RITE GEOSYSTEMS

ENCARDIO RITE METASENSING FOR MEGA STRUCTURES

Project Dossier

PROJECT DOSSIER

MALCOLM X BRIDGE PROJECT

PROJECT OVERVIEW

In preparation for the first section of track to be installed for Maryland's $5.6 billion Purple Line project, Rite Geosystem biaxial tiltmeters were used as a part of monitoring of transportation properties.

With the Purple Line transit system navigating through and around densely developed suburbs and communities in its path to providing mass transportation, the Maryland Transit Authority developed an existing structure protection plan for any properties determined to be within the zone of potential influence from adjacent construction. As one of the main overpass bridges in the project axis, Malcolm X bridge was monitored during pile foundation construction.

Project	**MALCOLM X BRIDGE PROJECT**
Location	Pennsylvania, USA
Client	Fugro USA Land Inc
Owner	Maryland Transit Authority
Year	2020

MONITORING SOLUTION

Rite Geosystems Inc., our USA Company was enstrusted to provide instrumentation and monitoring for risk assesment during construction.

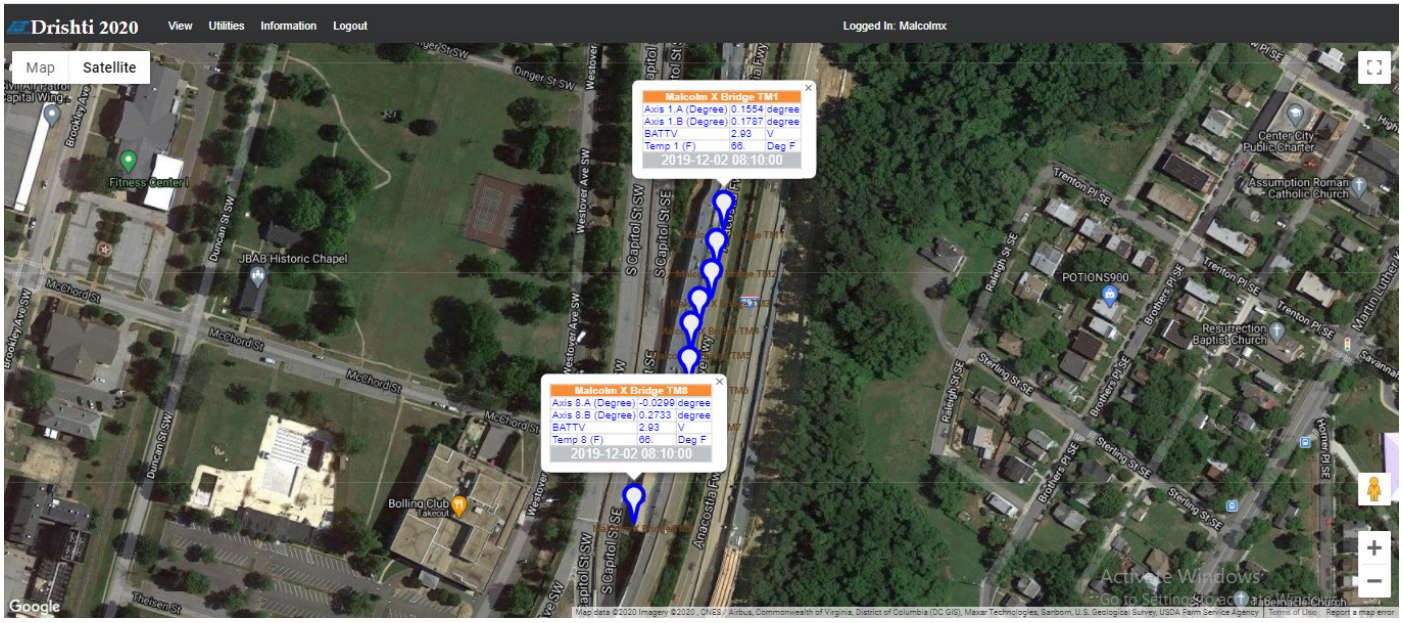
Scope of works include:

- Supply of geotechnical instruments
- Automatic monitoring with compact dataloggers
- Online web-based data management system (WDMS) with pre-set alarms

INSTRUMENT USED

Biaxial tilt meters	Used along the bridges to monitor any deformation taking place.
Datalogger	Automatic compact dataloggers with GSM/GPRS modem was used to collect the data from tilt meters and transmit it to the Drishti web-based database management system.

Rite Geosystems Inc. also provided complete online cloud based monitoring solution-Drishti. Monitoring continued over six months. Alarm notifications were provided through SMS/emails.



Google map view from our database management system, showing location of installed sensors

Tilt meter data