**Field investigation works**

***INSTITUT IGH, JSC covers all activities necessary to solve engineering problems at the soil or rock and structures contact.***

***Field investigation works and observations include activities on exploratory drilling, field mapping of soil and rocks, geophysical tests of the field, mechanical properties and water permeability of the soil and rock mass tests, and activities of field measurements and observations of geotechnical structures.***

All construction activities require reliable and relevant soil condition data for construction assessment and planning. Assessing soil stability and the risk of landslides or rockfalls requires a thorough knowledge of local and soil conditions. INSTITUT IGH, JSC experts have rich experience, extensive knowledge and sophisticated equipment for conducting field investigations.

**Knowing the soil condition is crucial**

Substandard field analysis can result in the wrong choice of engineering solutions for foundation construction, wrong design of the foundation, inappropriate and dangerous execution of works on the ground, and causing damage to neighbouring and new objects. Also, it can lead to the construction of massive and unnecessarily expensive foundations.

With today's geophysical technologies being integrated with traditional engineering geological soil investigations (e.g. mapping or exploratory drilling), it is possible to create highly detailed, continuous and comprehensive models for application in many areas.

**List of field investigation services that our experts in INSTITUT IGH, JSC can provide to you:**

• Foundations of high-rise buildings, bridges, viaducts, dams and other infrastructure facilities,

• Support structures of construction pits for the foundation of high-rise buildings and infrastructure in ports,

• Geotechnical constructions of embankments and slopes on the routes of transport infrastructure such as highways, high-speed railways and waterways,

• Improvement and strengthening of soil and rock mass

• Stability of tunnel and underground structures excavation

• Examination of the pile

• Geotechnical investigation works with exploratory drilling on the field and sea

• Geophysical research

• Engineering-geological and hydrogeological investigation works

• Implementation of investigative works and preparation of Geotechnical survey report for project documentation

• Geodetic surveys and preparing geodetic documentation

• Testing structures using non-destructive methods in operation and maintenance

• Geotechnical investigations and soil tests

• Laboratory tests of soil, rocks and geosynthetics

• Investigative works and technical observations

• Field tests of all layers of the pavement structure

• Field tests and technical supervision of waterproofing works

• Field tests of slip resistance of various types of floors