



# Wal-Mart Supercenter

Fowlersville, Michigan

**The Geopier GP3® system was recommended by the geotechnical engineer in lieu of overexcavation and replacement as a result of moderately high groundwater and construction debris present in the soil**

**Description:** This project provided foundation support for a single story 185,000 square foot retail store with column loads of 20 to 147 kips and wall loads that of three to six kips per lineal foot. In addition to the retail store two retaining walls were supported by the Geopier GP3® system. The walls were 11 feet in height and had a combined length of 515 feet.

**Subsurface Conditions:** Soil conditions consisted of uncontrolled fill material containing some construction debris, which was encountered across the site at various depths. Groundwater was encountered at 10 to 14 feet below existing grade.

**Geopier Solution:** The Geopier GP3 system was recommended as an alternative to overexcavation and replacement by the geotechnical engineer for foundation support. A total of 2,250 Rammed Aggregate Pier® (RAP) elements were installed. Each RAP element had a diameter of 30 inches and was installed to a depth of 12 feet below the foundation base.



### PROJECT TEAM

**Owner:**

Wal-Mart

**Geotechnical Engineer:**

TesTech

**Structural Engineer:**

PB2 Architecture & Engineers

**General Contractor:**

Micco Construction, LLC

**Geopier Installer:**

Foundation Service Corporation

**Geopier Designer:**

GFC Midwest