

Appendix I - Representative Profile Descriptions

1. Soil Group # 1

Site # 15 (Area A)

Northcote Key: Dy 3.32

Topography: Flat

Surface soil:

A₁ 0 – 4 cm Dark brown (7.5YR 4/4 m) silty loam; friable when moist; sharp to:

A₂ 4 – 25 cm Light brown (7.5YR 6/4 m) with strong brown (7.5YR 5/6 m) fine sandy loam (increasing to clay loam with depth); sporadically bleached; friable when moist; includes a moderate amount of soft dark inclusions; clear to:

Subsoil:

B₂₁ 25 – 40 cm Reddish yellow (7.5YR 6/6 m) with light brown (7.5YR 7/4 m) mottled medium clay; friable when moist; gradual to:

B₂₂ 40 – 50 cm Brownish yellow (10YR 6/6 m) with yellowish red (5YR 5/8 m) mottled heavy clay; friable when moist; clear to:

B₂₃ 50 – 65 cm Light brownish grey (10YR 6/2 m) with brownish yellow (10YR 6/6 m) and yellowish red (5YR 5/8 m) heavy clay; friable when moist; includes numerous soft dark inclusions; gradual to:

B₂₄ 65 – 90 cm Light grey (10YR 7/2 m) with brownish yellow (10YR 6/8 m) and red (2.5YR 4/8 m) medium clay; firm consistence when moist; includes numerous soft dark inclusions; strongly structured, breaking down to medium blocky peds; sharp to:

B₂₅ 90 – 120 cm Light brownish grey (10YR 6/2 m) dense heavy clay; extremely firm when moderately moist; includes free calcium carbonate at 110 cm.

Site # 74 (Area B)

Northcote Key: Dy 3.21

Topography: On flats of lower level plain.

Surface soil:

A₁ 0 – 10 cm Dark brown (10YR 4/3 m) loam; friable when moist; sharp to:

A₂ 10 – 40 cm Light brown (7.5YR 7/4 m) silty loam; friable when moist; clear to:

Subsoil:

B₂₁ 40 – 55 cm Pale brown (10YR 6/3 m) with brownish yellow (10YR 6/6 m) and red (2.2YR 4/8 m) mottled medium clay; friable when moist; gradual to:

B₂₂ 55 – 70 cm Yellow (10YR 7/6 m) with red (2.5YR 4/8 m) mottled light clay; friable when moist; sharp to:

B₂₃ 70 – 90 cm Light grey (10YR 7/2 m) with brownish yellow (10YR 6/8 m) and red (2.5YR 4/8 m) mottled medium clay; firmer consistence when moist; clear to:

B₂₄ 90 – 120 cm Light brownish grey (10YR 6/2 m) with yellow (10YR 7/8 m) and slight red (2.5YR 4/8 m) mottled medium to heavy clay; firm consistence when moist; strongly structured with coarse blocky peds which break down to finer units; includes a slight amount of ironstone gravel.

2. Soil Group # 2

Site # 12 (Area A)

Northcote Key: Dy 3.42

Topography: Flats below lower slope.

Surface soil:

A₁ 0 – 10 cm Greyish brown (10YR 5/2 m) fine sandy clay loam; friable when moist; includes some fine rusty root channel mottling; sharp to:

A₂ 10 - 25 cm Light yellowish brown (10YR 6/4 m) fine sandy clay loam; conspicuously bleached; friable when moist; includes a common amount of ironstone gravel; clear to:

Subsoil

B₂₁ 25 – 45 cm Pale brown (10YR 6/3 m) with brownish yellow (10YR 6/6 m) mottled medium clay; friable when moist; clear to:

B₂₂ 45 - 80 cm Light grey (10YR 7/2 m) with brownish yellow mottled heavy clay; firmer consistence when moist; includes a common amount of ironstone gravel; clear to:

B₂₃ 80 – 120 cm Light grey (10YR 7/1 m) with brownish yellow (10YR 6/6 m) heavy clay; firm consistence when moist; moderately structured, breaking down to coarse blocky peds; includes a common amount of ironstone gravel and numerous fine dark inclusions.

Site # 52 (Area B)

Northcote Key: Dy 3.42

Topography: On the upper level flats of the plain just below lower slopes.

Surface soil:

A₁ 0 – 15 cm Dark brown (10YR 4/3 m) fine sandy loam; friable when moist; sharp to:

A₂ 15 - 30 cm Pale brown (10YR 6/3 m) fine sandy loam; conspicuously bleached; friable when moist; includes a slight amount of fine ironstone gravel; clear to:

Subsoil:

B₂₁ 30 - 40 cm Pale brown (10YR 5/3 m) with yellowish red (5YR 5/8 m) mottled medium clay; friable when moist; strongly structured, breaking down to medium blocky peds; gradual to:

B₂₂ 40 – 50 cm Light grey (10YR 7/2 m) with yellowish red (5YR 5/8 m) and brownish yellow (10YR 6/6 m) mottled heavy clay; friable when moist; includes a slight amount of ironstone gravel; clear to:

B ₂₃	50 – 75 cm	Pale brown (10YR 6/3 m) with brownish yellow (10YR 6/6 m) and red (2.5YR 4/8 m) mottled heavy clay; friable when moist; strongly structured, breaking down to fine blocky peds; includes a common amount of ironstone gravel; sharp to:
B ₂₄	75 – 90 cm	Light grey (10YR 7/2 m) with brownish yellow (10YR 7/8 m) diffusely mottled medium heavy clay; firm when moist; sharp to:
B ₂₅	90 – 120 cm	Grey (2.5YR 6/0 m) with brownish yellow (10YR 6/6 m) mottled dense heavy clay; extremely firm when moist; strongly structured, breaking down to medium to coarse blocky peds.

3. Soil Group # 3

Site # 60 (Area B)

Northcote Key: Dy 3.42

Topography: Lower level of plain – flat.

Surface soil:

A ₁	0 – 10 cm	Dark brown (10YR 4/3 m) silty loam; friable when moist; sharp to:
A ₂	10 – 30 cm	Very pale brown (10YR 7/3 m) silty loam; conspicuously bleached; friable when moist; includes common ironstone gravel; clear to:

Subsoil:

B ₂₁	30 – 65 cm	Pale brown (10YR 6/3 m) with brownish yellow (10YR 6/8 m) mottled medium clay; firm when moist; includes slight to moderate gravel; sharp to:
B ₂₂	65 – 110 cm	Light brownish grey (2.5YR 6/2 m) with brownish yellow (10YR 6/6 m) diffusely mottled heavy clay; dense and extremely firm when dry; includes a slight amount of ironstone gravel; gradual to:
B ₂₃	110 – 120 cm	Light brownish grey (2.5YR 6/2 m) heavy clay; extremely firm when dry; includes abundant ironstone gravel and traces of free calcium carbonate.

4. Soil Group # 4

Site # 13 (Area A)

Northcote Key: Dg 2.42

Topography: On creek flat near a slight rise.

Surface soil:

A ₁	0 – 10 cm	Dark brown (10YR 4/3 m) silty loam; friable when moist; sharp to:
A ₂	10 – 30 cm	Pale brown (10YR 6/3 m) silty loam; conspicuously bleached; friable when moist; sharp to:

Subsoil:

B ₂₁	30 – 90 cm	Light grey (10YR 7/1 m) with brownish yellow (10YR 6/8 m) mottled heavy clay; friable when moist; includes a common to moderate amount of ironstone gravel and numerous dark inclusions which decrease with depth; gradual to:
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B₂₂ 90 – 120 cm Light brownish grey (10YR 6/2 m) with brownish yellow (10YR 6/8 m) and yellowish red (5YR 5/6 m) mottled heavy clay; firm consistence when moist; includes numerous dark inclusions.

Site # 66 (Area B)

Northcote key: Dg 2.43

Topography: In a drainage depression.

Surface soil:

A₁ 0 – 15 cm Brown (10YR 5/3 m) silty loam with some rusty root channel mottling; friable when moist; clear to:

A₂ 15 – 30 cm Very pale brown (10YR 7/3 m) silty loam, with some rusty flecking; conspicuously bleached; friable when moist; sharp to:

Subsoil:

B₂₁ 30 – 65 cm Light grey (10YR 7/2 m) with brownish yellow (10YR 6/8 m) mottled medium clay; firm when moist; includes a slight amount of ironstone gravel; clear to:

B₂₂ 65 – 90 cm Light grey (10YR 7/2 m) with yellowish brown (10YR 5/8 m) mottled heavy clay; firm when moist; strongly structured, breaking down to medium blocky peds; includes a slight amount of ironstone gravel (to 3 mm in diameter); clear to:

B₂₃ 90 – 120 cm Greyish brown (2.5YR 5/2 m) with faint brown (7.5YR 5/4 m) mottled heavy clay; very firm when moist; strongly structured, breaking down to coarse blocky peds; includes a slight amount of ironstone gravel and a trace of free calcium carbonate at 110 cm.

5. Soil group # 5

Site # 25 (Area B)

Northcote Key: Dr 3.21

Topography: Crest of the main hill

Surface soil:

A₁ 0 – 15 cm Dark reddish brown (5YR 3/2 m) loam; friable consistence when moist; contains an abundant amount of quartz floaters of 1-6 cm in size; clear to:

A₂ 15 – 30 cm Reddish yellow (5YR 6/6 m) clay loam; friable consistence; includes an abundant amount of quartz floaters (to 10 cm diameter); sharp to:

Subsoil:

B₂₁ 30 – 50 cm Red (2.5YR 4/8 m) heavy clay; friable when moist; strongly structured, breaking down to fine blocky peds; sharp to:

B₂₂ 50 – 90 cm Brownish yellow (10YR 6/8 m) with red (10YR 4/6 m) mottled medium clay; friable when moist; strongly structured, breaking down to fine blocky peds; becomes weathered schist bedrock at 90 cm.

Site # 46 (Area B)

Northcote Key: Dr 3.12

Topography: Mid-slope of main hill.

Surface soil:

A₁ 0 – 15 cm Reddish brown (5YR 4/4 m) fine sandy loam; friable when moist; sharp to:

Subsoil:

B₂₁ 15 – 45 cm Red (2.5YR 4/8 m) heavy clay; friable when moist; strongly structured, breaking down to fine blocky peds; includes a moderate amount of quartz gravel (up to 5 cm diameter) which begins to decrease in amount at 20 cm in depth; gradual to:

B₂₂ 45 – 120 cm Reddish yellow (5YR 6/8 m) with red (2.5YR 4/8 m) mottled medium heavy clay; friable when moist; includes a common amount of fine ironstone gravel.

6. Soil group # 6

Site # 1 (Area A)

Northcote Key: Dy 3.22

Topography: Lower slope of hill

Surface soil:

A₁ 0 – 15 cm Dark brown (10YR 4/3 m) silty loam; friable when moist; clear to:

A₂ 15 – 35 cm Brown (7.5YR 5/4 m) clay loam; friable when moist; clear to:

Subsoil:

B₂₁ 35 – 100 cm Brownish yellow (10YR 6/6 m) medium clay; friable when moist; includes a slight amount of ironstone gravel, which increases to common at 60 cm in depth; a red (2.5YR 4/8 m) mottle is also present from 60 cm; clear to:

B₂₂ 100 – 120 cm Very pale brown (10YR 7/4 m) with yellowish brown (10YR 5/8 m) mottled medium clay.

Site # 39 (Area B)

Northcote Key: Dy 3.22

Topography: Lower slope of main hill.

Surface soil:

A₁ 0 – 15 cm Brown (7.5YR 4/4 m) fine sandy loam; friable when moist; clear to:

A₂ 15 – 25 cm Yellowish red (5YR 5/6 m) fine sandy loam, becoming fine sandy clay loam with depth; friable when moist; includes a slight amount of fine ironstone gravel; clear to:

Subsoil:

B₂₁ 25 – 45 cm Yellowish red (5YR 5/8 m) with yellow (10YR 7/6 m) heavy clay; friable when moist; includes a slight to common amount of ironstone gravel; clear to:

B ₂₂	45 – 60 cm	Brownish yellow (10YR 6/6 m) with red (2.5YR 4/8 m) mottled heavy clay; friable when moist; includes a moderate amount of ironstone gravel; gradual to:
B ₂₃	60 – 90 cm	Light yellowish brown (10YR 6/4 m) with brownish yellow (10YR 6/6 m) and red (2.5YR 4/8 m) mottled medium clay; friable when moist; includes a slight amount of quartz gravel; sharp to:
B ₂₄	90 – 120 cm	Pale brown (10YR 6/3 m) with brownish yellow (10YR 6/6 m) and yellowish red (5YR 5/8 m) mottled medium clay; firmer consistence when moist; coarser in structure; includes a minimal amount of ironstone gravel.