



AGRICULTURAL LAND CLASSIFICATION  
LEEDS UDP  
WEST YORKSHIRE  
TOPIC 505  
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ADAS  
Leeds Statutory Group  
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## SUMMARY

A detailed Agricultural Land Classification of 7.3 ha of land South of Middleton Lane, Thorpe on the Hill was carried out in November 1994.

At the time of survey all of the site was in agricultural use. 2.6 ha of this falls within Grade 2 and 4.7 within Subgrade 3a. Most soils within both subgrades consist of well drained fine sandy loam topsoils overlying loamy fine sand or sandy silt loam subsoils followed at varying depths by weathering sandstone bedrock.

Droughtiness is the main limiting factor and restricts profiles to Grade 2 where sandstone occurs within about 70cm or 80cm of the surface and the Subgrade 3a where rock occurs at about 50cm depth.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND SOUTH OF MIDDLETON  
LANE THORPE ON THE HILL, LEEDS UDP, (TOPIC 505)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 6km south south east of Leeds City Centre to the south of Middleton Lane, Thorpe on the Hill around National Grid reference SE314 269. It covers a total area of 7.3 ha. 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 the sandstone, subsoil structure and stoniness to be assessed 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 all of the site was in agricultural use as arable land.

This site is very gently undulating at an altitude of around 110 m AOD.

1.2 Climate

|   |               |
|---|---------------|
| Grid Reference  | : SE 314 269  |
| Altitude  | : 110         |
| Accumulated Temperature above 0°C<br>(January - June) | : 1296 day °C |
| Average Annual Rainfall (mm)                          | : 673         |
| Climatic Grade  | : 2           |
| Field Capacity Days                                   | : 158         |
| Moisture Deficit (mm) Wheat                           | : 94          |
| Moisture Deficit (mm) Potatoes                        | : 81          |

#### 1.4 Geology, Soils and Drainage

The site is underlain by Coal Measure Sandstones consisting of thinly bedded fine sandstone. Most soils on the site are derived from weathering sandstone and consist of well drained (*Wetness Class I*) fine sandy loam topsoils over loamy fine sand or sandy silt loam upper subsoils. Weathering sandstone bedrock occurs at depths varying from 45cm to 80cm, resulting in a droughtiness limitation in most profiles.

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                     | 2.6             | 36                              |
| 3b                     | 4.7             | 64                              |
| 4                      |                 |                                 |
| 5                      |                 |                                 |
| (Sub total)            | (7.3)           | (100)                           |
| Urban                  |                 |                                 |
| Non Agricultural       |                 |                                 |
| Woodland - Farm        |                 |                                 |
| - Commercial           |                 |                                 |
| Agricultural Buildings |                 |                                 |
| Open Water             |                 |                                 |
| Land not surveyed      |                 |                                 |
| (Sub total)            |                 |                                 |
| <b>TOTAL</b>           | <u>100</u>      | <u>100</u>                      |

2.1 Grade 2

Land within this Subgrade occurs in the southern part of the site. Soils are all well drained (Wetness Class I) consisting mainly of very slightly stony fine sandy loam topsoils over loamy fine sand, sandy silt loam or sandy clay loam subsoils. Profiles become stonier with depth and pass into thinly bedded weathering fine sandstone at 70 - 80 cm depth. These soils are restricted to Grade 2 by slight droughtiness.

2.2 Subgrade 3a

Subgrade 3a land occurs on the northern part of the site. Here well drained (Wetness Class I) fine sandy loam topsoils and loamy fine sand subsoils overlie sandstone within 45 - 50 cm of the surface. Profiles of this type are limited to Subgrade 3a by droughtiness.

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MAP