CASE HISTORY

University of Louisville Tower Addition

The University of Louisville Tower Addition required a deep foundation to support new construction in Louisville, KY. Project stakeholders evaluated alternatives to keep the schedule moving during midsummer site conditions.



The Challenge

The project was originally designed for a deep foundation system using 14" O.D. auger-cast piles. With the speed of the project and the wetness in the month of July, the structural engineer from Sherman Carter Barnhart PSC sought an alternate foundation approach that could be installed quickly despite saturated ground.

The Solution

A helical pile foundation was selected for the addition. The scope included 74 new construction helical piles with 4.5" O.D. shafts designed for 30 tons working capacity. Helical piles provided a practical means to advance the foundation under wet conditions while meeting the project's schedule needs.



Results

Helical piles proved to be a cost-saving alternative. All 74 piles were installed in 4 working days.

Highlights

Location: Louisville, KY, Application: New construction tower addition, Original design: 14" O.D. auger-cast piles, Final foundation: Helical piles, Quantity: 74 piles, Pile size: 4.5" O.D. shafts, Working capacity: 30 tons, Engineer: Alternate system requested by structural engineer from Sherman Carter Barnhart PSC, Installer: Dwyer Companies, Job duration: 4 working days

MAGNUM® Piering

Helical pile foundations are well-suited to projects that need reliable capacity with rapid installation, especially when wet conditions make other deep foundation methods difficult. MAGNUM provides high-capacity helical pile systems for new construction additions and similar schedule-driven jobs.

