

EXECUTIVE SUMMARY

The Soho high rise condominium project consists of 13 above grade stories and two below grade stories. The building encompasses roughly 175,000 SF stretching from 28 feet below grade to 175 feet above grade. The first floor houses highly marketable retail spaces while the remaining 12 stories are condominium units. A sub-cellar level is set aside for resident parking and the cellar level contains a pool lounge, exercise facility, resident storage spaces and mechanical rooms. There are also roof terraces and Jacuzzi pools located at the 6th Floor step back.

In the first technical report the existing structural conditions are introduced through a detailed description of the foundation, floor, column and lateral systems. Structural concepts were investigated including preliminary analysis of the lateral force resisting system. Spot checks of gravity loads and lateral loads were done on a typical floor bay, column and shear wall for discrepancies in design loads.

ASCE 7-05 was used to determine all wind and seismic loads. For wind loads Method 2 (analytical procedure) of ASCE 7-05 section 6 was used. Seismic design loads were established using the equivalent lateral force procedure set forth in ASCE 7-05.