CHESTER LOCAL PLAN
PARSONS LANE AND WEST OF COUNTESS OF CHESTER HOSPITAL
Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LANE CLASSIFICATION REPORT
CHESTER LOCAL PLAN
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INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 13.7 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the west of the Countess of Chester Hospital. 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. The land was unfenced, adjoining hospital grounds and part had been landscaped with recent tree planting.

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	1.5	22	11
3b	5.5	78	40
4	-	-	
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	6.7	N/A	49
Total surveyed area	7.0	100	
Total site area	13.7		100

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

8. The area of good quality land is located on the eastern boundary of the site. The soils commonly comprise a medium sandy loam topsoil overlying sandy clay loam, loamy medium sand and sand.

9. The area of moderate quality land is found in the northern and western parts of the site. Close to the Knolls the soils comprise a medium sandy loam overlying sandstone. The western boundary is adjacent to a closed landfill site. Low levels of methane have been measured in the vicinity of the local site and are being monitored. Soils comprise a medium clay loam topsoil over heavy clay loam.

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 397 689
Altitude	m, AOD	15
Accumulated Temperature	day°C (Jan-June)	1450
Average Annual Rainfall	mm	672
Field Capacity Days	days	151
Moisture Deficit, Wheat	mm	105
Moisture Deficit, Potatoes	mm	97
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 10 to 15 metres AOD. The land falls gently to the west.

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 with sandstone close by - British Geological Survey (1986). Pebble beds outcrop close to the surface - British Geological Survey (1990).

19. The soils that have developed on this geology are generally of a sandy loam texture.

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.

Subgrade 3a

21. Land of good quality occupies 1.5 hectares (11%) of the site area and is found at the eastern boundary.

22. The soil has a sandy loam texture over loamy sand and sand to depth with few or no stones within the profile. The moisture balance places these soils in Subgrade 3a.

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

Subgrade 3b

24. Land of moderate quality occupies 5.5 hectares (78%) of the site area and is found in the north and eastern parts of the site.

25. In the north the soil has a sandy loam texture which overlying sandstone. The moisture balance places these soils in Subgrade 3b.

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

27. Adjacent to the closed landfill site the soils have a medium clay loam texture overlying heavy clay loam and in places were impenetrable. At the time of the survey the soil had a 'musty' smell.

Other Land

28. Other land occupies 6.7 hectares (49%) of the site area and is found on landscaped ground adjoining hospital property.

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SOURCES OF REFERENCE

British Geological Survey Sheet 109, Chester Solid (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.
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