



COUNCIL of GOVERNMENTS CENTRAL NAUGATUCK VALLEY

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Qualification Statement Submittal Form for Regulatory Dam Inspection Services and Other Dam Safety Related Engineering Services

Please save this document locally, fill in all applicable fields, and attach to your submittal e-mail.

A. Company Contact Information:

Company Name:	GEI Consultants, Inc.		
Street Address:	455 Winding Brook Drive, Suite 201	City:	Glastonbury
		State:	CT
		Zip Code:	06238
		Phone:	860.368.5301
		E-Mail:	mglunt@geiconsultants.com
Web Address:	www.geiconsultants.com	Primary Contact:	Matthew Glunt

Is this company registered to practice as a Professional Engineering Corporation in the State of Connecticut? YES NO

CT Registration#: PEC0000393

B. Company Description:

GEI Consultants is a nationally recognized expert on dam safety. We have completed work on over 2,000 dam and water resource-related projects to date for a variety of private owners, local governments, power companies, and mining companies, as well as for the U.S. Bureau of Reclamation, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Tennessee Valley Authority.

The work at your dam required by the new statutes will be handled by a team of professional engineers and scientists based from our local office in Glastonbury. In addition, we can count on the support of renowned dam safety experts spread across many of our 33 offices nationwide. Our professional staff includes experts in geotechnical, hydraulic/hydrologic, and structural engineering as well as environmental compliance and ecological studies. Your Project Manager at GEI will follow your project through the entire process, from the initial walk-through and inspection to remedial design and construction support, if these services are required.

GEI's experience covers the entire range of activities pertinent to dam design, safety evaluation, and rehabilitation. As a firm founded on engineering expertise, GEI has taken a leadership role in the application of advanced techniques to assess the condition and stability of masonry, concrete, and earthfill dams, levees, and appurtenant structures.

GEI has won numerous awards for engineering innovation and the quality of designs completed and constructed in our dam safety repair and rehabilitation practice, including the following notable projects:

2014 - American Council of Engineering Companies (ACEC - CT) Award of Merit - East Hartford FEMA Levee Accreditation

2010 - The Nicholas Humber Environmental-Energy Award for Outstanding Collaboration - Blue Hills

Covered Storage Project, Massachusetts Water Resources Authority

2010 - Connecticut Society of Civil Engineers ACE Merit Award FEMA Accreditation - Hartford Levee & Flood Control System

2009 - ASDSO Rehabilitation Project of the Year for Lake Burnt Mills Dam Rehabilitation, Virginia.

C. Staff Information

For key staff members that may be assigned dam safety related tasks, please provide the following information. For each staff member listed, attach a current resume to the submittal e-mail.

Staff 1 Name:	John McGrane, P.E.	Title:	Senior Professional
Primary Duties:	Program Management, Senior Technical Review	Connecticut P.E. License #:	PEN0013678
		Relevant Years Experience:	36 Resume Attached <input checked="" type="checkbox"/>
Staff 2 Name:	Peter M. Heynen, P.E.	Title:	Geotechnical Manager
Primary Duties:	Project Management, Senior Technical Review	Connecticut P.E. License #:	9618
		Relevant Years Experience:	36 Resume Attached <input checked="" type="checkbox"/>
Staff 3 Name:	R. Lee Wooten, P.E.	Title:	Vice President/Division Manager
Primary Duties:	Project Management, Senior Technical Review	Connecticut P.E. License #:	24808
		Relevant Years Experience:	37 Resume Attached <input checked="" type="checkbox"/>
Staff 4 Name:	Matthew Glunt, P.E.	Title:	Geotechnical Project Manager
Primary Duties:	Project Management, Engineering Analysis	Connecticut P.E. License #:	PEN0029702
		Relevant Years Experience:	10 Resume Attached <input checked="" type="checkbox"/>
Staff 5 Name:	James Nickerson, P.E.	Title:	Geotechnical Project Manager
Primary Duties:	Remedial Design	Connecticut P.E. License #:	26671
		Relevant Years Experience:	15 Resume Attached <input checked="" type="checkbox"/>

D. Services:

Please check the box next to any service your firm is qualified to undertake and interested in providing. If your firm offers other specialized dam-related services, please list them in the space provided. In following sections you will be asked to explain qualifications and provide examples of previous work and references for each service you check or list.

Dam Inspection <input checked="" type="checkbox"/>	Inundation Modeling and Mapping <input checked="" type="checkbox"/>	Other Specialized Dam Safety Related Services: Design of excavation support systems, Hydro power and FERC licensing, geotechnical instrumentation and structural monitoring
Dam Emergency Action Plan Preparation <input checked="" type="checkbox"/>	Hydrologic and Hydraulic Studies <input checked="" type="checkbox"/>	
Dam Operations and Management Plan Preparation <input checked="" type="checkbox"/>	Stability Analysis <input checked="" type="checkbox"/>	
Dam Repair Plan Preparation <input checked="" type="checkbox"/>	Underwater Investigation <input type="checkbox"/>	
Dam Removal Plan Preparation <input checked="" type="checkbox"/>	Dam Repair and Construction Monitoring <input checked="" type="checkbox"/>	

E. Qualifications:

Please explain your firm's qualifications for each service checked or listed in section D.

GEI is familiar with the new dam safety statutes in Connecticut (Public Act No. 13-197), including inspection, registration, and EAP requirements. We held a complimentary workshop to discuss the new regulations in early 2014 for all dam owners who had inspections coming due. We have experience coordinating work with CT DEEP and obtaining necessary permits from local, state, and federal bodies. If dam removal presents itself as an option, we also have experience proceeding through this regulatory process.

Inspection: The engineers at GEI have been performing periodic dam and levee safety inspections for over 35 years. The hundreds of dams we have inspected range in heights from 10 feet to over 400 feet, and include earthfill and rockfill embankments, as well as masonry, concrete, and RCC dams.

Emergency Action Plans (EAP): The new DEEP statutes require owners of high and significant hazard dams to develop and implement an Emergency Action Plan (EAP) and update it every two years. GEI engineers have prepared EAP's for many dams and have provided emergency preparedness and response training to state, federal, and local agencies.

Operations and Maintenance (O&M) Plans: GEI staff have experience in preparing operations and maintenance plans and commonly perform this service in conjunction with our engineering studies.

Repair Plans and Construction Monitoring: GEI has prepared drawings, technical specifications, and contract documents for a number of dam construction and rehabilitation projects, including the following: New dams ranging in size up to about 250 feet in height; Structures and features associated with new and rehabilitated dams – intake towers, spillways, outlet works, bridges, cutoff walls, seepage collection features, access roads, retaining walls, stability berms; Dam raises to enlarge normal operating pools or to increase freeboards; Reinforcements to improve static and seismic stability (seismic structural bracing, soil-mix shear walls, stability berms); Foundation grouting, filters and drains to improve seepage stability; Embankment overtopping protection (articulated concrete blocks, RCC, paving, riprap); Spillway enlargements and spillway repairs; Outlet works rehabilitation and replacement; and Dam breach / removal and site restoration.

Removal Plan Preparation: We know many of the nation's dams are aging. Owners and communities are faced with the question of what to do with these aging dams. One popular solution is removal and restoration. GEI specializes in environmental assessment, ecology, hydrology and hydraulics, remediation, geotechnical design, and construction support services. These inter-related disciplines offer beneficial insight into the assessment and resolution of multi-faceted projects, such as dam removal and restoration where ecological, hydrology and related engineering services are required.

H&H Studies/Inundation Mapping: As part of the permitting process, your dam may require a check of the governing hydrologic conditions and your dam's ability to safely pass significant storm events. A flood inundation study will also be requested as part of the EAP package, if one has not been prepared before or if conditions have changed. GEI has extensive experience in hydrologic and hydraulic studies to model flow through water conveyance facilities such as open channels, conduits, spillways, and outlet works. Computer modeling expertise includes HEC-1 and HEC-HMS hydrology model, HEC-2, HEC-RAS, UNET, and Flo2D hydraulic models. Hydraulic and hydrologic technical analyses and modeling extends to dam failure inundation studies (DAMBRK), reservoir operation and flood routing. GEI staff have decades of working experience in dam spillway evaluations using the NWS Hydro meteorological reports for the calculation of PMP and PMF.

Stability Analysis: GEI generally performs stability analyses of dams as part of its engineering studies. We are particularly well-known for our expertise in evaluating the seismic performance of dams.

Hydropower: GEI's focus to this industry has been on the safety aspects of hydro power including dam and facility inspections, evaluations of potential safety issues and design and construction of remedial measures to improve safety and operation reliability. Several of our staff have extensive backgrounds in planning, FERC licensing, and design of hydroelectric projects.

Geotechnical Instrumentation and Structural Monitoring: GEI has in-house equipment and capabilities for performing real-time survey measurements for structural monitoring using robotic total stations and a dedicated, controlled-access website for viewing data. We also have extensive experience in design, implementation, and review of geotechnical instrumentation programs.

GEI has extensive experience in design of excavation support systems including cantilever walls, braced excavations, tieback anchored excavations, soldier pile and lagging systems, secant-pile walls, sheetpile walls, soil nail support walls, and braced cofferdams.

F. Examples of Previous Work:

For each service checked or listed in section D, provide at least one comparable project completed by your firm within the past 10 years. Provide a brief description of the service rendered, the project name and location (Town and State), dam class, and a customer reference name and contact information (phone and/or e-mail)

Service Provided	Dam Name and Location	Dam Class	Customer Reference Name	Customer Reference E-mail/ Phone
Phase 1 Inspection, Emergency Action Plan	Gallup Pond Dam, North Stonington, CT	B	Carl Hobbs	carlhobbsiii@gmail.com
Phase 1 Inspection, Emergency Action Plan, O&M Plan	Cellu-Tissue Dam, East Hartford, CT	B	Cellu-Tissue Martha Smigel	Martha.smigel@clearwaterpaper.com
Inspection, analysis, and conceptual design of remedial measures	Browns Reservoir, Grupes Reservoir, Norwalk, CT	C	Norwalk Water Dept Mike Elliot, P.E.	(203) 847-7384
Design of remedial measures, construction monitoring	Tide Mill Dam, Fairfield, CT	A	Ken Money	Ken.Money@vale.com
FEMA Accreditation, inspections, remedial design, construction monitoring	East Hartford Flood Control System	N/A	Town of East Hartford	Denise Horan (860) 291-7384
FEMA Certification, inspections, engineering evaluation, remedial design	Hartford Levee and Flood Control System	N/A	City of Hartford	Bob Umashankar (860) 757-9985
Remedial design, construction monitoring	Bell Shop Pond Dam, Higganum, CT	BB	Kenyon Labs Ron Denman	(860) 345-2097
Annual inspections, EAP, remedial design, construction monitoring	Upper & Lower Stoneville Reservoirs, Auburn, MA	C	Auburn Water District Ken Smith	(508) 832-5336
Phase 1 inspection	Cohasse Brook Reservoir, Southbridge, MA	C	Southbridge Water Dept. Tom Cutler	(508) 764-3207
Annual inspections, EAP, remedial design, construction monitoring	Dark Brook Reservoir, Auburn, MA	C	Auburn Water District Ken Smith	(508) 832-5336
Phase 1 inspection, permitting and remedial design	Mill Pond Dam, Rockport, MA	B	Town of Rockport, Joseph Parisi	(978) 546-3525
Seismic Evaluation	Moore & Comerford Dams, NH, VT	C	TransCanada Justin Donaghy	Jud_Donaghy@transcanada.com
Design for modifications to toe drain, instrumentation, and spillway	Winsor Dam, Ware, MA	C	MWRA Tiffany Tran	(617) 570-5430
Dam safety evaluations, 20+ inspections, remedial design plans	Mass. (Various)	A/B	Mass. Audobon Society Stu Weinreb	(781) 259-2113
Phase 1 inspection, follow-up consulting on repairs	Andover, MA	B	Foster's Pond Corp. Stephen Cotton	(978) 475-5679