AGRICULTURAL LAND CLASSIFICATION

# ROOSECOTE (AREA 3) BARROW IN FURNESS OUTER BOROUGH PLAN

ADAS

LEEDS REGIONAL OFFICE

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Report on land at Roosecote (Area 3), Barrow in Furness Outer Borough Plan

### 1.1 INTRODUCTION

Sixty hectares of land around National Grid Reference SD 228693, about 3 km east of Barrow town centre, were surveyed in late May 1989. Soils were examined by hand auger borings at 58 points predetermined by the National Grid. Soil profile pits were dug where necessary to make more detailed assessments of soil morphology.

Land quality assessments were made using the "Revised guidelines and criteria for grading the quality of agricultural land" (MAFF, 1988).

### 1.2 LAND USE

Agricultural land uses are split evenly between grass and arable (including cereals and root crops). There is also a considerable area of non agricultural land containing playing fields and derelict areas.

#### 1.3 CLIMATE AND RELIEF

The average annual rainfall is estimated to be 1032 mm and the median accumulated temperature above 0°C (January to June) is 1398 day°C. The land is at field capacity for 230 days a year. Temperature and rainfall limit the site to no better than grade two. Roosecote, however, is only a few km from the west coast and is exposed to the prevailing westerly winds. Local experience indicates that strong winds increase the lodging risk in cereals and are likely to cause stress in cattle. For these reasons an additional local climatic limitation of subgrade 3a has been applied to the whole area.

Relief varies from gentle to moderate or strong and is the overriding limitation on ALC grade in a number of places.

Altitude ranges from below 20 m a.o.d. at Roosecote to over 60 m a.o.d. west of the village of Stank.

## 1.4 GEOLOGY, SOILS AND DRAINAGE

South west of Old Holbeck soils are formed on freely drained glaciofluvial sands. Profiles contain no slowly permeable horizon and fall within Wetness Class I. Around Old Holbeck where soils are moderately stony, topsoils consist of loamy medium sand over similar or lighter subsoils.

North of Old Holbeck and to the west of Stank stony, reddish boulder clay is widespread and soils consist of stony medium clay loam topsoils over clayey subsoils. The subsoil horizons are slowly permeable and most soils in this area fall within Wetness Class IV.

### 1.5 AGRICULTURAL LAND CLASSIFICATION

Grade	Hectares	% of total area
3a	15.6	26.0
3b	29.2	48.7
4	5.1	8.5
5	1.5	2.5
Non Agricultural	8.6	14.3
Total	60.0	<u>100%</u>

## 1.5.1 Subgrade 3a

Land in this subgrade occurs on level or moderately sloping land. Soils are light in texture with a loamy medium sand topsoil and a similar or lighter subsoil. Stoniness is not limiting and all profiles are freely drained thus falling within Wetness Class I. The main factor restricting this land to subgrade 3a is wind exposure.

## 1.5.2 Subgrade 3b

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This subgrade includes the stony light textured soils near Old Holbeck, which are excluded from subgrade 3a by topsoil stoniness, and the heavier, stony boulder clay soils west of Stank, where the limitations are a combination of stoniness and wetness. Also included in this subgrade is the disturbed area north of the dismantled railway and all the land with slopes of 8-11°.

### 1.5.3 Grade 4

Steep slopes are the overriding limitation on all land within this grade. Slopes of 12-18° will severely limit the use of agricultural machinery on land of this type.

### 1.5.4 Grade 5

Slope is again the main limiting factor. All land with slopes of more than 18° is restricted to this grade.

## 1.5.5 Non Agricultural

This category includes playing fields and derelict, or waste ground which could be returned to agricultural use.

Resource Planning Group May 1989