

Orchard Hotel San Francisco, California



Description: 10-story hotel structure with column loads on the order of 1,050 kips. Located in seismic zone 4, seismic settlements were a concern.

Subsurface Conditions: 25 feet of loose sand with SPT "N-values" ranging from 2 to 6 blows per foot.

Design Details: *Geopier*® soil reinforcement was selected based on the foundation cost savings and schedule acceleration as compared to 40-foot long driven piles. Ten-foot long *Geopier* elements were installed to mitigate seismic settlement in addition to controlling static foundation settlement. Rammed Cement Piers™ were installed to support all perimeter footings to maintain adjacent future excavation confinement as required by the San Francisco Building Department.

Geopier Licensee: Geopier Foundation Company - Northern California

General Contractor: Swinerton & Walberg Builders

Geotechnical Engineer: Consolidated Engineering

Structural Engineer: KL & A Structural

References: Mr. Bill Stevens - Consolidated Engineering - (925) 485-5000

Mr. Bill Krill - Swinerton & Walberg Builders - (415) 421-2980