

AGRICULTURAL LAND CLASSIFICATION REPORT FOR MARSH GREEN FARM, FRODSHAM, CHESHIRE

Introduction

The site was visited by the Resource Planning Team in March 1993. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Land" (MAFF 1988).

Location

The site is situated to the West of Frodsham and is bisected by the M56. The land immediately surrounding the site is predominantly in agricultural use.

Climate

Assessment of climatic limitation is based upon average annual rainfall (AAR) and accumulated temperature above 0°C January to June (ATO). For this site the figures are 740 mm and 1451° Days respectively.

Field capacity days (FCD) are 175 with a moisture deficit wheat of 96 mm and a moisture deficit potatoes of 84 mm.

There is no overall climatic limitation to the agricultural use of this land.

Geology and Soils

The solid geology of the area is comprised of Triassic Pebble Beds and Upper Mottled Sandstone which is overlain by deposits of Quarternary Marine/Estuarine alluvium and fluvio-glacial sand and gravel.

These deposits have given rise to two soil types North of the M56 the soils are typically silty clay loams and to the south of the motorway the soils are typically sandy loams, becoming sandier at depth.

Site

The site itself is relatively flat. Altitude varies between 7 metres in the North and 9 metres in the South. Therefore, gradient is not a limiting factor.

Land Use

At the time of the survey, the site was in potatoes, fallow and permanent grassland with a minor area in non-agricultural use.

Agricultural Land Classification

- * Grade 2 - occupies 3.399 ha and 15.3% of the site. It occurs to the South of the M56 motorway.

- * These soils are typically sandy loams over sandy clay loams, with loamy sands and sands at depth, with few or no stones within the profile. Occasionally topsoils are slightly rich in organic matter, but this is not present in sufficient quantities to term these topsoils "organic-mineral soils".

These soils are mainly limited by droughtiness.

- * Grade 3a - occupies 4.211 ha and 18.9% of the site. It represents a "transition zone" and this is to be found as a linear belt between the units of grade 2 and 3b.

This grade of soil is comprised of two distinct units. Firstly, North of the motorway silty clay loams overlie silty clays and wetness is the main limitation.

Secondly, South of the motorway soils are sandy loams or loamy sands over sands to depth, with few or no stones within the profile.

within this grade there are profiles of grade 2 quality, but they are of an insufficient area to be mapped separately at this scale.

- * Grade 3b - occupies 13.387 ha and 60.2% of the site. It occurs exclusively to the North of the M56 motorway.

These soils are of heavy clay loam over silty clay to depth. Occasionally there may be an isolated lense of loamy peat at depth, but this does not improve the grade of this unit. The main limitation of these soils is wetness.

SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

	Area in hectares	% of Site	% of Agricultural land
* Grade 2	3.399	15.3	16.2
* Grade 3a	4.211	18.9	20.0
* Grade 3b	13.387	60.2	63.8
* Non Agricultural	0.375	1.7	-
* Urban	0.858	3.9	-
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* Totals	22.23	100	100
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**RESOURCE PLANNING TEAM
Wolverhampton
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