AGRICULTURAL LAND CLASSIFICATION REPORT

MILL LANE, WARMSWORTH

Extension of the application area for a proposed Golf Course

MAFF

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT FOR THE PROPOSED GOLF COURSE, WARMSWORTH, SOUTH YORKSHIRE (EXTENSION OF APPLICATION AREA)

SECTION 1: INTRODUCTION AND SITE CHARACTERISTICS

1.1 LOCATION

The extension of the application area for the proposed golf course at Warmsworth is centred around national grid reference SE 545017, approximately 4 km south west of Doncaster town centre. It covers 30.1 ha, all of which is in agricultural use.

1.2 SURVEY METHOD

Survey work was carried out in September 1990 when soils were examined by hand auger borings at 100 m intervals pre-determined by the National Grid. Soil profile pits were also dug where necessary to assess stoniness, soil structural characteristics, gley morphology and soil depth.

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 Lane" (MAFF 1988).

1.3 LAND USE

The site is entirely in arable use.

1.4 CLIMATE

Average annual rainfall in the area is approximately 599 mm. Accumulated temperature above 0°C, between January and June is 1387 day°C and the land is at field capacity for about 126 days a year. There is thus no overall climatic restriction on ALC grade. Soil moisture deficits of 107 mm for winter wheat and 99 mm for potatoes indicate a moderate to severe drought limitation on the shallow limestone soils in the southern and eastern parts of the site.

1.5 RELIEF

The site varies between 25 and 42 metres above Ordnance Datum. It is virtually level in the south and mainly moderately sloping in the north. Slopes slightly in excess of 10° occur in the extreme north east. High soil stone contents are, however, more restricting and always form the overriding restriction on ALC grade in this area.

1.6 SOILS AND GEOLOGY

Soils on the site are formed over the Lower Magnesian limestone and typically consist of coarse to fine loamy topsoils and subsoils over relatively unweathered limestone. Calcareous reddish clay often occurs as a lower subsoil in the south east and near the northern site boundary. Profiles containing this material are deeper and more water retentive which thus tend to form the better quality (Subgrade 3a) land on the site.

Stoniness varies from slightly stony over most of the site to very stony in a few places along the northern site edge.

SECTION 2: AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on the site are as follows:

GRADE	HECTARES	PER CENT	OF	TOTAL	SITE	AREA
3-	14.0			4.C. F		
3a	14.0		•	46.5		
3b	14.0	46.5				
4	2.1	7.0				
TOTAL	30.1		1(00%		

SUBGRADE 3A

Soils in this subgrade typically consist of non calcareous sandy clay loam, medium clay loam or occasionally fine sandy loam topsoils and upper subsoils over gleyed and slowly permeable reddish clay passing into limestone at depth.

All profiles fall within Wetness Classes III or, occasionally II and are limited by profile wetness and topsoil workability problems.

A few small areas of grade 2 quality land are also included with this subgrade. These have not been separated because of the difficulty of mapping very small areas at this survey scale.

SUBGRADE 3B

Land in this subgrade occurs in the north eastern half of the site. Soils are typically shallow and consist of slightly stony coarse loamy topsoils and upper subsoils over relatively unweathered limestone. Soil droughtiness is moderately to severely limiting and forms the main restriction on ALC grade.

GRADE 4

Two small areas of grade 4 land occur near the northern site boundary. Soils are similar to those above except for the occurrence of many large flaggy limestones throughout the profile.

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