KNOXVILLE UTILITIES BOARD
FOURTH CREEK WWTP COMPOSITE CORRECTION PLAN
KNOXVILLE, TENNESSEE

Reynolds Construction

Project Description

The Work included, but was not limited to, the following:

- New flow diversion structure including an automated by-pass screen and flow control gates;
- 17-MGD Sewer Bypass and 18-MGD submersible pump station with four 70-HP submersible pumps
- Wet-weather ballasted flocculation treatment unit capable of treating 20 MGD of raw screened wastewater and associated 645 sq ft (interior) sand pumping building
- 3,500 sq ft (interior) bi-level chemical storage/blower building
- Drain pump station consisting of (3) 20-HP submersible pumps
- New buried (14.5' deep) 34' x 52' chlorine contact tank
- Additional effluent pumping capacity consisting of 2 40-HP can type pumps, variable frequency drives and controls
- 1,880 square foot (interior) electrical/ generator building; including a new 1,500 kW generator
- The project replaced the existing sludge transfer pumping system with two new 40-HP dry pit submersible pumps and their associated drives and controls. Modifications were made to the existing compressor building to install equipment, controls, and piping for Chemically Enhanced Primary Treatment (CEPT); miscellaneous yard piping to tie the existing and proposed structures together consisting of ductile iron pipe up to 54" diameter; to I&C systems; and miscellaneous site work and grading. Sheet piling was also installed to protect an existing outfall pipe.

At a Glance

Contract Amount:
$17.9 M

Notice to Proceed:
January 31, 2012

Completion Date:
November 11, 2013

MGD:
34

Owner:
Knoxville Utilities Board

Engineer:
CDM Smith

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