



Mobilization & Training Barracks

Fort Riley, Kansas

The Geopier® approach provided significant cost savings and schedule advantage as compared to other alternatives.

Description: This project consisted of the construction of four, two-story, slab-on-grade barracks in Fort Riley, Kansas. Based on the foundation drawings provided by Lockett & Farley, isolated column loads range up to 255 kips and maximum continuous wall loads range up to 6.4 kips/lineal foot. Site grading required only nominal cut and fill to attain the planned finished floor elevation.

Subsurface Conditions: The soil conditions generally consisted of varying depths of clay, silt, and silty sand soils overlying poorly graded sand deposits. Groundwater was encountered in several of the borings during drilling operations at depths ranging from approximately 20 to 25 feet below grade.

Geopier Solution: A total of 473 Rammed Aggregate Pier® (RAP) elements were constructed at a rate of approximately 30 to 50 piers per day to support the four foundations. The 30 inch diameter RAP elements extended to depths ranging from 10 to 12 feet below grade.



PROJECT TEAM

Owner:

U.S. Military

Geotechnical Engineer:

Allied Laboratories

Structural Engineer:

Lockett & Farley

General Contractor:

MA Mortenson Company

Geopier Installer:

Peterson Contractors, Inc.

Geopier Designer:

GFC-Midwest