

AGRICULTURAL LAND CLASSIFICATION

LEEDS UDP

WETHERBY SITE H5:30

JULY 1992

ADAS

Leeds Statutory Group

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT: SITE H5:30
WETHERBY, WEST YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

Site H5:30 is located around Grid Reference SE394490, on the western outskirts of Wetherby adjacent to the A661 Wetherby to Harrogate road. It covers approximately 15.0 ha, 98% of which is in agricultural use.

Survey work was carried out in July 1992 when soils were examined by hand auger borings at 100 m intervals at points pre-determined by the National Grid.

Classification was undertaken using the methods described in "Agricultural Land Classification of England and Wales", MAFF 1988.

Land Use

Approximately 98% of the total area is under agricultural production composed of a mixture of arable and horticultural use. Approximately 2% of the area is covered by woodland.

Climate

Climatic details for site H5:30 are as follows:-

Average Annual Rainfall	714 mm
Accumulated Temperature >0° (January to June)	1352°
Field Capacity Days	174
Climatic Restriction	None
Moisture Deficits: Wheat	95
Potatoes	84

Relief

Altitude varies between 35 and 60 m above Ordnance Datum. The relief is one of a gentle slope in a north easterly direction. Gradient do not exceed 5° and there is no slope restriction on ALC grade.

Geology and Soils

The majority of the site is underlain by solid deposits of the 'Lower Magnesian Limestone'. A small area of land in the north-eastern corner of the site, however, alongside the disused railway embankment, has a thin covering of drift deposits in the form of glacial sands and till.

Soils developed over the magnesian limestone deposits consist mainly of medium clay loam topsoils over medium clay loam, heavy clay loam or clay subsoils. In the majority of cases however soil depth does not exceed 45 - 50 cm and deep subsoils do not exist.

Soils developed on the Recent drift deposits consist of medium or heavy clay loam topsoils over heavy clay loam or clay subsoils which are both gleyed and slowly permeable within 70 cm of the surface. These soils fall into wetness classes 2 or 3 and are restricted in ALC grade by soil wetness.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades that occur on this site are as follows:-

<u>Grade</u>	<u>Hectares</u>	<u>Agricultural Area</u>	<u>Percentage of Total Area</u>
2	1.1	7.5	7.3
3a	12.0	81.6	80.0
3b	1.6	10.9	10.7
Non-Agricultural	0.1	-	0.7
Urban	0.2	-	1.3
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)Agricultural	14.7		
Totals)Land		100	100
)Total Site	15.0		

Grade 2

A small area of land on the eastern side of the site, adjacent to Rail Balk Lane, falls within Grade 2. The soils are of variable texture, but are all greater than 1 m in depth and are not severely droughty. Textures range from medium clay loam to heavy clay loam topsoils over heavy clay loam or clay subsoils. Profiles are not gleyed or slowly permeable within a metre of the surface and fall within wetness class 1 (well drained). Stone percentages in the topsoil are greater than 5% resulting in an overall stoniness limitation to Grade 2.

Subgrade 3a

Much of the remainder of the area falls within this subgrade, except for a small area near the middle of the site. Soils consist of medium or heavy clay loams of variable depth. The shallow profiles, generally of 50 - 75 cm thickness, are limited to subgrade 3a by droughtiness. The deep profiles are usually gleyed and slowly permeable at a depth of 60 - 70 cm (Wetness Class III) and limited to subgrade 3a by wetness and workability problems.

Subgrade 3b

The small area of subgrade 3b land is limited to this subgrade by droughtiness resulting from the very shallow soil depths. Profiles consist typically of medium clay loam topsoils up to 40 cm thick overlying a thin layer of well decomposed limestone with a medium clay loam or silty clay loam texture. This occurs directly over the limestone bedrock which even when well shattered provides little opportunity for root penetration.

Non-Agricultural

This consists of a small area of woodland at the western end of the site.

Urban

Rail Balk Lane on the eastern boundary is placed within this category.

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