
Project Name: H.M. Weir Sewage Treatment Plant

Location: Saskatoon, SK

Owner: City of Saskatoon

Prime Consultant: Stanley Engineering



Plant Facility: The Wastewater Treatment Plant protects the people, property, and environment downstream from Saskatoon along the South Saskatchewan River. The Plant is designated as a Class 4 treatment facility, the highest level of certification in Canada. The treatment of wastewater is regulated by rigid provincial and national standards. The Wastewater Treatment Plant in Saskatoon was built in 1971. Since that time, the Plant has had numerous improvements and expansions to meet new environmental laws and serve the growing population of Saskatoon. The first major expansion of the facility was in 1991 when the Plant was upgraded from a primary treatment facility to an enhanced primary treatment facility. In 1996, Secondary Treatment facilities costing \$52 million were added. The new Biological Nutrient Removal (BNR) process further reduces the levels of phosphorus, nitrogen, and dissolved organic matter in the effluent discharge to the river. With the BNR process, the addition of chemicals for secondary treatment is no longer necessary. Saskatoon was one of the first cities in Canada to use this process.

Delco Automation’s Scope of Work: Engineered and manufactured electrical control panels and commissioned and implemented modifications to the PLC/HMI based process control system.

Technology: The system consists of six Allen Bradley PLC5 processors controlling six process areas and communicating with other existing hardware. The designed system has two SCADA nodes (one is redundant). The reporting system uses MS Excel.

