

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

**Land East 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 East of Winterley*

**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 9.1 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the north east of Crewe at Winterley, centred on grid reference SJ 750 573. The site is bounded to the south by Pool Lane, to the north by Hassall Road and with residential developments on all other sides. 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 maize and potatoes.

**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	7.9	100	87
3a	-	-	-
3b	-	-	-
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	-	-
Other land	1.2	-	13
<b>Total surveyed area</b>	<b>7.9</b>	<b>100</b>	
<b>Total site area</b>	<b>9.1</b>		<b>100</b>

7. The agricultural land on this site has been classified as Grade 2 (very good quality). The key limitation to the agricultural use of this land is soil droughtiness.

8. Very good quality land is found throughout the site. The soils commonly comprise a sandy clay loam topsoil, overlying a medium sandy loam subsoil, onto a loamy medium sand lower subsoil, onto sand at depth. Occasionally sandy clay loam subsoils are present.

## 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	Values	Values
Grid reference	N/A	SJ 752 574	SJ 750 573
Altitude	m, AOD	65	64
Accumulated Temperature	day°C (Jan-June)	1390	1390
Average Annual Rainfall	mm	758	757
Field Capacity Days	days	177	175
Moisture Deficit, Wheat	mm	91	91
Moisture Deficit, Potatoes	mm	79	79
Overall climatic grade	N/A	Grade 1	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 site lies at an altitude of 65 metres AOD. The topography of the site is generally flat in nature.

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 Upper Keuper Saliferous Beds - British Geological Survey (1990). The drift geology of the site is Undifferentiated Fluvio Glacial Deposits - British Geological Survey (1968).

18. The soils that have developed on this geology are generally of slightly stony sandy clay loam topsoil passing to horizons of slightly stony loamy sand onto sand at depth.

### **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.

#### *Grade 2*

20. Land of very good quality occupies 7.9 hectares (87%) of the site area.

21. The soils commonly comprise a sandy clay loam topsoil, overlying a medium sandy loam subsoil, onto a loamy medium sand lower subsoil and sand at depth. Occasionally a sandy clay loam subsoil was present. The depth to gleying and absence of a slowly permeable layer place these soils in Wetness Class I.

22. Within the Grade 2 area, there are isolated borings of Grade 1 and Subgrade 3a. The Grade 1 profile occurs where the soils comprise of medium sandy loam topsoil over medium sand to depth. The Subgrade 3a profile comprises a sandy clay loam topsoil, onto loamy medium sand and sand subsoils. These profiles cannot be shown separately at this scale of mapping.

23. The main limitation to the agricultural use of this land is soil droughtiness.

#### *Other Land*

24. Other land occupies 1.2 hectares (13%) of the site and is found as housing.

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## **SOURCES OF REFERENCE**

British Geological Survey (1990) Sheet 110, Macclesfield, Solid Edition.  
1:50 000 Scale.  
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1:63 360 Scale.  
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