## DRAYCOTT HOUSE FARM, HOPWELL ROAD, LONG EATON, DERBYSHIRE

Agricultural Land Classification & Statement of Site Physical Characteristics May 1996

Resource Planning Team Huntingdon Statutory Group ADAS Cambridge ADAS job number25/96MAFF EL number09/02116LUPU Commission number 02207

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## AGRICULTURAL LAND CLASSIFICATION & STATEMENT OF SITE PHYSICAL CHARACTERISTICS

### DRAYCOTT HOUSE FARM, HOPWELL ROAD, LONG EATON, DERBYSHIRE

#### Introduction

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) Survey of 59.2 hectares of land at Draycott House Farm, Draycott, Derbyshire. The survey was carried out in April 1996 by the Resource Planning Team (RPT) of the ADAS Huntingdon Statutory Group, Cambridge and supersedes any previous ALC surveys at the site, notably the provisional 1:63 360 scale ALC map (MAFF 1970; Sheet 112) which shows most of the site to be Grade 3 but with a small area of Grade 2 in the south-west corner. The survey was commissioned by the Land Use Planning Unit (LUPU) of the Ministry of Agriculture, Fisheries and Food (MAFF) in connection with a planning application to convert the land from agricultural use to a 9-hole golf course.

2. The site is bounded to the north by the A52 road, to the west by the B5010 road and to the south and south-west by agricultural land. Hopwell Road runs along the eastern boundary of the site but in the north-east a small parcel of land lies to the east of Hopwell Road and to the north of Draycott Hospital.

3. Most of the land is in agricultural use, which at the time of the survey consisted of grass (in the north, centre and south-west) and winter cereals. Other, non-agricultural, land which was not surveyed comprises the buildings and access associated with Draycott House, Draycott House Farm and The Lodge, a short section of Hopwell Road and several small woodland areas.

4. The land has been classified in accordance with MAFF's revised guidelines and criteria for grading the quality of agricultural land (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I.

#### SUMMARY

5. The land classification was established by a total of 54 soil auger borings (i.e. about 1 per hectare) to a depth of 120 cm or to impenetrably stony layers. Subsoil conditions were assessed from seven inspection pits. The location of the pits and the auger borings is shown on the accompanying Sample Point Map.

### Table 1: Areas of grades and other land

Grade/Other land	Area (hectares)	% surveyed area
3a	10.9	18
3b	43.5	74
Other land	4.8	8
Total agricultural land	54.4	92
Total survey area	59.2	100

6. The results of the ALC survey are summarised in Table 1 and the distribution of the grades and subgrades is shown on the accompanying ALC map. The map is accurate at its scale of 1:10,000 but any enlargement would be misleading.

7. The site contains some small areas of good quality (Subgrade 3a) agricultural land but most of the site is of moderate quality (Subgrade 3b). The factor which primarily determines this classification is the varying soil wetness (see Appendix II), which is a function of climate and soil permeability.

### FACTORS INFLUENCING ALC GRADE

### Climate

8. Climate criteria are considered first when classifying land because severe climatic limitations will restrict land to low grades irrespective of favourable site or soil conditions. The overall climate itself may affect grading, or grading may be affected through climatic factors interacting with soil properties to influence soil wetness and droughtiness.

9. The main parameters used in the assessment of the overall climate limitation for ALC purposes are average annual rainfall as a measure of wetness and accumulated temperature as a measure of the relative warmth of an area. Estimates of these variables were obtained from the published 5 km grid datasets using the standard interpolation methods (Met. Office, 1989). The results of this analysis are given in Table 2 and show that the combination of rainfall and temperature at the site present no limitation for agricultural use.

#### Table 2: Climatic and altitude data

Parameter	Value
Grid reference	SK 439 347
Altitude (m,AOD)	60
Accumulated Temperature (day °C, Jan-June)	1390
Average Annual Rainfall (mm)	652
Field Capacity Days	141
Moisture Deficit, Wheat (mm)	105
Moisture Deficit, Potatoes (mm)	97
Overall Climatic Grade	1

Site

10. The land slopes southwards and south-eastwards from a plateau at about 70 m AOD in the north of the site to 55 m AOD near Draycott Hospital and 47 m AOD along the southern boundary. The slopes on the plateau area and in the relatively low-lying southern half of the site are less than 2°. On the mid-slopes, south of Draycott House, Draycott House Farm and The Lodge, gradients are commonly 3° or 4° or exceptionally steeper (to 9°) in the vicinity of Hopwell Road. Except for these locally steep breaks of slope gradients are not limiting in ALC terms. The land with slopes exceeding 7° cannot be classified higher than Subgrade 3b, reflecting an increasing risk to the safe and efficient operation of certain farm machinery.

#### Geology and soils

11. The published 1:50,000 scale geology map (Geological Survey, 1976) shows most of the site to be underlain by Triassic Keuper Red Marl possibly including bands of sandstone and gypsum. In the centre of the site in the very north the Marl is shown to be overlain by Pleistocene Boulder Clay and in the south-west corner of the site it is shown to be covered by Pleistocene Fluvio-glacial Gravel.

12. There is no detailed published soils information for the site. The relevant reconnaissance soil map and legend (Soil Survey, 1983) shows the occurrence of three soil associations, namely the Worcester (in the north), the Whimple 3 (in the centre) and the Salwick (in the south and south-west). All these associations are fine-textured soils with slowly permeable subsoils and derive from Permo-Triassic mudstone and /or its overlying drift.

13. The present survey of the site confirms an overall cover of generally non-calcareous, fine-textured and slowly permeable soils. Six soil types, briefly described in the following paragraphs, have been identified according to their different topsoil and upper subsoil textures, their variable depth to the slowly permeable subsoil and their contrasting intensity of gleying. The distribution of the six soil types is shown on the accompanying 1:10,000 scale Soil Resources Map and a detailed description of their physical characteristics is given in Appendix III.

#### Soil Type I

14. This soil is extensive in the north and centre of the site. Typically, a dark brown medium or heavy clay loam or clay topsoil to 30 cm overlies a brown or reddish brown heavy clay loam or clay upper subsoil with gleyed ped faces. From 35 / 50 cm the soil becomes a reddish brown to dusky red clay, again with gleyed ped faces. The subsoil may contain greenish grey soft weathering rock fragments. The soil is assessed as being slowly permeable from immediately beneath the topsoil and is classified as Wetness Class IV.

### Soil Type II

15. Soil Type II occurs to a limited extent in the north-east and south-east corners of the site and sporadically elsewhere. In its colours, its lower subsoil texture (clay) and gleying the soil appears similar to Type I but differs from it by having a permeable upper subsoil. Typically, a medium clay loam topsoil overlies a medium or heavy clay loam upper subsoil overlying slowly permeable clay with gleyed ped faces at 40 / 50 cm. Because the upper subsoil is permeable the soil is classified as Wetness Class III.

#### Soil Type III

16. This soil occurs on slopes south of Draycott House Farm. The soil in most respects is similar to Type II but has a greyer and sandier topsoil and upper subsoil. Typically, both these horizons are brown sandy clay loam or medium clay loam. The upper subsoil is assessed as permeable and overlies the aforementioned reddish brown to dusky red slowly permeable clay with gleyed ped faces at about 45 cm. The soil is classified as Wetness Class III.

## Soil Type IV

17. Soil Type IV occurs as a band on low slopes towards the south-west of the site. The soil is similar to Type I but has a greyer upper subsoil and a stonier lower subsoil. Typically, a dark brown medium or heavy clay loam topsoil to about 30 cm overlies a brown heavy clay loam or clay upper subsoil extending to 45 / 60 cm. Below this lies reddish brown clay; the upper part of this clay, to about 75 / 80 cm, contains many small to large rounded and angular hard stones. Both upper and lower subsoil have gleyed ped faces and are assessed as being slowly permeable. Consequently, the soil is classified as Wetness Class IV.

### Soil Type V

18. This soil occurs in the south of the site. A brown or dark greyish brown medium or heavy clay loam topsoil to 30 cm overlies a brown clay subsoil with gleyed ped faces and many distinct ochreous mottles. The clay becomes greyer with increasing depth and below 60 / 75 cm overlies a greenish grey clay or silty clay containing weathering siltstone fragments. Reddish brown clay may occur at depths below 80 cm. The soil is assessed as being slowly permeable from immediately beneath the topsoil and is classified as Wetness Class IV.

#### Soil Type VI

19. Soil Type VI occurs in the south-west corner of the site and is similar to Type V, except that the topsoil is typically medium clay loam and the upper subsoil, to about 50 cm, is a permeable medium clay loam with many ochreous mottles. Consequently, the soil is classified as Wetness Class III.

#### AGRICULTURAL LAND CLASSIFICATION

### Grades, Subgrades

20. The ALC classification of the land is shown on the attached ALC Map and the areas of each grade and subgrade have been given in Table 1 (page 1). Moisture balance calculations show nearly all the land to have a slight droughtiness limitation, restricting land quality to Grade 2 at best, but the factor which primarily determines the land classification is the varying soil wetness.

#### Subgrade 3a

21. The land having Soil Types II, III and VI is mapped as Subgrade 3a on account of a moderate wetness limitation. The soils have medium clay loam or sandy clay loam topsoils and are slowly permeable below 40 / 50 cm. Under the prevailing climatic conditions the land will have a moderate workability limitation and any cultivations and harvesting will need to be carefully controlled to avoid structural damage to the soils during the wetter periods of the year.

#### Subgrade 3b

22. The land with Soil Types I, IV and V is mapped as Subgrade 3b on account of a moderately severe wetness and workability restriction. The soils have medium or heavy clay loam or clay topsoils and are slowly permeable directly underneath. They have been asessed as Wetness Class IV. The land will lie wet for long periods and careful soil management will be required to avoid serious structural damage. Additionally, within the area of Soil Type I in the vicinity of Hopwell Road there are localised gradients above 7° and land having these slopes cannot be classified higher than Subgrade 3b regardless of soil conditions.

Resource Planning Team Huntingdon Statutory Group ADAS Cambridge

#### SOURCES OF REFERENCE

- GEOLOGICAL SURVEY OF GREAT BRITAIN (1976) Sheet 141, Loughborough, Solid and Drift edition, 1:50 000 scale.
- MAFF (1972) Agricultural Land Classification Map, Sheet 112, Provisional, 1:63 360 scale.
- MAFF (1988) Agricultural Land Classification of England and Wales. Revised Guidelines and Criteria for Grading the Quality of Agricultural Land. MAFF: London.
- METEOROLOGICAL OFFICE (1989) Climatological Data for Agricultural Land Classification. Met. Office: Bracknell.
- SOIL SURVEY OF ENGLAND AND WALES (1983) Soils of England and Wales, Sheet 3, Midland and Western England, 1:250 000 scale map and legend. Soil Survey of England and Wales: Harpenden.

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## APPENDIX I

## DESCRIPTIONS OF THE GRADES AND SUBGRADES

### Grade 1: Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

## Grade 2: Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

## Grade 3: Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

## Subgrade 3a: Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

## Subgrade 3b: Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

## Grade 4: Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

## Grade 5: Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

#### **APPENDIX II**

### SOIL WETNESS CLASSIFICATION

#### **Definitions of Soil Wetness Classes**

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Wetness Class	Duration of waterlogging <sup>1</sup>
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years <sup>2</sup> .
II	The soil profile is wet within 70 cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but only wet within 40 cm depth for 30 days in most years.
III	The soil profile is wet within 70 cm depth for 91-180 days in most years or, if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years.
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years or, if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.
v	-The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years.

### Assessment of Wetness Class

Soils have been allocated to wetness classes by the interpretation of soil profile characteristics and climatic factors using the methodology described in *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

<sup>&</sup>lt;sup>1</sup> The number of days is not necessarily a continuous period.

<sup>&</sup>lt;sup>2</sup> 'In most years' is defined as more than 10 out of 20 years.

# APPENDIX III

# SOIL DATA

Soil type I			
Topsoil	Texture	:	Medium or heavy clay loam; clay (locally sandy silt loam)
	Colour	:	Brown (7.5YR4/3); reddish brown (5YR4/3); dark brown (7.5YR3/2); dark reddish brown (5YR3/2)
	Mottles	:	None
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded and subangular
	Roots	:	Many fine
	CaCO <sup>3</sup>	· :	Non-calcareous
	Depth	:	25/30 cm
	Boundary	;	Abrupt smooth
Upper subsoil	Texture .	:	Heavy clay loam or clay
	Colour	:	Brown (7.5YR4/3); reddish brown (5YR4/4); dusky red (2.5YR4/4)
	Mottles	;	None to common distinct yellowish red (5YR5/6); also gleyed (7.5YR4/2) ped faces
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded and subangular; occasional weathering sandstone (skerry)
	Structure	:	Weak coarse subangular blocky
	Consistence	:	Friable to firm
	Structural condition	:	Moderate
	Pores	:	<0.5%
	Roots	:	Common fine and very fine
<u>к</u>	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	35/50 cm
	Boundary	:	Clear smooth
Lower subsoil	Texture	:	Clay
	Colour	:	Reddish brown (5YR4/4); dusky red (2.5YR4/4)
	Mottles	:	None, but gleyed (7.5YR4/2) ped faces
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded and subangular; occasional weathering sandstone (skerry)
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	Structure	:	Weak very coarse angular blocky

	Consistence	:	Firm
	Structural condition	:	Poor
	Pores	:	<0.5%
	Roots	:	Common fine and very fine
·	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	120 cm
Wetness	IV		
Class:	ĨV		
Soil type II			
Topsoil	Texture	:	Medium clay loam
	Colour	:	Brown (10YR4/3); dark reddish gre (5YR4/2)
	Mottles	:	None
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded an subangular
	Roots	:	Many fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	30 cm
	Boundary	:	Abrupt or clear smooth
Upper subsoil	Texture	:	Medium or heavy clay loam
	Colour	:	Dark yellowish brown (10YR4/4) reddish brown (5YR5/4)
	Mottles	:	None to few distinct brownish yellow (10YR6/6)
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded an subangular
	Structure	:	Moderate coarse and very coars subangular blocky
	Consistence	:	Friable to firm
,	Structural condition	:	Moderate
	Pores	: .	0.5 - 1.0%
	Roots	:	Many or common fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	40/50 cm
	Boundary	:	Abrupt to gradual, smooth
Lower subsoil	Texture	:	Clay
	Colour	:	Reddish brown (5YR4/4); dusky re (2.5YR4/4)
	Mottles	:	None, but gleyed (7.5YR4/2; 2.5Y5/3 ped faces
	Concretions	:	None
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Stone	:	1-5% small and medium, rounded and subangular; occasional weathering sandstone (skerry)
Structure	:	Weak very coarse and coarse angular and subangular blocky
Consistence	:	Firm
Structural condition	:	Poor
Pores	:	<0.5%
Roots	:	Common fine and very fine
CaCO <sup>3</sup>	:	Non-calcareous
Depth	:	120 cm

Wetness Class:

Soil type III

III

Topsoil	Texture Colour Mottles Concretions Stone CaCO <sup>3</sup> Depth	•••••••••••••••••••••••••••••••••••••••	Medium clay loam; sandy clay loam Brown (7.5YR4/2) None None 2% small, rounded and subangular Non-calcareous 20/30 cm
Upper subsoil	Texture Colour Mottles	: :	Sandy clay loam Brown (7.5YR5/3) Common distinct strong brown (7.5YR5/6)
	Concretions Stone	:	Few small manganese nodules 2-5% small and medium, rounded and subangular
	Structure	:	Moderate coarse and very coarse subangular blocky
	Consistence		Friable to firm
	Structural condition	:	Moderate
	Pores	:	0.5 - 1.0%
	CaCO <sup>3</sup>		Non-calcareous
	Depth	:	40/45 cm
Lower subsoil	Texture	:	Clay
	Colour	:	Dusky red (2.5YR4/4); light brownish grey (2.5Y6/2)
	Mottles	:	None or many distinct reddish yellow (7.5YR6/6), also gleyed (7.5YR4/2) ped faces
	Concretions	:	None
	Stone	:	1-5% small and medium, rounded and
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Wetness	Structure Consistence Structural condition Pores Roots CaCO <sup>3</sup> Depth III	•••••••••••••••••••••••••••••••••••••••	subangular; occasional weathering sandstone (skerry) Weak very coarse and coarse angular and subangular blocky Firm Poor <0.5% Common fine and very fine Non-calcareous 120 cm
Class:			
Soil type IV			
Topsoil	Texture Colour	•	Medium or heavy clay loam Brown (7.5YR4/2); dark brown (7.5YR3/2, 3/3)
	Mottles Concretions	:	None None
	Stone	:	1-5% small and medium, rounded and subangular
	Roots CaCO <sup>3</sup> Depth	:	Many fine and very fine; few medium Non-calcareous 25/30 cm
	Boundary	:	Clear smooth
Upper subsoil	Texture -Colour	:	Heavy clay loam or clay Brown (7.5YR4/3, 4/4, 5/4; 10YR5/3); dark yellowish brown (10YR4/4)
	Mottles	:	None to many distinct yellowish brown (10YR6/6) and strong brown (7.5YR5/6); also gleyed (7.5YR4/2) ped faces
	Concretions Stone	:	Few to common manganese 5-10% small to large, rounded and subangular
	Structure	:	Weak coarse and very coarse angular blocky
	Consistence Structural condition Pores Roots CaCO <sup>3</sup> Depth Boundary	•	Firm Poor <0.5% Common fine and very fine Non-calcareous 45/60 cm Abrupt smooth

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Lower subsoil 1	Texture Colour	:	Clay Reddish brown (5YR4/4); dark
	Colour	•	yellowish brown (10YR4/4)
	Mottles	:	None to common distinct yellowish brown (10YR5/6); also gleyed
	Concretions		(7.5YR4/2) ped faces None
	Stone	•	15-25% small to large, rounded and
	Stone	•	subangular; occasional weathering sandstone (skerry)
	Structure	:	Too stony
	Consistence	:	Firm
	Structural condition	:	-
	Pores	:	-
·	Roots	:	Few fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	75/85 cm
Lower subsoil 2	Texture	:	Clay
	Colour	:	Reddish brown (5YR4/4); dusky red
	Mottles		(2.5YR4/4) None, but sloved (7.5YD 4/2) and faces
	Concretions		None, but gleyed (7.5YR4/2) ped faces None
	Stone	:	1-5% small and medium, rounded and
	Sione	•	subangular; occasional weathering sandstone (skerry)
	Structure	:	Massive to weak very coarse subangular
		•	blocky
	Consistence	:	Firm
	-Structural condition	:	Poor
	Pores	:	<0.5%
	Roots	:	Few fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	120 cm, or to weathering rock 90+ cm
Wetness Class:	IV		
Soil type V			
Topsoil	Texture	:	Medium or heavy clay loam
	Colour	:	Brown (7.5YR4/2); dark greyish brown
			(10YR4/2); dark grey (10YR4/1)
	Mottles	:	None
	Concretions	:	None
	Stone	:	1-2% small and medium, rounded and subangular
	Roots	:	Many fine
	CaCO <sup>3</sup>	:	Non-calcareous
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	Depth	:	25/30 cm
	Boundary	:	Abrupt smooth
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Upper subsoil	Texture	:	Clay
••	Colour	:	Brown (7.5YR, 10YR5/3)
	Mottles	:	Many to abundant prominent yellowish
_			brown (10YR5/6), strong brown
			(7.5YR5/6), grey (10YR6/1); also gleyed
			(7.5YR5/2) ped faces
	Concretions	:	Few manganese
	Stone	:	1-10% small and medium, rounded and
		•	subangular
	Structure	:	Weak and moderate coarse and very
			coarse angular blocky
	Consistence	:	Firm
	Structural condition	:	Poor
	Pores	:	<0.5%
	Roots	:	Many fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	60/75 cm
	Boundary	:	Clear smooth
Lower subsoil	Texture	:	Clay, silty clay
	Colour	:	Greenish grey (5GY6/1); grey (5Y6/1)
	Mottles	:	None, to common distinct yellowish
			brown (10YR5/8)
X	Concretions	:	Few to common manganese
	Stone	*	1-5% small and medium, rounded and
			subangular; occasional weathering
	*		sandstone (skerry)
	Structure	:	Massive
	Consistence	:	Firm, very firm
	Structural condition	:	Poor
	Pores	:	<0.5%
	Roots	:	Few fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	120 cm
Wetness	IV		
Class:			
Soil turne VI	:		
Soil type VI		•	
Topsoil	Texture	:	Medium clay loam
-	Colour	:	Very dark greyish brown (10YR3/2)
	Mottles	:	None
	Concretions	:	None
	Stone	:	1-2% small and medium, rounded and
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			subangular
	Roots	:	Many fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	25/30 cm
	Boundary	:	Abrupt smooth
Upper subsoil	Texture	:	Medium clay loam, sandy clay loam
•	Colour	:	Brown (7.5YR4/3)
	Mottles	:	None, but gleying (10YR5/3) on ped faces
	Concretions	:	Few manganese
	Stone	:	1-5% small and medium, rounded and
	biolic	•	subangular
	Structure		Moderate medium subangular blocky
	Consistence	•	Friable
	Structural condition	•	Good
		•	
	Pores	:	>1%
	Roots	:	Common fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	50/60 cm
	Boundary	:	Abrupt smooth
Lower subsoil 1	Texture	:	Clay, silty clay
	Colour	:	Light brownish grey (10YR6/2) to
			yellowish brown (10YR5/4)
	Mottles	:	Many to abundant prominent yellowish
			brown (10YR5/6), strong brown
			(7.5YR5/6), grey (10YR6/1); also gleyed
			(10YR5/2) ped faces
	.Concretions	:	Common manganese
	Stone	:	1-5% small and medium, rounded and
			subangular
	Structure	:	Weak coarse angular blocky
	Consistence	:	Firm
	Structural condition	:	Poor
	Pores	:	<0.5%
	Roots	:	Few fine and very fine
	CaCO <sup>3</sup>	:	Non-calcareous
	Depth	:	80/90 cm
Lower subsoil 2	Texture	:	Clay, silty clay
	Colour	:	Greenish grey (5GY6/1); grey (5Y6/1)
	Mottles	:	None, to common distinct yellowish
			brown (10YR5/8)
	Concretions	:	Common manganese
	Stone	:	1-5% small and medium, rounded and
			subangular; occasional weathering
			sandstone (skerry)
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Structure	:	Massive
Consistence	:	Firm, very firm
Structural condition	:	Poor
Pores	:	<0.5%
Roots	:	Few fine and very fine
CaCO <sup>3</sup>	:	Non-calcareous
Depth	:	120 cm

Wetness Class: III

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