

**CREWE AND NANTWICH LOCAL PLAN:
FIRST REPLACEMENT**

Land West of Winterley

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

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**AGRICULTURAL LAND CLASSIFICATION REPORT
CREWE AND NANTWICH LOCAL PLAN: FIRST REPLACEMENT
Land West of Winterley**

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 12.8 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located at Winterley, east of Crewe and is centred on grid reference SJ 745 575. The site is bounded to the south by Newtons Lane, to the north and east by residential areas and to the west by agricultural land. 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 October 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 under grass.

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	2.4	20	19
3a	-	-	-
3b	9.6	80	75
4	-	-	-
5	-	-	-
Agricultural land not surveyed	0.8	-	6
Other land	-	-	-
Total surveyed area	12.0	100	
Total site area	12.8		100

7. The agricultural land on this site has been classified as Grade 2 (very good quality) and Subgrade 3b (moderate quality). The key limitations to the agricultural use of this land are soil droughtiness and soil wetness.

8. The area of very good quality land is located in the north of the site extending along the eastern boundary of the site. The soils commonly comprise either a sandy clay loam or medium clay loam topsoil, overlying a medium clay loam upper subsoil. The lower subsoil comprises of either a sandy clay loam passing to a loamy medium sand onto sandy clay loam at depth, or a medium sandy loam passing to a sandy clay loam onto clay at depth.

9. The area of moderate quality land is located in the centre of the site extending along the western boundary to the south of the site. The soils commonly comprise a medium clay loam topsoil, onto a heavy clay loam upper subsoil passing to a clay at depth.

FACTORS INFLUENCING ALC GRADE

Climate

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

11. 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	Values
Grid reference	N/A	SJ 745 575
Altitude	m, AOD	61
Accumulated Temperature	day°C (Jan-June)	1395
Average Annual Rainfall	mm	754
Field Capacity Days	days	174
Moisture Deficit, Wheat	mm	92
Moisture Deficit, Potatoes	mm	80
Overall climatic grade	N/A	Grade 1

12. 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.

13. 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 (ATO, January to June), as a measure of the relative warmth of a locality.

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

Site

15. The site lies at an altitude of 61 metres AOD. The topography of the site is generally flat in nature.
16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
17. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

18. The solid geology of the area comprises of Middle Keuper Marl - British Geological Survey (1990). The drift geology of the area comprises of Fluvio-glacial deposits and Boulder Clay - British Geological Survey (1968).
19. The soils that have developed on this geology are generally of medium clay loam topsoil, over an upper subsoil of clay loam, passing to clay. In the northern area of the site, extending along the eastern boundary, the soils that have developed in this area are influenced by sandy drift geological material.

Agricultural Land Classification

20. 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.

Grade 2

21. Land of very good quality occupies 2.4 hectares (19%) of the site area.
22. The soils commonly comprise either a sandy clay loam or medium clay loam topsoil, overlying a medium clay loam upper subsoil. The lower subsoil comprises of either a sandy clay loam passing to a loamy medium sand onto sandy clay loam at depth, or a medium sandy loam passing to a sandy clay loam onto clay at depth. The moisture balance places these soils in Grade 2.
23. The main limitation to the agricultural use of this land is soil droughtiness.

Subgrade 3b

24. Land of moderate quality occupies 9.6 hectares (75%) of the site area.
25. The soils commonly comprise a medium clay loam topsoil, onto a heavy clay loam upper subsoil passing to clay at depth. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

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

Land not surveyed

27. Land not surveyed occupies 0.8 hectares (6%) of the site area. This land already has permission for development.

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SOURCES OF REFERENCE

British Geological Survey (1990) Sheet 110, Macclesfield, Solid Edition.
1:50 000 Scale.
BGS: London.

British Geological Survey (1968) Sheet 110, Macclesfield, 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.