

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

South of Weston

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

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AGRICULTURAL LAND CLASSIFICATION REPORT
CREWE AND NANTWICH LOCAL PLAN: FIRST REPLACEMENT
South of Weston

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 13.2 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located south of Weston, centred on grid reference SJ 730 520. The site is bounded to the north by the village of Weston, with open farmland 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 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 under permanent grassland.

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	7.8	61	59
3a	0.2	2	2
3b	0.3	2	2
4	4.5	35	34
5	-	-	-
Agricultural land not surveyed	-	-	-
Other land	0.4	-	3
Total surveyed area	12.8	100	
Total site area	13.2		100

7. The agricultural land on this site has been classified as Grade 2 (very good quality), Subgrade 3a (good quality), Subgrade 3b (moderate quality) and Grade 4 (poor). The key limitations to the agricultural use of this land are soil wetness and droughtiness.

8. The area of very good quality land is located in the centre of the site and extends eastwards to the boundary of the site. The soils commonly comprise either a sandy loam or loamy sand topsoil, overlying a sandy loam or loamy sand upper subsoil and a loamy sand lower subsoil with sand at depth. Occasionally sandy clay loam subsoils are present.

9. The area of good quality land is mapped in the south of the site, where a slight depression runs through the centre of the site. The soils commonly comprise a sandy loam topsoil over loamy sand upper subsoil with sand at depth.

10. The area of moderate quality land is mapped on the south of the site where a ditch forms the boundary of the site. The soil textures are varied and are either clay loam over clay or sandy loam over sand at depth.

11. The area of poor quality land is mapped on the west of the site. The soils are varied and include clay loam over clay, loamy sand or sandy loam. At the time of the survey there appeared to have been some disturbance of the land. Glass fragments and fibre and plastic materials were present within the topsoil.

FACTORS INFLUENCING ALC GRADE

Climate

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

13. 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 730 520
Altitude	m, AOD	60
Accumulated Temperature	day°C (Jan-June)	1399
Average Annual Rainfall	mm	749
Field Capacity Days	days	174
Moisture Deficit, Wheat	mm	93
Moisture Deficit, Potatoes	mm	81
Overall climatic grade	N/A	Grade 1

14. 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.

15. 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.

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

Site

17. The site lies at an altitude of 60 metres AOD. The land form is gently rolling, with a slight depression running through the centre of the site.

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

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

Geology and Soils

20. The solid geology of the area is comprised of Keuper Marl. There is no drift geology mapped - British Geological Survey (1902).

21. The soils that have developed on this geology are generally of either a sandy loam, sandy clay loam or sandy silt loam topsoil texture, over sandy loam and sand or occasionally clay at depth.

Agricultural Land Classification

22. 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

23. Land of very good quality occupies 7.8 hectares (59%) of the site area and occurs across the centre of the site and extends eastwards to the boundary of the site.

24. The soils commonly comprise a sandy loam or loamy sand topsoil, overlying a sandy loam or loamy sand upper subsoil, onto a loamy sand lower subsoil, onto sand at depth. Occasionally the profiles went onto sandy clay loam subsoils. The depth to gleying and absence of a slowly permeable layer place these soils in Wetness Class I.

25. Within the Grade 2 area are isolated borings of Grade 1 and Subgrade 3a. The Grade 1 profile occurs where the soils comprise of sandy loam topsoil, over sandy loam subsoil onto sand at depth. There is no presence of gleying or a slowly permeable layer within this profile.

The Subgrade 3a profile comprises a loamy sand topsoil, onto loamy sand and sand subsoil onto sandy clay loam and loamy sand at depth. These profiles cannot be shown separately at this scale of mapping.

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

Subgrade 3a

27. Land of good quality occupies 0.2 hectares (2%) of the site area and occurs in the south of the site, where a slight depression runs through the centre of the site.

28. The soils commonly comprise a sandy loam topsoil over loamy sand upper subsoil onto sand at depth. The depth to gleying and the absence of a slowly permeable layer places these soils into Wetness Class I.

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

Subgrade 3b

30. Land of moderate quality occupies 0.3 hectares (2%) of the site and occurs in the south of the site, where a ditch forms the boundary of the site.

31. The soils are varied and comprise of either clay loam over clay or sandy loam over sand at depth. However, this land is affected by the presence of high groundwater levels for much of the year, indicated by the presence of a gleyed upper subsoil and signs of wetness at depth, such that Wetness Class III is appropriate.

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

Grade 4

33. Land of poor quality occupies 4.5 hectares (34%) of the site area and occurs in the west of the site.

34. The soils are varied and include clay loam over clay or loamy sand or sandy loam.

35. The limitations to agricultural land use of this land include soil wetness and soil droughtiness, although evidence of disturbance to the land limits the agricultural land use. Glass fragments and other imported material were present within the soil

Other Land

29. Other land occupies 0.4 hectares (3%) of the site area and is found as a sub station and an overgrown area.

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SOURCES OF REFERENCE

**British Geological Survey (1902) Sheet 123, Stoke-on-Trent, Solid 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.**