

Client

- Judlau Contracting

Location

- New York, NY

Services Provided

- Baseline Dynamic Signature
- Data Acquisition
- Frequency Identification
- Non-linear Damping Characteristics
- Continuous Monitoring

Value Added

- Provided a baseline of each building to use as a comparative tool
- Allowed for the Engineer to confidently continue to jack up part of the building when traditional monitoring was too inconclusive.
- Observed and reported on any changes that occurred to the buildings behavior throughout construction to help avoid damage

Project Summary

STRAAM provided a Baseline Assessment Report which detailed the results of measurements and analysis of the dynamic behavior of the two buildings above and adjacent to the new entrance of the 2nd Ave Subway. The dynamic properties of the two buildings were identified and datum for comparison to future measurements was established in the form of baseline spectral responses, which includes frequencies of resonance, amplitudes, mode shapes and modal damping as well as long term tilt measurements.

This project consisted of two load transfer operations and STRAAM's instrumentation was considered invaluable by the engineer (Weidlinger Assoc.). Our technique allowed for the completion of the preloading, when the standard techniques were too inconclusive.

STRAAM was also contracted to provide continuous dynamic monitoring. Monthly reports were provided that consisted of update frequencies of resonance, damping and tilt measurements.

