Soil Environment Services

Geotechnical site investigation

General scope of works

This survey provides a report on the ground conditions for a development such that a general assessment of the ground can be gained, foundation depth can be assessed and concrete specification determined. The survey uses ***window sampling*** equipment.

Scope of works

Site survey

Boreholes - number and depth* to be agreed
LDP or SPT in non cohesive and cohesive soils
Shear vane to 3 m if cohesive soils
Groundwater depth
Soil sampling for laboratory testing
Tree type, location and height

Laboratory testing

Atterberg limits re soil plasticity
pH and sulphates re concrete specification

Reporting

To include maps of BH and sample locations
BH log as per BS5930
Foundation depth re NHBC tables: soil shrink swell/ trees
Safe ground bearing using NOVOSPT*
Concrete specification re aggressive ground

Equipment

0 to ~ 6 m depth Fits in one Landrover and all hand manoeuvrable	Van Walt Window sampling rods are used with an Atlas Copco MK1 Cobra breaker hammer and hydraulic jack for removal. Dynamic Probing (light) is undertaken with a Nordmeyer Geotool 10 kg probe. Results are converted to SPT using correlations.
~6 m to 15 m depth Fits in one Transit van	Archway Engineering Competitor 130 rig using SPT or super heavy dynamic probe. Windowless sampling is carried out and casing used if needed.

General site works

The site has a full reconnaissance to CAT scan for electrics and lift manhole covers to determine pipe runs before work begins. All surfaces are protected as much as possible and replaced as found if required. All arisings are usually returned to the hole.

*Borehole depth may vary if rock or very hard/dense ground is encountered and the window sampling equipment cannot progress. This is termed a REFUSAL and ground bearing will be extremely high. If progression to depth is required irrespective of ground strength, please inform us at the time of your request for a quotation.

* NOVOSPT is a software package for converting SPT N values into ground bearing values. A number of standard equations are used.

The work takes about three weeks from commission. We do not charge for travel.

Please contact Dr Robin Davies, Soil Environment Services Ltd

Unit 8, Stocksfield Hall, Stocksfield, Northumberland, NE43 7TN

Tel 01661 844827 Email rd@soilenvironmentservices.co.uk