

**Shropshire Minerals Local Plan  
Objection 413/6175  
Agricultural Land Classification  
ALC Map and Report  
April 1997**

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**AGRICULTURAL LAND CLASSIFICATION REPORT**  
**Shropshire Minerals Local Plan**  
**Objection 413/6175**

**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 86.0 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located at Wackley Lodge on either side of the A528 between Shrewsbury and Ellesmere, Shropshire. The survey was in connection with the Shropshire Minerals Local Plan.
2. The survey was undertaken in March and April 1997 by the Farming and Rural Conservation Agency (FRCA) on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF). The work was conducted by members of the Resource Planning Team (RPT) in the Northern Region of FRCA.
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 and grass.

**SUMMARY**

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10 000 with an average auger boring density of 1 per hectare. The ALC map is only accurate at this 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.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% surveyed area	% site area
1	-	-	-
2	12.7	15	15
3a	35.3	42	41
3b	35.9	43	42
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	2.1	N/A	2
<b>Total surveyed area</b>	<b>83.9</b>	<b>100</b>	<b>-</b>
<b>Total site area</b>	<b>86.0</b>	<b>-</b>	<b>100</b>

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 limitations being soil wetness and soil droughtiness.

8. The area of very good quality land is located to the west of Wackley Lodge. The soils commonly have a sandy loam topsoil overlying sandy loam and sandy clay loam to depth. Occasionally loamy sand, sand and clay loam may be found in the lower subsoil.

9. The area of good quality land is mapped in the centre, north and east of the site. The soils have a sandy loam texture over loamy sand and sand with occasional lenses of sandy loam and sandy clay loam in the subsoil.

10. The area of moderate quality land is mapped in the south west and east of the site. The soils in the south west have a medium clay loam topsoil overlying a gleyed and slowly permeable clay subsoil. The soils in the east have an organic clay loam topsoil over gleyed organic mineral and peaty subsoils to depth.

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

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 441 279
Altitude	m, AOD	93
Accumulated Temperature	day°C (Jan-June)	1378
Average Annual Rainfall	mm	703
Field Capacity Days	days	157
Moisture Deficit, Wheat	mm	98
Moisture Deficit, Potatoes	mm	86
Overall climatic grade	N/A	Grade 1

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.

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 an altitude of 85-100 metres AOD. The land rises from the basin in the north east of the site towards the higher ground in the south west.

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

18. These factors do not impose any limitations on the agricultural use of this land.

### **Geology and Soils**

19. The solid geology of the area is comprised of Middle Keuper Marl. This is overlain with deposits of peat, glacial sands and gravels and boulder clay - British Geological Survey (1967).

20. The soils that have developed on this geology are generally of either a peaty or a sandy and loamy texture.

### **Agricultural Land Classification**

21. The details of the classification of the site are shown on the enclosed ALC map and the area statistics of each grade are given in Table 1, page 1.

#### *Grade 2*

22. Land of very good quality occupies 12.7 hectares (15%) of the site area and is found to the west of Wackley Lodge.

23. The soils have a sandy loam texture over sandy loam and sandy clay loam to depth with few to common stones within the profile. The moisture balance places these soils in Grade 2. Occasionally there are lenses of loamy sand, sand and clay loam in the lower subsoil.

24. The main limitation to the agricultural use of this land is soil droughtiness.

#### *Subgrade 3a*

25. Land of good quality occupies 35.3 hectares (41%) of the site area and is mapped in the centre, north and east of the site. The soils have a sandy loam texture over loamy sand and sand to depth. Occasionally there are lenses of sandy clay loam and sandy loam in the subsoil. The moisture balance places these soils in Subgrade 3a.

26. The main limitation to the agricultural use of this land is soil droughtiness.

### *Subgrade 3b*

27. Land of moderate quality occupies 35.9 hectares (42%) of the site area and is found in the south west and east of the site.

28. In the south west the soils have a clay loam texture overlying clay. The depth to gleying and the slowly permeable layer place these soils in Wetness Class IV. In the low lying area of the eastern part of the site the soil has either an organic clay loam or peaty topsoil over either a peaty subsoil to depth or peaty subsoil and organic silt loam to depth. The depth to gleying and waterlogging places in these soils in Wetness Class IV.

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

### *Other Land*

30. Other land occupies 2.1 hectares (2%) of the site area and includes the A528 road and farm buildings at Wackley Lodge.

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## SOURCES OF REFERENCE

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*1: 63 360 Scale*.  
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Meteorological Office (1989) *Climatological Data for Agricultural Land Classification*.  
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