

**CREWE AND NANTWICH LOCAL
PLAN : FIRST REPLACEMENT
Site 2 - Leighton Hospital**

**Agricultural Land Classification
ALC Map and Report
May 1998**

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**RPT Reference: 116/97 & 25/RPT/0864
FRCA Reference: EL 06/11729
LURET Job Number: ME1A865**

**AGRICULTURAL LAND CLASSIFICATION REPORT
 CREWE AND NANTWICH LOCAL PLAN : FIRST REPLACEMENT
 Site 2 - LEIGHTON HOSPITAL**

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 86.0 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located on the north west periphery of Crewe. The survey was in connection with the Crewe and Nantwich Local Plan (First Replacement 2011).
2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in April and May 1998 by the Resource Planning Team of the Farming and Rural Conservation Agency (FRCA)- Northern region of FRCA.
3. The land has been graded in accordance with the publication "Agricultural Land Classification of England and Wales - Revised guidelines and criteria for grading the quality of agricultural land" (MAFF 1988) .
4. At the time of survey the agricultural land on this site was mainly under grass, with a small area remaining fallow.

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10000 with an average auger boring density of 1 per hectare. The ALC map is only accurate at this base map scale and any enlargement would be misleading.
6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% surveyed area	% site area
1	-	-	-
2	-	-	-
3a	-	-	-
3b	79.0	100	92
4	-	-	-
5	-	-	-
Agricultural land not surveyed	1.6	N/A	2
Other land	5.4	N/A	6
Total surveyed area	79.0	100	-
Total site area	86.0	-	100

7. The agricultural land on this site has been classified as Subgrade 3b (moderate quality). The key limitation to the agricultural use of this land is soil wetness.

8. The area of moderate quality land is found across the majority of the site. The soils have a clay loam topsoil texture overlying clay loam and clay to depth.

FACTORS INFLUENCING ALC GRADE

Climate

9. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

10. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using standard interpolation procedures (Meteorological Office, 1989).

Table 2: Climatic and altitude data

Factor	Units	Value
Grid reference	N/A	SJ 681 584
Altitude	m, AOD	50
Accumulated Temperature	day°C (Jan-June)	1408
Average Annual Rainfall	mm	745
Field Capacity Days	days	172
Moisture Deficit, Wheat	mm	94
Moisture Deficit, Potatoes	mm	83
Overall climatic grade	N/A	Grade 1

11. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

12. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (AT0, January to June), as a measure of the relative warmth of a locality.

13. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

Site

14. The relatively flat site lies at an altitude of 45 to 55 metres AOD.

15. The three site factors of gradient, microrelief and flooding are considered when classifying the land.

16. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

17. The solid geology of the area is comprised of Middle Keuper Marl. This is overlain with deposits of boulder clay - British Geological Survey (1968).

18. The soils that have developed on this geology have a clay loam texture over clay.

Agricultural Land Classification

19. The details of the classification of the site are shown on the enclosed ALC map and the area statistics of each grade are given in Table 1, page 1.

Subgrade 3b

20. Land of moderate quality occupies 79.0 hectares (92%) of the site area and is found across the majority of the site.

21. The soil has a clay loam topsoil texture over clay loam over and clay. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

22. The main limitation to the agricultural use of this land is soil wetness.

Land Not Surveyed

23. To the north east of the site (near Moss Side Farm) a small area of land amounting to 1.6 hectares was not surveyed as access had not been granted.

Other Land

24. Other land occupies 5.4 hectares (6%) of the site area and includes farms, residential buildings, roads and trackways.

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SOURCES OF REFERENCE

British Geological Survey (1968) Sheet 110, Macclesfield Solid and Drift Edition.
1:63 360 Scale.
BGS: London.

Ministry of Agriculture, Fisheries and Food (1988) Agricultural Land Classification of
England and Wales: Revised guidelines and criteria for grading the quality of agricultural
land.
MAFF: London.

Meteorological Office (1989) Climatological Data for Agricultural Land Classification.
Meteorological Office: Bracknell.