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GeoTech Foundation Company - West

GeoTech Foundation Company - West®
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PROJECT DESCRIPTION

PROJECT: Clark County Parking Structure

LOCATION: Vancouver, Washington

DESIGN TEAM:

Architect:	Barrentine Bates Lee: Vancouver, Washington
Structural Engineer:	Kramer Gehlen: Vancouver, Washington
Geotechnical Engineer:	David Newton Associates: Portland, Oregon

CONTRACTOR: Swinerton Builders: Vancouver, Washington

OWNER: Clark County: Vancouver, Washington

DESCRIPTION:

- 2-story parking structure with shear walls
- Foundation loads up to 300 kips, gravity dead plus live loads
- 15' – 17' of silt overlying gravel and sand

The site consisted of 15-17 feet of silt overlying a gravel and sand formation. The geotechnical report recommended two alternatives for foundation support:

(1) A Geopier® System providing up to 6,000 psf bearing pressure

(2) Overexcavation and replacement of the silty soils overlying the gravel formation with a structural fill for bearing pressure of 2,400 psf

The Geopier® System was selected as the most cost effective and expedient approach. The need for excavation and replacement filling was completely eliminated, and a significant saving in footing concrete was realized. A total of 480 Rammed Aggregate Pier® (RAP) elements were installed in only 15 working days on-site.

REFERENCES:

Cynthia L. Hovind, P.E.	Jay Blackwell	JoseTroy Lyver, P.E.
David Newton Associates	Swinerton Builders	Kramer Gehlen Associates
(503) 228-7718	(503) 222-2000	(503) 289-2661