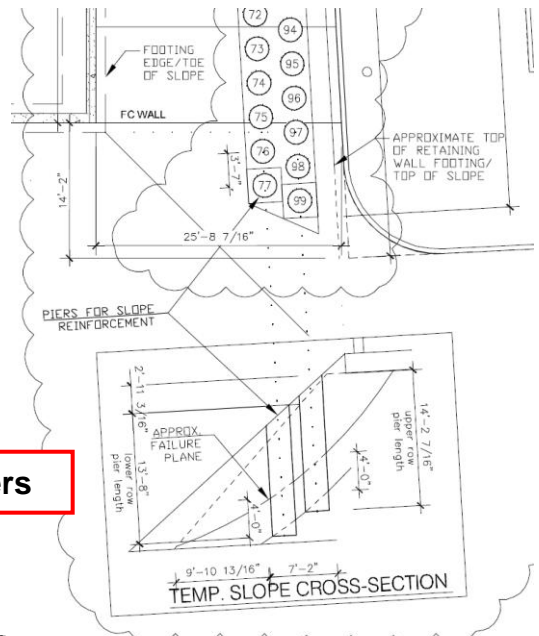


## PROJECT DESCRIPTION

**PROJECT:** Mercedes Benz of Beaverton - Parking Structure  
**LOCATION:** Beaverton, Oregon  
**DESIGN TEAM:** *Structural Engineer:* WDY Structural Engineers : Portland, OR  
*Geotechnical Engineer:* GEOCON Northwest, Inc. : Beaverton, OR  
**CONTRACTOR:** R&H Construction : Portland, OR  
**OWNER:** Lithia Motors, Inc. : Medford, OR



**Slope Stabilization Piers**



### DESCRIPTION:

- 3-story parking structure with column loads to 250 kips
- Variable foundation support conditions across the site
- 18' deep cut at 1:1 needed adjacent to existing building

Excavation to establish floor grade exposed soft SILT in about half of the site and stiff CLAY in the remainder of the building footprint. Aggregate piers were used under footings in the soft area so that all footing could be designed using the higher bearing pressure available in the stiff CLAY, and so that settlement performance of footings would be uniform.

To avoid the need to shore the temporary 18' cut adjacent to the existing building, GTFC-W installed aggregate piers to reinforce the slope.

**REFERENCES:** Michael Kremers, Project Manager R&H Construction      Greg Munsell, S.E., WDY Engineers      Wesley Spang, Ph.D., G.E., P.E. GEOCON Northwest