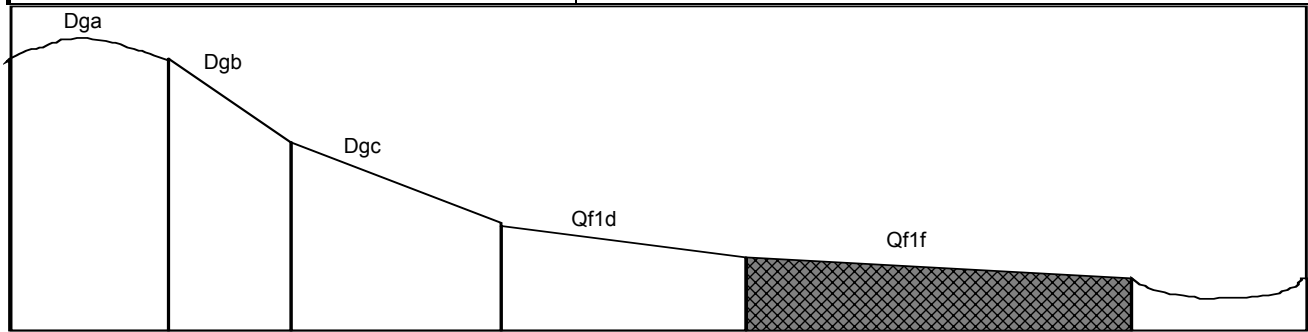


MAP UNIT SYMBOL : Qf1f	MAP UNIT : Quaternary fan (granitic), gentle slope.
Area : 90 ha	



A. GENERAL DESCRIPTION :

These colluvial fans have developed on the south eastern hillslopes of the metamorphic/sedimentary/ ridge known as the "Three Sisters". They overlie the pre-existing Flowerdale Granite intrusion which has been almost eroded away completely. The soils are very variable containing a mix of metamorphic and granitic material. At this particular map unit site the soils are polygenic meaning that they contain a number of layers of material from different origin. In the first layer a dark brown loam overlies a bleached loam. The second layer consists of a very dark grey heavy clay over a dark greyish brown medium clay. Both clays are mottled indicating only moderate drainage and the lower one consists also of metamorphic and granitic fragments. The third layer is a light yellowish brown coarse sandy clay loam which is also mottled. Wetter soils are present in drainage lines which occur within this unit. This particular unit is highly susceptible to gully and wind erosion. It is recommended that a more detailed survey be carried out on the area if it is to be developed for a more intensive use than grazing.

SITE CHARACTERISTICS :

Parent Material Age:	Devonian/Devonian	Depth to Seas. Watertable:	>2.0m
Parent Material Lithology:	Granite/Sedimentary	Flooding Risk:	Nil
Landform Pattern:	Rolling low hills	Drainage:	Imperfectly drained
Landform Element:	Fan	Rock Outcrop:	0%
Slope a) common:	5%	Depth to Hard Rock:	>1.4m
Slope b) range:	3-10%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	Low		
Major Vegetation Species:	River Red Gum,		

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1	0-65mm	Dark brown (10YR3/3) loam fine sandy, weak granular structure, peds 2-5mm, rough fabric, moderately weak consistence, pH 4.3. Clear transition to:
A2	65-500mm	Brown (7.5YR5/2) loam fine sandy, bleached (10YR7/2) when dry, fine distinct orange mottles, apedal, earthy fabric, very firm consistence, pH 4.5. Abrupt transition to:

2B21 500-665mm	Very dark grey (2.5YR3/0) heavy clay, common fine distinct red, orange and brown mottles, moderate angular blocky structure, peds 2-5mm, smooth fabric, very firm consistence, pH 5.0. Clear transition to:
2B22 665-1075mm	Dark greyish-brown (10YR4/2) medium clay, abundant fine distinct red, orange and grey mottles, weak subangular blocky structure, peds 10-20mm, smooth fabric, moderately firm consistence, common medium sized metamorphic fragments, pH 5.7. Clear transition to:
3B 1075-1560+mm	Light reddish-brown (2.5YR6/4) sandy clay loam, many medium distinct orange and yellow mottles, apedal, sandy fabric, pH6.2.

CLASSIFICATION

Factual Key (Northcote):	Dd2.42
Australian Soil Classification:	Bleached-Mottled, Magnesian, Grey Chromosol; thick, non-gravelly, loamy.
Unified Soil Group:	CH

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	PH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
1A1	4.3**	< 1	VL	L	S	S	T	L	L
1A2	4.5**	< 1	VL	VL	D	D	T	L	M
2B22	5.0	9.4	VL	M	D	D	S	L	M
2B22	5.7	4.5	VL	M	D	D	S	VL	L
3B	6.2	2.8	VL	L	D	D	S	VL	VH

VL : Very low L : Low M : Moderate H : High VH : Very High D : Deficient S : Satisfactory
T : Toxic * see appendix D for analytical results ** : Strongly acidic N.A. : Not Available

SOIL PROFILE CHARACTERISTICS:

Permeability :	Very slow (average 3.5 mm/day, range 3-4 mm/day)
Available Water Capacity:	Very high (315 mmH ₂ O)
Linear Shrinkage (B horizon):	Moderate (16%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₃ T ₃ S ₄	Highly susceptible to gully and wind erosion
Effluent Disposal (septic tanks)	5	Very low permeability
Farm Dams	3	Moderate slope, moderate linear shrinkage, moderate suitability of subsoil, moderate depth to seasonal watertable, moderately dispersible subsoils
Secondary Roads	4	Imperfect drainage
Rural Residential	5	Effluent disposal
Small Farms	5	Effluent disposal