
MAFF
Ministry of
Agriculture
Fisheries
and Food

AGRICULTURAL LAND CLASSIFICATION

Wakefield U.D.P

Normanton East, Site N/I/5

MAFF

Leeds Regional Office

March 1992

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AGRICULTURAL LAND CLASSIFICATION REPORT,

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-	SE 409230
Location Details:-	2½ km east of Normanton
Site Size:-	94 ha of which 4 ha was not surveyed because ownership details are not known

1.2 Survey Methods

Dates Surveyed:-	3 December 1991 and 5 March 1992
Boring Density and Spacing Basis:-	At 100m intervals on a grid pattern predetermined by the national grid.
Sampling Method:-	By hand auger borings to a depth of 1 metre
Number of Borings:-	77

All land quality assessments were made using the methods described in "Agricultural Land Classification of England and Wales: Revised Guidelines and Criteria for grading the quality of agricultural land (MAFF 1988)".

1.3 Land Use:-		Most of the land is in agricultural use (mainly winter cereals). There are also areas of urban and non-agricultural land, farm woodland and agricultural buildings
1.4 Climate and Relief		
Average Annual Rainfall (AAR):-	619	mm
Accumulated Temperature above 0°C (January-June):-	1375	day °C
Field Capacity Days:-	135	days
Altitude average:-	40	m a.o.d.
maximum:-	45	m a.o.d.
minimum:-	20	m a.o.d.
Climatic limitation (based on interaction of rainfall and temperature values:-		There is no limitation on ALC grade
Relief:-		The area surveyed slopes gently from east to west
Slopes (°):-		0° - 7°
Gradient Limitations:-		None

1.5 Geology and Soil

Solid Strata:-	Coal measures
Depth of solid rock from surface:-	> 1 metre
Drift types:-	Heavy clay formed from weathering coal measure shales.
Thickness of drift and distribution:-	1 metre over the whole site
Soil Types and Distribution:-	Mainly pelo-stagnogley soils (poorly drained heavy soils) with some areas of medium and light textured material in the north with some areas of medium and light-textured material in the north.
Soil Textures (topsoils and subsoils):-	Topsoils consist of medium or heavy clay loam over subsoils generally of heavy clay loam, silty clay or clay with occasional patches of lighter sandy material.
Soil Series/Associations:-	Dale
On 1/250000 map:-	
Identified on site:-	-

Soil Limitations and type:-	Heavy topsoil textures, especially in the Southern part of the site.

1.6 Drainage

Soil type and Wetness Class:-	The heavy soils fall mainly in wetness class IV. The medium textured soils fall within wetness classes II & III
Drainage Limitations:-	Slowly permeable sub-soils

2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
1	-	
2	-	
3a	21.4	22.8
3b	56.6	60.4
4	1.3	1.4
5	-	-
Non Agricultural	8.6	9.2
Agricultural Buildings	0.9	0.96
Urban	1.2	1.3
Not surveyed (Ownership Unknown)	3.7	3.94
Total	93.7	100

Subgrade 3a

Distribution on site:-	This subgrade occurs in the northern part of the site and in the separate areas in the South.
Soil Type(s) and Texture(s):-	Soils are generally medium textured with medium clay loam top-soils over sandy clay loam or medium sandy loam subsoils often with clay at depth.
Depth to Slowly Permeable Layers:-	35 - 70 cm
Wetness and Drainage Class:-	Profiles fall within wetness classes II and III where slowly permeable layers are present making them imperfectly drained. The occasional lighter soils in the North are freely drained (wetness class I)
Stone Percentage and Type:-	0 - 5% hard rocks and Stones
Grade Limiting Factors:-	Soil wetness is limiting on the imperfectly drained areas. The light, sandy soils are limited by soil droughtness.

Subgrade 3b

Distribution on site:-	Subgrade 3b land covers much of the central and southern parts of the site.
Soil Type(s) and Texture(s):-	Soils of this subgrade are heavy and consist of heavy clay loam over similar or heavier sub-soils.
Depth to Slowly Permeable Layers:-	25 - 45 cm
Wetness and Drainage Class:-	Wetness Classes III and IV imperfectly and poorly drained soils
Stone Percentage and Type:-	0 - 4%
Grade Limiting Factors:-	Soil wetness and workability

Grade 4

Distribution on site:-	An area of restored land to the east of Don Pedro cottages.
Soil Type(s) and Texture(s):-	Medium textured soils, consisting of a thin medium clay loam topsoil, over shaley overburden to depth.
Depth to Slowly Permeable Layers:-	Greater than 1 metre.
Wetness and Drainage Class:-	Wetness Class 1
Stone Percentage and Type:-	15-20% small and medium shales and soft sandstones
Grading Limiting Factors:-	Soil stoniness workability and subsoil compaction problems.

Non Agricultural

Type and location of land included:- Farm woodland to the east of Don Pedro Cottages and north of Loscoe Grange; gardens at Loscoe Grange and scrubland along Loscoe Lane and south of Wood House Farm.

Agricultural Buildings

Type and location of buildings included:- The farmhouse and out-buildings at Loscoe Grange, in the west.

Urban

Type of land use included:- The access road to Wood House Farm, the houses and roads around Loscoe Grange.

Resource Planning Group
Leeds Regional Office
March 1992

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