

PROJECT DESCRIPTION

PROJECT: 6-Level Parking Structure & Helipad for Providence Hospital Complex
LOCATION: Portland, Oregon
OWNER: The Sisters of Providence
CONTRACTOR: Andersen Construction Co., Inc.



DESCRIPTION:

- 6 Elevated levels, reinforced concrete (cast-in-place)
- Column loads between 216 and 2106 kips

Initial plans for foundation support were to overexcavate 7' or more beneath spread footings to remove a compressible silty soil stratum from beneath spread footings, and to then place compacted crushed rock for footing support. The Geopier® System was selected as a Value Engineering alternative to eliminate the overexcavation and replacement filling.

Several columns were located in a utility corridor, and augercast piles were utilized to support those foundations. Since the augercast piles extended to a lower dense gravel formation, it was necessary to design the Geopier System to result in less than ½" of differential settlement between adjacent pile supported foundations. Rammed Aggregate Pier®(RAP) lengths below bottom of footing grade ranged from 6' to 8'.

A full-scale load test was conducted to confirm design parameters and select the final pier lengths.

REFERENCES:

Mr. Joe Dinsdale, Senior Project Manager
Andersen Construction Co., Inc.
(503) 283-6712

Mr. Curt Boardman, Superintendent
Andersen Construction Co., Inc.
(503) 283-6712