

## Orillia Water Filtration Plant (WFP) Upgrade

The Orillia Water Filtration Plant will undergo a major upgrade to improve disinfection and clearwell capacities. The scope of the works for the upgrade includes the construction of two new clearwells with an effective capacity of 3,000 m<sup>3</sup>, conversion of existing clearwells to chlorine contact chambers and the addition of a major new pumping station complete with UV disinfection systems. The design is such that the plant capacity can be increased from the current 27 m<sup>3</sup>/d to an ultimate capacity of 77 m<sup>3</sup>/d.

As part of the works, the control system is also undergoing a major re-work. The existing controls were originally installed in the 1970's with further additions and expansions in the 1990's. The entire plant control system and instrumentation will be replaced, upgraded and expanded as necessary with the primary objectives to have a fully automated plant with standardized control hardware and software throughout the plant. The plant automation will be based on Allen-Bradley PLC's, networked remote I/O and PC based Operator Interface Terminals utilizing Rockwell RSVIEW HMI software.



A complete detailed design was carried out (including P&IDs, system architecture, control narratives).

