AGRICULTURAL LAND CLASSIFICATION

BARROW-IN-FURNESS

ELLISCALES FARM

Resource Planning Team
ADAS Statutory Group
Wolverhampton

Job No : 041/93
MAFF Ref : EL08/10094

vpralc/sep/jdj

AGRICULTURAL LAND CLASSIFICATION REPORT FOR

BARROW-IN-FURNESS LOCAL PLAN

ELLISCALES FARM

1. SUMMARY

1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC Grades are present :

Sub-grade 3a	14.4 ha	(41.9% of the site)
Sub-grade 3b	3.8 ha	(11.1% of the site)
Grade 4	5.3 ha	(15.4% of the site)
Other land		
Urban	7.6 ha	(22.2% of the site)
Non-Agricultural	2.2 ha	(6.3% of the site)
Agricultural buildings	0.5 ha	(1.3% of the site)
Open Water	0.6 ha	(1.8% of the site)

1.2 The main limitations to the agricultural use of land in Subgrade 3a is soil wetness.

1.3 The main limitation to the agricultural use of land in Sub-grade 3b is soil wetness and soil stoniness.

1.4 The main limitation to the agricultural use of land in Grade 4 is soil depth.

2. INTRODUCTION

2.1 The site was surveyed by the Resource Planning Team in September 1993 at the request of MAFF, in connection with the Barrow-in-Furness Local Plan.

2.2 The survey was undertaken as a detailed grid survey at 1 : 10 000 scale with a minimum auger boring density of 1 per hectare. The survey followed guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of the Land". (MAFF 1988).

2.3 The 34 ha site is situated north of Dalton-in-Furness and is bisected north - south by the A595. The Dalton by-pass runs east-west across the northern portion of the site. Land to the south of the site is in urban use whilst the remaining surrounding land is in agricultural use.

2.4 At the time of survey the site was under permanent grass.

3. CLIMATE

3.1 The following interpolated data are relevant to the site.

Average Annual Rainfall	1181 mm
Accumulated Temperature above 0°C January to June	1339 day °C.

3.2 The above factors limit the climatic grade to 3a.

3.3 Other climatic parameters used in the classification of land include :

Field Capacity Days	261 days
Moisture Deficit, Wheat	58 mm
Moisture Deficit, Potatoes	37 mm

4. SITE

4.1 The assessment of site factors is primarily concerned with the way in which topography influences the use of agricultural machinery. The factors assessed include gradient, micro-relief and flooding.

4.2 Flooding and micro-relief do not impose any limitations on the agricultural use of the site. Gradient is a limitation on the hill slope south of Elliscale Farm and along the southern boundary of the site.

5. GEOLOGY AND SOILS

5.1 The solid geology of the area is Carboniferous Limestone and has been overlain by deposits of boulder clay, (British Geological Survey, sheet 48, Ulverston, 1 : 50 000).

5.2 The soils developed on the boulder clay are typically medium clay loam and silty clay loam over heavy clay loam and clay.

6. AGRICULTURAL LAND CLASSIFICATION

6.1 Subgrade 3a occupies 14.4 ha (41.9%) of the site located south and east of Elliscale Farm and to the west of the A595.

6.1.1 The soils are typically medium clay loam or silty clay loam over heavy clay loam and clay. The soils are not gleyed and there is no slowly permeable layer; they fall into Wetness Class III.

6.1.2 The limitation to the agricultural use of the land is soil wetness.

6.2 Subgrade 3b occupies 3.8 ha (11.1%) of the site over 3 areas; adjacent to Elliscales Quarry, in the north-east corner of the site and around the pond east of Elliscale Farm.

6.2.1 Adjacent to the quarry and in the north-east of the site the soils are typically medium clay loam over heavy clay loam with many large and very large stones encountered close to the surface.

6.2.2 The limitation to the agricultural use of the land in this subgrade is stoniness around the quarry and in the north-east, and wetness around the pond.

6.3 Grade 4 occupies 5.3 ha (15.4%) of the site. It occurs along the northern boundary of the site, and south of Elliscale Farm.

6.3.1 The soils are typically medium clay loams directly overlying limestone bedrock. Bedrock outcrops occasionally.

6.3.2 The main limitation to agriculture in this grade is soil depth.

6.4 Other land includes urban land occupying 7.6 ha (22.2%) of the site as a new road development; non-agricultural land occupying 2.2 ha (6.3%) of the site as site offices for the road development and storage for farm machinery.

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Subgrade	Area (ha)	% of survey area	% of Agricultural land
3a	14.4	41.9	61.3
3b	3.8	11.1	16.2
4	5.3	15.4	22.5
Other Land			
Urban	7.6	22.2	
Non-Agricultural	2.2	6.3	
Agricultural buildings	0.5	1.3	
Open Water	0.6	1.8	
TOTALS	34.4	100.0	100.0

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September 1993