46/189C

AGRICULTURAL LAND CLASSIFICATION
WARBOYS, CAMBRIDGESHIRE

The site at Warboys was surveyed by the Resource Planning Group in October 1989. The site is situated on the western edge of Warboys and is bounded by the B1040 (Ramsey Road and Church Street) to the north and south. Land to the west of the site is in agricultural use. The site covers about 38 hectares and was all in agricultural use at the time of survey with mainly winter sown cereal and oilseed rape.

Climate

Average annual rainfall in the vicinity of the site is about 560 mm, with July, August and November being the wettest months of the year and a drier period from February to April. The accumulated temperature above 0°C for the period January to June (a measure of the relative warmth of a locality) is 1434 day °C. The combination of rainfall and accumulated temperature indicates that there is no overall climatic limitation on the agricultural use of this site. The median duration of field capacity is 93 days and the balance between summer rainfall and evapotranspiration creates moisture deficits of 120 mm for winter wheat and 116 mm for potatoes. The growing season extends to about 250 days from late March to the end of November and the mean date of the last frost is late April.

Topography

Altitude ranges from 20m along the drainage ditch in the north of the site to 30 m in the centre of the site and in the extreme north. The land is level or gently sloping and altitude and relief do not pose any limitations to the agricultural use of the land.

Geology

The solid geology in this area comprises Oxford clay and Kellaway Beds and this is overlain by drift deposits of Boulder Clay in the western half of the site. The soils derived from this geology are heavy clay loams and clays, often calcareous and sometimes having soft chalky deposits within the profile.

Agricultural Land Classification

Grade 2. A small area of Grade 2 land has been mapped in the south of the site. Soils have medium clay loam topsoils over clay loam and sandy clay loam over clay subsoils. Gleying and slowly permeable layers occur at various depths below 30 cm, but because of the lighter texture, and in some cases calcareous nature, of the topsoils these soils

are Grade 2. The soils are stoneless or only slightly stony with occasional angular and rounded flints of medium size. This is very good quality agricultural land with minor limitations to its use. Individual auger borings of Grade 2 quality were found elsewhere on the site, notably in the centre (to the west of Redhouse Farm) and on the western edge but it was not possible to map these separately.

Grade 3a. Most of the site has been mapped as Grade 3a. Soils are mainly heavy clay loams over clay at about 30 cm. The subsoils showed signs of wetness and are slowly permeable below 30 cm restricting most of the soils to wetness class III. The heavy topsoils are mostly calcareous and thus are more workable and better structured than similar non-calcareous soils. Auger borings of Grade 2 do occur within the area mapped as Grade 3a.

A few profiles are limited to Grade 3a by droughtiness, augering was limited to 45-50 cm depth by chalky stony layers within the profile. Two profiles with heavy but not calcareous topsoils were found immediately adjacent to the ditch in the north of the site but it was not possible to map a very small area OF Grade 3b separately. Most of this site is good Grade 3a land with only moderate limitations to its use.

	Area of land in each grade hectares	% of total area	% of agricultural area
Grade 2	2.6	7%	7%
Grade 3a	34.5	91	93%
NA	0.9	2%	-
Total	38.0	100%	100%

Resource Planning Group
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