AGRICULTURAL LAND CLASSIFICATION

BUCK BECK, NEW WALTHAM

Proposed Integrated Village

MAFF
Leeds RO

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BUCK BECK NEW WALTHAM, HUMBERSIDE

1. INTRODUCTION AND SITE CHARACTERISTICS

This site is located around grid reference TA 278058 approximately 4 km south of Grimsby town centre. It covers 72.6 hectares, nearly all of which is in agricultural use.

Survey work was carried out in August 1990 when soils were examined by hand auger borings at 100 metre intervals pre-determined by the National Grid. A Soil Profile Pit was also dug to assess soil structural characteristics and gley morphology.

All land quality assessments were made using the methods described in the "Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).

1.1 LAND USE

With the exception of a small grass paddock near Low Farm, all agricultural land was in arable use during the 1989-90 season.

Non-agricultural land consists of farm buildings at Low Farm.

1.2 CLIMATE

Average Annual Rainfall (AAR) is approximately 621 mm. Accumulated temperature above 0°C between January and June (ATO) is 1396 day °C and the land is at field capacity for 137 days a year.

These temperature and rainfall values indicate that there is no overall climatic limitation on ALC grade.

Summer Moisture Deficits of 111 mm for winter wheat and 104 mm for potatoes indicate a slight drought risk for most soils on the site. Droughtiness is an overriding limitation on ALC grade only on soils with little or no wetness limitation.

1.3 RELIEF

The site is virtually level at mean altitude of 10 metres above Ordnance Datum.

1.4 GEOLOGY AND SOILS

Site geology consists of calcareous Boulder Clay overlain by a variable coarse to fine loamy drift. Soils formed over this are stoneless to very slightly stony and have coarse to fine loamy topsoils and upper subsoils passing into gleyed and slowly permeable boulder clay within a metre of the surface. Boulder clay occurs close to the surface around Low and Beck Farms where the overlying drift is virtually absent. Topsoils here typically consist of non-calcareous fine loamy to clayey topsoils over gleyed and slowly permeable clay.

2. AGRICULTURAL LAND CLASSIFICATION GRADES

The ALC grades occurring on this site are as follows:-

GRADE/SUBGRADE	HECTARES	PER CENT OF TOTAL SITE AREA
2	16.2	22
3a	48.5	67
3b	7.3	10
Farm Buildings	0.6	1
TOTAL	72.6	100%

GRADE 2

Two areas of Grade 2 occur near the centre of the site. Soils fall within Wetness Class II, or occasionally III, and consist of stoneless to very slightly stony sandy loam, sandy clay loam or clay loam topsoils and upper subsoils over gleyed and slowly permeable boulder clay. Slight soil droughtiness is the overriding limitation on ALC grade along with a slight wetness and workability restriction in a few places where the topsoil is heavier than normal.

SUBGRADE 3a

This is the main grade on the site. Soils consist usually of non calcareous sandy clay loam or medium clay loam topsoils and gleyed upper subsoils which pass into slowly permeable Boulder Clay at depth. All profiles fall within Wetness III and are limited by soil wetness and topsoil workability problems more severe than as the adjoining grade 2 land.

SUBGRADE 3b

Two small areas of subgrade 3b land occur near Low and Beck Farms. Soils consist of non calcareous heavy clay loam or clay topsoils over gleyed and slowly permeable Boulder Clay to depth.

All profiles fall within Wetness Classes III or IV and are limited to subgrade 3b by wetness and workability problems.

FARM BUILDINGS

This category includes the various farm buildings at Low Farm.

Resource Planning Group
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MAP