OVERTON GREEN FARM
SMALLWOOD
CHESHIRE

Agricultural Land Classification Survey
ALC Map and Report
January 1997

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ADAS Statutory Group
ADAS Wolverhampton

ADAS Reference: 077/96, 25/RPT/0811
MAFF Reference: EL 06/10841
LUPU Commission: W 02243

AGRICULTURAL LAND CLASSIFICATION REPORT
OVERTON GREEN FARM, SMALLWOOD
CHESHIRE

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 5.7 hectares of land. The land is located to the east of the A50, approximately 2 miles south east of Junction 17 on the M6 motorway. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during January 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 proposal for an inert landfill operation at this site. 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 cereal stubble and grass.

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
3b	5.4	95	100
Other Land	0.3	5	-
Total surveyed area	5.4	-	100
Total site area	5.7	100	-

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

8. The area of moderate quality land is mapped over the majority of the site. The soils in this area comprise either of a medium clay loam topsoil overlying a gleyed and slowly permeable clay subsoil or an organic mineral soil over peat in the isolated hollows scattered across the site.

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

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.

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 801603
Altitude	m, AOD	85
Accumulated Temperature	day°C	1365
Average Annual Rainfall	mm	779
Field Capacity Days	days	188
Moisture Deficit, Wheat	mm	86
Moisture Deficit, Potatoes	mm	73

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 (ATO, 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. Local climatic factors, such as exposure and frost risk, are not believed to significantly affect the site. The site is climatically Grade 1.

Site

14. The site lies at altitudes in the range 80-95m AOD.

15. Three site factors of gradient, microrelief and flooding are considered when classifying the land.

16. In the west and east of the site there are slopes with gradients of between 7° and 11° limiting the agricultural use of the land to Subgrade 3b.

17. The remaining 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 Triassic Upper Keuper Saliferous Beds. This is overlain with boulder clay, fluvio-glacial deposits and peat - British Geological Survey (1968).

19. The soils that have developed on this geology are generally of a clay loam texture over clay at depth or a peaty soil

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 3b

21. Land of moderate quality occupies 5.4 hectares (95%) of the site area.

22. The soil has a clay loam texture overlying heavy clay loam and clay. The depth to gleying and the slowly permeable layer place these soils in Wetness Class IV. Occasionally the topsoil may be of a sandy silt loam texture.

23. Within the isolated hollows scattered across the site peaty soils are found. At the time of the survey the peaty soil was saturated.

24. In the west and east of the site there are slopes with gradients of between 7° and 11° limiting the agricultural use of the land to Subgrade 3b.

25. The main limitations to the agricultural use of this land are gradient and soil wetness.

Other Land

26. Other land occupies 0.3 hectares (5%) of the site area and is found as a trackway.

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SOURCES OF REFERENCE

British Geological Survey (1968) *Sheet 110, Macclesfield Solid and Drift Edition. 1:63 360 Scale.*
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