AGRICULTURAL LAND CLASSIFICATION KIRKLEES UDP (CASE REFERENCE CG21) WEST YORKSHIRE MARCH 1996

ADAS Leeds Statutory Group Job No:- 31/96 MAFF Ref:- EL 49/23 Commission No:- 2418

. .

2FCS 11274

. . . .

ALCKIRK.DOC\ALC'MT

.

SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 15.4 ha of land at Cleckheaton (Kirklees UDP, Case Reference CG21) was carried out in March 1996. At the time of the survey 14.5 ha of the site was in agricultural use and 13.8 ha of this has been mapped as Subgrade 3b. The soils are poorly drained, with medium-textured topsoils overlying medium to heavy-textured upper subsoils and heavy-textured lower subsoils. Profiles are generally gleyed within 35 cm depth and become slowly permeable within 45 cm depth. Soil wetness is therefore the factor limiting the ALC grade.

Grade 4 land covers 0.7 ha in the west, where slopes of around 12° are the grade-limiting factor.

Other land on this site consists of buildings, a track, woodland and a small spoil heap covering 0.9 ha in total.

CONTENTS

1. INTRODUCTION AND SITE CHARACTERISTICS

2. AGRICULTURAL LAND CLASSIFICATION

MAP

1. AGRICULTURAL LAND CLASSIFICATION

ALCKIRK.DOC\ALC\MT

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT CLECKHEATON (KIRKLEES UDP, CASE REFERENCE CG21)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies around Merchant Fields Farm, on the north side of Cleckheaton. A detailed Agricultural Land Classification (ALC) survey of the land 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, and two soil pits were dug to allow full profile descriptions 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 94% of the site was agricultural land (permanent grass, which had degenerated to rough pasture where left unattended) while 6% consisted of buildings, a road, woodland and a small spoil heap in the east. Site altitude varies from 105 m AOD in the north to 82 m AOD in the south-west and the land is gently to moderately sloping (2 - 7°) in most places, although strongly to moderately steeply sloping land occurs in the south-west (8 - 12°) where some land is limited to Grade 4 by slope.

1.3 <u>Climate</u>

Grid Reference	: SE 191265		
Altitude (m)	: 95		
Accumulated Temperature above 0°C			
(January - June)	: 1316 day °C		
Average Annual Rainfall (mm)	: 782		
Climatic Grade	: 2		
Field Capacity Days	: 194		
Moisture Deficit (mm) Wheat	: 90		
Moisture Deficit (mm) Potatoes	: 76		

1.4 Geology, Soils and Drainage

The site is underlain by deposits of Lower Coal Measures consisting of interbedded sandstones and shales. There is no drift cover on the site and the soils have developed in weathering shale.

The soils on the site are generally poorly drained, falling in Wetness Class IV, and consist of medium clay loam or medium silty clay loam topsoils overlying medium silty clay loam, heavy silty clay loam, clay or silty clay subsoils which are typically gleyed within 36 cm depth and become slowly permeable within 45 cm depth.

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

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	<u>Hectares</u>	<u>% of Total Area</u>
1 .		
2		
3a		
3b	13.8	89.7
4	0.7	4.5
5		
(Sub total)	(14.5)	(94.2)
Other land	0.9	5.8
TOTAL	15.4	100

2.1 <u>Subgrade 3b</u>

Most of the agricultural land on this site falls in Subgrade 3b. The soils are generally poorly drained (Wetness Class IV) and consist of medium-textured topsoils overlying medium to heavy-textured upper subsoils and heavy-textured lower subsoils. The profiles are generally gleyed within 35 cm depth and slowly permeable layers begin with 45 cm depth. The factor which limits the ALC grade of this land is, therefore, soil wetness. In addition, some areas in the south-west are limited to Subgrade 3b by slopes of 8° to 10°.

2.2 <u>Grade 4</u>

Grade 4 land occurs in the west of the site, where slopes of around 12° limit the ALC grade.

2.3 Other Land

This category includes the buildings at Merchant Fields Farm, an access road in the north, a block of woodland in the north-east and a spoil heap in the east.

۰.

RPT File: 2 FCS 11274Leeds Statutory Group

.

.

.

.

MAP

5

.

.