Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

2519 **Accredited to ISO/IEC 17025:2017**	**K4 Soils Laboratory** **Issue No:** 017 **Issue date**: 21 July 2023
	Unit 8, Olds Close **Olds Approach** **Watford** **Hertfordshire** **WD18 9RU**
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Testing performed by the Organisation at the locations specified below

Locations covered by the organisation and their relevant activities

Laboratory locations:

Location details		Activity	Location code
Address Unit 8, Olds Close Olds Approach Watford Hertfordshire WD18 9RU	**Local contact** Mr K D Phaure	Testing soils for civil engineering purposes and aggregates	A

Site activities performed away from the locations listed above:

Location details	Activity	Location code
Ground Investigation sites	Plate loading and CBR testing, in situ density and DCP testing	B

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DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
AGGREGATES	Particle size distribution – sieving method	BS EN 933-1:2012	A
SOILS for civil engineering purposes	Moisture content oven drying method	BS 1377:Part 2:1990	A
	Saturation moisture content of chalk	BS 1377:Part 2:1990	A
	Liquid limit - cone penetrometer	BS 1377:Part 2:1990	A
	Liquid limit - cone penetrometer - one point	BS 1377:Part 2:1990	
	Plastic limit	BS 1377:Part 2:1990	A
	Plasticity index and liquidity index	BS 1377:Part 2:1990	A
	Linear shrinkage	BS 1377:Part 2:1990	A
	Particle density – gas jar	BS 1377:Part 2:1990	A
	Particle density – small pyknometer	BS 1377:Part 2:1990	A
	Particle size distribution - wet sieving	BS 1377:Part 2:1990	A
	Particle size distribution - dry sieving	BS 1377:Part 2:1990	A
	Particle size distribution hydrometer method	BS 1377:Part 2:1990	A
	Particle size distribution – pipette method	BS 1377:Part 2:1990	A
	Mass loss on ignition	BS 1377:Part 3:2018	A
	Sulphate content of soil and groundwater – acid soluble method	BS 1377:Part 3:1990	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SOILS for civil engineering purposes (cont'd)	Determination of water-soluble sulfate in soil	BS 1377:Part 3:2018	A
	Determination of groundwater sulfate	BS 1377:Part 3:2018	A
	pH value	BS 1377:Part 3:2018	A
	Dry density/moisture content relationship (2.5 kg rammer)	BS 1377:Part 4:1990	A
	Dry density/moisture content relationship (4.5 kg rammer)	BS 1377:Part 4:1990	A
	Dry density/moisture content relationship (vibrating hammer)	BS 1377:Part 4:1990	A
	California Bearing Ratio (CBR)	BS 1377:Part 4:1990	A
	Measurement of swelling of soaked CBR specimen	BS 1377:Part 4:1990	A
	Moisture condition value (MCV)	BS 1377:Part 4:1990	A
	Chalk crushing value	BS 1377:Part 4:1990	A
	One-dimensional consolidation properties	BS 1377:Part 5:1990	A
	Swell strain using an oedometer	Documented In-House Method based on BS 1377:Part 5	A
	Permeability in a triaxial cell	BS 1377:Part 6:1990	A
	Undrained shear strength - triaxial compression without measurement of pore pressure	BS 1377:Part 7:1990	A
	Undrained shear strength - triaxial compression with multistage loading and without measurement of pore pressure	BS 1377:Part 7:1990	A
	Shear strength - small shearbox	BS 1377:Part 7:1990	A

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
SOILS for civil engineering purposes (cont'd)	Shear strength - large shearbox	BS 1377:Part 7:1990	A
	Effective angle of internal friction and effective cohesion of earthworks materials	BS 1377:Part 7:1990 and Specification for Highway Works: February 2016: clause 636	A
	Residual strength – small ring shear apparatus	BS 1377:Part 7:1990	A
	Effective shear strength - consolidated-undrained triaxial compression test with measurement of pore pressure	BS 1377:Part 8:1990	A
	Effective shear strength - consolidated-drained triaxial compression test with measurement of volume change	BS 1377:Part 8:1990	A
	Determination of the state of desiccation in clay soils	Documented In-House Method based on BRE Information Paper 4/93	A
	In-situ California Bearing Ratio (CBR)	BS 1377:Part 9:1990	B
	In-situ density - sand replacement method (large pouring cylinder)	BS 1377:Part 9:1990	B
	In-situ density - core cutter method	BS 1377:Part 9:1990	B
	Vertical deformation and strength characteristics of soil by the plate loading test	BS 1377:Part 9:1990	B
	Equivalent CBR value by the plate loading test	BS 1377:Part 9:1990 and Design Manual for Roads and Bridges: volume 7: HD 25/94 (withdrawn)	B
	Strength characteristics using the Dynamic Cone Penetrometer (DCP)	Documented In-House Method based on TRL Information Note – R 8157 – "Improved measurement of pavement strength by Dynamic Cone Penetrometer"	B

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GEOTECHNICAL INVESTIGATION and TESTING - Laboratory testing of soil	Water content	BS EN ISO 17892-1:2014	A
	Bulk density - linear measurement method	BS EN ISO 17892-2:2014	A
	Determination of particle density – fluid pycnometer method	BS EN ISO 17892-3:2015	A
	Determination of particle size distribution -sieving method -pipette method -hydrometer method	BS EN ISO 17892-4:2016	A
	Unconsolidated undrained triaxial test	BS EN ISO 17892-8:2018	A
	Determination of liquid limit by the fall cone method	BS EN ISO 17892-12 2018	A
	Determination of plastic limit	BS EN ISO 17892-12 2018	A
	Plasticity Index and Liquidity Index	BS EN ISO 17892-12 2018	A
END			