

**LAND AT THE BIRCHES, BIRKENHEAD ROAD
MEOLS, WIRRAL
MERSEYSIDE**

**Agricultural Land Classification Survey
ALC Map and Report
March 1997**

**Resource Planning Team
ADAS Statutory Group
ADAS Wolverhampton**

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**AGRICULTURAL LAND CLASSIFICATION REPORT
LAND AT THE BIRCHES, BIRKENHEAD ROAD, MEOLS, WIRRAL
MERSEYSIDE**

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 1.3 hectares of land. The land is located at Meols, to the west of Birkenhead Road, and north of the Birkenhead-West Kirby Railway. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during March 1997.
2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) from its Land Use Planning Unit in Crewe. The survey was in connection with the proposed use of the land for housing. The results of this survey supersede any previous ALC information for this land.
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 horticultural cultivation, including onions, cabbage, rhubarb and fallow.

SUMMARY

5. The findings of the survey are shown on the attached ALC map. At the request of the Land Use Planning Unit this was a detailed grid survey at a scale of 1:10 000 with a minimum auger boring density of 1 per hectare. The ALC map is only accurate at the 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 below.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% site area	% surveyed area
3a	0.3	23	25
3b	0.9	70	75
Other Land	0.1	7	-
Total surveyed area	1.2	-	100
Total site area	1.3	100	-

7. The agricultural land on this site has been classified as Subgrade 3a (good quality) and Subgrade 3b (moderate quality), the key limitation being soil wetness.

8. The area of good quality land is located in the north of the site. The soils commonly comprise a sandy loam topsoil overlying either a sand, medium clay loam or sandy clay loam upper subsoil passing to a gleyed and slowly permeable silty clay lower subsoil.

9. The area of moderate quality land is mapped in the south of the site. The soils in this area comprise a fine sand topsoil overlying a medium sand upper subsoil passing to a gleyed and slowly permeable silty clay lower subsoil.

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 below and were obtained from the published 5km grid datasets using standard interpolation procedures (Met. Office, 1989).

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.

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 232 898
Altitude	m, AOD	5
Accumulated Temperature	day°C	1456
Average Annual Rainfall	mm	755
Field Capacity Days	days	179
Moisture Deficit, Wheat	mm	99
Moisture Deficit, Potatoes	mm	89

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 altitudes in the range 5-6m AOD and is generally level.
16. 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 alluvium. - British Geological Survey (1974).
19. The soils that have developed on this geology are generally of a sandy texture over silty clay at depth.

Agricultural Land Classification

20. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1.

Subgrade 3a

21. Land of very good quality occupies 0.3 hectares (23%) of the site area and extends across the north of the site in a single unit.
22. The soil has a sandy loam texture over either sand, sandy clay loam or medium clay loam and silty clay to depth with few or no stones within the profile. The depth to gleying and the slowly permeable layer places these soils in Wetness Class III.
23. The main limitation to the agricultural use of this land is soil wetness.

Subgrade 3b

24. Land of moderate quality occupies 0.7 hectares (70%) of the site area and extends across the south of the site in a single unit.
25. The soil has a fine sand texture overlying medium sand and silty clay. The depth to gleying and the slowly permeable layer place these soils in Wetness Class III.
26. The topsoil has a high proportion of fine sand, is weakly structured and prone to surface capping and slaking. Soils with sand topsoils are not eligible at Grades 1, 2 or 3a.
27. The main limitation to the agricultural use of this land is soil texture.

Other Land

28. Other land occupies 0.1 hectares (7%) of the site area and is found as an embankment, trackway and farm buildings.

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SOURCES OF REFERENCE

British Geological Survey (1974) *Sheet 96, Liverpool Solid Edition. 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.*
Met. Office: Bracknell.