



AGRICULTURAL LAND CLASSIFICATION
LEEDS UNIVERSITY PLAYING FIELDS
KING LANE
WEST YORKSHIRE
AUGUST 1995

ADAS
Leeds Statutory Group

Job No:- 174/95
MAFF Ref:- EL 10787
Commission No:- 2044

2 FCS 10886

SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 33.9 ha of land south east of Bramhope near Five Lane Ends, West Yorkshire, was carried out in August 1995.

At the time of the survey 33.2 ha was in agricultural use of which 12.3 ha falls into Subgrade 3a.

The soils are either well drained or imperfectly drained, with light textured topsoils over similar subsoils or medium textured topsoils over similar upper subsoils in turn over heavy textured lower subsoils. The ALC grade is limited either by moderate soil droughtiness or moderate soil wetness restrictions.

The remaining agricultural land 20.9 ha falls into Subgrade 3b. A small area to the west consists of light textured topsoils directly over weathering sandstone bedrock. The ALC grade is limited by severe soil droughtiness. The remaining land consists of medium to heavy textured topsoils over slowly permeable heavy textured subsoils. This land is restricted to this Subgrade by severe soil wetness and workability limitations. The remaining land consists of farm buildings (0.6 ha) and urban (0.1 ha).

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT KING LANE, LEEDS,
WEST YORKSHIRE. PROPOSED LEEDS UNIVERSITY PLAYING FIELDS

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies 2 km south east of Bramhope, north of Leeds. It covers 33.9 ha, and is centred around National Grid Reference SE278420 . Survey work was carried out in August 1995 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. In addition three soil pits were dug to allow profiles to be described in greater detail. 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 33.2 ha of the site was in agricultural use, a mixture of recently harvested barley to the north and east, and permanent grass. Remaining land consists of a recently built farmhouse and buildings with access road to the west, and the remains of a dwelling located centrally. The land is level to gently sloping and varies from 135m AOD in the south west to 160m AOD in the north west.

1.3 Climate

Grid Reference	: SE278420
Altitude (m)	: 150
Accumulated Temperature above 0°C (January - June)	: 1244 day °C
Average Annual Rainfall (mm)	: 771
Climatic Grade	: 2
Field Capacity Days	: 196
Moisture Deficit (mm) Wheat	: 80
Moisture Deficit (mm) Potatoes	: 64

1.4 Geology, Soils and Drainage

The site is mainly underlain by Carboniferous deposits of Millstone Grit, with some shale in the north-west. This is mainly overlain by a cover of till. However, there is no drift in the south-east and north-west.

Soils vary between well drained (Wetness Class I) and poorly drained (Wetness Class IV). Well drained soils consist of light textured topsoils over similar subsoils over sandstone. Poorly drained boulder clay soils consist of medium and heavy textured topsoils over heavy textured subsoils.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2		
3a	12.3	36.3
3b	20.9	61.7
4		
5		
(Sub total)	(33.2)	(98.0)
Urban	0.1	0.3
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.6	1.7
Open Water		
Land not surveyed		
(Sub total)	(0.7)	(2.0)
TOTAL	<u>33.9</u>	<u>100</u>

2.1 Subgrade 3a

An area of this Subgrade runs north to south through the centre of the site. The majority of these soils are well drained (Wetness Class I) and consist of very slightly stony medium sandy loam topsoils over very slightly stony coarse loamy sand subsoils. Weathering sandstone bedrock is encountered at approximately 60 cm depth. This land is limited to Subgrade 3a by moderate soil droughtiness limitations.

The remaining Subgrade 3a land is to the north of this area and contains imperfectly drained (Wetness Class III) soils. Soils consist of very slightly stony medium clay loam topsoils over gleyed permeable heavy clay loam upper subsoils, in turn over slowly permeable clay lower subsoils. The slowly permeable layer occurs at or below 55 cm depth. This land is limited to Subgrade 3a by moderate soil wetness and workability restrictions.

2.2 Subgrade 3b

The remaining agricultural land falls into this Subgrade. Two areas occur, a small one in the west and the larger in the east. Soils in the west are well drained (Wetness Class I) and consist of very slightly stony medium sandy loam topsoils over weathering sandstone bedrock at approximately 30 cm depth. Soil droughtiness limits this land to Subgrade 3b.

The remaining large area to the east consists mainly of very slightly stony medium and heavy clay loam topsoils over gleyed slowly permeable clay subsoils. The slowly permeable layers occur between 30 cm and 55 cm depth and this land is limited to Subgrade 3b by severe soil wetness and workability restrictions.

Occasional shallow borings over sandstone occur in the south of the site with similar properties and limitations to the Subgrade 3b land to the west of the site.

2.3 Farm Buildings

A recently built farmhouse with associated outbuildings is found in the west of the site, and a small derelict building in the centre.

2.4 Urban

Urban land consists of an access road from the farm.

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MAP