



General Description:

This area of gentle slopes is situated around the base of Mount Macedon. A substantial proportion has been cleared for agricultural uses, mainly grazing. The red duplex soils are predominant and the hazard of sheet and gully erosion increases markedly should the protective grass cover be removed and the soil surface cultivated. Areas with native trees and wildlife still remain.

Site characteristics: Site No. 33, 21

Parent material Age: Lithology:	Devonian Rhyodacite (and Colluvium)	Depth seasonal watertable:	> 2 m
Landform Pattern: Element:	Rolling mountains Gentle slope	Potential recharge to groundwater:	Low
Slope common: range:	8% 5-10%	Flooding risk:	Nil
Rock outcrop:	0%	Drainage:	Well drained
		Depth to hardrock:	1.0 – 1.5 m
		Proportion of Shire:	1.9%

Native vegetation: Manna Gum, Narrow-leaf Peppermint Present land use: Grazing (native and introduced pastures)

Land	Water e	erosion	Wind	Salting	Acidification
degradation:	Sheet/rill	Gully			
Susceptibility	Moderate	Moderate	Moderate	Very low	Low
Incidence	Low	Low	Nil	Nil	Low

Soil profile characteristics:

Permeability (measured - average, range):	90, 20 - 150 mm/day
(estimated):	-
Available water capacity:	170 mm H₂O
Linear Shrinkage (B horizon):	Moderate (estimate)

Map Unit Symbol: Dre

Soil profile description:

A₁ 0-25 cm Dark yellowish brown (10YR 3/4) loam, fine sandy, weak subangular blocky

structure 4 mm, rough fabric, loose consistence, pH 7.0. Abrupt transition to

A₂ 25-55 cm Brown (7.5YR 5/4) loam, fine sandy, moderate subangular blocky structure 5

mm, rough fabric, moderately firm consistence, pH 6.0. Clear transition to

B₂₁ 55 -70 cm Yellowish red (5YR 4/6) light clay, moderate angular blocky structure 8 mm

rough fabric, moderately firm consistence, pH 6.0. Gradual transition to

B₂₂ 70-99 cm Reddish brown (2.5YR 4/4) light medium clay, moderate angular blocky

structure 8 mm, rough fabric, very firm consistence, pH 6.0. Clear transition

to

C 99 + cm Parent material, rock

Soil classification:

Factual Key (Northcote): Dr 2.22

Australian Soil Classification: Haplic, Mesotrophic, Red Chromosol, moderate medium, loamy,

non-gravelly

Unified Soil Group: MH

Interpretation of soil analyses*

Horizon	рН	Gravel	E.C.	Nutrient	Р	K	Al	Org.	Dispersibility
				status				matter	
A ₁	7.0	<1	VL	L	D	S	S	Н	L
A ₂	6.0	2	VL	L	D	S	S	M	L
B ₂₁	6.0	1	VL	L	D	D	S	L	M
B ₂₂	6.0	1	VL	M	D	D	S	L	L

 VL : Very Low
 L : Low
 M : Moderate
 H: High
 VH : Very High

 D: Deficient
 S: Satisfactory
 T: Toxic
 ** Acid
 NA : Not available

Land capability assessment

Land use	Class	Major limiting feature (s)
Agriculture (CTS values)	C ₃ 7 ₃ S ₃	Moderate soil depth and susceptibility to sheet, rill and gully erosion
Effluent disposal (septic tanks)	2	Nil
Farm dams (earthen)	4	Shallow depth to hardrock and depth of clay layer
Building foundations * slab * stumps/footings	3 2	Moderate slopes Nil