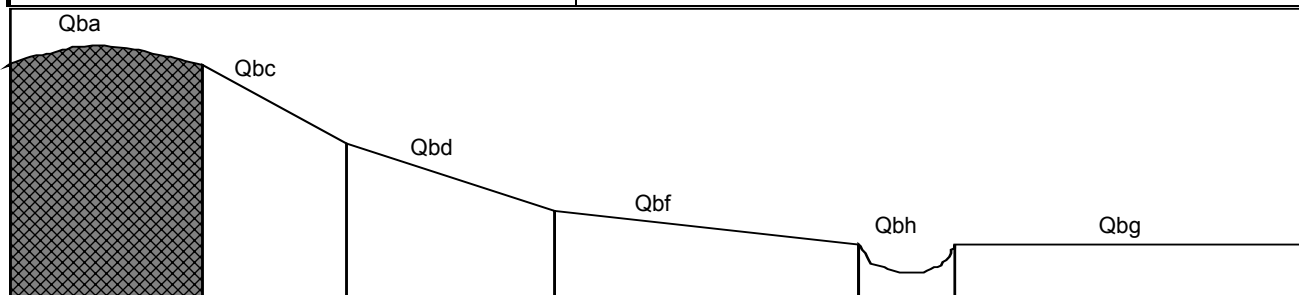


MAP UNIT SYMBOL : Qba	MAP UNIT : Quaternary basalt, crest.
Area : 22 ha	



A. GENERAL DESCRIPTION :

This map unit represents the crests of the volcanic eruption points in the Shire, including the Bald Hills, Mt Prospect and Round Hill. The soils are shallow to moderate in depth and are generally red gradational with dark reddish-brown clay loam top soils overlying dark reddish brown light clays which overlie either solid rock or yellow/brown clay loams or yellow/brown light-medium clay subsoils. Where the soils are very shallow, the clay loam top soil may overlie rock only. In some locations the soil may be darker in colour, (very dark grey top soils), but in all other respects these two profiles are very similar. Coarse fragments are present throughout the profile and rock outcrop is usually common. The soils are moderately permeable and are regarded as potentially high groundwater recharge areas.

SITE CHARACTERISTICS :

Parent Material Age:	Quaternary	Depth to Seas. Watertable:	> 10.0m
Parent Material Lithology:	Basalt	Flooding Risk:	Nil
Landform Pattern:	Rolling/low hills	Drainage:	Well drained
Landform Element:	Cone-crest	Rock Outcrop:	0-50%
Slope a) common:	0%	Depth to Hard Rock:	0.1-0.7m
Slope b) range:	0-3%	Present Land Use:	Grazing
Potential Recharge to Groundwater:	High		
Major Vegetation Species:			

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1	0-180mm	Dark reddish-brown (5YR3/3) heavy clay loam, strong subangular blocky structure, peds 2-5mm, rough fabric, moderately firm consistence, a few fine basaltic gravel fragments, moderate organic matter content, pH 4.7. Gradual transition to:
B	180-480mm	Dark reddish-brown (5YR3/4) medium clay, strong subangular blocky structure, peds 2-5mm, smooth fabric, moderately weak consistence, a few fine basaltic gravel fragments, pH 5.5 Clear transition to:
BC	480-600mm	Brown (7.5YR5/4) fine sandy clay loam, common red and grey mottles, moderate subangular blocky structure, peds 5-10mm, smooth fabric, moderately firm consistence, abundant coarse basaltic gravel fragments, pH 6.5. Gradual transition to:
C	600mm	Rock (basalt)

CLASSIFICATION

Factual Key (Northcote):	Gn 3.12/3 (major), Gn 4.42 (minor)
Australian Soil Classification:	Haplic, Eutrophic, Red Ferrosol; medium, slightly gravelly, silty/clayey, moderate.
Unified Soil Group:	MH

INTERPRETATION OF LABORATORY ANALYSIS

Horizon	pH (CaCl ₂)	%Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A	5.3	4.8	VL	M	D	D	S	H	L
B	6.2	27.5	VL	H	D	D	S	M	L
BC	7.5	33.1	VL	H	D	D	S	L	L

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

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C ₃ T ₁ S ₄	Shallow depth to hard rock, low available water capacity, high gravel/stone /boulder content
Effluent Disposal (septic tanks)	4	Shallow depth to hard rock
Farm Dams	5	Very low suitability of subsoil, very shallow depth to hard rock
Secondary Roads	4	High proportion of stones and boulders
Rural Residential	5	Farm dams
Small Farms	5	Building foundations