AGRICULTURAL LAND CLASSIFICATION

HOLME WOOD LANE, ARMTHORPE

Proposed Golf Course

MAFF

LEEDS REGIONAL OFFICE

April 1990

FILE REF: 2FCS 4812

MAP REF: 25/90

Lds.AL1.Armthrpe

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT HOLME WOOD LANE, ARMTHORPE

1. INTRODUCTION AND GENERAL SITE CHARACTERISTICS

1.1 LOCATION AND SURVEY METHOD

The site is located around National Grid Reference SE 656057 near junction 4 of the M18 motorway. It covers 79 hectares nearly all of which is in agricultural use.

Survey work was carried out in April 1990 when soils were examined by hand auger borings at 100 metre intervals pre-determined by the National Grid. Soil profile pits were also dug at representative locations to assess topsoil and subsoil stone contents and soil structural characteristics.

All assessments of land quality 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).

1.2 LAND USE

The majority of the site was in cereal production during the 1989-90 season.

Oilseed rape, the other main crop grown, was confined to a small area in the south eastern corner of the site.

1.3 CLIMATE AND RELIEF

Mean Annual Rainfall (AAR) is approximately 567 mm. Accumulated temperature above 0°C between January and June (ATO) is 1419 day degree C and the field capacity period is about 116 days.

These factors indicate no overall climatic restriction on ALC grade, although summer moisture deficits of 115 mm for winter wheat and 108 mm for potatoes mean that soil droughtiness will be moderately limiting on coarse loamy or sandy soils and slightly limiting on the fine loamy and clayey soils that predominate on the site. Altitude varies between 3 and 8 metres above Ordnance Datum and the relief is level to very gently undulating. Slopes rarely exceed 1 or 2 degrees and, therefore, do not restrict the use of agricultural machinery.

1.4 GEOLOGY AND SOILS

Soils have developed on non-calcareous glacio-fluvial drift overlying Permo-Triassic Bunter Sandstone at depth.

Of these deposits, sands and gravels form the predominant cover. Soils on these are light and easily worked but have a moderate drought limitation in most years, particularly between mid summer and early autumn.

North of Holme House the soils have developed over clayey drift. These have gleyed and slowly permeable clay subsoils although localised deposition and mixing from adjacent sands often give rise to appreciably lighter coarse to fine loamy topsoils, particularly between Holme Wood Grange and the motorway.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on this site are as follows:

GRADE	HECTARES	PER CENT OF TOTAL AREA
3a	16.5	22.7
3b	59.2	74.7
Non Agricultural	1.3	1.7
Farm Woodland	1.5	1.9
Farm Buildings	0.5	0.6
TOTAL	79.0	100%

2.1 SUBGRADE 3A

Land in this subgrade occurs in 2 distinct areas: adjacent to the motorway in the north and south of Holme Wood Grange.

Soils in these areas mainly consist of sandy clay loam or medium clay loam topsoils over gleyed and slowly permeable clay. These profiles fall within wetness Class III and are limited to the grade by a combination of soil wetness and workability problems.

2.2 SUBGRADE 3B

Subgrade 3b land predominates on the site. South of Holme House, soils consist of slightly stony loamy medium sand or medium sandy loam topsoils over stony loamy medium sand subsoils. In this area soil droughtiness is limiting for both winter wheat and potatoes and is the main limitation on ALC grade.

North of this, particularly around Waterton Drain, the land is heavy and soils consist of stoneless non calcareous heavy clay loam or clay topsoils over gleyed and slowly permeable clay to depth. All profiles fall within wetness Class IV or III and are limited to the subgrade by a combination of profile wetness and topsoil workability problems.

2.3 FARM WOODLAND

Approximately 1.5 hectares of deciduous farm woodland occurs at Holme Wood on the eastern site boundary.

2.4 FARM BUILDINGS

These consist of an agricultural dwelling and general farm buildings at Holme House, along with various agricultural buildings at Holme Wood Grange most of which are semi-derelict.

2.5 OTHER NON AGRICULTURAL

This consist of a small area of vacant land near Holme Wood Grange, which is used mainly for machinery storage.

Resource Planning Group
Leeds RO
April 1990

MAPS