[redacted]

AGRICULTURAL LAND CLASSIFICATION

KIRKLEES U.D.P. SITE B11:17

DEWSBURY

WEST YORKSHIRE

DECEMBER 1992

ADAS

Leeds Statutory Group

Job No:- 129/92

MAFF Ref:-

ZFRS6272

KIRKLB11.AL8/MT

SUMMARY

An Agricultural Land Classification of 54 ha of land north of Dewsbury was carried out in December 1992.

Grade 2 land covers a total of 24.6 ha and generally consists of medium clay loam or medium sandy loam topsoils overlying similarly-textured subsoils. Overall climate and, in places, slight soil droughtiness and soil workability limitations are the factors limiting A.L.C. grade.

Subgrade 3a land covers a total of 16.9 ha. In most cases soils are similar to those on the Grade 2 land except that sandstone bedrock occurs at around 50 cm depth, thus imposing a moderate soil droughtiness limitation to Subgrade 3a. In a few places heavy-textured subsoils occur and profiles are only moderately well or imperfectly drained. In these cases the limiting factors on A.L.C. grade are soil wetness and workability.

A total of 11.4 ha of Subgrade 3b land occurs on the site. Two small areas in the west are limited to Subgrade 3b by slopes of 8 - 10°. Elsewhere soils are medium to heavy-textured and poorly drained and the land is restricted to Subgrade 3b by soil wetness and workability limitations.

A small area of Grade 4 land in the south-west of the site is limited to this grade by steep slopes.

CONTENTS

AGRICULTURAL LAND CLASSIFICATION REPORT: KIRKLEES U.D.P.
SITE B11:17, DEWSBURY, WEST YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 3 km north-east of Dewsbury town centre and is located around Grid Reference SE264240. It covers a total area of almost 54 ha. Survey work was carried out in December 1992 when soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Extra borings were made, where necessary, to refine grade boundaries, and four inspection pits were dug to allow the assessment of subsoil structure and depth to bedrock. 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 survey 99.5% of the land surveyed was in agricultural use, principally as permanent pasture but including a significant area of arable.

Site altitude varies from 102m A.O.D. in the east to 130m A.O.D. in the north-west. The land is generally slightly sloping (typically 1 - 3°) with a southerly or easterly aspect. However, slopes of 10 - 14° in parts of the south-west of the site limit small areas of land there to Subgrade 3b or Grade 4.

1.3 Climate

Grid Reference	:	SE 264240
Altitude (m)	:	118
Accumulated Temperature above 0°C (January-June)	:	1289 day °C
Average Annual Rainfall (mm)	:	742
Climatic Grade	:	2
Field Capacity Days	:	177
Moisture Deficit (mm) Wheat	:	87
Moisture Deficit (mm) Potatoes	:	73

1.4 Geology, Soils and Drainage

The site is underlain by Carboniferous coal measures consisting of interbedded sandstones (which occur within one metre of the soil surface in parts of the site) and shales. THere is no drift cover and the soils have formed in weathering bedrock.

Soils formed over shale occur in the south and north-east of the site. Typically they are medium to heavy-textured with a medium clay loam topsoil overlying a heavy clay loam or heavy silty clay loam subsoil. These soils are poorly drained, falling in Wetness Class IV. Over the remainder of the site soils have formed over weathering sandstone. These soils are light to medium-textured and generally consist of a medium clay loam or medium sandy loam topsoil overlying a similarly textured subsoil. Sandstone bedrock occurs at varying depths (often between 60 cm and 90 cm). Profiles are well drained, falling in Wetness Class I.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2	24.60	45.8
3a	16.87	31.4
3b	11.38	21.2
4	0.58	1.1
5		
(Sub total)	(53.43)	(99.5)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.24	0.5
Open Water		
Land not surveyed		
(Sub total)	(0.24)	(0.5)
TOTAL	53.67	100

2.1 Grade 2

Grade 2 land occurs in the centre and north-west of the site. Profiles are well drained (falling in Wetness Class I) and consist of medium clay loam or medium sandy loam topsoils overlying similarly-textured subsoils. Topsoils are typically very slightly to slightly stony (containing around 6% small and medium sized sandstones) and subsoils slightly to moderately stony (containing up to 20% small, medium and large sandstones). Sandstone bedrock occurs in places at depth.

This land is limited to Grade 2 by overall climate, slight soil droughtiness and, where medium clay loam topsoils occur, slight soil workability restrictions.

2.2 Subgrade 3a

Land in this subgrade occurs in two separate areas in the south and north-east of the site. Generally profiles are well drained (falling in Wetness Class I) and consist of medium clay loam or medium sandy loam topsoils and subsoils overlying weathering sandstone bedrock at around 50 cm depth. In this case moderate soil droughtiness is the factor which limits the land to Subgrade 3a.

In a few places profiles are moderately well or imperfectly drained (falling in Wetness Classes II and III) and consist of medium clay loam topsoils overlying medium clay loam, heavy clay loam or heavy silty clay loam subsoils. Slowly permeable layers generally begin at around 55 cm depth where they occur.

This land is restricted to Subgrade 3a by soil wetness and workability restrictions.

2.3 Subgrade 3b

Subgrade 3b land occurs principally in the south and north-east of the site. Profiles are poorly drained (falling in Wetness Class IV) and consist of medium clay loam topsoils overlying slowly permeable heavy clay loam or heavy silty clay loam subsoils at around 35 cm depth. Soil wetness and workability are the factors which limit the A.L.C. grade of the land in this case.

Two small areas of Subgrade 3b land occur in the west of the site where slopes of 8 - 10° are the factor restricting land to this subgrade.

2.4 Grade 4

Grade 4 land occurs in a small area in the south-western corner of the site where slopes of around 14° prevent the land being placed in a higher grade.

2.5 Agricultural Buildings

This refers to the farmhouse and outbuildings at Grange Farm, in the south of the site.

RPT File: 2 FCS 6272
Leeds Statutory Group

MAP