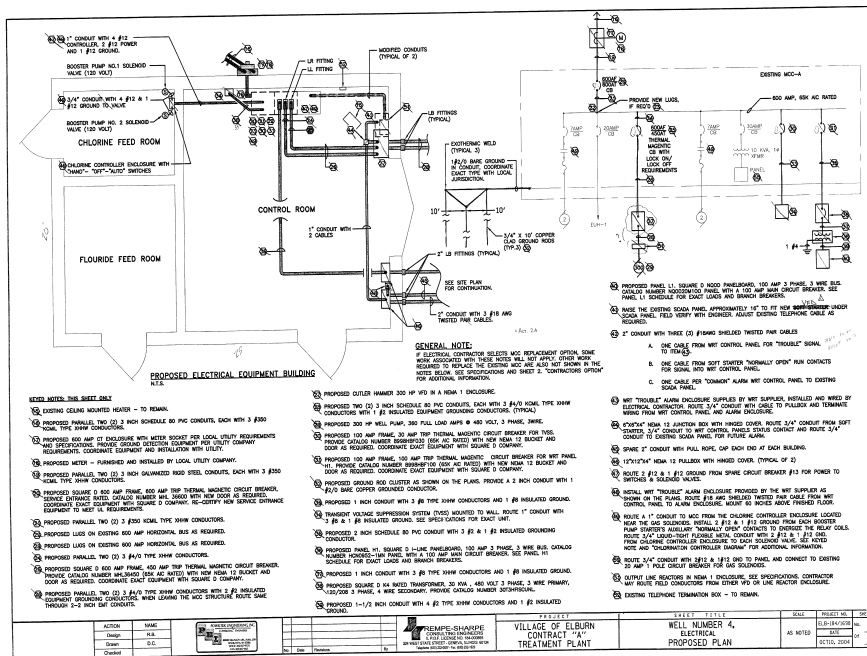


# WELL NO. 4 PUMP HOUSE—ELBURN



## WRT Water Treatment Plans



Radium Removal Plant

## Client: Village of Elburn

The Village of Elburn was required to incorporate Radium treatment facilities into an existing system. Upflow treatment facilities required the flow from the well pump to be gradually increased at start-up and gradually decreased during shut-down to prevent the loss of media into the distribution system.

## Rempe-Sharpe:

- ◆ Researched the ability of the existing submersible well pumps to be controlled by a variable frequency drive.
- ◆ Designed the drive to ramp the revolutions per minute from the minimum flow required by the pump manufacturer up to the rpm's (flow rate) set by the operator.
- ◆ Prepared design drawings and specifications reflecting the recommended equipment and most appropriate piping and equipment layout.
- ◆ Provided shop drawing reviews and construction related services.

The resulting system protected the treatment facilities from media loss and reduced pressure spikes in both the treatment unit and the distribution system. The variable frequency drive provided the operator flexibility in well pumping capacity and thereby reduced pump cycling. Fewer main breaks have been experienced.

Construction Cost: \$459,500

