



## RYDER CORPORATION • Novi, Michigan

### CHALLENGES

- Substantial cost of removing four feet of existing uncontrolled fill across a portion of the building pad
- Difficult time of year to utilize on-site clay soils as engineered fill

### SOLUTIONS

- Comprehensive settlement analyses combined with field evaluation of existing fill allowed G2 to recommend leaving fill in to support engineered fill and foundations

### SERVICES

- Geotechnical engineering
- Value engineering
- Construction engineering services

### Reducing costs at Ryder Corp.'s regional headquarters

Value engineering by G2 Consulting Group significantly reduced the cost of the foundation for the new regional headquarters of Ryder Corp., a global leader in supply chain, warehousing and transportation management solutions, in Novi, Mich.

Design/build contractor Cunningham-Limp hired G2 to perform supplemental geotechnical investigations on four feet of uncontrolled, undocumented soils left in the area slated for Ryder's three-story, 150,000-square-foot building.

Designing a building's foundation requires engineers to know how much the ground will settle beneath the structure. Preliminary geotechnical investigations by another firm recommended removing the uncontrolled fill soil and replacing it with four feet of "engineered fill" – soil placed in layers that are 12 inches deep and compacted before adding the next layer. Soil borings and settlement analysis by G2 revealed that the uncontrolled soil could remain to support the addition of 13 feet of engineered fill required to achieve finished grades for the site, reducing the cost and time involved. G2 also determined that conventional shallow foundations for the proposed building could be constructed within the engineered fill.

G2 provided construction engineering services throughout the project, assuring that Ryder Corp.'s new facility was built according to the project plans and specifications.