

AGRICULTURAL LAND CLASSIFICATION
NORTHUMBERLAND MINERALS LOCAL PLAN
LAND AT HEDGELEY HAUGH
NORTHUMBERLAND
OCTOBER 1995

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification (ALC) survey of 23.3 ha of land at Hedgeley Haugh was carried out in October 1995. At the time of survey all the agricultural land on the site was under permanent pasture. 5.0 ha were classified as Grade 2. Soils were well drained and ALC grade was limited by droughtiness and the overall climate of the site.

Most of the site, 16.3 ha, was Subgrade 3b. Soils were well drained but stony. Topsoil stoniness, micro relief and droughtiness limit the ALC grade of this land. A disused rail embankment was graded 4 (0.4 ha).

Remaining land was occupied by a single 1.6 ha block of woodland.



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1. AGRICULTURAL LAND CLASSIFICATION

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MINERALS LOCAL PLAN. LAND AT HEDGELEY HAUGH

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

23.3 ha of land at Hedgeley Haugh were surveyed in detail in October 1995. The site lies between the River Breamish and the unclassified road from Hedgeley Bridge to Beamley. It has a centroid grid reference of NU 065173. Soils were examined by hand auger borings at locations predetermined by the OS National Grid. Supplementary borings were used to check upon and refine grade boundaries. The overall density of borings was 1 per hectare. 4 soil profile pits were dug to examine representative soils in greater detail. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: *Revised guidelines and criteria for grading the quality of agricultural land*" MAFF (1988).

1.2 Land Use and Relief

93% of the site was in agricultural use under permanent pasture at the time of the survey. Woodland occupied the remaining 1.6 ha. Overall the site is level, however, much of the north and west of the site is affected by a complex micro relief pattern relating to old river channels, terraces and levées. These are likely to seriously limit the use of agricultural machinery. Average altitude is 80m A.O.D.

1.3 Climate

| | |
|---|---------------|
| Grid Reference | : NU 065173 |
| Altitude (m) | : 80 |
| Accumulated Temperature above 0°C (January - June) | : 1252 day °C |
| Average Annual Rainfall (mm) | : 715 |
| Climatic Grade | : 2 |
| Field Capacity Days | : 193 |
| Moisture Deficit (mm) Wheat | : 81 |
| Moisture Deficit (mm) Potatoes | : 64 |

1.4 Geology, Soils and Drainage

Soils on the site are all derived from river terrace deposits. These have produced moderately stony, loamy coarse sand topsoils over similar or lighter textured moderately stony subsoils. Profiles are well drained (Wetness Class I). An area east of the woodland block contains stoneless sandy loam topsoils and upper subsoils over moderately stony, medium sand lower subsoils. Again these profiles are well drained (Wetness Class I).

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

| <u>Grade/Subgrade</u> | <u>Hectares</u> | <u>Percentage of Total Area</u> |
|------------------------|-----------------|---------------------------------|
| 1 | | |
| 2 | 5.0 | 21 |
| 3a | | |
| 3b | 16.3 | 70 |
| 4 | 0.4 | 2 |
| 5 | | |
| (Sub total) | (21.7) | (93) |
| Urban | | |
| Non Agricultural | | |
| Woodland | 1.6 | 7 |
| Agricultural Buildings | | |
| Open Water | | |
| Land not surveyed | | |
| (Sub total) | (1.6) | (7) |
| TOTAL | 23.3 | 100 |

2.1 Grade 2

5 ha of land east of the block of woodland were mapped as Grade 2. Topsoils and upper subsoils were both a stoneless fine sandy loam or sandy silt loam over moderately to very stony medium sand lower subsoils. Profiles were well drained (Wetness Class I). Slight droughtiness and the overall climate limitation restrict the ALC grade of this land.

2.2 Subgrade 3b

Subgrade 3b covered 16.3 ha of the site. Soils were generally moderately stony, loamy sand topsoils over very stony sand subsoils. All the land was well drained (Wetness Class I). Micro relief was often complex and is likely to limit the efficient use of agricultural machinery. Topsoil stoniness, droughtiness and micro relief limit this land to Subgrade 3b.

2.3 Grade 4

A disused railway embankment was graded 4 due to slope and soil depth limitations.

2.4 Woodland

Woodland occupies 1.6 ha towards the north of the site.

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MAP