



AGRICULTURAL LAND CLASSIFICATION  
SEDFIELD DISTRICT LOCAL PLAN  
EXTENSION TO PROPOSED BUSINESS PARK  
WHITWORTH FARM, HEIGHINGTON LANE  
NEWTON AYCLIFFE, CO DURHAM  
JANUARY 1995

ADAS  
Leeds Statutory Group  
2 FCS 10608

Job No:- 7/95  
MAFF Ref:- EL 12/26  
Commission No:- 1547

## SUMMARY

A detailed Agricultural Land Classification survey of 70.0 ha of land at Whitworth Farm, Heighington Lane, Newton Aycliffe was carried out in November 1990 and January 1995. The following report is a composite of the two surveys.

At the time of survey 67.2 ha of land was in agricultural use of which 25.7 ha falls into Subgrade 3a. Soils consist of imperfectly drained (Wetness Class III) medium clay loam topsoils over similar upper subsoils, in turn over slowly permeable subsoils. Moderate soil wetness restrictions limits these soils to Subgrade 3a.

41.5 ha of land falls into Subgrade 3b. Profiles are poorly drained (Wetness Class IV), with medium and heavy clay loam topsoils, overlying slowly permeable clay subsoils within 45 cm depth. Severe wetness and workability restrictions limits this land to Subgrade 3b.

The remainder of the site consist of Farm Buildings (0.3 ha), the remains of wartime storage buildings, Urban (1.6 ha) and Land Not Surveyed (0.9 ha).

## CONTENTS

1. INTRODUCTION AND SITE CHARACTERISTICS
2. AGRICULTURAL LAND CLASSIFICATION GRADES

## MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT WHITWORTH FARM, HEIGHINGTON LANE, NEWTON AYCLIFFE, CO DURHAM

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 3 km south west of Newton Aycliffe centred around National Grid Reference NZ 268 220. The site covers a total of 70.0 ha. This report represents a composite of work carried out in January 1995 and a previous survey work in November 1990. In both cases soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Two soil pits were dug during the most recent survey to allow profiles to be described in greater detail. The 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

At the time of survey 67.2 ha of the site were under permanent grass and arable, with the remaining 2.8 ha being Urban and Farm Buildings. Altitude varies between 95 and 100m AOD and the site is level to gently sloping (0-3°).

1.3 Climate

Grid Reference	: NZ 268 220
Altitude (m)	: 100
Accumulated Temperature above 0°C (January - June)	: 1266 day °C
Average Annual Rainfall (mm)	: 686
Climatic Grade	: 2
Field Capacity Days	: 175
Moisture Deficit (mm) Wheat	: 90
Moisture Deficit (mm) Potatoes	: 75

#### 1.4 Geology, Soils and Drainage

The area is underlain by Permian Magnesian Limestone which is covered by a thick layer of glacial drift derived from Carboniferous Coal Measures. In the southern and eastern parts of the site, the drift consists of a heavy textured boulder clay. Soils formed on this consist of heavy clay loam with occasional medium clay loam topsoils over slowly permeable heavy clay loam, and clay subsoils, falling into Wetness Class IV. Somewhat lighted drift occurs in the northern and north western parts of the site where medium clay loam or sandy clay loam topsoils overlie similar textured upper subsoils, in turn over slowly permeable subsoils between 50 and 60 cm depth. These fall into Wetness Class III.

## 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		
3a	25.7	36.7
3b	41.5	59.3
4		
5		
(Sub total)	(67.2)	(96.0)
Urban	1.6	2.3
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.3	0.4
Open Water		
Land not surveyed	0.9	1.3
(Sub total)	(2.8)	(4.0)
<b>TOTAL</b>	<u>70.0</u>	<u>100</u>

2.1 Subgrade 3a

Land in this subgrade occurs in the northern part of the site and corresponds largely with the slightly elevated area of lighter texture drift.

Soils mainly consist of very slightly stony medium clay loam topsoils over similar gleyed, permeable upper subsoils, these in turn overlie gleyed slowly permeable subsoils. These soils are imperfectly drained, falling into Wetness Class III and are limited to this subgrade by moderate soil wetness limitations.

2.2 Subgrade 3b

The remaining agricultural land falls within this subgrade, and occurs in the southern and eastern parts of the site. A small area also occurs in the north western area near Demous Beck. Soils consist of stoneless to very slightly stony heavy and medium clay loam topsoils over very slightly stony, gleyed, slowly permeable heavy clay loam and clay subsoils. Soils are poorly drained, falling into Wetness Class IV. These soils are restricted to this subgrade by severe soil wetness and workability limitations.

2.3 Urban

Urban land consists of the remains of wartime storage buildings and associated structures.

2.4 Farm Buildings

Farm Buildings consist of Whitworth Farm located centrally.

2.5 Not Surveyed

This consists of a small area in the north east corner.

RPT File 2 FCS 10608  
Leeds Statutory Group

MAP