GOSPEL END ROAD, GOSPEL END SEDGLEY

Agricultural Land Classification ALC Map and Report November 1997

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AGRICULTURAL LAND CLASSIFICATION REPORT GOSPEL END ROAD, GOSPEL END SEDGLEY

INTRODUCTION

- 1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 12 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located south of the A463, between Gospel End Village and Sedgley in the West Midlands. The survey was in connection with a proposed cemetery.
- 2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in November, 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 grass and used for horse grazing.

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
2 3b	11.6 0.4	97	97 3
Total surveyed area	12.0	100	•
Total site area	12.0	-	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, gradient, and soil wetness.

- 8. The majority of the area is classified as very good quality agricultural land. The soils commonly comprise a clay loam topsoil overlying a sandy clay loam upper subsoil passing to heavy clay loam and occasionally clay at depth.
- 9. The area of moderate quality agricultural land is mapped on sloping land towards the south west of the site. Gradients of between 7° and 11° occur in this area.

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 5 km grid datasets using standard interpolation procedures (Meteorological Office, 1989).

Factor Units Values SO 905 934 Grid reference N/A m, AOD Altitude 160 day°C (Jan-June) Accumulated Temperature 1306 Average Annual Rainfall 706 mm Field Capacity Days 162 days Moisture Deficit, Wheat 91 mm 77 Moisture Deficit, Potatoes mm Overall climatic grade N/A 2

Table 2: Climatic and altitude data

- 12. The climatic criteria are considered first when classifying land because 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 the site is climatically Grade 2.

Site

15. The site lies at an altitude of 155 to 170 metres AOD. The land is undulating in character and rises up to the east and west from a lowest point at the south of the site.

- 16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
- 17. Gradient imposes limitations to the agricultural use of land in the south western side of the site.
- 18. Microrelief and flooding do not impose any limitations on the agricultural use of this land.

Geology and Soils

- 19. The solid geology of the area is comprised of Carboniferous Upper Coal Measures (Red Marls, Sandstones and Conglomerates) British Geological Survey (1975). The is no overlying drift geology.
- 20. The soils that have developed on this geology are generally of a clay loam topsoil texture overlying a clay loam upper subsoil, passing to heavy clay loam with occasional sandy lenses.

Agricultural Land Classification

21. 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

- 22. Land of very good quality occupies 11.6 hectares (97 %) of the site area and covers the majority of the site.
- 23. The soil has either a medium clay loam or sandy clay loam topsoil texture over either a medium clay loam or sandy clay loam upper subsoil, passing to heavy clay loam, with no stones within the profile. Sandy lenses may occur within the heavy clay loam subsoils. These soils are placed in Wetness Class I and, combined with a field capacity days figure of 162 and a sandy clay loam or medium clay loam topsoil texture, are Grade 1. However there is an overall climate limitation of Grade 2, therefore this land cannot be classified higher than Grade 2.
- 24. Isolated borings occurred within this area where gleying was noted within 40 cm of the surface and/or the subsoil went on to slowly permeable clay. The depth to gleying and the slowly permeable layer place the soil in Wetness Class 2.
- 25. The main limitations to the agricultural use of this land are climate and soil wetness.

SubGrade 3b

- 26. Land of moderate quality occupies 0.4 hectares (3 %) of the site area and occurs where the ground rises more steeply in the south west of the site. Gradients of between 7° and 11° were noted on this land.
- 27. The main limitation to the agricultural use of this land is gradient.

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SOURCES OF REFERENCE

British Geological Survey (1975) Sheet 167, Dudley, 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.