

A. GENERAL DESCRIPTION :

These steep slopes occur in the sedimentary steep hills land system below the ridge line. The soils are similar to those on the crest/ridge line; shallow, gravelly fine sandy loams which sometimes grade into clay loams or clays at depth. These slopes are potentially very high groundwater recharge areas if cleared of native vegetation. They are also very susceptible to sheet and rill erosion, and to mass movement.

SITE CHARACTERISTICS :

Parent Material Age:	Devonian		Depth to Seas. Watertable:	>10m
Parent Material Lithology:	Sediment	s	Flooding Risk:	Nil
Landform Pattern:	Steep hills	S	Drainage:	Rapidly drained
Landform Element:	Hillslope		Rock Outcrop:	0-10%
Slope a) common:	39%		Depth to Hard Rock:	0.2-1.0m
Slope b) range:	32-70%		Present Land Use:	Native forest
Potential Recharge to Groundwater:		Very high		
Major Vegetation Species:		Red Stingybar	<, Silver Wattle, Kangaroo Grass	, Wallaby Grass

LAND DEGRADATION :

Land Degradation	Water Erosion		Wind Erosion	Mass Movement	Salting	Acidification
	sheet / rill	gully				
Susceptibility	Very high	Moderate	Moderate	Moderate	Very low	Low
Incidence	Moderate	Low	Low - Mod	Low	Very low	Not available

B. SOIL PROFILE

PROFILE DESCRIPTION

A11	0-160mm	Very dark grey (10YR3/1) light clay loam, weak subangular blocky structure, peds 5-10mm, rough fabric, moderately weak consistence, abundant angular sedimentary gravel fragments, pH 4.3. Gradual transition to:
A12	160-300mm	Very dark greyish brown (10YR3/2) fine sandy loam, weak subangular blocky structure, peds 2-5mm, rough fabric, moderately weak consistence, abundant angular sedimentary gravel fragments, pH4.4. Gradual transition to:
A2	300-570mm	Yellowish brown (10YR5/4) fine sandy loam, bleached (10YR7/3) when dry, weak subangular blocky structure, peds 2-5mm, rough fabric, moderately weak consistence, abundant angular sedimentary gravel fragments;
С	570mm	Rock (sedimentary)

CLASSIFICATION

Factual Key (Northcote):

Australian Soil Classification:

Uc2.12 (major), Gn4.64, Dy3.41 (minor)

Haplic, Lithic, Bleached-Leptic Tenosol;. thick, very gravelly, clay loamy/loamy, moderate.

Unified Soil Group:

ML

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	Р	к	AI	Organic matter	Dispersibility
A11	4.3**	58.5	VL	VL	D	S	Т	Н	L
A12	4.4**	59.3	VL	L	D	S	Т	М	L
A2	NA	55.36	NA	NA	NA	NA	NA	NA	L
VL : Very low L : Low M : Moderate H : High			I : High	VH : Very High D : Deficient			ent S:	Satisfactory	
T : Toxic * see appendix D for analytical results			** : Strongly acidic			N.A	. : Not Available		

SOIL PROFILE CHARACTERISTICS:

Permeability:	Very rapid (average 2465 mm/day, range 1166-3233 mm/day)
Available Water Capacity:	Very low (50 mmH ₂ O)
Linear Shrinkage (B horizon):	Very low (3%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use					
Agriculture	C ₃ T ₅ S ₅	Steep slope, very shallow depth to hard rock, very low available water capacity, very high gravel/stone/boulder content, very susceptibile to sheet erosion					
Effluent Disposal (septic tanks)	5	Steep slope, very shallow depth to hard rock, very rapid permeability - risk of groundwater or stream pollution					
Farm Dams	5	Steep slope, very low suitability of subsoil, very shallow depth to hard rock, very high permeability					
Secondary Roads	5	Steep slope					
Rural Residential	5	Effluent disposal farm dams, secondary roads, building foundations					
Small Farms	5	Agriculture, effluent disposal, farm dams, secondary roads, building foundations					