



AGRICULTURAL LAND CLASSIFICATION
KIRKLEES UDP
(CASE REFERENCE MF12)
WEST YORKSHIRE
MARCH 1996

ADAS
Leeds Statutory Group

Job No:- 30/96
MAFF Ref:- EL 49/23
Commission No:- 2418

2FCS 11273

SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 7.7 ha of land at Mirfield (Kirklees UDP, Case Reference MF12) was carried out in March 1996. At the time of the survey 6.7 ha of the site was in agricultural use and all of this falls in Subgrade 3b. In the centre and west the soils are well drained, with medium clay loam or medium sandy loam topsoils and subsoils overlying weathering sandstone at around 40 cm depth. Soil droughtiness is the ALC grade limiting factor in these areas. In the east of the site the soils are poorly drained, with medium clay loam topsoils and, in places, upper subsoils, overlying gleyed and slowly permeable heavy clay loam or clay. In this case soil wetness limits the land to Subgrade 3b.

Other land on the site, consisting of playing fields in the east, covers 1.0 ha.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION (ALC) REPORT ON LAND AT MIRFIELD
(KIRKLEES UDP, CASE REFERENCE MF12)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies 3½ km west of Dewsbury town centre, on the north-eastern side of Mirfield. A detailed ALC survey was carried out in March 1996 when the soils were examined by hand auger borings at 100 m intervals predetermined by the O.S. National Grid. In addition, one soil pit was dug to allow a full profile description to be made. The land quality was assessed 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).

1.2 Land Use and Relief

At the time of the survey 87% of the site was in agricultural use (as permanent grass or, in the north where the land has been left unattended in recent years, rough grazing) and 13% consisted of playing fields in the south-east.

The land on the site is gently to moderately sloping (2 - 7°) with an easterly or south-easterly aspect, and site altitude varies from 100 m AOD in the north to 75 m AOD in the south east.

1.3 Climate

Grid Reference	: SE210211
Altitude (m)	: 90
Accumulated Temperature above 0°C (January - June)	: 1324 day °C
Average Annual Rainfall (mm)	: 802
Climatic Grade	: 2
Field Capacity Days	: 196
Moisture Deficit (mm) Wheat	: 87
Moisture Deficit (mm) Potatoes	: 73

1.4 Geology, Soils and Drainage

This area is underlain by Lower Carboniferous Coal Measures consisting of interbedded sandstones and shales. There is no significant drift cover on the site and the soils have developed in weathering sandstone (in the centre and west) or weathering shale (in the east).

The soils closely reflect the underlying geology. In the centre and west medium clay loam or medium sandy loam topsoils and subsoils overlie weathering sandstone bedrock at between 35 cm and 60 cm depth. These profiles are well drained (Wetness Class I), and very slightly stony to slightly stony.

In the east of the site the soils are poorly drained (Wetness Class IV), with medium clay loam topsoils, and, in places, upper subsoils overlying gleyed and slowly permeable heavy clay loam or clay.

The soils on this site correspond to the Dale and Rivington associations as mapped by the Soil Survey and Land Research Centre.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>% of Total Area</u>
1		
2		
3a		
3b	6.7	87.0
4		
5		
(Sub total)	(6.7)	(87.0)
Other Land	1.0	13.0
TOTAL	<u>7.7</u>	<u>100</u>

2.1 Subgrade 3b

All of the agricultural land on this site has been mapped as Subgrade 3b. In the centre and west the soils are well drained (Wetness Class I), with medium clay loam or medium sandy loam topsoils and subsoils overlying weathering sandstone bedrock at around 40 cm depth. These soils are well drained (Wetness Class I) but soil droughtiness limits the land to Subgrade 3b. Although some deeper profiles meet the requirements for Subgrade 3a, these cannot be accurately mapped together as a separate unit.

In the east of the site the soils are poorly drained, falling in Wetness Class IV, and medium clay loam topsoils and, in places, upper subsoils, overlie gleyed and slowly permeable heavy clay loam or clay at between 25 cm and 40 cm depth. In this case soil wetness is the factor which limits the ALC grade of the land.

2.2 Other land

This occurs in the east of the site and consists of playing fields.

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MAP