

Pumping System Helps Town Bring New Development Up to Code

When a Leicester, Mass., developer planned a subdivision of 16 houses at the same elevation as the town's water tower, he was faced with the problem of how to provide minimum water pressure mandated by the state. He wanted a constant pressure booster system, and his first solution was to put in 16 separate booster systems. However, the town would not go along with that plan.

"If there was a negative pressure in the water system, the houses would drain out even if they were checked," said Frank W. Lyon, superintendent, Leicester Water Supply District. "They didn't have at least 20 pounds of pressure at the 12" main in the street. I was looking for a more reliable, more affordable system to operate. Eventually, this system gets turned over to the Leicester Water Supply District to own and maintain once the development is done."

Lyon had read about the use of a Goulds Aquavar pump control system in high-rise commercial buildings, and the idea of a variable-speed system appealed to him. He thought a pressure-demand system might do the job cost effectively. "If there's a little bit of draw, it comes on and runs full speed until it's satisfied, and then it shuts down," Lyon said.

When Lyon called Goulds for more information, Chad Curtis, Aquavar specialist, suggested he come to Seneca Falls, N.Y., for a hands-on demonstration and mini training course that would help answer Lyon's questions. Curtis met with Lyon at the Seneca Falls training lab to show him how the Aquavar-controlled pump system could work for him.

In October 1998, Lyon bought four skid-mounted Goulds SSV pumps with the Aquavar

microprocessor-controlled variable frequency drive, and D.L.L. Thurrott piped together

This all-in-one variable-speed drive and pump controller can link up to four pumps to automatically control sequencing, lead lag change over and system pressure without an external control panel.

the entire package. Units included a 5-hp pump for 0-15 gallons per minute (gpm) pressure, a 15-hp pump for more than 15 gpm and two redundant pumps that can ramp up to maintain flow requirements.

A big selling point was D.L. Thurrott's ability to handle the total package for Lyon. This company provided four pumps, the Aquavar system controller, assembly, programming, installation, testing and on-site startup. The total cost was slightly more than \$25,000, about \$10,000 less than a constant-speed system Lyon investigated.

"The Aquavar system controller can be teamed up with any product in Goulds' centrifugal pump line," Curtis said. It can link up to four pumps to automatically

control sequencing, lead lag change over and system pressure without an external control panel. It is fully programmable in English, French or Spanish.

By summer 1999, the new development in Leicester had six houses hooked up to the Aquavar system with its own 4" water line. "There are a number of sprinklers in operation now as people try to get their lawns in," Lyon said. "I'm using as much as 20,000 gallons of water a day, and not one has complained about water pressure or the lack thereof."

For more information on this subject, circle 860 on the reader service card.

At completion, this system will connect and supply water to all 16 houses in the subdivision. Flows as much as 20,000 gallons per hour have been reported without any complaints about lack of pressure.

