Request for Proposal: Water System Master Plan
Glencoe Water Utility
Glencoe, IL 60022

June 15, 2012
PROJECT SUMMARY

Property Location
Village of Glencoe, IL 60022

Anticipated Project Dates
RFP released: June 18, 2012
RFP Bids due: July 23, 2012
Notice to proceed: August 17, 2012
Project complete: January 31, 2013

INTRODUCTION

Purpose
The purpose of this Request for Proposal (RFP) is to evaluate and select a qualified professional consultant or engineering firm to provide the Village with a comprehensive 20-Year Master Water Plan.

Background
The Glencoe water utility is a municipally-owned public water supply that treats Lake Michigan water and distributes it to approximately 8,600 residents within the village limits. The original plant was built in 1928 with a capacity of 4 million-gallons per day with an addition in 1952 that increased the production to its current 8 million-gallon per day capacity. Glencoe served the growing community of Northbrook until 1963 when Northbrook built their own treatment plant. In the early 1960's the Glencoe plant was producing at its capacity until Northbrook left the system. For the last 10 years average day demand was 1.6 MG, peak daily demand was approximately 4.2 MG, and peak hourly flow was 7.2 MGD. Various equipment and process upgrades have been made over the years. While utility staff has done a good job of maintaining and modernizing the system there are elements of the infrastructure that are showing their 84 year-old age and reaching the end of their useful lives.

Project Goal
The proposed project will take place in two phases. The first phase of the project is to prepare a study to investigate and determine which of three potential paths the Village should follow to provide an efficient, sustainable and cost-effective potable water supply for its residents for the next twenty years. The three options for preliminary consideration and discussion are: 1) continue operating the existing treatment plant and pumping station with appropriate rehabilitation, equipment replacement, and process upgrades such as UV/Peroxide and membrane filtration; 2) build a new treatment plant utilizing state-of-the-art processes such as UV/peroxide and membrane filtration; 3) purchase water from another producer and forego production altogether.

The Village will determine which option to pursue in more detail and the consultant will perform phase two of the project to provide a Master Water Plan. The Master Plan will include the annual capital expenditures required to upgrade and maintain the system for the next twenty years. In addition phase two will incorporate analysis and recommendations for the distribution system including water storage, hydraulic analysis, and other items as discussed in the project scope below.

SELECTION PROCESS AND SCHEDULE
Overview
The Director of Public Works, the Public Works Superintendent and the Water Plant Superintendent will make up the Review Committee (RC) who will review all proposals and make a recommendation to the Village Board for consideration.

**Selection Criteria**

Proposals will be evaluated on: (a) the experience of the consulting firm with master water plans; (b) the consultant's experience and reputation for satisfactory work, judgment, integrity, and timeliness; (c) the consultant's facilities, equipment, and skills for performing the contract; (d) the extent to which the proposal and consultant meet the stated requirements and specifications; (e) project fees for project scope as described below. Firms shall present a comprehensive proposal that shows a clear understanding for delivering the requested scope and to meet the project goals within the required timeframe. The recommended proposal will be selected to ensure that the Village receives the best value. The RC considers the following Evaluation Criteria during the selection process:

A. Expertise
   Experience and qualifications of the primary person(s) assigned to the project in performing similar work; demonstrated abilities in the individuals' assigned roles, education, training, and credentials. Only provide background on those individuals who will be assigned to and work on the project.

B. Project Understanding
   Understanding of the tasks required to complete the Scope of Work and the skills and expertise across various disciplines needed to perform those tasks. Also, the understanding and foresight of any critical issues and challenges involved in the project.

C. Responsiveness
   The ability and expressed commitment of the consultant to meet or exceed the anticipated project dates.

D. Fees
   The fee structure and total fee for services.

E. Other Factors
   Reputation of firm, reviewer's past experience with firm, other municipal experience, structure of firm or team, positive and/or negative reports from references, proximity/availability/responsiveness, quality/accuracy of statement of qualifications and other factors that the reviewer considers relevant.

The Village reserves the right to seek clarifications of the proposed project approach, projected fees, assignment of resources, and to negotiate a final contract which is in the best interest of the Village, and the right to reject any or all proposals if it would be in the public interest to do so.

After evaluating all of the responses and using the criteria set forth in the RFP, village staff will select those firms it desires to interview in person. Once the firm which the RC deems to be the best fit for the project is identified and contract negotiations are complete,
and the Village board approves the contract, and all required submittals are received, an acceptance of the contract and notice to proceed will be issued and the specified contract time for completion will begin. A sample of the Village’s standard PROFESSIONAL SERVICES AGREEMENT is attached as “ATTACHMENT 1”.

Upon payment for the services, the documents and all deliverables shall become the property of the Village of Glencoe with the right to use said documents with no further payment.

Proposal Content

Proposals must contain the following:

A. **Transmittal Letter** - This letter should designate the individual authorized to represent the proposing consultant regarding this proposal and should summarize the key points of the proposal.

B. **Required Information** - This general section of the overall proposal should provide all the information necessary to determine if the consultant services will meet the needs of the Glencoe Water Utility.

This section must contain the following:

1. Executive Summary
2. Content Requirements
3. Documentation
4. Consultant Qualifications, Relevant Experience, References, and Resumes of Key Individuals Who Will Work on the Study
5. Owner’s Resource Requirements
6. Other Relevant Information

**Executive Summary** should include but is not limited to; (1) a brief statement of the salient features of the proposal including conclusions and generalized recommendations on the detailed work program; (2) a brief statement indicating the consultant’s capabilities and experience in this type of project; (3) any additional information the consultants might wish to add which would allow the Owner to more fully understand the contents of the proposal.

**Content Requirement** should contain a detailed work program that describes how the consultant will address the tasks identified in the project scope. This section shall include an estimated schedule in the form of a bar chart showing an approximate task completion schedule and include milestone criteria and products of each step which will be presented to the owners in draft form for review and comment.

**Documentation** should include a description of the contents of the final report, including such things as computer outputs, summary information, and pertinent maps.

**Consultant Qualifications** should clearly indicate the firm’s experience in water system master planning and their experience in working collaboratively with the client’s staff. This section shall also provide a listing of the personnel assigned to the project with the individual's pertinent experiences and expertise. References must include other master water plan studies relevant to the proposed project, including a brief summary of the work performed including
size and general description of the client's water system, with client name, address, contact person, and telephone number.

**Owner's Resource Requirements** should quantify the support and services the consultant will require and expect of the utility.

**Other Relevant Information** should include information specific to this project that will further inform the consultant about the project's capabilities and understanding of the project.

**C. Cost Proposal** - This section of the proposal should provide all the relevant cost information of the project as proposed. Prices quoted within the cost proposal shall be deemed to include all costs for which the Glencoe Water Utility shall be responsible. Unspecified costs will be borne by the consultant.

**D. Insurance** - Acknowledgement that the Consultant will be expected to maintain the insurance requirements as shown in Attachment 1, Exhibit C, during the life of the agreement:

Upon selection of the successful Consultant, the Owner will enter into contract negotiations to develop the detailed terms of the contract for the Master Water Plan. During this process, specific performance objectives, completion date, and payment terms will be defined and become an integral part of the contract terms.

Questions and clarifications should be addressed to the RC via email only. All questions and answers will be forwarded by email to all bidders of record.

**Point of Contact: Tom Weathers, Superintendent, 847-835-4183.**

**Email:** tomw@villageofglencoe.org

Submit one (1) original and three (3) copies of your Proposal by **Monday, July 23, 2012 by 4:00PM** to:

Glencoe Public Works Office
675 Village Ct.
Glencoe, IL 60022

Attn: Water Utility Review Committee

**Late submittals will not be evaluated and the firm will be disqualified from further consideration.**

**PROJECT SCOPE**

The selected firm or consultant is expected to be familiar with and well versed in all related deliverables required for the preparation of reports and recommendations, and other activities as described in this Request for Proposal. The RFP does not attempt to identify every possible task which would benefit this project. The Consultants are encouraged to identify problems, solutions, or any additional features which would benefit the Village and are pertinent to the proposal. The work shall generally include, but not be limited to, the following:

**Phase One**

**A. Project Management**

1. Upon selection and award, the successful Consultant must prepare a work plan and schedule, including the kick-off meeting and regular meetings with Village staff.
The schedule must be updated and submitted with the monthly project progress report.

2. The Consultant must provide in writing a Quality Control/Quality Assurance procedure for the project.

B. Data Collection and Criteria Review
   1. Review village maps and records, including any existing reports that will be provided by the Village.
   2. Review operational manual and records to become familiar with existing systems operations.
   3. Develop or request other supporting data as may be required to effect analysis and understanding of the existing water production system and the study alternatives.

C. Analysis and Recommendations
   Investigate, analyze and make a recommendation of which of the three alternatives described below the village should adopt as a basis for the Master Water Plan considering economic, energy efficiency, environmental impact, water quality, and long-term sustainability factors. Provide estimated present and future value of the required improvements and capital expenditures for each alternative.

   Alternative One - Continue operating the existing treatment plant and pumping station with rehabilitation as required, equipment replacement, and process upgrades such as modern coagulation and settling processes, UV disinfection and membrane filtration systems. Intensive review of existing equipment condition and structural defects regarding the building elements such as concrete deterioration and concrete failures throughout the plant will be required to make a thorough assessment.

   Alternative Two – Design and build a new water treatment plant with a capacity to meet current demand needs. This option should include utilizing state-of-the-art treatment processes such as UV/Peroxide, membrane filtration as well as a conventional treatment system. In addition energy efficiency and “Green” design will be a high priority with this option.

   Alternative Three – Abandon water production altogether and purchase water from another system. Work with the project team to investigate the ability, willingness and cost of service with neighboring systems to provide Glencoe with finished water. There are existing emergency connections with Winnetka, Northbrook and Highland Park. Investigate the required transmission, storage, pumping facilities, disinfectant boosting, etc. to make this option functional.

Phase Two
   Phase two of the project is to develop a long-term (20 year) master water plan for the chosen alternative. Phase two will also include evaluation and recommendations for the distribution system and be integrated into one Master Water Plan.

   The work shall generally include, but not be limited to, the following:

A. Project Management
   1. Upon selection and award, the successful Consultant must prepare a work plan and schedule, including the kick-off meeting and regular meetings with Village staff. The schedule must be updated and submitted with the monthly project progress report.
2. The Consultant must provide in writing a Quality Control/Quality Assurance procedure for the project.

B. Data Collection and Criteria Review
1. Review Village maps and records, including existing Esri GIS information, previous water distribution studies and water main failure records.
2. Review operational records to become familiar with existing systems operations.
3. Develop or request other supporting data as may be required to effect computer analysis of water system.

C. Hydraulic Model
1. The distribution system is fully integrated in the Village’s Esri GIS. The Village has fire hydrant flow data for most hydrants. Provide a water distribution hydraulic model.

D. System Capacity Analysis
1. Analyze the existing system under peak operating conditions (maximum day plus fire flow) to determine possible system deficiencies.
2. Propose system improvements needed based on results of the system capacity analysis and failure analysis.

E. Water Storage Tanks
1. Evaluate the feasibility and cost for an additional elevated storage tank to facilitate maintenance and increase the storage to current design recommendations.
2. Evaluate the condition of the existing elevated tank and provide cost analysis of the long-term maintenance of the existing eight lattice-legged tank versus a single pedestal type tank.

F. Operational Analysis
1. Analyze the existing system to determine energy requirements and potential for energy conservation and cost reductions by modification of operational procedures and system components such as pressure zones.

G. Capital Improvement Plans
1. Develop short-term and long-term improvements, including costs, priorities, and completion dates of necessary improvements over a twenty year period in a year-by-year format which will be the basis for the Village’s annual CIP.

H. Report Preparation
1. Prepare exhibits and maps that delineate proposed modifications or improvements.
2. Prepare draft Water Master Plan and respond to comments.
3. Attend at least one (1) presentation, as needed, at a Village Board meeting, and respond to comments. Additional copies of the reports for meeting attendees shall be the Consultant’s responsibility.
4. Prepare final Water Master Plan report incorporating all comments into the report.

DELIVERABLES

All reports shall be prepared in Microsoft Word format compatible with the Village version (2007 edition). An executive summary describing the project and the methodology of validating the report shall be included in the report.

For Phase One the Consultant shall within 90 days from contract acceptance deliver a 50% complete study report for Village review and within 30 days of the Village’s completed review (allow ten days) provide a 95% complete report. At the 50% completed stage, the engineering and design should be roughly 50% complete in the sense that; (a) all aspects of the project have
been developed to the point that the improvements are detailed in scope and concept; (b) schematic plans are substantially completed; (c) the specifications are in complete outline form; and (d) preliminary cost estimates are completed. The 95% complete stage is defined as that point when the plans, specifications and estimates are essentially complete and only final review comments will need to be incorporated. Consultant shall provide the Village with four (4) copies of the study at each stage of the review described above.

For Phase Two the Consultant shall within 45 days from acceptance of completed Phase 1 documents deliver a 50% complete Master Water Plan report for Village review and within 15 days of the Village’s completed review (allow ten days) provide a 95% complete Master Water Plan report. At the 50% completed stage, the engineering and design should be roughly 50% complete in the sense that; (a) all aspects of the project have been developed to the point that the improvements are detailed in scope and concept; (b) schematic plans are substantially completed; (c) the specifications are in complete outline form; and (d) preliminary cost estimates are completed. The 95% complete stage is defined as that point when the plans, specifications and estimates are essentially complete and only final review comments will need to be incorporated. Consultant shall provide the Village with four (4) copies of the Water Master Plan at each stage of the review described above.

Consultant shall furnish the Village with an electronic non-write protected file on CD of the final Water Master Plan and deliver five (5) printed and spiral-bound copies to the Village and close the project within 270 days from contract acceptance.

PROJECT MANAGEMENT AND CONTROL

In performing the scope of services, the Consultant shall execute, at a minimum, the project management and control described below:

The Consultant shall designate a Project Manager, acceptable to the Village, who will be responsible for initiating and implementing the work and maintaining effective communications among the Consultant, the Village, and other involved agencies and organizations.

During the course of the project and to support each and every invoice, the Consultant shall furnish Control Reports of the following:

A. A Narrative Progress Report that must include:
   • Specific accomplishments during the reporting period.
   • Problems encountered or anticipated.
   • Accomplishments scheduled for the next reported period.
   • Results of any significant activities.

B. A Cost Report for each task showing:
   • Current period and cumulative expenditures to date.
   • Estimated cost at completion.
   • Approved budget.
   • A comparison of the estimated cost at completion with the approved budget to show any variance.


- Estimated date to complete.

Control Reports are to be submitted monthly, together with invoice submittal, unless directed otherwise by the Owner. The invoice shall be accompanied by a cost breakdown showing specific persons and classifications being billed for the period. Failure of Consultant to submit and update plans or furnish required reports as directed shall constitute a cause for suspension of payment of invoices.

The Consultant shall be available for consultation with the Village’s Project Manager at all reasonable times and shall immediately advise the Village’s Project Manager of requirements, technical decisions, or problems that may materially affect the project scope, schedule, or cost.

**Professional Services**

The selected design firm shall designate a licensed Professional Engineer as the Designer of Record who will be responsible for the approval of the complete package. The Designer of Record must sign and stamp/seal all documents. The Designer of Record will designate representatives as sign-off authority for individual disciplines required for the completion of the work. Sign-off from the Designer of Record and designated representatives will be applicable on all documents before they will be accepted.

**Document Approval**

1) Documents shall be of quality and details commensurate with Best Industry Practices.
2) All documents shall be reviewed and approved by the RC.