

**Agricultural Land Classification  
ALC Map and Report**

**York City F C  
Playing Fields  
August 1997**

**Resource Planning Team  
Northern Region  
FRCA, Leeds**

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# AGRICULTURAL LAND CLASSIFICATION REPORT

## YORK CITY FC PLAYING FIELDS

### INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of 8.3 ha of land about 10 km north of York just west of the B1363 York to Helmsley road. The field survey work was carried out in July 1997.
2. The survey was carried out by the Farming and Rural Conservation Agency (FRCA) for the Ministry of Agriculture, Fisheries and Food (MAFF), in connection with the proposal to develop the site into training facilities for York City FC.
3. The work was conducted by members of the Resource Planning Team in the Northern Region of FRCA. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I.
4. At the time of survey the land on the site was mostly under grass which was managed as sports playing fields. The application area also includes an access track connecting the site with the B1363 and a small area of hard standing which lies in the north of the site.

### SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:5,000. It is accurate at this scale but 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			
3b	7.8	100	94
4			
5			
Agricultural land not surveyed			
Other land	0.5	N/A	6
Total surveyed area	7.8	100	-
Total site area	8.3	-	100

7. The fieldwork was conducted at an average density of one boring per hectare. A total of 8 borings and one soil pit were described.

8. All of the agricultural land falls in Subgrade 3b. The soils are poorly drained with medium to heavy-textured topsoils overlying slowly permeable clayey subsoils. Soil wetness and topsoil workability limitations are the factors which restrict this land to Subgrade 3b.

9. Other land occurs in the north of the site and consists of an access road and an area of hard standing.

## 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 the standard interpolation procedures (Met. Office, 1989).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SE 588 601
Altitude	m, AOD	16
Accumulated Temperature	day°C (Jan-June)	1381
Average Annual Rainfall	mm	629
Field Capacity Days	days	144
Moisture Deficit, Wheat	mm	104
Moisture Deficit, Potatoes	mm	95
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 on 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 on ALC grade.

### Site

15. The land on the site is level at an altitude of 16 m AOD.

## **Geology and soils**

16. The site is underlain by Triassic Sandstones over which lie thick deposits of lacustrine clay. Soils are developed from these clay deposits and typically contain medium or heavy clay loam or silty clay loam topsoil over clayey subsoil at 25 to 35 cm depth. Subsoils are gleyed and slowly permeable. Profiles are Soil Wetness Class IV and correspond with the Foggathorpe 2 association as described by the Soil Survey and Land Research Centre.

## **AGRICULTURAL LAND CLASSIFICATION**

17. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1, page 1.

### **Subgrade 3b**

18. Except for the small area of hardstanding and access road to the site all land on the site is ALC Subgrade 3b. Topsoils are medium or heavy clay loam or silty clay loam over clayey, gleyed, slowly permeable subsoils. Profiles are Soil Wetness Class IV and the land suffers a significant soil wetness and workability limitation.

### **Other land**

19. This includes a small area of hard standing and the site access road.

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## SOURCES OF REFERENCE

British Geological Survey (1983) *Sheet No. 63, Solid and Drift Geology 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.

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

Soil Survey of England and Wales (1983) *Soils of England and Wales, Sheet 1. 1:250,000 scale*  
SSEW: Harpenden.

Soil Survey of England and Wales (1984) *Soils and their Use in Northern England*  
SSEW: Harpenden

## APPENDIX I

### DESCRIPTIONS OF THE GRADES AND SUBGRADES

#### **Grade 1: Excellent Quality Agricultural Land**

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

#### **Grade 2: Very Good Quality Agricultural Land**

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

#### **Grade 3: Good to Moderate Quality Land**

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

#### **Subgrade 3a: Good Quality Agricultural Land**

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

#### **Subgrade 3b: Moderate Quality Agricultural Land**

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

#### **Grade 4: Poor Quality Agricultural Land**

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

#### **Grade 5: Very Poor Quality Agricultural Land**

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.