WEST LANCASHIRE LOCAL PLAN
OBJECTION 0651/005
Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT WEST LANCASHIRE LOCAL PLAN Objection 061/005

INTRODUCTION

- 1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 12.2 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the south of Ormskirk. The survey was in connection with the West Lancashire Local Plan.
- 2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in September 1997 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 majority of the agricultural land on this site was under cereals and sugar beet, with the remainder being fallow.

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	7.9	65	65
3a	-	- 1	-
3b	4.3	35	35
4	-		=
5	-	- 1	-
Agricultural land not surveyed	-	N/A	-
Other land	-	N/A	-
Total surveyed area	12.2	100	
Total site area	12.2	-	100

- 7. The agricultural land on this site has been classified as Grade 2 (very good quality) and Subgrade 3b (moderate quality). The key limitations to the agricultural use of this land are soil wetness and soil droughtiness.
- 8. The area of very good quality land is located in the east and west of the site. The soils have either a sandy loam or a sandy clay loam topsoil overlying loamy sand and sand. Occasionally silty clay may be encountered at depths below 80 cm.
- 9. The area of moderate quality land is mapped in the centre of the site. The soils in this area have a sandy clay loam topsoil overlying a gleyed and slowly permeable clay subsoil.

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).

Factor	Units	Values
Grid reference	N/A	SD 414 073
Altitude	m, AOD	50
Accumulated Temperature	day°C (Jan-June)	1393
Average Annual Rainfall	mm	927
Field Capacity Days	days	211
Moisture Deficit, Wheat	mm	77
Moisture Deficit, Potatoes	mm	61
Overall climatic grade	N/A	Grade 1

Table 2: Climatic and altitude data

- 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 50 to 55 metres AOD. The land rises from the east of the site towards the west.
- 16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
- 17. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

- 18. The solid geology of the area is comprised of Bunter Sandstone. This is overlain with deposits of boulder clay and Shirdley Hill Sand British Geological Survey (1977).
- 19. The soils that have developed on this geology are generally of a sandy clay loam texture over clay or sand to depth.

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.

Grade 2

- 21. Land of very good quality occupies 7.9 hectares (65%) of the site area and is found in the west and east of the site.
- 22. In the west of the site the soil has a sandy clay loam texture over loamy sand and sand to depth with few or no stones within the profile. Occasionally silty clay may be found below 80cm in depth. These soils are placed in Wetness Class I, which combined with the topsoil texture and field capacity day figure gives a classification of Grade 2.
- 23. In the east of the site the soil has a sandy loam texture over loamy sand and sand. The moisture balance places these soils in Grade 2.
- 24. The main limitations to the agricultural use of this land include soil wetness and soil droughtiness.

Subgrade 3b

- 25. Land of moderate quality occupies 4.3 hectares (35%) of the site area and is found in the centre of the site.
- 26. The soil has a sandy clay loam texture which lies directly over clay. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV.

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

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SOURCES OF REFERENCE

British Geological Survey (1977) Sheet 84, Wigan 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.

MAFF: London.

Meteorological Office (1989) Climatological Data for Agricultural Land Classification. Meteorological Office: Bracknell.