



SCOTLAND-WIDE GROUND
INVESTIGATION SUPPORT

In-Situ Soil Testing & Field Services

Practical site-based testing, monitoring and field assessments to support ground investigation projects across Scotland.

STRENGTH & COMPACTION

DRAINAGE & PEAT

RESISTIVITY

MONITORING

**Know the ground.
Build with confidence.**

BROCHURE OVERVIEW

ScotGround Engineering

This brochure outlines the in-situ soil testing and field assessment services offered by ScotGround, including DCP, hand vane, Clegg hammer, LWD, soakaway and percolation testing, peat probing, resistivity testing, and gas and groundwater monitoring.

Designed to be practical, clear and easy to read, it explains what each service involves and the purpose it can serve on a project.

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Strength, stiffness & compaction

Rapid field methods that help assess how soils, fills and pavement layers perform in their existing condition.

01

Dynamic Cone Penetrometer (DCP)

A standard hammer drives a cone into the ground. Penetration per blow is recorded to show how resistance changes with depth.

PURPOSE

Assess subgrade strength, identify weaker layers and provide indicative CBR correlations where appropriate.

02

Hand Vane Testing

A vane is inserted into soft cohesive soil and rotated until failure. The measured resistance provides a quick indication of undrained shear strength.

PURPOSE

Assess soft clays and silts and compare strength between locations or depths.

03

Clegg Hammer Testing

A controlled falling hammer measures the response of near-surface soils and granular materials, producing a Clegg Impact Value.

PURPOSE

Check compaction, material consistency and near-surface strength during earthworks.

04

Lightweight Deflectometer Testing

A controlled dynamic load is applied to the surface and the resulting deflection is measured to provide a rapid indication of stiffness.

PURPOSE

Assess compacted fills, working platforms, subgrades and pavement layers.

Drainage & peat

Site-specific assessments that help establish infiltration behaviour and identify the depth and distribution of peat before design or construction decisions are made.

05

Soakaway & Percolation Testing

Field infiltration testing assesses how quickly water can enter and disperse through the surrounding ground. Testing can be undertaken at proposed drainage locations to provide site-specific information for designers.

PURPOSE

Support soakaway and drainage design, planning investigations and Sustainable Drainage Systems (SuDS) by assessing infiltration characteristics.

06

Peat Probing

A peat probe is advanced through soft organic deposits until firmer underlying ground is encountered. Repeated probes allow peat thickness and distribution to be mapped across a site.

PURPOSE

Inform renewable-energy and infrastructure layouts, access track planning, peat depth surveys and ground investigation strategies.

Resistivity & monitoring

Measurements that support electrical infrastructure design and longer-term understanding of groundwater and ground-gas conditions.

07

Electrical Resistivity Testing

Measures the resistance of the ground to the passage of electrical current. Values can vary significantly with soil type, moisture content and geology.

PURPOSE

Provide ground-resistivity data for earthing design, substations, wind farms and other electrical infrastructure.

08

Thermal Resistivity Testing

Determines how effectively soil and surrounding materials resist heat transfer, which is particularly important around buried power cables.

PURPOSE

Support underground cable design, route assessment and thermal-rating calculations.

09

Gas & Groundwater Monitoring

Monitoring installations can be checked over agreed periods to build a picture of groundwater conditions and ground-gas concentrations. Results are recorded clearly for use by the project team and can form part of broader geotechnical or environmental assessment programmes.

TYPICAL PURPOSES

- Groundwater levels and variation
- Ground-gas assessment
- Geotechnical assessment support
- Environmental monitoring programmes

Project-specific field assessments

Every ground investigation is different. ScotGround can provide additional field assessments and practical site support where the scope, location or programme requires a tailored approach.

Need something not listed?

Tell us what information your project needs and we can discuss the most practical site-based approach. Services can be delivered as standalone assessments or as part of a wider programme of ground investigation support.

SERVICES AT A GLANCE

DCP

HAND VANES

CLEGG HAMMER

LWD

SOAKAWAY / PERCOLATION

PEAT PROBING

ELECTRICAL RESISTIVITY

THERMAL RESISTIVITY

GAS & GROUNDWATER MONITORING

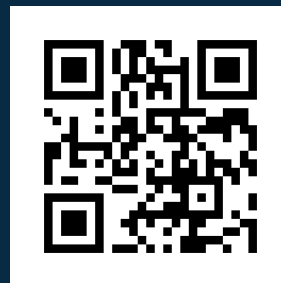
Discuss your project with ScotGround

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VISIT SCOTGROUND.SCOT

Know the ground. Build with confidence.

Testing methods and correlated parameters should be selected and interpreted in accordance with project requirements, applicable standards and ground conditions.