

RELATED EXPERIENCE

WATERFORD TOWNSHIP WATER AND SEWER SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) UPDATE MANAGEMENT PLAN

Johnson & Anderson, Inc. was retained by the Charter Township of Waterford to develop a structured and incremented water and sewer control hardware, programming, human machine

Client:	Waterford Township
Schedule:	2015
Project Engineer:	Terry Biederman, P.E.
Client:	Waterford Township DPW
Contact:	William Fritz, P.E. DPW Director (248) 618-7451

interface (HMI), historian, and radio communication update management plan. Over 90% of the existing DPW water and sewer SCADA control hardware was installed in the late 1990s and is no longer formally supported by Opto22. In addition, all existing water and sewer site radio communication equipment was installed in 2003 and will need to be updated in the near future. As a result, the DPW wanted to catalog the current SCADA system remote terminal unit (RTU), input/output (I/O) and radio modem infrastructure and create a water and sewer

control hardware, programming, HMI, historian and radio communication five year capital update management plan to facilitate prioritized control hardware and programming system updates while ensuring system operational reliability.

J&A developed a SCADA update management plan to include a summary inventory of all water and sewer site control hardware, program logic and radio communication equipment along with recommended replacement control hardware and program logic including estimated budget costs. The water and sewer sites control hardware and programming was prioritized into an annual site update list for the DPW to use as a five year capital update management planning tool.

J&A included a single year budget cost estimate per water and sewer site for radio communication equipment updates because all radios will have to be converted at the same time, unless the Township elects to run a two radio system until all sites can be upgraded.

J&A developed the plan to include water and sewer site HMI improvements and budget costs for prioritized water and sewer sites to be included in the five year capital update management planning tool.

J&A included in the plan a single budget year water and sewer site historian update and enhancement improvement outline and budget cost plan to cleanup and add new historian archiving tags and to update the HMI trend screens of the Central SCADA station as part of the five year capital update planning tool.

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J&A will provide necessary project management services to organize, schedule and install the various components of the update plan, as approved by the DPW, with both in-house and specialized third party services, where necessary, under a separate proposal and agreement to optimize and more cost effectively execute the developed capital update plan.

SCADA Network Diagram

