

**WEST LANCASHIRE LOCAL PLAN
Objection 0742
Agricultural Land Classification
ALC Map and Report
July 1997**

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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 15.8 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located approximately 4km south west of Junction 3 on the M58 motorway. 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 June and 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 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	-	-	-
3a	12.8	97	81
3b	0.4	3	3
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	N/A	-
Other land	2.6	N/A	16
Total surveyed area	13.2	100	-
Total site area	15.8	-	100

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 soil droughtiness.

8. The area of good quality land is located over the majority of the site. The soils have either a loamy sand or a sandy loam topsoil overlying sand and clay to depth.

9. The area of moderate quality land is mapped in a lower lying area in the north of the site. The soil in this area has a loamy sand topsoil overlying sand and a gleyed and slowly permeable clay lower 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 438 011
Altitude	m, AOD	40
Accumulated Temperature	day°C (Jan-June)	1406
Average Annual Rainfall	mm	885
Field Capacity Days	days	208
Moisture Deficit, Wheat	mm	80
Moisture Deficit, Potatoes	mm	66
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 relatively level site lies at an altitude of approximately 40 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 either of a loamy sand or sandy loam texture over sand and clay 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.

Subgrade 3a

21. Land of good quality occupies 12.8 hectares (81%) of the site area and extends across the majority of the site.
22. The soil has either a loamy sand or a sandy loam texture over loamy sand and sand to a depth of between 45 and 100 cm. Below the sand a thin band of stones marks the sharp change in texture to the slowly permeable clay. These soils are placed in Wetness Class III. There are isolated borings where the moisture balance places these soils in Subgrade 3a.
23. The main limitations to the agricultural use of this land are soil wetness and soil droughtiness.

Subgrade 3b

24. Land of moderate quality occupies 0.4 hectares (3%) of the site area and is found in a low lying area in the north of the site.
25. The soil has a loamy sand texture overlying sand and clay. The depth to gleying and the slowly permeable layer place these soils in Wetness Class IV.
26. The main limitation to the agricultural use of this land is soil wetness.

Other Land

27. Other land occupies 2.6 hectares (16%) of the site area and includes housing, trackway and buildings associated with a redundant nursery and a stockpile of earth and rubble in the east of the site connected to the landfill tip south of the site.

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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.