

**Removal of Sea Defence Embankment
Hesketh New Marsh
Hesketh Bank
Agricultural Land Classification Survey
ALC Map and Report
February 1997**

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

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AGRICULTURAL LAND CLASSIFICATION REPORT HESKETH NEW MARSH, HESKETH BANK

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 6.9 hectares of land. The land is located west of Hesketh Bank and north of Shore Road. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during February 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 removal of a redundant sea defence embankment and the subsequent respreading of the embankment material across agricultural land. 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 had been ploughed.

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	6.9	100	100
Total surveyed area	6.9	-	100
Total site area	6.9	100	-

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

8. The soils commonly comprise a medium and heavy silty clay loam topsoil texture overlying a fine sandy silt loam subsoil texture to a depth of 120 cm.

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	SD 423 239
Altitude	m, AOD	5
Accumulated Temperature	day°C	1437
Average Annual Rainfall	mm	878
Field Capacity Days	days	199
Moisture Deficit, Wheat	mm	84
Moisture Deficit, Potatoes	mm	71

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 (AT0, 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 an altitude of 5m AOD and is level.
15. Three site factors of gradient, microrelief and flooding are considered when classifying the land.
16. These factors do not impose any limitations on the agricultural use of this land.

Geology and soils

17. The solid geology of the area is comprised of Triassic Sherwood sandstone British Geological Survey (1982). No drift deposits are shown for this site.
18. The soils that have developed on this geology are generally of a silty clay loam texture over sandy silt loam to depth.

Agricultural Land Classification

19. 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

20. Land of good quality occupies 6.9 hectares (100%) of the site area.
21. The soil generally has either a medium or heavy silty clay loam topsoil texture over a fine sandy silt loam subsoil texture to depth. The soils do not have a slowly permeable layer and the depth to gleying places these soils in Wetness Class II.
22. The main limitation to the agricultural use of this land is soil wetness.

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SOURCES OF REFERENCE

British Geological Survey, (1982), *Sheet 75 Preston Solid and Drift Edition. 1:50 000 Scale*
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