both new construction and reconstruction for projects ranging from local streets to major interstate highways. Our roadway design experience throughout the state, both through LPA process, at the municipal level, and with NHDOT provides us a broad expertise across a range of potential projects. These may be small local improvements to bike and pedestrian facilities, through to complex intersections and new roadways. We have in-house proven experts in critical support roles, such as stormwater management and treatment, and traffic engineers to design signals, pavement marking and signage to name a couple. Roadway aesthetics, including landscaping and the preservation of existing trees and natural features, are an important component of our roadway design projects. We have also provided planning level corridor studies, such as Lebanon's Mechanic Street and Route 28 in Wolfeboro.

We strive to include innovation and provide cost effective solutions to meet the specific needs of the client. Intersection and roadway reconstruction projects for municipalities have included geotechnical studies to identify appropriate opportunities for pavement reclamation. Our team members understand the importance of working with the client in the earliest stages of an assignment to identify the benefits of innovative strategies and technologies.

BRIDGE DESIGN

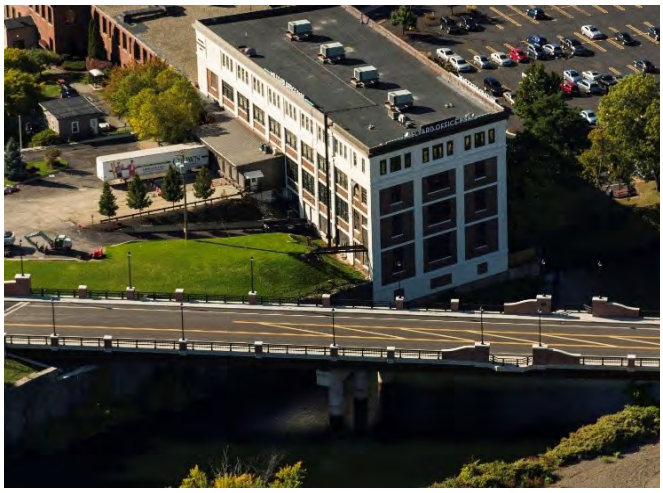
Stantec has designed new and rehabilitated bridges throughout New Hampshire and the Northeast, which include a number of regional landmarks. The scope of Stantec's bridge projects encompasses inspection and rating, design, rehabilitation, and replacement of bridges, as well as entirely new facilities. Projects range from small pedestrian bridges and short, single spans over local streams, such as the Old Lake Shore Bridge in Gilford, to larger single and multi-span bridges over railroads, local roads, and major rivers, such as the Broad Street Parkway bridges in Nashua and Sagamore Creek in Portsmouth. Our work includes both fixed and movable bridges.

ADDITIONAL DESIGN SERVICES

Stantec has the additional capabilities outlined in the posting, including:

- PROJECT MANAGEMENT SERVICES. Stantec has provided peer review, owner's representation, and project management services for both state and municipal clients.
- ENVIRONMENTAL EFFORTS. We routinely provide a range of environmental services to our clients, including the Department and New Hampshire municipalities. We have in-house scientists and permitting experts to manage many environmental issues that may arise, and long-standing relationships with local subconsultants for issues such as historic or archaeological documentation.

- TRAFFIC CONTROL DESIGN. We routinely prepare traffic control plans for our transportation related projects. These plans balance the roadway usage and needs with construction impacts, and account for traffic volume, bike and pedestrian usage, as well as accessibility concerns due to impacts to existing facilities during construction.
- HYDRAULIC CALCULATIONS. Whether for dam analysis, bridge and culvert sizing, floodplains, scour, or stormwater flows, Stantec has extensive local experience in hydraulics. Recent work includes the Lake Gloriette Dam improvements and hydraulics on several bridge and culvert projects for both the Department and New Hampshire municipalities.
- TRAFFIC ANALYSIS. Our local traffic engineering team has modeling, pavement marking and signage, and construction traffic management proficiency that has been used on a variety of projects throughout New Hampshire.
- TECHNICAL WRITING. Stantec's designers, engineers and permitting specialists are well versed in developing engineering studies, environmental documents, technical specifications, and manuals.
- GEOTECHNICAL SERVICES. Stantec works closely with several local geotechnical firms to provide a full range of services for all of our transportation related projects. This work may include foundation recommendations, pavement designs, infiltration and soils analysis for AoT compliance, and slope stabilization design.
- ROW LAYOUT AND PLAN DEVELOPMENT. We subcontract with land surveyors approved by our client who have the capabilities to provide the ROW survey and plan production that may be required.



- TOPOGRAPHIC SURVEY. We maintain close partnerships with reputable surveying firms across the state. Depending on the location, type and size of the project, we determine the most beneficial surveyor to bring on for that particular project. This allows us to tailor our survey scope and make the best use of individual firms location, size, and previous work.
- PUBLIC INVOLVEMENT. We are experienced in the Public Involvement phase of transportation design, whether in a support role to the Department or local municipality, leading a large-scale public meeting, or working one on one with project stakeholders or abutters. We have in-house capabilities to produce top of the line graphics and renderings as needed to support this process.
- ALTERNATIVE PROCUREMENT METHODS. While most LPA projects are completed using conventional design-bid-build methodologies, there may be situations that call for alternative procurement methods. Stantec is well versed in many of these, including design-build.
- COORDINATION BETWEEN THE LPA AND NHDOT. Our New Hampshire staff is highly experienced with NHDOT's Local Project Administration (LPA) program. We have completed dozens of LPA projects including bridges, intersections and traffic signals, sidewalks, roadways, and drainage improvement projects. These projects included State Aid Bridge and Roadway projects, as well as the many other funding sources available under this program. We pride ourselves in completing these projects efficiently and within the LPA guidelines. We routinely keep both the NHDOT and LPA up to date on projects and their status, through regular communication, clear monthly reports, and a transparent process.
- DRIVE PERMIT AND TIS REVIEWS. In the event there is the need to review drive permits or a third party TIS through this program, Stantec provides these types of services for several communities throughout New Hampshire, including Salem and Londonderry. These reviews have provided us insight and understanding of the Department's standards and protocols, as they often overlap.

3+4 ORGANIZATION CHART + TEAM

ORGANIZATION CHART + TEAM

PERSONNEL + RESOURCES

We're active members of the communities we serve. That's why at Stantec, we always design with community in mind. The Stantec community unites more than 28,000 employees working in over 400 locations. We are a global firm with a local presence, local knowledge and local relationships. We offer a wide range of expertise from our local Auburn office with support from our other offices throughout the Northeast. We have award winning designers and engineers, including roadway, highway and bridge engineers, environmental scientists, and a large staff of traffic management and geotechnical experts. We also have global experts with experience in nearly every facet of transportation available to assist, if needed. Our team has the depth and commitment to provide responsive service on a wide range of assignments under this contract with timely and cost-effective turnarounds. Stantec's history of designing roadways and highways in New Hampshire, both with NHDOT and municipalities statewide will be an asset to this contact.

Stantec's Principal-in-Charge, **Gerard Fortin, PE**, brings 42 years of varied experience focused on management, planning and design of transportation projects. He has managed previous NHDOT projects as well as projects for municipalities under the LPA program. Working with Dave, Jerry will help organize and manage the required project teams for each assignment based upon the scope of work. He is a transportation business center leader in New England and will ensure that our project team provides the highest quality of service to NHDOT and LPA program municipalities.

Dave McNamara, PE will serve as the Project Manager for all assignments under this contract, as well as our primary Highway Lead. Dave has 24 years of experience in the design of highway and bridge projects. He has considerable experience leading highway projects involving bridge design, substantial traffic control, and permitting coordination. Dave has managed numerous LPA projects, including the Strafford Square roundabout in Rochester, Mechanic Street Intersection improvements in Lebanon, and the Transportation Heritage Trail in Keene. He will provide project management and senior level design guidance and review for the project team.

Tyler Gagnon, PE will serve as Lead Highway Engineer under Dave's supervision. He is a project engineer with experience in the design and construction of various roadway and bridge reconstruction projects from conceptual to final design. Tyler is currently leading the design of improvements for projects such as the Mechanic Street Sidewalk and Mechanic Street Intersection in Lebanon, NH.

Brandon Rayno, PE will lead the bicycle and pedestrian design team. He recently completed the Bradford Rail Trail Project in Haverhill, MA and has been leading the bicycle and pedestrian alternatives development for the Cape Cod Canal bridges project. In NH, he also recently assisted on road safety audits for three municipalities working under Stantec's NHDOT Highway On-Call contract.

Evan Drew, PE has 13 years of traffic engineering experience on a wide range of transportation-related projects, from planning and permitting through to design and construction. Evan has considerable experience working with municipalities in New Hampshire for traffic peer reviews and road safety audits (RSAs), traffic signal analysis and design, and roundabout analysis and design. Evan has worked on multiple Department and LPA projects utilizing both NEPA and LPA processes throughout the state.

Michael Leach is a certified wetland scientist and permitting specialist with 26 years of experience. He has extensive field and design experience in soils, wetland soil delineation and permitting and facility layout and design. His extensive field experience includes soils mapping, site feasibility studies, wetland delineation and environmental permitting through local, state and federal agencies. Michael's design experience includes geometric roadway design, water and wastewater infrastructure design, shop drawing review and construction observation.

Dan Taylor, PE is an LPA certified design engineer and will serve as the structures team lead. He brings 17 years of experience in the design and construction of bridge and transportation projects, and is a NBIS Bridge Inspection Team Lead. Dan started his engineering career at the NHDOT. He knows DOT staff and procedures well and has established himself as a go-to engineer within Stantec.

SUBCONSULTANTS

We maintain close partnerships with reputable surveying, historic evaluation, and archaeological investigation firms across the state. Depending on the location, type and size of the project, we determine the most beneficial subconsultant(s) to bring on for that particular project. This allows us to tailor our scope and make the best use of individual firms location, size, and previous work.

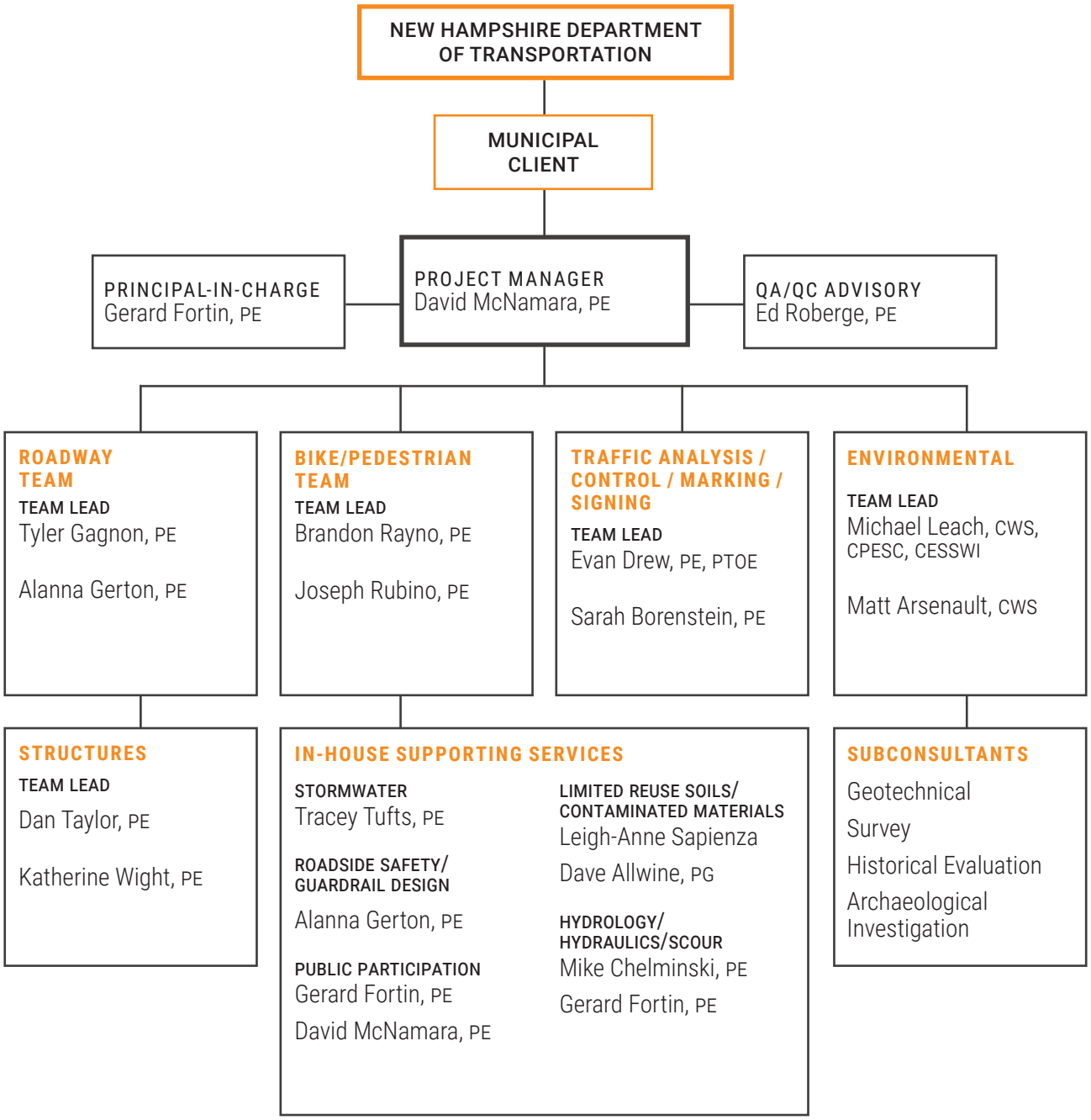
APPLICABLE SKILLS MATRIX

We've assembled a team of skilled, dedicated staff who are ready and available to support on-call assignments in their respective disciplines as shown.

→ Applicable Skills Matrix

		Years' experience	Years with firm	LPA certified	Project management	Highway design	Bridge design	Structural engineering	Alternative procurement methods	Corridor study planning	Bridge inspection	Bridge load rating	Hydrology	Environmental	Traffic analysis	Geotechnical engineering	Survey	Public engagement
DISCIPLINE TEAM LEADS	Gerard Fortin	42	42	x	x	x			x	x			x					x
	Dave McNamara	24	24	x	x	x			x	x								x
	Ed Roberge	38	4		x	x			x	x								x
	Tyler Gagnon	6	6	x		x				x								
	Brandon Rayno	16	16		x	x				x								x
	Evan Drew	13	3	x	x										x			
	Michael Leach	26	26	x	x									x				x
	Dan Taylor	17	12	x	x		x	x	x		x	x						x
	Leigh-Anne Sapienza	22	22		x									x				
	Tracey Tufts	32	30			x							x	x				
	Alanna Gerton	8	8	x		x				x			x					
	Matt Arsenault	22	18											x				
	Katherine Wight	7	6				x	x			x	x						
	Dave Allwine	34	34		x									x				
	Mike Chelminski	26	21		x								x	x				
	Geotechnical	-	-													x		
	Survey	-	-														x	
	Historical Evaluation	-	-											x				
	Archaeological Investigation	-	-											x				

→ Organization Chart



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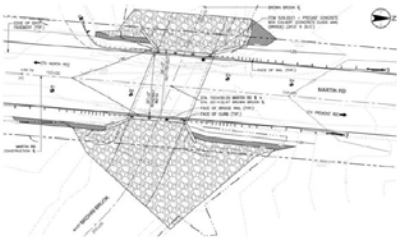
5 REFERENCES

REFERENCES

NH LPA DESIGN PROJECTS



TOWN OF FREMONT
HEIDI CARLSON

Town Administrator
(603) 895-2226 X 301
hcarlson@fremont.nh.gov

Stantec provided hydraulics, geotechnical, bridge and roadway design, and regulatory permitting for the replacement of the Martin Road bridge over Brown Brook. The new bridge was designed to meet current stream crossing guidelines.

CITY OF ROCHESTER
PETER NOURSE, PE

Director of City Services
(603) 332-4096
peter.nourse@rochesternh.net

Stantec provided design and construction phase services for the new Strafford Square roundabout. The roundabout opened to traffic in late 2023, following a 2 phase construction process, which included the undergrounding of extensive aerial utility infrastructure.

TOWN OF LONDONDERRY
JOHN TROTTIER

Director of Engineering & Environmental Services
603-432-1100 X146
jtrottier@londonderrynh.org

Our New Hampshire design team has been working continuously for the Town of Londonderry for the past 25 years.

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APPENDICES A + B

6A

RESUMES

Gerard Fortin

PE—SENIOR PRINCIPAL

YEARS OF EXPERIENCE **42**

PRINCIPAL-IN-CHARGE

Gerard's supervisory and design responsibilities include the coordination and production of contract documents, specifications and cost estimates, reports, proposals and liaison with clients and communities. He has extensive experience in major highway stormwater drainage systems and stormwater management. He has been responsible for directing drainage design for highway and roadway systems, analysis and evaluation of major municipal urban stormwater systems, bridge and roadway culvert design and replacement projects, flood insurance studies and flood protection projects.

CREDENTIALS

B.S., Hydrology, 1978

Professional Engineer #6419 // NH

NHDOT LPA Certification

PROJECT EXPERIENCE

Martin Road Bridge Replacement // Fremont, NH

Principal-in-Charge for final design of the replacement of the Martin Road bridge over Brown Brook in Fremont, NH. The project included hydraulics, geotechnical, bridge and roadway design, and regulatory permitting The new bridge was designed to meet current stream crossing guidelines. The design provides for a new 22 ft wide x 7 ft high precast concrete box culvert with wingwalls on concrete spread footings, stone fill armoring and stream gravel to provide a simulated channel bottom.

Center Street Improvements // Wolfeboro, NH

Project Manager for analysis and design of improvements for drainage systems and outfalls from the downtown area of Wolfeboro to Lake Winnipesaukee at Back Bay. The project involved permitting as well as hydrologic and hydraulic analysis for new storm drain systems to serve street catchment areas. An evaluation of the area stormwater pumping station resulted in recommendations to increase pumping capacity.

Additionally:

- Salem Road Program // Salem NH
- CMAQ, Pillsbury-Mammoth Sidewalk // Londonderry, NH
- F.E. Everett Turnpike—Stormwater Drainage Design + Water Quality Analysis // Merrimack, NH
- Bartley Hill Road Reconstruction // Londonderry, NH
- Pettengill Road // Londonderry, NH

Dave McNamara

PE—PRINCIPAL

YEARS OF EXPERIENCE **24**

PROJECT MANAGER

Dave is a civil engineer with considerable experience on roadway design, reconstruction, and multi-modal projects. He has managed a broad array of projects from initial conceptual level designs and planning efforts, through final design, bidding and construction. Projects he manages routinely involve multi-discipline coordination, permitting, and significant public outreach components.

CREDENTIALS

B.S., Civil Engineering, 1999

Professional Engineer #11241 // NH

NHDOT LPA Certification

10 Hour, Occupational Safety and Health Training Course // Certification #001105700

KEY EXPERIENCE

Strafford Square Intersection Improvements // Rochester, NH

Project Manager for final design and construction components of this major intersection reconstruction project. David managed the design efforts to reconstruct an existing stop controlled intersection into a modern multi-lane roundabout, while also relocating the aerial utilities in the project corridor underground. He is currently managing the on-going construction phase of the work.

Old Lake Shore Road Bridge Rehabilitation // Gilford, NH

Project Manager for the Old Lake Shore Road Bridge replacement over the Gunstock Brook from the study through construction. The project was funded through the State Aid Bridge program and was completed in 2020.

Additionally:

- Mechanic Street Intersection Improvements // Lebanon, NH
- Mechanic Street Sidewalk // Lebanon, NH
- Transportation Heritage Trail // Keene, NH
- Center Street Improvements // Wolfeboro, NH
- Broad Street Parkway // Nashua, NH
- Mascoma River Greenway // Lebanon, NH
- Dulac Street Roadway Reconstruction // Lebanon, NH

Tyler Gagnon

PE—CIVIL ENGINEER

YEARS OF EXPERIENCE **6**

ROADWAY TEAM LEAD

Tyler is a project engineer with experience in the design and construction phases of state and local roadways. He was been primarily involved in the design of various roadway and bridge reconstruction projects at both conceptual and final design stages.

CREDENTIALS

B.S., Civil Engineering, 2017

NHDOT LPA Certification

Professional Engineer #17309 // NH

PROJECT EXPERIENCE

Strafford Square Intersection Improvements // Rochester, NH

Project Engineer assisting with the final design of the improvements to the Strafford Square Intersection in Rochester, NH. The design includes the reconstruction of an existing stop-controlled intersection into a modern multi-lane roundabout, while also relocating aerial utilities underground. Tasks include roadway design, utility and ROW coordination, and splitting the project design and estimate into two projects in order to complete the utility relocation work prior to final roadway construction.

US Route 1 Improvements // Portsmouth, NH

Project Engineer assisting with the preliminary engineering for the improvements of US Route 1 from Ocean Road to Wilson Road in Portsmouth, NH. The project includes the development of alternatives that address of safety and operational deficiencies along the corridor and at each of the eight intersections within the project limits. Tasks have included developing multiple roadway alternatives, analyzing sight lines and potential drainage issues, and creating linear foot cost estimates.

Mechanic Street Intersection Improvements // Lebanon, NH

Project Engineer for the final design of the roadway improvements to the Mechanic/Mascoma/High Street intersection in Lebanon, NH. This confusing and dangerous intersection is being converted to a modern roundabout to increase safety and operations for all users. Widened sidewalks and crossings will be incorporated into the roundabout approaches to enhance the safety of these users. Other project elements include stormwater improvements, extensive public outreach, and incorporation of three retaining walls.

Brandon Rayno

PE—SR. TRANSPORTATION ENG.

YEARS OF EXPERIENCE **16**

BIKE / PEDESTRIAN TEAM LEAD

Brandon's assignments have focused on highway and site design along with site inspection for various municipal and state clients.

CREDENTIALS

B.S., Civil Engineering, 2008

Professional Engineer #50829 // MA

PROJECT EXPERIENCE

Bradford Rail Trail Extension Project // Haverhill, MA

1,100 foot extension of a bike path in the City of Haverhill. As Project Engineer and ultimately Project Manager, Brandon was responsible for the design and development of a 10 foot wide bike path along an abandoned rail corridor. The project also included the design of pedestrian connections to local streets and a parking lot, reconstruction of a 500 foot segment of roadway and layout of various landscaping features. He oversaw the design of various disciplines including drainage, electrical, landscaping and traffic. During construction, he fielded questions and responded to submittals made by the contractor until its completion in the fall of 2022.

Cape Cod Canal Bridges Project // Bourne, MA

Project management support, preliminary project development and initial alternative development screening for the Cape Cod Canal bridges and approaches. As a Project Engineer, Brandon has been responsible for design and development of multiple shared use path alternatives for both the Sagamore and Bourne bridges. The SUP alternatives vary in length and complexity depending on the roadway mainline and interchange alternative applied. The intent is to connect the pedestrian and bicycling traffic to local and regional destinations in an efficient and safe manner. Additionally, he have been involved in the design and development of various mainline and interchange alternatives for the Sagamore Bridge crossing.

Grove Street Improvements // Salem, MA

3,500 feet of roadway and sidewalk realignment and reconstruction including the installation of landscaping and street lighting. As lead highway designer, responsible for the design and development of the horizontal and vertical geometry of the proposed roadway improvements from preliminary design through construction.

Dan Taylor
PE—ASSOCIATE

YEARS OF EXPERIENCE **17**

STRUCTURES ENGINEER

Dan brings 15 years' experience in the design and construction of transportation projects. Earlier in his career, Dan participated in an 18-month training program with the NHDOT which was primarily split up into the following three bureaus: Highway Design, Bridge Design, and Construction. His technical skills include steel, concrete, and foundation design, plan production, cost estimating, specification writing, and bridge load rating & condition evaluation. Dan has had formal training in LRFD steel and concrete design, LRFR load rating of bridges, hydraulic design of safe bridges, culvert design, roadside safety design, stream stability and scour for highway bridges, bridge rehabilitation & evaluation, urban drainage design, and inspection of bridges.

CREDENTIALS

B.S., Civil Engineering, 2006

Professional Engineer #13334 // NH

Safety Inspection, In-Service Bridges // FHWA-NHI 130055

PROJECT EXPERIENCE

Huse Road over I-293/NH101 // Manchester, NH

Project manager and engineer responsible for the preliminary and final design of the deck replacement and minor widening of this 5-span, 295 foot long, 37.5 degree skewed, interstate overpass bridge. The existing sidewalks were 4'-6" wide with aluminum bridge rail, so the bridge was widened 9" on each side in order to provide 5'-0" clear sidewalk width to meet ADA requirements and allow for modern crash-tested 4-bar steel bridge railing to be installed. In order for the existing beams to load rate an acceptable level, this bridge was detailed to behave non-compositely in the negative moment regions over the piers and compositely at midspan. In addition to the deck, the expansion joints, bridge railing and protective screening, and pavement and membrane were also replaced. This bridge will be constructed in two phases while maintaining one lane of alternating one-way traffic on Huse Road.

Bridge Rehabilitation Projects * Statewide, NH

Project Engineer for various bridge rehabilitation projects in NH along I-89, I-93, Route 101, Route 302, & Route 175. Scope of work generally consisted of replacing pavement and membrane, partial and full-depth deck repairs, expansion joint replacement, deck fascia removal and replacement, bridge rail upgrades, and abutment backwall reconstruction.

Evan Drew, PE, PTOE—
SR. TRANSPORTATION ENG.

YEARS OF EXPERIENCE **13**

TRAFFIC ANALYSIS/CONTROL/ MARKING/SIGNING TEAM LEAD

Evan Drew has comprehensive and extensive experience as a transportation engineer, generally in the fields of traffic and Intelligent Transportation Systems (ITS) engineering. He has participated in the planning, analysis, design, implementation, and construction of dozens of signalized intersections on municipal and state roadways throughout New England.

CREDENTIALS

B.S., Civil Engineering, 2010

NHDOT LPA Certification

Certified Professional Traffic Operations Engineer

Professional Engineer // NH + ME

PROJECT EXPERIENCE

Road Safety Audit // Claremont, NH

As lead traffic engineer, Evan evaluated traffic and crash elements of the RSA data and assisted in facilitating the public meeting. After the RSA kick-off meeting and field review, Evan assisted the RSA team in the development of improvement concepts (including traffic analysis, signing and pavement markings improvements) and producing the Draft and Final RSA Report for stakeholders.

Professional Services Agreement - Traffic Assignments // Melrose, MA

As senior traffic engineer, Evan was utilized for two of four traffic engineering tasks. The first task included evaluation of existing pavement markings and signing associated with a signalized intersection along a major city street. The second task evaluated an unsignalized, two-way stop-controlled roadway for existing limitations and proposed improvements for a pedestrian crossing.

Maine Turnpike (I-95) Exits 35 & 36 Interchange Improvements // Saco, ME

Traffic engineer for the design of a full access interchange with Route 112 (Exit 35) and improvements to the Exit 36 interchange with I-195. This multi-faceted project includes improvements along two miles of the Maine Turnpike mainline, half mile of the major collector Route 112 with two signalized intersections, the design of on- and off-ramps for the Exit 35 interchange, a southbound collector-distributor road between Exit 35 and Exit 36, new toll collection facilities, and relocation of existing business driveways and a Park N' Ride lot.

Michael Leach, CWS, CPESC, CESSWI—SR ASSOCIATE

YEARS OF EXPERIENCE **26**

ENVIRONMENTAL TEAM LEAD

With 24 years of experience on public and private projects, Michael has extensive field and design experience in soils, wetland soil delineation and permitting and facility layout and design. His extensive field experience includes soils mapping, site feasibility studies, wetland delineation and environmental permitting through local, state and federal agencies.

CREDENTIALS

B.S., Soils, 1988 + A.S., Civil Engineering, 1985

NHDOT LPA Certification

Certified Professional, Erosion & Sediment Control #2619

Certified Erosion, Sediment & Storm Water Inspector #1078

Certified Wetland Scientist // NH #189

Licensed Septic Installer // NH #1343 + Designer // NH #153

PROJECT EXPERIENCE

Pillsbury & Mammoth Rd. Sidewalk // Londonderry, NH
Project Engineer responsible for the wetland delineation and town and NHDES Wetland permitting for this community enhancement and NHDOT CMAQ project.

Downtown Streets Improvements // Wolfeboro, NH
Wetland Scientist responsible for the wetland delineation and NHDES Wetlands and Alteration of Terrain permitting for this infrastructure improvement project which began with a conceptual design meeting held with NHDES and the town. The project included dredging and existing channel draining to Back Bay, located off Lake Winnipesaukee, and providing treatment for roadway runoff as part of the roadway drainage improvements for the project. The work included wetland flagging, abutter notification for wetland impacts and NHDES permitting.

Mary Ann Avenue and Elsie Avenue // Salem, NH
Environmental Engineer and Wetland Scientist responsible for wetland delineation and NHDES wetland permitting for a 4,100-foot roadway reconstruction.

Additionally:

- Stiles Road // Salem, NH
- South Road Culvert Replacement // Londonderry, NH
- Litchfield Road Improvements // Londonderry, NH
- Cluff Crossing Road and S. Policy Street // Salem, NH
- Talent Road Culvert Replacement // Litchfield, NH

Michael Chelminski, PE—PRINCIPAL

YEARS OF EXPERIENCE **26**

HYDROLOGY/HYDRAULICS/ SCOUR

Michael is responsible for technical aspects of ecological evaluation, mitigation, and restoration analyses and designs. Michael's work includes the development of hydrologic and hydraulic studies for integration with Stantec's skills in the ecological and biological sciences. A licensed engineer, his project experience includes ecological restoration design and monitoring, fish passage assessments, dam removal, effluent mixing analyses, and dam safety evaluations.

His hydrology and geomorphology experience includes water resource inventories and classifications, hydrologic and hydraulic analyses and modeling, water quality and quantity monitoring and assessment, watershed restoration analyses and planning, aquatic species surveys and habitat mapping, Essential Fish Habitat evaluations, fish passage design, and dam removal evaluations.

CREDENTIALS

MS, Civil Engineering, Utah State University, Logan, Utah, US, 1999

BS, Civil Engineering, University of Connecticut, Storrs, Connecticut, US, 1994

Professional Engineer #10677 // New Hampshire

PROJECT EXPERIENCE

Geomorphic and Hydraulic Assessment for Culvert Replacement // Fremont, NH
Reviewed geomorphic assessments and performed independent hydrologic and hydraulic analyses for proposed culvert replacement in Fremont, NH

Geomorphic Assessment for Culvert Replacement // Londonderry, NH
Performed geomorphic monitoring as part of a permit requirement for replacement of a culvert on Little Cohas Brook in Londonderry, New Hampshire. Work included a site visit and reporting.

Great Dam Water Quality Assessments // NH
Project manager and technical lead for evaluation of means to improve water quality and fish passage in an impounded reach of the Exeter River. Work included hydraulic modeling to determine potential operational regimes of the Great Dam that could achieve desired water quality benefits and improvements in diadromous fish passage.

Leigh-Anne Sapienza
—ASSOCIATE

YEARS OF EXPERIENCE **22**

LRS / CONTAMINATED MATERIALS TEAM LEAD

Leigh-Anne Sapienza brings 22 years of assessment and remediation experience to our team. As both an Associate and a project Manager, Leigh-Anne manages the day-to-day operations on a wide variety of projects including underground storage tank removals, preliminary and Phase I Environmental Site Assessments (ESAs), site investigations, long-term environmental monitoring, design support, and construction screening and monitoring. She also serves as the project manager for several site investigation and site remediation projects throughout New England. Her duties have included the development of contractor specifications, coordination of field staff, report writing, and quality assurance of field work.

CREDENTIALS

B.S., Ecology and Evolutionary Biology, 2001

Wetlands Resource Management + Wetlands Delineation, 2002 + 2003

PROJECT EXPERIENCE

Environmental Support to NHDOT // New Hampshire
Leigh-Anne currently serves as the primary project manager for New Hampshire Department of Transportation (NHDOT) environmental projects. In this capacity, Leigh-Anne manages the day to day operations on a wide variety of projects including UST removals, preliminary and Phase I Environmental Site Assessments, site investigations, design support, and construction screening and oversight.

Phase I/II Environmental Site Assessments, Peace International Tradeport // Portsmouth, NH
Leigh-Anne has conducted multiple due diligence assessments for properties located on land formerly occupied by Pease Air Force Base. As part of these assessments, Leigh-Anne conducted site inspections, performed reviews of state and municipal files, conducted historical research, and authored Phase I Environmental Site Assessment reports. In addition to tasks typically required to complete a Phase I Environmental Site Assessment to the ASTM 1527-05 standard, these projects required an understanding of concerns specific to former base operations. Subsurface investigations conducted at Tradeport properties focused on issues including chlordane impacts to soil in former military housing areas and polychlorinated biphenyl (PCB) releases from transformers.

Tracey Tufts, PE—SENIOR TRANSPORTATION ENGINEER

YEARS OF EXPERIENCE **32**

STORMWATER TEAM LEAD

Tracey Tufts' assignments at Stantec have focused on stormwater management and design, preparation and coordination of environmental permits, and highway design.

CREDENTIALS

B.S., Civil Engineering, 1991

Professional Engineer #10266 // NH

PROJECT EXPERIENCE

Strafford Square Roundabout, Rochester, NH
Project includes the design of a multi-lane modern roundabout to replace a dangerous, unsignalized intersection which is difficult for motorists to navigate. Prepared supplemental information to amend previously approved Non-Programmatic Categorical Exclusion and 4(f) Evaluation. Design will include new drainage layout, BMPs and preparation of an Alteration of Terrain permit.

Mechanic Street, Lebanon, NH
Project involves the reconstruction of 1.3 miles of Mechanic Street, as well as at its intersections with Slayton Hill Road and High Street which will be reconstructed with roundabouts. Responsible for the preparation of roadway design elements, Engineering Study, Non-Programmatic Categorical Exclusion and attendance at a Public Information Meeting.

Broad Street Parkway, Nashua, NH
Responsible for the design of new urban parkway designed to alleviate traffic congestion in downtown Nashua. Project is currently under construction. Project includes design of 3 bridges, retaining walls, utility relocations, design through historic Millyard and an at grade RR crossing. Project broken down into multiple construction contracts. Design included horizontal and vertical alignment of numerous roadways, roadway reconstruction, grading, preparation of contract plans and specifications and cost estimate. Also responsible for design and analysis of stormwater facilities, consisting of closed systems and multiple bioretention areas, and erosion control measures to minimize impact to the adjacent Nashua River and Nashua Canal and preparation of a NH Alteration of Terrain permit.

6B

WORK EXPERIENCE

WORK EXPERIENCE

Providing design and engineering services for all phases of municipal roadways across New Hampshire is our Auburn team's core specialization. Much of this work has been through the LPA program and includes both federal and state aid projects. The following highlights recent, relevant LPA assignments our key team members have supported.

→ Similar Project Qualifications + Personnel Matrix

		Years' experience	Years with firm	LPA Certified	Strafford Square Intersection Improvements, Rochester, NH	Broad Street Parkway Nashua, NH	Mechanic Street Reconstruction Lebanon, NH	Mechanic Street Sidewalk Lebanon, NH	Martin Road Bridge Fremont, NH	Griffin Mill Bridge Auburn, NH	Transportation Heritage Trail Keene, NH	Center Street Improvements Wolfeboro, NH	NH Route 101 Corridor Pedestrian Safety Improvements, Dublin, NH	Old Lake Shore Road Gilford, NH*	Mascoma Street Bridge Lebanon, NH*
SERVICES + CRITERIA	LPA Program – Federal Funds				X	X	X	X		X	X		X		
	State Aid Highway Funded											X			
	State Aid Bridge Funded								X	X				X	X
	Project management				X		X	X	X	X	X	X	X	X	X
	Highway design				X	X	X	X			X	X	X	X	X
	Structural engineering					X			X	X				X	X
	Alternative procurement methods														
	Corridor study planning						X					X	X		
	Bridge inspection														
	Bridge load rating					X			X	X				X	X
	Hydrology								X	X		X		X	X
	Environmental				X	X	X	X	X	X	X	X	X	X	X
	Traffic analysis				X	X	X								X
	Geotechnical engineering				X				X	X	X	X		X	
	Survey				X		X	X	X	X	X	X	X	X	X
	Public engagement				X		X	X	X	X	X	X	X	X	X
DISCIPLINE TEAM LEADS	Gerard Fortin	42	42	X	X		X	X	X	X		X		X	X
	Dave McNamara	24	24	X	X	X	X	X			X	X	X	X	X
	Tyler Gagnon	6	6	X	X		X	X			X			X	X
	Brandon Rayno	16	16			X									
	Evan Drew	13	3	X											X
	Michael Leach	26	26				X	X	X	X	X	X		X	
	Dan Taylor	17	12	X					X	X					
KEY STAFF	Alanna Gerton	8	8	X					X	X	X	X		X	X
	Leigh-Anne Sapienza	22	22					X				X			
	Tracey Tufts	32	30		X	X	X	X			X		X	X	X

**Not included in the following pages due to page limitations.*

BROAD STREET PARKWAY

NASHUA, NH // 2015

Stantec prepared final design plans and specifications for the Broad Street Parkway. The new $36 million urban arterial is a 2-mile long, 2-lane facility on a new alignment. After following a route which begins on Broad Street near Exit 6 of the F. E. Everett Turnpike and running adjacent to an active railroad, the parkway crosses the Nashua River with a new bridge, continues through the historic Millyard area and terminates at the intersection of Ledge and Central Streets. The full corridor includes 5-foot bike lanes, new sidewalks and granite curbing to provide full bicycle and pedestrian access. A separate trail was designed to allow access to the Parkway from a residential neighborhood. Traffic signalization, retaining walls, stormwater management, utility relocations, geotechnical investigations, and environmental permitting were all key project elements for the design team, in addition to the roadway design. The parkway facilitates and cultivates economic development in the Millyard and other underdeveloped areas of the city.

Bridge aesthetic treatments were addressed through a series of meetings and workshops with the City. Stantec's 3-D visualization capabilities were extremely valuable in this process that was utilized to gain consensus for the bridge railing, protective fencing, lighting, formliners and the overall bridge aesthetic at all three of the bridge sites. The project included extensive drainage design, including bioretention ponds, closed drainage systems, outlet control and resolution of utility conflicts. In addition, the project included period lighting design, dam replacement and relocation of a 54" sewer interceptor. The management of stormwater runoff for the Broad Street Parkway consisted of the implementation of numerous Best Management Practices (BMPs) sited along the corridor. Multiple closed drainage systems, along with roadside ditches, were designed to convey stormwater runoff to either one of eight bioretention ponds or an underground infiltration system before being discharged to the Nashua River. The bioretention ponds varied in size depending on available ROW and site constraints, and infiltration was incorporated in all but one pond due to soil limitations.

STRAFFORD SQUARE INTERSECTION IMPROVEMENTS

ROCHESTER, NH // ONGOING

The Strafford Square Intersection Improvements project is a long awaited upgrade to this outdated, confusing and dangerous intersection near the heart of Rochester, NH. The project involved two phases of construction, the first relocated the existing aerial lines underground, along with associated improvements to existing water, sewer and drainage infrastructure.

The second phase replaced the heavily skewed, dangerous intersection with a modern multilane roundabout. The new roundabout more efficiently and safely manages traffic through this congested intersection, while enhancing safety for all uses and creating a new gateway to downtown Rochester.

The roundabout opened to traffic in the fall of 2023, with final punchlist, paving and landscaping items planned for the spring of 2024. Stantec was responsible for final design, extensive utility coordination, permitting and updates to the original NEPA document. We are currently providing Construction Administration services for the project.

CENTER STREET IMPROVEMENTS

WOLFEBORO, NH // 2019

For this complex, multi-disciplined ***State Aid Highway project*** Stantec provided full time inspection throughout the work. This project was municipally managed and funded under NHDOT's State Aid Highway Program. The project involved the reconstruction of 1,900 feet of Center Street (NH Route 28/109A) and approximately 500 feet of Lehner Street including new curbing and sidewalks. Improvements also included a Rectangular Rapid Flashing Beacon (RRFB) and new lighting at the mid-block pedestrian crossing. The roadway reconstruction included a new closed drainage system within the project limits. In addition to the new roadway drainage system, the drainage improvements also included up-grades with construction of a new twin 24-inch piping system to the stormwater pumping station that discharges to the Back Bay swale and controls excessive stormwater flow during major storm events. The project included replacement of approximately 500 feet of existing water line with new 8-inch ductile iron water line including new water services to the homes and businesses in the neighborhood along Lehner Street. The project also included replacement of sewer mains and services along portions of Center Street and Lehner Street. The scope of the project included assisting the town with easement acquisition, preparing environmental and cultural resources documentation, and obtaining the necessary permits from the NHDES

Wetlands Bureau and NHDES Wastewater Bureau. The work included preparation of the construction documents to meet the requirements of NHDOT LPA municipally managed projects. Stantec also provided bid assistance and engineering services during construction for the town. Construction of the project was completed in fall of 2019. In addition to typical construction administration services, the project was construction adjacent to 3 gas stations with groundwater management and monitoring zones and Stantec staff provided specialty services with monitoring of soils and air quality during construction.

GRIFFIN MILL BRIDGE REPLACEMENT

AUBURN, NH // ONGOING

Stantec is providing hydraulics, geotechnical, bridge and roadway design, and regulatory permitting for the replacement of the Griffin Mill bridge over Sucker Brook (NHDOT Bridge #095/127) in Auburn, NH. The project was funded through the State Aid Bridge Program and also has federal funding through the MOBIL program.

The existing bridge is a single span structure, originally constructed in 1850. In 1991 a concrete cap was installed on the existing stone abutments and the structure and decking were replaced. The existing structure consists of a wood deck, with associated wood timber curb, wood guardrail posts and steel girders, set on stone abutments. The structure is a single lane bridge, with a curb-to-curb travel lane width of approximately 12.3-feet.

The new bridge involves the removal and replacement of the existing superstructure, while leaving the existing stone abutments in place. The existing wing walls will also remain in place unchanged. New abutments will be constructed behind the existing abutments to remain, and will consist of concrete cast in place abutment/ footings - 3-foot 6-inch wide by 7-foot 6 inch tall to support the proposed wooden superstructure of the new bridge. The proposed superstructure will have a wooden deck of 4-inch-thick x 12-inch-wide timbers supported on 12" x 24" beams, a 2-inch x 8 -inch wooden wearing surface, and timber bridge rail. The existing stone abutments will remain in place, resulting in the existing streambed and bridge span width remaining unchanged, to minimize impacts to the wetland resources. Construction is anticipated to begin in 2025.

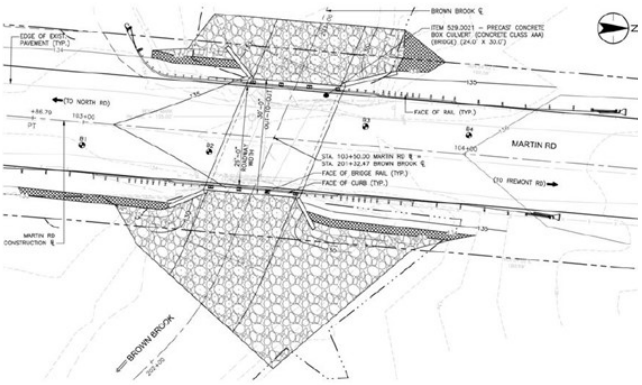
MARTIN ROAD BRIDGE REPLACEMENT

FREMONT, NH // ONGOING

Anticipated to be bid in February 2024, Stantec provided hydraulics, geotechnical, bridge and roadway design, and regulatory permitting for the replacement of the Martin Road bridge (NHDOT Bridge #155/133) over Brown Brook in Fremont, NH. The project was funded through the State Aid Bridge Program.

The existing bridge was built in 1930 and consists of a cast-in-place concrete deck on steel girders, which are set on reinforced concrete abutments on soil. The bridge clear span is skewed and is 12'-3" at the inlet and 10'-2" at the outlet of the waterway. The existing bridge is on the State's Municipal Red List due to the poor condition of the deck and serious condition of the substructure and has a load posting of 15 tons.

The new bridge was designed to meet current stream crossing guidelines. The design provides for a new 22 ft wide x 7 ft high precast concrete box culvert with wingwalls on concrete spread footings, stone fill armoring and stream gravel to provide a simulated channel bottom. Construction procedures will include a road closure with a detour to allow for shorter project duration. Construction is anticipated to begin in the Spring of 2024.



MECHANIC STREET RECONSTRUCTION

LEBANON, NH // ONGOING

Stantec provided civil and roadway planning and design services to the City of Lebanon for 1.25 miles of Mechanic Street (US Route 4). The city anticipates significant future development in the area, and asked Stantec to plan and design improvements to Mechanic Street to accommodate the growth. In the first phase of the project, Stantec evaluated the existing traffic and infrastructure of the corridor through field observations and record analysis. As information was gathered and analyzed, critical needs were identified, and alternative concepts for improvement were developed. Input from the public and town officials were actively sought through four walks along Mechanic Street with property abutters, interested citizens and business owners, and two public forums.

In the second phase, the conceptual alternatives for intersection, roadway, and streetscape improvements were presented to the city, NHDOT, and the public to solicit input with visualization graphics that aided in understanding the alternatives. Feedback was collected and integrated into the design. By the end of the second phase Stantec had finalized a preferred alternative for each segment and intersection. Federal and Local funding has been approved for final design and construction of the first segment of the corridor. Final design is underway for the first segment, which involves the reconstruction of the Mascoma/High/Mechanic Street intersection with a new roundabout.

NH RTE 101 CORRIDOR PEDESTRIAN SAFETY IMPROVEMENTS PROJECT

DUBLIN, NH // 2018

Working in concert with local and regional officials, and a wide variety of stakeholder groups, we created a Consensus Master Concept Plan for pedestrian safety improvements and traffic calming along NH Route 101 through the national register listed historic Dublin Village. Our experience working with New Hampshire towns through economically challenging times has ingrained in our staff an understanding of budget and staffing constraints. We carved the master plan into suitably sized projects focused for phased implementation in subsequent years. Certain projects aligned themselves for construction by local forces (Road Agent) based on personnel and equipment capabilities and capital improvement budget dollars; while others were targeted for larger construction bid projects funded by grants and alternative sources.

This federally funded project received special attention from NHDOT as a pilot project for flexibility in design and implementation of traffic calming measures on a major state arterial road. Stantec received an ACEC-NH Engineering Excellence Award for transportation projects after the completion of construction on the ***Phase I TE LPA project***.

The ***Phase II TE LPA project*** consisted of the realignment of the Old Common Road and Route 101 intersection and minor realignment of approximately 560 linear feet of Route 101 for sight distance and safety improvements. Work also included a gateway median area on Route 101 with low-lying vegetation, slope work for improved sight distance at the Dublin Road intersection, an ADA-compliant crosswalk across Route 101, 530 linear feet of sidewalk, granite curb, upgraded closed drainage system, and lighting.

A nearby ***Safe Routes to School (SRTS)*** project was also designed concurrently by Stantec. The SRTS project consisted of an ADA-compliant crosswalk across Route 101, approximately 300 linear feet of concrete sidewalk with vertical granite curb, minor pavement widening and approximately 140 linear feet of dry-laid stone retaining wall at the entrance to the Dublin Consolidated School.

Design with community in mind