WEST LANCASHIRE LOCAL PLAN Objection 0583/5 Agricultural Land Classification ALC Map and Report July 1997

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AGRICULTURAL LAND CLASSIFICATION REPORT WEST LANCASHIRE LOCAL PLAN Objection 0583/5

INTRODUCTION

1. This report presents the findings of a detailed, Agricultural Land Classification (ALC) survey on 59.9 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located at Burscough Airfield, 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 July 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 agricultural land on this site was under a variety of crops including grass, potatoes, turnips and wheat.

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.

Grade/Other land	Area (hectares)	% surveyed area	% site area
1	<u> </u>		
2	8.2	18	14
3a	30.0	65	50
3b	7.9	17	13
4	-	-	-
5	-	-	-
Agricultural land not		N/A	
surveyed	-		-
Other land	13.8	N/A	23
Total surveyed area	46.1	100	
Total site area	59.9	-	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 limitations to the agricultural use of this land include topsoil texture, soil wetness and soil droughtiness.

8. The area of very good quality land occurs in two distinct areas, one is in the centre of the site and the other is in the south east of the site. The soil has either a sandy loarn or a loarny sand texture over loarny sand and sand.

9. The area of good quality land is mapped over a large proportion of the site. The soil in this area has a sandy loam texture over sand and clay at depth.

10. The area of moderate quality land is found in the north and east of the site adjacent to the main runway. The soil has a sandy loam texture over loamy sand and clay to depth.

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 425 110
Altitude	m, AOD	25
Accumulated Temperature	day°C (Jan-June)	1420
Average Annual Rainfall	mm	924
Field Capacity Days	days	209
Moisture Deficit, Wheat	mm	80
Moisture Deficit, Potatoes	mm	65
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.

Site

15. The relatively level site lies at an altitude of 21 to 29 metres AOD.

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 Shirdley Hill Sand - British Geological Survey (1977).

19. The soils that have developed on this geology are generally of a sandy loam texture over sand or clay at 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 8.2 hectares (14%) of the site area and is found in two distinct areas.

22. The soil has either a sandy loam or a loamy sand texture over loamy sand and sand to depth, with few or no stones within the profile. Occasionally clay may be present at depths below 80cm. The depth to gleying places these soils in either Wetness Class I or II.

23. The main limitation to the agricultural use of this land is either topsoil texture or soil wetness.

Subgrade 3a

24. Land of good quality occupies 30.0 hectares (50%) of the site area and is found over a large proportion of the site.

25. The soil has a sandy loam texture over loamy sand, sand and clay. The depths to gleying and the slowly permeable layer places these soils in Wetness Class III.

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

Subgrade 3b

27. Land of moderate quality occupies 7.9 hectares (13%) of the site area and is found in the north and east of the site adjacent to the main runway.

28. The soil has a sandy loam texture overlying loamy sand and clay. The depths to gleying and the slowly permeable layer place these soils in Wetness Class IV. The soils adjacent to the main runway exhibit signs of soil disturbance such as man made objects and clay mixing.

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

Other Land

30. Other land occupies 13.8 hectares (23%) of the site area and includes hangars, runways and an area in the north east of the site used for car boot sales.

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SOURCES OF REFERENCE

British Geological Survey (1977) Sheet 84, Wigan Solid and Drift Edition. 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.

MAFF: London.

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