

**CHESTER LOCAL PLAN
WEST OF EATON ROAD
Agricultural Land Classification
ALC Map and Report
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**AGRICULTURAL LAND CLASSIFICATION REPORT
CHESTER LOCAL PLAN
WEST OF EATON ROAD**

INTRODUCTION

1. This report presents the findings of a detailed, Agricultural Land Classification (ALC) survey on 11.0 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the west of Eaton Road and north of Eccleston. The survey was in connection with the Chester Local Plan.
2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in July 1997 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 used for horse grazing.

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 2 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	8.9	83	81
3b	1.8	17	16
4	-	-	
5	-	-	
Agricultural land not surveyed	-	N/A	
Other land	0.3	N/A	3
Total surveyed area	10.7	100	
Total site area	11.0		100

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

8. The area of good quality land is located over the majority of the site. The soils commonly comprise either a medium sandy loam or sandy clay loam topsoil overlying clay or sandstone.

9. The area of moderate quality land is located in the north western and north eastern parts of the site. The soils comprise a medium clay loam overlying clay.

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 407 642
Altitude	m, AOD	25
Accumulated Temperature	day°C (Jan-June)	1440
Average Annual Rainfall	mm	690
Field Capacity Days	days	153
Moisture Deficit, Wheat	mm	101
Moisture Deficit, Potatoes	mm	91
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 (AT0, 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 25 metres AOD. The land falls gently from its northern boundary to the north and east.
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 is comprised of Pebble Beds (close to boundary of lower mottled sandstone) - British Geological Survey (1986). This is overlain with deposits of Boulder clay - British Geological Survey (1990).
19. The soils that have developed on this geology are generally of a sandy clay loam texture over clay or sandstone at depth.

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.

Sub-grade 3a

21. Land of good quality occupies 8.9 hectares (81%) of the site area and extends across the majority of the site.
22. Across the centre of the site the soil has either a sandy loam or sandy clay loam topsoil overlying sandstone. The moisture balance places these soils in Grade 2 and Subgrade 3a. Overall the land has been classified as Subgrade 3a due to the variation in depth to sandstone and resultant variation in moisture balance.
23. The main limitation to the agricultural use of this land is soil droughtiness.
24. Along the western site boundary the soil has a medium clay loam texture overlying heavy clay loam and clay. Observations of gleying and the depth of the slowly permeable layer place these soils in Wetness Class III.
25. The main limitation to the agricultural use of the land is soil wetness.

Subgrade 3b

26. Land of moderate quality occupies 1.8 hectares (17%) of the site area and is found in the northern part of the site over sandy clay loam and clay.

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

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

Other Land

29. Other land occupies 0.3 hectares (3%) of the site area and is found as a pond and trees.

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SOURCES OF REFERENCE

British Geological Survey Sheet 109, Chester (1986) and Drift (1990) Editions.
1:50 000 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.