AGRICULTURAL LAND CLASSIFICATION

BETTON FARM, EAST AYTON,
SCARBOROUGH

Proposed Golf Course

MAFF
Leeds Regional Office

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AGRICULTURAL LAND CLASSIFICATION REPORT;
BETTON FARM, EAST AYTON, SCARBOROUGH

1.1 INTRODUCTION AND SITE CHARACTERISTICS

The site is located at grid reference TA000857 approximately 4 km south west of Scarborough, North Yorkshire. It covers 98.1 hectares, of which 96.9 hectares are in agricultural use with the remainder under woodland.

Soils on the site were examined in May 1990 by hand auger at regularly spaced intervals pre-determined by the National Grid. Soil profile pits were also dug at representative locations to assess soil morphology in greater detail.

Land quality assessments were made using the methods described in "Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).

1.2 CLIMATE AND RELIEF

Average Annual Rainfall (AAR) is approximately 749 mm. Accumulated temperature above 0°C, between January and June is 1271 day °C. The land is estimated to be at field capacity for 178 days a year.

The rainfall and temperature figures for this site indicate that the site is restricted to a maximum ALC grade of 2.

Moisture deficit of 92 mm for wheat and 79 mm for potatoes in combination with shallow and light soil profiles produce moisture balances that limit the ALC grade over much of the site.

The site slopes in a general southerly direction. Altitude ranges from 126 m aod at the north of the site near Black Rigg Plantation to 60 m aod where the site joins Racecourse Road near East Ayton. The site is

moderately undulating and in places slopes are severe enough to limit ALC grade.

1.3 SOILS, GEOLOGY AND DRAINAGE

Site geology consists largely of oolitic limestone which forms the predominant soil forming material. This limestone is partially overlain by superficial glacial gravel deposits in the most southerly part of the site above Betton Farm. Soils are stoney and consist of predominantly medium clay loam and occasional heavy clay loam topsoils over similar subsoils or more commonly weathered limestone bedrock. Soil depth is limited over much of the limestone with profile of only 20 to 30 cm predominating.

Calcareous grit beds are present in the northern part of the site near Keepers Cottage and Long Plantation. Soils formed over this are deeper and generally consist of sandy loam topsoils passing into medium sandy clay loam subsoils at depth.

The majority of the profiles on the site are freely drained and meet the requirements for Wetness Class I with a few profiles falling in Wetness Class II.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on this site are as follows

GRADE	HECTARES	PER CENT OF TOTAL SITE AREA
2	8.1	8%
3A	13.2	14%
3B	71.6	73%
5	4.0	4%
Non Agricultural	1.2	1%
TOTAL	98.1	100%

GRADE 2

Land of this grade occurs in the northern part of the site on the deeper soils. Soils fall generally within Wetness Class I and consist of predominantly medium sandy loams and medium sandy clay loam topsoils over similar subsoils to depth. The overall climatic limitation on the site is the main factor limiting ALC grade on this land.

GRADE 3A

Land in subgrade 3A occurs mainly to the north of the site with a small pocket at the southern most point of the site above Betton Farm. Soils are moderately deep and consist of medium clay loam and heavy clay loam topsoils over similar subsoils. Droughtiness is the main limitation to ALC grade on this land.

SUBGRADE 3B

Most of the site falls within this subgrade. Topsoils are generally stoney medium clay loam over weathered limestone bedrock at between 20 and 30 cm. Soil depth, stoniness and droughtiness are the main restrictions on ALC grade on this land. Some small areas are restricted to subgrade 3B by slopes exceeding 11°.

GRADE 5

Land of this grade occurs as patches in the central and western part of the site. Soils consist mainly of stoney medium clay loams over weathered limestone bedrock. The ALC grade of this land is restricted by slope, soil depth, and droughtiness limitations.

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