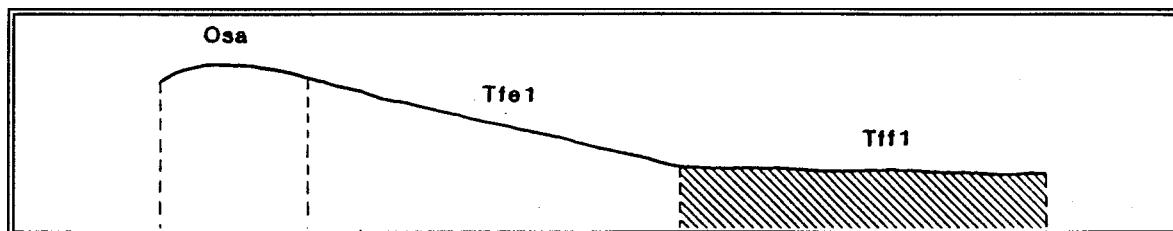


Map Unit:	Tertiary fan, very gentle slope, 1	Map Unit Symbol:	Tff1
		% of Study Area:	0.1



General Description:

These very gentle Tertiary fans have the same soils as the gentle fans (Tfe1), the only difference between the two units is slope. Soils are deep red duplex with loam top soils and heavy red clay subsoils which become brown and mottled with depth. The soils are well structured and calcium carbonate nodules occur deep in the profile.

Site characteristics:

Parent material age:	Ordovician	Depth seasonal watertable:	> 2m
Lithology:	Sediments	Potential recharge to groundwater:	Low
Landform Pattern:	Undulating rises	Flooding risk:	Nil
Element:	Slope	Drainage:	Moderately well drained
Slope common range:	2% 1 - 3%	Depth to hardrock:	> 1.6m
Rock outcrop:	<2%		

Major vegetation: Grey Box, Yellow Box, Red Ironbark, Red Gum, Lightwood, Hedge Wattle, Wallaby Grass, Oxalis, Onion Grass, Moss, rushes

Present land use: Grazing (major), cropping (minor)

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

Soil profile characteristics:

Permeability (measured - average, range): (estimated):	5, 3 - 8 mm/day
Available water capacity:	265 mm H ₂ O
Linear shrinkage (B horizon):	14.6 %

Soil profile description:

A	0-15 cm	Dark reddish brown (5YR3/2) loam, strong structure, subangular blocky peds 5-10mm, smooth fabric, moderately firm consistence, a few fine rounded ferruginous gravel fragments, pH5.8 Clear transition to
B ₂₁	0-15 cm	Dull reddish brown (5YR4/4) heavy clay, moderate structure, subangular blocky pads 10-20mm, smooth fabric, moderately firm consistence, less than 2% rounded fine ferruginous gravel fragments, pH8.0. Gradual transition to
B ₂₂	58-74 cm	Dull reddish brown (5YR4/4) heavy clay, moderate structure, subangular blocky pads 10-20mm, smooth fabric, moderately firm consistence, less than 2% rounded fine ferruginous gravel fragments, pH9.0. Clear transition to
B ₂₃	74-121 cm	Dull brown (7.5YR5/4) medium clay, a few medium faint reddish brown mottles, strong structure, angular blocky pads 10-20mm, smooth fabric, very firm consistence, common moderately calcareous nodules, less than 2% fine rounded ferruginous gravel fragments, pH 9.2. Clear transition to
B ₂₄	121-157+ cm	Dull orange (7.5YR6/4) medium clay, common medium faint reddish brown mottles, strong structure, angular blocky peds 5-10mm, smooth fabric, very firm consistence, common highly calcareous nodules, a few fine rounded ferruginous gravel fragments, pH 9.6

Soil classification:

Factual Key (Northcote): Dr 2.13

Australian Soil Classification: Calcic, Hypernatric, Red Sodosol; very deep, medium, silty, non-gravelly

Unified Soil Group: CH

Interpretation of soil analyses*

Horizon	pH	Gravel %	E.C. (salts)	Nutrient status	P	K	Al	Organic matter	Dispersibility
A	5.8	22.7	VL	L	D	S	T	H	M
B ₂₁	8.0	5.6	M	H	S	S	S	L	VH
B ₂₂	9.0	8.3	H	H	S	S	S	L	L
B ₂₃	9.2	14.0	H	H	S	S	S	L	H
B ₂₄	9.6	7.6	H	H	S	S	S	L	H

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

VH : V e r y High; D : Deficient; S : Satisfactory; T : Toxic; **: Acid * See Appendix 4 for analytical results

Land capability assessment

Land use	Class	Major limiting feature(s)/landuse
Agriculture (CTS values)	C ₃ T ₂ S ₅	Very susceptible to gully erosion
Effluent disposal (septic tanks)	5	Very slow permeability
Farm dams (earthen)	5	Very dispersible subsoil
Building foundations * slab * stumps/footings	3 3	Moderate drainage Moderate drainage, moderate linear shrinkage
Secondary roads	3	Moderate drainage, moderate linear shrinkage, Universal Soil Group
Urban residential	3	Secondary roads, building foundations
Rural residential	5	Farm dams, effluent disposal