

EARTHWORKS GUIDE FOR MANAGEMENT OF MATERIALS

GEOTECHNICAL CLASSIFICATION TESTING GUIDE

Material Type	Used for	MCHW Class	Moisture Content	Atterberg Limits	Intact Dry Density and Saturated	Grading	Particle Density	Compaction study			Possible Other Tests to be considered. (Project specific to suit design)
								2.5kg	4.5kg	Vibrating Hammer	
Granular Sands, and Gravels	General Fill	Class 1A Well Graded Class 1B Uniformly Graded Class 1C Coarse Graded	X			X	X		O	X	Remoulded CBR (dry and soaked) Effective strength - Shear Box MCV Los Angeles Coefficient Contamination Suites BRE pH and SO ₄
Cohesive Clays and Silts	General Fill	Class 2A Wet Cohesive Class 2B Dry Cohesive Class 2C Stony Cohesive Class 2E Silty Cohesive	X	X		X	X	X	O		Remoulded CBR (dry and soaked) Remoulded Undrained shear strength, Effective Stress - Shear Box Contamination Suites BRE pH and SO ₄
Chalk	General Fill	Class 3	X	O	X		X	O	O		Remoulded CBR (dry and soaked) Remoulded Undrained shear strength, Effective Stress - Shear Box Contamination Suites BRE pH and SO ₄
Various	Landscape Fill	Class 4	X	X		X					Contamination Suites BRE pH and SO ₄

NOTES:

1. X recommended / O optional - dependant on actual soil type.
2. Additional Testing may be required and should be determined by the DESIGNER to be appropriate to the project. This should be seen as the minimum to allow initial classification of material for reuse for earthworks.
3. Different specialist classes exist in the MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS (MCHW) for use in other specific applications.
4. The above table is for guidance only for general fill materials and the advice of the geotechnical designer should be sought to ensure sufficient and appropriate tests are undertaken.

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