# KINGSLAND NORTH LEOMINSTER DISTRICT LOCAL PLAN

Agricultural Land Classification Survey
ALC Map and Report
December 1996

Resource Planning Team ADAS Statutory Group ADAS Wolverhampton

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## AGRICULTURAL LAND CLASSIFICATION REPORT KINGSLAND NORTH, LEOMINSTER DISTRICT LOCAL PLAN

#### INTRODUCTION

- 1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 7.5 hectares of land. The land is located to the north of Kingsland. The site is adjoined by land in agricultural use to the north, east and west and land in urban use to the south. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during November 1996.
- 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 Leominster District Local Plan. 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 cereals.

#### **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	7.5	100	100
Total surveyed area	7.5	-	100
Total site area	7.5	100	

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

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The area of good quality land has soils which comprise of a medium silty clay loam topsoil overlying a medium silty clay loam and medium clay loam subsoil which passes on to gravel at depth.

#### FACTORS INFLUENCING ALC GRADE

#### Climate

- Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.
- 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	SO 447 617
Altitude	m, AOD	86
Accumulated Temperature	day°C	1416
Average Annual Rainfall	mm	764
Field Capacity Days	days	173
Moisture Deficit, Wheat	mm	97
Moisture Deficit, Potatoes	mm	86

- 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 an altitude of approximately 86m AOD.
- 15. Three site factors of gradient, microrelief and flooding are considered when classifying the land.
- These factors do not impose any limitations on the agricultural use of this land. 16.

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### Geology and soils

- 17. The solid geology of the area is comprised of Raglan Mudstone. This is overlain with glaciofluvial terrace deposits.
- 18. The soils that have developed on this geology are generally of a medium silty clay loam.

### **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 7.5 hectares (100%) of the site area.
- 21. The soil has a medium silty clay loam texture over medium silty clay loam, medium clay loam and gravel. The topsoil is very slightly stony with the subsoil becoming extremely stony at depth. The moisture balance places these soils in Subgrade 3a.
- 22. The main limitation to the agricultural use of this land is soil droughtiness.

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## **SOURCES OF REFERENCE**

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.