

RAW WATER INTAKE -- 2001 WATER SYSTEM IMPROVEMENTS CONTRACT "B" SPRING HILL, TENNESSEE

OWNER

City of Spring Hill
199 Town Center Parkway
Spring Hill, Tennessee 37174
Contact: John McCord, Public Works Director
Telephone: 931-489-0033

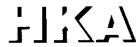
ENGINEER

Highers, Koonce & Associates, Inc.
3343 Perimeter Hill Drive, Suite 212
Nashville, Tennessee 37211
Contact: Jerome Dempsey, P.E., Project Engineer
Telephone: 615-333-7200

% SELF PERFORMED: ±80%

PROJECT

This project consisted of the construction of a new 4 MGD Raw Water Intake Pump Station. The pump station removes water from the Duck River through an 18" ductile iron pipe with intake screen and airburst backwashing system, and pumps it to the Water Treatment Plant for processing. The project consisted of constructing a 2,500 linear feet access road to the site of the intake structure. Excavation of the structure required drilling and blasting rock over 50' deep. A poured-in-place concrete wetwell and one-story masonry structure was constructed with associated mechanical and piping systems. There was also 2,500 linear feet of 18" ductile iron pipe installed to convey the raw water towards the Treatment Plant.



HIGHERS, KOONCE & ASSOCIATES, INC.
Civil and Environmental Engineering
3343 Perimeter Hill Drive, Suite 212
Nashville, Tennessee 37211
(615) 333-7200
(615) 333-0529 Fax
E-Mail: HKA@HighersKoonce.com
Web: www.HighersKoonce.com

Mr. Donny Breeding
3D Enterprises Contracting Corp.
3257 Lochness Drive
Lexington, Kentucky 40517

June 6, 2003

**RE: CITY OF SPRING HILL, TENNESSEE
2001 WATER SYSTEM IMPROVEMENTS
CONTRACT "B"- RAW WATER INTAKE**

Dear Mr. Breeding:

On behalf of the City of Spring Hill, Tennessee and Highers, Koonce & Associates, Inc., I would like to take this opportunity to extend an appreciation to 3D Enterprises Contracting Corporation for the thorough and professional manner of the construction of the Raw Water Intake Facility, located at mile 166 of the Duck River. This was a complex project that required a 50' deep solid rock excavation for a 10' by 20' poured in place concrete wetwell. Solid rock trench excavation into the Duck River for the 18" raw water intake line, 24" diameter by 114" long intake screen, and air purge piping installations were required. The facility also included; two 300 HP vertical turbine pumps with variable frequency drives, each rated at 2800 gpm (with future pad and wiring), potassium permanganate feed pumps with analyzer, poured in place valve vault, emergency generator, SCADA and telemetry system, HVAC system, with 2500 LF of 18" DIP raw water line.

Not only was this project complex in nature, the regulatory construction guidelines and requirements were numerous, especially the federally listed endangered species (Duck River Pearly Mussel) located 300-feet downstream of the project site. The permitting agencies were the Tennessee Department of Environment and Conservation (Aquatic Resource Alteration Permit), Tennessee Valley Authority (26a Permit), and Army Corp of Engineers (404 Permit).

The conscientious of your site personnel in dealing with the environmental guidelines and the adjacent property owners is to be commended. The value engineering and provision of additional concrete caissons beneath the slab-on-grade structure to assure there would be no differential settlement is very admirable. Office personnel performed and responded in a very professional manner to assure no delays in the project. The project was completed in a timely manner (prior to the water treatment plant start-up), within budget, and within all regulatory guidelines. The experience and commitment level of 3D personnel was excellent and I am offering my recommendation of your firm to those who may be considering. Please feel free to have potential clients contact me.

Sincerely,

HIGHERS, KOONCE & ASSOCIATES, INC.

Jerome D. Dempsey, P.E.

