GP3®

Big River Resources Ethanol Plant

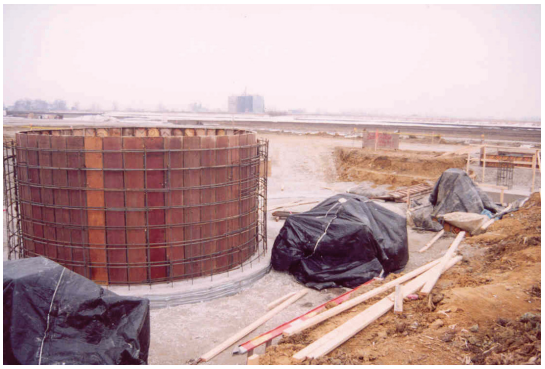
West Burlington, Iowa

The Geopier GP3® system enabled owners to keep plant construction moving forward

Description: Six storage tanks with diameters of 50-ft to 60-ft and tank bearing pressures of 4,000 psf.

Subsurface Conditions: Stratified layers of compressible silty clay loess and fat clay to depths of 18 feet underlain by stiff glacial till.

Geopier Solution: The Geopier GP3® system was developed to reinforce the soft soils and support the tank floors and ringwalls. A total of 556 30-inch diameter Rammed Aggregate Pier® (RAP) elements were installed to depths of 18 to 20 feet. RAP installation reinforced the soft soils, improving the bearing pressure and reducing the tank settlements. The Geopier approach provided significant cost savings and a schedule advantage compared to conventional overexcavation/replacement that would otherwise have been required.



PROJECT TEAM

Owner:
Big River Resources

Geotechnical Engineer:
Beik Engineering, Inc.

Structural Engineer:
Fagen Engineering, LLC

General Contractor:
Fagen Engineering, LLC

Geopier Installer:
Peterson Contractors, Inc.

Geopier Designer:
GFC-Midwest

130 Harbour Place Drive, Suite 280, Davidson, NC 28036
800.371.7470 | www.geopier.com | info@geopier.com | marketing@geopier.com

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