# AGRICULTURAL LAND CLASSIFICATION HALTON LOCAL PLAN (PROPOSED BUSINESS PARK)

Resource Planning Team ADAS Statutory Group WOLVERHAMPTON

> Job No: 086/93 MAFF Ref: EL06/00006

## AGRICULTURAL LAND CLASSIFICATION REPORT FOR HALTON LOCAL PLAN (PROPOSED BUSINESS PARK)

#### 1. SUMMARY

1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC grades are present:

Grade/Subgrade	ha	% of site
	22.6	25.0
2	22.6	25.0
3a	32.2	35.6
3b	27.2	30.1
4	0.8	0.9
5	0:2	0.2
Other land		
Agricultural buildings	0.7	0.8
Woodland	0.1	0.1
Open Water	0.2	0.2
Urban	6.4	7.1

- 1.2 The main limitation to the agricultural use of land in Grade 2 and Subgrade 3a is soil wetness.
- 1.3 The main limitations to the agricultural use of land in Subgrade 3b, Grade 4 and Grade 5 are gradient and soil droughtiness.

#### 2. INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in December 1993. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).
- 2.2 The 90 ha site is situated to the north west of Junction 11 on the M56 motorway. The land immediately to the north, south and east of the site is predominantly in agricultural use.
- 2.3 The survey was requested by MAFF in connection with a proposal for Halton Borough Local Plan.
- 2.4 At MAFF Land Use Planning Unit's request this was a detailed grid survey at 1:10000 with a minimum auger boring density of 1 per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.
- 2.5 At the time of the survey the site was under grass and cereals.

#### 3. CLIMATE

3.1 The following interpolated data are relevant for the site:

Average Annual Rainfall	782 mm
Accumulated Temperature above 0°C January to June	1440 day °C

- 3.2 There is no overall climatic limitation on the site
- 3.3 Other relevant data for classifying land include:

Field Capacity Days	186 days
Moisture Deficit Wheat	94 mm
Moisture Deficit Potatoes	83 mm

#### 4 SITE

- 4.1 Three site factors of gradient, micro relief and flooding are considered when classifying land
- 4.2 Gradient imposes a limitation on the agricultural use of the land (Grade 3b to 5) running north south through Red Brow Hill and South East of Crows Nest.

#### 5. GEOLOGY AND SOILS

- The solid geology of the area is comprised of Keuper Sandstones, Waterstones and Marl British Geological Survey Sheet 97 Runcorn 1 Inch. This is overlain by deposits of Quaternary boulder clay and blown sands.
- 5.2 The underlying geology influences the soils which either have a sandy loam texture in the north east or a clay loam texture over the remainder of the site.

#### 6. AGRICULTURAL LAND CLASSIFICATION

- 6.1 Grade 2 occupies 22.6 ha (25 %) of the survey area and is found to the south and east of Red Brow and east of the Bridgewater Canal.
  - 6.1.1 These soils typically have a clay loam texture overlying clay loam or sandy loam and sand or clay to depth, with few or no stones within the profile.

    Occasionally these profiles are truncated by sandstone bedrock at depths below 80cm. These soils are in wetness class I with no SPL.
  - 6.1.2 The main limitation to the agricultural use of this land is soil wetness.

- 6.2 Subgrade 3a occupies 32.2 ha (35.6%) of the survey area and is found mainly to the west and north east of Red Brow.
  - 6.2.1 These soils either have a clay loam texture over clay (which is as an SPL) to depth or a sandy loam texture over sand to depth, with few or no stones within the profile.
  - 6.2.2 The main limitation to the agricultural use is either soil wetness for the clay loam profiles or droughtiness for the sandy loam profiles.
- 6.3 Subgrade 3b occupies 27.2 ha (30.1 %) of the survey area and is found to the west of the Bridgewater Canal and as a band running north south through Red Brow Hill.
  - 6.3.1 The soil typically has a clay loam or sandy clay loam texture overlying sandstone bedrock.
  - 6.3.2 The main limitation to the agricultural use of this land is gradient where it exceeds 7° and soil droughtiness where the soils are shallow on to sandstone bedrock.
- 6.4 Grade 4 occupies 0.8 ha (0.9 %) of the survey area and is found to the south of Red Brow Lane.
  - 6.4.1 The soil typically has a clay loam texture overlying bedrock, with gradients greater than 11°.
  - 6.4.2 The main limitation to the agricultural use of this land is gradient.
- 6.5 Grade 5 occupies 0.2 ha (0.2 %) of the survey area and is found to the North of Red Brow Hill in the vicinity of a former rock face.
  - 6.5.1 The land is limited by gradients greater than 18°.
- Other land includes agricultural buildings which occupy 0.7 ha (0.8 %) of the survey area and are found to the north of the site; woodland occupying 0.1 ha (0.1 %) of the survey area to the south west of the site and urban covering 6.4 ha (7.1 %) of the survey area as roads, canals and hotel accommodation. Open water occupies 0.2 ha (0.2 %) of the survey area.

### 6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	22.6	25.0	27.2
3a	32.2	35.6	38.8
3b	27.2	30.1	32.8
4	0.8	0.9	1.0
5	0.2	0.2	0.2
Other land			
Agricultural Buildings	0.7	0.7	-
Woodland	0.1	0.1	•
Urban	0.2	0.2	-
Open Water	<u>6.4</u>	<u>6.4</u>	=
Totals	90.4	100.0	100.0

Resource Planning Team ADAS Statutory Group Wolverhampton December 1993