

**AGRICULTURAL LAND CLASSIFICATION**

**HAGGERSTON, NORTHUMBERLAND**  
**Proposed Extension to Caravan Park**

ADAS  
LEEDS REGIONAL OFFICE

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**CONTENTS**

1. Agricultural Land Classification

**MAP**

1. Agricultural Land Classification

**AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT  
HAGGERSTON NEAR BERWICK, NORTHUMBERLAND**

**1.1 INTRODUCTION**

The site is located at National Grid Reference **NU 050439** immediately east of the hamlet of Haggerston. It covers an area of **29.8** hectares **93%** of which is in agricultural use.

Survey work was carried out in February 1989 when soils were examined by hand auger borings to a depth of one metre. Borings were made at points predetermined by the National Grid at a density of one boring per hectare. Additional borings were made where necessary to check and refine grade boundaries. Profile pits were dug to collect data on soil morphology and to obtain samples for laboratory analysis.

Land quality assessments were made using the revised guidelines published by MAFF in 1988.

**1.2 CLIMATE AND RELIEF**

Average annual rainfall is approximately **611 mm** and the accumulated temperature above  $0^{\circ}\text{C}$  (January to June) is **1324 day  $^{\circ}\text{C}$** . The site is at field capacity for **149** days a year. None of the soils on the site are subject to any drought limitation.

Haggerston is only **2 km** from the North Sea and therefore likely to be exposed to strong easterly winds. For this reason an overall climatic limitation of grade 2 has been applied.

The site is level or gently undulating at an average altitude of **5 m** a.o.d.

### 1.3 GEOLOGY SOILS AND DRAINAGE

Soils on the lower flatter parts of the site near the railway are formed on fine silty alluvium and stoneless clay. Elsewhere the more undulating land is underlain by boulder clay or glaciofluvial sandy deposits. Soils on the boulder clay are heavy and difficult to cultivate in early spring and contrast sharply with the light easily worked sandy land.

The coarse loamy and alluvial soils fall within wetness classes I or II. The heavier textured boulder clay soils contain a slowly permeable subsoil horizon which impedes drainage and places them in wetness classes III and IV.

### 1.4 LAND USE

Except for one field of grass the agricultural land is in arable use. Non agricultural land consists of small areas of woodland or land around farm buildings. Milkhouse Plantation shown on most maps has been felled fairly recently.

### 1.5 AGRICULTURAL LAND CLASSIFICATION

Grade	Area	% of Agricultural Land Area
2	11.2	40.2
3a	7.6	27.2
3b	9.1	32.6
Non Agricultural	<u>1.9</u>	<u>-</u>
Total	<u>29.8</u>	<u>100</u>

#### 1.5.1 Grade 2

The 3 areas of grade two land contain soils with coarse loamy or silty topsoils over similar subsoils. Drainage is generally good and profiles fall within wetness classes I or II. Slight winter wetness and the overall climatic limitation are the main limitations on ALC grade.

### **1.5.2 Subgrade 3a**

Topsoils are fine loamy or fine silty in texture over a similar upper subsoil. Below about 50 cm depth is a slowly permeable, clayey, lower subsoil which restricts drainage and places these soils in wetness class III. Moderate winter wetness limits this land to subgrade 3a.

### **1.5.3 Subgrade 3b**

The area graded 3b contains the heaviest soils on the site. Topsoils are fine loamy with a slowly permeable subsoil occurring at about 30 cm depth. All profiles are within wetness class IV which, combined with a medium or heavy clay loam topsoil, makes this land difficult to work in spring and restricts it to subgrade 3b.

### **1.5.4 NON AGRICULTURAL**

Fishers Close Plantation and land around Old Ends Farm are classified as non agricultural.

#### **Reference**

Revised guidelines and criteria for grading the quality of agricultural land MAFF (1988).

Resource Planning Group  
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