

**BROMSGROVE DISTRICT LOCAL PLAN: SITE 1  
LAND AT BRAKEMILL FARM  
HEREFORD AND WORCESTERSHIRE**

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

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

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**AGRICULTURAL LAND CLASSIFICATION REPORT  
BROMSGROVE DISTRICT LOCAL PLAN: SITE 1  
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**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 108.1 hectares of land. The land is located between the western edge of Hagley and the railway line to the south of the site. 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 Bromsgrove 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 cereal stubble from the previous harvest, ploughed and under rough grassland.

**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
2	49.6	45.9	62.7
3a	23.7	21.9	30.0
3b	3.9	3.6	4.9
4	1.9	1.8	2.4
Other Land	29.0	26.8	
Total surveyed area	79.1	-	100.0
Total site area	108.1	100.0	

7. The agricultural land on this site has been classified as Grade 2 (very good quality), Subgrade 3a (good quality), Subgrade 3b (moderate quality) and Grade 4 (poor quality), the key limitations being soil droughtiness and gradient.

8. The area of very good quality land is located on the lower lying land over the majority of the site. The soils commonly comprise sandy loam or loamy sand topsoil overlying sand or sandstone.

9. The area of good quality land is mapped in the southern and northern parts of the site. The soils in this area comprise loamy sand over sand to depth.

10. The areas of moderate and poor quality land are mapped in the north west and northern central part of the site. The soils in this area comprise loamy sand over sand to depth but gradient is the limiting factor in these areas.

## 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.

12. 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).

13. 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 894 806
Altitude	m, AOD	103
Accumulated Temperature	day°C	1377
Average Annual Rainfall	mm	736
Field Capacity Days	days	170
Moisture Deficit, Wheat	mm	93
Moisture Deficit, Potatoes	mm	81

14. 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.

15. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

## Site

16. The site lies at altitudes in the range 85-140m AOD. The land undulates across the site although the higher ground tends to be in the north and east of the site.
17. Three site factors of gradient, microrelief and flooding are considered when classifying the land.
18. Gradient imposes a limitation on the agricultural use of this land in the north west and northern central part of the site. Slopes measure between 8° and 16°.

## Geology and soils

19. The solid geology of the area is comprised of Lower Keuper Sandstone and Upper Mottled Sandstone. This is overlain with deposits of sand and gravel on the higher ground - British Geological Survey (1967).
20. The soils that have developed on this geology are generally of a sandy loam or loamy texture over sand or sandstone at depth.

## Agricultural Land Classification

21. 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.

### *Grade 2*

22. Land of very good quality occupies 49.6 hectares (45.9%) of the site area and extends across the majority of the site in two main units.
23. The soil has either a sandy loam or loamy sand texture overlying loamy sand and sand to depth with few or no stones within the profile. The moisture balance places these soils in Grade 2.
24. The main limitation to the agricultural use of this land is soil droughtiness.

### *Subgrade 3a*

25. Land of good quality occupies 23.7 hectares (21.9%) of the site area and extends across the southern end of the site and the northern central part of the site.
26. The soil has a loamy sand texture overlying either sand or sandstone to depth. The moisture balance places these soils in Subgrade 3a.
27. The main limitation to the agricultural use of this land is soil droughtiness.

### *Subgrade 3b*

28. Land of moderate quality occupies 3.9 hectares (3.6%) of the site area and extends across the north west and south of the site in isolated units.

29. The soil has either a sandy loam or loamy sand texture overlying either sand or sandstone. The moisture balance places these soils in either Grade 2 or Subgrade 3a but gradients of between 8° and 11° place these soils in Subgrade 3b.

30. The main limitation to the agricultural use of this land is gradient.

### *Grade 4*

31. Land of poor quality occupies 1.9 hectares (1.8%) of the site area and extends across the north west of the site in a single unit.

32. The soil has a loamy sand texture over sand to depth. The moisture balance places the soils in Grade 2 although gradients of between 11° and 18° were measured over this area placing the soils into Grade 4.

33. The main limitation to the agricultural use of this land is gradient.

### *Other Land*

34. Other land occupies 29.0 hectares (26.8%) of the site area and includes a trackway buildings, ponds and woodland.

Resource Planning Team  
Wolverhampton Statutory Group  
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## SOURCES OF REFERENCE

British Geological Survey (1967) *Sheet 167, Dudley Solid. 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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