

AGRICULTURAL LAND CLASSIFICATION  
AND STATEMENT OF PHYSICAL CHARACTERISTICS

Haigh Hall Farm, Tingley, West Yorkshire  
Proposed Opencast Coal Site

MAFF  
Leeds Regional Office

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT,

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-

SE 285 238

Location Details:-

4 km NE of Dewsbury  
town centre

Site Size:-

14.96 ha

1.2 Survey Methods

Date Surveyed:-

4th October 1991

Boring Density and Spacing Basis:-

One boring per hectare  
carried out at 100 m  
intervals at points  
predetermined by the  
National Grid

Sampling Method:-

By hand auger, to a  
depth of 1.00 m

Number of Borings:-

13

Number of Soil Pits (used for):-

One, to collect further  
information on soil  
characteristics

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)".

**1.3 Land Use:-**

Mostly ley grassland but there is also a tip and small areas of urban land, non-agricultural land and agricultural buildings in the north west of the site

**1.4 Climate and Relief**

**Average Annual Rainfall (AAR):-**

667 mm

**Accumulated Temperature above 0°C (January-June):-**

1,320 day °C

**Field Capacity Days:-**

161 days

**Altitude average:-**

85 m a.o.d.

**maximum:-**

95 m a.o.d.

**minimum:-**

75 m a.o.d.

**Climatic limitation (based on interaction of rainfall and temperature values:-**

None

**Relief:-**

Moderately/steeply sloping from north to south

**Slopes (° ):-**

6° to 10°

**Gradient Limitations:-**

yes

**Limiting gradient(s):-**

7° to 11°

**Grade(s)/subgrade(s):-**

3b

**Occurrence on site:-**

Mainly in the west of the site

## 1.5 Geology and Soil

Solid Strata:-	Carboniferous coal measures
Depth of solid rock from surface:-	1-2 metres
Drift types:-	None
Soil Types and Distribution:-	Heavy textured soils occur throughout the site
Soil Textures (topsoils and subsoils):-	Heavy clay loam and heavy silty clay loam topsoils overlying clay or silty clay subsoils
Soil Series/Associations:- On 1/250000 map:- Identified on site:-	Dale Association Dale Association
Soil Limitations and type:-	Heavy topsoil texture

## 1.6 Drainage

Soil type and Wetness Class:-	Soils are poorly drained (falling in Wetness Class IV) throughout the site
Drainage Limitations:-	Slowly permeable layers generally begin at around 30 cm depth. As a result soil wetness is the overall limiting factor on A.L.C grade

## 2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Agricultural Area</u>	<u>Percentage of Total Area</u>
1	-		
2	-		
3a	-		
3b	13.04	100	87%
4	-		
5	-		
Non Agricultural Urban (including Agric Buildings)	0.40		2.6%
Other	1.52		10.2%
<b>Total</b>	<b>14.96</b>	<b>100</b>	<b>100</b>

**Subgrade 3b**

**Distribution on site:-**

The entire site with the exception of some non-agricultural and urban land and agricultural buildings in the north west of the site

**Soil Type(s) and Texture(s):-**

Heavy textured soils - heavy clay loam or heavy silty clay loam topsoils over clay or silty clay subsoils

**Depth to Slowly Permeable Layers:-**

Slowly permeable layers generally start at depths of around 30 cm

**Wetness and Drainage Class:-**

Soils in this subgrade are poorly drained falling in Wetness Class IV

**Stone Percentage and Type:-**

Stoneless

**Grade Limiting Factors:-**

Soil wetness and workability problems

**Non Agricultural**

**Type and location of land included:-**

An area of trees in the west of the site

**Agricultural Buildings**

**Type and location of building included:-**

Haigh Hall Farmhouse and buildings, in the NW of the site

**Urban**

**Type of land use included:-**

An existing tip and an access road in the west of the site and a concreted area beside Haigh Hall Farm



### 3.0 STATEMENT OF PHYSICAL CHARACTERISTICS (SOIL PROPERTIES AND RESOURCES)

#### 3.1 Soil Properties

One soil types occur on the site. It's distribution along with soil depth and quantity information is shown on the accompanying maps.

**Soil Type 1:-** Heavy poorly drained soil derived from Coal Measure Shales

**Occurrence:-** Throughout the site

**Textures:-** Heavy clay loam or heavy silty clay loam topsoils overlying clay or silty clay subsoils

**Stone content:-** Stoneless

**Horizon thicknesses:-** Topsoils 25-30 cm, subsoils 65-70 cm

**Profile pit features:-** Prismatic structured subsoil

#### 3.2 Soil Resources

##### Topsoils

###### Unit T1

**Texture/stone content:-** Stoneless heavy (heavy clay loam)

**Structure:-** Moderately developed medium sub-angular blocky

**Occurrence:-** Throughout the site

**Thickness:-** 25 cm

**Subsoils**

**Unit S1**

**Texture/stone content:-** Stoneless, heavy (silty clay)

**Structure:-** Moderately developed coarse prismatic

**Occurrence:-** Throughout the site

**Thickness:-** 75 cm

Resource Planning Group  
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MAP(S)