



PROJECT BRIEF

Second Ave Subway Instrumentation & Monitoring

PROJECT PROFILE

CLIENT:
New York City Transit Authority

LOCATION:
New York, NY

VALUE:

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

SERVICES PROVIDED:

- Supply, install, commission, and monitor of sensors for buildings and utilities

“The work involved the supply, installation, commissioning and monitoring of instruments to safeguard buildings and utilities surrounding the project site. Data processing, presentation and reporting were carried out using Geocomp’s *iSiteCentral*®, web-based data management system.”



INSTALLATION OF GEOTECHNICAL INSTRUMENTS & DATA MANAGEMENT COLLECTION

The first contract consisted of construction of the tunnel boring machine (TBM) launch box and the mining of the TBM tunnels from 92nd Street to 63rd Street. The launch box will ultimately become the southern half of the 96th Street Station. The second contract is for the 96th Street Station Heavy Civil/Structural package. This contract completes the northern half of the 96th 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. Geocomp provided instrumentation for the second contract. The work involved the supply, installation, commissioning and monitoring of instruments to safeguard buildings and utilities surrounding the project site. A key component to this monitoring program was a networked series of automated total stations that provided precise redundant measurements of the existing above ground infrastructure. Data processing, presentation, and reporting were carried out using Geocomp’s *iSiteCentral*® web-based data management system.



BACKGROUND

The Second Ave Subway is New York City’s first major subway system expansion in over 50 years. The line will stretch 8.5 miles along the length of Manhattan’s East Side from 125th Street in Harlem to Hanover Square in lower Manhattan. In addition, a track connection to the existing 63rd Street and Broadway Lines 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.