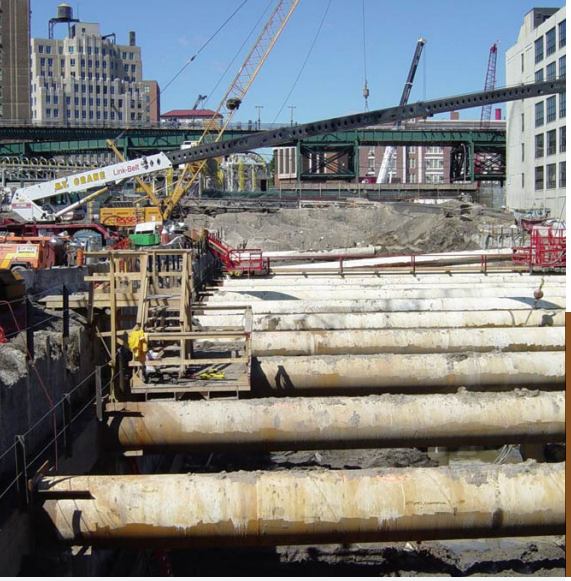

Geocomp
Trusted to help mitigate risk

PROJECT BRIEF

East Side Access Tunnel Monitoring

PROJECT PROFILE

CLIENT:
AECOM

LOCATION:
New York City, NY

VALUE:

- 24/7 monitoring and reporting provided essential data during critical and sensitive phases of construction
- Real time monitoring, automatically generated email alerts identifying instrument movements exceeding set thresholds

SERVICES PROVIDED:

- Provided installation of various geotechnical instruments
- Web-based data management system

"Geocomp collected and managed a vast amount of data from more than 13,000 geotechnical instruments and provided a web-based data management system allowing data to be processed, presented and reported in a timely, accessible and understandable manner."

INSTALLATION OF GEOTECHNICAL INSTRUMENTS & DATA MANAGEMENT COLLECTION

Geocomp offered a complete geotechnical data management solution, which enabled the ESA Project Team to determine whether excavation, tunneling, or construction activities had any adverse effects on surrounding structures. Geocomp collected and managed a vast amount of data from more than 13,000 geotechnical instruments and provided a web-based data management system allowing data to be processed, presented and reported in a timely, accessible, and understandable manner. Using Geocomp's web-based data management system, iSiteCentral, all instruments were monitored and continuous review of data collected and processed. Geocomp also collected readings from instruments which needed to be ready manually.

BACKGROUND

The East Side Access (ESA) project in New York City connects the Long Island Rail Road's (LIRR) Main and Port Washington lines in Queens to a new LIRR terminal beneath Grand Central Terminal in Manhattan. The connection increases the LIRR's capacity into Manhattan, dramatically shortening travel time for Long Island and eastern Queens commuters traveling to the East Side of Manhattan. Prior to construction, geotechnical instruments were installed above ground and in the subway tunnels to measure any movement, settlement, tilt, strain, and induced vibrations from tunneling, excavation, and construction activities. Instruments included robotic total stations (RTS) with reflective prismatic targets, manual survey points, inclinometers, extensometers, observation wells, tilt meters, seismographs, dynamic strain gages, and liquid level settlement systems. Most of the instruments were designed to be read remotely and automatically.