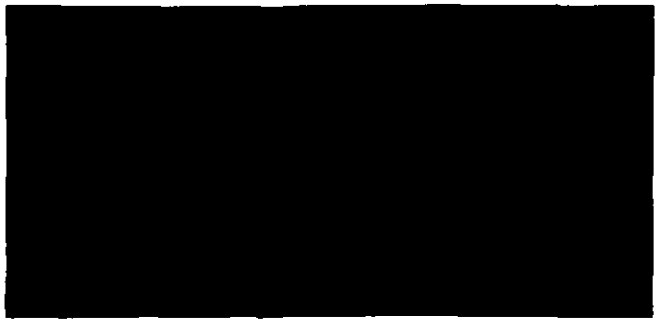

MAFF Ministry of Agriculture Fisheries and Food

AGRICULTURAL LAND CLASSIFICATION

PROPOSED GOLF COURSE
RENEWAL OF CONSENT
AT SHERIFF HUTTON
NORTH YORKSHIRE
FEBRUARY 1996

ADAS
Leeds Statutory Group

Job No:- 19/96
MAFF Ref:- EL 10905
Commission No:- N2365

SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 180.2 ha of land near Sheriff Hutton ("Proposed Golf Course, Renewal of Consent at Sheriff Hutton") was carried out in February 1996. At the time of the survey 174.1 ha of the site were in agricultural use and 1.6 ha of this falls in Grade 2. These soils are well drained, with medium-textured topsoils and upper subsoils overlying heavy clay loam lower subsoils. A slight topsoil stoniness limitation restricts this land to Grade 2.

7.5 ha of the site has been mapped as Subgrade 3a. In the southwest the soils are generally imperfectly drained, with organic medium to heavy textured topsoils and upper subsoils overlying gleyed and slowly permeable clay at around 50cm depth. Soil wetness limits this area to Subgrade 3a. In the east of the site medium textured topsoils and subsoils overlie weathering siltstone at around 50cm depth. In this case soil droughtiness restricts the ALC grade.

Subgrade 3b land covers a total of 164.7 ha. The soils are poorly drained and consist of medium clay loam, heavy clay loam or clay topsoils (many of which are organic) overlying gleyed and slowly permeable heavy clay loam or clay at around 30cm depth. A severe soil wetness limitation restricts the ALC grade in this case.

Slopes of 19° in the east of the site limit 0.3 ha to Grade 5, while other land (consisting of woodland and agricultural buildings) covers 6.1 ha in the south and east.

CONTENTS

MAP

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT SHERIFF HUTTON, NORTH YORKSHIRE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This 180 ha site lies approximately 13km west-south-west of Malton, on the north-east side of the village of Sheriff Hutton. Survey work was carried out in February 1996 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. In addition, three soil pits were dug to allow full profile descriptions to be made and a number of topsoil samples were collected for laboratory analysis. The land quality was assessed 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 and Relief

At the time of the survey, 97% of the site was in agricultural use, mainly growing winter cereals but with smaller areas of recently ploughed land and grassland. The remaining 3% of the site consists of woodland and agricultural buildings.

Most of the site lies at an altitude of around 34m AOD and is level but in the east and south the land rises (to 38m AOD in the south and 60m AOD in the east). Slopes in the south are gentle (2 - 3°) with a generally northerly aspect, while slopes in the east are gentle to moderate (3 - 6°), typically with a westerly aspect.

1.3 Climate

Grid Reference	: SE 667 675
Altitude (m)	: 46
Accumulated Temperature above 0° (January - June)	: 1342 day °C
Average Annual Rainfall (mm)	: 662
Climatic Grade	: 1
Field Capacity Days	: 158
Moisture Deficit (mm) Wheat	: 98
Moisture Deficit (mm) Potatoes	: 87

1.4 Geology, Soils and Drainage

The whole site is underlain by Lower and Middle Lias clays, which outcrop to within one metre of the soil surface in the far east. However, over most of the site the solid geology is overlain by deposits of lacustrine clay or, in the far south, glacial till.

Where the deposits of lacustrine clay occur the soils are generally poorly drained (falling in Wetness Class IV) and consist of medium clay loam, heavy clay loam or clay topsoils (many of which are organic) overlying gleyed and slowly permeable clay subsoils. The soils correspond to the Foggathorpe 2 association as mapped by the Soil Survey and Land Research Centre (SSLRC).

The soils derived from till vary between well drained (Wetness Class I) and poorly drained (Wetness Class IV). Typically medium clay loam topsoils overlie medium clay loam, heavy clay loam or clay subsoils. These soils correspond to the Dunkeswick association as mapped by the SSLRC.

Where the Lias clays lie close to the soil surface, the profiles are generally well drained (Wetness Class I) with medium clay loam or medium silty clay loam topsoils and subsoils overlying weathering siltstone at around 50cm depth. In this case, the soils correspond to the Wickham 2 association as mapped by SSLRC.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	% of Total Area
1		
2	1.6	0.9
3a	7.5	4.2
3b	164.7	91.3
4		
5	0.3	0.2
(Sub Total)	(174.1)	(96.6)
Other Land	6.1	3.4
TOTAL	**180.2**	**100**

2.1 Grade 2

One small area of Grade 2 land occurs in the south-west of the site. The soils are well drained (Wetness Class I) and consist of very slightly to slightly stony medium clay loam topsoils overlying slightly stony medium clay loam upper subsoils and heavy clay loam lower subsoils. This area is limited to Grade 2 by a slight topsoil stoniness restriction.

2.2 Subgrade 3a

Two small areas of Subgrade 3a land occur on the site. In the south-west the soils are generally imperfectly drained (Wetness Class III), with medium or heavy clay loam topsoils (which are generally organic) overlying similar upper subsoils, with gleyed and slowly permeable clay occurring at between 45cm and 65cm depth. Soil wetness limits this land to Subgrade 3a. In the east of the site the profiles are well drained (Wetness Class I) and consist of medium clay loam or medium silty clay loam topsoils and subsoils overlying weathering siltstone at around 50cm depth. In this case the land is limited to Subgrade 3a by soil droughtiness.

2.3 Subgrade 3b

Most of the site has been mapped as Subgrade 3b. The profiles are poorly drained (Wetness Class IV) and, where deposits of lacustrine clay occur, consist of medium clay loam, heavy clay loam or clay topsoils (many of which are organic) overlying gleyed and slowly permeable clay subsoils at around 30cm depth, with horizons of slightly stony sandy clay loam occurring in places. Where organic clay topsoils occur the profiles meet the requirements for Grade 4 but these cannot be mapped together accurately as a separate unit. Where deposits of till occur, medium clay loam topsoils overlie gleyed and slowly permeable heavy clay loam or clay subsoils, also at around 30cm depth.

In both these cases, soil wetness and topsoil workability limitations restrict the land to Subgrade 3b.

2.4 Grade 5

A small area of Grade 5 land occurs in the east of the site where slopes of 19° provide the limiting factor.

2.5 Other Land

Other land on this site consists of the farmhouse and outbuildings at New House Farm in the south and three blocks of recently planted woodland in the south and east.

RPT File: 2 FCS 11240
Leeds Statutory Group

MAP