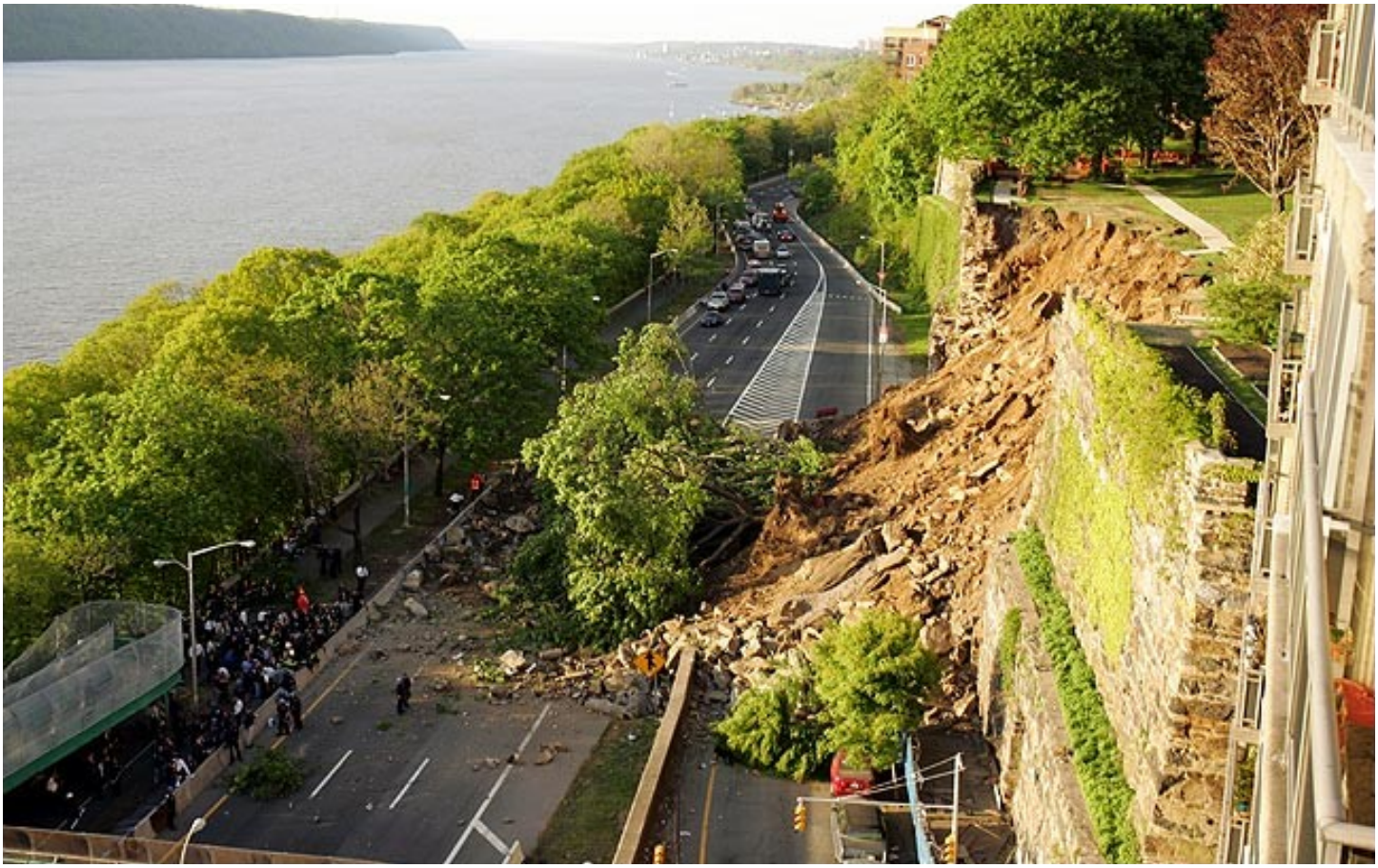
GEOD CORPORATION

AERIAL MAPPING · LAND SURVEYING · UTILITY MARKOUTS

A CERTIFIED SMALL BUSINESS ENTERPRISE



Castle Village Field Survey & Deformation Monitoring

In 2005, a portion of a 75-foot-tall stone retaining wall constructed in 1908 at the Castle Village Apartments collapsed onto the Henry Hudson Parkway, halting traffic in both directions. Rebuilding of the collapsed portion of the wall was substantially completed in 2007, but it would take another three years for the project to be completed.

From the time of the collapse, ongoing deformation monitoring was performed to detect movement of the structure during the subsequent repair of the wall. In early 2015, GEOD assumed responsibility for the monitoring effort. GEOD developed a scope of work with our client to provide ongoing monitoring and reporting. The scope included:

* Establishment of permanent project controls referenced to geodetic control
* Evaluation of the condition of existing prisms being utilized as monitoring points
* Observation of the monitoring points and reporting/comparing the results
* Establishment of new monitoring prisms to replace damaged prisms and complement the existing array of monitoring prisms
* High definition 3D laser scanning of the wall to capture the current condition in a comprehensive way for future analysis of the 600'+ long retaining wall

GEOD successfully implemented this scope of work and has continued to perform monitoring observations and reporting on a semi-annual schedule, with full comprehensive scans of the entire wall on a yearly schedule.

Location: Riverside Drive, Manhattan, NY

Client: Castle Village Owner's Corp.

Contract Amount: $39,000

Services:

- Deformation monitoring
- Establish project survey control
- Observation of points
- 3D laser scanning