HIGHFIELDS, CAMBS AGRICULTURAL LAND CLASSIFICATION SUPPLEMENT TO MAFF PROOF P11

1. INTRODUCTION

- 1.1 This additional survey area lies to the south of the original site, to the south west of the village of Hardwick. It extends to 62.4 ha in size and was inspected by MAFF in February 1990. At the time of the survey the land was in arable use, typical crops include winter cereals and oil seed rape.
- 2. PHYSICAL FACTORS AFFECTING LAND QUALITY

Climate

2.1 Climate data for the site was obtained from the published agricultural climatic dataset (Met Office, 1989). This indicates that for the site's mid range altitude (55m AOD) the annual average rainfall is 562 mm (22.1 inches). This also indicates that field capacity days are 94 and moisture deficits are 116 mm for wheat and 110 mm for potatoes. These climatic characteristics do not impose any climate limitation on the ALC grading of the survey site.

Altitude and Relief

2.2 The land surveyed is gently undulating and rises from 45m to 65m AOD. The highest ground occurring to the north of the site with gentle falls to the south, west and east. Gradient and altitude do not constitute limitations to the ALC grade.

Geology and Soils

2.3.1 The published geology and soils information for the Highfields/Hardwick area, described in MAFF's ALC Proof No (P11) (paragraphs 3.3 and 3.4), applies also to this additional area.

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- 2.3.2 The soils comprise the calcareous variants of the soils described in paragraph 3.4.1 of MAFF's Proof No (P11).
- 3. AGRICULTURAL LAND CLASSIFICATION
- 3.1 The definitions of the Agricultural Land Classification (ALC) grades are included in Appendix 1 of MAFF's Proof No (P11).
- 3.2 The table below shows the breakdown of ALC grades for the additional survey area.

	AGRICULTURAL LANI	O CLASSIFICATION
Grade	ha	010
2	5.1	8.2
3a	57.3	91.8
TOTAL	62.4	100

3.3 The table below shows the ALC grades for the original and additional survey areas together. The areas for non agricultural/urban land uses have been amended from those shown in MAFF's Proof P11 following a detailed resurvey of the area of fragmented land use along the northern and western part of the site. This resurvey identified various small parcels of agricultural land in areas previously categorised as "non agricultural". These parcels are listed as "agricultural land not surveyed" in the table.

AGRICULTURAL LAND CLASSIFICATION

Grade	ha	010
2	17.5	5.5
3a	234.7	74.4
3b	10.0	3.2
Agricultural land		
Not Surveyed	6.6	2.1
Non Agricultural/		
Urban land	46.6	14.8
TOTAL	315.4	100

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4. GRADE 2

4.1 Two small areas of land graded 2 have been mapped in valley features at the southern and western edges of the site. Soils are slightly droughty and typically comprise calcareous heavy clay loam or clay topsoils over calcareous clays which overlie gleyed chalky clays at depth. Soil profile pit observations indicate that these soils have slowly permeable horizons present at depth in the subsoils (ie. wetness class II). This land is consequently limited by minor wetness and workability imperfections which derive from the reduced subsoil permeability at depth combined with the heavy topsoil textures. This together with the slight risk of drought, in this low rainfall area, excludes the land from grade 1.

5. SUBGRADE 3a

5.1 The majority of the site has been graded 3a. Soils typically comprise calcareous clay or heavy clay loam topsoils which are mainly underlain by chalky boulder clay or occasionally calcareous clay, passing into chalky boulder clay at depth. The subsoils are slowly permeable (wetness class III) and topsoils are heavy; these factors combine to impose a moderate limitation to the agricultural potential of this land. Thus the land is restricted to subgrade 3a (good quality agricultural land).

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