



Destination Cancer Center

Cedar Rapids, Iowa

Rammed Compaction® provided by the Geopier Densipact™ system proved to be the cost-effective ground improvement method of choice

Description: Mercy Hospital in Cedar Rapids, Iowa added a 37,000 square foot cancer center to the existing hospital building. The addition was a 3-story masonry and steel frame structure supported by isolated pad and continuous strip footings with transfer loads of 250 to 500 kips. Continuous wall footings were designed to 3.6 to 4.9 kips per lineal foot for this patient medical service center.

Subsurface Conditions: Uncontrolled fill materials existed to depths of 18 to 25 feet below floor level.

Geopier Solution: The geotechnical engineer considered removal and replacement, but ultimately determined that the Geopier Densipact™ system was the most cost-effective and efficient ground improvement solution. The Geopier system installed 282 Rammed Compaction™ points in eleven days to accomplish the allowable total and differential settlement to 1-inch and 0.5-inches respectively.



PROJECT TEAM

Owner:

Mercy Medical Center

Geotechnical Engineer:

Terracon

Structural Engineer:

HGA Architects & Engineers

General Contractor:

Rinderknecht Associates, Inc.

Geopier Designer:

Ground Improvement Engineering

Geopier Installer:

Peterson Contractors, Inc.