

# New York's Second Avenue Buildings Survey, Evaluate & Provide Mitigative Design

## Client:

New York City Metropolitan  
Transit Authority

## Location:

New York City, NY

## Services Provided:

- Building condition surveys and reports
- Mitigation design
- Establish limiting and threshold values for vibration, angular disturbance, and settlement

## Value Provided:

- Ensure integrity of buildings by establishing limiting and threshold values for various construction activities
- Established baseline conditions to gauge the effects of construction on adjacent properties

## Background & Project Challenges

The New York City Metropolitan Transit Authority required survey, evaluation and design services for 110 buildings located along and adjacent to Second Avenue between 63rd and 86th Streets. The purpose of this assignment was to document the condition of the existing buildings and to design repair details for the structures (as necessary) in conjunction with the construction of the Second Avenue subway.



## Geocomp Role & Accomplishments

Geocomp was selected by the prime consultant as a subconsultant for this project assignment. The project team reached out to each building owner to communicate project goals, and developed an inspection schedule based upon the owner's input. This outreach program kept the owners continually abreast of the progress of our work.

Then the team performed a pre-condition survey of all 110 buildings. During the inspection, we conducted a visual survey and photo-documented any deficiencies found on the structures. We evaluated the condition of the façade, exposed foundations, and appurtenances which overhang the public way. We also determined the vertical profile for low-rise masonry buildings using optical survey instruments. Upon completion of the inspection, our team submitted pre-condition survey reports documenting the current condition of each building.

Finally the team prepared and submitted our building evaluation report, which categorized each building according to building type and extent of defects.

Geocomp also performed mitigation design and prepared contract documents for mitigative remediation measures for the building to withstand the effects of construction of the Second Avenue subway. Contract documents included soil stabilization, underpinning, temporary protection systems, etc. The team also provided construction support services during construction.

## For More Information Contact:

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