

AGRICULTURAL LAND CLASSIFICATION
AND STATEMENT OF PHYSICAL CHARACTERISTICS

FINNINGLEY PARK, AUSTERFIELD, DONCASTER

PROPOSED HOTEL, CONFERENCE CENTRE, AND
GOLF COURSE

MAFF
Leeds Regional Office

August 1990
File Ref: 2FCS 4900
Project No: 50/90

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1. AGRICULTURAL LAND CLASSIFICATION

These factors indicate that there is no overall climatic limitation on ALC grade although light textured soils will be droughty.

1.3 RELIEF

Altitude varies between 15 m and 25 m above Ordnance Datum, and the relief is flat or gently undulating. Slopes rarely exceed 4° and do not restrict the use of agricultural machinery.

1.4 GEOLOGY AND SOILS

Site geology consists largely of superficial glacial and post glacial deposits of sand and gravel. Solid strata does not occur within a metre of the surface. Topsoils generally consist of loamy sand (topsoils stoniness ranging from slightly stony to very stony) over sand or loamy sand subsoils with abundant mixed stones (up to 60%). Such profiles fall into Wetness Class I, but are severely restricted by droughtiness due to their small water holding capacity.

Boulder clay occurs only as small patches scattered across parts of the site. Soils formed on these deposits consist of medium or heavy clay loam topsoils over gleyed slowly permeable clay subsoils. These soils fall within Wetness Class IV and suffer from wetness and workability problems. In a few places slowly permeable boulder clay occurs as a lower subsoil beneath lighter textured surface and upper subsoil horizons. Wetness and workability problems are less severe on soils of this type which fall within Wetness Class III.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on the site are as follows:

Grade	Hectares	Per cent of Total Site Area
3A	16.0	6.0
3B	188.6	71.4
4	5.6	2.1
Non Agric	4.3	1.6
Woodland	49.1	18.6
Open Water	0.7	0.3
		<u>100%</u>

Subgrade 3A

Three localised patches of subgrade 3A land occur near the site boundary. In each of these fine sandy loam or loamy fine sand topsoils with few stones overlie loamy fine or medium sand subsoils with approximately 60% mixed stone content. Such profiles fall into Wetness Class I, and are restricted to subgrade 3A by droughtiness which is the main feature limiting ALC grade.

A larger area of 3A land occurs to the east of Cadman's Plantation. Here fine sandy loam and fine sandy clay loam topsoils overlie similar textured upper subsoils. A slow permeable, gleyed clayey lower subsoil results in slight workability and wetness problems (Wetness Class III) in the horizons above and these form the main restrictions on ALC grade in this area.

Subgrade 3B

Most of the site is restricted to subgrade 3B. This includes two distinct soil types. Most widespread are sandy deposits consisting of loamy fine sand topsoils (slightly or moderately stony) overlying similar light textured subsoils with abundant mixed stones. These soils fall into Wetness Class I but due to their small water holding capacity are restricted to subgrade 3B by droughtiness which is the overriding limiting factor.

The remaining 3b land is restricted to this subgrade by Wetness and workability problems. Heavy clay loam topsoils pass into slowly permeable gleyed clayey subsoils within 30 cm of the surface. Soils

of this type fall within Wetness Class IV and are restricted to subgrade 3B by wetness and workability problems.

Grade 4

Grade 4 land occurs in four separate small areas. Soils consist of loamy fine sand topsoils with a stone content (stones between 2 and 6 cm) exceeding 50%, overlying similar light textured subsoils with abundant stones. Such profiles are restricted to Grade 4 by overriding stoniness and droughtiness limitations, and often correspond with the location of former gravel pits or other disturbed land.

Non agricultural

This consists of derelict unformed land, often adjoining the sites of former gravel pits.

Woodland

The category which is extensive in the northern part of this site includes commercial and non commercial woodland and scrub.

Open Water

Open water on this site consists of ponds and lagoons which probably represent the remains of old gravel workings which extended into the underlying ground water.

Resource Planning Group
Leeds Regional Office
August 1990