

## PROJECT DESCRIPTION

**PROJECT:** Tri-Met Sunset Parking Garage

**LOCATION:** Highway 26 and Barnes Road, Beaverton, Oregon

**DESIGN TEAM:** *Architect:* Yost Grube Hall  
*Structural Engineer:* Cary Kopczynski Engineers  
*Geotechnical Engineer:* Geotechnical Resources, Inc.

**CONTRACTOR:** JE Dunn Construction



### DESCRIPTION:

- 3-Story light rail transit station/parking structure, reinforced concrete
- Column loads between 200 to 800 kips

Pile supported foundations were required to span the subsurface light rail tunnel which was previously constructed beneath the east portion of the parking garage. Rammed Aggregate Pier® (RAP) elements were used beneath conventional spread foundations to mitigate differential settlement between the spread foundations and foundations supported on piles in the tunnel area. The RAP approach replaced the need for deep pile support throughout the building.

The Geopier® System approach reduced foundation concrete (as more favorable support was provided, a higher allowable bearing pressure was appropriate for design), and enabled footings to be poured “neat” against existing soils without forming or backfilling. The Geopier System approach resulted in significant cost savings, which assisted the contractor in winning the design/build competition and completing the project within budget and schedule.

The RAP load test and installation were conducted within 10 days onsite, enabling the contractor to maintain a rapid schedule.

### REFERENCE:

Mr. Joseph Bolkovatz, Vice-President  
JE Dunn Construction  
(503) 226-3991