

PROJECT DOSSIER

# EAST MIDTOWN GREENWAY PROJECT



<b>Project</b>	<b>EAST MIDTOWN GREENWAY - EAST 53<sup>RD</sup> - 61<sup>ST</sup> STREET - BOROUGH OF MANHATTAN</b>
Location	East Midtown, USA
Contractor	Wang Tech
Duration	2020 and ongoing

## PROJECT OVERVIEW

The East Midtown Greenway Project will fill a major gap in the Manhattan Waterfront Greenway along the East River while providing much-desired waterfront

access and public open space resources. The E 53<sup>rd</sup> to E 61<sup>st</sup> St phase of the project entails construction of the northern section of the esplanade that connects to Andrew Haswell Green Park at 62<sup>nd</sup> Street and will include a pedestrian bridge to East 54<sup>th</sup> Street.

The pier structure will be founded on piles drilled into bedrock in the East River. All piles will be rock-socketed into bedrock and filled with rebar cages and concrete/grout. On the topside, a bike path will be constructed on top of the tub girders. The tub girders will allow for soil installation to support the various landscaping and tree system. A walkway path will run adjacent to the bike path and will feature various seating and railing options for pedestrians to enjoy the space. The esplanade will also include various light fixtures, irrigation systems, and watering stations (hose and public water fountains).

At E 54<sup>th</sup> Street, there will be a steel and concrete pedestrian bridge erected. This bridge will span from Sutton Place Park, over the FDR, and onto a pile supported structure at the esplanade.

## WHY MONITORING?

The instrumentation monitoring plan included installation of crack meters and tiltmeters with wireless dataloggers on the existing retaining wall. This was required to monitor changes in existing cracks as well as tilt in the retaining wall, caused due to the construction activities.

## MONITORING SOLUTION

Rite Geosystems Inc., our USA Company was entrusted to provide complete instrumentation for the project.

Scope of works include:

- Supply of geotechnical instruments
- Automatic monitoring with dataloggers

## INSTRUMENT USED

Crack meters	Used to monitor existing cracks on the retaining wall along FDR and on the FDR columns
Tiltmeter	Used to monitor angular distortion of the retaining walls along the Andrew Haswell Park and/or the FDR columns.
Datalogger	Automatic dataloggers with GSM/GPRS modem to collect and transfer the data at central server

The project may require our tiltmeters also in the future to monitor the angular distortion of retaining walls along the Andrew Haswell Park and/or the FDR columns.

## RESULTS

Installation of the above mentioned instruments has been executed successfully, giving the client necessary information required for smooth progress of the project. The wireless datalogger collected the data from the instruments at a required frequency and transferred it to a remote server/PC to be easily accessed by stakeholders.



Crack meters installed across existing cracks

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