



2 Cooper Square

This project entailed construction of a new 14-story mix use building with 2 full cellar levels below street grade. To enable 26-foot deep excavation, the neighboring 5-story Landmarked building at 37 East 4th St received 16 feet of conventional concrete underpinning and the neighboring 7-story Kaplan (across from Stable Court) was supported using a soldier beam and lagging wall with two levels of prestressed rakers set on heel blocks cast 7 feet below the mat subgrade. Temporary soldier beam and lagging walls were constructed along East 4th St and Cooper Square, both of which were supported with two levels of wales and prestressed tieback anchors.

Services provided

- Geotechnical Subsurface Investigation with Report
- Settlement Analysis of Mat Foundation
- Design and Inspection of Underpinning and Support of Excavation
- Subgrade Inspection for Mat Foundation
- Monitoring of Adjacent Buildings



Tieback Installation of Soldier Beam & Timber Lagging Wall



Concrete Pour for Underpinning of Building on East 4th St



Temporary Bracing inside East 4th St Building



2nd Level Tieback Installation of Soldier Beam and Timber Lagging Wall