



Ministry of
Agriculture
Fisheries
and Food

AGRICULTURAL LAND CLASSIFICATION
LEEDS UDP
WEST YORKSHIRE
TOPIC 472
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ADAS
Leeds Statutory Group
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SUMMARY

A detailed Agricultural Land Classification of 20.5 ha of land between the A650 and the M62 at Morley was carried out in November 1994.

At the time of survey 77.6% of the site was in agricultural use. 4.1 ha of this falls within Grade 2 and 11.8 ha within Subgrade 3a. Soils within both grades consist of well drained fine sandy loam topsoils overlying loamy fine sand or occasionally fine sandy loam upper subsoils followed at varying depths by weathering sandstone bedrock. Droughtiness is the main limiting factor and restricts profiles to Subgrade 3a where sandstone occurs with 40-50cm of the surface, and Grade 2 where rock occurs at 60-80cm depth.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND ADJOINING THE M62
MOTORWAY AT MORLEY (TOPIC 472), LEEDS UDP

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 8km south west of Leeds city centre between the A650, Bruntcliffe Road and M62 motorway, on the south western edge of Morley. It covers a total area of 20.5 ha and lies around National Grid Reference SE 255 268. Survey work was carried out in November 1994 when the soils on the site were examined by hand auger borings at 100m intervals predetermined by the National Grid. In addition two soil pits were dug to allow the depth of sandstone, subsoil structure and stoniness to be determined accurately. 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 77% of the site was in agricultural use, mainly as arable land. There was also one field of permanent pasture used for horse grazing, immediately west of the allotments.

Site altitude varies from 168m in the south-west where the site adjoins the M62 to 177m along Bruntcliffe Road. The land is level to gently sloping with an overall southerly aspect.

1.3 Climate

Grid Reference	: SE 255 268
Altitude (m)	: 165
Accumulated Temperature above 0°C (January - June)	: 1234 day °C
Average Annual Rainfall (mm)	: 795
Climatic Grade	: 2
Field Capacity Days	: 185
Moisture Deficit (mm) Wheat	: 79
Moisture Deficit (mm) Potatoes	: 62

1.4 Geology, Soils and Drainage

The site is underlain by Coal Measure Sandstone consisting of thinly bedded fine sandstone. Soils on the site are all derived from weathering sandstone and consist of well drained (Wetness Class I) fine sandy loam topsoils over loamy fine sand or fine sandy loam upper subsoils. Thin lenses of medium or heavy clay loam occur within the subsoil in a few isolated localities. Weathering sandstone bedrock occurs at depths varying from 30cm to 80cm depth.

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	4.1	20.0
3a	11.8	57.6
3b		
4		
5		
(Sub total)	(15.9)	(77.6)
Urban	2.4	11.7
Non Agricultural	1.7	8.3
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.5	2.4
Open Water		
Land not surveyed		
(Sub total)	(4.6)	(22.4)
 TOTAL	 20.5	 100

2.1 Grade 2

Land within this Grade occurs in the north western part of the site around the covered reservoir and as a smaller isolated patch towards the south-east. Soils are all well drained (Wetness Class I) and consist mainly of very slightly stony fine sandy loam topsoils over loam fine sand subsoils. Profiles become stonier with depth and pass into thinly bedding weathering fine sandstone at about 60cm depth. In a few places subsoils may also contain lenses of mottled medium or heavy clay loam. This land is restricted to Grade 2 by slight droughtiness.

2.2 Subgrade 3a

Most agricultural land on the site falls within this Subgrade. Soils are well drained (Wetness Class I) and consist of slightly stony fine sandy loam topsoils over loamy fine sandy subsoils which pass into thinly bedded weathering fine sandstone between 40-50cm depth.

2.3 Urban

The covered reservoir and the large house and grounds east of Street Farm fall within this category.

2.4 Non Agricultural

This consists of the allotment gardens on the western edge of the site.

2.5 Agricultural Buildings

Agricultural buildings occur at Street Farm in the central northern part of the site.

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MAPS