

THE RESIDENCES AT PARK GROVE COCONUT GROVE, FLORIDA, USA

Park Grove is a luxury residential condominium development located on South Bayshore Drive in Miami's Coconut Grove. The project consists of three 20-story, nearly 300-foot towers with 298 residential units featuring panoramic Biscayne Bay views along with 6 smaller amenity buildings. The two towers located closest to the bay feature a unique figure-eight shape designed to maximize natural light in the center of the buildings.

Loadtest performed multi-level O-Cell® tests on two dedicated test shafts. Subsurface conditions consisted of very soft to soft limestone with some sand and very loose sand. Malcolm Drilling Company Inc. completed construction of the two test piles utilizing the continuous flight auger method. After each pile was excavated and grouted, the reinforcing cage with attached O-Cell assemblies was immediately inserted. The first test was performed on a 73.4-foot deep, 30-inch diameter test pile, using two 16-inch O-cells located at approximately 8



Lowering assembly cage

PROJECT INFORMATION

- Owner: Park Grove
- Client: Malcolm Drilling Company Inc.
- Engineer: NV5
- Completion Date: 2017
- Project Cost: \$680 million
- Maximum Load: 6,382 kips

SERVICES PROVIDED

- Bi-directional O-Cell load testing and reporting
- Foundation risk management



feet and 26 feet above the pile tip. Test Pile 1 resulted in a maximum sustained combined load of 5,407 kips. Test Pile 2 was performed on an 84.8-foot deep, 36-inch diameter shaft, and consisted of two 20-inch O-Cells located at approximately 11 and 35 feet above the pile tip. The maximum sustained bi-directional load was 6,382 kips. By validating the required loads for the buildings, Loadtest's testing program thereby reduces uncertainty and supports the most efficient foundation design.



Preparing foundation construction

