

COUNTY OF CARROLL OFFICE OF THE COMMISSIONERS

95 Water Village Road, #1 Ossipee, NH 03864 Phone: 603-539-7751 Fax 603-539-4287



REQUEST FOR PROPOSALS

Water System Improvement Study

System Description and Statement of Problem

The Carroll County Complex and approximately 40 homes in Ossipee Village are served by the Carroll County Water System. The sources of supply include two deep bedrock wells and three dug wells, which are also referred to as springs. The artesian output of two of the dug wells/ springs flows by gravity to the third dug well/spring from which water is pumped through a metering and treatment building., where chlorine is fed, and then into an in-ground 200,000 gallon concrete reservoir through a 10-inch D.I. main to the County Complex, and then onto the village via County Farm Road, Route 28 and Route 171 where the size is reduced to 8-inch in the village center and several smaller diameter mains serve other streets.

A 1999 engineering study of the Carroll County Water System identified a supply deficiency and bedrock well #2 was added subsequent to that report and prior to 2001. However, no water supply improvements have been made since that time and demands have increased over the last 20 years due to the addition of new facilities at the County Complex (new jail in 2003 and a new nursing home in 2010) and addition of several residential connections.

The last measurement of the capacity of the wells/springs supplying the water system was in 1999 prior to installation of bedrock #2. Both the current supply capacity of these wells and the water levels are unknown. It is noted that level measurement infrastructure was included in design documents from 2001 but it is not clear if any of this was actually installed. It is further noted that recent source metering data indicates that 99% of the water flowing to the reservoir is coming from bedrock well #2. Additionally, in a recent water quality sampling effort, there was air in the discharge from bedrock well #1 indicating a possible low water level.

The 10-inch and 8-inch D.I. water mains noted above were installed in 2001/2002. However, the rest of the distribution system consists of 4-inch and smaller cast iron and PVC mains which are older. In some locations, fire hydrants are connected to 4-inch mains which does not meet current design standards.

Carroll County requires an engineering evaluation and study to determine the following:

- Supply capacity of existing sources of supply
- Projected demands and ability of supplies to meet them
- Fire flow capability throughout water system

- Recommendations on
 - Rehabilitating or improving existing supply sources
 - Adding a supply source or sources to meet demands
 - Distribution system improvements to ensure adequate fire flow
 - Rate adjustments to help support recommend improvements

Scope of Work

It is envisioned that the initial effort will be primarily a desktop analysis aided by field work to evaluate sources and equipment and conduct fire flow tests and/or supply flow measurements. If it is determined that pump tests of the existing wells, or evaluation of the wells requiring the efforts of a licensed water well contractor are necessary, this work will be carried out in a subsequent phase.

The general scope of the engineering evaluation shall include but not be limited to:

- Review existing reports, studies, plans and available information on the Carroll County water system
- Determine, or make the best possible estimate of the current sustainable capacity of each of the existing supply sources
- Determine status of designed well water level infrastructure from 2001 and if this exists, what is necessary to make it functional
- Evaluation of source water quality and any required treatment changes
- Project demand for water at the County complex and Ossipee Village for a 20-year planning period, including potential development
- Inspect the existing water supply and storage infrastructure (without dewatering) to determine the general condition and note any required upgrades
- Analyze required or needed fire flow at the County complex and in Ossipee Village
- Develop a computerized water model of the County complex water system for use in evaluating both current available fire flow at any location and recommend water main improvements to achieve the needed fire flow
- Evaluate current County rate structure and compare to similar size systems in the State. Determine proportional use by the County and the Ossipee Village users and use this to help develop an equitable rate structure that supports operational and capital costs
- Produce an engineering report to document the existing system, supply capacity, projected demand, condition of existing supply and storage infrastructure, and fire flow capability throughout the system. The report will include recommendations on:

- Need, or not, for additional supply sources

- Additional required investigations such as pump tests, inspection of pumping equipment or new source investigations

- Required upgrades to existing supply, treatment, and storage infrastructure

- Distribution system improvements to both modernize the system as well as provide needed fire flows

- Changes in the rate structure

- Possible funding sources that Carroll County can tap to proceed with any proposed upgrades.

2. Submission Details

A completed proposal shall be submitted to the Carroll County Commissioners Office, 95 Water Village Rd, Ossipee, NH 03864.

All submissions shall be received before 4:00 pm, Thursday June 10, 2021.

Each proposer must submit one (1) original, and (3) copies of their proposal.

The County reserves the right to cancel this Request for Proposal for any reason without any liability to any proponent or to waive irregularities at their own discretion.

Proposals may be withdrawn by written notice only provided such notice is received at the Carroll County Business Office prior to the date/time set as the closing time for receiving proposals.

Any interpretation of, additions to, deletions from, or any other corrections to the Proposal document, will be issued as written addenda by the County of Carroll.

Proposals will be evaluated post bid opening by the Carroll County Director of Public Works, and bid recommendation (if any) will be made upon satisfactory submission of bid, and possible interviews to determine and clarify the experience and responsibility of the proposer. The Director will make a recommendation to the Carroll County Commissioners, who will make the final decision to select the contractor.

Carroll County reserves the right to accept or reject any and all bids for any reason, and award bids deemed most advantageous to the County.

Except as expressly and specifically permitted in these instructions, no proponent shall have any claim for any compensation of any kind whatsoever, as a result of participating in the RFP, and by submitting a proposal each proponent shall be deemed to have agreed that it has no claim.

3. Inquiries

Clarifications of terms and conditions of the proposal, as well as requests for existing details, for all submitting vendors shall be directed to:

Will DeWitte

Director of Public Works Carroll County Facilities 95 Water Village Rd Ossipee, NH 03864 603-539-5125, 603-393-2898 (cell) wdewitte@cchoc.org

4. Project Schedule

The project start date shall be determined after the notification of the award. However, it is anticipated to be prompt.

5. Proposal Information

Please mail or hand-deliver proposals to: Carroll County, Office of the Commissioners Mellisa Seamans Attn: Water System Improvements Study 95 Water Village Rd Ossipee, NH 03864 603-539-7751 phone mseamans@carrollcountynh.net

Proposals must be received no later than **4:00 pm, Thursday June 10, 2021** Bids will be opened at next scheduled Meeting of the Commissioners