38/91

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

AGRICULTURAL LAND CLASSIFICATION

LAND AT VERMUYDEN WAY, FEN DRAYTON, CAMBRIDGESHIRE

1.0 INTRODUCTION

1.1 Land on this 5.9 acre (2.39 ha) site was initially inspected on the 20 October 1987 and subsequently re-inspected on the 10 June 1991 following publication of the Revised Guidelines and criteria for grading the quality of agricultural land (MAFF, 1988). A total of 16 auger borings were made on a 50m grid basis, supplemented by additional borings as necessary. This data was further supplemented by information from a soil profile pit. At the time of survey the land was under cereals.

1.2 On the published one inch to one mile Agricultural Land Classification map sheet no 134 (MAFF, 1969) the site is graded 1.

2.0 PHYSICAL FACTORS AFFECTING LAND QUALITY

Relief

2.1 The site lies at approximately 6m AOD and falls very slightly towards its northern and eastern boundaries. In general terms the land is more level in the west and becomes undulating towards the east where a number of shallow troughs and depressions occur. A small area of noticeably lower lying land flanks the ditch in the southeast corner of the site.

Climate

2.2 Site specific climate data has been obtained by interpolating information within the 5km grid agroclimatic dataset produced by the Meteorological Office (Met Office 1989). This shows average annual rainfall to be 542 mm (21.7 inches) which is very low by national and regional standards. Field capacity days at 88 per annum are also very low. Soil moisture deficits of 119 and 115 are recorded for wheat and potatoes respectively.

Geology

2.3 The geology of the site is mapped on the 1:50,000 scale drift edition geology map sheet no 187 as third terrace river gravels overlying Oxford Clay (Geol Surv 1970). The soils identified during fieldwork conform closely with these mapped geological deposits.

Soils

2.4 In general terms soils occurring on the site are fairly free draining (wetness class I and II), slightly stony and typically comprise humose sandy loam and sandy clay loam topsoils over similar subsoils which become increasingly stony and light textured with depth. A small area of similar soils, with slightly inferior drainage occurs on the lower lying land flanking the ditch in the south east corner of the site.

3.0 AGRICULTURAL LAND CLASSIFICATION

3.1 The site is predominantly graded 3b with a smaller area of 3a. A breakdown of ALC grades in hectares and % terms is provided below.

ALC Grade	Hectares	%
3a	0.93	38.9
3b	1.46	61.1
Total	2.39	100.0

(This grading is in accordance with the Revised Guidelines and criteria for grading the quality of agricultural land (MAFF, 1988).

Grade 3a

3.2 This occurs on the more level land towards the west of the site. Soils in this area are more uniform than those occurring to the east and typically comprise moderately deep well drained profiles of sandy loam and sandy clay loam textures over gravel. The land is excluded from grade 2 by droughtiness imperfections.

Grade 3b

3.3 This is mapped on undulating land towards the east of the site where sandy loam sandy clay loam soils overlie gravel at variable depth. Profiles are mainly well or moderately well drained (predominantly wetness class I and II) and the land is limited chiefly by droughtiness imperfections which may be aggravated by stonier subsurface horizons. Although individual profiles of deeper soils occur which are or approach 3a, these are not sufficiently extensive to delineate separately and an overall grade of 3b has been applied. This subgrade also includes the lowlying land in the southeast corner of the site which is believed to be subject to slightly fluctuating groundwater levels.

RESOURCE PLANNING GROUP
FARM AND COUNTRYSIDE SERVICE

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Sources of Reference

GEOLOGICAL SURVEY OF ENGLAND AND WALES (1970) 1:50,000 drift edition geological map sheet no 187 (Huntingdon).

MAFF (1969) 1:63,360 scale Agricultural Land Classification Map. Sheet no 134.

MAFF (1988) Revised guidelines and criteria for grading the quality of agricultural land.

MET OFFICE (1989) Climatological data for agricultural land classification.