



## Civil Engineering Support

### Experience:

City of Chicago Public Works  
Tarbella Dam Civil Design  
Bath County, VA Hydroelectric Power

### Highlights:

Civil Design Support  
Project Management



Lemongrass Consulting has experienced civil engineers and can provide civil engineering support. Civil engineering support includes project support:

- Preparation of project schedules,
- Handling changes orders and related cost estimates.

Clovia Hamilton leads the Lemongrass Consulting team. Clovia interned with Harza Engineering and assisted with the Tarbella Dam (Pakistan) civil engineering design plans.

- Analyzed the stability of the Dam's plunge pool spillway chute walls using Rankine formulas.
- Investigated scouring via chemical analyses.
- Revised access road layouts
- Prepared plots for four years of accumulated piezometric data
- Checked the powerhouse reinforcement for proper clear cover and splice lengths.

Clovia also assisted with project management services for the 2100 MW, \$1.7Billion Bath County, Virginia Hydroelectric Pump Storage project. This was the largest pumped storage project in the world.