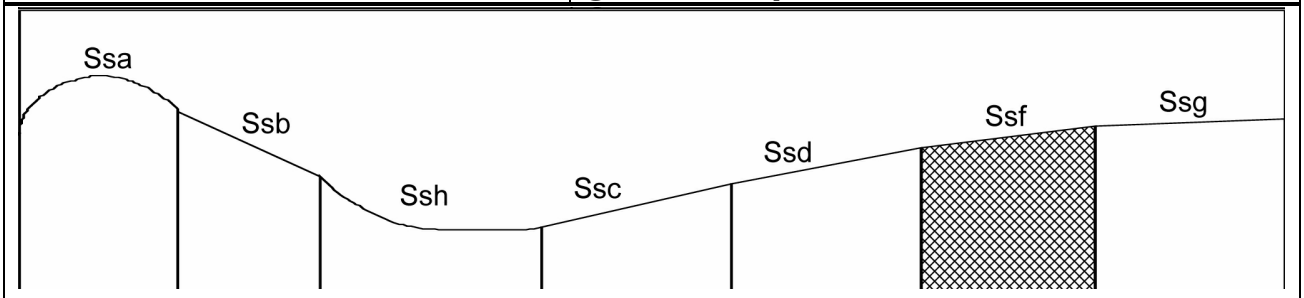
MAP UNIT SYMBOL: **Ssf** Area: 29 511 ha	MAP UNIT: **Silurian sediments, gentle slope**



A. GENERAL DESCRIPTION

The soils on the gentle slopes are similar to those on the very gentle and moderately steep slopes. The major soil type is a yellow duplex with a mottled subsoil. Minor varieties include yellow duplex with whole coloured subsoils, and conspicuously bleached A2 horizons. The soils are generally strongly acidic and potentially toxic in aluminium. Salinity occurs mainly in the drainage lines dissecting this component, and at the junction where the basalt overlying the sedimentary material meet. As there is a high percentage of gravel in the topsoil, the available water holding capacity of the profile is decreased.

SITE CHARACTERISTICS

Parent Material Age:	Silurian/Ordovician	**Depth to Seas. Watertable:**	>2.0 m
Parent Material Lithology:	Sedimentary	**Flooding Risk:**	Nil
Landform Pattern:	Undulating rises	**Drainage:**	Moderately well drained
Landform Element:	Hillslope	**Rock Outcrop:**	0 - 2%
Slope a) common:	5%	**Depth to Hard Rock:**	>1.5 m
Slope b) range:	4-10%	**Present Land Use:**	Grazing

Potential Recharge to Groundwater: Low
Major Native Vegetation Species: Manna Gum, Silver Wattle, Stringybark, Narrow-leaved Peppermint, Blackwood, Long-leaved Box, Grey Box, Candlebark Gum, Bracken Fern, Messmate, Cherry Ballart

LAND DEGRADATION

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

B. SOIL PROFILE

PROFILE DESCRIPTION

A1 0-135 mm — Very dark grey (10YR3/1) loam, weak subangular blocky structure, peds less than 2 mm, earthy fabric, very weak consistence, many coarse subangular and angular sedimentary and quartz gravel fragments, pH 4.5. Clear transition to:

A12 135-190 mm — Dark greyish brown (10YR4/2) loam, weak subangular blocky structure, peds 10-20 mm, rough fabric, moderately firm consistence, many medium subrounded sedimentary and quartz gravel fragments, pH 4.5. Abrupt transition to:

B1 190-420 mm — Light yellowish brown (10YR6/4) light clay with fine sand, weak subangular blocky structure, peds 20-50 mm, rough fabric, moderately strong consistence, organic segregations are common, a few fine subangular quartz, sedimentary and carbon gravel fragments, pH 5.0. Clear transition to:

B2 420-790 mm — Light yellowish brown (10YR6/4) medium clay, medium faint orange and yellow mottles are common, strong subangular blocky structure, peds 10-20 mm, rough fabric, a few medium subangular sedimentary gravel fragments, pH 5.5. Clear transition to:

B3 790-1060 mm Very pale brown (10YR7/4) light clay, many coarse distinct orange and yellow mottles, moderate subangular blocky structure, peds 10-20 mm with some 2-5 mm, rough fabric, very strong consistence, pH 6.0. Clear transition to:

BC 1060-1400 mm+ Partially weathered sedimentary rock.

CLASSIFICATION

Factual Key:	Dy3.11 (major), Dy3.41, Dy2.11 (minor)
Australian Soil Classification:	Mottled, Dystrophic, Yellow Kurosol; medium, moderately gravely, loamy/clayey, moderate
Unified Soil Group:	CH

INTERPRETATION OF LABORATORY ANALYSIS*

Horizon	pH ($CaCl_2$)	% Gravel	E.C. (salts)	Nutrient Status	P	K	Al	Organic matter	Dispersibility
A1	3.7**	27.9	VL	L	S	S	T	H	L
A12	3.8**	49.3	VL	VL	D	D	T	L	H
B1	4.0**	3.7	VL	VL	D	D	T	L	H
B2	4.1**	9.3	VL	VL	D	D	T	VL	H
B3	4.1**	<1	VL	VL	D	D	T	VL	H

VL: Very Low L: Low M: Moderate H: High VH: Very High D: Deficient S: Satisfactory
T: Potentially Toxic NA: Not Available * see appendix D for analytical results ** Strongly Acidic

SOIL PROFILE CHARACTERISTICS:

Permeability: Moderate (estimate)
Available Water Capacity: Moderate (130 mm H_2O)
Linear Shrinkage (B horizon): Low (11%)

C. LAND CAPABILITY ASSESSMENT

Land Use	Class	Major Limiting Feature(s)/Land Use
Agriculture	C_2 T_2 S_3	Condition of topsoil, available water capacity, gravel content, susceptibility to sheet, rill, gully and wind erosion
Effluent Disposal (septic tanks)	3	Drainage
Farm Dams	3	Suitability of subsoil, depth to seasonal watertable, depth to hardrock, permeability
Building Foundations		
slab	3	Slope, drainage, stone content
stumps/footings	3	Drainage, stone content