

AGRICULTURAL LAND CLASSIFICATION

**BARROW-IN-FURNESS LOCAL PLAN
THWAITE FLAT**

**Resource Planning Team
ADAS
WOLVERHAMPTON STATUTORY GROUP**

**Job No: 040/93
MAFF Ref: EL08/10094**

**AGRICULTURAL LAND CLASSIFICATION REPORT
BARROW-IN-FURNESS LOCAL PLAN
THWAITE FLAT**

1. SUMMARY

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

Subgrade 3a	1.3 ha	(4.3% of the site)
Subgrade 3b	26.4 ha	(87.7% of the site)
Grade 4	0.3 ha	(1.0% of the site)
Grade 5	0.3 ha	(1.0% of the site)
Urban	1.8 ha	(6.0% of the site)

1.2 The main limitation to the agricultural use of land in subgrades 3a and 3b is soil wetness.

1.3 The main limitation to the agricultural use of land in grades 4 and 5 is slope.

2. INTRODUCTION

2.1 The site was surveyed by the Resource Planning Team in August 1993. An ALC survey was undertaken according to the 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).

2.2 The site consists of 30.1 ha situated 2 Km north-east of Barrow-in-Furness and 1 Km west of Dalton-in-Furness. A disused railway forms the eastern boundary and the A590 Dalton by-pass meets the north-west corner of the site. The land surrounding the site is agricultural.

2.3 The survey was requested by MAFF in connection with the Barrow-in-Furness Local Plan Review.

2.4 At the request of MAFF this was a detailed grid survey at 1:10 000 scale with a minimum auger boring density of 1 per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.

2.5 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	1112 mm
Accumulated temperature above 0°C January to June	1363 day °C

3.2 The average annual rainfall and accumulated temperature limit the climatic grade of the site to grade 2.

3.3 Other relevant climatic data for the site includes;

Field Capacity Days	246 days
Moisture Deficit Wheat	63 mm
Moisture Deficit Potatoes	44 mm

4. SITE

4.1 Limitations imposed by gradient, microrelief and flooding are considered in agricultural land classification.

4.2 Flooding and microrelief are not limitations on this site. Gradient is a limiting factor over a small area in the east of the site sloping down to the disused railway. Gradient limits the land here to grade 4 (0.3ha) and grade 5 (0.3ha).

5. GEOLOGY AND SOILS

5.1 The solid geology of the area comprises Triassic Sandstones. This is overlain by drift deposits of reddish boulder clay, (British Geological Survey, Sheet 58, 50,000).

5.2 Soils developed on the boulder clay consist of medium clay loam topsoils over reddish, clayey subsoils. Stoniness is common in most profiles but is not limiting.

6. AGRICULTURAL LAND CLASSIFICATION

6.1 Subgrade 3a occupies 1.3 ha (4.3%) of the survey area and occurs as a narrow strip on the western side of the site.

6.1.1 These soils typically consist of medium clay loam over heavy clay loam. There is no gleying in the profile and no slowly permeable layer however the Field Capacity Days at the site limit the soils to sub-grade 3a.

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

6.2 Subgrade 3b occupies 26.4 ha (87.7%) of the survey area.

6.2.1 The soils within this subgrade typically consist of medium clay loam over heavy clay loam over clay. The topsoils are gleyed but there is slowly permeable layer.

6.2.2 The main limitation to the agricultural use of this land is soil wetness.

- 6.3 Grade 4 land occupies 0.3 ha (1.0%) of the surveyed area.
- 6.3.1 The average slope in this grade is 16° and gradient is the main limitation to agricultural use of land in this grade.
- 6.4 Grade 5 land occupies 0.3 ha (1.0%) of the surveyed area.
- 6.4.1 The average slope in this grade is 24° and gradient is the main limitation to agricultural use of land in this grade.
- 6.5 Other land on the site consists of part of the recently constructed Dalton by-pass.

6.6 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES.

Grade/Sub grade	Area (ha)	% of survey area	% of agricultural land
3a	1.3	4.3	4.6
3b	26.4	87.7	93.2
4	0.3	1.0	1.1
5	0.3	1.0	1.1
Urban	1.8	6.0	
Totals	30.1	100.0	100.0

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