

AGRICULTURAL LAND CLASSIFICATION  
BERWICK DISTRICT WIDE LOCAL PLAN  
ALC SURVEY OF DEVELOPMENT SITES  
(LAND AROUND SEAHOUSES)  
NORTHUMBERLAND  
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## SUMMARY

Three sites at or near Seahouses were surveyed in detail during February 1995 for the Berwick Borough Wide Local Plan.

Soils were mostly developed from boulder clay drift deposits.

Site 9 Ref S4 /S6 at Seahouses (1.5 ha) contained imperfectly drained soils with a medium clay loam topsoil and upper subsoil over a clayey lower subsoil. Soil wetness limited the ALC grade of all this land to Subgrade 3a.

Site 10 Ref R4 also at Seahouses (2.0 ha) had moderately well drained soils with either a sandy loam or medium clay loam topsoil and upper subsoil. The lower subsoil was clayey and slowly permeable. Slight soil wetness and wind exposure limit the ALC grade of this land.

Site 11 at Beadnall, Ref 4.2-5 contained 11.1 ha of Subgrade 3a land and 9.7 ha of Subgrade 3b land. The Subgrade 3a land was imperfectly drained usually with a medium clay loam or medium sandy loam topsoil. The Subgrade 3b land contains heavy clay loam topsoils. Both these areas of land are limited by soil wetness, the Subgrade 3a land to a lesser extent. The site also contains 0.2 ha of Farm Buildings and 0.4 ha of Non Agricultural land.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON BERWICK BOROUGH WIDE  
LOCAL PLAN, LAND AROUND SEAHOUSES

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

Three sites around Seahouses were surveyed in detail in February 1995. Soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Soil profile pits were dug to examine the soils in greater detail. All land quality assessments were made 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 Geology, Soils and Drainage

All 3 sites are underlain with lower Carboniferous Limestone above which are thick deposits of boulder clay drift. Soils are mostly imperfectly drained (Wetness Class III), typically with a medium clay loam or sandy clay loam topsoil and upper subsoil over a clayey slowly permeable lower subsoil. However Site 10 at Seahouses (Ref R4) contains soils with a slowly permeable layer deeper in the profile and profiles are generally Wetness Class II. Also the low lying land at Beadnall Site 11 (Ref 4.2-5) contains poorly drained soils which are Wetness Class IV.

2.1 AGRICULTURAL LAND CLASSIFICATION REPORT ON SITE 9, SEAHOUSES  
POLICY REF S4/S6

2.1.1 Location

The site has a centroid grid reference of NU 211 324 and is located to the north west of the village of Seahouses.

2.1.2 Land Use and Relief

At the time of survey the site was growing winter cereals. It has an average altitude of 10m AOD with a level to gently sloping relief. Aspect is to the north.

2.1.3 Climate

|                                   |               |
|-----------------------------------|---------------|
| Grid Reference                    | : NU 211 324  |
| Altitude (m)                      | : 10          |
| Accumulated Temperature above 0°C |               |
| ( January - June )                | : 1322 day °C |
| Average Annual Rainfall (mm)      | : 627         |
| Climatic Grade                    | : 1           |
| Field Capacity Days               | : 155         |
| Moisture Deficit (mm) Wheat       | : 100         |
| Moisture Deficit (mm) Potatoes    | : 88          |

A further climatic limitation of Grade 2 is imposed by the increased wind exposure from the North Sea on this coastal site.

#### 2.1.4 AGRICULTURAL LAND CLASSIFICATION - SITE 9

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                      |                 |                                 |
| 3a                     | 1.5             | 100.0                           |
| 3b                     |                 |                                 |
| 4                      |                 |                                 |
| 5                      |                 |                                 |
| (Sub total)            | (1.5)           | (100.0)                         |
| Urban                  |                 |                                 |
| Non Agricultural       |                 |                                 |
| Woodland - Farm        |                 |                                 |
| - Commercial           |                 |                                 |
| Agricultural Buildings |                 |                                 |
| Open Water             |                 |                                 |
| Land not surveyed      |                 |                                 |
| (Sub total)            |                 |                                 |
| <br>                   |                 |                                 |
| TOTAL                  | <u>1.5</u>      | <u>100</u>                      |

#### 2.1.5 Subgrade 3a

The whole site is Subgrade 3a. Topsoils and upper subsoils are usually medium clay loam over a clayey, slowly permeable subsoil. These soils are imperfectly drained (Wetness Class III).

Soil wetness and workability problems limit the ALC grade of this land to Subgrade 3a.

## 2.2 AGRICULTURAL LAND CLASSIFICATION REPORT ON SITE 10, SEAHOUSES, POLICY REF R4

### 2.2.1 Location

The site has a centroid grid reference of NU 216 314 and is located to the south of the village of Seahouses.

### 2.2.2 Land Use and Relief

At the time of survey the site was in arable use. It has an average altitude of 10m AOD and gently slopes to the south.

### 2.2.3 Climate

|   |               |
|---|---------------|
| Grid Reference  | : NU 216 314  |
| Altitude (m)  | : 10          |
| Accumulated Temperature above 0°C<br>(January - June) | : 1322 day °C |
| Average Annual Rainfall (mm)                          | : 633         |
| Climatic Grade  | : 1           |
| Field Capacity Days                                   | : 158         |
| Moisture Deficit (mm) Wheat                           | : 99          |
| Moisture Deficit (mm) Potatoes                        | : 87          |

A further climatic limitation of Grade 2 is imposed by increased wind exposure from the North Sea on this coastal site.

2.2.4 AGRICULTURAL LAND CLASSIFICATION - SITE 10

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                      | 2.0             | 100.0                           |
| 3a                     |                 |                                 |
| 3b                     |                 |                                 |
| 4                      |                 |                                 |
| 5                      |                 |                                 |
| (Sub total)            | (2.0)           | (100.0)                         |
| Urban                  |                 |                                 |
| Non Agricultural       |                 |                                 |
| Woodland - Farm        |                 |                                 |
| - Commercial           |                 |                                 |
| Agricultural Buildings |                 |                                 |
| Open Water             |                 |                                 |
| Land not surveyed      |                 |                                 |
| (Sub total)            |                 |                                 |
| TOTAL                  | 2.0             | 100                             |

2.2.5 Grade 2

The whole site is Grade 2. Soils are moderately well drained (Wetness Class II) with a medium sandy loam or medium clay loam topsoil and upper subsoil. The lower subsoil is slowly permeable and clayey. Slight soil wetness and wind exposure limit the ALC grade of this site to Grade 2.



## 2.3 AGRICULTURAL LAND CLASSIFICATION REPORT ON SITE 11, BEADNALL, POLICY REF S4/S6

### 2.3.1 Location

The site is located around centroid grid reference NU 230 289 to the south of the village of Beadnall.

### 2.3.2 Land Use and Relief

The site is mostly level or gently sloping with a southerly aspect. Altitude ranges between 5m and 10m AOD. All the agricultural land is in permanent pasture.

### 2.3.3 Climate

|                                   |               |
|-----------------------------------|---------------|
| Grid Reference                    | : NU 230 289  |
| Altitude (m)                      | : 10          |
| Accumulated Temperature above 0°C |               |
| (January - June)                  | : 1322 day °C |
| Average Annual Rainfall (mm)      | : 648         |
| Climatic Grade                    | : 1           |
| Field Capacity Days               | : 163         |
| Moisture Deficit (mm) Wheat       | : 98          |
| Moisture Deficit (mm) Potatoes    | : 86          |

A further climatic limitation of Grade 2 is imposed by increased wind exposure from the North Sea on this coastal site.

2.3.4 AGRICULTURAL LAND CLASSIFICATION - SITE 11

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                      |                 |                                 |
| 3a                     | 11.1            | 51.9                            |
| 3b                     | 9.7             | 45.4                            |
| 4                      |                 |                                 |
| 5                      |                 |                                 |
| (Sub total)            | (20.8)          | (97.3)                          |
| Urban                  |                 |                                 |
| Non Agricultural       | 0.4             | 1.8                             |
| Woodland - Farm        |                 |                                 |
| - Commercial           |                 |                                 |
| Agricultural Buildings | 0.2             | 0.9                             |
| Open Water             |                 |                                 |
| Land not surveyed      |                 |                                 |
| (Sub total)            | (0.6)           | (2.7)                           |
| <br>TOTAL              | <br>21.4        | <br>100                         |

#### 2.3.5 Subgrade 3a

This subgrade is found on the higher lying land in the north of the site. Topsoils are either medium clay loam or medium sandy loam over similar textured upper subsoils.

Lower subsoils are reddish, clayey and slowly permeable. These imperfectly drained areas (Wetness Class III) are limited by soil wetness and workability restrictions.

#### 2.3.6 Subgrade 3b

This land is found generally below the 10m contour on the site. Topsoils are heavy textured - usually heavy clay loam over a clayey slowly permeable subsoil. Sand is occasionally below the clay. These soils fall within Wetness Class IV and the land is limited by severe soil wetness and workability problems.

#### 2.3.7 Farm Buildings

This comprises the derelict Beadnall Green Farm.

#### 2.3.8 Non Agricultural

Old quarry workings and a lime kiln are included in this category.