

**FYLDE BOROUGH LOCAL PLAN**

**East of Carr Lane  
Kirkham**

**Agricultural Land Classification  
ALC Map and Report  
December 1998**

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**AGRICULTURAL LAND CLASSIFICATION REPORT**  
**FYLDE BOROUGH LOCAL PLAN**  
**East of Carr Lane, Kirkham**

**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 6.9 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the north east of Kirkham, centred on grid reference SD 434 322. The site is bounded to the west by Carr Lane, to the south west by residential development, and by agricultural land on all other sides.
2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in December 1998 by the Resource Planning Team of the Farming and Rural Conservation Agency (FRCA)- 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 grass.

**SUMMARY**

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10000 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	-	-	-
3a	2.5	36	36
3b	4.4	64	64
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	-	N/A	-
<b>Total surveyed area</b>	<b>6.9</b>	<b>100</b>	<b>-</b>
<b>Total site area</b>	<b>6.9</b>		<b>100</b>

7. The agricultural land on this site has been classified as Subgrade 3a (good quality) and Subgrade 3b (moderate quality). The key limitations to the agricultural use of this land are soil wetness and gradient.

8. Good quality land is found in the south east of the site. The soils commonly comprise either a sandy clay loam or a sandy loam topsoil overlying a variety of subsoil textures including sandy clay loam, sandy loam, loamy sand and sand, passing to a sandy clay loam at depth.

9. Moderate quality land is found throughout the majority of the site. The soils commonly comprise either a medium clay loam or a heavy clay loam topsoil, overlying a silty clay loam or clay subsoil. Occasionally peaty subsoils are present. Gradient is limiting in the east of the site, where there are slopes of between 7° and 11° falling northwards to a drain at the site boundary.

## 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.

11. 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	SD
Altitude	m, AOD	
Accumulated Temperature	day°C (Jan-June)	1424
Average Annual Rainfall	mm	941
Field Capacity Days	days	209
Moisture Deficit, Wheat	mm	80
Moisture Deficit, Potatoes	mm	65
Overall climatic grade	N/A	Grade 1

12. 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.

13. 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.

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

### **Site**

15. The site lies at an altitude of 13 metres AOD. The topography of the site is generally flat in nature with a gentle rise in the south east corner of the site which extends towards the site boundary.

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

17. Gradient is limiting in the east of the site, where there are slopes of between 7° and 11° falling northwards to a drain at the site boundary.

### **Geology and Soils**

18. The solid geology of the area comprises of Kirkham Mudstone with Singleton Mudstone in the south eastern corner of the site - British Geological Survey (1982). The drift geology of the site comprises of Freshwater Alluvium with Sand and Gravel in the south eastern corner of the site - British Geological Survey (1971)

19. The soils that have developed on this geology are generally of a clay loam topsoil passing to clay loam and peaty subsoils. In the south eastern corner of the site, the soils have a sandier texture.

### **Agricultural Land Classification**

20. 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.

#### *Subgrade 3a*

21. Land of good quality occupies 2.5 hectares (36%) of the site area.

22. The soils commonly comprise either a sandy clay loam or a sandy loam topsoil overlying a variety of subsoil textures including sandy clay loam and loamy sand. Occasionally sandy loam and sand subsoils are present. The depth to gleying and absence of a slowly permeable layer place these soils in Wetness Class III.

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

#### *Subgrade 3b*

24. Land of moderate quality occupies 4.4 hectares (64%) of the site area.

25. The soils commonly comprise either a medium clay loam or a heavy clay loam topsoil, overlying a silty clay loam or clay subsoil. Occasionally peaty subsoils are present.

The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV. At the time of the survey surface water was present in hollows throughout the area.

26. Gradient is limiting in the east of the site, where there are slopes of between 7° and 11° falling northwards to a drain at the site boundary.

27. The main limitations to the agricultural use of this land are soil wetness and gradient.

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## **SOURCES OF REFERENCE**

British Geological Survey (1982) Sheet 75, Preston, Solid Edition.  
1:50 000 Scale.  
BGS: London.

British Geological Survey (1971) Sheet 75, Preston, Drift Edition.  
1:63 360 Scale.  
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