

# Station Plaza Retail Building & Parking Garage Kirkwood, Missouri

Geopier® Rammed Aggregate Piers™

## Project Team

**Geotechnical Engineer:** Geotechnology Inc.

**Structural Engineer:** Alper Audi, Inc. & Snowden Engrg, Inc.

**Owner:** MLP Development

**Design-Build Contractor:** Pioneer Construction, Inc.

**Geopier Installer:** Foundation Service Corp.

**Geopier Designer:** GFC – St. Louis

**The use of a Geopier Rammed Aggregate Piers (RAP) resulted in total foundation cost savings of up to 40 percent and reduced the foundation construction time by more than two months.**

## Project Overview

### Description:

Construction of three, 3 to 4 story retail/office and apartment buildings, a four-level parking garage, and a five-level parking garage. Maximum column loads are on the order of 900 kips.

### Subsurface Conditions:

Silty clay fill with SPT N-values ranging from 2 to 18 bpf extended up to eight feet below grade and was underlain by firm to stiff lean clay over weathered limestone bedrock.

### Geopier Solution:

The Geopier Intermediate Foundation System was selected as an alternative to drilled pier foundations to reduce the significant risk of cost overruns introduced by drilled pier foundations which were expected to require rock coring to penetrate weathered limestone and clay seams. The use of Geopier Rammed Aggregate Piers (RAPs)



resulted in total foundation cost savings of up to 40 percent and reduced the foundation construction time by more than two months. After careful consideration of total foundation costs, it was estimated that using RAP supported footings reduced the project foundation costs by as much as \$120,000.

### FOR MORE INFORMATION

Contact Geopier Foundation Company at **800-371-7470**  
or at **[www.geopier.com](http://www.geopier.com)**



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*The Intermediate Foundation System*