



Linear Infrastructure - Slope Stability



PROJECT SUMMARY

NAME: Linear Infrastructure - Slope Stability (Location classified)

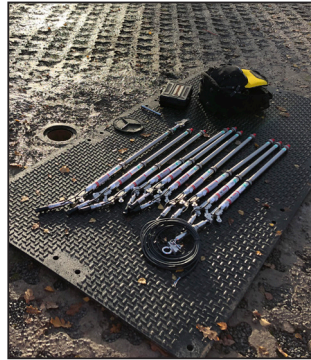
DATE: 2020

CLIENT: Classified

CONTRACTOR: Classified

CONSULTANT: Cundall

INSTRUMENTATION SPECIALIST: Dunelm Geotechnical & Environmental Ltd



OVERVIEW

A major road is located at the top of a significant slope which runs down to a river in the bottom of the valley.

The stability of the slope has historically been of concern and has been monitored manually for several years.

The existing monitoring has shown increased movement associated with increased rainfall over the years and therefore it was decided to improve and automate the monitoring of the slope.

MONITORING

The project represents classical slope stability monitoring where instruments were installed to identify the location of the slip plane and on the surface to identify any top layer instability.

QJ Inclinator Casing was installed to allow the installation of In-Place Inclinator which were installed to identify the location of the sub-surface slip plane within the slope.

PRODUCTS USED

In-Place Inclinator

Measures tilt and is used to calculate rotation and/or displacement.

QJ Casing

Quick connect inclinometer casing.

VW Piezometers

Measurement of pore water pressure.

WI-SOS 480 Tilt Meters

Combines a high-precision biaxial MEMS tilt sensor with the benefit of long-range wireless communication.

Wi-SOS 480 Digital Nodes

To log and transmit data from digital sensors.

WI-SOS 480 VW Nodes

To log and transmit data from vibrating wire sensors.

WI-SOS 480 Gateway

Central data acquisition logger for remote access via the internet.

GeoAxiom

Data visualisation software to retrieve data in or near real time.