

REQUEST FOR QUALIFICATIONS
Design, Engineering, and Permitting for the Removal of the
Upper (067.07) and Lower (067.08) Sawyer Mill Dams
on the Bellamy River, Dover, NH

February 6, 2015



Upper Sawyer Mill Dam



Lower Sawyer Mill Dam



1 Mill Street, Dover, New Hampshire

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DISCLAIMER

This Request for Qualifications does not commit the Sawyer Mill Associates, Inc. to award a contract or pay any costs incurred during the preparation of the qualifications package. The dam owner’s reserve the right to reject any or all of the proposals for completing this work.

The dam owner’s also reserve the right to eliminate the need for the selected firm to complete one or more tasks, pending the outcome of preceding related tasks or issues.

REQUEST FOR QUALIFICATIONS

Design, Engineering, and Permitting for the Removal of the Upper (067.07) and Lower (067.08) Sawyer Mill Dams on the Bellamy River, Dover, NH

I. INTRODUCTION

The Upper (067.07) and Lower Sawyer (067.08) Mill Dams on the Bellamy River in Dover are candidates for removal to resolve dam safety issues, reduce flood hazard, and improve water quality and fish passage. The dam owner, Sawyer Mill Associates, Inc. (OWNER), is seeking an Engineering Firm/ Consulting Team (CONSULTANT) to conduct design, engineering, and permitting for the removal of both dams. Interested consultants are invited to submit a qualifications package in the manner and format described below. Submissions to this Request for Qualifications (RFQ) will be evaluated according to their adherence to Section III. REQUIRED QUALIFICATIONS SUBMISSIONS and Section IX. SELECTION CRITERIA, as described below. Favorable performance of the selected consultant for the design, engineering and permitting phase may lead to construction oversight services during the construction phase.

This project is being conducted through a partnership between the owner and the AGENCY PARTNERS, which include representatives from the New Hampshire Department of Environmental Services (Watershed Assistance Section, Coastal Program, and Dam Bureau), New Hampshire Fish and Game Department, US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and the National Fish and Wildlife Foundation. The owner has retained TTG Environmental Consultants, LLC to serve as its OWNER'S REPRESENTATIVE for evaluating qualifications packages, technical submittals, invoices, and providing budget, schedule, and project oversight. Together, the owner's representative, agency partners, and consultant are referred to as PROJECT TEAM.

II. BACKGROUND

The Upper (067.07) and Lower (067.08) Sawyer Mill Dams are located on the Bellamy River at river mile 4.45 and 4.38 (respectively). In 2009, the New Hampshire Department of Environmental Services - Dam Bureau (NHDES) issued a Letter of Deficiency (LOD) to the owner noting that both dams had been classified as "High Hazard" due to the proximity of the dams to inhabited mill buildings. The LOD indicated that the dams must be brought into compliance by passing 250% of the 100 year flood event with at least one foot of freeboard without dam operation. Initially the concept of lowering the dams to less than 6 feet in height was considered to remove the dams from state jurisdiction; however, that alternative was not pursued.

A Dam Removal Feasibility Study (DRAFT), submitted in 2014, considered the potential impacts associated with the removal of the Sawyer Mill Dams. As part of the Feasibility Study, the following existing conditions assessments were conducted: topographic and bathymetric surveys, wetland evaluation, river and sediment characterization, watershed modeling and river reach flow evaluation under a wide variety of rainfall and flow conditions. Post removal conditions were also evaluated as part of the Feasibility Study, which included the development of river reach modeling, sediment scour/transport evaluation, river reach geomorphology and habitat changes, and feasibility of fish passage. Additionally, the 'Sawyers Mill Dam Pond', located upstream of the dams, is on the state's 2012 303(d) list of impaired waters. The 20.71 acre impoundment does not support Primary Contact Recreation due to high levels of Chlorophyll *a* and *Escherichia coli*.

III. REQUIRED QUALIFICATIONS SUBMISSIONS

A. COVER LETTER:

The qualifications package must include a cover letter indicating primary contact for the consultant (including person's title, address, phone number, and email address). The cover letter should also state services the respondent is interested in rendering and any relevant professional certifications of the team (e.g., Professional Engineer, Certified Wetland Scientist, Certified Floodplain Manager, etc.).

B. TECHNICAL PROPOSAL AND APPROACH

The qualifications package must include a section that describes the consultant's proposed approach for the technical aspects of this project. The submission must be clear as to how the consultant will address all elements described in ATTACHMENT I - SCOPE OF WORK GUIDANCE. Respondents may propose alternative or supplemental tasks that they deem necessary for project success.

C. PROPOSED SCHEDULE

Respondents shall provide a schedule for completion of the proposed work. The schedule must include tasks as identified in the ATTACHMENT I - SCOPE OF WORK GUIDANCE. Project tasks shall be laid out in a flow chart (e.g. Gant chart) identifying the anticipated days to complete each task and the interrelationship of conducting and completing these tasks. The schedule should specifically indicate durations for completion of final design and permitting (including all Section 106 tasks) within an 18 month duration. The schedule must show total project completion (i.e. dams removed) by June 30, 2017. The schedule should allow for at least a 3 week review period for submittals requiring agency review.

D. CONSULTANT TEAM DESCRIPTION

The qualifications package shall describe the designated project manager and project team (including sub-consultants, specialists, etc.) including team member qualifications and their anticipated level of involvement in each phase of the project. An organizational chart showing lines of communication and decision-making hierarchy should also be included in the qualifications package. The qualifications package shall include curriculum vitae for key personnel. Consulting teams are required to be represented by the designated project manager. The designated project manager is required to oversee and ensure timely completion of all work completed by sub-contractors.

E. RELEVANT EXPERIENCE AND REFERENCES

The qualifications package shall include project reference pages, including relevant project summaries, past specific roles and responsibilities of the proposed project team, representative photographs, and contact information of references. These will preferably be clients for whom similar work has been performed within the past five (5) years.

IV. QUESTION PERIOD AND PROCEDURE

Questions concerning this RFQ will only be accepted in writing, which must be submitted via email to Kevin.Lucey@des.nh.gov by 5:00 pm ET on February 20, 2015. Questions must have the Subject

RFQ for Design, Engineering, and Permitting for the Removal of the Upper and Lower Sawyer Mill Dams, Dover, NH.

Line: "Design RFQ Question". Responses to questions will be compiled and emailed to all those that have submitted questions. Prospective respondents to the RFQ without specific questions may request responses to questions by emailing Kevin.Lucey@des.nh.gov with the subject line: "Design RFQ Question Response Request".

V. PRE-PROPOSAL SITE WALK

A pre-proposal site walk will be convened at Sawyer Mill Apartments on February 17, 2015 at 1pm. Snow delay date is February 18, 2015 at 1pm. Contact Kevin.Lucey@des.nh.gov to inquire about weather related delays. The pre-proposal site walk is mandatory.

VI. BID SUBMITTAL AND FORMAT

The deadline for receipt of responses to this RFQ is 5:00 pm on March 6, 2015. Each respondent shall submit an electronic version of their qualifications package via email as a single .pdf file (no larger than 10 MB) to Kevin.Lucey@des.nh.gov, attention Kevin Lucey. Qualification packages may also be submitted via regular or priority mail on a CD or other digital storage device to Sawyer Mill Associates at 1 Mill St. Dover, NH 03820. Hard copy submittals will not be accepted. Complete and timely submission of all required documents is required for the qualifications package to be considered.

VII. TIME LINE

February 6, 2015	RFQ Release
February 17, 2015	Pre-proposal site walk at 1pm. Snow delay date: 2/18/15 at 1pm.
February 20, 2015	Deadline for submission of questions on RFQ (5:00 pm ET)
February 27, 2015	Responses to questions emailed to those requesting a copy
March 6, 2015	Deadline for receipt of proposals to RFQ (5:00 pm ET)
March 25, 2015	Anticipated date of final consultant selection
April 2, 2015	Contract Start Date (Anticipated)

VIII. GEOGRAPHIC SCOPE



IX. SELECTION CRITERIA

Qualification packages will be evaluated according to weighted scoring of the following categories and criteria:

Categories:

- Specialized Experience of Consultant
- Relevant Experience of all Project Personnel
- Response of References

Criteria:

- a. An understanding of river engineering in the context of fluvial geomorphology and ecology, and the application of engineering services to river and stream restoration.
- b. An understanding of river ecology and ecosystem-based habitat restoration for multiple species and life stages.
- c. Experience with hydraulic and hydrologic analysis and modeling.
- d. Experience with structural and geotechnical assessments of infrastructure during construction projects.
- e. Experience conducting sediment management analysis, including quality, quantity and transport; ability to translate analytical results into a Sediment Management Plan.
- f. Experience developing quality assurance documents, such as Quality Assurance Project Plans, Site Specific Project Plans and Standard Operating Procedures, to guide collection and analysis of environmental data.
- g. Experience with successful preparation of federal and State of New Hampshire permit applications and approvals for river-related projects.
- h. Experience with Section 106 (National Historic Preservation Act) requirements as they relate to river restoration and dam removal projects in New Hampshire.
- i. Experience developing pre-construction and final designs and as-built / record drawings designs for river restoration projects in the Northeast (e.g. dam removal, channel design, daylighting, streambank stabilization, bioengineering, etc.).
- j. Successful preparation of bid documents and demonstrated effectiveness facilitating pre-bid meetings, site walks, and related correspondence.
- k. Demonstrated ability to complete the work within the required schedule and budget to achieve project goals within the projected timeline.
- l. Experience providing effective presentation of complex and sometimes controversial information to the public as well as demonstrated ability to effectively solicit, assess, and use comments and suggestions from stakeholders.
- m. Demonstration of successful cooperation and communication with private property owners, non-profit organizations, and local, state and federal agencies.
- n. Experience with construction oversight of contractors implementing plans and design specifications for river-related projects.

QUALITY BASED SELECTION (QBS) PROCESS: After the quality-based ranking is complete, a task-based cost proposal will be requested from the first ranked consultant and the owner will proceed with contract negotiations with the selected consulting firm. If these negotiations are not successful, the owner will negotiate with the second ranked consulting firm, etc. until a contract has been successfully negotiated. The negotiated contract will be based on fair and reasonable compensation for the services required.

RFQ for Design, Engineering, and Permitting for the Removal of the Upper and Lower Sawyer Mill Dams, Dover, NH.

ATTACHMENT I - SCOPE OF WORK GUIDANCE

The anticipated Scope of Work for this project is provided below for guidance purposes. Submissions will be reviewed and evaluated based on respondents' qualifications to perform tasks and services described in the scope. *Note that the Task number sequence presented below will correspond to the overall agreement between the State of New Hampshire and the owner. The selected firm for Design/ Permitting/ Engineering will not be responsible for completing Task 1 (below).*

1. Owner's Representative services (*not a component of this RFQ*).
2. Develop a Site Specific Project Plan (SSPP) or Quality Assurance Project Plan (QAPP) for environmental data gathering tasks for the Upper and Lower Sawyer Mill Dams Project, if required.
 - 2.1. Develop draft SSPP or QAPP, in accordance with NHDES guidance, and submit to NHDES Watershed Assistance Section (WAS) for review and comment.
 - 2.2. Incorporate/ address requested edits to draft SSPP or QAPP, then prepare and submit final SSPP or QAPP to WAS for final approval.
3. Analyze Hydrology and Hydraulics (H&H): HYDROCAD and HECRAS models were developed for the Sawyer Mill Dam Removal Feasibility Study to simulate the effects of dam removal on water velocity, width and depth under a wide variety of rainfall scenarios, the results of which pointed to areas of the project that require additional inquiry. As such, the next phase of work requires additional H&H analysis to evaluate: the potential effects of dam removal on stream banks, walls, abutments and piers; changes in flood water surface profiles; changes in sediment movement within the affected river reach; passage of target fish species during key migration times; and the impact of the project on other infrastructure at or near the site.
 - 3.1. Evaluate existing H&H models (HECRAS and HYDROCAD) and verify model inputs and outputs and develop a technical memorandum describing the H&H modeling verification process, findings, as well as recommended next steps. The technical memorandum should describe applicability of the existing model to conduct Letter of Map Revision (LOMR). Revise modeling to meet project needs, as appropriate.
4. Further characterize sediments in the Sawyer Mill Dam Impoundments and develop management strategies to minimize adverse sediment related impacts of dam removal.
 - 4.1. Develop Sediment Technical Memo: Synthesize previous sediment quality, quantity and transport information for the Sawyer Mill Dam Impoundments and develop a technical memo that characterizes the predicted effects of dam removal on impounded river sediments as well as on downstream reaches. The technical memo should make recommendations of sediment management (including, but not limited to: stabilize-in-place, mechanical removal, passive transport). The technical memo should also describe what additional sediment toxicity characterization is needed based on the management techniques proposed. The draft technical memo will be submitted to NHDES Water Quality Section for review and approval.

- 4.1.1. ADD ALTERNATIVE- Additional sediment testing and bioassays with verification that consultant's chosen laboratory is able to analyze sediments to required detection limits.
- 4.2. Develop a Sediment Management Plan as an extension of the Sediment Technical Memo. The Sediment Management Plan shall summarize previous sediment sampling, testing results, estimated volumes of in-place sediment, proposed sediment management recommendations, proposed water control measures for sediment management (including predicted river discharge during expected construction timeline), and proposed draft construction access and sequencing. The Sediment Management Plan is a pre-permitting document that will be reviewed and approved by NHDES.
5. Complete historic and archaeological resource consultation and review according to Section 106 of the National Historic Preservation Act. A Request for Project Review (RPR) has been prepared by Public Archaeology Laboratory; however, the RPR has not yet been submitted to New Hampshire Division of Historical Resources.
 - 5.1. Develop a scope-of-work for completing Individual Inventory Forms for the Upper and Lower Sawyer Mill Dams. A scope-of-work for two (2) Individual Inventory Forms will be completed based on the recommendations in the NH Division of Historic Resources (NHDHR) Request for Project Review (RPR) form and approval by the Lead Federal Agency. Agency team, owner and Lead Federal Agency representative will review and comment on the scope-of-work. Comments will be incorporated and a final Scope of Work will be prepared. Authorization to proceed is given once the scope is approved.
 - 5.2. Prepare two Individual Inventory Forms for the Upper and Lower Sawyer Mill Dams. Agency partners, owner, and Lead Federal Agency representatives will review and comment on the draft forms prior to submittal to NHDHR. NHDHR will review the Individual Dam Inventory forms for both of the dams at a Determination of Eligibility (DOE) meeting and determine if the dams are eligible for inclusion onto the State and/or National Register of Historic Places. Additional information may be needed to make the determination or to complete the form.
 - 5.3. Develop a scope-of-work for completing a Phase IA Archaeological Survey based on the recommendations in the NHDHR RPR form and approval by the Lead Federal Agency. Agency partners, owner and Lead Federal Agency representatives will review and comment on the scope-of-work. Submit to NHDHR for review and approval. Authorization to proceed is given once the scope is approved.
 - 5.4. Prepare a Phase IA Archaeological Survey Report, which includes defining an Area of Potential Effect (APE) and recommendations for the need to complete a Phase IB survey, or not. Agency partners, owner, and Lead Federal Agency representatives will review and comment on the draft forms prior to submittal to NHDHR. NHDHR approval of the report will be required.
 - 5.5. ADD ALTERNATIVE: Develop a scope-of-work for completing a Phase IB Archaeological Survey based on the findings and recommendations in the Phase IA Archaeological Survey report and approval by the Lead Federal Agency. Agency partners, owner and Lead Federal Agency representatives will review and comment on the scope-of-work. Submit to NHDHR for review and approval. Authorization to proceed is given once the scope is approved.

- 5.6. ADD ALTERNATIVE: If needed, prepare a Phase 1B Archaeological Survey Report: Consultant will prepare a Phase 1B Archaeological Survey Report which identifies sensitive areas and precautionary measures. Agency partners, owner, and Lead Federal Agency representatives will review and comment on the draft forms prior to submittal to NHDHR. NHDHR approval of the report will be required.
- 5.7. If any adverse effects to historic properties are determined (assumed that dam removal will be deemed an adverse effect) the selected consultant will contribute to the preparation a Memorandum of Agreement (MOA).
 - 5.7.1. Assist the owner and Agency Partners to define mitigation measures to be incorporated into a MOA.
 - 5.7.2. Review first draft of the MOA (the first draft will be developed by the lead federal agency)
6. Obtain all required State, Federal and Local permits to carry out the scope of work to remove the Upper and Lower Sawyer Mill Dam.
 - 6.1. Prepare the NHDES Standard Dredge and Fill Permit with the Dam Removal Attachment for the Upper and Lower Sawyer Mill Dam Removal Project area. Copies in electronic and hard copy formats of the final application will be provided to the owner and Project Partners
 - 6.2. Submit approved NHDES Standard Dredge and Fill Permit application with Dam Removal Attachment. Consultant will submit the approved NHDES Standard Dredge and Fill Permit (including Dam Removal Attachment) to the City of Dover.
 - 6.3. ADD ALTERNATIVE. If, in the event that the Project doesn't qualify under the Programmatic General Permit or if project conditions warrant, the consultant should ensure compliance with Section 401 Water Quality Certification.
7. Evaluate the effects of the dam removal on adjacent, upstream, and downstream infrastructure, including the Sawyers Mill Apartment Complex, retaining walls, and nearby road and utility crossings. Assessment should include, but not be limited to: an evaluation of construction access and staging, how to separate the dam from adjacent structures, and vulnerability of adjacent infrastructure (i.e. drainage outfalls, buildings, building foundations, retaining walls, bridge, support piling support and downstream infrastructure). Technical memorandum summarizing assessment and key findings including recommendations for additional evaluation as needed.
8. Complete the final engineering designs to remove the Upper and Lower Sawyer Mill Dams. Removal concepts for the Sawyer Mill dams are based on the following criteria: 1. Remove sufficient dam structure to eliminate dams from Dam Bureau regulation, 2. Remove sufficient dam structure to meet target fish passage criteria (water depth, water velocity) under seasonal median river flow, 3. Leave dam end buttresses to provide lateral restraint for the adjacent walls.
 - 8.1. Develop dam removal and river restoration plans at the 75% to 90% level and distribute them to the owner and project partners for review and comment.
 - 8.2. Develop the 100% design construction ready plans stamped by a Professional Engineer licensed in the State of New Hampshire.

9. Develop Technical Specifications utilizing standard NHDOT items and specifications, as appropriate. Additional or modified specifications may be used as necessary for specialized work.
10. Meetings. The selected consultant is responsible for providing leadership on meetings described in Tasks 10.1, 10.2, 10.3 and 10.4; providing drafts of all meeting materials (e.g. presentations, agendas, handouts, public notices, meeting notes), as appropriate, to the project team for review and approval.
 - 10.1. Convene up to (3) coordination meetings with NHDHR.
 - 10.2. Hold up to (1) coordination meeting with Dover City Engineer regarding potential impacts to infrastructure.
 - 10.3. Hold a pre-permit meeting with representatives of State and Federal regulatory agencies.
 - 10.4. Present the final project to the City of Dover's Conservation Commission, town officials and public-at-large.
 - 10.5. Participate in monthly project status meetings. Assume 5 in-person meetings, the first of which will be a kick-off meeting. Assume 12 conference calls. The agency partners will prepare meeting minutes for all project status meetings, which will be provided to the project team for review and approval.
11. Implement bid process for construction services and facilitate any pre-bid meetings within the project area necessary for the removal of the Upper and Lower Sawyer Mill Dams
 - 11.1. Prepare draft bid documents (Project Manual) to secure a qualified construction firm to complete the scope of work outlined in the final design plans. Obtain review and comment by the dam owner, Project Partners and NHDES Watershed Assistance Section (WAS).
 - 11.2. Prepare final bid documents, develop and post bid announcement, and facilitate correspondence between owner and firms participating in bid process. Develop and distribute bid documents that are designed to secure a qualified construction firm to complete the scope of work outlined in the final design plans. Manage communications between competing firms and the owner during the open bid process.
 - 11.3. Plan and facilitate pre-bid meetings for the project area. Provide leadership for each meeting and facilitate site visits and question and answer sessions on-site and follow-up email communications with project partners and construction firms.
12. Provide a probable opinion of cost (POC) or Engineer's Estimate for construction of the final project. Cost data will be obtained from the Means Construction Cost Data, industry standard cost data, and available final costs from comparable projects. The POC, shall at minimum, itemize costs for mobilization/demobilization, access, water management, erosion and sediment control, dam removal, bank stabilization, sediment management, protection of infrastructure, planting and construction management. The draft POC will be circulated to the project partners with the designs for review by project partners.

ATTACHMENT II - RELEVANT ATTACHMENTS

Download the following attachments at www.hlturner.com. On the bottom right hand corner click on FTP. A screen prompting you for the username and password will pop-up. Username: sawyermills
Password: E187.smdr

1. Feasibility Study (DRAFT) (3/27/14)
 - a) Executive Summary
 - b) Report
 - c) Appendices
2. Feasibility Study Completion Memo (4/18/14)