

TOWN OF BARRINGTON, NEW HAMPSHIRE

JANUARY 2021

Statement of Qualifications

Qualifications for Professional Engineering Services





January 28, 2021

Town of Barrington 333 Calef Highway PO Box 660 Barrington, NH 03825

SUBJECT: Request for Qualifications – General Engineering Services

Town of Barrington, New Hampshire

Dear Selection Committee,

The Town of Barrington, with its expansive woodlands, historic farms, and numerous lakes and ponds, offers its residents a beautiful place to call home. The Town is looking for an on-call engineering partner to work toward protecting its natural resources and improving infrastructure assets in the community on an as-needed basis. As a New England firm, we got our start in 1947 working with rural communities just like yours in Maine and are confident we can offer knowledge and experience that will benefit the Town. With that, we offer the following:

- A seasoned team Our proposed Project Team Manager will be Britt Eckstrom, PE, who will also be your
 main project contact. We have assigned individual project managers for each service category that
 specialize in the related type of work.
- **New Hampshire knowledge and experience** We have provided on-call type services to New Hampshire communities for decades. This includes providing design, construction, permitting, and funding assistance for a wide array of projects. We currently have over 75 on-call clients throughout New England including nearby Rochester, Newmarket, and Hampton.
- Proximity As indicated in the RFQ, expedient responsiveness is an important factor for the Town. The
 majority of the core project team is located in our Portsmouth and Manchester offices. We are routinely
 able to respond to the needs of our local New Hampshire clients at a moment's notice and would like
 nothing more than to continue our track record of providing immediate and responsive service to the
 Town of Barrington.
- Specialty subconsultants to deliver an "all-in-one" team We have included specialty subconsultants on our team to supplement the services Wright-Pierce provides in-house. Doucet Survey provides surveying, Marc Jacobs provides wetland mapping, and Stephens Associates provides dam engineering and geotechnical services.



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- Commitment to client satisfaction and team collaboration One of our greatest strengths is our responsive, client focused service, with a goal of exceeding our client's expectations. We have an excellent record in maintaining strong client relationships over the long-term and strive to act as an extension of our clients' staff. We believe our past work attests to the importance we place on client satisfaction and collaboration and encourage you to contract our references, provided in Section 5, for a first-hand account of our performance and engineering capabilities.
- Balance of performance and cost We understand that balancing the functionality, quality and performance of any engineering project with cost will be critical. The best solution must deliver the most value. As general engineering projects are assigned, we will identify alternatives and cost savings measures which can be incorporated, such that the projects can be completed within your budget.

With this submission, we acknowledge receipt of Addendum 1. We appreciate being considered for this opportunity and would love the chance to further discuss our qualifications with the selection committee. If you have any questions, or if you need additional information, please feel free to call or email at the contact information listed below.

Sincerely,

WRIGHT-PIERCE

Britt Eckstrom, PE Project Manager

britt.eckstrom@wright-pierce.com

603.570.7126

Ryan Wingard PF

Vice President and Principal-in-Charge

ryan.wingard@wright-pierce.com

207.523.1419



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Evaluation Criteria

Prior similar relevant experience. Responder has experience providing services of a similar nature as described in the Scope of Services.



Our Team Will Deliver

Wright-Pierce has significant experience with the design of projects similar to those that may be completed under an on-call engineering services contract. Refer to a description of our capabilities and case studies in **Section 4 – Firm's Related Experience.**

Entering in an on-call contract with a full service

engineering firm like Wright-Pierce, allows the Town

to contract for services on an as-needed basis and

provides the opportunity to bring in project team members with the best expertise for the project at

- Understanding of the Town's need for an Engineer of Record. Responder has an understanding of the need for and understands the role an Engineer of Records should play in a community of Barrington's size.
- **Project team depth and experience.** The project team's member depth and experience on projects of a similar nature as described in the Scope of Services.



Our project team members have extensive experience designing and administering the construction of projects just like those described in the Scope of Services. Refer to **Section 3 - Project Team** to learn more about the project team's qualifications and project experience.

Firms and team members references.

Consideration will be given to both the firms and team members' references and reputations.



We encourage you to reach out to the references provided in Section 5 regarding our track record of providing responsive and effective service.

- Familiarity with the Town of Barrington.
- >

In addition to working in numerous communities just like Barrington, we have added Stephens Associates to our project team because of their experience providing the Town dam engineering services.

Firm's office location. Responder has the office location and ability to promptly respond to the Town's needs, including possible emergency situations without delay.



Our Portsmouth office is less than 20 miles away, allowing us to respond to emergencies without delay. Project team members work to assist the Town during emergencies as if they are an extension of your staff.

Quality of References. The quality of reference's responses from clients when contacted by the Town.



Wright-Pierce has long standing relationships with all of the references provided in **Section 5** and will be able to share candid opinions about the quality of service provided by Wright-Pierce.

Compliance and responsiveness of Qualifications
Statement. Responder has provided a complete response to the needs outlined in the RFQ.



This SOQ includes a significant sampling of our personnel and experience, additional information will be provided if needed. All requested information in included in this submission.





South Berwick

Barringto

236

Pover

Portsmo

Portsmo

95

On-Call assignments will be managed out of our Portsmouth, NH office, a short drive from the Town of

Wright-Pierce Office

Barrington.



Wright-Pierce is an award-winning, multidiscipline engineering firm that has specialized in civil infrastructure, wastewater, and water services since 1947. Employee-owned and operated, our 275+ engineers and support professionals are located in offices throughout the Northeast and Florida. Because our leadership team is located in many of our offices, we do not have a formal corporate headquarters. Instead, we focus on a whole-company approach, where each of our offices have leadership team members and equal support from our corporate divisions, such as finance, human resources, and marketing. We complete many water, wastewater, and civil infrastructure projects each year, ranging in size from \$100,000 to over \$100 million. We provide complete engineering services from initial planning to design, bidding, construction administration, and operations.

An Award-Winning Firm

Wright-Pierce has been recognized by several industry organizations for business performance and engineering excellence. We rank in Engineering News-

Record (ENR) "Top" lists including the Top 500 Design Firms and Top 200 Environmental Design Firms in the country. Many of our projects receive regional ACEC Engineering Excellence Awards.

In addition, we have repeatedly received the PSMJ 'Circle of Excellence' Platinum Award — one of only six firms in North America to do so. PSMJ is a firm dedicated to business practices of architectural and engineering (A/E) firms worldwide and bestows its Circle of Excellence award after assessing benchmarks for operations, management and sustainability.

Location of Office Supporting This Project

Our team will be primarily working from our **Portsmouth, NH** office. This close proximity will allow the project assignment budgets to be used in a timely and efficient manner for completion of design meetings, field surveys, and inspections, which will result in the best overall value to the Town of Barrington. We will also be able to quickly respond to any emergency-related or time-sensitive needs.



Wright-Pierce Team Engineering Services

Civil Engineering

Roadway Evaluation/Engineering

- Transportation planning
- Bicycle and pedestrian facilities
- Bridge assessment and design
- Highway and street design
- Culvert replacement
- Highway safety improvements
- Pavement management

Bridge Evaluation/Engineering

- Long span/complex bridges
- Design, analysis and inspection
- Seismic and wind evaluation
- Conventional highway bridges
- Pedestrian bridges

Dam Utility Engineering Dam Evaluations/Engineering

- Dam inspections
- Breach analysis
- Bathymetric surveys
- Emergency action plans
- Dam rehabilitation
- Hydropower

Stormwater Management Stormwater System Eval./ Design

- Master planning
- Best management practices
- MS4 compliance
- Storm sewers and culverts
- Hydraulic modeling
- Low-impact development
- In-line treatment
- Scour analysis/mitigation

Climate Resiliency Assistance

- Flood mitigation
- Floodproofing
- Sea level rise planning
- Hydraulic modeling
- LOMR/LOMA

Solid Waste Facility/Landfill Closure Monitoring Evaluation/ Engineering

- Landfill closure engineering
- Landfill closure monitoring
- Data management and compliance

Permitting/Engineering

- Site suitability evaluation
- Landfill design
- Leachate collection

Planning Board Peer Review

- Planning board applications
- Water and sewer connections
- Building permits

Construction Inspection/ Administration

- Resident project representatives
- Full range of construction administration services

Permitting Assistance

- Federal agencies
- State agencies
- Local authorities

Grant/Loan Application and Administration Assistance

- Investigating funding options
- Grant/loan application assistance
- Grant/loan administration

Town Facilities/Buildings

- Civil engineering
- Architecture
- Landscape architecture
- Structural engineering
- Mechanical and plumbing
- Electrical and communications
- Cost estimating
- Bidding and construction administration

Survey/Right-of-Way/Mapping

Doucet Surveying, Inc.

- Right-of-way and topographic surveys
- Taking and easement plans
- Recordable DOT plans
- GIS Services









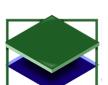






Subconsultant Qualifications Summary

The following introductions describe our specialty subconsultants and the role they will take on for these on-call projects, as needed. **Wright-Pierce routinely works with this group of subconsultants on projects throughout New England.** Additional information about these subconsultants is included in sections 3 and 4.



Doucet Survey LLC

Survey, Right-of-Way, Mapping

Established in 1993, Doucet Survey LLC is one of the largest dedicated land surveying firms in northern New England. Their 13-person firm is led by five Licensed Land Surveyors with over 100 years of combined survey experience. Doucet Survey provides outstanding service and cost-effective solutions for public and private sectors in New Hampshire, Maine, Vermont, Massachusetts and Rhode Island.

Highlights

- Experience working with Wright-Pierce
- Local New Hampshire office
- NHDOT eligible consultant
- NH registered professional land surveyors

Marc Jacobs Wetlands



Marc is an independent consultant with over twenty years of experience providing a variety of professional wetland and soil related services to a broad range of clients that include engineers, surveyors, realtors, abutters, conservation commissions, building, developers, and municipalities.

Highlights

- Experience working with Wright-Pierce
- Extensive New Hampshire project experience
- NH Certified Soil Scientist
- NH Certified Wetland Scientist
- Certified Professional in Erosion and Sediment Control

Stephens Associates Consulting Engineers, LLC Dams, Geotechnical



Stephens Associates Consulting Engineers, LLC (SA) provides insightful, cost-saving engineering solutions for dams, bridges, buildings, and other infrastructure from our locations in Brentwood, New Hampshire and Wilmington, Massachusetts. SA was established in 1999. Specializing in geotechnical, structural and seismic engineering, geology, hydraulics and hydrology of public and private sector facilities, our staff have experience on small- to large-scale projects on both the east and west coasts of the US as well as overseas.

Highlights

- Experience working with Town of Barrington
- Local New Hampshire office
- NHDOT eligible consultant



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Team Organization

The team presented below has many years of demonstrated practical experience completing projects similar to yours.



TECHNICAL ADVISOR

Jan Wiegman, PE*

Ryan Wingard, PE*

Britt Eckstrom, PE*

CIVIL

Civil Project Manager

Britt Eckstrom, PE*

Roadways

Jeffrey Preble, PE*

Bridges/Culverts

Jason Gallant, PE*

Stormwater

Jaime Wallace, PE

DAM

Dam Project Manager

Bob Stephens, PE*
Stephens Associates

PERMITTING ASSISTANCE

Project Engineer

Nate Edwards, EIT

GRANT/LOAN

Grant/Loan Application Assistance

Mike Theriault, PE

PLANNING BOARD REVIEW

PROJECT TEAM MANAGER AND MAIN CLIENT CONTACT

Planning Board and Peer Reviews Project Manager

Michael Guethle, PE* Christine Rinehart, PE

SOLID WASTE

Solid Waste Project Manager

Stephanie Hubbard, PE*

Monitoring Evaluation

Stephanie Hubbard, PE Adam Couture

Permitting

Adam Couture

CONSTRUCTION ADMIN

Construction Inspection and Administration

Robert Barnes

Field Services

Lucas Chapman

 Resumes for key staff provided at the end of this section.
 Resumes for other team members available upon request.

FACILITIES/BUILDINGS

PRINCIPAL-IN-CHARGE

Structural Design

Jason Powell, PE

Architectural Design

Cathy Michaud, AIA

Electrical Design

Steve LaPrise, PE

Plumbing/HVAC

Rodney Greene, PE

Instrumentation and Controls

Scott Hinckley, PE

SURVEY

Survey/ROW/Mapping

Jack Kaiser, LLS*

Doucet Survey LLC

WETLANDS

Wetlands

Marc Jacobs, CWS, PWS, CSS, CPESC*

Marc Jacobs

GEOTECHNICAL

Geotechnical

Bob Stephens, PE*

Stephens Associates



Introducing Our Key Team Members

The following introductions describe the Project Team Manager and key members assigned to lead each service line for this on-call. Their descriptions will explain:

- Their role and responsibilities for this project
- Their general qualifications as they relate to this project

Additional information about each key team member and their experience can be found in their resume directly following this section.



Wright-Pierce team members typically participate through all phases of a project to ensure continuity, effective implementation of original concepts, and overall success.





Experience: 25 years
Joined Wright-Pierce: 2007
Professional Licenses: NH, ME, CT, FL,
MA, MI, RI, VT

Principal-in-Charge: Ryan Wingard, PE

Ryan will be your dedicated Principal-in-Charge for the Town of Barrington's General Engineering Services Contract. He has 25 years of experience in civil engineering including roadways, dams, wastewater system design, watershed characterization, stormwater system design, planning board peer review, construction administration, permitting, grant/loan funding, climate resiliency, and project management.

Ryan will be supported by the technical team shown in the organization chart, many of whom have worked together before and have familiarity with like-sized communities in New Hampshire. Ryan's role is to bring corporate oversight to the on-call assignments, ensuring they are completed on time and on budget, and that our services exceed your expectations. He brings knowledge of all components of project development, management, and financing to the team. He has been involved with several on-call contracts for and has led multiple projects for the following municipalities:

- City of Lebanon, NH
- City of Rochester, NH
- Town of Exeter, NH
- City of Bath, ME
- Town of Old Orchard Beach, ME
- City of Portland, ME
- Town of Falmouth, ME
- Town of Richmond, ME





Experience: 36 years Joined Wright-Pierce: 2011 Professional Licenses: ME

Technical Advisor: Jan Wiegman, PE

Jan will serve as a Technical Advisor to the project team. His expertise includes engineering design, permitting and project management experience on a wide variety of civil, structural and transportation projects. Most recently, he has been managing several large-scale site development and transportation related projects and giving technical guidance on a wide variety of projects including pedestrian projects and transportation. In this position, Jan will provide technical oversight and guidance, and perform QA/QC reviews.



Experience: 38 years
Joined Wright-Pierce: 2001
Professional Licenses: NH, ME, CT

Roadways: Jeff Preble, PE

Jeff has extensive experience in stormwater management plans, street and highway design and reconstruction, site design, sewer separation, storm drainage projects, surface water treatment, water distribution systems, water system planning and analysis, sanitary landfills, transfer stations/recycling and wastewater systems. He will serve as the technical expert for roadway engineering projects for the Town, working alongside Britt. He has served in this capacity for roadway projects in communities throughout New England.



Experience: 17 years Joined Wright-Pierce: 2018 Professional Licenses: NH, ME

Project Manager – Civil and Stormwater: Britt Eckstrom. PE

Britt has more than 17 years of experience in consulting engineering working on a wide variety of civil and environmental projects, including water system, wastewater and general municipal engineering projects. She has significant project experience with infrastructure evaluation, report preparation, project design, construction document preparation, permitting and construction administration. She will act as Project Manager for civil and stormwater related projects.



Experience: 24 years
Joined Wright-Pierce: 2020
Professional Licenses: NH, ME, MA,
CT, RI, VT, PA, TX

Bridges/Culverts: Jason Gallant, PE

Jason has over two decades of progressive experience in transportation infrastructure engineering throughout the Northeast. His engineering expertise includes design, analysis, and construction of new and rehabilitated bridges and other highway, railroad, and building structures under design-build and design-bid-build project delivery methods. Jason offers strong knowledge of bridge and building design standards throughout the Northeastern U.S. and has successfully designed many Department of Transportation (DOT), municipal, commercial, and institutional structures using reinforced concrete, prestressed concrete, structural steel, and timber.





Experience: 20 years Joined Wright-Pierce: 2009 Professional Licenses: CT, MA, ME, RI



Experience: 9 years
Joined Wright-Pierce: 2015
Professional Licenses: ME

Project Manager – Solid Waste/Dams: Stephanie Hubbard, PE

Stephanie has 20 years of site and infrastructure design, construction administration and project management experience on a wide variety of civil projects. Her responsibilities have included design, permitting, budget, schedule, and construction monitoring on both public and private sector development projects. She has been involved in site design, dam evaluations and permitting throughout New England and will provide those same services for dam and solid waste projects for the Town.



Peer Reviews: Michael Guethle, PE

Michael is a lead project engineer with extensive experience in site development including stormwater treatment, street and parking lot design, utility design and relocation, and associated permitting, funding, public process facilitation, and construction phase services. His experiences range from small residential projects to large multi-modal transportation expansions. Michael draws on this experience when complete planning board and peer reviews.



Experience: 31 years Joined Stephens Associates: 1987 Professional Licenses: NH, ME, MA, VT



Experience: 26 years
Joined Doucet: 2001
Professional Licenses: NH

Project Manager – Dams/Geotechnical: Bob Stephens, PE

Robert Stephens, PE is Principal Engineer for Stephens Associates' geotechnical/geological, earthquake and dams consulting services. He has engineered rock slopes, and performed and/or supervised geotechnical, geological, seismic, hydraulic and hydrologic studies of existing facilities such as seismic safety evaluations for dams, including High Hazard, large embankment and historic stone-masonry dams. He has evaluated earth properties by geotechnical and geophysical methods including seismic refraction techniques. Bob will serve as project manager on dam related projects and support the project team with geotechnical engineering on other assignments.

Survey/Right-of-Way/Mapping: Jack Kaiser, LLS

Jack routinely provides the following survey services: cost estimating, records research, boundary analysis, computations, and client correspondence. Of the many varieties of surveys, Jack deals primarily with engineering surveys and construction layout. The engineering surveys are typically topographic surveys of large commercial sites (office buildings or retail plazas) or roadway surveys for municipalities making improvements. In many instances the site surveys will lead to construction layout, which varies from laying out complex residential homes to layout of column lines for multi-million-dollar commercial projects.





Experience: 35 years
Joined Marc Jacobs: 1993
Professional Licenses: NH

Wetlands: Marc Jacobs, CWS, PWS, CSS, CPESC

Marc is an independent consultant with over 35 years of experience providing a variety of professional wetland and soil related services to a broad range of clients that include engineers, surveyors, realtors, abutters, conservation commissions, building, developers, and municipalities. Marc will also provide support on permitting efforts and construction inspection.



Working with Barrington & Client-Focused Project Management

Our project team has been selected based on their technical expertise and previous experience. All of our key team members have worked on recent projects for New Hampshire communities.

The project team will be supported by Wright-Pierce's staff of more than 275 engineers and support personnel. Our professional in-house capabilities include water, wastewater, stormwater, transportation, civil, landscape architecture, and GIS. We also have field service engineers, CADD technicians, and construction inspectors (RPRs) on staff.

The cornerstone of our project management plan is client focus. At Wright-Pierce, our goal is to produce quality, cost-effective projects. Our managers accomplish this through a well-developed work plan, utilizing proven standards and procedures, having individual responsibility and accountability, and leveraging our company-wide commitment to client satisfaction.

We involve our clients throughout the project to ensure we understand their needs, develop solutions that address those needs, and continually solicit client feedback on ways we can improve our services and minimize conflicts.



General Engineering Services

Wright-Pierce currently has over 75 on-call clients, several of which are in New Hampshire. As a testament to our dedication and performance, most of these clients have utilized our on-call services for over 10 years. Through our on-call and other engineering contracts, we routinely provide all of the services identified in the RFQ. The below list represents some of our current on-call clients in New Hampshire and nearby Maine.



New Hampshire On-Call Clients

Client	On-Call Services Provided	Client Since
City of Rochester	Civil Infrastructure Engineering, Water, and Wastewater	1998
Town of Hampton	Civil, Water and Wastewater Engineering	2015
Town of Londonderry	Civil, Water and Wastewater Engineering	1996
Town of Newmarket	Civil, Water and Wastewater Engineering	2007
Town of Salem	Civil Infrastructure Engineering, and Water	2008
Town of Durham	Wastewater Engineering	2000
Town of Jaffrey	Water and Wastewater Engineering	2000
NASSCO	Wastewater Engineering	2015
Plymouth Village Water and Sewer District	Water and Wastewater Engineering	2006
Rye Water District	Water Engineering	1994
Rye Sewer District	Wastewater Engineering	2011
City of Somersworth	Water Engineering	1994

Maine On-Call Clients

Client	On-Call Services Provided	Client Since
Town of Falmouth	Civil Engineering, Wastewater, Stormwater	1988
Limestone Water and Sewer District	Civil, Water and Wastewater Engineering	2003
Presque Isle Utilities District	Civil, Water and Wastewater Engineering	1990
Town of Richmond	Civil and Infrastructure Engineering	2001
Town of Gardiner	Water and Wastewater Engineering	2006
Town of Kennebunk	Water and Wastewater Engineering	2008
Town of Lisbon	Water and Wastewater Engineering	2001
Town of Penobscot	Water and Wastewater Engineering	1987
Town of Rangeley	Water and Wastewater Engineering	1994
City of Rockland	Wastewater Engineering, Permitting and Funding	1967
Town of Wells	Water and Wastewater Engineering	2001



Civil - Roadway Evaluation/Engineering

Wright-Pierce regularly works with municipalities and state transportation agencies on the construction of new highways, the rehabilitation of existing roadways, and with the regulatory and administrative aspects of each project. We have provided engineering planning and design services associated with highway projects in many states and are familiar with all applicable design standards and variations in technical specifications pertaining to roadway design, pavements, drainage facilities, and ancillary elements. We also work routinely with a variety of technologies for cost-effective rehabilitation. Some common project elements include:

- Transportation planning
- Route surveying/topographic mapping
- Development of drawings and specifications
- Public outreach process
- Construction administration
- Highway safety features
- Reclaim/grinding
- Pavement management/GIS
- Funding applications and administration





Relevant Project Examples

Belknap and Elm Street Neighborhood Reconstruction – Dover, NH

Services provided include design, permitting, and construction oversight of this roadway project. Project involved full reconstruction, including sidewalks and curbs; utility improvements (water, sewer, and storm drainage); and pedestrian features. Also included significant public outreach and involvement given its location within one of the oldest neighborhoods in the City.

Street Reconstruction – Lebanon, NH

In concert with its CSO Management Plan, the City has embarked on an aggressive program of infrastructure improvements, often involving full-depth reconstruction of streets and replacement of storm drainage, sewers, and water mains. Design efforts have included street base and paving, curbing, sidewalks, retaining walls, signage, and pavement markings.

Road Reconstruction – Somersworth, NH

Services provided include design and permitting of the Constitutional Way, Main Street, and Cemetery Road project. Topographical survey and geotechnical investigations were performed during the design phase. Project scope includes roadway reconstruction, including sidewalks and curbs; utility improvements (water, sewer, and storm drainage); bicyclist and pedestrian; and low-impact design (LID) features.

Road Reconstruction – Rochester, NH

As part of a comprehensive project to improve water, sewer and stormwater utilities, the Woodman Park Area project involves reconstructing over 5,000 feet of roadway. The design of the project required significant stormwater modelling to evaluate and design new stormwater outfall locations. The project incorporates several stormwater BMPs.



Planning Board Peer Reviews

Through our on-call and other contracts, Wright-Pierce has had the opportunity to provide peer review services for construction documents such as: Planning Board Applications, Water and Sewer Connection Permits, and Building Permits. Review of plans and documents for private site development and/or subdivisions often include the following:

- Review of Applications Applicants' submissions are reviewed for compliance with local town, state and federal regulations, bylaws and standard engineering practice.
- Site Plan Review Applicants' Site or Subdivision
 Plan submissions are reviewed for compliance with
 local town, bylaws and standard engineering
 practice. The site plan review typically evaluates
 the following:
 - Zoning compliance;
 - Drainage and utility compliance with local and state regulations;
 - Stormwater management and erosion control;
 - Soils information;
 - Environmental impacts;
 - Public Safety;
 - Consistency with standard engineering and planning practice;
 - Off-site roadway improvements proposed as a part of the application; and
 - Identifying other permits (state, national) that may apply.
- Town Meetings As needed, Planning Board meetings are attended.
- Technical Memoranda are prepared describing the projects compliance with applicable regulations.
 The memoranda typically include a summary of technical findings as well as additional issues the Board may wish to consider.
- Site Visit and Construction Compliance Wright-Pierce has the capacity to assist in site visits and certain related construction-phase and postconstruction phase professional services if requested.



Relevant Project Examples

Third-Party Reviews - Plymouth, NH

Through an on-going contract, Wright-Pierce provides the Plymouth Village Water and Sewer District with engineering review services for proposed developments and property improvements requiring water and sewer connection permits. Construction documents are reviewed for compliance with State and District standards, and the anticipated water and wastewater flows are evaluated to determine if the existing infrastructure capacity can serve the proposed development.

Planning Board Review - Derry, NH

Wright-Pierce was recently selected to provide peer review services to the Town of Derry Planning department. Our most recent assignment was the review of a two-acre commercial site plan consisting of a new "Contractor Bay" structure with appurtenant parking, utilities, and stormwater management/treatment. Proposed team members Mr. Wingard, Mr. Guethle, Mr. Theriault, and Mr. Edwards are all involved with the Derry planning board review services.

Planning Board Review - Portland, ME

The City of Portland has entrusted Wright-Pierce with 3rd party peer review services for incoming planning board submittals for over five years. We have completed dozens of site plan reviews including residential, commercial, downtown, and medical facility sites. Both our proposed Principal-in-charge (Mr. Wingard) and our Planning Board project manager (Mr. Guethle) have been very closely involved with each of the City of Portland peer reviews.



Civil – Culverts and Bridges

Wright-Pierce provides a full range of engineering services associated with transportation infrastructure. Culverts and bridge are a critical component of municipal roadway systems. We have designed and overseen construction of dozens of culverts and bridges. We understand various rehabilitation and construction methodologies available and advise our clients regarding cost-effective means to maintaining safe and functional culverts and bridges. Bridge evaluation and engineering experience includes:

- Visual and hands-on inspections
- Project scoping, estimating and grant applications
- Structural analysis and rating
- Design for habitat connectivity
- Hydrologic and hydraulic analysis
- Channel armoring and scour protection
- NHDOT State Aid Bridge Program
- State and federal permitting
- Concrete and stone masonry repair
- Superstructure and substructure rehabilitation
- Bridge coatings
- Replacement bridges
 - Structural steel
 - Cast-in-place concrete
 - Prestressed concrete
 - Timber
- Highway bridges
- Pedestrian bridges
- Pre-engineered bridges
- Appurtenant structures
- Suspended pipelines
- Construction phase engineering





Relevant Project Experience

Culvert Replacement - Newmarket, NH

The Nature Conservancy, New Hampshire Coastal Program (NHCP) and the Town of Newmarket partnered in the planning and replacement of the Bay Road/Lubberland Creek culvert. Wright-Pierce was retained to evaluate the hydrology and hydraulic performance of the failing culvert and design improvements focused on resiliency.

Culvert Replacement - Rye, NH

Wright-Pierce assisted the Town of Rye with design, permitting and construction administration associated with the replacement of a failing culvert that carried Bailey Brook into the Echo Pond Marsh. The Brook and Marsh had been identified as valuable habitat by a variety of natural resource agencies, and it was desired to provide a culvert structure with a "natural" soil channel substrate.



Wright-Pierce assisted the Town of Weston with design and permitting the replacement of a deteriorated granite block and stone culvert at the crossing of Merriam Street and Cherry Brook. The replacement structure was a 5 ft by 5 ft precast concrete box culvert. The project included improving surrounding stormwater drainage and wetland mitigation.

Bridge Deck Repair - Berlin, NH

The City of Berlin retained Wright-Pierce to provide an evaluation, prepare bidding documents, and provide construction management services associated with the rehabilitation of two bridge decks on key arterials within the community. Work included installing new waterproof membrane, expansion joint replacement.



Construction Inspection/Administration

Wright-Pierce maintains a staff of resident project representatives (RPRs) to perform on-site observation of the construction process. Our RPRs monitor for compliance with design plans and specifications, site safety, and keep field reports to document construction work. We have in-house quality control procedures for our field staff, and we bring our field staff together quarterly to review "lessons learned" and to continuously improve our design and construction management methods.

We know the importance of appropriate project documentation during construction and we maintain a complete "paper trail" of inspection reports, payment requests, field classifications, field orders, change orders, quality control testing, etc. We encourage regular communications during construction between all the stakeholders to anticipate and resolve issues. The following services are an example of typical duties performed by Wright-Pierce during the construction phase:

- Lead all meetings
- Review progress schedules
- Review submittals
- Conduct on-site observations of the work in progress
- Report to the client any work that does not conform
- Oversee tests, equipment and systems start-ups and operating and maintenance training
- Oversight of contract documents modifications
- Clarifications and interpretations of the contract documents
- Inspections
- Records maintenance
- Certificates, operation and maintenance manuals
- Review applications for payment



Relevant Project Examples

Street Reconstruction – Lebanon, NH

The City has embarked on an aggressive program of infrastructure improvements, involving full-depth reconstruction of streets and replacement of storm drainage, sewers, and water mains. Wright-Pierce has provided construction administration, RPR services, and funding agency coordination on 12 contracts involving over \$60 million in infrastructure improvements.

Culvert Replacement – Numerous locations

Wright-Pierce has provided construction administration services and part time construction observation at numerous culvert replacement projects throughout New England. These projects often include coordination with environmental permitting requirements and funding agencies such as bridge aid programs.

Water Treatment Plant Replacement – University of New Hampshire, Durham, NH

Wright-Pierce was contracted to act as the owner's agent for the following design/build services: Providing treatment technology piloting, creating technical program documents for owner's design/build qualifications and proposal request packages, proposal evaluation and technical assistance during construction and start up.





Dam Evaluations/Engineering

Services provided by Stephens Associates Consulting Engineers, LLC

Stephens Associates Consulting Engineers, LLC (SA) performs full dam-engineering services from inspections, alternatives analyses, hazard evaluation, and regulatory compliance, to design, permitting, and construction administration for dam repair, rehabilitation, and/or decommissioning. SA is recognized by the NHDES Dams Bureau as meeting the qualifications for dam engineer specified in the NHDES Rules ENV-WR 403.03(a)(1). SA has experience providing design services for the following:

- Dam repairs and upgrades
- Dam reconstruction of earth embankment, concrete, timber plank/crib, and stone masonry dams
- Dam components including standard and highefficiency (labyrinth weir) spillways, auxiliary outlets, training walls, embankment slopes, fish passage by Denil fish ladder, and pedestrian and vehicular crossings.

SA has consulted on many decision analyses for dams, including repair versus partial or total decommissioning. SA has prepared emergency action plans with dam breach analysis and inundation mapping, drawdown plans, and operation and maintenance plans. SA routinely coordinates with NHDES Dam Bureau and other regulators on client's behalf to cost-effectively meet regulatory requirements and address deficiencies for nonmenace, low, significant, and high hazard dams.

SA will be assisted by Wright-Pierce staff member Stephanie Hubbard, PE. Ms. Hubbard is an industry leader in dam inspections and Emergency Action Plan development for dam owners throughout New England. She is a well-known technical resource for the NHDES dam bureau as well as the Federal Energy Regulatory Commission (FERC).



Relevant Project Examples Swains Lake Dam, Barrington, NH

SA prepared a detailed drawdown plan to guide Town's dam operations for seasonal, flood-related, and urgent drawdowns and refilling of Swains Lake in consideration of varying and competing goals and hydraulic limitations imposed by downstream road crossings. The 400+ acre Swains Lake is impounded by the high-hazard Swains Lake Dam, which discharges to the Bellamy River. The Town maintains Swains Lake at higher elevations during the summer for the numerous shorefront properties and Lake users, but lowers the lake level each autumn to reduce winter shorefront ice impacts, facilitate repairs to the Dam and/or shorefront structures, and provide additional capacity to store and discharge higher spring flows and meltwater runoff. SA considered competing goals regarding drawdown/refill amount, rate, timing, and others between lake users, Dam safety purposes, environmental bodies, and downstream areas in developing the plan. Evaluation also included impacts to Dam operations from poor condition and limited capacity of culverts carrying Lakeside Oaks Drive over the Bellamy River.



Facing the deterioration of the Dam and orders from NHDES Dams Bureau, the Town engaged SA to evaluate the Dam and design its replacement (reconstruction) as no other source of similar water quantity and quality is available to the Town. The existing low-hazard Dam is 90-ft. long, 9-ft. high and impounds a volume of about 40 million gallons. SA inspected the dam and surrounding rock joint structure on which it is founded, and evaluated hydrology, hydraulics and dam stability. SA designed a replacement concrete dam pinned to the rock foundation with rock dowels, designed to knit together jointed bedrock and act monolithically with dam. The replacement dam design included new mechanical slide gates, capability for adding future remote operation, and redundancy for maintenance and emergency operations.



Stormwater Engineering Services Stormwater System Evaluation/Design

New England states have experienced increases in precipitation trends throughout the past several years. As a result, many communities have witnessed an increase in stormwater runoff, and river, stream and tributary flood flow rates. To recover from past flood events and to prepare for future events, many communities have turned to Wright-Pierce for stormwater solutions. From community stormwater master planning to emergency dam repairs, Wright-Pierce has provided efficient and expert stormwater planning and design services including:

- Stormwater master planning
- Flood Studies
- Storm drain system design
- Stormwater management plans
- Scour analysis/mitigation
- Riverbank stabilization
- NPDES permitting

Climate Resiliency Evaluation/Assistance

The rate of sea level rise is increasing, and studies forecast that frequency of extreme storm events will continue to increase. Extensive private property and municipal infrastructure are likely to be negatively impacted. Many communities have embarked on initiatives to understand likely impacts to their infrastructure and identify strategies for adapting. Wright-Pierce has long focused on adaptation solutions that are achievable and backed by sound engineering.

- FEMA Flood mapping
- NOAA ocean surge and precipitation data
- US Army Corps of Engineers and US Coast Guard information
- Interviews with local operational staff
- Documented and anecdotal storm event information from operational staff



Relevant Project Examples

Lafayette Road Drainage – Hampton, NH

Wright-Pierce was retained to provide design and permitting of the existing drainage infrastructure along Lafayette Road (Route 1) and an adjacent municipal lot. Project elements included full-width pavement and ADA improvements. This project followed replacement of the water main and sewer system within the same corridor.



Wright-Pierce used GIS mapping and field GPS survey to inventory and assess all major stormwater conveyance structures with 18-inch diameter or larger. The resulting report provided recommendations for consideration in future infrastructure planning.

Woodman Park - Rochester, NH

Wright-Pierce is providing design services for the Woodman Park Area Utility Project that involves water, sewer, stormwater, and roadway improvements for over 5,000 ft of roadway. A key component of the project included evaluating and designing stormwater treatment practices throughout the project area. Proposed stormwater best management practices include underdrain soil filter, bioretention basin, and inline treatment units. Extensive stormwater modeling was completed to evaluate four new outfall options. The project required obtaining NHDES Wetlands, Shoreland, and Alteration of Terrain permits.





Solid Waste Facility/Landfill Closure

A successful solid waste facility design project begins with collaborative discussions with clients to understand their goals and expectations. Then, we strive to realize the client's vision by developing a design strategy that combines strong engineering fundamentals with value-adding innovation. We integrate our skills across the spectrum of technical services often needed to meet the range of challenges encountered during solid waste facility design and permitting. These needs include civil, geological, geotechnical, hydrological, mechanical, air, and electrical expertise.

Wright-Pierce has provided landfill monitoring and engineering services to several public and private clients throughout the years. We are currently monitoring landfills on the Cape in Massachusetts as well as managing the data for agency compliance.

We have also served as engineer of record for several solid waste transfer stations in New England including facilities on Martha's Vineyard in Massachusetts and Old Orchard Beach, Maine. Mr. Wingard and Ms. Hubbard have been involved in those projects, respectively. Mr. Wingard was also involved with a Downtown Revitalization Plan for the Town of Norridgewock, Maine, which needed to consider the travel routes and turning movements of trucks servicing the Waste Management Landfill Facility in Town.



Relevant Project Examples

Martha's Vineyard Refuse Disposal & Resource Recovery District Central Facility Improvements – Edgartown, MA

Wright-Pierce was retained to evaluate alternatives to improve traffic circulation around the Central Facility's solid waste and recyclables drop-off area. A complete design of the selected alternative has been completed and project permitting is underway. The improvements are slated for construction in Summer 2021. Wright-Pierce will provide bidding assistance, construction contract administrative services, and provide a resident project representative to observe that construction is proceeding in accordance with the Contract Documents.

Milliken Street Transfer Station – Old Orchard Beach, ME

Wright-Pierce provided engineering design services and prepared bidding documents for a 20-foot by 40-foot building for the Milliken Street Transfer Station. The project design included preparing documents to support the Town's Solid Waste Application. Wright-Pierce developed contract documents for purchase and installation of a pre-engineered, prefabricated building, and provision of all related site work, foundation design and installation, and utility installation.

Tisbury Landfill - Tisbury, MA

Wright-Pierce has provided landfill monitoring and inspection services for the Tisbury Landfill. Tasks have included semi-annual sampling and analysis of the landfill's groundwater monitoring wells; quarterly inspections of the landfill area and the landfill cover systems for settlement; quarterly inspections of the landfill cover system, monitoring wells, gas vent wells, stormwater controls; quarterly sampling and analysis of the landfill gas vent wells; and reporting to MassDEP.



Permitting Assistance

Wright-Pierce routinely assists clients with obtaining a wide range of regulatory approvals from federal, state and local agencies. Because of the amount of this work that we do, our staff are able to keep abreast of recent and pending changes to the complex system of regulations that governs design and construction within the state of New Hampshire. Our experience includes working hand in hand with the following entities:

- Federal agencies EPA (Region 1), US Army Corps of Engineers, FEMA
- State agencies NHDES, NHDOT
- Local authorities

Grant/Loan Application and Administration Assistance

Public infrastructure projects often require significant capital expenditures and a well-developed financing plan. Many municipalities request assistance to establish funding for their projects and each financing approach can be unique. Wright-Pierce has considerable experience in developing cost-effective engineering solutions and investigating funding options to maximize the use of state and federal grants and low-interest loans. The adjacent table lists some of the funding assistance we have provided to our New Hampshire clients.



Funding Assistance Experience

Location/ Community	State Revolving Fund (SRF)	USDA Rural Development (RD) Grant and/or Loan	Community Development Block Grant (CDBG)	EPA/STAG Grants	ARRA 2009/ AIS	State Aid Grant (SAG)	Unique State and Federal Funds	Energy Rebate Programs	Local Bond/ Bond Bank
Berlin	•	•			•	•		•	
Bow	•					•			
Claremont	•					•		•	
Concord	•					•		•	•
Dover	•				•	•		•	
Durham	•				•	•		•	•
Exeter	•					•		•	
Farmington	•	•	•		•	•		•	
Hampton	•					•		•	
Jackson		•							
Jaffrey	•	•		•	•	•	•	•	
Keene	•					•			
Lebanon	•		•		•	•	•		
Londonderry	•					•			•
Manchester	•					•		•	
Merrimack	•					•	•	•	
Newington	•							•	
Newmarket	•	•				•		•	
Portsmouth	•					•			
Plymouth	•	•			•	•			•
Ossipee	•					•	•		
Raymond	-		_			•		-	•
Rochester	•		•	_				•	•
Somersworth	-	_		•	_	-			
Sunapee	•	•	_		•	•			
Warner	•	_	•			•			
Whitefield	•	•							



Town Facilities/Buildings

Working almost exclusively with municipal clients, Wright-Pierce has extensive experience assessing and designing municipal office spaces and buildings for clients across New England. We have worked on municipal office design projects for clients ranging from small rural communities to large metropolitan areas. Our recent projects have included a broad range of needs and goals requiring creative solutions.

Wright-Pierce is also well-versed in the U.S. Green Building Council (USGBC) sustainable design criteria. Our LEED accredited professionals can guide clients through the LEED certification process, as well as LEED equivalent design processes.

In-House Expertise

- Civil engineering
- Condition assessment
- Architecture
- Landscape architecture
- Structural engineering
- Mechanical and plumbing engineering
- Electrical and communications engineering
- Cost estimating
- Bidding and construction administration







Relevant Project Examples

Industrial Facility – Van Buren, ME

Wright-Pierce provided design, bidding, and construction-phase services for a new warehouse and manufacturing facility. The site work package was prepared based on conventional procurement procedures, but the building construction was performed as a design-build project. Funding was received from the U.S. Economic Development Agency, USDA Rural Development Agency, and the Maine Department of Economic and Community Development.



In order to develop a "one campus" approach for Town DPW and the sewer district, two separate structures were created: one for storage of equipment and vehicles, and other for maintenance space, office space, a breakroom, and locker rooms. Renovations were also completed in the existing administrative area of the control building, including floor finishes and wood cabinetry.

Building Restoration and Reuse: Caretaker's Cottage – Waterbury, CT

The historically and architecturally significant Caretaker's Cottage dates back to the 1920s. Located in Fulton Park, it had since been abandoned and deteriorating. Wright-Pierce was retained by the City to aid in repurposing the building as a home base for the park's maintenance crew. The interior was completely refurbished to provide office, lunch and restroom space, while the exterior was restored to its original historical condition.



Survey/Right-of-Way/Mapping Assistance

Services provided by Doucet Survey LLC

With more than 100 years of combined experience, Doucet Survey has the ability and expertise to handle most any land surveying, mapping and GIS, or land planning project. Their land surveying services allow for accurate, comprehensive surveys of highways, utility corridors, bridges, construction layouts, and more. Their highway surveyors are OSHA-certified with significant experience in:

- Right-of-way and topographic surveys
- Taking and easement plans
- Recordable DOT plans
- Layouts

For projects where a high level of detail is necessary for planning purposes, they provide a variety of efficient land mapping and GIS skills and technology. They assist clients with site assessment and preclosing due diligence by compiling base maps that can be based on online GIS and zone data, or mapping grade on-site location of features such as jurisdictional lines.

Doucet has provided land planning and land development services on projects with over 3,000 single family and multi-family units. They have developed conceptual designs based on current state and local regulations for real estate appraisal purposes, as well as subdivision and lot line adjustment presentations.





Relevant Project Examples

Watson Road and Tolend Road – Dover, NH

Over the winter of 2010, Doucet Survey performed a detailed topographic survey of approximately 5 miles of roadway in Dover. The project area included all of Watson Road, and the portion of Tolend Road lying within the City limits. Using Trimble 5700 and 5800 survey grade GPS units, their fieldwork was tied into the City of Dover's horizontal control network. This allowed them to easily overlay the City's GIS data onto their field survey to graphically depict significant features outside of the survey limits. Differential levels were run over the entire project length in order to establish accurate vertical control on the National Geodetic Vertical Datum of 1929 (NGVD29). Topographic data was collected using multiple field crews employing both robotic and traditional total stations. Over the course of over 500 man-hours, their field crews collected in excess of 10,800 observations.

Jady Hill Area Rehabilitation – Exeter, NH

Doucet performed a detailed topographic survey of approximately 5 miles of roadway within the area known as Jady Hill. In order to quantify the existing sewer infiltration problems and to identify solutions, the Town hired a Wright-Pierce, who in turn contracted with Doucet Survey. Their survey was composed of three main tasks: establishment of survey/aerial control, collection of topographic data, and CAD drafting. Aerial topography was used where suitable, which increased their coverage and speed of acquiring data, and decreased cost. The field data was compiled, analyzed and adjusted by a Licensed Land Surveyor using AutoCAD software. The final product was a 6-sheet topographic plan-set drawn at 1" =40' scale, as specified by the engineer.



Wetland Regulation & Permitting

Wright-Pierce routinely assists clients with obtaining regulatory approvals from federal, state and local agencies. Nearly all of our design projects require some amount of environmental permitting. Because of the amount of this work that we do, our staff is able to keep abreast of recent and pending changes to the complex system of regulations that governs design, bidding and construction within the State of New Hampshire.

We are teaming with Marc Jacobs, a consulting wetland and soil scientist with 35 years of experience in natural resource assessment. Marc will provide wetland delineation and natural resource assessment services to project teams. Marc is an integral part of project design teams, evaluating potential environmental impacts and providing mitigation design and support to compensate for unavoidable wetland impacts.

Wetlands Regulation & Permitting

- Soil Survey
- Wetland Delineation
- Functional Wetland Assessment
- Vernal Pool Evaluation
- Wetland Permitting
- Wetland Impact Mitigation
- Erosion & Sediment Control
- Construction Monitoring



Relevant Project Examples

Water Main Replacement - Great Bay, NH

Two thirds of the City of Portsmouth's water supply is provided by a 20" transmission main from the Madbury Treatment Plant to Portsmouth. The section of pipe that crosses the Great Bay from Durham to Newington requires replacement. The project includes the design and permitting of a replacement pipe. Permitting efforts include delineation and functional assessment of wetlands; preparation and support of a wetland permit application to the NHDES; development of a mitigation plan; salt marsh restoration plan; coordination with resource agencies including NHDES, NH Fish and Game, US Army Corps, NH Port Authority, abutters and the Towns of Durham and Newington.

Wetland Restoration – North Hampton, NH

Restoration of 73,942 sf of forested wetlands and compensatory mitigation for 18,965 SF of retained fill. Delineation of wetlands and resource areas; preparation of a Wetland Restoration Program; compensatory mitigation design; support of a wetland permit application to the NHDES; restoration construction monitoring and long-term, post-construction monitoring including implementation of erosion and sediment controls.

Wetland Restoration – Portsmouth, NH

Restoration of 420 sf of previously filled saltmarsh. Preparation of a Wetland Revegetation Program and Wetland Functional Analysis; support of a NHDES wetland permit application; restoration construction monitoring and long-term,post-construction monitoring for compliance.



Geotechnical Services

Services provided by Stephens Associates, Inc.

For more than 20 years, Stephens Associates Consulting Engineers, LLC has provided Engineering/consultation in all New England states. Specializing in geotechnical, structural and seismic engineering, geology, hydraulics and hydrology of public and private sector facilities, our staff have experience on small- to large-scale projects on both the east and west coasts of the US as well as overseas. Our experience is broad-based, including dams, bridges, roads and highways, railroads, transit facilities, buildings, tunnels, airports, pavements, pipelines, industrial and petrochemical plants and refineries. We have completed projects for national and local public agencies, municipalities and private sector clients including design of new facilities and evaluations of existing/historic structures. Their highway surveyors are OSHA-certified with significant experience in:

- Geotechnical
- Dams
- Hydrology & Hydraulics





Relevant Project Examples

New Water Treatment Facility and 2,000-foot Pipeline Crossing Pemigewassett River, Franklin, New Hampshire – SA evaluated geotechnical conditions at new water treatment facility to be constructed in floodplain of Pemigewasett River downstream of Franklin Falls Dam, a large US Army Corp of Engineers Flood Control Dam. During dam construction, the proposed site was filled with dredge and excavated materials, creating poor site soils and potential settlement. SA analyzed the site for the proposed structure loads and evaluated several foundation alternatives and ground modifications. Also included is a 2000-foot pipeline crossing of the Pemigewassett River to be constructed by directional drilling. SA evaluated soils with respect to excavation and lateral earth pressures of drilling/jacking pits and in drilling of the pipeline crossing. SA also performed geotechnical laboratory testing on soil samples from the subsurface explorations and compared the results with published data. Through map reconnaissance and correlation with our soil borings along the pipeline alignment, SA identified areas of potentially liquefiable soils.

Crawley Falls Road Bridge over Exeter River, Brentwood, New Hampshire – SA provided geotechnical engineering and hydrologic and hydraulic services for evaluation and design of repair or replacement of this single-span, reinforced concrete, rigid frame arch bridge originally constructed in 1941. During the major floods of May 2006 and April 2007 on the Exeter River, SA observed and photographed the flooding while it occurred, and subsequently aided the Town by observing sinkholes in the bridge deck created by the floods, and assisting the Town in applying for FEMA assistance.



5

Hear our clients' perspective

The following are references of clients for whom we have provided similar services to your proposed project. We have completed projects for these clients within the last five years. These contacts are familiar with Wright-Pierce, know our work ethic, and can speak to the services we provide. Please contact them and ask specifically about our:

- Responsiveness
- Sensitivity to local goals and objectives
- Adherence to scope, schedule, and budgets
- Attention to detail
- Ability to work with committees and stakeholders
- Effectiveness in dealing with regulatory agencies
- Technical knowledge



The references below will be able to share candid opinions regarding the quality of service that has been provided by Wright-Pierce.

Client References

Reference	Contact	Project Relevance			
City of Dover Municipal Building 271 Mast Road Dover, NH 03820	John Storer Director of Community Services 603.516.6450 j.storer@dover.nh.gov	 Complete streets Wastewater treatment plant Pump station I/I evaluation Similar project team as proposed for Barrington 			
City of Somersworth Public Works Facility 18 Lilac Lane Somersworth, NH 03878	Mike Bobinsky Director of Public Works and Utilities 603.692.4266 mbobinsky@somersworth.com	 General engineering services Complete streets Wastewater treatment plant Water treatment plant Similar project team as proposed for Barrington 			
City of Lebanon Dept. of Public Works 193 Dartmouth College Hwy Lebanon, NH 03766	Christina Hall City Engineer 603.448.0674 christina.hall@lebanonnh.gov	 Infrastructure and transportation improvements provided over many years and 13 contracts Complete streets Similar project team as proposed for Barrington 			





General Approach to On-Call Projects

The scale and scope of every project may vary, from plan reviews, construction inspection, or engineering studies to a multiphase project including preliminary/final design and construction phases.

Since 1947, we have worked on thousands of projects and developed a proven project approach that each of our project managers implements on every project, to the extent possible. A typical engineering project would follow the various phases of work identified in the graphic below. We work with you to refine our approach and customize it to fit your project goals, budget, and desired schedule.



Our team will work with you to develop the steps needed for each phase of any project and involve key people necessary in decision-making to ensure project success.

1

Project Planning

- Fully understand goals, timeline, and critical success factors
- Develop workplan, scope of services, schedule, and budget

4

Final Design

- Develop detailed plans and specifications
- Use 3D design tools to facilitate acceptance of design concepts
- Perform constructability reviews

2

Engineering Study

- Investigate, document, and analyze data
- Suggest alternatives with consideration of safety, innovation, and cost-savings
- Make recommendations with client's best interest in mind

5

Bidding Support

- Website hosting of files and plan holders list
- Respond to bidder questions
- Review addendum prior to issuance

3

Preliminary Engineering

- Develop design alternatives that consider safety and innovative cost-saving ideas
- 3D design to thoroughly vet ideas
- Produce accurate cost estimates



Construction Administration

- Be proactive in addressing potential issues
- Think two steps ahead of contractor
- Review construction schedule in detail at each meeting

Quality Assurance & Quality Control

We have developed a proven standardized approach for project execution to ensure quality projects; from preliminary planning with initial brainstorming and preparation of a detailed work plan – through evaluations, preliminary and final design, bidding, construction administration, start-up and operational phases. On larger projects, we utilize state-of-the-art software to facilitate information sharing and cross coordination between project team members.

Our quality control program includes comprehensive design guidelines and calculations templates for the different technical aspects of projects, guidance manuals, and standard specifications and contract documents based on widely accepted industry standards and our many years of experience. Technical leaders from each discipline are charged with maintaining and updating these standards on an on-going basis. We also have a formal "suggested modifications" process to improve our standards based on lessons learned by staff while actively working on projects.

Wright-Pierce operates under well-established QA/QC procedures that require internal reviews conducted by senior members of the firm with experience on similar projects. This includes "cross-coordination reviews" of different discipline design documents. Project technical advisors are involved throughout the life of a project to take advantage of their experience and to ensure quality assurance and quality control, as outlined below.

To ensure a high level of consistent quality performance, we have established a formal in-house training program with frequent (several per week) training sessions on various technical execution, project management and technology subjects. We have a formal on-boarding process for new employees that includes required training on our standards.

Another aspect of ensuring quality projects is by our use of well-vetted subcontractors that may be needed on the project, such as survey, geotechnical, environmental, traffic control, etc. We have

established working relationships with various subcontractors that have proven to us their capabilities to provide quality services. This includes a several MBE and WBE subcontractors. We work with these subs to develop specific scopes of work to meet the needs of the project. We have also developed specific guidelines and subcontractor agreements to coordinate their work with our work.

Wright-Pierce has also been involved in projects that utilize an outside peer review for one or more aspects of the project or a thorough Value Engineering assessment, for both our own projects and the work of others.

Cost Effective Solutions

Wright-Pierce got its start serving small towns with a limited user-base and financial considerations were of paramount importance. Streamlined and cost-effective approaches are still vital to making projects affordable today and requires stretching each available dollar while achieving the desired result. Our approach to cost-effective solutions includes the following:

- Understanding the problem thoroughly before developing solutions
- Keeping solutions simple and effectively engineered
- Developing solutions that anticipate future needs
- Maximizing the value of existing facilities
- Positioning our clients for favorable regulatory requirements and financial assistance programs

We feel strongly that no other firm will provide as much value to your Town as Wright-Pierce.



Litigation Statement

The construction industry can be a litigious environment, particularly when you are dealing with hundreds of millions of dollars per year in complex municipal infrastructure construction projects as Wright-Pierce does. To protect ourselves and our clients, Wright-Pierce carries \$5-million in professional liability insurance, plus adequate general liability, worker's compensation and other insurances.

Our claims track record over the past 30 years has been exceptional. From 2009 to 2019, we provided approximately \$300 million in engineering services for hundreds of clients on thousands of projects with a combined value approaching \$2 billion. Over that time frame, we have been involved in three claims.

- Status: Settled. Wright-Pierce, along with two contractors and one other engineer, were notified by the City Rochester, NH, of a claim over a water tank that developed a leak in the steel floor plates in 2011. The tank was designed and constructed by others decades ago. Wright-Pierce coordinated a 2009 project that included the painting of the tank and the installation of a tank mixing system. In 2018, Wright-Pierce settled our role in the claim with the City of Rochester under terms acceptable to all parties that resulted in the dismissal of the lawsuit. The water tank remains in service, we have a good relationship with the City and continue to work for the City on other infrastructure projects.
- **Status: Settled.** In 2014, Wright-Pierce settled a 2012 claim by the Town of Wolfeboro, NH regarding the rated capacity of a treated wastewater rapid infiltration basin system we designed in 2007, and which continues to be operational. The Town, Wright-Pierce, and other involved parties agreed to settle this dispute on terms acceptable to all parties that resulted in dismissal of the lawsuit.

• Status: Ongoing. In 2019, Wright-Pierce was named in a third-party claim by Ovivo, the manufacturer of equipment that failed on an upgrade to the digester at the Danbury, CT wastewater treatment plant. Ovivo designed and supplied the equipment that failed and were sued by the Contract Operator, Veolia. Wright-Pierce had prepared the contract documents for the upgrade. Wright-Pierce is currently in the process of addressing this third-party claim to have the case dismissed. Wright-Pierce continues to have a good relationship with the City of Danbury and Veolia and continues to work on wastewater projects for them.

Conflict of Interest Statement

Wright-Pierce does not have any conflicts of interest that would affect our ability to work with you under this contract. Wright-Pierce is a private consulting firm and the nature of our business is to provide independent advice and recommendations based upon our experience and best engineering judgment. We pride ourselves in developing sustainable solutions that are best suited for our client's needs, not the needs of Wright-Pierce or other third parties such as equipment vendors. Additionally, Wright-Pierce does not undertake land development work, and therefore we do not have relationships with developers that may come to the Town for permits.





Billing Rates

Submitted under separate cover as requested in Addendum 1.



RESUMES



EducationM.S., Civil Engineering, Wayne State University

B.S., Civil and Environmental Engineering, University of Michigan

Professional Registration

New Hampshire
Maine
Connecticut
Florida
Massachusetts
Michigan
Rhode Island
Vermont

Experience 25 Years

Joined Firm 2007

Training / Certifications

Certified Professional in Sediment and Erosion Control # 4630

Maine DEP Certification in Maintenance and Inspection of Stormwater Best Management Practices

Professional Affiliations

American Council of Engineering Companies (board member 2016present)

American Society of Civil Engineers

New England Water Environment Association

American Public Works
Association

Ryan T. Wingard, PE

VICE PRESIDENT, CIVIL PRACTICE GROUP LEADER

Project Assignment: Principal-in-Charge

Experience Summary

Mr. Wingard has 25 years of water resources-related experience including wastewater system design, watershed characterization, planning, stormwater system design, and project management. His specialties center on hydrology and hydraulics as they pertain to wastewater, water, CSO, dams, and watershed systems. He has successfully managed a variety of water resources projects for various municipal, private, commercial, and industrial clients. His in-depth knowledge of hydrologic and hydraulic systems is an asset for any water resources related project. He is also a certified professional in erosion and sediment control (CPESC).

Relevant Project Experience

Stormwater

- Water Quality Treatment Unit O&M Manual, Lebanon, NH
- Stormwater Utility GIS Coordination, Portsmouth, NH
- Stormwater Drainage Report, Newington, NH
- Stormwater Master Planning, Gloucester, MA
- Rocky Hill Road Emergency Culvert Repair, Somersworth, NH
- Belknap and Elm Street Neighborhood Reconstruction Project, Dover, NH
- Spring/Bank Street Roadway and Drainage Improvements, PVPC, Ware, MA
- Old Poor Farm Road Culvert Replacement, Ware, MA
- Diamond Street Tide Gate Improvements, Portland, ME
- Lyseth/Moore School Site Improvements, Portland, ME
- Townwide Drainage Study, Old Orchard Beach, ME
- Greendale Avenue Drainage Improvements, Needham, MA
- Rip-Rap Swale BMP, Framingham, MA
- Gazo Avenue Outfall Repairs, Burlington, VT
- Drainage Infrastructure Improvements, Fall River, MA
- Stormwater Drainage System Evaluation, Cranston, RI
- Stormwater Water Quality Analysis, Camden, ME
- Skate Park Drainage Plan, Old Orchard Beach, ME
- Northern Avenue Roadway Reconstruction, Farmingdale, ME
- Townwide Drainage System Study, Wakefield, MA
- Weston Neighborhood Stormwater Study, Weston, MA
- Garden Lane Stormwater Analysis, Cape Elizabeth, ME
- New Salt Road Tide Gate Improvements, Old Orchard Beach, ME
- Cottage and Grove Infrastructure Inventory, Old Orchard Beach, ME
- Reggio and Odessa Stormwater Improvements, Old Orchard Beach, ME
- Stormwater Pollution Prevention Plan (SWPPP), Private Client, Portland, ME
- BMP Inspections, South Portland, ME



Presentations

Wingard, Ryan, "Stretching Towards the Finish Line – A 10 Year Journey with Lebanon, NH's CSO Program", presented at NEWEA CSO/Wet Weather Issues Specialty Conference, Portland, Maine, October 30, 2018

Wingard, Ryan, "Enhancing CSO Storage by Integrating Separation and Green Infrastructure into the Back Cove South Storage Conduit", presented at NEWEA CSO Specialty Conference, Lowell, Massachusetts, October 27, 2015

Wingard, Ryan, "Responding to Infrastructure Failure Resulting from Climate and Weather Changes", presented at APWA Fall Conference, Chelmsford, Massachusetts, October 2015

Wingard, Ryan, "Back Cove South Storage Conduit, City of Portland, Maine", presented at MEWEA Fall Conference, Bethel, Maine, September 17, 2015

Wingard, Ryan, "Asset management, CMOM & CSO System Planning", presented at Management Candidate School, Kennebunk, Maine, December 2014

Wingard, R.T., "Climate Change and Infrastructure: Implementing Solutions", presented at the E2TECH Conference Portland, Maine, April 2013

- Erosion and Sediment Control Inspections, South Portland, ME
- Flood Mitigation Studies, Old Orchard Beach, ME

Dams

- Dam Breach Analysis, Newmarket, NH
- Dam Breach Analysis, Rochester, NH
- Dam Breach Analysis, Waterville Valley, NH
- Dam Spillway Armoring Design, Waterville Valley, NH
- Hydraulic Modeling, Exeter, NH
- Rochester Reservoir Breach Analysis, Rochester, NH
- West End Spillway Capacity Analysis, Rochester, NH
- Winnicut Dam Expert Witness, Greenland, NH
- Cohas Avenue Reservoir Breach Analysis, Manchester, NH
- Dam Breach Analysis, Goffstown Water Precinct, NH
- Round Pond Dam Expansion Analysis, Rochester, NH

Civil and Water Resources

- Hydraulic Model, Waterville Valley, NH
- FEMA, LOMA, Private Client, Rochester, NH

LID/BMP Projects

- CSO Contract 9 Sewer Separation, Lebanon, NH
- CSO Contract 10 Sewer Separation, Lebanon, NH
- CSO Contract 11 Sewer Separation, Lebanon, NH
- Portland Back Cove South CSO Storage Facility, Portland, ME
- Portland Back Cove West CSO Storage Facility, Portland, ME
- Long Creek Porous Pavement, South Portland, ME

Roadways and Traffic

- Belknap and Elm Street Neighborhood Reconstruction Project, Dover, NH
- Jady Hill Phase I Utility Improvements Project, Exeter, NH
- Jady Hill Phase II Utility Improvements Project, Exeter, NH
- Contract 12 Sewer Separation, Lebanon, NH
- Contract 11 Sewer Separation Phase 1, Lebanon, NH
- Contract 11 Sewer Separation Phase 2, Lebanon, NH
- Contract 10 Sewer Separation, Lebanon, NH
- Contract 9 Sewer Separation, Lebanon, NH
- Contract 8 Sewer Separation, Lebanon, NH
- Contract 7 Sewer Separation, Lebanon, NH
- Contract 4 Sewer Separation, Lebanon, NH





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

Professional Registration Maine

Experience 36 Years

Joined Firm 2011

Professional Certification

MaineDOT Local Project Administrator

Professional Affiliations

American Society of Civil Engineers

Jan B. S. Wiegman, PE

PROJECT MANAGER

Project Assignment: Technical Advisor

Experience Summary

Mr. Wiegman has over 35 years of engineering design, permitting and project management experience on a wide variety of civil, structural and transportation projects. Most recently, he has been managing several large-scale site development and transportation related projects and giving technical guidance on a wide variety of projects including pedestrian projects and transportation.

Relevant Project Experience

Site Development/Permitting

- State Office Building Parking Lot Rehabilitation, Augusta, ME
- Municipal Parking Lot, Damariscotta, ME
- Potato Processing Facility, Washburn, ME
- Conservatory Expansion, Coastal Maine Botanical Gardens, Boothbay, ME
- Industrial Building Expansion, Saco, ME
- Blue Dog Daycare Site Plan, Brunswick, ME
- Anaerobic Digester Facility Expansion, Brunswick, ME
- Subdivision Expansion for Brunswick Landing, Brunswick, ME
- Chewonki Foundation Campus Expansion, Wiscasset, ME
- Bates College STEM Building, Lewiston, ME
- Zoning Change, Bates College, Lewiston, ME
- Long Term Care Facility, The Cedars, Portland, ME
- Wayfair Parking Lot Construction, Brunswick Landing, Brunswick, ME
- Acadia Harvest Inc. Aquaculture Facility, Gouldsboro, ME
- CLC YMCA Expansion Project Site Planning, Damariscotta, ME
- Bear Self Storage, Site Plan, Auburn, ME
- Commerce Way Industrial Subdivision, Brunswick Landing, Brunswick, ME
- Coastal Maine Botanical Gardens, Expansion, Boothbay, ME
- Demolition Contract 2 Brunswick Landing, Brunswick, ME
- New England Tent and Awning Drying Facility, Brunswick, ME
- Pelican Street Parking Lot Reconstruction, Brunswick Landing, Brunswick, ME
- 25 Building Demolition Plan Brunswick Landing, Brunswick, ME
- Subdivision Permitting Brunswick Landing, Brunswick, ME
- Residence Halls Project, Bates College, Lewiston, ME
- Greater Androscoggin Humane Society Site Plan, Lewiston, ME
- Wetlands Permitting South Oakfield Road Improvements, Oakfield, ME
- Topsham Commerce Park Subdivision, Topsham, ME
- Onshore Aquaculture Facility, Gouldsboro, ME
- Wetland Permitting Centerline Brook Crossing, Oakfield, ME



Transportation

- Hutchins Street Reconstruction, Berlin, NH
- Pedestrian Bridge, Coastal Maine Botanical Gardens, Boothbay, ME
- Bristol Road Sidewalk, Damariscotta, ME
- Green Street Rehabilitation, Bath, ME
- Tufts Pond Road Reconstruction Plan, Kingfield, ME
- Admiral Fitch Avenue Lane Reconfiguration, Brunswick, ME
- Route 1 Construction Detour, Woodland Mill, Baileyville, ME
- North Street Drainage Improvements, Bath, ME
- North Street Rehabilitation, Phase 1 & 2, Bath, ME
- Thompson Settlement Road Rehabilitation, Oakfield, ME
- Elm Street Sidewalk, Newport, ME
- Main Street Sidewalk and Street Lighting, Biddeford, ME
- South Oakfield Road Improvements and Permitting, Oakfield, ME
- High Street Rehabilitation, Bath, ME
- Hillside Street Reconstruction, Yarmouth, ME
- South Oakfield Road Improvements Review, Oakfield, ME
- Old Alfred Road Sidewalk, Waterboro, ME
- Route 25 and 35 Sidewalks, Standish, ME
- Route 1 Weigh Station Improvements, Kittery, ME
- US Route 1/Lewis Road Intersection Improvements, Kittery, ME

Stormwater

- Water Quality Treatment Unit O&M Manual, Lebanon, NH
- Phosphorous Treatment Plan Coastal Maine Botanical Gardens, Boothbay, ME
- Willow Street Drainage Study, Bath, ME
- Stormwater Management Plan Cobalt Court Subdivision, Windham, ME
- Stormwater Management Plan Lilac & Laura Lane Subdivision, Gorham, ME

Building Improvements and Funding Approvals

- Hangar 4 Building Improvements, Brunswick Landing, Brunswick, ME
- Building Demolition Contract #2 Brunswick Landing, Brunswick, ME
- Metering and Life Safety Improvements Brunswick Landing, Brunswick, ME
- Paint Booth Project, Kestrel Aviation, Brunswick, ME
- TechPlace Building Improvements Brunswick Landing, Brunswick, ME

Dam Improvements

- Calef Lake Dam Replacement, Auburn, NH
- Dam Breach Analysis Upper and Lower Reservoir Dams, Goffstown, NH
- Pleasant Lake Dam Improvements, New London, NH
- Lovejoy Pond Dam Evaluation, Wayne, ME





PROJECT MANAGER

Project Assignment: Project Manager

Britt Eckstrom, PE

Education

M.S., Civil Engineering, University of California -Berkeley B.S., Civil Engineering, University of New Hampshire

Experience Summary

Ms. Eckstrom has more than 17 years of experience in consulting engineering working on a wide variety of civil and environmental projects, including water system, wastewater and general municipal engineering projects. She has significant project experience with infrastructure evaluation, report preparation, project design, construction document preparation, permitting and construction administration.

Professional Registration

New Hampshire Maine

Experience

17 Years

Joined Firm

2018

Training / Certifications

NHDOT Local Public Agency Certification #1807

Professional Affiliations

American Society of Civil **Engineers** Infrastructure and Climate Network

Relevant Project Experience

Roadways

- Contract 13 Sewer Separation, Lebanon, NH
- Contract 12 Sewer Separation, Lebanon, NH
- Lafayette Road Improvements, Hampton, NH
- Roadway Reconstruction Projects, Somersworth, NH
- Neighborhood Utility and Street Reconstruction, Dover, NH
- Pavement Management Plan, Somersworth, NH*
- Pavement Management Plan, Eliot, ME*

Stormwater

- Contract 13 Sewer Separation, Lebanon, NH
- Contract 12 Sewer Separation, Lebanon, NH
- Preliminary Stormwater Design, Plymouth, NH
- Cemetery Road Improvements, Somersworth, NH
- Culvert Replacement, Hillsborough, NH
- Culvert Replacement, Newmarket, NH
- MS4 Compliance, Various Clients
- Multi-Use Path, Pease Tradeport, Portsmouth, NH*
- Cooperative Recycling Facility, Concord, NH*
- Kingston Road TAP Project, Exeter, NH*
- Sidewalk and Rail Trail TAP Project, Claremont, NH *
- Tolend Road and Watson Road Reconstruction, Dover, NH*
- 2008 Multi-Sector General Permit Updates, Various Clients*

Site Design

- Booster Pump Station, Holderness, NH
- Water Storage Tank, Rochester, NH
- Pump Station Upgrade, Hanover, NH
- Pump Station Upgrade, Portsmouth, NH
- Water Treatment Facility Upgrade, Newmarket, NH
- Wastewater Treatment Facility Upgrade, Hampton, NH



- Wastewater Treatment Facility Upgrade, Whitefield, NH
- Water Storage Tank, Dunstable, MA
- Franklin Ash Landfill Expansion, Franklin, NH*
- Troy Mills Landfill Site Improvements, Troy, NH*

Permitting

- Sagamore Avenue Sewer Extension, Portsmouth, NH
- Marine Patrol Dock Replacement, Gilford, NH
- Subaqueous Water Main, Portsmouth, NH
- Contract 13 Sewer Separation, Lebanon, NH
- Contract 12 Sewer Separation, Lebanon, NH
- Varney Brook Pump Station Upgrade, Dover, NH
- Pump Station Improvements, Hanover, NH
- Water Treatment Facility Upgrade, Concord, NH
- Sewer Rehabilitation, Dover, NH
- Sewer Force Main, Plymouth, NH
- Water Main Extension, Rochester, NH
- Well Investigation, Newmarket, NH
- Corcoran's Pond Dam Armoring, Waterville Valley, NH
- Bicycle-Pedestrian Corridor Phase 2 TAP Project, Salem, NH*
- Linden Street and Court Street Bridge, Exeter, NH*

Water & Wastewater

- Contract 13 Sewer Separation, Lebanon, NH
- Contract 12 Sewer Separation, Lebanon, NH
- Cemetery Road Improvements, Somersworth, NH
- Wastewater Asset Management, Dover, NH
- Pump Station Evaluation, Rye, NH
- Wastewater Treatment Facility Assessment, Nashua, NH
- Melendy Road Sewer Main Replacement, Hudson, NH
- Water and Sewer Improvements, Northumberland, NH*
- Water and Sewer Improvements, Colebrook, NH*
- Water and Sewer Improvements, Waterville Valley, NH*
- Water System Improvements, Bethlehem, NH*
- Wastewater Pump Station Replacement, Manchester-by-the-Sea, MA*
- Wastewater Treatment Facilities CIP, Concord, NH*
- CMOM Program Development, Seabrook, NH*
- Fisherville 107 Cooperative, Concord, NH*
- New Leachate Treatment Facility, Franklin Ash Landfill Franklin, NH*





B.S., Civil Engineering, University of Maine, Orono

Professional Registration

New Hampshire Maine Connecticut

Experience

34 Years

Joined Firm

2001

Professional Affiliations

Maine Water Utilities Association Maine Rural Water Association, Maine Chapter American

Public Works Association

Jeffrey D. Preble, PE

SENIOR PROJECT MANAGER

Project Assignment: Project Engineer

Experience Summary

Mr. Preble is a senior project manager in the Civil Practice Group at Wright-Pierce. He has extensive experience in stormwater management plans, street and highway design and reconstruction, site design, sewer separation, storm drainage projects, surface water treatment, water distribution systems, water system planning and analysis, sanitary landfills, transfer stations/recycling and wastewater systems.

Relevant Project Experience

Streets and Roadways

- Intersection Reconstruction, Rochester, NH
- Allen Street Reconstruction, Rangeley, ME
- Old Jay Hill Road, Jay, ME
- Bald Mountain Road, Rangeley, ME
- Redington Road Improvements, Dallas Plantation, ME
- Roadway Reconstruction, North Berwick, ME
- Railroad Street Improvements, Bangor, ME
- Front Street Improvements, Bangor, ME
- Harrison Avenue Improvements, Gardiner, ME
- So. Lisbon Road Improvements, Lewiston, ME
- Pond Road Reconstruction, Lewiston, ME
- Heritage Crossing, Sanford, ME
- Village Center Relocation, Canton, ME
- Industrial Park Road, Boothbay, ME
- Route 27 Bypass Turning Lanes, Kingfield, ME
- Capen Road Culvert Replacement, Gardiner, ME
- Back Narrows Road Culvert Replacement, Boothbay, ME
- Utility Upgrades, Jay and Livermore Falls ME

Stormwater

- New Drainage System, Wolfeboro, NH
- Stormwater Management Plan, Hanover, NH
- Stormwater Management Plan, Newmarket, NH
- Stormwater Management Plan, Berlin, NH
- Stormwater Management Plan, Somersworth, NH
- Stormwater Management Plan, Jaffrey, NH
- Stormwater Management Plan, Sunapee, NH
- Village Center Relocation, Canton, ME
- Poland Spring Bottling Facility, Kingfield, ME



- Stormwater Management Plan WWTF, Sanford, ME
- Stormwater Management Plan, Falmouth, ME
- Stormwater Management Plan, South Portland, ME
- Dora Highlands, Boothbay Harbor, ME
- Penobscot Commons, Orono, ME
- Orchard Trails, Orono, ME
- Stormwater Management Plan, Bangor, ME
- Stormwater Management Plan Mill Yard, Sanford, ME
- Stormwater Management Plan ICS Production Facility, Baileyville, ME
- Phase II Stormwater Plans, Orono and Old Town, ME
- Stormwater Management System, Bangor, ME
- New Drainage System, Wolfeboro, NH
- Stormwater Management Plan, North Hampton, MA
- Stormwater Management Plan, Hadley, MA
- Stormwater Management Plan, Littleton, MA
- Stormwater Management Plan, Bellingham, MA
- Stormwater Management Plan, Leominster, MA
- Stormwater Management Plan, Acton, MA
- Stormwater Management Plan, Devens, MA
- Stormwater Management Plan, Mattabassett, CT
- Stormwater Management Plan, Manchester, CT
- Stormwater Management Plan, Windham, CT
- Sikorsky Stormwater Management, Fairfield, CT

Site Development

- Orchard Trails Housing Complex, Orono, ME
- Village Center Relocation, Canton, ME
- Bottling Plant, Kingfield, ME
- New Storage Area Design, Wells, ME
- Tank Replacement, West Bath, ME
- Tank Replacement, United States Postal Service, ME
- Site Development Projects, York, ME
- Tank Replacement, West Bath, ME
- Tank Replacement, United States Postal Service Tank Replacements, ME
- Student Housing Complex, Orono, ME
- Regional Recycling Facility, Presque Isle, ME
- White Wharf Rehabilitation, Rockport, MA
- Singing Beach Revetment, Manchester By the Sea, MA
- Slope Stabilization, Hadley, MA
- Niantic River Road Retaining Wall, Waterford, CT
- Bolles Court Stream Stabilization, Waterford, CT





M.S., Civil Engineering, Structural Focus, Northeastern University

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

Professional Registration

New Hampshire Connecticut Maine Massachusetts Pennsylvania Rhode Island Texas

Experience 24 Years

Joined Firm

Professional Affiliations

American Society of Civil Engineers (ASCE)

NH ASCE Section President 2005 - 2006

ASCE National Committee on State Government Relations, Past Member

> American Consulting Engineers Council

NHDOT / ACEC Consultant Quality Initiative Subcommittee on Consultant Contracts, Past Member

> MaineDOT / ACEC Joint Transportation Taskforce Committee, Member

MaineDOT / ACEC Subcommittee on Bridge Design, Member, Past Chair

Jason L Gallant, PE

SENIOR PROJECT MANAGER

Project Assignment: Project Engineer

Experience Summary

Jason has over two decades of progressive experience in transportation infrastructure engineering throughout the Northeast including project management, project engineering, staff leadership, and development for design and construction projects. His engineering expertise includes design, analysis, and construction of new and rehabilitated bridges and other highway, railroad, and building structures under design-build and design-bid-build project delivery methods. Jason also has supplementary experience in marine infrastructure, dams, environmental permitting, and site design. As Senior Project Manager, he offers strong knowledge of bridge and building design standards throughout the Northeastern U.S. and has successfully designed many Department of Transportation (DOT), municipal, commercial, and institutional structures using reinforced concrete, prestressed concrete, structural steel, and timber.

Relevant Project Experience

Bridge Projects

- Statewide On-Call Bridge Design Services, NHDOT, Various Locations in NH*
- Loudon Road Bridge Rehabilitation, Concord, NH*
- Linden and Court Street Bridges, Exeter, NH*
- Bridge Rehabilitation, Concord, NH*
- Longmarsh Road Bridge, Durham, NH*
- I-93 Salem-Manchester Final Design, NHDOT, Salem and Windham, NH*
- Bridge Widening and New Pedestrian Bridge, Waterville Valley, NH*
- Belvedere Road Reconstruction, Gilsum, NH*
- Emergency Bridge Replacement Program, Loudon, NH*
- Rehabilitation of U.S. Rt. 4 over the BMRR and Mascoma River, Lebanon, NH*
- Bridge Repair and Bridge Replacement Program, Salem, NH*
- Haverhill Road over Spicket River, Salem, NH*
- Cluff Crossing over Policy Brook, Salem, NH*
- Pelham Road over Porcupine Brook, Salem, NH*
- Emerson Way over Widow Harris Brook, Salem, NH*
- North Main Street over Widow Harris Brook, Salem, NH*
- Lawrence Road over Spicket River, Salem, NH*
- Washington Street Bridge Replacement, Dover, NH*
- Bridge Repair Program, Dover, NH*
- Conway Bypass Phase 4B, 6, 7A, and 7B, NHDOT, Albany, Conway and Madison, NH*
- Conway Bypass Phase 4A, NHDOT, Conway, NH*
- Mine Falls Bridge Inspections, Nashua, NH*



MaineDOT / ACEC Subcommittee on Alternate Project Delivery, Past Member

Professional Trainings/Certifications

FHWA-NHI Safety Inspection of In-Service Bridges, 6.7 CEU Team Leader Training

OSHA 10-Hour Training

Keolis Roadway Worker Protection Certification

US Government Transportation Worker Identification Credential (TWIC)

- Marsh Hill Road over I-95, ConnDOT, Orange, CT*
- Bridge Load Rating Assignments, MaineDOT, Various Locations in ME*
- Design-Build, Route 136/125, MaineDOT, Freeport, ME*
- Embden-Solon Bridge #2267, MaineDOT, Embden-Solon, ME*
- Piscataquis River Bridge Design/Build Project, MaineDOT, Howland, ME*
- I-95 Bridges over Kennebec River and MCRR, MaineDOT, Fairfield and Benton,
 MF*
- Veteran's Memorial Bridge Design/Build, MaineDOT, Portland, ME*
- Summer Street Bridge Modifications, Massachusetts Port Authority, Boston, MA*
- Leverett Circle Pedestrian Overpass #68387, MassDOT, Boston, MA*
- CA/T Program Management Services #77866, MassDOT, Boston, MA*
- Thomas J. Butler Dedicated Freight Corridor and Memorial Park, Massachusetts Port Authority, Boston, MA*
- Commonwealth Avenue Design/Build Superstructure Replacement, MassDOT, Boston, MA*
- Cambridge Turnpike, Concord, MA*
- Monument Street Retaining Wall, Concord, MA*
- Route 8 over B&M Railroad and Hoosic River, MassDOT, North Adams, MA*
- MA Route 146/Route 20 Interchange Project (Masspike Exit 10A), MassDOT, Millbury, MA*
- CA/T, I-93 Viaduct/Central Artery, C19B1, MassHighway Dept., Boston, MA*
- Olive Street Bridge, MassDOT, Attleboro, MA*
- Route I-91 NB & SB over East Street, MassDOT, Easthampton, MA*
- North Hero-Grand Isle Drawbridge Replacement, Vermont Agency of Transportation, North Hero, VT*
- Chittenden County Circumferential Highway (CCCH) Supplemental EIS, Vermont DOT, Essex-Williston, VT*

Transit Projects

- Worcester Union Station Accessibility Improvements and Associated Track Work, Massachusetts Bay Transportation Authority, Worcester, MA*
- Repair/Rehabilitation of the Merrimack River and Washington Street Bridges,
 Massachusetts Bay Transportation Authority, Haverhill, MA*
- On-Call Rail Support Services, Keolis Commuter Services, Statewide, MA*

Dams and River Stabilization

- Sawyer Mills Dam Removals, Sawyer Mills, LLC, Dover, NH*
- White Brook Bank Stabilization Project, Gilsum, NH*
- Connecticut Riverbank Stabilization Project, Colebrook, NH*
- Dam Spillway Rehabilitation, AIMCO, Inc., Warwick, RI*



^{*}Experience from previous employer



M.S., Environmental Engineering, Worcester Polytechnic Institute

B.S., Civil Engineering, Worcester Polytechnic Institute

Professional Registration

Maine Connecticut Massachusetts Rhode Island

Experience

20 Years

Joined Firm

2009

Professional Affiliations

American Society of Civil Engineers

Association of State Dam Safety Officials

Publications

Bergendahl, J., Hubbard, S., Grasso, D., "Pilot-scale Fenton's Oxidation of Organic Contaminants in **Groundwater Using** Autochthonous Iron" Journal of Hazardous Materials, B99(2003)43-56

Stephanie A. Hubbard, PE

PROJECT MANAGER

Project Assignment: Project Engineer

Experience Summary

Ms. Hubbard is a project manager in the Civil Practice Group at Wright-Pierce. Stephanie has 20 years of site and infrastructure design, construction administration and project management experience on a wide variety of civil projects. Her responsibilities have included design, permitting, budget, schedule, and construction monitoring on both public and private sector development projects. Stephanie has been actively involved in dam inspections, evaluations and studies throughout New England.

Relevant Project Experience

Stormwater

- Catherine Street Area Infrastructure and Roadway Improvements, Rochester, NH
- Woodman Area Infrastructure Improvements, Rochester, NH
- Culvert Replacement Assessment, Plymouth, NH
- Southside Drainage Improvements Technical Design, Weston, MA
- Bristol Town Beach Water Quality Improvements, Bristol, RI
- Guitera's School Stormwater Retrofit, Bristol, RI
- Hillside Street Green Infrastructure Retrofit, Newport, RI
- Kittery Estates Stormwater Recertification, Kittery, ME
- Comprehensive Drainage Plan, Old Orchard Beach, ME
- Lake Andrews Drainage Evaluation, Lewiston, ME
- EMMC Stormwater Maintenance Plan, Bangor, ME
- MS4 Review and Documentation, Old Orchard Beach, ME

Environmental

- Milliken Street Transfer Station Building Review and RFP, Old Orchard Beach, ME
- Transfer Station Stormwater Pollution Prevention Plan, Old Orchard Beach, ME
- Freshwater Pond Permitting Review, Enfield, CT
- TFMA Retrofit Reconnaissance Investigation, Topsham, ME
- I-95 Bridge Replacement Soil Management Plan and Remedial Action Work Plan, RIDOT, Pawtucket, RI
- Lake Dredging, Rome, ME

Dam Breach Analysis and Inundation Mapping

- Lake Penacook Dam, Concord, NH
- UNH Dam Breach Analysis, Durham, NH
- Lower Mill Pond Dam Spillway Analysis and Dam Breach Modeling, Easthampton, MA



Dam Rehabilitation, Improvements, and Evaluations

- Robinson Dam Rehabilitation, Blaine, ME
- Mann's Pond Dam Stump Removal Project, Sharon, MA
- Bell Marsh Toe Drain Replacement, York, ME
- Neguasset Lake Fishway Design, Woolwich, ME
- Neguasset Lake Fishway Construction Administration, Woolwich, ME
- Center Pond Fishway Design, Phippsburg, ME
- Dam Sediment Screening Level Analysis, Kennebunk, ME
- Dam Assessment Sediment Screening Analysis, Frankfurt, ME

Dam Inspections, Evaluations & Studies

- DCR Dam Inspections, Haverhill, MA
- Ware Levee Evaluation, Ware, MA
- Kesslen Dam, Kennebunk, ME
- Twine Mill Dam, Kennebunk, ME
- Dane Perkins Dam, Kennebunk, ME
- Upper Purgatory Dam, Litchfield, ME
- Marsh Stream Dam, Frankfort, ME
- Nequasset Dam, Woolwich, ME
- Center Pond Dam, Phippsburg, ME
- Long Pond Dam, Western Maine
- Massachusetts Bog Dam, Western Maine
- Little Island Pond Dam, Western Maine
- Beaver Pond Dam, Western Maine
- Sleeper Dam, Sabattus, ME
- Fortier Dam, Sabattus, ME





B.S., Environmental Engineering and Civil Engineering, Clarkson University

Professional Registration

Maine

Experience

9 Years

Joined Firm

2015

Professional Affiliations

Maine Water Environment Association (MEWEA) 2020 President

New England Water Environment Association (NEWEA)

Certifications

OSHA 10-Hour

Michael. A. Guethle, PE

LEAD PROJECT ENGINEER

Project Assignment: Planning Board and Peer Reviews

Experience Summary

Michael is a lead project engineer with extensive experience in site development including stormwater treatment, street and parking lot design, utility design and relocation, and associated permitting, funding, public process facilitation, and construction phase services. His experiences range from small residential projects to large multi-modal transportation expansions. His diverse background has created a unique knowledge set of design needs, permitting requirements, and construction realities. His skill set includes the design software of AutoCAD, ArcGIS, HEC-RAS, and HydroCAD, as well as construction tools such as sub-centimeter GPS systems and contract management software. Below is a partial list of relevant projects throughout the northeast that he has been involved with throughout his career.

Relevant Project Experience

Land Use Planning and Third-Party Reviews

- On-Call Services, Derry, NH
- On-Call Services, Bath, ME
- On-Call Services, Portland, ME

On-Site Construction Administration – Including Stormwater Treatment and Erosion and Sediment Control

- Peary Terrace Subdivision, South Portland, ME
- Bike Path Improvements, Topsham, ME
- Former FPL Parcel Reconstruction, Biddeford, ME
- International Marine Terminal, Portland, ME*
- Rangeley Branch Rail Restoration, Auburn & Poland, ME*
- Eldredge Lumber and Hardware Intermodal Site Redevelopment, Portland, ME*
- Cottage Brook Subdivision, Cape Elizabeth, ME*

Roadway and Sidewalk Engineering

- Furbish Road FLAP Sidewalk Grant and Design, Wells, ME
- Harbor Road FLAP Sidewalk Grant and Design, Wells, ME
- Benton Avenue Roadway Reconstruction, Winslow, ME
- North Street Improvements, Bath, ME
- MRRA Roadway Improvements, Brunswick, ME
- Memorial Circle Multi-Use Path, Kittery, ME
- Elm Street Sidewalk Construction, Damariscotta, ME
- Whipple Road Sidewalk Design, Kittery, ME
- Eagle Road Stormwater Improvements, Acton, ME*



Blue Heron Lane NRPA Permitting, Kennebunkport, ME*

Dam Engineering

- Rainbow Lake Dam Reconstruction, T2 R11 WELS, ME
- Kotler Family/Indian Pond Dam Reconstruction, Greenwood, ME
- Kennebunk Light & Power District Dam Study, Kennebunk, ME
- Ladd Dam Fishway, Vassalboro, ME
- Roberts Pond Dam EAP, Ridgefield, CT

River Restoration and Culvert Design

- Bald Mountain Road Culvert Replacement, Rangeley, ME
- Causeway Road Bridge Replacement, China, ME
- PIBO Effectiveness Monitoring Program, Ukiah, OR*
- Hudson River ADCP River Modeling Installation, Potsdam & Beacon, NY*

Site Development – Including Stormwater Treatment

- Wastewater Facility Upgrade, Somersworth, NH
- York Sewer District Pump Stations Assessment, York, ME
- Blue Dog Daycare Site Development, Brunswick, ME
- Wild Oats Site Development, Brunswick, ME
- Penobscot McCrum LLC, Processing Plant SLDP Application, Washburn, ME
- Chewonki Master Plan Implementation, Wiscasset, ME
- Genesis Industrial Anaerobic Digester, Brunswick, ME
- County Road Pump Station Evaluation, Westbrook, ME
- Greater Augusta Utility District CSO Mitigation, Augusta, ME
- Industrial Road Redevelopment, Saco, ME
- McMann Fields Master Plan and Implementation, Bath, ME
- STEM Building Improvements at Bates College, Lewiston, ME
- YMCA Building Addition, Damariscotta, ME
- Long-Term Care Facility Improvements, The Cedars, Portland, ME
- Hagar Enterprises, Inc. Laydown Facility Expansion, Damariscotta, ME
- Inn Along the Way Site Development, Damariscotta, ME
- Maine Wild Blueberry Expansion, Machias, ME
- Lyseth Lyman-Moore School Site Design, Portland, ME
- Coastal Bluff Erosion Evaluation, Falmouth, ME
- Coastal Maine Botanical Gardens Expansion, Boothbay, ME
- Munjoy Heights, Portland, ME*
- 89 Anderson Street Redevelopment, Portland, ME*
- Knights Pond Improvements, Cumberland, ME*
- Wastewater Treatment Facility Upgrade, Monticello, NY*



^{*}Experience from previous employer



Robert S. Stephens, PE

PROJECT MANAGER

Project Assignment: Dams, Geotechnical

Education

M.S., Civil (Geotechnical)
Engineering, Cornell
University
B.S., Geology & Geophysics,
University of Hawaii at
Manoa
Undergraduate Studies,
Geological Engineering,
University of New Hampshire
Undergraduate Studies,
Mining Engineering,
Montana College of Mineral
Science and Technology

Professional Registration

New Hampshire Maine Massachusetts Vermont

Experience

31 Years

Professional Affiliations

Member, G-I Technical Committee on Embankments, Dams and Slopes

Member, G-I Codes & Standards Committee on Inspection of Dams

Member, Association of State Dam Safety Officials and US Society on Dams

President, Boston Society of Civil Engineers Section (BSCES) of the American Society of Civil Engineers (ASCE)

Member & Co-Chair, Editorial Board of Civil Engineering Practice: The Journal of the BSCES

Experience Summary

Robert Stephens, PE is Principal Engineer for Stephens Associates geotechnical/geological, earthquake and dams consulting services. He served as District Manager, Project Manager, Project and Staff Engineer with nationally recognized engineering firms on the east and west coasts of the United States, Hawaii and Guam. Mr. Stephens has performed geotechnical, geological, geophysical, earthquake and environmental engineering, hydraulics and/or hydrology on civil works, including buildings and infrastructure, in the United States and overseas. He has evaluated and designed foundations, excavation support systems, embankments and slopes. Mr. Stephens has engineered rock slopes, and performed and/or supervised geotechnical, geological, seismic, hydraulic and hydrologic studies of existing facilities such as seismic safety evaluations for dams, including High Hazard, large embankment and historic stone-masonry dams.

Relevant Project Experience

Dams and Geotechnical

- Swains Lake Dam, Barrington, NH
- Loon Pond Dam, Lincoln, NH
- Transcript Dam & Main Street Bridge over Contoocook River, Peterborough, NH
- North Village Dam, Peterborough, NH
- Old Mill Pond Dam, Hampton, NH
- Wiswall Dam, Durham, NH
- Pelham Road Retaining Wall/Dam and Culvert, Hudson, NH
- Jackson Mills Dam, Nashua, NH
- Levee and Six Dams, Canton, MA
- New Portsmouth Public Library Project, Portsmouth, NH
- Wiswall Road Bridge over Lamprey River, Durham, NH
- Merrimack Valley Regional Transit Authority (MVRTA) Transportation Center, Amesbury, MA
- Merrimack Valley Regional Transit Authority (MVRTA) Transportation Center, Haverhill, MA
- Crawley Falls Road Bridge over Exeter River, Brentwood, NH
- Bradford Street Bridge, Derry, NH
- Long Hill Road/New Rochester Road Intersection, Dover, NH
- Lowell Street Culvert and Retaining Wall, Rochester NH
- Water Treatment Facility & Pipeline Crossing Pemigewasset River, Franklin, NH
- Precast, Prestressed, Concrete Water Tanks, Franklin, NH
- MWRA Northern Intermediate High Redundant Pipeline, Stoneham, Wakefield, Reading, Woburn MA
- Hampton Beach and Kings Highway Sewer Project, Hampton NH





A.S., Surveying & Mapping, University of New Hampshire

Professional Certifications

New Hampshire

Experience

26 Years

Professional Affiliations

Secretary, Structural Engineers Association of Maine (SEAM)

Member of Maine Government Affairs Committee, American Council of Engineering Companies (ACEC)

Member, American Institute of Steel Construction (AISC)

Jack Kaiser, LLS

PROJECT MANAGER

Project Assignment: Survey/Right-of-Way/Mapping Engineer

Experience Summary

Mr. Kaiser began surveying in 1993. He then went to the University of New Hampshire where he received an Associate's Degree in Surveying & Mapping in 1995. Since then he has moved through the ranks to Project Manager where he has been since 2002. Jack obtained his New Hampshire Surveyor's License in December of 2005. His current duties include project cost estimating, records research, boundary analysis, computations and client correspondence. Of the many varieties of surveys, Jack deals primarily with engineering surveys and construction layout. The engineering surveys are typically topographic surveys of large commercial sites (office buildings or retail plazas) or roadway surveys for municipalities making improvements. In many instances the site surveys will lead to construction layout, which varies from laying out complex residential homes to layout of column lines for multi-million-dollar commercial projects. Some of the more notable building construction survey sites Jack has managed include; Lonza Biologics in Portsmouth, NH, Velcro USA in Somersworth, NH, Home Depot in Portsmouth, NH, Bed Bath & Beyond/Christmas Tree Shop in Portsmouth, NH, Shaw's Supermarkets in Plaistow, NH and Chestnut Hill, MA, Portsmouth Water Treatment Facility in Madbury, NH and CVS Drugstores in Plaistow & Hooksett, NH. Roadway construction survey sites include over 10 miles of new residential subdivision roads, and over 54 miles of asbuilt survey of town, city and state roads.

Relevant Project Experience

Relevant Projects Working with Wright-Pierce

- Lafayette Sewer Upgrade, Hampton NH
- Varney Brook Pump Station ROW Investigation, Dover, NH
- Constitution Way, Main Street, Cemetery Road Reconstruction, Somersworth, NH
- Belknap and Elm Street Neighborhood Reconstruction, Dover, NH
- Wastewater Treatment Plant Upgrade, Newmarket, NH
- Lubberland Creek Restoration, Newmarket, NH





B.S., Soil Science, University of New Hampshire

Professional Registration

New Hampshire Certified Soil Scientist New Hampshire Certified Wetland Scientist Certified Professional in Erosion and Sediment Control

Experience

35 Years

Professional Affiliations

Member and Past Officer, New Hampshire Association of Natural Resource Scientists

Member and Past Officer, Society of Soil Scientists of Northern New England.

Past Member & Past Chair, Barrington (NH) Conservation Commission

Member, Strafford Rivers Conservancy, currently serving on the Lands Committee

Marc E. Jacobs, PE

WETLANDS

Project Assignment: Wetland Delineation and Characterization

Experience Summary

Marc is a consulting wetland and soil scientist. He has 35 years of consulting experience in natural resource assessment and mapping. He has interfaced with local, state and federal regulatory agencies to provide permitting assistance and has provided expert testimony on environmental impact at state regulatory hearings and for litigation. He has also made numerous project presentations at various public hearings and meetings. Marc has worked as part of multidisciplinary teams evaluating potential environmental impact at contaminated wetland sites and has provided mitigation design support to compensate for unavoidable wetland impacts.

Relevant Project Experience

- Sagamore Avenue Sewer Extension Portsmouth, NH*
- Little Bay Water Line Replacement Durham and Newington, NH*
- Route 202A Water Main Extension Rochester, NH*
- Cemetery Road Improvements Somersworth, NH*
- Sewer Force Main Improvements Exeter, NH*
- Culvert Replacement Hillsborough, NH*
- Lubberland Creek Culvert Replacement Newmarket, NH*
- Culvert Replacement -Rye, NH*
- Water Main Extension Rochester, NH*
- Pump Station Upgrade Dover, NH*
- Pump Station Upgrade Hampton, NH*
- Sewer Force Main Replacement Hampton, NH*
- Water Treatment Facility Rye, NH*
- Municipal Well South Berwick, ME*
- JPI Development Nyanza Superfund Site, Ashland, MA
- Olin Chemical Superfund Site, Woburn, MA
- Nichols Village, Groveland, MA
- Groen Builders Residential Subdivision in Barrington, NH
- Towle Riverwalk Condominiums: Towle Medical Office Building for First Republic Corporation of America, Newburyport, MA
- Hawkview Estates Residential Development, Hudson, NH
- Town of Barrington Gravel Pit Development Plan, Barrington, NH
- Newburyport Conservation Commission Crow Lane Landfill Closure, Newburyport, MA



^{*}Wright-Pierce designed projects





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