



COUNCIL of GOVERNMENTS CENTRAL NAUGATUCK VALLEY

49 Leavenworth Street, Suite 303, Waterbury, CT 06702 · 203-757-0535 · cogcnv.org

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: | GHD Inc | | |
| Street Address: | 100 Roscommon Drive Suite 301 | City: | Middletown |
| | | State: | CT |
| | | Zip Code: | 06457 |
| | | Phone: | 860 316 2400 |
| | | E-Mail: | bethann.smith@ghd.com |
| Web Address: | www.ghd.com | Primary Contact: | Beth Ann Smith |

Is this company registered to practice as a Professional Engineering Corporation in the State of Connecticut? YES

NO

CT Registration#: 0001202

B. Company Description:

As one of the world's leading engineering, architecture and environmental consulting companies; GHD employs more than 5500 people across five continents and serves clients in the global markets of water, energy and resources, environment, property and buildings, and transportation. Conestoga-Rovers & Associates (CRA) and GHD announced in March that they have entered into an agreement to merge the two companies. The merger is expected to close in July 2014. Once complete, this will be one of the largest true mergers to have occurred in the engineering and environmental industry, with the two firms combining resources, pooling their equity interests, and each company's shareholders becoming mutually dependent on each other for the creation of value over time. CRA is a 3,000-person multi-disciplinary engineering, environmental, construction, and information technology (IT) services firm. Together GHD and CRA professionals will be well positioned to respond to the specific scope of services requested by members of the Central Naugatuck Valley for Dam Safety Related Engineering Services.

The cornerstone of our business is our client-centered culture and teamwork-based approach known as One GHD. Operating globally and delivering services locally, we are united by the core values of Teamwork, Respect and Integrity. GHD has local presence in Connecticut for our project team and project partners, but has additional experience with dam safety regulatory compliance in neighboring states and resources worldwide. GHD has one of the largest dedicated dams teams across the globe. This team is backed by industry professionals in related fields including geotechnical engineering, geology, hydrogeology, hydrology, river hydraulics, structural engineering, environmental sciences and materials technology. Having our expansive network of technical professionals provides us with instant access to a wealth of forward thinking, technical professionals, but also cost savings to our client since these resources can be accessed readily through our established GHD worldwide communication network.

GHD is committed to safety, environment, quality and integrity. We put our clients first, care for the wellbeing of our people, assist communities in need and conduct business in an ethical and environmentally responsible manner. You can expect surety of outcome through our depth of experience and breadth of services. We will work closely with you throughout the entire project life cycle to develop safe, innovative and cost-effective outcomes, maximizing benefits for all stakeholders.

GHD operates under a Practice Quality Management System, ISO 9001:2008 and an Environmental Management System, ISO 14001:2004 which are certified by Lloyds Register Quality Assurance.

For more information, visit www.ghd.com

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: | Beth Ann Smith, PE BCEE | Title: | Geotechnical Engineer |
| Primary Duties: | Project Manager for regulatory compliance projects involving O&M plans, EAPs, safety inspections and engineering assessment plans. Other dam projects include design, permitting and construction of rehabilitations for dams and decommissioning dams. | Connecticut P.E. License #: | NY PE: 068971 |
| | | Relevant Years Experience: | 26 Resume Attached <input checked="" type="checkbox"/> |
| Staff 2 Name: | Dustin Briere, EIT | Title: | Hydraulics and Hydrology Engineer |
| Primary Duties: | Regulatory compliance projects involving operation and maintenance plans, emergency action plans, safety inspections and engineering assessment plans. | Connecticut P.E. License #: | CT EIT: 0010366 |
| | | Relevant Years Experience: | 2 Resume Attached <input checked="" type="checkbox"/> |
| Staff 3 Name: | Chris Kwasniewski | Title: | Structural Engineer |
| Primary Duties: | Structural engineer for regulatory compliance projects involving O&M plans, EAPs, safety inspections and engineering assessment plans. Other dam projects include design, permitting and construction of rehabilitations for dams and decommissioning dams. | Connecticut P.E. License #: | NY PE: 81520 |
| | | Relevant Years Experience: | <input type="text"/> Resume Attached <input checked="" type="checkbox"/> |
| Staff 4 Name: | Jeffrey Lambert, PE LEP LSP | Title: | Associate |
| Primary Duties: | Civil and environmental engineering, environmental and regulatory compliance. | Connecticut P.E. License #: | 24811 |
| | | Relevant Years Experience: | 17 Resume Attached <input checked="" type="checkbox"/> |
| Staff 5 Name: | Stuart Manley, LEP CHMM | Title: | Senior Project Manager |
| Primary Duties: | Safety inspections for masonry and concrete dams, hydroelectric development, and wetland permitting/mitigation plans. | Connecticut P.E. License #: | CT LEP: 367 |
| | | Relevant Years Experience: | 31 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: <div style="border: 1px solid black; height: 100px; width: 100%;"></div> |
| 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.

GHD and CRA will meet your engineering needs, as well as your expectations for responsiveness with the following:

-Experienced Project Team that has managed many dam engineering, natural resources permitting and stream restoration design and construction projects. By leveraging GHD's experience and expertise in dams, we have allowed our dam clients to maximize the benefits from their capital invested. Our project team includes engineers and scientists in the Connecticut offices, with regional resources in White Plains, NY and Cazenovia, NY from which to draw upon. The technical team reaches across our seamless network to Canada, Australia and New Zealand.

-Knowledge and Resources Worldwide through GHD's internal network, the project team will have instant access to key technical specialists in the field of dam engineering and stream restoration throughout the US and around the world. A broad depth of knowledge allows us to bring past and present project experiences to your local needs.

-Dedication to providing client service, meeting your vision for the project and the environment. This commitment allows us to deliver assignment on time and within budgets.

Experience

GHD staff has worked on a number of dam projects from the first dam design phases, permitting, construction, asset management and decommissioning projects throughout the world, and are adept at developing solutions with attention to the operational needs of our clients.

Identifying needs

We recognize our client's need for guidance and services that harness in-depth knowledge with forward thinking to produce innovative, safe and cost-effective outcomes. With the state regulations putting stricter responsibilities on dam owners, we realize our clients need for a trusted professional that is familiar with the process of regulatory transitioning. We'll work corroboratively with you to deliver results in line with these objectives.

Dam Inspections and Operations and Management Plans - Ongoing maintenance of the safety of a dam and associated infrastructure is crucial in protecting communities and your assets. We're experienced in all aspects of dam safety requirements including inspections, surveillance reviews, detailed safety reviews, development of dam safety documentation, dam safety training, and post-disaster inspection and assessment. A key strength of our team is the use of risk assessment for the review of both individual dams and dam portfolios.

Dam Emergency Action Plan (EAP); Inundation Modeling and Mapping and Hydrologic and Hydraulic Studies - We have prepared over 20 EAPs that have included inundation modeling and mapping with hydrologic and hydraulic studies. These have included high hazard and significant hazard dams in the highly populated areas and sparsely populated areas. The modeling has included straight stream channels in well defined valleys to meandering creek channels with in-line man-made structures and other dams to include in the process. For dams that may not have a rainy and sunny day event, we have looked at the incremental effect of a dam breach to storm events other than the design flood event.

Dam Engineering Assessment and Stability Analysis, Dam Repair and Removal Plan Preparation, Permitting and Construction Monitoring - We can work with you through the early phases of projects in the identification of project opportunities, site selection and optimization, site investigations including geotechnical, hydrogeological and hydrological/hydrometeorological assessments, feasibility and option studies, environment assessments and input for gaining statutory approvals. All of these skills can help to provide the options available for repair of the dam to meet regulatory compliance for maintaining the dam in place. The same skills can help to provide the options available for complete or partial removal of the dam. We provide design services through all phases of a project regardless of size from concept through to detailed engineering. Our experience covers all disciplines including foundation design, dam design including sizing, material zoning, structural and slope stability, investigation and assessment of construction materials, modelling, analysis and design of hydraulic and structural components, and design of mechanical components including gates and outlet works. We provide experienced construction engineers in both technical and project management through the construction phase to ensure the quality of the end result. We have provided numerous projects that started with an engineering assessment of the dam and appurtenances and ended with construction documentation filed with regulatory compliance.

Operational Support

Our people provide support throughout the operational life of dam assets in areas including asset management and valuations, condition assessments, dam safety and risk assessments, rehabilitation works including corrosion control and concrete repairs, sediment deposition management and seepage analysis and control solutions.

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 |
|---|---|-----------|---|--|
| Permitting, design and construction of Goodwives River Spillway Replacement | Country Club of Darien, Darien, CT | A | Tim O'Neill Country Club of Darien | 203-655-9726 toneill@ccdarien.org |
| Permit, design, and construction 34' Embankment Dam Rehab, EAP, I&M | Pocantico Lake Dam Westchester County NY | C | Jeffrey Dean Westchester County DPWT | 914-995-3361 jadc@westchestergov.com |
| Permit, design, and construction 30' Embankment Dam Rehab, EAP, I&M | New Rochelle Res No 3 Dam, Westchester County | C | Jeffrey Dean Westchester County DPWT | 914-995-3361 jadc@westchestergov.com |
| 85' Concrete Dam Engineering Assessment, Safety inspection, and EAP | Boyd Dam Lewis, NY | C | Frank Tallarino City of Rome | 315-339-7625 ftallarino@romecitygov.com |
| Permitting, design and construction of Rehabilitation of 24' Concrete Dam | Kessinger Dam Annsville, NY | A | Frank Tallarino City of Rome | 315-339-7625 ftallarino@romecitygov.com |
| Permit, design, and construction 30' Embankment Dam Rehab, EAP, I&M | Woodlands Lake Dam Westchester County, NY | C | Jeffrey Dean Westchester County DPWT | 914-995-3361 jadc@westchestergov.com |
| I&M, EAP, Engineering Assessment Earthen Embankment Dams | Little Falls Reservoir Dams Little Falls NY | B | Dan Benett City of Little Falls, NY | 315-823-0890 littlefalls.wtp@verizon.net |
| Safety Inspections, EAP, Engineering Assessment Earthen Embankment Dams | Water Supply Reservoir 1 and 2 Dams, Norwich NY | C | Carl Ivarson City of Norwich, NY | 607-334-1255 conwwtp@frontiernet.net |
| Permit, Design, and Construction Run of River dam structure removal | Canasawacta Creek Norwich, NY | D | Carl Ivarson City of Norwich, NY | 607-334-1255 conwwtp@frontiernet.net |
| Permit, design, and construction 9' Stone Dam Rehabilitation | Picture Pond Dam Stamford, CT | | Private Client | |
| EAP, Engineering Assessment Earthen Embankment Dams | Reservoirs No. 1, 2 & 3 Port Jervis, NY | C | Jack Farr City of Port Jervis, NY | 845-858-4000 |
| Permit, design, and construction Embankment Dam and 2 Dikes | Reservoir No 2 Main Dam Port Jervis, NY | C | Jack Farr City of Port Jervis, NY | 845-858-4000 |
| 2012 Dam Safety Inspection, EAP Update & Maintenance Activities | Thurston Pond Dam Naugatuck CT | C | Paul Meyer Chemtura Corporation | 203 573 3545 paul.meyer@chemtura.com |
| 2014 Dam Safety Inspection & Maintenance Activities | Thurston Pond Dam Naugatuck CT | C | Paul Meyer, Chemtura Corporation | 203 573 3545 paul.meyer@chemtura.com |
| 2012 Dam Safety Inspection, EAP preparation & Maintenance Activities | Long Meadow Pond Middlebury/Oxford CT | B | Paul Meyer, Chemtura Corporation | 203 573 3545 paul.meyer@chemtura.com |
| Hydroelectric Feasibility Study | Long Meadow Pond Middlebury/Oxford CT | B | Paul Meyer, Chemtura Corporation | 203 573 3545 paul.meyer@chemtura.com |
| Hydroelectric Feasibility Study | Thurston Pond Dam Naugatuck CT | C | Paul Meyer, Chemtura Corporation | 203 573 3545 paul.meyer@chemtura.com |
| 2013 Dam Safety Inspection | Conrad Pond Dam New Haven CT | B | Whyndam Abrams, Yale University | 203 432 2093 whyndam.abrams@yale.edu |
| Riverbank Restoration and Stabilization | Five-Mile Creek Norwalk, CT | | Lise Bacon Norwalk, CT | 203-838-0159 |
| Watercourse Assignments - relocation of Goodwives River Channel | Country Club of Darien, Darien, CT | | Tim O'Neill Country Club of Darien | 203-655-9726 toneill@ccdarien.org |