

# Second Avenue Subway



**Client:**

New York City Metropolitan  
Transit Authority

**Location:**

New York, NY

**Service Provided:**

Supply, install, commission,  
and monitor of buildings and  
utilities

**Value Provided:**

- Instrumentation and monitoring during demolition provided project alerts safeguarding buildings and utilities surrounding the site

## Background & Project Challenges

The Second Avenue Subway will be New York City's first major subway system expansion in over 50 years. When fully completed, the line will stretch 8.5 miles along the length of Manhattan's East Side, from 125<sup>th</sup> Street in Harlem to Hanover Square in Lower Manhattan. In addition, a track connection to the existing 63<sup>rd</sup> Street and Broadway Lines will allow a second subway line to provide direct service from East Harlem and the Upper East Side to West Midtown via the Broadway express tracks. Sixteen new stations will be built.

The first contract is for the construction of the tunnel boring machine (TBM) launch box and the mining of the TBM tunnels from 92<sup>nd</sup> Street to 63<sup>rd</sup> Street. The launch box will ultimately become the southern half of the 96<sup>th</sup> Street Station.

The second contract is for the 96<sup>th</sup> Street Station Heavy Civil/Structural package. This contract completes the northern half of the 96<sup>th</sup> Street Station box and includes the demolition of an existing building at the site of a new fan plant and construction of the underground structure for three entrances and two ancillary buildings.

Similar to the launch box contract, this contract includes relocation of all the existing utilities that presently lie within the limits of the box, excavation of the area between the slurry walls and placement of a precast concrete roadway deck over the excavation.

## Geocomp Role & Accomplishments

Geocomp is providing instrumentation for the second contract. The work involves the supply, installation, commissioning and monitoring of instruments to safeguard buildings and utilities surrounding the project site.

A key component to this monitoring program will be a networked series of automated total stations that will provide precise redundant measurements of the existing above ground infrastructure. Data processing, presentation and reporting will be carried out using Geocomp's proven *iSiteCentral*<sup>TM</sup> web-based data management system.