



AGRICULTURAL LAND CLASSIFICATION
DONCASTER UNITARY DEVELOPMENT PLAN
SITE EMP 1-2, ADWICK LE STREET
JANUARY 1993

ADAS
Leeds Statutory Group

Job No:- 5/93
MAFF Ref:

2 FCS 6314

siteemp.alc.mp

SUMMARY

An Agricultural Land Classification survey of approximately 119ha of land at Adwick le Street was carried out in January 1993.

78ha of this land was in agricultural use of which 3.2ha falls within Grade 2. Soils in this grade are freely drained (Wetness Class 1) and consist of medium clay loam topsoils over medium clay loam subsoils. They are limited to Grade 2 by slight droughtiness.

Subgrade 3a land covers 4.4ha. Soils are freely drained (Wetness Class 1) and consist of medium or heavy clay loam topsoils and upper subsoils over extremely stony lower subsoils. This land is limited to Subgrade 3a by droughtiness.

Subgrade 3b land covers 65.4ha. Soils within this subgrade are either freely drained (Wetness Class 1) with medium to heavy clay loam topsoils over extremely stony subsoils, or are poorly drained (Wetness Class IV) and consist of medium or heavy clay loam topsoils over heavy clay loam or clay subsoils. The freely drained soils are limited by droughtiness; *the poorly drained soils are limited by wetness.*

Grade 4 land covers 5.3ha. Soils in this grade are freely drained (Wetness Class 1) and consist of moderately stony medium clay loam topsoils over extremely stony subsoils. These soils are limited to Grade 4 by severe droughtiness and, in places, by gradients of 12°C-15°.

CONTENTS

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

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT DONCASTER
LOCAL PLAN SITE EMP 1-2, ADWICK LE STREET

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site is located 5Km north west of Doncaster and is centred on Grid Reference SE523084. Survey work was carried out in January 1993 when soils were examined by hand auger borings at a density of one per hectare at points predetermined by the National Grid. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land." (MAFF 1988).

1.2 Land Use and Relief

At the time of survey 65% of the site was in Agricultural production, all of which was in arable use. The remainder of the site consisted of Non Agricultural land (allotment gardens) and Urban land (a derelict coal mine, a nursery and a road). Site altitude varies from 40 to 50m AOD. Most of the site is level to gently sloping. A small area near the southern edge of the site, however, is moderately steeply sloping (gradients of 12°-15°).

1.3 Climate

Grid Reference	: SE 523084
Altitude	: 50
Accumulated Temperature above 0°C (January-June)	: 1367 day°C
Average Annual Rainfall (mm)	: 620
Climatic Grade	: 1
Field Capacity Days	: 128
Moisture Deficit (mm) Wheat	: 104
Moisture Deficit (mm) Potatoes	: 95

1.4 Geology, Soils and Drainage

Most of the site is underlain by Upper Magnesian Limestone. A small area, mostly covered by urban land, is underlain by Middle Permian marl. Most soil profiles consist of slightly stony medium to heavy clay loam topsoils over shallow, freely drained (Wetness Class I), extremely stony medium or heavy clay loam subsoils. In places where soil profiles are deeper and less stony, subsoils often consist of imperfectly drained (Wetness Class III) slowly permeable heavy clay loam or clay.

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	3.2	2.7
3a	4.4	3.7
3b	65.4	54.8
4	5.3	4.4
5		
(Sub total)	(78.3)	(65.6)
Urban	36.2	30.3
Non Agricultural	4.9	4.1
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land Surveyed		
(Sub total)	(41.1)	(34.4)
	_____	_____
TOTAL	119.4	100
	_____	_____

2.1 Grade 2

Grade 2 land occurs near the western edge of the site. Soils consist generally of slightly stony medium clay loam topsoils over similar textured subsoils. In places profiles contain very to extremely stony medium clay loam lower subsoils. Soils are freely drained (Wetness Class I) and are limited to Grade 2 by slight soil droughtiness.

2.2 Subgrade 3a

Subgrade 3a land, adjoins the Grade 2 land on the western edge of the site. Profiles consist mainly of slightly stony medium clay loam topsoils over slightly stony, medium or heavy clay loam upper subsoils passing to extremely stony, medium or heavy clay loam lower subsoils. Most soils are freely drained (Wetness Class I) and are limited to Subgrade 3a by droughtiness.

2.3 Subgrade 3b

Most of the agricultural land on the site falls within this subgrade. Most soil profiles consist of very slightly or slightly stony medium or heavy clay loam topsoils over extremely stony medium to heavy clay loam subsoils. These soils are freely drained (Wetness Class I) and are limited to Subgrade 3b by droughtiness. In some areas profiles consist of very slightly stony, medium or heavy clay loam topsoils over stoneless, slowly permeable clay subsoils. These soils are poorly drained (Wetness Class IV) and are limited to Subgrade 3b by soil wetness.

2.4 Grade 4

Grade 4 land occurs within the area of Urban land near the southern edge of the site. Profiles consist of moderately stony medium clay loam topsoils over extremely stony, medium clay loam subsoils. This land is freely drained (Wetness Class I) and is limited to Grade 4 by droughtiness and, in places, gradients of 12-15°.

2.5 Non Agricultural

The Non Agricultural land consists of the allotment gardens in the centre of the site.

2.6 Urban

This consists largely of the derelict colliery site.

RPT File: 2 FCS 6314
Leeds Statutory Group

MAP