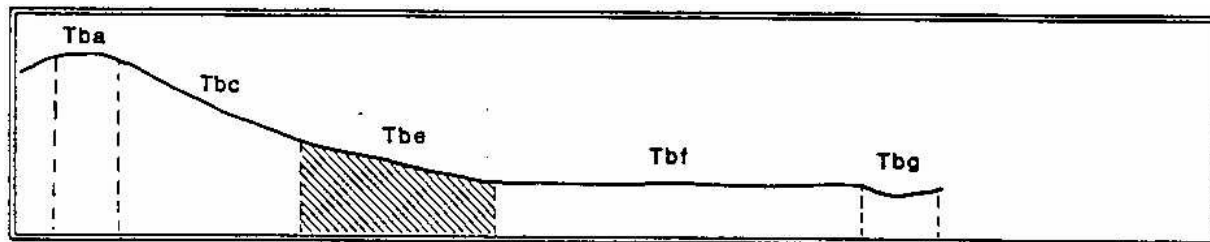


| | | |
|------------------|-------------------------------|-----------------------------|
| Map Unit: | TERTIARY BASALT, GENTLE SLOPE | Map Unit Symbol: Tbe |
|------------------|-------------------------------|-----------------------------|



General Description:

Situated on the lower slopes of volcanic cones, the red gradational soils represent some of the most versatile land in the Shire. For plant growth, the excessive permeability is counteracted by an average rainfall of at least 50 mm/month for eleven months of the year. The risk of sheet/rill erosion is minimised by maintaining a vegetative cover on the susceptible topsoil.

Site characteristics: **Site No. 19**

| | | | |
|--|-------------------------------|---|--------------|
| Parent material Age: Lithology: | Tertiary Basalt | Depth seasonal watertable: | > 4 m |
| Landform Pattern: Element: | Gently undulating plain Slope | Potential recharge to groundwater: | High |
| Slope common: range: | 7% 4 – 10% | Flooding risk: | Nil |
| Rock outcrop: | 0% | Drainage: | Well drained |
| | | Depth to hardrock: | > 1.3 m |
| | | Proportion of Shire: | 6.6% |

Native vegetation: Manna Gum, Swamp Gum (mostly cleared)
Present land use: Grazing (native and introduced pastures), residential

| Land degradation: | Water erosion | | Wind | Salting | Acidification |
|-------------------|---------------|-------|------|---------|---------------|
| | Sheet/rill | Gully | | | |
| Susceptibility | Moderate | Low | Low | Low | Low |
| Incidence | Low | Nil | Nil | Nil | Low |

Soil profile characteristics:

| | |
|--|------------------------------|
| Permeability (measured - average, range): (estimated): | 2800, 400 - 8000 mm/day - |
| Available water capacity: | 120 mm H ₂ O |
| Linear Shrinkage (B horizon): | 16% |

Soil profile description:

| | | |
|-----|------------|--|
| A | 0-12 cm | Dark brown (7.5YR 3/2) loam, strong subangular blocky structure 3 mm, smooth fabric, loose consistence (dry), <2% basaltic gravel, pH 6.7. Clear transition to |
| B21 | 12-34 cm | Reddish brown (5YR 4/4) clay loam, strong subangular blocky structure 3 mm, smooth fabric, very firm consistence (dry) pH 6.7. Clear transition to |
| B22 | 34-90 cm | Dark reddish brown (5YR) 3/4) medium clay, strong subangular blocky structure 5 mm, smooth fabric, pH 6.0. Gradual transition to |
| B3 | 90-130+ cm | Dark reddish brown (5YR 3/4) medium clay, strong subangular blocky structure 8 mm, smooth fabric, common basalt rock fragments and gravel pH 6.0. |

Soil classification:

Factual Key (Northcote): Gn 3.11
 Australian Soil Classification: Haplic, Mesotrophic Red, Ferrosol, deep, medium, loamy, non-gravelly
 Unified Soil Group: NA

Interpretation of soil analyses*

| Horizon | pH | Gravel | E.C. | Nutrient status | P | K | Al | Org. matter | Dispersibility |
|-----------------|-----|--------|------|-----------------|---|---|----|-------------|----------------|
| A | 6.7 | 18 | VL | H | S | S | S | H | L |
| B ₂₁ | 6.7 | < 1 | VL | M | S | S | S | M | L |
| B ₂₂ | 6.0 | < 1 | VL | M | S | S | S | M | L |
| B ₃ | 6.0 | 10 | VL | L | S | S | 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 T ₃ S ₃ | Moderate susceptibility to sheet/rill erosion |
| Effluent disposal (septic tanks) | 2 | Nil |
| Farm dams (earthen) | 5 | Excessive permeability |
| Building foundations * slab | 3 | Moderate slopes |
| * stumps/footings | 3 | Moderate linear shrinkage |