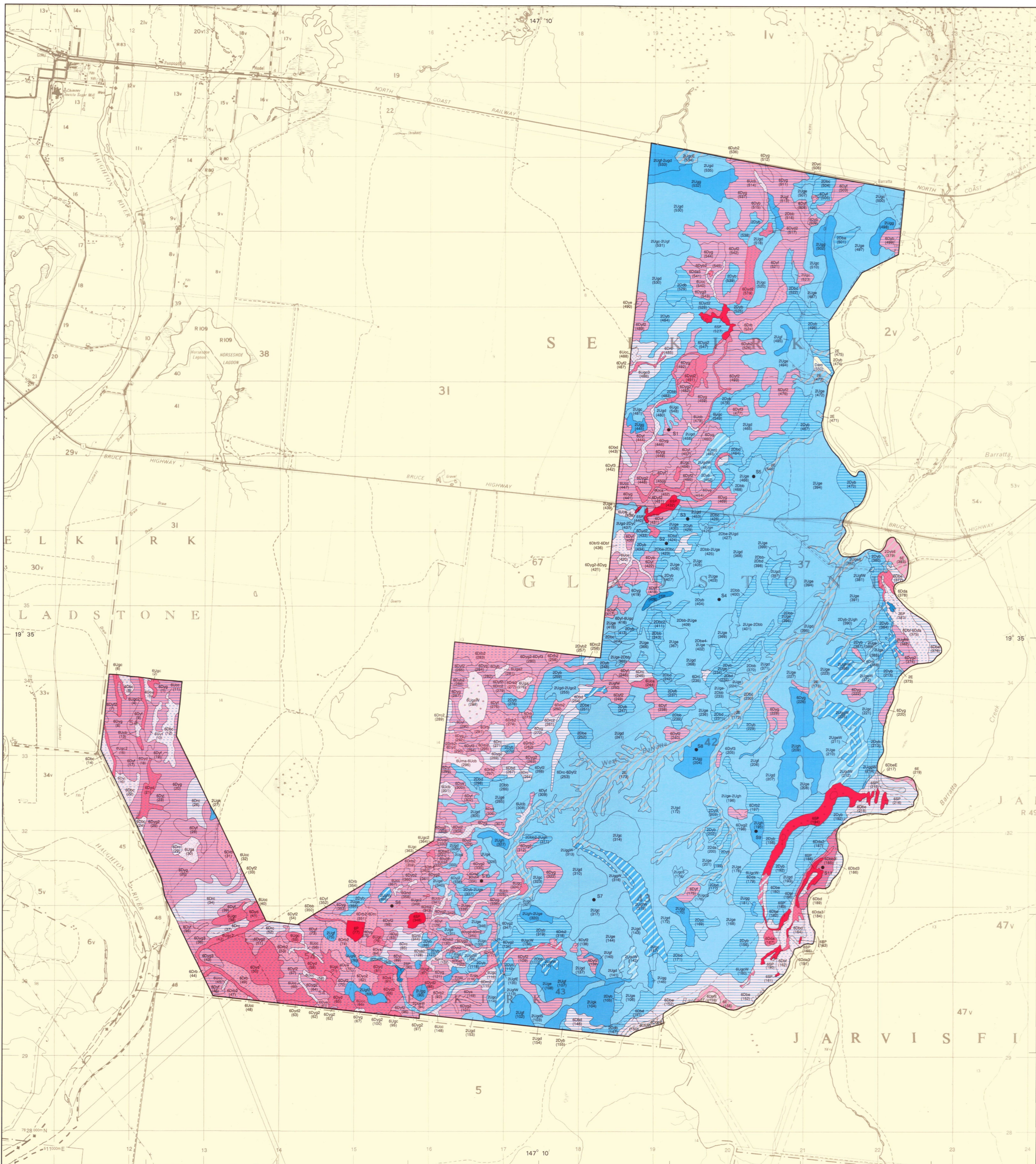


SOILS



REFERENCE			REFERENCE					
Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Mapping Unit Code	Series Affiliation	Major Attributes of Dominant Soil	Great Soil Group	Main Principal Profile Forms
SOILS OF THE BURDEKIN AND HAUGHTON RIVER ALLUVIAL PLAINS (Landscape Unit 2)								
LOW LYING FLATS								
2Ug	Barratta	Weakly self-mulching to hard setting surface over occasionally bleached, brown-mottled grey light to light medium clay to 0.1-0.2 m over grey medium to heavy clay to 0.8-1.2 m over grey to brown light medium to heavy clay to 1.5 m, neutral throughout or alkaline to strongly alkaline at and below 0.3 m. Normal gages, 0.05-0.3 m vertical interval.	(Bleached) grey clay - grey clay	2Ug	Kelona	0.15-0.25 m brown-mottled grey to brown or dark loamy sand to sandy loam A1 horizon over bleached A2 horizon to 0.3-0.5 m over alkaline brown mottled yellow-brown to yellow grey medium clay B horizon to 0.65-0.8 m over grey to brown sandy clay loam to medium clay D horizon to 1.5 m.	Solodic soil - sodicized solonetz	Dy3.43 Dy3.33
2Ugd	Barratta	Weakly self-mulching to hard setting surface over bleached, brown-mottled grey to brown light to light medium clay to 0.1-0.2 m over brown-mottled grey to brown medium to medium heavy clay to 1.0-1.2 m over grey to brown light to medium clay to 1.5 m, strongly alkaline at and below 0.3 m. Normal gages, 0.1-0.3 m vertical interval.	(Bleached) grey and brown clay	2Ug	Lanona	0.1-0.2 m dark to brown or grey loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.2-0.4 m over alkaline red to brown-mottled brown to yellow-brown or yellow medium clay B horizon to 0.6-1.3 m over brown to yellow-brown to grey sand to medium clay D horizons to 1.5 m.	Solodic soil - sodicized solonetz	Dy3.43 Dy3.33 Dy2.43
2Uge	Barratta	Weakly self-mulching to hard setting surface over frequently bleached, brown-mottled grey light to light medium clay to 0.05-0.25 m over brown-mottled grey to brown medium to medium heavy clay to 0.8-1.3 m over grey to brown light to medium clay to 1.5 m, strongly alkaline above or at 0.3 m. Normal gages, 0.05-0.3 m vertical interval.	(Bleached) grey clay - grey clay	2Ug	Jacuna	0.05-0.1 m grey to brown or dark loam to clay loam A1 horizon over bleached A2 horizon to 0.1-0.2 m over strongly alkaline occasionally brown-mottled grey to yellow-brown light medium to medium clay B horizon to 0.7-1.2 m over brown-mottled yellow-brown to grey coarse sand to light medium clay D horizons to 1.5 m.	Solodic soil - sodicized solonetz	Dy3.43 Dy3.33 Dy2.43
2Ug	Barratta	0.01-0.02 m moderate self-mulch over brown-mottled grey to dark medium clay to 0.05-0.15 m over brown-mottled grey to dark heavy clay to 0.8-1.2 m over grey medium clay to 1.5 m, neutral throughout or alkaline to strongly alkaline at 0.1-0.5 m. Normal gages, 0.1-0.3 m vertical interval.	Grey clay and black earth	2Ug	Wetonga	Weakly self-mulching to hard setting surface over grey to dark light to light medium clay to 0.05-0.2 m over alkaline grey to dark to brown light to medium clay to 1.0-1.5 m over grey to brown sandy clay to medium clay D horizon to 1.5 m.	Grey clay - Black earth	Ug5.2 Ug5.16 Ug5.17
2Ugj	Barratta	0.01-0.02 m moderate self-mulch over occasionally bleached, brown-mottled grey medium clay to 0.1-0.2 m over grey medium to medium heavy clay to 1.2-1.4 m over yellow-brown to brown light to medium clay to 1.5 m, strongly alkaline at and below 0.6-0.9 m. Normal gages, 0.1-0.3 m vertical interval.	Grey clay - (bleached) grey clay	2Ug	Wilkey	Hard setting surface over brown-mottled, dark to grey silty clay to light clay A1 horizon to 0.1-0.2 m over bleached A2 horizon to 0.15-0.25 m over alkaline grey medium clay B horizon to 0.8-1.5 m over brown to brown fine sand to light medium clay D horizon to 1.5 m.	(Bleached) grey clay	Ug5.2 Ug5.28 Ug5.29
2Ugh	Barratta	0.01-0.02 m moderate to strong self-mulch over brown-mottled grey medium to medium heavy clay to 0.1-0.15 m over grey medium to medium heavy clay to 1.5-1.5 m over brown to brown medium to medium heavy clay to 1.5 m, strongly alkaline at and below 0.3 m. Normal gages, 0.1-0.3 m vertical interval.	Grey clay	2Ug	Wilkey	0.1-0.15 m dark to brown clay loam A1 horizon over bleached A2 horizon to 0.15-0.2 m over alkaline dark medium clay B horizon to 0.95-1.1 m over grey to yellow-brown light to light medium clay D horizon to 1.5 m.	Solodic soil - sodicized solonetz	Dy3.33 Dy2.43
2Ugi	Barratta	Normal gages 0.1-0.3 m vertical interval. Moist: 0.01-0.02 m weak to strong self-mulch over grey to dark medium to heavy clay to 1.2-1.5 m, over brown to yellow-brown light to light medium clay D horizon to 1.5 m, strongly alkaline at and below 0.3-0.8 m.	Grey clay-black earth	2Ug				
2Ugj	Barratta	Depression: Hardsetting surface over frequently bleached, brown-mottled grey to brown light to light medium clay to 0.05-0.1 m over brown-mottled grey light to light medium clay to 0.3-0.5 m over grey to yellow-brown medium clay to 0.7-1.2 m over brown light to light medium clay D horizon to 1.5 m, strongly alkaline at and below 0.3-1.2 m.	(Bleached) grey clay - grey clay - no subtype group	2Ug				
2Ugk	Barratta, clay loam variant	0.05-0.1 m brown-mottled dark to brown clay loam A1 horizon over bleached A2 horizon to 0.12-0.25 m over alkaline brown-mottled grey to brown medium to medium heavy clay B horizon to 0.9-1.1 m over brown to grey light to medium clay D horizon to 1.5 m. Normal gages, 0.1-0.25 m vertical interval.	Solodic soil - sodicized solonetz	2Ug				
SLIGHTLY ELEVATED FLATS								
2Uk	Dowe	0.05-0.12 m brown loam fine sandy to clay loam A1 horizon bleached throughout or near base over brown medium clay B horizon to 1.0-1.5 m over brown to yellow-brown light to light medium clay D horizon to 1.5 m, strongly alkaline at and below 0.3 m.	Solodic soil - sodicized solonetz	2Uk				
2Ukd	Oakey	0.05-0.15 m dark to brown loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.12-0.2 m over occasionally mottled brown medium clay B horizon to 0.8-1.05 m over brown to yellow-brown fine sandy clay to light medium clay D horizon to 1.5 m, strongly alkaline above or at 0.6 m.	Solodic soil - sodicized solonetz	2Uk				
2Uke	Oakey	0.05-0.2 m dark to grey loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.12-0.2 m over frequently brown-mottled grey to brown medium clay B horizon to 0.7-1.3 m over brown to yellow-brown fine sandy clay to light medium clay D horizon to 1.5 m, strongly alkaline at and below 0.9-1.2 m.	Solodic soil - sodicized solonetz	2Uk				
2Ukf	Oakey	0.1-0.2 m brown-mottled dark to brown loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.2-0.35 m over grey to brown or dark medium clay B horizon to 0.8-1.0 m over brown to yellow-brown fine sandy clay to light medium clay D horizon to 1.5 m, strongly alkaline at and below 0.6 m.	Solodic soil - sodicized solonetz	2Uk				
2Ukg	Oakey	0.05-0.1 m brown-mottled grey to brown loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.12-0.2 m over grey to dark medium to medium heavy clay B horizon to 0.7-1.5 m over brown to yellow-brown fine sandy clay to light medium clay D horizon to 1.5 m, strongly alkaline above or at 0.6 m.	Solodic soil - sodicized solonetz	2Uk				
2Ukh	Oakey	0.05-0.12 m brown-mottled dark to brown loam to clay loam A1 horizon bleached throughout or near base over dark to brown medium to medium heavy clay B horizon to 0.8-1.2 m over brown to yellow-brown light to medium clay D horizon to 1.5 m, strongly alkaline at and below 0.6-0.9 m.	Solodic soil - sodicized solonetz	2Uk				
2Uki	Dowe	0.05-0.12 m brown-mottled dark to brown loam fine sandy to clay loam A1 horizon bleached throughout or near base over grey to dark medium to medium heavy clay B horizon to 0.85-1.0 m over brown to yellow-brown light to medium clay D horizon to 1.5 m, strongly alkaline at and below 0.3 m.	Solodic soil - sodicized solonetz	2Uk				
SOILS OF MISCELLANEOUS ALLUVIAL LANDFORMS (Landscape Unit 6)								
SOILS PRIMARILY OF RELICT ALLUVIAL LANDFORMS								
LEVELS, FLOOD-OUTS, FAIR AND HIGH STREAMS								
6Ua	Yellow	0.1-0.3 m dark coarse sand to sandy loam A1 horizon over acidic neutral brown to yellow coarse sand to sandy loam B horizon to 0.8-1.0 m over mottled coarse sandy loam to sandy clay loam D horizons to 1.5 m.	No suitable group, affinities with earthy sand	6Ua				
6Ub	Hylo	0.2-0.3 m dark grey or brown coarse sand to sandy loam A1 horizon over bleached A2 horizon to 0.5-0.6 m over acid to neutral frequently yellow or brown-mottled yellow-brown to brown coarse sand to sandy loam B horizon to 1.5 m.	No suitable group, affinities with siliceous sand or earthy sand	6Ua				
6Uc	Burdekin	0.05-0.5 m dark to grey or brown sand to sandy loam A1 horizon over yellow or yellow A2 or A3 horizon to 0.1-1.1 m over acidic neutral brown to yellow sand to light sandy clay loam A3 or B horizon to 1.5 m.	No suitable group, affinities with siliceous sand or earthy sand	6Ua				
6Ud	Burdekin	0.15-0.4 m dark to brown sandy loam to sandy clay loam A1 horizon over acid to neutral brown to yellow sandy loam to clay loam B horizon to 0.8-1.1 m over brown to yellow-brown sandy loam to sandy clay loam D horizon to 1.5 m.	No suitable group, affinities with yellow earth	6Ua				
6Ue	Clare	0.1-0.3 m dark to brown loamy sand to sandy loam A1 horizon over brown A2 horizon to 0.6-0.9 m over brown sandy clay loam to clay loam A3 horizon to 0.1-1.3 m over acid to neutral red to red-brown clay loam to sandy clay B1 or B2 horizon to 1.5 m.	Red podzolic soil	6Ua				
6Uf	Elkin	0.15-0.3 m grey to brown sandy loam to clay loam A1 horizon over brown to yellow-brown fine sandy loam to clay loam A2 or A3 horizon to 0.5-1.2 m over neutral brown to yellow-brown clay loam to clay B horizon to 1.5 m.	No suitable group, affinities with yellow podzolic soil	6Ua				
6Ug	Lancaster	0.1-0.2 m dark to grey loam to clay loam A1 horizon over bleached A2 horizon to 0.2-0.4 m over neutral frequently yellow-mottled red light medium to medium clay B horizon to 0.6-1.1 m over brown to red-brown coarse sand to light medium clay D horizons to 1.5 m.	Red podzolic soil	6Ua				
6Uh	Lanona	0.1-0.2 m dark to grey loam to clay loam A1 horizon over bleached A2 horizon to 0.2-0.3 m over alkaline frequently yellow-mottled red-brown to red medium clay B horizon to 0.1-1.2 m over red-brown to brown coarse sand to light medium clay D horizons to 1.5 m.	Solodic soil	6Ua				
6Ui	Embo	0.1-0.2 m dark to brown sandy loam to sandy clay loam A1 horizon over bleached A2 horizon to 0.15-0.3 m over yellow-brown medium clay B horizon to 0.8-1.1 m over dark to grey to brown sandy loam to medium clay D horizons to 1.5 m, alkaline at and below 0.6 m.	Solodic soil - sodicized solonetz	6Ua				
6Uj	Kelona	0.1-0.25 m dark to grey clay loam A1 horizon over bleached A2 horizon to 0.2-0.4 m over alkaline grey to brown or dark medium clay B horizon to 0.55-1.1 m over yellow-brown to brown fine sandy clay to medium clay D horizon to 1.5 m.	Solodic soil	6Ua				
6Uk	Glenelder	0.1-0.2 m dark to brown fine sandy loam to fine sandy clay loam A1 horizon over frequently bleached A2 horizon to 0.2-0.35 m over neutral occasionally mottled yellow-brown to brown medium clay B horizon to 0.7-1.4 m over brown to yellow-brown sand to light medium clay D horizons to 1.5 m.	No suitable group, affinities with brown podzolic soil	6Ua				
6Ul	Glenelder	0.05-0.11 m brown-mottled dark to brown loam fine sandy to clay loam A1 horizon over bleached A2 horizon to 0.2-0.3 m over alkaline occasionally yellow-mottled brown light medium to medium clay B horizon to 0.85-1.2 m over brown to yellow-brown or grey sandy loam to light medium clay D horizon to 1.5 m.	Red-brown earth	6Ua				
6Um	Glenelder	0.05-0.15 m brown-mottled dark to brown loam to clay loam A1 horizon over bleached A2 horizon to 0.1-0.2 m over alkaline brown medium clay B horizon to 0.6-0.7 m over brown to yellow-brown loamy sand to light medium clay D horizons to 1.5 m.	Red-brown earth	6Ua				
6Un	Glenelder	0.05-0.25 m dark to brown sandy loam to sandy clay loam A1 horizon over yellow-brown to grey fine sandy loam to fine sandy clay loam A2 or A3 horizon to 0.2-0.4 m over neutral brown to yellow-brown fine sandy clay to medium clay B horizon to 0.5-1.0 m over coarse sandy loam to fine sandy clay D horizons to 1.5 m.	Brown podzolic soil	6Ua				
6Uo	Toona	0.1-0.3 m brown to grey-brown to dark loamy sand to sandy loam A1 horizon over bleached brown to yellow-brown loamy sand to sandy loam A2 horizon to 0.1-1.3 m over acid to neutral occasionally grey-mottled yellow-brown sandy clay to medium clay B horizon to 1.5 m.	Yellow podzolic soil	6Ua				
6Up	Clare	0.1-0.2 m dark to brown sandy loam to sandy clay loam A1 horizon over bleached, grey to yellow-brown sandy loam to sandy clay loam A2 horizon to 0.1-0.2 m over acid to neutral yellow-mottled yellow-brown to yellow grey sandy clay to medium clay B horizon to 0.1-1.5 m over brown to grey coarse sand to medium clay D horizon to 1.5 m.	Soloth-solodic soil	6Ua				
6Uq	Toona	0.15-0.4 m dark to grey loam to clay loam A1 horizon over bleached A2 horizon to 0.45-0.8 m over acid to neutral red mottled yellow-brown to brown medium clay B horizon to 1.25-1.5 m over brown to yellow-brown coarse sand to sandy clay loam D horizon to 1.5 m.	Yellow podzolic soil	6Ua				
6Ur	Toona	0.1-0.2 m brown-mottled grey to dark loam to clay loam A1 horizon over bleached A2 horizon to 0.2-0.4 m over acid to neutral red mottled yellow-brown to brown light medium to medium clay B horizon to 0.7-1.0 m over grey to yellow-brown sand to medium clay D horizons to 1.5 m.	Yellow podzolic soil	6Ua				

MAPPING UNIT CODE EXPLANATION

Example Code: 2Ug

6: Landscape Unit
 U: Subdivision of the Primary Profile Form (Northcote 1979)
 g: Distinguishes a modal soil type within the same primary profile form subdivision and landscape unit

Notes:

- Within areas of intense soil variability, the mapping unit is a soil complex and is named after the two most frequently occurring soil types, for example 20b-2Ug.
- Variants and phases of soil types may occur, for example 20b-2Ug. Such mapping units are described by the major attributes of the modal soil type modified by the description of the variant or phase concerned. Variants and phases are described separately in the reference.

Other Mapping Units:

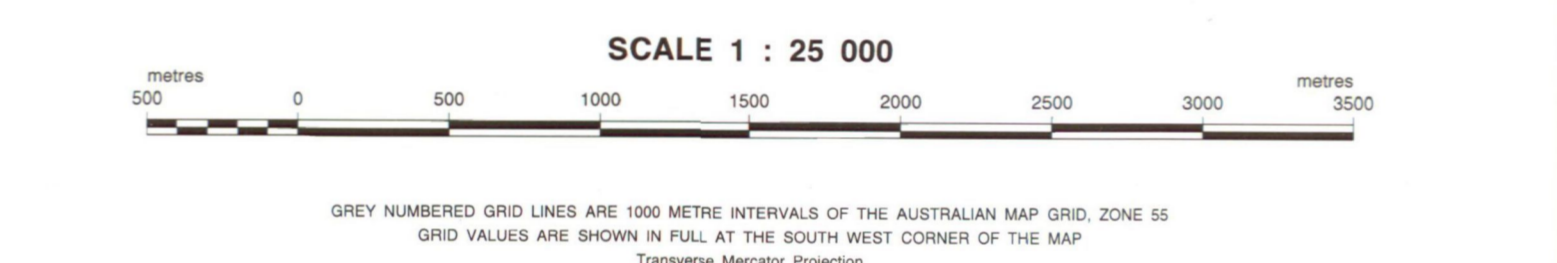
- Swamps.
- Closed depressions excavated by human activity.

VARIANTS AND PHASES

- Buried soils or D horizons of contrasting or coarser texture underlie the modal soil type at depths less than 1.5 m or at depths less than that specified in the major attributes.
- Significant variation in depth or field texture of the A horizon to that of the modal soil type.
- Significant amounts of coarse gravel or cobble within the soil. These coarse fragments are absent from the modal soil type.
- Significant variation in colour of B horizon to that of the modal soil type.

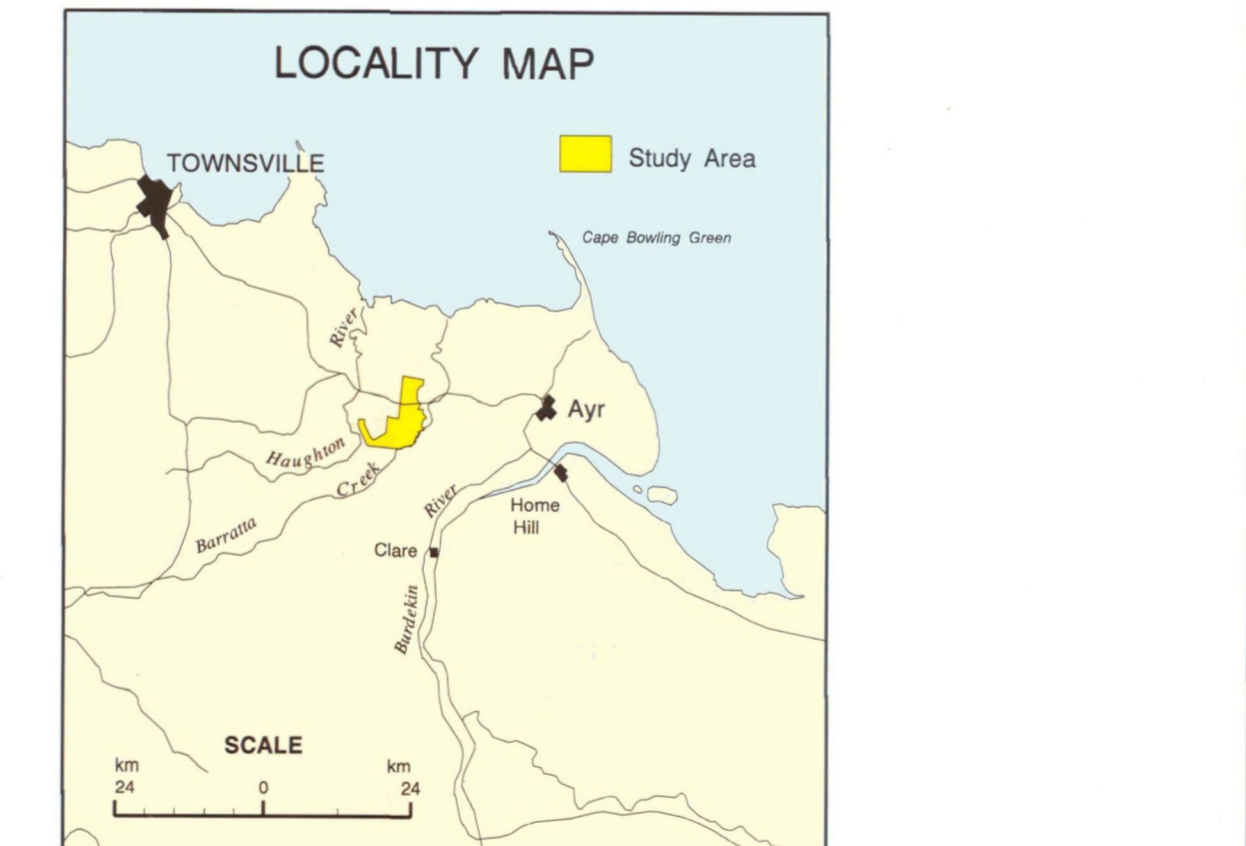
MISCELLANEOUS

- Soil sampling site.
- Unique map area (UMA) number.
- Values of attributes are described in terms of the dominant values in the Selkirk Section only. The full range of values within each soil type in the Lower Burdekin Valley does not necessarily occur in this area.
- Bracketed qualifiers are not an official part of great soil group names.
- Prior surges of slightly elevated sandy deposits.
- Narrow depressions.



INTENSITY STATEMENT

This is a high intensity soils survey. It is based on aerial photography interpretation and ground observations of the order of one observation to an area of 6 hectares.



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BASE MAP compiled from the 1:25 000 Topographic Series supplied by the Department of Lands, Brisbane.

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