January 24, 2024



Mr. C.R. Willeke, PE, Municipal Highways Engineer New Hampshire Department of Transportation Bureau of Planning & Community Assistance 7 Hazen Drive Concord, NH 03302

Via electronic mail to: Charles.R.Willeke@dot.nh.gov

SUBJECT: Updated 2024 Pre-Qual Package for Preliminary Engineering for Local Public Agency (LPA) Contracts

Dear Mr. Willeke:

Kleinfelder is pleased to present this updated 2024 Pre-Qual Package for our continued inclusion on the prequalified list of Statewide Preliminary Engineering Services Consultants for LPA projects. Our team has the necessary depth and breadth of experience to successfully fill this role for NHDOT and municipalities.

Experienced, Qualified, & Dedicated Team – Kleinfelder is a full service architectural and engineering firm with significant transportation engineering experience that results in common sense and environmentally sound designs that have preserved our client's infrastructure and reduced overall maintenance costs. Kleinfelder, as the prime consultant, has successfully provided all phases of engineering services for New Hampshire municipalities for over 25 years. Our experienced team of bridge, highway, and supporting professionals have qualifications and local capacity to meet LPA project needs. We are pleased to propose Project Manager, William Ashford, PE, and Principal-In-Charge, Peggy Duval for these services, who will use their decades of experience managing LPA projects to carefully select a team with the necessary capabilities, experience, and certifications.

Our team is further strengthened by our strategic partnership with **Gorrill Palmer** of South Portland, Maine, to provide Highway Design, Traffic Engineering, and Corridor Planning services alongside our in-house engineers. Gorrill Palmer shares a prominent level of MaineDOT LPA experience and the successful delivery of municipal projects throughout New England since 1998. Don Ettinger, PE, Highway Team Lead, has over 25 years of experience in transportation engineering, including feasibility, design, and management of roadway, multimodal, and bridge projects.

Project Understanding & Successful Execution – Based on our long history and past performance, we fully understand the key roles and services necessary to produce high quality design projects. Our team commits to providing responsive and proactive service as if we are an extension of the Owner/ LPA's Team. We understand, through our experience, that our role in LPA projects is to assist the municipality through the process, keep their projects on budget and schedule, and make sure they have acquired the appropriate sign offs and approvals to deliver a high-quality project. We work with the municipalities to develop a range of alternatives and tailor the most sensible solutions to meet their needs within the NHDOT standards for design.

As a company, we bring a collaborative, service-based approach to our work, and are proud of our reputation for quality, responsiveness, and flexibility. Thank you for the opportunity to continue our long history of successfully delivering New Hampshire LPA projects. Please feel free to contact us with any questions or comments.

Sincerely, KLEINFELDER

William Cashful

William Ashford, PE, Project Manager bashford@kleinfelder.com



PROJECT UNDERSTANDING AND APPROACH

Capabilities and Experience – The Kleinfelder Team has successfully completed engineering design and construction phase services for over 70 LPA and State Bridge Aid Program projects since the mid-1990s. Based on our experience, we have a comprehensive understanding of the NHDOT LPA design process including key points of communications and sign-offs, NHDOT's Standards and Design Guides, the NEPA process, and NHDES permitting requirements for projects funded with State, Federal, and local funds. We understand the LPA design process as outlined below:

Engineering Study

- Public Involvement Public Presentation of Proposed Actions; Gather Public Comments
- Purpose and Need Statement Development
- Misc. Tasks as Needed Survey, Traffic Studies, Hydrology/Hydraulics Studies, Geotechnical Evaluation, Utility Coordination
- Environmental and Cultural Resources
 - Regulatory & Resource Agency Coordination
 - o NEPA/ESA/CWA/NHPA Compliance
- ADA Compliance
- Alternatives Analysis, Proposed Layout, Structures Studies, and Recommendations
- Cost Estimates

Preliminary Design

• Preliminary Plans and Revised Cost Estimate

- Environmental Documentation Process (NEPA)
- Environmental Permitting Process
 - Wetlands, Shoreland, Water Quality, Individual ACOE 404, AOT, etc.

Final Design

- Right-of-Way Process/R.O.W. Certificate
- Utility Coordination/Certification
- Federal Labor Compliance Requirements as Applicable
- Final Plans, Specs, and Estimate (PS&E)
- Contract Documents/PS&E Authorization

Bid Phase

- Advertisement, Contractor Pre-qual, Addendums, Bidder Coordination
- Pre-Bid Meeting, Bid Opening, Bid Analysis, Award Recommendation
- Nonstandard Project Procurement

Project Management, Schedule, and Cost Control – Successful delivery of LPA projects begins with effective and efficient project management. Our approach to project management is based on clear communications, collaboration, and staffing. Careful scoping, cost, and schedule development along with proactive monitoring and communications, create successful project results. We know that once the municipality, NHDOT, and our team agree to a project scope

and schedule, it must be met unless changes are fully agreed to by all stakeholders. Delays can directly affect project costs and potentially other projects. Our approach to project management for LPA projects is as follows:

- Develop comprehensive work plan with the municipality.
 - Scope of services, budget, deliverables, schedule, team member roles and responsibilities.
- Maintain communication throughout the project.
 - Submit monthly project status reports, invoicing, and documentation per LPA procedures.
- Develop appropriate public involvement for LPA requirements.
- Assign senior level staff to provide QA/QC of all deliverables.
- Deliver high quality submissions on-time.

Bridge Engineering — Our team's experience with innovative materials, structural engineering software, and finite element modeling allows Kleinfelder to provide practical, cost-effective design solutions that meet schedules and budgets. The range of our bridge rehabilitation and replacement experience includes single and multi-span steel girder and concrete bridges (both cast-in-place and pre-cast), timber bridges with and without skews, and curved structures on local, state and National Highway system roads. Our team has design experience with historic steel truss rehabilitation projects including the Patterson Hill Road Bridge in Henniker, and

Bridge Design Strengths & Expertise

- ✓ Advanced Scoping and Feasibility
- ✓ Preliminary and Final Design
- ✓ Complete PS&E
- ✓ Bid and Construction Phase Engineering
- ✓LPA Levels I and II
- ✓ Bridge Preservation, Rehabilitation, and Replacement
- ✓ NBIS Inspection

(Topside/Underwater)

- ✓ Complex Bridge Analysis, Modelling, LRFR Bridge Ratings, Fracture Critical, and 3-D Scanning
- ✓ Scour and Substructure Protection
- ✓ Bridge Approaches & Highway Drainage
- ✓ Accelerated Bridge Construction



the evaluation and study of historic trusses in Exeter, Newport, Deering/Antrim, and Bristol/New Hampton. Kleinfelder also developed MaineDOT's fracture critical plans for 85 structures for their Engineers and Inspectors. Our team has designed numerous buried structures including precast box culverts and rigid frames, large cast-in-place culverts and rigid frames, and large highway drainage structures. Recently, the Eddington, ME, precast box

culvert project was recognized by US Fish and Wildlife Services as an excellent example of decreasing erosion and making fish passage through the culvert easier.

Highway/Civil/Traffic Engineering — Our team has provided full-service highway and traffic engineering for municipalities in the Northeast since 1998. Gorrill Palmer's unique municipal and transportation agency experience perfectly complements Kleinfelder's in-house professionals to create the best combination of experience to deliver the full range of LPA engineering services. Gorrill Palmer has:

- Over 25 years of experience with roadway, bridge, traffic circle, parking lot, intersection, signalization, drainage design, traffic engineering, and corridor planning projects.
- Multi-staged traffic control during construction, offsite detours, onsite temporary bypasses, alternating one-way traffic with temporary signalization, signalized intersection design and timing adjustments during construction.

Full Suite of Services – Kleinfelder presents a full-service team with expertise to design and deliver NH LPA projects, including:

Geotechnical Engineering – Kleinfelder is recognized for providing expert geotechnical engineering services across the country and the Northeast for over 55 years. Our firm has NH LPA experience on several recent projects including the Sand Hill Road and Oak Street Bridge Replacements in Newport and an Emergency Outfall Repair in Manchester. Their early involvement often provides opportunities for cost savings.

Highway Design & Traffic Engineering Strengths & Expertise

- ✓ Advanced Scoping and Feasibility
- ✓ Preliminary and Final Design
- ✓ Complete PS&E
- ✓ Bid and Construction Phase Engineering
- ✓LPA Levels I & II
- ✓ Highway Reconstruction,
 Rehabilitation, Roundabout, and
 Bridge Approaches
- ✓ Intersection and Signalization Improvements
- ✓ Traffic Impact Studies, Simulation Modelling, and TDM
- ✓ Corridor/Downtown Planning Studies
- ✓ Bicycle-Pedestrian Facilities, Multiuse Trail, and Complete Streets
- ✓ Parking and Transit facilities
- ✓ Access Management Evaluations

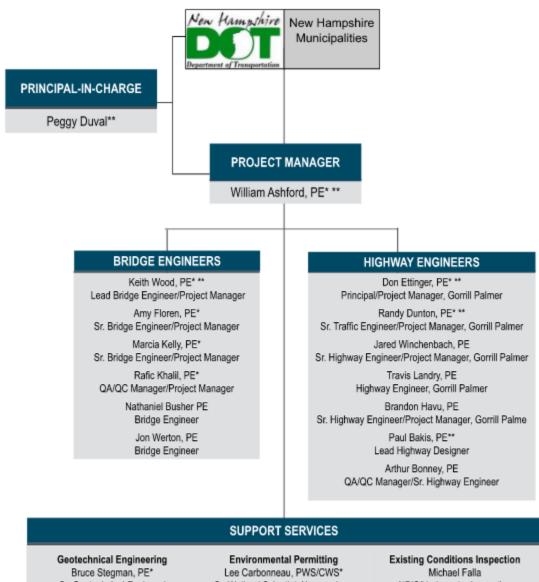
Environmental Services – Kleinfelder's team has the full range of expertise to address regulatory compliance, natural resources permitting, and cultural resource compliance. Kleinfelder and subconsultant **Normandeau Associates** have positive long-term relationships with NH regulatory agencies. Our combined experience allows us to design in a manner that avoids and minimizes impacts to resources and streamlines project timelines. For example, the Oak Street Bridge Replacement project in Newport saw Kleinfelder's engineers and cultural resources staff collaborate to avoid and minimize impacts to historic and archaeologic resources.

Hydraulics and Hydrology – We are pleased to partner with **Headwaters Consulting, LLC**, who we have worked closely with on several LPA projects over the last 10 years. Most recently, Headwaters provided hydraulics/hydrology studies for Breezy Hill Road over the Warner River in Bradford, Oak Street over the Sugar River in Newport, Castle Hill Road over Beaver Brook in Windham, and most recently the hydraulic study for Kleinfelder on NHDOT's Route 101 over Pulpit Brook project in Bedford.

Survey and Right-of-Way – Our team has provided topographic survey and Right-of-Way (ROW) services on several NHDOT projects. Our partner, **Doucet Survey**, **LLC**, has intimate knowledge of NHDOT requirements. In addition to base mapping, Doucet provides ROW services including ROW mapping, property owner outreach, easement negotiation, property evaluation, and deed recording assistance.

Public/Stakeholder Involvement – Kleinfelder's experience organizing and leading public involvement for various projects with enthusiastic stakeholders has proven that early engagement reduces conflicts and saves time and money. We make sure municipalities meet LPA requirements for public involvement and collaborate with them to implement additional public outreach efforts as appropriate to each specific project. Our team has implemented the following methods and techniques for municipal projects: presenting technical aspects of projects at public meetings in a clear and concise manner, providing critical project information for and maintaining websites, and serving as a business and residential liaison to resolve property specific issues. Our experience is both in person and using virtual platforms.

ORGANIZATON CHART



Sr. Geotechnical Engineer/ Team Leader

Hydraulic Engineering

Sean Sweeney, PE*, CWS* Hydraulic Engineer, Headwaters Consulting LLC

Sr. Wetland Scientist, Normandeau

Cultural Resources

Amanda Taylor Architectural Historian

Survey/Right-of-Way

William Doucet, PS* Doucet Survey, LLC

NBIS/Underwater Inspection Team Leader

Timothy Merrithew NBIS/Underwater Inspector

Utility Coordination

Michael Barden Sr. Utility Coordinator

^{*}Denotes NH Registrations or Certification ** Denotes NHDOT LPA Certification



PROJECT TEAM

The Kleinfelder Team is led by **William Ashford, PE, Project Manager**. Mr. Ashford has over 34 years of experience as a Project Manager, Construction Engineering and Inspection, and Quality Assurance/Quality Control with LPA bridge and roadway projects and State Bridge Aid projects. He is a NH licensed PE and is certified in LPA. He has either performed and/or managed engineering and construction phase services for municipal transportation projects, including coordinating environmental, right-of-way, and public involvement. He understands the challenges facing municipalities and how to assist with design and construction phase services during the LPA process to keep the projects on schedule and budget. He is further supported by the following team leaders:

Peggy Duval, Principal-in-Charge: As a former MaineDOT LPA Senior Project Manager, Ms. Duval taught LPA training and delivered over 60 municipal projects with Federal, State, and local funding sources following specific LPA requirements for consultant selection, design, environmental, ROW, utility coordination, and construction oversite and documentation. She is NHDOT LPA certified and has a thorough understanding of LPA requirements and funding sources to make sure municipalities maintain Federal participation. Her project experience includes bridge, highway, multi-use trail, building, transit, marine, aviation facilities, and planning projects. She is particularly adept at supporting municipalities who may not have experience delivering capital projects.

Keith Wood, PE, Lead Bridge Engineer: Mr. Wood has over 20 years of experience in bridge design. He has successfully completed a variety of bridge projects, including short, medium, and long spans, simple and multispan, along with bridge rehabilitation and replacement, evaluation/engineering studies, multi-use trails, pedestrian bridges, bridge approaches, highway reconstruction, and construction support service projects. In addition, he has led numerous LRFR Bridge Rating assignments and performs refined analysis and finite element modeling. He is NHDOT LPA certified and has direct NHDOT LPA project experience, most recently the Oak Street Bridge and Sand Hill Road Bridge in Newport.

Paul Bakis, PE, PTOE, Lead Highway Engineer: Mr. Bakis has 22 years of experience in the analysis and design of transportation improvement from concept to final design through final construction. Mr. Bakis has performed traffic analysis for signalized and unsignalized intersections, crash analysis, and road safety audits. He has also prepared functional design reports, traffic signal design plans, and temporary traffic control plans including temporary roadways. Mr. Bakis has participated in value engineering projects associated with bridge replacement focusing on temporary traffic control and interchange design.

Bruce Stegman, Sr. Geotechnical Engineer: Mr. Stegman has over 44 years of engineering, management, and field exploration of both normal and difficult soil and rock experience. He is involved with a wide variety of projects including towers, roadways, structures with shallow and deep foundations, retaining walls, underpinning, storm water management impoundments, embankments, reinforced embankments, slope stability analysis, and failure investigations.

Amanda Taylor, Architectural Historian: Ms. Taylor has over 15 years of experience in cultural resources compliance and is a Secretary of the Interior qualified Architectural Historian. She has successfully guided NH municipal projects through initiation of consultation with the NH Division of Historical Resources through final mitigation measures and Section 4(f) documentation, including the Oak Street Bridge Replacement in Newport.

Strategic Partnership

Kleinfelder has a strategic partnership with Gorrill Palmer of South Portland, ME, to provide highway design, traffic engineering, and corridor planning. Gorrill Palmer holds several on-call contracts for Highway Reconstruction, Rehabilitation, Roundabout Design, and Traffic Engineering services. They provided these services to municipalities in the Northeast for over twenty-five years.

Don Ettinger, PE, Principal/Project Manager: Mr. Ettinger, licensed NH PE and NHDOT LPA certified, will lead the highway design team. He has over 25 years of experience in transportation engineering, including design, management. and feasibility of roadway, bridge, and multimodal projects. He has successfully led numerous municipal projects and sought sensible and cost-effective solutions.



Randy Dunton, PE, PTOE, Sr. Traffic Engineer/Project Manager: Mr. Dunton, licensed NH PE and NHDOT LPA certified, brings over 27 years of experience in traffic, transportation engineering, and transportation planning services and with municipally lead project where he understands the challenges facing municipal infrastructure.

Subconsultants – Our team is further strengthened by these longtime trusted subconsultant partners:

- Normandeau Associates, Lee Carbonneau, CWS, Sr. Principal Scientist: Ms. Carbonneau is a senior biologist with over 30 years' experience assessing terrestrial and wetland communities. She has provided wetland and wildlife surveys, permitting, and mitigation for many of Kleinfelder's LPA bridge projects.
- Headwaters Consulting, LLC, Sean Sweeney, PE, CWS: Mr. Sweeney has 26 years of experience and will lead hydrology, hydraulic, and scour related services as he has done for several of Kleinfelder's LPA bridge projects in New Hampshire.
- **Doucet Survey, LLC, William Doucet, PS:** Mr. Doucet has intimate knowledge of NHDOT requirements and will lead topographic survey and Right-of-Way (ROW) services. He has worked with Kleinfelder on a number of NHDOT and municipal projects.

PROJECT TEAM TABLE

The table below includes staff members that Kleinfelder proposes to serve on LPA projects under this pregualification.

	n Engineering Services in Support of LAP Projects	Years of Experience	Years with Firm	LPA Certified	Project Management	Highway Design	Bridge Design	Structural Engineer	Alternative Procurement Methods	Corridor Study Planning	Hydrology	Environmental	Traffic Analysis	Geotechnical Engineer	Surveyor	Public Involvement
Key Personnel	Project Role		÷				В	S		၁	I	Ш	T	9	လ	-
William Ashford, PE	Project Manager	35	2	Х	Х	Х			Х							Х
Peggy Duval	Principal-In-Charge	28	11	Х	Х				Х	Х						Х
Don Ettinger, PE*	Principal/Project Manager	29	10	Х	Х	Х				Х					_	Х
Keith Wood, PE	Bridge Lead	23	18	Х	Х		Х	Х	Х							Х
Jared Winchenbach, PE*	Sr. Highway Engineer/Project Manager	8	8		Х	Х				Х						
Brandon Havu, PE*	Sr. Highway Engineer/Project Manager	13	7		Х	Х				Х						Х
Paul Bakis, PE	Lead Highway Engineer	23	1	Х	Х	Х			Х	Х			Х			Х
Arthur Bonney, PE	Highway Engineer/QA/QC	19	2		Х	Х			Х	Х						Х
Travis Landry, PE*	Highway Engineer/Project Manager	7	7		Х	Х				Х						Х
Amy Floren, PE*	Bridge Engineer	28	2		Х		Х	Х								
Rafic Khalil, PE	Bridge Engineer/QA/QC	36	5				Х	Х								Х
Marcia Kelly, PE	Bridge Engineer	40	2		Х		Х	Х								
Jon Werton, PE	Bridge Engineer	6	5				Х									
Nathaniel Busher, PE	Bridge Engineer	8	2				Х									
Randy Dunton, PE*	Sr. Traffic Engineer/Project Manager	29	16	Х	Х	Х				Х			Χ			Х
Bruce Stegman, PE	Geotechnical Engineer	44	7											Х		
Amanda Taylor	Architectural Historian	18	12		Х							Х				
Michael Falla, NBIS	Bridge Inspector (NBIS)	27	7				Х									
Timothy Merrithew, NBIS	Bridge Inspector (NBIS)	14	7				Х									
Michael Barden	Sr. Utility Coordinator	43	4			Х	Х									
Subconsultants																
Sean Sweeney, PE, LWS	Hydraulic Engineer	26	16								Х					Ш
Lee Carbonneau, LWS	Scientist	37	34									Χ				
William Doucet, PS	Surveyor	36	33												Х	
*Gorrill Palmer professional																





Town of Newport, NH

Lori L. Schinck Admin of Public Works Town of Newport 15 Sunapee Street Newport, NH 03773 Phone: 603.863.3650

Email: tcartier@newportnh.gov

Example Project Experience:

- Oak Street Bridge Replacement Bridge and highway approach design, environmental and cultural resources compliance, hydrology, survey, right-of-way, public process, and construction services for federally-funded LPA bridge replacement
- Sand Hill Bridge Replacement Bridge and highway approach design, environmental and cultural resource compliance, hydrology, survey, right-of-way, public process and construction services for this federally funded LPA bridge project.

Town of Weare, NH

Naomi L. Bolton, Town Administrator

Town of Weare

15 Flanders Memorial Road

Weare, NH 03281 Phone: 603.529.7525

Email: nbolton@weare.nh.gov

Example Project Experience:

 Peaslee Road Bridge Replacement – Bridge and highway approach design, environmental and cultural resources compliance, hydrology, survey, right-of-way, public process, and construction services for Municipally Managed State Aid Program

Town of Windham, NH

David Sullivan, Town Administrator (Retired)

Brian McCarthy, Town Administrator Town of Windham

4 North Lowell Road Windham, NH 03087 Phone: 603.432.7732

Email: TownAdmin@WindhamNH.gov

Example Project Experience:

• Castle Hill Road Arch Culvert Replacement – CMP culvert replacement with approach design, environmental and cultural resources compliance, hydrology, survey, right-of-way, and public process.

APPENDIX: RESUMES



Education - BS, Civil Engineering. University of New Hampshire, 1989

Registrations- Professional Engineer (PE): NH #9777

Certifications

Local Public Agency Certification, No. 1823, NHDOT Local Project Administration, MaineDOT

WILLIAM ASHFORD, PE

Project Manager

Mr. Ashford has over 34 years of experience in Construction Engineering and Inspection, Program and Project management, and Quality Assurance/ Quality Control in New Hampshire and throughout New England. His diverse portfolio of projects includes large-scale, multifaceted transportation projects requiring the oversight of numerous consultants, contractors, and concurrent tasks on fast-track schedules. He has overseen teams of design and construction engineering and inspectors and has managed several on-call design contracts with the New Hampshire Department of Transportation (NHDOT). Mr. Ashford possesses strong leadership and management skills needed for budgeting, scheduling, and implementation. He develops and maintains client relationships to achieve and exceed the goals and expectations of the client with project deliverables. Mr. Ashford joined Kleinfelder in January 2022 as a Senior Project Manager and QA/QC Manager.

SELECT PROJECT EXPERIENCE:

- Henry Law Avenue and River Street Reconstruction, City of Dover, NH
- Sand Hill Road Bridge, Town of Newport, NH
- Quality Assurance/Quality Control Assurance, MassDOT
- Statewide Bridge Scour Plans of Action, Statewide, NH
- F.E. Everett Turnpike, Bedford/Merrimack/Nashua, NH
- On-Call Design Contracts, NHDOT, Statewide



Education - MS, Civil Engineering. University of Maine- Orono, 2000 BS, Civil Engineering. University of Maine - Orono, 1998

Registrations- Professional Engineer (PE): NH #14198

Certifications
Local Project Administration,
MaineDOT

Local Public Agency Certification, No. 2183, NHDOTOSHA 10

KEITH WOOD, PE

Lead Bridge Engineer

Mr. Wood has over 20 years of experience designing and managing transportation infrastructure projects in the Northeast. As Lead Bridge Engineer and Project Manager, Mr. Wood has guided projects from preliminary design through final design and PS&E. He has also provided construction oversight and construction engineering services for major bridge projects. His breadth of experience with bridge design includes short, medium, and long, simple, and multi-span bridge rehabilitation and replacement projects, which includes full replacements, deck replacements, wearing surface replacements, and rehabilitations. He has also completed bridge evaluation studies, bridge load ratings, multi-use trail, pedestrian bridges, and highway reconstruction projects. Mr. Wood provided preliminary and final design for the Whittier Street Bridge replacement in Dover, a NH Municipally Managed Bridge Aid Program project.

- NH Route 101 over Pulpit Brook, NHDOT, Bedford, NH
- Oak St. & Sand Hill Bridge Replacements, Town of Newport, NH
- Whittier Street Bridge Replacement, City of Dover, NH
- Main Street Bridge Replacement, City of Keene, NH
- Brewer Riverwalk Trail, MaineDOT, Brewer, ME
- Bridge Load Ratings, MaineDOT, Statewide



Education - MS, Civil Engineering. University of Massachusetts -Lowell, 1985

BS, Civil Engineering. Merrimack College, 1982

Registrations- Professional Engineer (PE): NH #10725

Professional Affiliations American Society of Civil Engineers, NH Chapter

RAFIC KHALIL, PE

QA/QC Manager/Sr. Bridge Engineer

Mr. Khalil has over thirty years of diversified structural engineering and project management experience focusing on bridge and transportation projects in design, rehabilitation, and rating of basic to complex steel, concrete, and timber bridges, including historic bridges and concrete and masonry arches. Mr. Khalil's experience includes management and design of various Transportation, Infrastructure, Environmental, Water/ Wastewater, Parks, and Site projects and structures including construction administration services, for municipal, private, public, and state clients. He has worked on numerous bridge projects for municipal clients in MA, where he served as project manager and engineer coordinating multidisciplinary teams and public outreach, Mr. Khalil served as the Project Manager and Lead Bridge Engineer for the rehabilitation of a historic three-span concrete arch bridge in Cambridge, MA. This multidisciplinary project included final design and PS&E along with traffic engineering, hydraulics, environmental permitting, cultural resources compliance, and extensive public stakeholder involvement.

SELECT PROJECT EXPERIENCE:

- Anderson Memorial Bridge Rehabilitation, MassDOT, Cambridge, MA
- Vine Brook Accessway Timber Bridge, Town of Burlington, MA
- Palmer Road Bridge Replacement, MassDOT, Ware, MA
- Pierce Crossing Road Bridge Replacement, Town of Jaffrey, NH
- Union Station Intermodal Transportation Center Rehabilitation, Worcester, MA



Education - MS, Civil Engineering. Illinois Institute of Technology, Chicago, IL 1999

BS, Civil Engineering. State University of New York, Buffalo, NY 1994

Registrations- Professional Engineer (PE): NH #15142

Certifications - Safety Inspection of In-Service Bridges, NBIS

AMY FLOREN, PE

Sr. Bridge Engineer/Project Manager

Ms. Floren is a Senior Bridge Engineer with 27 years of experience. Her background includes the design, inspection, and ratings of bridges in Maine, New Jersey, West Virginia, Illinois, Georgia, and Utah. She has been involved in all project aspects including inspection, construction, load ratings, and design of pedestrian, trail, rail, and highway transportation bridge projects. Ms. Floren has designed externally post-tensioned strengthening of existing steel girders for a fracture-critical bridge in Maine, as well as internally post-tensioned pier caps for bridges in several states. She provided quality control of prestressed concrete beam bridge plans and calculations ensuring the release of plans on schedule for design-build and accelerated bridge construction projects in Utah. Ms. Floren has volunteered with Bridges to Prosperity on the construction of footbridges in Peru and East Timor and is currently assisting the organization Engineers in Action university teams' footbridge design projects in Bolivia.

- Mill Hill Bridge, MaineDOT, Deer-Isle Stonington, ME
- Route 7 over Des Plaines River, Lockport, IL
- York River Bridge, Maine Turnpike Authority, York, ME
- Androscoggin River Overpass, Maine Turnpike Authority, Auburn-Lewiston, ME

Education - BS, Civil Engineering. University of Maine - Orono

Registrations- Professional Engineer (PE): NH #15666

Professional Engineer (PE): ME #9244

Certifications

Local Public Agency Certification, No. 2008, NHDOT Local Project Administration, MaineDOT

DON ETTINGER, PE

Principal/Project Manager - Gorrill Palmer

Mr. Ettinger is the Principal/Project Manager at Gorrill Palmer and leads the firm's Transportation Engineering Group. He has over twenty-seven years of experience in transportation engineering. His experience includes planning and design for roadway, intersection, pedestrian and bicycle facilities, rail, transit, and bridge projects. He has first-hand knowledge of project development processes and procedures, having served as a project manager for many public and private sector projects. In addition to working directly with state transportation agencies, Don is experienced in MaineDOT Local Project Administration (LPA) and works with several municipalities in Maine on state and municipal transportation projects.

SELECT PROJECT EXPERIENCE:

- Route 4/17 Reconstruction, Jay, ME
- Franklin Street Corridor Study & PDR, Portland, ME
- Memorial Traffic Circle Improvements (LPA), Kittery, ME
- Hampshire Street Reconstruction, Auburn, ME
- Somerset Street Restoration (LPA), Portland, ME
- Route 35 Sidewalk Improvements (LPA), Windham, ME
- Broadway Corridor & Intersection Improvements (LPA), Bangor, ME
- Hotel Road Improvements (LPA), Auburn, ME

Education - BS, Civil Engineering. University of Maine - Orono

Registrations- Professional Engineer (PE): NH #14676

Professional Engineer (PE): ME #8686

Certifications

Local Public Agency Certification, No. 1226, NHDOT

RANDY DUNTON, PE, PTOE

Project Manager/Sr. Traffic Engineer - Gorrill Palmer

Mr. Dunton, Project Manager/Sr. Traffic Engineer, is a partner at Gorrill Palmer and manages the Transportation Planning Group. He has over twenty-seven years of experience in traffic and transportation engineering. He has worked for both the private sector as well as with the Maine Department of Transportation as the Region Traffic Engineer for the southern region of Maine. His design and project management experience include traffic signal design, traffic permitting, intersection and corridor designs, feasibility studies, traffic calming design, safety evaluations and analysis, traffic modelling and analysis, peer reviews. Mr. Dunton is a licensed PE in both NH and ME, a certified Professional Traffic Operations Engineer (PTOE), and has numerous IMSA Certifications.

- Route 236 Corridor Study, Kittery/Elliot, ME
- Waterville Downtown Study, Waterville, ME
- Stillwater Avenue Corridor Study, Old Town, ME
- Broadway Corridor and Intersection Improvements (LPA), Bangor, ME
- Washington Avenue Intersection Improvements, Portland, ME
- Broadway Improvements, South Portland, ME
- Franklin Street Corridor Study & PDR, Portland, ME

Education - BS, Civil Engineering. University of Maine - Orono Registrations- Professional Engineer (PE): ME #16113

JARED WINCHENBACH, PE

Project Manager/Sr. Highway Engineer - Gorrill Palmer

Mr. Winchenbach is a Project Manager/Sr. Highway Engineer at Gorrill Palmer within the firms Transportation Engineering Group. He has over six years of experience in transportation engineering design, drafting and plan production. His project experience includes roadway reconstruction, rehabilitation, downtown planning studies, pedestrian and bicycle facilities, intersection geometric and safety improvements, traffic calming and traffic signal upgrades. He has managed design efforts for projects of varying size and scope and is well versed with the project development process for highway, multimodal and traffic projects. Mr. Winchenbach is also experienced with utility and environmental coordination. Since joining Gorrill Palmer, Mr. Winchenbach has participated in numerous MaineDOT Local Project Administration (LPA) projects with several Maine municipalities.

SELECT PROJECT EXPERIENCE:

- Recreation Trail, The Forks, ME
- Oak Grove and Judkin Ave Sidewalk Improvements (LPA), Bath, ME
- Hampshire Street Reconstruction, Auburn, ME
- Somerset Street Restoration (LPA), Portland, ME
- Route 109 (Main Street) Sidewalk Construction with HMA Overlay, Sanford, ME
- Cedar Street Parking and Sidewalk Improvements (LPA), Brunswick, ME
- Hotel Road Improvements (LPA), Auburn, ME



Education - BS, Physics, University of Massachusetts, Amherst, MA, 2002 Registrations- Professional Engineer (PE): MA #51576 Professional Affiliations Association of Pedestrian and Bicycle Professionals

ARTIE BONNEY, PE

QA/QC Manager/Highway Engineer

Mr. Bonney is a Project Manager Urban Transportation with over 18 years progressive experience in the planning, design, and management of transportation engineering projects. He specializes in urban roadway reconstruction projects that restore equity to communities and increase their safety, resiliency, and health. Artie is experienced in the planning, design and holistic integration of roadway corridors, enhanced pedestrian and bicycle safety treatments, innovative multimodal infrastructure, bus transit priority, sustainable green stormwater management practices and subsurface utilities. He understands the importance of providing infrastructure and urban design providing universal access. He manages interdisciplinary teams and their preparation of concept plans, memos and technical reports, contract documents and construction phase services.

- Kendell Square Urban Redevelopment Area Streetscape Design, Cambridge, MA
- River Street Infrastructure and Streetscape Infrastructure, Cambridge, MA
- Neighborhood Slow Streets Traffic Calming, Boston, MA
- Connect Historic Boston Bike Trail, Boston, MA

Education - MS, Geotechnical Engineering. University of Maryland, College Park, 1981

BS, Civil Engineering. Drexel University, Philadelphia, 1979

Registrations- Professional Engineer (PE): NH #15906

Professional Engineer (PE): MA #54719

Professional Engineer (PE): ME #PE15769

Education - MS, Wildlife Ecology. University of New Hampshire

BS, Forest Biology, SUNY College of Environmental Science and Forestry

Certifications

NH Professional Wetland Scientist #882

NH Certified Wetland Scientist #123

Education - MA, Public History, Indiana University - Indianapolis, 2009

BA, History & International Affairs, Muskingum College, OH, 2004

Professional Affiliations

WTS - ME Chapter, Scholarship Committee Chair

BRUCE STEGMAN, PE

Sr. Geotechnical Engineer/Geotechnical Team Lead

Mr. Stegman has 44 years of engineering, management, and field explorations of both normal and difficult soil and rock experience. He involved with a wide variety of projects including towers, roadways, structures with shallow and deep foundations, retaining walls, underpinning, storm water management impoundments, embankments, reinforced embankments, slope stability analysis, and failure investigations.

SELECT PROJECT EXPERIENCE:

- Baltimore County Road over CSXT, Baltimore County, MD
- Kunkle Bridge, Cumberland County, PA
- Mountain View Highway Occupancy Permit, Schuylkill County, PA

LEE CARBONNEAU, CWS

Sr. Principal Scientist - Normandeau

Ms. Carbonneau has over 30 years of experience assessing terrestrial and wetland communities throughout the Northeast. Her skills include wetland delineation and assessment, mitigation design, and wildlife inventory and habitat assessment. She manages ecological support projects for transportation clients, ecological risk assessment, hazardous waste site remediation, and commercial industrial developments.

SELECT PROJECT EXPERIENCE:

- Oak Street Bridge Replacement, Town of Newport, NH
- NH Route 101 over Pulpit Brook, NHDOT, Bedford, NH

AMANDA TAYLOR

Architectural Historian

Ms. Taylor has 15 years of experience as a Secretary of the Interior qualified professional Architectural Historian. She has extensive experience with federal and state cultural resources compliance. She is adept at navigating cultural resources compliance from conducting historic resource surveys to completing mitigation measures, such as recordation or interpretive panels.

SELECT PROJECT EXPERIENCE:

- Oak Street Bridge Replacement, Town of Newport, NH
- Peaslee Road Bridge Replacement, Town of Weare, NH

Education - BS, Civil & Environmental Engineering. Clarkson University, NY, 1993

Registrations- Professional Engineer (PE): NH #11053

SEAN SWEENEY, PE, CWS

Hydraulic Engineer - Headwaters Consulting, LLC

Mr. Sweeney has over 20 years of experience in hydrology, hydraulic engineering, environmental permitting, and land surveying. He has significant experience with transportation projects in New Hampshire and has provided fluvial geomorphic assessments, precipitation runoff modeling, stream restoration design, construction oversight, and post-construction monitoring,

- Oak Street Bridge Replacement, Town of Newport, NH
- Castle Hill Road Culvert Replacement, Town of Windham, NH

APPENDIX: PROJECTS

Replacement of Oak Street Bridge over the Sugar River, Newport, NH



Client: Town of Newport, NH

Services Provided: Bridge Design •
Roadway Design • Hydrology and
Hydraulics Analysis • Drainage
Design & Stormwater Management
• Subsurface Investigation &
Geotechnical Engineering • Utility
Coordination & Relocation •
Public Involvement • Right-ofWay Assistance • Environmental
Permitting • Cultural Resources •
Contract Document Development •
Bidding Assistance • Construction
Administration and Observation

Kleinfelder provided design and construction phase engineering services for the replacement of a 1937 historic truss bridge. This project included federal funding through the Federal Municipal Off System Bridge Program (MOBRR). The Kleinfelder bridge team presented the Town with three alternatives for rehabilitation of the existing truss and two complete replacement alternatives and after a number of public meetings, Section 106 historic consultation, the proposed solution was a replacement with a new 118' clear span steel girder bridge with composite reinforced concrete deck on new concrete abutments.

Advantages:

- New structure with 75-year minimum design life
- Meets minimum hydraulic opening requirements
- Improvement NHDES Stream Crossing Guideline compliance
- Improved site distance
- Very low maintenance and life cycle costs

The Kleinfelder team worked diligently with NHDHR, NHDOT, FHWA, the Town, and other project stakeholders to expedite the Section 106 historic consultation process and the environmental process to gain the necessary support and approvals for NEPA compliance so that the project proceeded to final design and was ready for advertisement in early 2018. As part of the final design effort Kleinfelder secured the necessary permits from NHDES and worked with the Town to obtain the easements and utility relocations prior to advertising the project. This bridge aid project was federally funded and therefore required near full-time construction observation and increased construction administration efforts by the Kleinfelder team.

Replacement of Peaslee Road Bridge over Piscataquog River, Weare, NH



Client: Town of Weare, NH

Services Provided: Bridge Design •
Roadway Design • Hydrology and
Hydraulics Analysis • Drainage
Design & Stormwater Management
• Subsurface Investigation &
Geotechnical Engineering • Utility
Coordination & Relocation •
Public Involvement • Right-ofWay Assistance • Environmental
Permitting • Cultural Resources •
Contract Document Development •
Bidding Assistance • Construction
Administration and Observation

Kleinfelder provided complete design and construction phase services for the replacement of the Peaslee Road Bridge for the Town of Weare as part of the NH State Bridge Aid Program. The completed bridge is a 96' single-span weathering steel plate girder structure with a composite concrete deck with new concrete abutments and wingwalls supported on spread footings. The original structure was a historic one-lane steel girder structure with a single span of about 61'. Flooding had caused erosion damage to the roadway approaches and cut off access for the property owners on the east side of the river until the water subsided and repairs were completed. To reduce flood risks, the new structure was designed to accommodate the 100-year storm event, which required a substantial increase in span as well as a significant raising of the bridge and roadway approaches.

Since this bridge is located on a dead-end road, a temporary bridge was used to maintain access to all properties during construction. Kleinfelder worked closely with the Town to obtain easements from those property owners that were affected by the temporary bridge and the widening and realignment of the permanent roadway.

During construction Kleinfelder was instrumental in providing QA for the cast-in-place concrete substructures. The final construction cost finished 2.5% under the original bid amount of about \$925,000.

Sand Hill Road Bridge Replacement, Newport, NH



Client: Town of Newport, NH

Services Provided: Bridge Design/ Structural Engineering • Roadway Design • Subsurface Investigation/ Geotechnical Engineering • Hydraulics & Hydrology • Environmental Permitting • Cultural Resources • Contract Development • Bidding Assistance • Construction Phase Engineering Kleinfelder was the prime consultant for preliminary and final design plans, specifications, and estimate (PS&E) for the bridge replacement project located on Sand Hill Road over Long Pond Brook. The project scope included bridge replacement, widening of the roadway to 22'-0", upgrade of the bridge railing and roadway guardrails. The goal was to match the horizontal alignment to the greatest extent possible while moving the roadway centerline upstream as necessary to minimize impacts to the ditch and stonewall along the downstream side of the north approach.

The proposed structure consists of a 34' span Butted Precast Concrete Deck Beam superstructure founded on a spread footing substructure. This replacement alternative has a slightly higher cost in terms of upfront construction costs, but it has many construction advantages especially under a tight construction schedule (temporary emergency repairs/shoring of the superstructure was done in January of 2021), is lower maintenance with minimal lifecycle costs and have a minimum 75-year service life making it a better long-term solution. To expedite construction, the road was closed during construction and traffic was detoured on local roads.

Brewer Riverwalk Trail - Phase II, Brewer, ME



Client: MaineDOT

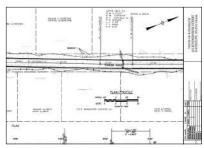
Services Provided: Trail Design
• Structural Design • Drainage
Design & Stormwater Management
• Utility Coordination & Relocation
• Public Involvement • Right-of-Way
Assistance • Cultural Resources •
Contract Document Development •
Bidding Assistance • Construction
Inspection

Kleinfelder provided preliminary and final design and cultural resources compliance for the Riverwalk Trail Phase II project, located along the Penobscot River in Brewer. Kleinfelder worked closely with MaineDOT and Brewer's City Engineer and Planner to finalize plans and design a safe and creative alternative that avoided crossing the heavily travelled intersection of Main and Wilson Streets. Kleinfelder designed a tunnel through the curtain wall of the abutment of the Joshua Chamberlain Bridge and maintained the trail along the river front to avoid this busy intersection. Kleinfelder oversaw right-of-way mapping, geotechnical engineering and electrical design for the trail lighting, security system, and public Wi-Fi.

The design also avoided impacts to Brewer's Veterans Park and eliminated a costly trail switchback structure. The design at this location also improved a large apartment complex parking area by locating the trail to the westerly border of the property. A new retaining wall replaced a deteriorated one and provided the trail with greater width and a green esplanade along the street. Through the redesign of sidewalks, improved parking, lighting replacement, and improved business access as part of the trail design, the Center Street downtown area is now a more inviting area for existing and new businesses. Safety improvements were made by updating all the crossings to gain access downtown and provide ADA access. Finally, Kleinfelder worked closely with the City of Brewer to provide low cost, but attractive, landscaping with cedar post fencing and hardy drought resistant plants.

This project received a 2019-2020 Engineering Excellence Award from the American Council of Engineering Companies of Maine for Engineering for Civic Value.

Road Reconstruction, Fairview and Belmont Avenues, Randolph, ME



Client: Town of Randolph, ME

Kleinfelder is providing the Town of Randolph with design, environmental, and construction administration services for the reconstruction of two residential roads. Fairview Avenue will include 1,650' of reconstruction and Belmont Avenue 2,750' of reconstruction. Design services include preliminary and final design through to PS&E and bid documents for road reconstruction, sidewalk reconstruction, and closed drainage. Our team will work closely together to minimize potential impacts to nearby wetlands and streams. Services Provided: Highway Engineering • Drainage Design & Stormwater Management • Utility Coordination • Public Involvement • Right-of-Way Assistance • Environmental Permitting • Contract Document Development • Bidding Assistance • Construction Inspection

Castle Hill Road Arch Culvert Replacement, Windham, NH



Client: Town of Windham, NH

Kleinfelder has provided the Town of Windham with preliminary and final design and will be providing construction phase services for the replacement of the CMP culvert with concrete headwalls on Castle Hill Road over the East Channel of Beaver Brook. This NHDOT Municipal Bridge Aid Project will result in the replacement of the CMP culvert with a 24' rigid frame bridge. The project included coordination with state and local environmental regulations. Services Provided: Bridge Design • Roadway Design • Hydrology and Hydraulics Analysis • Drainage Design & Stormwater Management • Geotechnical Engineering • Public Involvement • Right-of-Way Assistance • Environmental Permitting • Cultural Resources • Contract Document Development • Bidding Assistance • Construction Administration and Observation

East Main Street Highway Improvements, Bradford, NH



Client: Town of Bradford, NH

Services Provided: Roadway Design
• Drainage Design & Stormwater
Management • Utility Coordination
• Public Involvement • Right-ofWay Assistance • Environmental
Permitting • Cultural Resources •
Contract Document Development •
Bidding Assistance • Construction
Administration and Observation

Kleinfelder was the prime consultant for design of this highway improvement project, leading preliminary and final design and environmental compliance and construction phase services. The scope of work included improvements to 1,700' of roadway on East Main Street in the Town's central district and intersections with Route 114 and Route 103.

Kleinfelder's design provided a consistent roadway and ADA compliant sidewalks and improved roadway geometry with no land takings or permanent easements. The addition of sidewalks and paved shoulders provided new alternatives for non-motorized transportation and improved access and safety. The roadway profile and cross slopes were developed through an iterative process that reduced the overall construction impact and reduced the volume of earthwork. The project area included several National Register-eligible properties, which required additional consultation to avoid impacts while maintaining the project budget. The project was funded with Transportation Enhancement (TE) funds, a precursor to the TAP program. Kleinfelder provided full-time construction inspection and functioned as a stakeholder liaison and coordinated directly with local business owners and abutters to resolve any issues affecting their properties.

Franklin Street Corridor Improvements, Portland, ME



Client: MaineDOT and City of Portland

Gorrill Palmer provided a corridor planning study and preliminary (25%) design development for the Complete Street's transformation of the Franklin Street arterial in Portland. This design provides a better balance by serving all modes of transportation. Design included geometric improvements for several major/minor intersections (including a single lane roundabout), I-295 ramp modifications, sidewalk and ADA accommodations, bicycle lanes/multi-use pathways, and other related roadway features.

Services Provided: Roadway Design/Engineering •
Transportation Planning • Traffic Research/Engineering • Intersection
Design/Engineering, Roundabout Layout • Multimodal Design/Engineering
• Public Involvement Process

Route 4/17 Highway Reconstruction, Jay, ME



Client: MaineDOT

Gorrill Palmer provided Preliminary and Final Design development for 1.25 miles of highway reconstruction on Route 4/17 in Jay. This design includes roadway alignments, super elevation, intersection reconfiguration and improvements, sidewalks and ADA improvements, open and closed drainage, guardrail/roadside safety, signing and striping, entrances, and other related highway features. This project also included design of retaining walls along the roadway and adjacent entrances.

Services Provided: Roadway Design/Engineering • Intersection Design/Engineering • Multimodal Design/Engineering • Geotechnical Design & Coordination • Public Involvement Process

Hotel Road Improvements, Auburn, ME



Client: City of Auburn

Gorrill Palmer is currently providing Preliminary and Final Design for this MaineDOT LPA project on Hotel Road in Auburn. This roadway improvement design includes roadway and intersection alignments, super elevation, open and closed drainage, entrances, and other related roadway features. This project also includes environmental coordination/permitting and utility coordination.

Services Provided: Roadway Design/Engineering • Intersection
Design/Engineering • Multimodal Design/Engineering • Local Project
Administration • Environmental Coordination/Permitting • Public
Involvement Process

Recreation Trail, The Forks & West Forks, ME



Client: MaineDOT

Gorrill Palmer provided design services for approximately 6 miles of recreational trail in the Forks and West Forks. This trail runs parallel and adjacent to the Kennebec River in the Forks and along the Dead River in West Forks, providing a great biking and walking experience in one of the most scenic locations in Maine. Services provided include multi-use path design, drainage design, and parking facility design.

Services Provided: Trail Design • Multi-Use Path Design • Multimodal Design/Engineering • Drainage Design • Parking Facility Design

Memorial Traffic Circle Improvements, Kittery, ME



Client: Town of Kittery

Gorrill Palmer provided Preliminary and Final design development for this operational and safety improvements project at the Memorial Traffic Circle in Kittery. Following the MaineDOT LPA process, this design included reconfiguration and alignment of approach roadways and splitter islands, truck aprons, bicycle lanes and multi-use pathway, open and closed drainage, access management, signing and striping, entrances, and other related roadway features.

Services Provided: Roadway Design/Engineering • Intersection Design/ Engineering • Roundabout/Traffic Circle Design • Multimodal Design/ Engineering • Local Project Administration • Public Involvement Process • Right of Way Mapping

Hampshire Street Improvements, Auburn, Maine



Client: City of Auburn

Gorrill Palmer provided Preliminary and Final Design services for the reconstruction of Hampshire Street in Auburn. This reconstruction project featured a Complete Streets transformation of the Hampshire Street corridor, providing improvements to the roadway structure and travel lanes while also implementing curb extensions, on-street parking, and sidewalks along both sides of the road. This project also included transit accommodations, lighting, landscaping, utility coordination and Right-of-Way mapping.

Services Provided: Roadway Design/Engineering • Intersection Design/Engineering • Multimodal Design/Engineering • Traffic Analysis • Transit Accommodations • Utility Coordination • Public Involvement Process

Webster Avenue Multi-Use Path, Bangor, ME



Client: MaineDOT

Gorrill Palmer provided Preliminary and Final design services associated with the roadway, multi-trail and, utility improvements associated with this bridge replacement project in Bangor. Services provided include roadway improvements to I-395, trail improvements to Webster Avenue, and replacement of the existing sewer main within the project limits. Gorrill Palmer provided additional design efforts for the development of detour plans for I-395, I-95, and other approach roadways to facilitate shutdown of I-395 during construction.

Services Provided: Roadway Design/Engineering • Trail Design • Multi-Use Path Design • Interstate Design • Traffic Control & Detour Design • Utility Design