



ITC HEADQUARTERS • Novi, Michigan

CHALLENGES

- Site included up to 26 feet of highly organic, very compressible peat and marl
- Deep foundations for supporting bridge option would be costly and delay completion of project

SOLUTIONS

- Use rolling surcharge method to squeeze out peat and marl soils
- Surcharge soil could be used to support roadway in lieu of constructing a bridge

SERVICES

- Geotechnical engineering
- Construction engineering services

Substantial savings on site preparation for automotive supplier's new headquarters

Construction engineering services provided by G2 Consulting Group secured a substantial savings on the cost of a new \$60-million headquarters for ITC in Novi, Mich.

G2 suggested and designed an alternate method for placing an access road on a large deposit of deep peat and marl, a very compressible clay and silt material. Instead of building a bridge over it, G2 recommended using a "rolling surcharge" to squeeze out the peat and marl. The rolling surcharge method consisted of excavating in front of a 30- to 35-foot-high sand pile while moving across the roadway alignment. The peat and marl squeezes out and is removed from the work area. The remaining surcharge pile is left in place to support the roadway. Settlement markers were placed on top of the roadway subgrade, which would allow G2's on-site construction engineering staff to determine if all of the peat and marl had been squeezed out.

G2's recommendations resulted in a substantial savings for ITC while still meeting project deadlines.

Cunningham-Limp Company is serving as the general contractor. Phase I of the project consists of constructing a six-story, 188,000-square-foot headquarters with a control center, and an attached two-story parking deck within the 86-acre site.