

Construction of the S1 (formerly S69) Bielsko-Biała - Żywiec - Zwardoń expressway, section Przybędza - Milówka (bypassing Węgierska Górka)

Węgierska Górka, Poland

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The project

Providing an extensive and comprehensive monitoring program for slopes and retaining structures commissioned by Keller Poland, which is performing the structure reinforcements. Providing comprehensive monitoring services (in the field of geotechnics and geodesy) for 16 different bridge structures commissioned by the General Contractor.

The challenge

Execution of works in the areas of active landslides required us to carry out the works with the utmost precision. Additionally, the works were performed on many fronts, which combined with severe mountain conditions was a great logistic challenge.

The solution

- preparation of complete project documentation for monitoring of slopes and retaining structures,
- inclinometric monitoring of slopes and retaining structures,
- monitoring of groundwater table levels,
- surface geodetic monitoring of slopes and retaining structures,
- monitoring of forces in soil anchors,
- strain gauge monitoring in large diameter piles
- test loads on soil nails
- strain gauge monitoring of temporary lining of newly built tunnels
- geodetic monitoring of bridges (during the warranty period)
- continuity monitoring of piles

Project facts

Owner(s)

Generalna Dyrekcja Dróg Krajowych i Autostrad Katowice
Branch

Keller business unit(s)

Geo Instruments Polska

Main contractor(s)

MIRBUD S.A. - Leader
KOBYLARNIA S.A. - Partner
Zrzeszenie budowlane INTERBUDMONTAŻ - Partner

Engineer(s)

Jerzy Pieronkiewicz - Technical Director
Mateusz Orsicz - Software Specialist
Bartłomiej Jadach - Monitoring Engineer

Services

Deformation monitoring

Markets

Infrastructure
Tunnelling

Technologies

Wireless sensors