# WEST LANCASHIRE LOCAL PLAN
## Objection 0630/011
## Agricultural Land Classification
## ALC Map and Report
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# AGRICULTURAL LAND CLASSIFICATION REPORT
# WEST LANCASHIRE LOCAL PLAN
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## INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 16.3 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the south east of Skelmersdale and west of the Pimbo Industrial Estate. 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 and August 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 cereals and grass, with some of the land in the west remaining 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 | 11.9 | 79 | 73 |
| 3a | - | - | - |
| 3b | 3.1 | 21 | 19 |
| 4 | - | - | - |
| 5 | - | - | - |
| Agricultural land not surveyed | - | N/A | - |
| Other land | 1.3 | N/A | 8 |
| Total surveyed area | 15.0 | 100 | - |
| Total site area | 16.3 | - | 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 climate and soil wetness.

8. The area of very good quality land is located in the centre and west of the site. The soil has a peaty texture over either peat or sand.

9. The area of moderate quality land is mapped in the east of the site. The soils in this area have a sandy clay loam topsoil overlying a gleyed and slowly permeable clay loam and 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).

Table 2: Climatic and altitude data

| Factor | Units | Values |
|---|---|---|
| Grid reference | N/A | SD 493 033 |
| Altitude | m, AOD | 65 |
| Accumulated Temperature | day°C (Jan-June) | 1376 |
| Average Annual Rainfall | mm | 950 |
| Field Capacity Days | days | 220 |
| Moisture Deficit, Wheat | mm | 72 |
| Moisture Deficit, Potatoes | mm | 55 |
| Overall climatic grade | N/A | Grade 2 |

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 (ATO, 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 a climatic limitation. The site is climatically limited to Grade 2.

## Site

15. The site lies at an altitude of approximately 65 to 70 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 Westphalian Sandstones. This is overlain with deposits of boulder clay, peat and Shirdley Hill Sand - British Geological Survey (1977).

19. The soils that have developed on this geology are generally of a peaty texture over peat 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 11.9 hectares (73%) of the site area and is found in the centre and west of the site.

22. In the west of the site the soil has a loamy peat texture over peat to depth with few or no stones within the profile. These soils are in either Wetness Classes II or III.

23. In the centre of the site the soil has a peaty sand texture over sand to depth with few or no stones within the profile. These soils are in Wetness Class II.

24. The main limitations to the agricultural use of this land are either climate (where soils fall into Wetness Class II) or soil wetness.

*Subgrade 3b*

25. Land of moderate quality occupies 3.1 hectares (19%) of the site area and is found in the east of the site.

26. The soil has a sandy clay loam texture which overlies clay loam and 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.

*Other Land*

28. Other land occupies 1.3 hectares (8%) of the site area and includes a trackway and scrub.

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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.