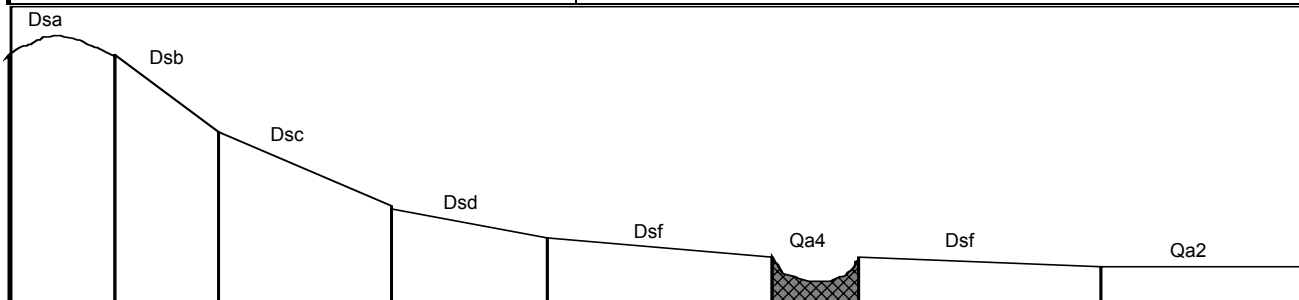


| | |
|------------------------------|---------------------------------------|
| MAP UNIT SYMBOL : Qa4 | MAP UNIT : Quaternary alluvium |
| Area : 73 ha | |



A. GENERAL DESCRIPTION :

Alluvium associated with the steep sedimentary hills and steep granite hills in the east of the Shire. This alluvial material has been developed from stream bed deposits and therefore contains layers of 'river' gravels intermixed with layers of fine sandy material. The variable nature of stream flows means that the content and order of these layers will vary. In most locations the stream is still actively eroding streambanks and depositing material in the streambed. The following site description is regarded as representative of the dominant soil type.

SITE CHARACTERISTICS :

| | | | |
|---|---------------|-----------------------------------|--------------|
| Parent Material Age: | Quaternary | Depth to Seas. Watertable: | > 2m |
| Parent Material Lithology: | Alluvium | Flooding Risk: | Low |
| Landform Pattern: | Alluvial fan | Drainage: | Well drained |
| Landform Element: | Stream bar | Rock Outcrop: | 0% |
| Slope a) common: | 3% | Depth to Hard Rock: | > 1.8m |
| Slope b) range: | 1-3% | Present Land Use: | Grazing |
| Potential Recharge to Groundwater: | Moderate | | |
| Major Vegetation Species: | River Red Gum | | |

LAND DEGRADATION :

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

B. SOIL PROFILE

PROFILE DESCRIPTION

| | | |
|---------------|--------------------------|---|
| A1 | 0-80mm | Dark brown (7.5YR4/2) fine sandy loam, weak subangular blocky structure, peds 5-10mm, rough fabric, moderately weak consistence, common fine subangular, subrounded sedimentary and quartz fragments, pH 4.0. Clear transition to: |
| A2 | 80-430mm | Dark yellowish brown (10YR4/4) fine sandy loam, bleached (10YR7/3) when dry, apedal, earthy fabric, moderately weak consistence, few fine subangular, subrounded sedimentary and quartz fragments, pH 4.1. Abrupt transition to: |
| Gravel | 430-630mm | Layer of fine to coarse gravels, including rounded, subrounded, subangular sedimentary and quartz fragments. Abrupt transition to: |
| B | 630-785mm | Brown (7.5YR4/4) fine sandy loam, many medium distinct yellow and orange mottles, apedal, earthy fabric, moderately strong consistence, few fine subangular, subrounded sedimentary and quartz fragments, pH 5.4. Abrupt transition to: |
| Gravel | 785-1830 ⁺ mm | Layer of fine to very coarse gravels, including subangular, subrounded sedimentary and granitic fragments. |

CLASSIFICATION

| | |
|--|---|
| Factual Key (Northcote): | Uc2.21 |
| Australian Soil Classification: | Haplic, Regolithic, Bleached-Leptic Tenosol; thick, slightly gravelly, loamy/sandy, moderate. |
| Unified Soil Group: | ML |

INTERPRETATION OF LABORATORY ANALYSIS

| Horizon | pH (CaCl ₂) | %Gravel | E.C. (salts) | Nutrient Status | P | K | Al | Organic matter | Dispersibility |
|---------|-------------------------|---------|--------------|-----------------|---|---|----|----------------|----------------|
| A1 | 4.0** | < 1 | VL | L | S | S | T | H | L |
| A2 | 4.1** | 5.8 | VL | VL | D | S | T | VL | M |
| B | 5.4 | 4.3 | VL | VL | D | S | S | VL | 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

SOIL PROFILE CHARACTERISTICS:

| | |
|--------------------------------------|--|
| Permeability : | Moderate (average 133 mm/day, range 36-213 mm/day) |
| Available Water Capacity: | Low (88 mmH ₂ O) |
| Linear Shrinkage (B horizon): | Very low (2%) |

C. LAND CAPABILITY ASSESSMENT

| Land Use | Class | Major Limiting Feature(s)/Land Use |
|----------------------------------|--|------------------------------------|
| Agriculture | C ₃ T ₂ S ₄ | Low available water capacity |
| Effluent Disposal (septic tanks) | 2 | Nil |
| Farm Dams | 5 | Very low suitability of subsoil |
| Secondary Roads | 3 | Unified Soil Group |
| Rural Residential | 5 | Farm dams |
| Small Farms | 5 | Farm dams |