

**AGRICULTURAL LAND CLASSIFICATION**

**LAND NORTH OF LEICESTER ROAD**

**MELTON MOWBRAY**

**LEICESTERSHIRE**

1/35/92

## AGRICULTURAL LAND CLASSIFICATION

### LAND NORTH OF LEICESTER ROAD, MELTON MOWBRAY, LEICESTERSHIRE

#### 1. BACKGROUND

1.1 The site, an area of 9.9 hectares, is the subject of an application by Wilson Bowden Properties, for industrial development near Melton Mowbray, Leicestershire. ADAS Statutory Unit surveyed the site in June 1992 to assess the agricultural land quality.

1.2 On the published Agricultural Land Classification Map 122 (Provisional, scale 1:63360 (MAFF 1972)) the area is shown as grade 2. In 1978 the area was included in a reconnaissance survey of the Melton Mowbray area. This survey indicated the predominance of grade 3a land west of Melton. The current, more detailed survey shows the site to comprise land of mainly grade 2, with a small area of 3b to the south east.

#### 2. PHYSICAL FACTORS AFFECTING LAND QUALITY

##### Climate

2.1 Climate data for the site was obtained from the published agricultural climatic dataset (Met Office 1989). This indicates that for the site's mid range altitude the annual average rainfall is 634 mm (22.2"). This data also indicates that field capacity days are 137 and moisture deficits are 105 mm for wheat and 95 mm for potatoes. These climatic characteristics do not impose a limitation to the ALC grade.

##### Altitude and Relief

2.2 The land falls gently to the northwest towards the brook west of the site. Altitude ranges from 75 to 85 m AOD. Gradient and altitude do not constitute limitations to the ALC grade.

## Geology and Soils

- 2.3 The published small scale solid geology sheet 52°N-02°E (Institute of Geological Sciences, 1983) shows the site to comprise Lower Jurassic Ferruginous Limestone.
- 2.4 The Soil Survey of England and Wales have mapped the soils in the Melton area at a reconnaissance scale of 1:250,000. This map, entitled "The Soils of Eastern England", shows the occurrence of the Wick 1 Association (\*1) over the whole site. During the current survey a more detailed inspection of the soils broadly confirmed the predominance of such soils.
- 2.4.1 The majority of the site comprises deep well drained sandy loams which become stonier (slightly to moderately stony) at depth. Towards the southeast corner a small outcrop of clayey poorly drained soils predominate, these may be present as a result of the working of land for gravel extraction at White House Farm.

### 3. AGRICULTURAL LAND CLASSIFICATION (refer to ALC Map)

- 3.1 The majority of the site comprises grade 2, with a small area of 3b. The definitions of the Agricultural Land Classification grades are included in Appendix 2!
- 3.2 The table below shows the ALC grades in hectares and % terms for the survey area.

#### AGRICULTURAL LAND CLASSIFICATION

Grade	ha	%
2	8.7	88
3b	1.1	11
Agricultural Buildings	<u>0.1</u>	<u>1</u>
TOTAL	<u>9.9</u>	<u>100</u>

- (\*1) Wick 1 Association: Deep well drained coarse loamy and sandy soils, locally over gravel. Some similar soils affected by ground water.

Grade 2

- 3.3 The majority of the site comprises grade 2 land. The presence of profile flints at depth in these coarse loamy profiles slightly reduces the available water for crop growth. Consequently slight droughtiness limitations restrict the land to grade 2 (very good quality agricultural land).

Subgrade 3b

- 3.4 A very small area at the south east edge of the site has been graded 3b. Poorly drained clayey soils with a wetness class of IV predominate at this corner of the site. As a result, significant drainage limitations and heavy topsoil textures combine to restrict this land to sub grade 3b (moderate quality agricultural land).

Agricultural Buildings

- 3.5 A barn has been mapped as Agricultural Buildings.

July 1992

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References

GEOLOGICAL SURVEY OF ENGLAND AND WALES, 1985. Solid edition Geology Sheet 52°N-02°E 1:250,000 scale.

MAFF, 1988. Agricultural Land Classification of England and Wales (Revised Guidelines and Criteria for grading the Quality of Agricultural Land) Alnwick.

METEOROLOGICAL OFFICE, 1989. Published climatic data extracted from the agroclimatic dataset, compiled by the Meteorological Office.

SOIL SURVEY OF ENGLAND AND WALES, 1983. The Soils of Midland and Western England, Sheet 3 1:250,000 scale.

## Appendix 1

### Grade 1 - excellent quality agricultural land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes to fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

### Grade 2 - very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

### Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

### Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land

Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (eg cereals and forage crops) the yield of which are variable. In most climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor quality agricultural land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

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**MAP 1 : AGRICULTURAL LAND CLASSIFICATION**