

AGRICULTURAL LAND CLASSIFICATION

GREEN ROYD FARM, DARRINGTON
WEST YORKSHIRE
PROPOSED GOLF DRIVING RANGE

MAFF
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1. Agricultural Land Classification

AGRICULTURAL LAND CLASSIFICATION REPORT: LAND NEAR
GREEN ROYD FARM, DARRINGTON, WEST YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

This site is located around grid reference SE 492202 approximately 2½ km south of Knottingley. It covers 4.59 hectares, 93% of which is in agricultural use.

Survey work was carried out in August 1990 when soils were examined by hand auger borings at 50 metre intervals at points pre-determined by the National Grid. Soil profile pits were also dug at representative locations to assess soil structural characteristics and stone content, and to collect samples for laboratory analysis. All land quality assessments were made 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).

LAND USE

All agricultural land was under grass at the time of survey. Topsoils had been removed and stockpiled in part of the northern section of the site. These areas are indicated on the accompanying map as non-agricultural land.

CLIMATE

Average Annual Rainfall (AAR) is approximately 597 mm. Accumulated temperature above 0°C between January and June (ATO) is 1374°C and the land is at field capacity for 125 days a year. The rainfall and temperature figures indicate that there is no overall climatic restriction on ALC grade. Moisture deficits of 105 mm for wheat and 92 mm for potatoes, however indicate a drought limitation on the thin soils over limestone which are common on parts of the site.

RELIEF

Altitude varies between about 30 and 45 m above Ordnance Datum and the relief is undulating with an overall north to south slope. Slopes rarely exceed 6° and do not restrict the use of agricultural machinery.

DRAINAGE

All soils in the site are freely drained and fall within Wetness Class I.

GEOLOGY AND SOILS

All soils are formed on the Lower Magnesian Limestone and consist usually of clay loam or sandy clay loam topsoils over varying depths of similar textured subsoil. On the upper gently sloping northern part of the site weathering limestone usually occurs within 40 cm of the surface. Stone content in this area is variable but rarely the main restriction on ALC grade. On the southern part of the site soils are much deeper, probably as a result of the downslope movement of material and limestone rarely occurs at depths of less than 70 cm. In places hollows contain even deeper profiles. There are no soil wetness limitations as all soils are freely drained and fall into Wetness Class I. Droughtiness, however, is limiting to some extent in most soils on the site.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades on the site are as follows:

GRADE	HECTARES	PERCENTAGE OF TOTAL AREA
2	0.15	3.3
3a	2.63	57.3
3b	1.51	32.9
Non ag	<u>0.30</u>	<u>6.5</u>
Total	4.59	100

Grade 2

Land in this grade occurs in a small pocket in the southern half of the site. Soils consist of sandy clay loam topsoils over similar textured subsoils to a depth of more than 1 metre. Profiles are very slightly stony and fall into Wetness Class I. These soils occur in a hollow and are deeper due to a downward movement and accumulation of material. Droughtiness is only slightly limiting and is the main restriction on ALC grade.

Subgrade 3a

This subgrade is widespread through the southern part of the site. Soils consist of freely drained (Wetness Class I) medium clay loam. Topsoils over similar textured subsoils which pass into weathering limestone between 60-70 cm depth. They are limited to subgrade 3a by slight droughtiness.

Subgrade 3b

Subgrade 3b land is limited to the northern part of the site. Soils consist of shallow medium clay loam or fine sandy clay loam topsoils which pass into weathering limestone between 30-40 cm depth. Although topsoils are moderately stony (16-35%) droughtiness is the overriding limitation on ALC grade.

Non Agricultural

The two areas of non-agricultural land consist of an area where topsoil has been removed to expose weathering limestone and a stockpile of topsoil material, presumably from the stripped area.

RPG Leeds RO
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