

## Montgomery County Conference Center and Hotel Rockville, Maryland



**Project Description:** Construction of the 33,000 square foot conference center. Column loads for the conference center ranged from 100 to 800 kips. Maximum column loads for the hotel were 1,700 kips.

**Subsurface Conditions:** Soil conditions at the site consist of residual silt with SPT N-values at the foundation level as low as 6 blows per foot (bpf).

**Design Details:** The original foundation design called for spread footings designed for 3,000 psf for the conference center and drilled shafts or piles for the hotel. The geotechnical engineer also provided a *Geopier*® soil reinforcement alternate recommendation consisting of spread footings supported by Geopier elements and designed for 7,000 psf. The Geopier alternative provided significant foundation cost savings compared to the 60- to 70-foot deep drilled shaft and pile options for the hotel and additional savings compared to the 3,000 psf spread footing design for the conference center. A total of 947 Geopier elements were installed in spring of 2003.

**Geopier Design & Installer:** GeoConstructors, Leesburg, Virginia

**General Contractor:** HITT Contracting, Inc., Fairfax, Virginia

**Architect:** RTKL Associates, Washington, DC

**Structural Engineer:** KTLH Engineers, P.C., Washington, DC

**Geotechnical Engineer:** The Robert B. Balter Co., Owings Mills, MD