

AGRICULTURAL LAND CLASSIFICATION

WAKEFIELD U.D.P.

SNOW HILL, WAKEFIELD, WEST YORKSHIRE

A.D.A.S.

Leeds Statutory Centre

June 1992

File Ref: 2FCS 5703

Job No. 130/91

ALWakefd.udp

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AGRICULTURAL LAND CLASSIFICATION OF LAND AT  
SNOW HILL, WAKEFIELD, WEST YORKSHIRE

1. INTRODUCTION

The site lies around National Grid Reference SDE 325 225, approximately 2 Km. north west of Wakefield city centre. It covers a total of 60.4 ha. Survey work was carried out in May 1992 when soils were examined by hand auger borings to a maximum depth of 1.00 m. The borings were carried out at 100 m. intervals predetermined by the National Grid and further borings were made, where necessary, to refine grade boundaries. Two soil pits were dug to allow the assessment of subsoil structure.

Land Use

Most of the site is in agricultural production (principally cereals and rhubarb) but there are significant areas of urban land (in the east, centre and south), non-agricultural land (scattered throughout the site) and agricultural buildings (at White Hall Farm in the south of the site and Red Hall in the centre).

Climate and Relief

Average Annual Rainfall is approximately 643 mm. The accumulated temperature above 0°C (January to June) is 1354 day °C and the area is at field capacity for 150 days in an average year. The temperature and rainfall figures indicate that there is no overall climatic limitation on A.L.C. grade.

The site is generally flat to gently sloping with steeper slopes of 6 - 10° occurring in parts of the south-west.

Geology - Soils and Drainage

The entire site is underlain by Carboniferous Coal measures consisting of

interbedded sandstones and shales. To the north of Red Hall Lane the soils closely reflect the solid geology with poorly drained (Wetness Class IV) soils formed on the Coal Measure Clays in the east, and moderately well to imperfectly drained soils (Wetness Classes II and III) in the west, where sandstone is closer to the surface. To the south of Red Hall Lane much night soil has been deposited in the past leading to well-drained soils (Wetness Class I) with deep dark coloured topsoils.

2. Agricultural Land Classification

The A.L.C. grades occurring on this site are as follows:-

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>	<u>Percentage of Total Agricultural Area</u>
2	16.7	27.8	38.8
3a	11.0	18.3	25.6
3b	15.3	25.5	35.6
Agricultural Buildings	.0.4	0.7	
Non Agricultural	5.5	9.2	
Urban	11.2	18.5	
<u>TOTAL</u>	60.1	100	100

## Grade 2

Most of the agricultural land to the south of Red Hall Lane falls within Grade 2. The soils typically consist of deep dark coloured medium clay loam topsoils overlying fine sandy silt loam, medium or heavy silty clay loam or silty clay subsoils. In places subsoils are slightly gleyed but not within 40 cm. of the surface and profiles are generally well drained (Wetness Class I). Slowly permeable layers are usually absent, but in places occur at depths of 60 to 70 cm. giving rise to a few profiles with slight drainage impedance (Wetness Class II). Slight soil wetness and soil droughtiness are the main factors limiting A.L.C. grade on these soils.

### Subgrade 3a

Land in this subgrade occurs mainly in the west and north west of the site. In these areas most soils consist of medium clay loam topsoils over medium clay loam or heavy clay loam subsoils. Profiles are well drained (Wetness Class I) to moderately well drained (Wetness Class II) and slowly permeable layers are generally absent. Sandstone bedrock commonly occurs at around 60 cm. depth and soil droughtiness is, thus, the main factor limiting A.L.C. grade.

### Subgrade 3b

Subgrade 3b land occurs in the north-east and in a small area in the west. In the north-east soils are poorly drained (Wetness Class IV) with slowly permeable layers typically occurring at around 30cm. depth. Topsoils consist of medium clay loam or heavy clay loam and these overlie heavy clay loam, clay or silty clay subsoils. Soil wetness and workability are the factors limiting this land to subgrade 3b. In the west, an outcrop of sandstone occurs and the land is limited to subgrade 3b by slopes of 8 - 10°, soil stoniness and droughtiness.

### Urban

This includes an electricity substation in the west, the houses at Red Hall and Red Hall Lane, the A658 road in the east and the offices and access roads in the south.

### Non-Agricultural Land

This consists of playing fields in the north of the site, a nursery in the north-west, scrub land in the west, farm woodland around Red Hall and park land in the south.

### Agricultural Buildings

This includes outbuildings at Red Hall and the farmhouse and outbuildings at White Hall Farm in the south.

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