11.   Volcanic Hills Unit

Volcanic hills, derived from partially dissected volcanic cones and vents, are widespread throughout the basaltic terrain in the east of the study area. They are cone-shaped with rounded crests, and frequently asymmetrical; presumably due to the direction of the lava flow, the prevailing winds at the time of eruption and the degree of dissection since eruption. They are mostly composed of scoria ash or lava, the latter often having rock exposed on the steeper slopes.

Also included in this unit are a few hilly basaltic areas that, although not actual extrusion points, have similar soils and slopes to the volcanic hills.

Red or brown gradational soils predominate, usually stony on the steeper upper slopes, but often red and deep on the lower colluvial slopes.

Geology: Quaternary olivine basalts.

Slope: Slopes variable, averaging 10-15%; range 2-50%.

Landforms: 95% Crest, slope
5% Crater, fan, slope failure

Soils:
Dominant: Gn3.11, Gn3.12, Gn3.14, Gn4.12. Red or occasionally brown gradational soils, typically strongly structured, non-mottled with silty loam-clay loam surface textures and clayey subsoils; fragments or floaters of basalt common throughout the profile, the soils range from shallow on the steeper slopes to deep on the colluvial slopes; they are fertile and highly permeable, and typically acidic or neutral throughout.

Minor: Um. Shallow structured brown uniform loams on the steeper slopes in areas of rock outcrop.

See appendix 20 for a typical soil profile description from this unit.

Stone rock outcrop: 0-10%.

Pans: Not present.

Land use: Predominantly grazing, although some cropping occurs on the lower slopes where the soils are generally deeper and the slopes not too steep to prohibit cultivation.

Observed land deterioration: Minor slope failures and sheet erosion.

Susceptibility to land degradation:
Slope failure (low)
Compaction (moderate)
Sheet erosion (low to moderate).

Land capability classification:
Land capability classification in this unit is determinant on the slope. Most areas are in class 2, although where the slope is <10% they are in class 1. Areas which have slopes >20% have a higher classification (according to Table 1).