MAFF Ministry of Agriculture Fisheries and Food

AGRICULTURAL LAND CLASSIFICATION
LEEDS UDP TOPIC 359
CARLTON MOOR, YEADON
WEST YORKSHIRE.
JUNE 1995

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification survey of 63.4 ha of land at Carlton Moor, Yeadon was carried out as part of the Leeds UDP (Topic 359) in June 1995. At the time of the survey 56.9 ha of this was in agricultural use, 4.2 ha was Non Agricultural, 1.7 ha Urban, 0.5 ha Agricultural Buildings and 0.1 ha Open Water.

19.2 ha of the agricultural land falls in Subgrade 3a. The soils are well drained, with light to medium textured topsoils overlying light textured subsoils. Sandstone bedrock occurs between 45 cm and 110 cm depth. Soil droughtiness and climate restrictions limit this land to Subgrade 3a.

37.7 ha falls in Subgrade 3b. The soils are poorly drained, consisting of medium textured topsoils overlying heavy textured slowly permeable subsoils. Severe soils wetness and workability restrictions limit this land to Subgrade 3b.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LEEDS UDP TOPIC 359, CARLTON MOOR, YEADON

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies 1½ km north-east of Yeadon, centred around National Grid Reference SE 228 423 and covers 63.4 ha. Survey work was carried out in June 1995 when the soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid. 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 survey 90% of the site was in agricultural use, consisting of cereals in the north and the remainder being ley grass and permanent pasture. The remainder of the site consists of non agricultural, farm buildings, urban and open water. The northern part of the site and far south is gently to moderately sloping (2 - 4°), the remainder is level to gently sloping (0 - 2°).

1.3 Climate

Grid Reference	: SE 228 423
Altitude (m)	: 190
Accumulated Temperature above 0°C (January - June)	: 1199 day° C
Average Annual Rainfall (mm)	: 799
Climatic Grade	: 3a
Field Capacity Days	: 202
Moisture Deficit (mm) Wheat	: 75
Moisture Deficit (mm) Potatoes	: 57

1.4 Geology, Soils and Drainage

The site is underlain by Carboniferous Sandstone in the north, with the rest underlain by Shale.

The centre and south has a drift cover of boulder clay, while the north has none.

Soils formed over the sandstone are well drained (Wetness Class I) and typically consist of medium sandy loam or loamy medium sand topsoils over similar upper subsoils with sand at depth. Sandstone bedrock typically occurs between 45 cm and 110 cm depth.

The remaining soils formed over boulder clay are poorly drained (Wetness Class IV) and typically consist of medium clay loam topsoils over clay subsoils. The soils to the north of the site correspond to the Rivington 1 and to the centre and south Brickfield 3 Associations, as mapped by Soil Survey and Land Research Centre.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2		
3a	19.2	30.3
3b	37.7	59.4
4		
5		
(Sub total)	(56.9)	(89.7)
Urban	1.7	2.7
Non Agricultural	4.2	6.6
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.5	0.8
Open Water	0.1	0.2
Land not surveyed		
(Sub total)	(6.5)	(10.3)
TOTAL	63.4	100

2.1 Subgrade 3a

Subgrade 3a land occurs over the north of the site. The soils are well drained (Wetness Class I) and consist of very slightly to slightly stony (2 - 8%) medium sandy loam and loamy medium sand topsoils, over similar textured subsoils with occasional medium sand at depth. Sandstone bedrock occurs between 45 cm and 110 cm depth and this land is limited to Subgrade 3a by a combination of moderate soil droughtiness or climate restrictions.

2.2 Subgrade 3b

The remaining agricultural land falls into this subgrade. The soils are poorly drained (Wetness Class IV) and consist of very slightly stony medium clay loam topsoils over very slightly stony, gleyed, slowly permeable clay subsoils.

The slowly permeable layer occurs at or above 30 cm depth, and this land is limited to Subgrade 3b by severe soil wetness and workability restrictions.

2.3 Non Agricultural

The main area of non agricultural land lies to the north west of the site and is an area of fenced off grass and shrubs belonging to the warehouse south of it. The remainder consists of three small areas to the south.

2.4 Urban

This consists of a metalled access road running east to west, and an airport access road in the south.

2.5 Open Water

A small area of open water occurs in the south of the site.

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