

DESIGN



Statewide On-Call Preliminary Engineering Prequalified List of Consultants for Locally Administered Public Agency (LPA) Qualifications-Based Selection Contracts

NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION

February 1, 2024



hoyletanner.com



February 1, 2024

Mr. Tobey Reynolds, PE
Assistant Director of Project Development
New Hampshire Department of Transportation
7 Hazen Drive, PO Box 483
Concord, New Hampshire 03302

RE: Statewide On-Call Preliminary Engineering Prequalified List of Consultants for Locally Administered Local Public Agency (LPA) Qualifications-Based Selection Contracts

Dear Mr. Reynolds:

The New Hampshire Department of Transportation (NHDOT) is providing municipalities the opportunity to jump start the consultant selection process for LPA projects by maintaining a long list of prequalified firms that an initial short-list can be drawn from. **Hoyle Tanner has a long history of providing transportation services to municipalities utilizing numerous funding sources and programs and has invested heavily in training and certifications to maintain our dedicated staff’s qualifications and suitability for LPA projects.**

Hoyle Tanner’s multi-disciplinary, New Hampshire-based team of over 35 professionals has successfully designed over a hundred LPA projects through the Municipally-Managed State Aid Bridge program, as well as Alternative Transportation Enhancement and Transportation Alternative Programs, Safe Routes to School program, and Congestion Mitigation and Air Quality program for over 30 years. Our team includes 18 certified LPA staff members as well as environmental and NEPA permitting specialists. In addition, our team is up-to-date on the latest NHDOT preferences and resource agencies through our current bridge, highway, and environmental on-call contracts.

Hoyle Tanner appreciates your consideration of our qualifications. We believe our New Hampshire-based team is well-qualified for the design phase of LPA projects, possesses solid relationships with DOT, DES and federal stakeholders, and makes available our strong depth of staff and a proven track record throughout the state.

Very Truly Yours,

HOYLE TANNER & ASSOCIATES, INC.

Sean James, PE
Division Manager - Ground Transportation
sjames@hoyletanner.com
(603) 460-5175

Table of Contents

	PAGE
Project Understanding & Approach	2
Organizational Chart	4
Project Team	5
References	7
Appendix	8

Project Understanding & Approach

The key to successful design projects is a thorough understanding of our client's goals, DOT standards, stakeholder concerns, regulatory and financial constraints and engineering challenges. Our project approach is to partner with our clients and lead them through the project development process while meeting regulatory and funding requirements. We utilize our team's expertise so that the municipality can make informed and effective decisions that will benefit their project.

HIGHWAY & TRAFFIC DESIGN

Our team has experience with all highway design efforts expected under this prequalification

including rehabilitation of existing roadways (Union Street, Peterborough); intersection improvements, drainage systems, signalization, Right-of-Way plan development (NH Route 28, Derry); park and ride lots (multiple location, VTrans); trails (Mine Falls Park, Nashua); sidewalks (NH Route 27, Exeter) and bike lanes (Mammoth Road, Manchester). We regularly review traffic impact studies and other related land development projects through an on-call contract with the Town of Londonderry. We have also recently completed a corridor study on the 13692D Wilton-Milford-Bedford-Amherst corridor project where we assisted in prioritizing safety improvements along 20 miles of NH Route 101, along with Road Safety Audits in Jaffrey, Chichester and Milton.

Hoyle Tanner is particularly knowledgeable on the current practices and implementation of the "Manual on Uniform Traffic Control Devices" (MUTCD), the highway safety manual and others to increase safety for pedestrians, and bicycles crossing or sharing the roadway with vehicles. In addition, our understanding of new publications, such as the "Small Town and Rural Multimodal Networks" guide from FHWA, will offer municipalities options for context sensitive highway solutions.



Innovative design features were utilized in the Union Street reconstruction in Peterborough to improve the livability and walkability of the area.

BRIDGE DESIGN

Hoyle Tanner's depth of experience in the Municipally-Managed State Bridge Aid program includes 122 projects – more than any other firm. Several of these projects were also funded through the Municipal Off-System Bridge Rehabilitation and Replacement (MOBRR) program which met full federal LPA requirements. **In the past two years, our bridge design projects have included precast rigid frames, prestressed deck beams, single and multi-span steel stringer, pedestrian and historic covered bridges.** In addition, our team includes five NBIS bridge certified inspectors who routinely perform inspections and load ratings including steel truss gusset plates for municipal contracts as well as NHDOT, MaineDOT, VTrans and MassDOT.



Two bridges on Stage Road in Gilmanton were bundled, creating design and construction efficiencies.

THE LPA PROCESS

In short, the LPA process requires completion of three steps of design grouped together in the Preliminary Engineering (PE) Phase: Engineering Study, Preliminary Design, and Final Design steps, all of which must be followed to receive authorization to bid an LPA project and



Trusted Experts | Innovative Results

Project Understanding & Approach

acquire full reimbursement. **Through our efforts on numerous LPA projects, Hoyle Tanner can prepare deliverables that meet the requirements of the LPA process efficiently.**

PUBLIC INVOLVEMENT

Public involvement is an essential component of the LPA process and public support is critical for the project's successful implementation. Our projects are presented by our technical design team as well as public involvement specialists who assist with gaining input and reaching consensus from meetings, providing the best value to all stakeholders.



Nichole Davis has successfully administered effective outreach processes for several important projects in the City in the last few years. Public involvement is a critical step in the LPA process which helps to address the needs of all

ENVIRONMENTAL RESOURCES & PERMITTING

Protection of natural and cultural resources is an important goal and a critical requirement in the LPA process. **Our team includes dedicated cultural resource and environmental permitting specialists who have developed strong working relationships with resource agency staff** and routinely complete required environmental documentation such as Environmental Short Forms, Categorical Exclusions (CATEX) and Environmental Assessments (EAs). Our team is also proficient in dealing with limited reuse soils and preparing permit by notification, minor and major standard dredge and fill wetland permit applications and shoreland impact permits. **Hoyle Tanner is one of two consultants that was selected by NHDOT to provide on-call environmental permitting services for NHDOT's own projects.**

SUBCONSULTANTS

In support of our bridge, highway, and environmental permitting groups, we have added several specialty subconsultants to our team to provide services often required as part of the design development process. Survey services will be provided by established firms **Doucet Survey, LLC** and **Sandford Surveying & Engineering, Inc.**, whose three offices in New Hampshire provide local knowledge and geographic diversity. Soil borings and geotechnical engineering will be provided by **SW Cole Engineering, Inc.** (borings through SW Cole Explorations). **GZA GeoEnvironmental, Inc.** and **Stephens Associates Consulting Engineers, LLC** will provide geotechnical and specialty hydraulic design services for projects near or affected by dams. **Preservation Company** has been providing above ground historic resource services in New Hampshire for nearly 40 years and is well respected by NHDES. For below ground concerns, we have added two of the state's leading firms to our team: **Independent Archaeological Consulting, LLC** and **Monadnock Archaeological Consulting, LLC**. We have partnered with each of the above firms on numerous projects throughout New Hampshire.

CONCLUSION

Successful design of LPA projects requires a strong understanding of the community in which the project is located, fiscal and other constraints, and the ability to lead a diverse group of non-technical stakeholders. It also requires a deep understanding of the non-design aspects of the project including abutter relations, public presentations, environmental documentation and permitting (wetlands, NEPA, etc.), and construction practices. The Hoyle Tanner team excels in these areas and has demonstrated success in delivering projects on-schedule and on-budget.



Trusted Experts | Innovative Results



Local Public Agency
(NH municipality or other project sponsor)

Organizational Chart



PRINCIPAL-IN-CHARGE
(Bridge Projects)
Sean James, PE
Senior Vice President

BRIDGE/STRUCTURAL PROJECTS
Josif Bicja, PE
Aaron Lachance, PE
Project Managers

BRIDGE DESIGN
Joe Ripley, PE
Ed Weingartner, PE*
Kayla Hampe, PE*
Ryan McMullen, PE*

PRINCIPAL-IN-CHARGE
(Transportation Projects)
Todd Clark, PE
Senior Vice President

ROADWAY/TRAIL/MULTI-MODAL PROJECTS
Heidi Marshall, PE
Steve Haas, PE, PTOE
Project Managers

ROADWAY DESIGN
Jake Sparkowich, PE, PTOE
Jeff Collins, EIT*
Kevin Preston*

ENVIRONMENTAL PERMITTING
Kimberly Peace
Joanne Theriault*, CWS, AWB®
Deb Coon*

HYDRAULICS/HYDROLOGY/SCOUR
Kayla Hampe, PE*
Lynne Sabourin, EIT*

UTILITY COORDINATION
Joseph Ducharme, Jr., PE,
BCEE*

RIGHT-OF-WAY
Betsy Bosiak

PUBLIC OUTREACH
Nichole Davis*

SUBCONSULTANT PARTNERS			
SURVEY SERVICES Doucet Survey, LLC Sanford Surveying & Engineering, Inc.	GEOTECHNICAL SW Cole Engineering, Inc. GZA GeoEnvironmental, Inc. Stephens Associates Consulting Engineers, LLC	HISTORIC REVIEW Preservation Company	ARCHAEOLOGICAL Independent Archaeological Consulting, LLC Monadnock Archaeological Consulting, LLC

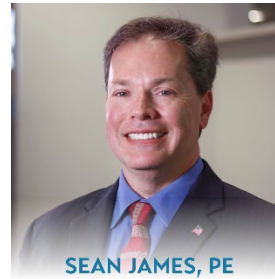


* Resume not included, but is available upon request

Project Team

SENIOR LEADERSHIP

Sean James, PE will serve as Principal-in-Charge for bridge projects ensuring that the design teams have the necessary resources to complete project designs. He will also be available to manage projects where his experience or relationship with a municipality is advantageous to the project. Throughout Sean's 29-year career, he has served as a designer, resident project representative (RPR) and project manager for vehicle and pedestrian bridge projects throughout the state. **Todd Clark, PE** possesses extensive municipal and NHDOT design and construction experience that he will utilize as Principal-in-Charge for roadway, trail and multi-modal projects.



SEAN JAMES, PE



TODD CLARK, PE



JOSIF BICJA, PE



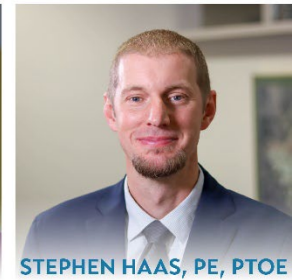
AARON LACHANCE, PE

PROJECT MANAGEMENT

We anticipate a wide variety of potential assignments stemming from this prequalification and are therefore proposing several project managers with extensive experience in transportation infrastructure design. Of particular importance is this teams' experience with municipally-led projects throughout the state. Our project managers have demonstrated success in delivering projects on-schedule and on-budget.



HEIDI MARSHALL, PE



STEPHEN HAAS, PE, PTOE

Our bridge project managers include **Josif Bicja, PE** and **Aaron Lachance, PE** who each have over 20 years of experience and a wealth of municipal bridge project experience. Josif has experience on over 80 municipal bridge projects of all types while Aaron recently completed managing the design of one of the state's largest LPA projects in Peterborough.

Our roadway project managers include **Heidi Marshall, PE** and **Steve Haas, PE, PTOE**. Heidi has dedicated the majority of her 39-year career to the success of municipal infrastructure projects. In addition to her numerous municipal projects, she has designed or managed 11 LPA projects totaling over \$10 million. Steve has earned his Professional Traffic Operations Engineer® (PTOE) certification and specializes in roadway and traffic engineering, traffic analysis, and intersection and traffic signal layouts for DOT and LPA projects.

DESIGN SUPPORT STAFF

Hoyle Tanner's staff includes specialists in the fields of bridge, roadway, safety and intersection design, hydrology and hydraulics, Right-of-Way and land acquisition, environmental permitting and NEPA documentation, utility evaluation and design, and public outreach. Resumes are not included for many of the individuals with these specialties but are available upon request.



Trusted Experts | Innovative Results

Project Team

ENGINEERING DESIGN SERVICES IN SUPPORT OF LPA PROJECTS	YEARS OF EXPERIENCE	YEARS WITH FIRM	LPA CERTIFIED	PROJECT MANAGEMENT	HIGHWAY DESIGN	BRIDGE DESIGN	STRUCTURAL ENGINEERING	CORRIDOR STUDY PLANNING	BRIDGE INSPECTION & LOAD RATING	HYDROLOGY / HYDRAULICS	ENVIRONMENTAL/NEPA/PERMITS	TRAFFIC ANALYSIS	GEOTECHNICAL ENGINEERING	SURVEYOR	PUBLIC INVOLVEMENT	HISTORIC / ARCHAEOLOGY
Sean James, PE <i>Principal-in-Charge</i>	29	28	●	●		●	●		●						●	
Todd Clark, PE <i>Principal-in-Charge</i>	33	22	●	●	●			●							●	
Heidi Marshall, PE <i>Project Manager</i>	39	6	●	●	●			●			●	●			●	
Josif Bicja, PE <i>Project Manager</i>	21	20	●	●		●	●		●	●					●	
Aaron Lachance, PE <i>Project Manager</i>	20	10	●	●		●	●		●	●					●	
Steve Haas, PE, PTOE <i>Project Manager</i>	22	18	●	●	●			●				●			●	
Kimberly Peace <i>Sr. Environmental Coordinator</i>	26	11									●				●	
Joe Ripley, PE <i>Structural Engineer</i>	14	13	●			●	●		●				●			
Betsy Bosiak <i>Land Acquisition Specialist</i>	45	9	●													
Jake Sparkowich, PE, PTOE <i>Transportation Engineer</i>	12	11			●			●				●				
Subconsultant <i>Teammates</i>													●	●		●



Trusted Experts | Innovative Results

References

The following client references are familiar with Hoyle Tanner’s capabilities and performance on various projects. We encourage you to call upon the following individuals as a testament to the quality and thoroughness of the work we do for our clients.

REFERENCE	PROJECT(S)
<p>MICHAEL FOWLER, PE Public Works Director Town of Derry Public Works Department 14 Manning Street Derry, New Hampshire 03038 (603) 432-6144 mikefowler@derrynh.org</p>	<ul style="list-style-type: none"> • Route 28 Improvements • Rockingham Road (Route 28) Bridge Replacement over Tributary G to Beaver Brook • North High Street Culvert • Florence Street Bridge over Shields Brook • Drew Road Bridge over Drew Brook • South Avenue Bridge over Shields Brook • North Shore Road over Tributary to Beaver Lake • Fordway Road Bridge over Beaver Brook • North Shore Road over Taylor Brook • Route 28 Improvements
<p>OWEN FRIEND-GRAY, PE Deputy Public Works Director City of Manchester Public Works Department 475 Valley Street Manchester, New Hampshire 03103 (603) 624-4444 ofriend@manchesternh.gov</p>	<ul style="list-style-type: none"> • Amoskeag Bridge Eastbound and Ramp Engineering Study • Piscataquog River Trail Phase IV • 2015 Construction Inspection Services • Gossler Parkside School Parking Lot Reconfiguration • City-Wide Bridge Services • City-Wide Parking Facility Services
<p>DAVID SHARPLES Town Planner Town of Exeter 10 Front Street Exeter, New Hampshire 03833 (603) 773-6112 dsharples@exeternh.gov</p>	<ul style="list-style-type: none"> • Epping Road/Winter Street/Spring Street TAP Sidewalks • String Bridges Rehabilitation



SEAN JAMES, PE

Senior Vice President – Principal-in-Charge (Bridge)

Sean has performed structural analysis and design of steel, prestressed concrete, reinforced concrete, masonry and wooden covered bridge repair, rehabilitation, and replacement projects, as well as NBIS bridge inspections. He has completed projects for NHDOT, MaineDOT, VTTrans, MassDOT, NYSDOT, and numerous municipal clients. Sean has successfully managed, or served as Principal-in-Charge for, the construction phase of over 9 NHDOT LPA projects. His project experience includes environmental permitting, NEPA and Section 106 review, bidding and construction inspection and administration. He serves as Hoyle Tanner’s Division Manager of Ground Transportation, focusing on successful delivery of projects to our clients.

Registrations:

Professional Engineer: NH, ME, VT, PA, NY

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training
- FHWA - Bridge Inspection Refresher Training; Fracture Critical Inspection Techniques for Steel Bridges; Safety Inspection of In-Service Bridges

- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Principal-in-Charge (PIC)*
- North Shore Road over Tributary to Beaver Lake, Derry, NH: *PIC*
- String Bridges, Exeter, NH: *Project Manager*
- Piscataquog River Trail Phase IV, Manchester, NH: *Project Manager*
- Amoskeag Bridge EB & Ramp E, Manchester, NH: *PIC*



TODD CLARK, PE

Senior Vice President – Principal-in-Charge (Transportation)

Todd has extensive experience in transportation engineering managing multi-discipline projects with complex roadway, bridge, traffic, environmental, utilities and Right-of-Way components. His strengths include evaluation of roadway cross section, geometrics, compliance with stringent stormwater regulations, development of efficient traffic management and phasing strategies along interstate and arterial corridors. Todd serves as a Principal-in-Charge and Project Manager for municipal and state-agency transportation projects including NHDOT, MassDOT, and MaineDOT and is a former state-agency highway/bridge design employee. He is the Division Manager for Hoyle Tanner’s Transportation Services overseeing roadway, and traffic project delivery, design practices, innovation, and quality control and assurance.

Registrations:

Professional Engineer: NH, ME, VT

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training

- NHDOT Statewide Highway #41880 Conway, Conway, NH: *PIC*
- Safe Routes to School, Main Street, Plaistow, NH: *PIC*
- Route 1 & Winnacunnet Road Intersection & Signal Improvements, Hampton, NH: *Project Manager*
- Main Street Bridge & US 202, Peterborough, NH: *Senior Transportation Engineer*



HEIDI MARSHALL, PE

Associate – Roadway/Trail/Multi-Modal Project Manager

Heidi is a Senior Engineer that has been assisting New England communities with engineering needs for over three decades. Her expertise with municipal engineering and construction projects includes LPA projects, design, peer review and construction oversight for municipal roadway, sidewalk, path, trail, athletic fields, infrastructure, circulation, parking design, as well as residential, commercial, and industrial developments. Heidi has assisted communities with all aspects of municipal projects, from developing regulations, administering compliance programs, assisting with budgeting, permitting, public outreach, design, and peer review.

Registrations:

Professional Engineer: NH, VT, ME

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training
- OSHA - 10 Hour Construction Safety & Health

- Planning Board Support Services, Londonderry, NH: *Project Manager*
- Hampton Harbor Study, Hampton, NH: *Project Manager*
- High & Winnacunnet Streets Infrastructure Assessment & Design, Hampton, NH: *Project Manager*
- CIP Project Planning & Estimating, Rochester, NH: *Project Manager*
- Granite Ridge TIF District Planning & Regulatory Assistance, Rochester, NH: *Project Manager*
- South Street Sidewalk & Roadway Reconstruction, Milford, NH: *Team Leader/Project Manager*



JOSIF BICJA, PE

Vice President – Bridge & Structural Project Manager

Josif has experience in the design, rehabilitation, and inspection of numerous bridges, covered bridges, and miscellaneous projects. He has served as a project manager, structural design engineer, construction inspector, and construction administrator on over 50 NHDOT Municipally-Managed State Bridge Aid projects, LPA projects, as well as for MassDOT, VTtrans and NYSDOT. Josif has extensive experience and familiarity with the latest load resistance factor design methods. He has many years of experience working in transportation civil engineering projects.

Registrations:

Professional Engineer: NH, VT

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training
- FHWA - Fracture Critical Inspection Techniques for Steel Bridges

- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Senior Structural Engineer*
- North Shore Road over Tributary to Beaver Lake, Derry, NH: *Project Manager*
- String Bridges, Exeter, NH: *Senior Structural Engineer*
- Piscataquog River Trail Phase IV, Manchester, NH: *Structural Engineer*
- Town Farm Road Bridge, Salem, NH: *Senior Structural Engineer*
- Bluff Street Extension Bridge over Widow Harris Brook, Salem, NH: *Project Manager/Senior Structural Engineer*
- Bluff Street over Hitty Titty Brook, Salem, NH: *Senior Structural Engineer*
- Shannon Road Bridge over Providence Hill Brook, Salem, NH: *Senior Structural Engineer*



AARON LACHANCE, PE

Vice President – Bridge & Structural Project Manager

Aaron is a project manager and senior structural engineer with 16 years of design and construction experience related to state and municipal bridge, roadway and infrastructure improvement projects for municipalities throughout New Hampshire as well as numerous state transportation agencies. Aaron relies on his many years of construction experience that progressed from grade foreman to resident project representative to project manager, a role that he now fills for both the design and construction phases for many municipal infrastructure projects. Aaron is NHDOT LPA certified and has experience with LPA projects ranging from multi-use path construction to large-scale bridge and roadway construction projects.

Registrations:

Professional Engineer: NH, MA, ME, VT

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training
- FHWA - Fracture Critical Inspection Techniques for Steel Bridges
- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Project Manager*
- String Bridges, Exeter, NH: *Senior Structural Engineer*
- Dewey Street Pedestrian Bridge, Rochester, NH: *Project Manager*
- Route 125 Pedestrian Bridge, Rochester, NH: *Project Manager*
- Portland Street Culvert Replacement, Rochester, NH: *Senior Structural Engineer*
- Lowell Street Culvert Evaluation, Rochester, NH: *Project Manager*



STEPHEN HAAS, PTOE, PE

Vice President – Roadway/Trail/Multi-Modal Project

Steve assists clients in identifying infrastructure problems, as well as the associated transportation engineering solutions. Steve specializes in roadway and traffic engineering, traffic analysis, and intersection and traffic signal layouts. Because of his specialty, he is knowledgeable in the AASHTO, FHWA, ITE, and TRB transportation guidelines. He is well versed with NHDOT and VTrans standards. His understanding of balance, forward planning, and attention to detail is what makes him a respected mentor to his team. Steve has been the Project Manager or Designer of many successful NH LPA projects for several communities.

Registrations:

Professional Engineer: NH, MA, ME, VT

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training
- NHI Roadway Safety Design
- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Lead Roadway Engineer*
- Route 28 Improvements, Derry, NH: *Lead Roadway Engineer*
- String Bridges, Exeter, NH: *Roadway Engineer*
- Epping Road/Winter Street/Spring Street TAP Sidewalks, Exeter, NH: *Project Manager*
- Amoskeag Bridge East Bound & Ramp E, Manchester, NH: *Lead Traffic Engineer*
- Campbell Street Intersection, Manchester, NH: *Transportation Engineer*



KIMBERLY PEACE

Vice President – Senior Environmental Coordinator

Kimberly has a thorough understanding of the intricacies of federal, state, and local ordinances and regulations required for successful, timely project completion. She has extensive experience in National Environmental Policy Act compliance and the preparation of Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements in accordance with the varying guidelines developed by federal environmental regulatory agencies. She is also experienced in wetland delineation, permitting, and mitigation design. She has technical experience with the identification and protection of natural resources – including rare, threatened or endangered species – in all six New England states, as well as New York, South Carolina and Florida.

Certifications:

- FHWA - Public Involvement in the Transportation Decision-Making Process
- OSHA - HAZWOPER
- Society of Wetland Scientists

Professional Associations:

- New Hampshire Association of Natural Resource Scientists
- Society of Wetland Scientists

- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Environmental Coordinator*
- North Shore Road over Tributary to Beaver Lake, Derry, NH: *Senior Environmental Coordinator*
- String Bridges, Exeter, NH: *Environmental Coordinator*
- Epping Road/Winter Street/Spring Street TAP Sidewalks, Exeter, NH: *Senior Environmental Coordinator*
- Amoskeag Bridge EB & Ramp E, Manchester, NH: *Environmental Coordinator*
- Four Rod Road Culvert Lining, Rochester, NH: *Environmental Coordinator*



JOE RIPLEY, PE

Associate – Structural Engineer

Joe's experience includes bridge design, inspection, load rating, shop drawing review, and construction observation for NHDOT, MaineDOT, VTrans and NYSDOT and numerous municipal clients. His experience also includes inspection and rehabilitation of various other structures including covered bridges and parking garages and the use of small unmanned aerial systems (sUAS) for site mapping and bridge inspections. Joe is fluent in various software programs such as Merlin-Dash, LEAP Bridge, GROUP/L-Pile, STAAD and Microstation.

Registrations:

Professional Engineer: NH

Certifications:

- NH LPA Certification for Labor Compliance
- NH LPA Certification Training

- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Project Engineer*
- North Shore Road over Tributary to Beaver Lake, Derry, NH: *Project Engineer*
- Piscataquog River Trail Phase IV, Manchester, NH: *Project Engineer*
- Amoskeag Bridge East Bound & Ramp E, Manchester, NH: *Project Engineer*
- Bluff Street Extension Bridge over Widow Harris Brook, Salem, NH: *Project Engineer*
- Bluff Street over Hitty Titty Brook, Salem, NH: *Project Engineer*
- Shannon Road Bridge over Providence Hill Brook, Salem, NH: *Project Engineer*



BETSY BOSIAK

Land Acquisition Specialist

Betsy is Hoyle Tanner’s expert in Right-of-Way (ROW) acquisition. She started her career in the field in 1979 when she joined the staff of NHDOT’s ROW Bureau. In her role as land acquisition specialist, Betsy is conscientious and diligent when communicating with property owners, designers, and field construction staff. She plays an essential role preparing proper documentation for land acquisition and easements to secure property rights in compliance with federal and state requirements. Betsy’s expansive knowledge about ROW and avigation easement acquisitions results in cooperative and effective communication among project stakeholders.

Certifications:

NH LPA Certification Training

Professional Associations:

- International Right of Way Association
- International Asset Management Committee
- Epsom Planning Board
- Central New Hampshire Regional Planning Commission

- Main Street Bridge Replacement & US 202 Reconstruction, Peterborough, NH: *Land Acquisition Specialist*
- Crystal Lake Road Bridge, Gilmanston, NH: *Land Acquisition Specialist*
- Westville Road Bridge, Plaistow, NH: *Land Acquisition Specialist*
- Epping Road/Winter Street/Spring Street TAP Sidewalks, Exeter, NH: *Acquisitions/Relocation Specialist*



JAKE SPARKOWICH, PE, PTOE

Associate – Transportation Engineer

Jake’s experience has included progressive opportunities to meet civil/site, and roadway and bridge engineering challenges. During his career as a design engineer, he has developed roadway geometrics and site grading, temporary and permanent traffic signal designs, hydrologic and hydraulic calculations, stormwater BMP design, and utility mapping on state and municipal projects. As an accomplished engineer, he mentors junior staff on all aspects of roadway design. While he works on all types of projects in our transportation group, he harbors a growing interest in traffic engineering. For projects large and small, his proficiency and continued work on our design software platforms, including Microstation, InRoads, Autodesk Civil 3D, SignCAD, Synchro, SimTraffic, and HydroCAD, has enabled our team to meet our clients’ project goals and visions.

Registrations:

Professional Engineer: NH

Professional Associations:

New Hampshire Institute of Transportation Engineers (NHITE) - Secretary/Treasurer 2020

- Main Street Bridge & US Route 202 Reconstruction, Peterborough, NH: *Roadway Engineer*
- North Shore Road over Tributary to Beaver Lake, Derry, NH: *Roadway Engineer*
- Piscataquog River Trail Phase IV, Manchester, NH: *Resident Engineer*
- Amoskeag Bridge East Bound & Ramp E, Manchester, NH: *Roadway Engineer*



MAIN STREET BRIDGE REPLACEMENT & US 202 RECONSTRUCTION

Peterborough, New Hampshire

Design Completion:

December 2019

Services Provided:

- Highway & Bridge Design
- Structural Engineering
- Bridge Inspection & Load Rating
- Hydrology / Hydraulics Analysis
- NEPA & Environmental Permitting
- Traffic Analysis, Control & Management
- Geotechnical Engineering
- Historic & Archeological Investigation
- Right-of-Way Coordination
- Public Outreach/Participation Coordination

Replacement of the historic, but structurally deficient, bridge in downtown Peterborough was the catalyst for one of the largest and most complex transportation infrastructure projects the Town has undertaken in recent history. Hoyle Tanner worked with the Town and NHDOT on this federally-funded LPA project from the engineering study through final design phases, including through the NEPA process and bid phase. This multi-year, multi-discipline project is currently under construction.

Realignment and widening of approximately 850' of Route 202 will improve sight distance, traffic flow, and safety in this area. The existing western Route 202 sidewalk will be maintained and reconstructed, and a new eastern sidewalk will be added. In addition to bridge and roadway reconstruction, this project also includes construction of a new kingpile retaining wall to support the realigned Route 202 roadway, reconstruction of a portion of the Transcript Dam, in-situ stabilization of an historic boulder retaining wall, and lining of an historic granite canal.

The project has required close coordination with project stakeholders, including the NH Division of Historical Resources and the Peterborough Heritage Commission.



NORTH SHORE ROAD OVER TRIBUTARY TO BEAVER LAKE

Derry, New Hampshire

Construction Completion:

November 2019

Services Provided:

- Hydrologic/Hydraulic Study
- Hydrologic/Hydraulic Analysis
- Study & Design
- Bid & Construction Administration

Hoyle Tanner prepared a hydrologic and hydraulic (H&H) study, a feasibility study, and designed/oversaw construction of a new bridge for the replacement of a structurally deficient corrugated metal pipe (CMP) arch. The existing culvert was a single 7'-11" span by 5'-7" rise CMP arch with approximately 2' of soil cover beneath the roadway surface.

Hoyle Tanner performed a H&H analysis, evaluated the existing hydraulic opening of the culvert, and recommended and designed a new culvert type and opening that passes the 50-year flood event with a minimum of 1' of freeboard per NHDOT requirements. The proposed replacement structure is a 12' span precast concrete rigid frame founded on bedrock. The project was fully funded through NHDOT Municipally-Managed State Bridge Aid.



NH ROUTE 28 IMPROVEMENTS

Derry, New Hampshire

This project covers an area that accommodates 22,000 vehicles per day. Hoyle Tanner was selected to help alleviate a traffic "bottle neck" within the heavily traveled commercial district. Existing signalized and non-signalized intersections were first analyzed, then animation models were created to visualize the proposed additional signalization and roadway widenings. An added thru lane, turning lanes, and interconnected signal system increased roadway capacity and improved traffic operations.

Construction Completion:

October 2013

Services Provided:

- Design
- Stormwater Management
- Permitting
- Traffic Analysis
- Signalization
- Cost Estimating
- Traffic Control/Management
- Construction Observation
- Construction Administration

Early project efforts included stormwater coordination located up gradient in the watershed. Stormwater analysis of existing conditions involved complex urban "open" and "closed" combined systems. The drainage design included the retrofit of existing conveyances to update aged infrastructure, meeting pre- vs. post-runoff requirements resulting in minimal impacts to upstream and downstream conditions. We assisted the Town with Right-of-Way negotiations by providing site impact plans and alternative development concepts. 3D modeling was utilized to map existing underground utilities. Utility conflicts were minimized by designing around existing structures and lines where possible. Hoyle Tanner prepared the contract documents and assisted the Town in bidding, was responsible for construction administration, and resident engineering services.



STRING BRIDGES

Exeter, New Hampshire

The String Bridges are twin 50' span reinforced concrete rigid frame bridges that were constructed in 1935. The bridges carry String Bridge Road over the Squamscott River. Numerous utilities cross the bridge including buried gas, water, and sewer as well as overhead power, cable and phone lines. With the exception of routine paving, minor repairs, and installation of a waterproofing membrane in the 1990s, very little work had been completed to the bridges since they were originally constructed.

Construction Completion:

December 2017

Services Provided:

- Inspection, Design & Permitting
- Construction Administration
- Construction Observation

We performed a detailed inspection of each bridge; the bridges were found to be generally in fair to good condition with some select areas in poor condition due to concrete deterioration. A complete rehabilitation of both bridges was completed over two construction seasons and included concrete repair, relocation of overhead utilities to underground, the addition of period light fixtures and reconstruction of the roadway.



EPPING/WINTER/SPRING STREET TAP SIDEWALKS

Exeter, New Hampshire

Completion Date:

September 2020

Services Provided:

- Study
- Public Outreach/Participation Coordination
- Preliminary Design
- NEPA Process
- Traffic Analysis
- Right-of-Way Coordination
- Final Design
- Cost Estimating
- Bidding Administration

Promoting and providing safe pedestrian facilities is a high priority for the Town of Exeter. Recognizing that there were gaps in their connected sidewalk network and limited suitable pedestrian crossing facilities, we were selected to develop solutions for three key locations - Epping Road (NH 27), Winter Street, and Spring Street. As the project is funded by federal Highway through the LPA program, the Town also needed a partner who was knowledgeable in navigating this program.

The project is expected to propose approximately 1,600' of new and reconstructed sidewalk along these roads. ADA compliant curb ramps and a new mid-block roadway crossing with a Rectangular Rapid Flashing Beacon and overhead lighting will also be installed. A minor realignment of the unconventional intersection of Epping Road, Brentwood Road, and Columbus Avenue is also proposed to improve pedestrian safety and reduce pedestrian/vehicular conflict points.

We used an in-depth public outreach campaign (flyers, a Facebook Group, and several public meetings) to identify the residents' preferred alternatives. Upcoming services will include traffic analysis, preliminary and final design, environmental permitting and more.



PISCATAQUOG RIVER TRAIL PHASE IV

Manchester, New Hampshire

Completion Date:

December 2016

Services Provided:

- Study
- Design
- Inspection
- Cultural Resources Coordination
- NEPA Process
- Construction Administration

The City selected Hoyle Tanner for design and construction services for the final phase of the Piscataquog Trail. This 1,800' long section of the trail is built on a former rail bed and the project includes a local street crossing, easement acquisitions, pedestrian bridge over the Piscataquog River, trail section upgrade and paving, and landscape and wayfinding enhancements.

A full inspection and evaluation of the existing trestle was performed; replacement of the 1941, 7-span timber trestle with single-span steel truss was selected as the preferred alternative.

The trail improvements included paving the majority of the trail section and installing guardrail and fencing, as appropriate, to guide users along the trail. The project was partially funded through the federal Transportation Enhancement program and was completed through the NHDOT Local LPA program.





Completion Date:

September 2022

Services Provided:

- Bridge Inspection
- Non-Destructive Testing
- Life-Cycle Cost Analysis
- Engineering Study Preparation

AMOSKEAG BRIDGE

Manchester, New Hampshire

The Amoskeag Bridges are an extremely important connection between the east and west sides of Manchester. Increased maintenance requirements and a deteriorating concrete deck led to the need for a full evaluation of the bridge. Rehabilitation, particularly traffic control during construction, will be complicated and will require careful planning.

We are performing a full inspection of the bridge and evaluating rehabilitation options. A steel coating evaluation and a ground penetrating radar evaluation of the deck are being completed by specialty subconsultants. Some rehabilitation elements of the eastbound bridge are removal and replacement of the pavement and membrane, replacement of expansion joints, and abutment and pier concrete repairs. A life-cycle analysis will be completed to determine the preferred deck alternative, full replacement or replacement of the existing aluminum bridge railing. The project is being completed under the NHDOT Municipally-Managed State Bridge Aid program and is currently in the engineering study phase.

TOWN-WIDE SERVICES

Hoyle Tanner provides municipal engineering services throughout New England, including the following New Hampshire communities with whom we have been prequalified or have standing contractual relationships for these services: *Capital Planning, Grant & Funding Assistance, Asset Management, Roads, Bridges & Utility Engineering (estimating, design, permitting, NEPA, Right-of-Way acquisition), Peer Review, Miscellaneous Structural Engineering, MS4 Stormwater Compliance*

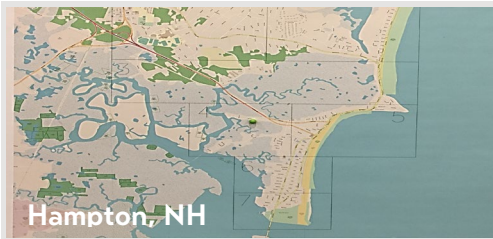


Londonderry, NH

Town of Londonderry

We were selected in 2018 to assist the Community Development Department with planning and engineering professional review and supporting services, focusing on peer review of Planning Board submissions.

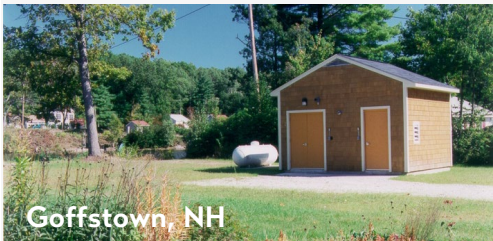
- The initial assignment involves assisting with review of elements that are part of a large, community-style planned unit development
- Subsequent reviews involved compliance evaluations of smaller-scale commercial, industrial, and residential developments
- Hoyle Tanner was recently selected for Transportation Alternatives Program funded rail trail design and permitting



Town of Hampton

The Town selected Hoyle Tanner in 2018 to support the Town's diverse CIP needs. This has been accomplished by utilizing on-call agreements to support varying types of assignments. The initial two assignments include:

- The Hampton Harbor Study, an evaluation and analysis of the complex hydraulic behavior of the Hampton Harbor with focus on the current and future impact of sea level rise
- The High & Winnacunnet Streets Infrastructure project



Goffstown (various municipal entities)

Various Town entities (Sewer Commission, Planning Department) have partnered with Hoyle Tanner to solve the Town's infrastructure challenges for over 30 years for:

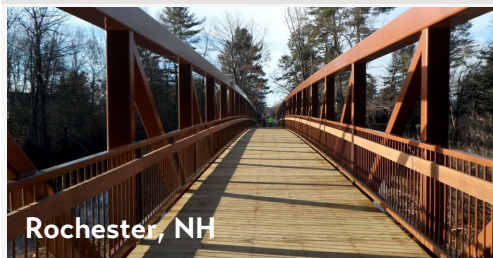
- Pump Station Upgrade
- Regulations Review
- Mast Road Sewer Replacement



Town of Salem

Over the past 10 years, Hoyle Tanner has completed numerous bridge/roadway infrastructure projects for the Town, many under our current on-call agreement. Some of these projects have utilized NHDOT Municipally-Managed State Bridge Aid funding while others were completed with Town-only funds.

- Bluff Street Extension over Window Harris Brook
- Bluff Street over Hittytitty Brook
- Bridge Street over Spicket River
- North Main Street over Spicket River
- Teague Drive over Spicket River
- Shannon Road over Providence Hill Brook
- Town Farm Road Bridge over Spicket River
- Tuscan Village Engineering Support Services



City of Rochester

The City of Rochester has turned to Hoyle Tanner for nearly 20 years to help solve the City's infrastructure challenges. The following projects are underway or have been completed via our current multi-year, multi-discipline on-call contract:

- CIP Project Planning Estimates
- Dewey Street Pedestrian Bridge Evaluation & Replacement
- Lowell Street Bridge evaluation
- Route 125 Pedestrian Bridge Evaluation & Replacement
- Four Rod Road Culvert Lining



**HOYLE
TANNER**

Corporate Headquarters:

150 Dow Street
Manchester, NH 03101

Branch Offices:

Pease International Tradeport
100 International Drive, Suite 360
Portsmouth, NH 03801

285 Billerica Road, Suite 203
Chelmsford, MA 01824

125 College Street, 4th Floor
Burlington, VT 05401

106 Lafayette Street, Unit 2D
Yarmouth, ME 04096

95 E. Mitchell Hammock Road, Suite 200
Oviedo, FL 32765

