

**SHREWSBURY AND ATCHAM BOROUGH LOCAL PLAN  
LAND NORTH OF HANWOOD ROAD  
SHREWSBURY**

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

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

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**AGRICULTURAL LAND CLASSIFICATION REPORT  
SHREWSBURY AND ATCHAM BOROUGH LOCAL PLAN  
LAND NORTH OF HANWOOD ROAD**

**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 180.0 hectares of land. The land is located to the west of Shrewsbury inside the bypass and to the north of the A488. 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 Shrewsbury and Atcham Borough 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 winter sown cereal 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
2	16.1	9	9
3a	119.0	66	70
3b	35.3	20	21
Other Land	9.6	5	-
Total surveyed area	170.4	-	100
Total site area	180.0	100	-

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

8. The area of very good quality land is located to the north and east of the site. The soil commonly comprises a medium clay loam topsoil overlying a deep medium clay loam subsoil occasionally with heavy clay loam at depth.

9. The area of good quality land is located across the majority of the site. The soil commonly comprises a medium clay loam topsoil overlying a medium or occasionally heavy clay loam upper subsoil which is occasionally gleyed, passing to a gleyed and slowly permeable heavy clay loam lower subsoil.

10. The area of moderate quality land is mapped as several blocks, the largest being found on higher ground towards the south and west of the site. The soil in this area comprises a medium clay loam topsoil overlying a gleyed and slowly permeable heavy clay subsoil.

## FACTORS INFLUENCING ALC GRADE

### Climate

11. 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 (1)	Values (2)
Grid reference	N/A	SJ 459 113	SJ 466 119
Altitude	m, AOD	95	79
Accumulated Temperature	day°C	1383	1401
Average Annual Rainfall	mm	711	697
Field Capacity Days	days	156	151
Moisture Deficit, Wheat	mm	98	102
Moisture Deficit, Potatoes	mm	88	92

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 74-97m AOD. The land is undulating and rises from the north east of the site towards the south west.

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

18. Gradients greater than 7° near Oak Cottage limit the classification to Subgrade 3b.

19. The factors of microrelief and flooding do not impose any limitations on the agricultural use of this land.

### **Geology and soils**

20. The solid geology of the area is comprised of either Lower Mottled Sandstone or Keele Beds, in the North and South of the site, respectively. This is overlain with deposits of boulder clay and fluvio-glacial gravels - British Geological Survey (1974).

21. The soils that have developed on this geology are generally of a clay loam texture over clay at depth and contain siliceous stones.

### **Agricultural Land Classification**

22. 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*

23. Land of very good quality occupies 16.1 hectares (9%) of the site area and is found as three blocks in the north and east of the site.

24. The soil has a medium clay loam texture to depth, or occasionally overlying heavy clay at depth with few or no stones within the profile. The depth to gleying places these soils in Wetness Class II.

25. The main limitation to the agricultural use of this land is soil wetness.

#### *Subgrade 3a*

26. Land of good quality occupies 119.0 hectares (66%) of the site area and extends across the majority of the site in a single unit.

27. The soil has a medium clay loam texture, overlying a gleyed medium clay loam upper subsoil passing onto a gleyed and slowly permeable heavy clay loam lower subsoil at depth. Generally the profiles contain few stones, although some profiles were characterised by a band

of siliceous gravel below the upper subsoil. The depth to gleying and the slowly permeable layer place these soils in Wetness Class III.

28. The main limitation to the agricultural use of this land is soil wetness.

*Subgrade 3b*

29. Land of moderate quality occupies 35.3 hectares (20%) of the site area is found in several blocks, the most extensive being in the south and west of the site.

30. The soil has a medium clay loam texture overlying a gleyed and slowly permeable heavy clay loam occasionally over clay. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

31. The main limitation to the agricultural use of this land is soil wetness.

*Other Land*

32. Other land occupies 9.6 hectares (5%) of the site area and is found as trackways, roads, woodland, farm buildings and private dwellings.

Resource Planning Team  
Wolverhampton Statutory Group  
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## SOURCES OF REFERENCE

British Geological Survey (1974) *Sheet 152, Shrewsbury Solid and Drift Edition. 1:63 360 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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