

Construction Method: **Microtunneling**

Project: Intake Project
Beaver Water District

Location: Lowell, Arkansas

Job Scope:

- ❖ Feasibility and Design Evaluation
- ❖ Design Services
- ❖ Geotechnical Baseline Report
- ❖ Construction Inspection



Project Description:

As a sub-consultant to MWH, Staheli Trenchless Consultants conducted the feasibility/preliminary design evaluation and geotechnical investigation, prepared Geotechnical Data and Baseline reports, evaluated alternative construction methods, conducted a design workshop, and provided design services for twin intake shafts and eight 60-inch diameter intake tunnels to triple water supply capacity from 80 MGD to 220 MGD.

The shafts were 30-ft ID by 100-ft deep, excavated through very challenging karstic limestone and fissile shale.

The eight 60-inch ID tunnels varied from 90 to 160 ft and required underwater retrieval of the MTBM after each bore. The limestone contained numerous solution features and caves, and had unconfined compressive strengths up to 28,000 psi.

Staheli Trenchless Consultants provided full-time construction management and inspection.

Staheli Trenchless Consultants
ph: 425-205-4930
www.stahelitrenchless.com