



AGRICULTURAL LAND CLASSIFICATION
MIDDLESBROUGH LOCAL PLAN
STAINSBY HILL FARM
CLEVELAND
MAY 1994

ADAS
Leeds Statutory Group

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Commission:- 1018

2FCS10130

SUMMARY

An Agricultural Land Classification survey was carried out on 44.6 ha of land at Stainsby Hill Farm, Cleveland in May 1994.

The majority of this land was in agricultural use, the remainder being Non-Agricultural, Urban, Farm Buildings and Open Water.

Subgrade 3a land covers 4.0 ha. Soils within this subgrade consist of medium clay loam topsoils over slowly permeable gleyed heavy clay loam and clay subsoils. They are imperfectly drained and the land is limited to Subgrade 3a by soil wetness problems. Subgrade 3b land covers 29.0 ha. Soils consist of heavy clay loam topsoils overlying gleyed slowly permeable heavy clay loam and clay subsoils. They are imperfectly and poorly drained and the land is limited to Subgrade 3b by soil wetness and topsoil workability problems.

The remainder of the site consists of Non-Agricultural land (10.1 ha), Urban land (0.6 ha), Farm Buildings (0.6 ha) and Open Water (0.3 ha).

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CLEVELAND

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site lies approximately 5km south east of Middlesbrough town centre directly east of the A19(T) around National Grid Reference NZ 471167. Survey work was carried out in May 1994 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 methods outlined 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 the survey most of the area was ploughed or under ley grass. The remainder consisted of an area of Non-Agricultural land to the north, consisting of common land and recently planted trees and shrubs and an area immediately to the east of the farm buildings which was at the time of the survey being built up from ground level, farm buildings, a track, and an area of open water. The site lies between 10m and 20m AOD. It is mainly level to moderately sloping (0-7°) with some areas south of the farm, north of the farm and an area north east of the farm, by the beck, strongly sloping (8-10°).

1.3 Climate

Grid Reference	: NZ 471167
Altitude (m)	: 15
Accumulated Temperature above 0°C (January-June)	: 1361
Average Annual Rainfall (mm)	: 607
Climatic Grade	: 1
Field Capacity Days	: 147
Moisture Deficit (mm) Wheat	: 105
Moisture Deficit (mm) Potatoes	: 96

1.4 Geology, Soils and Drainage

The area is underlain by Sherwood (Bunter) sandstone over which there is a covering of boulder clay and undifferentiated drift. Some alluvium is found to the far north of the site. Soils are heavy textured and are similar to the Crewe Association as mapped by the Soil Survey and Land Research Centre. Soils consist mainly of heavy clay loam, with occasional medium clay loam topsoils over heavy clay loam or clay subsoils. Slowly permeable layers begin at between 25 and 60cm depth and drainage is imperfect to poor (Wetness Class III and IV).

Two small areas of better drained land occur to the south and east of the site. Soils consist of medium clay loam topsoils overlying gleyed slowly permeable heavy clay loam or clay subsoils, and slowly permeable layers begin at between 45cm and 60cm depth. Soils are imperfectly drained (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	4.0	9.0
3b	29.0	65.0
4		
5		
(Sub total)	(33.0)	(74.0)
Urban	0.6	1.3
Non Agricultural	10.1	22.7
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.6	1.3
Open Water	0.3	0.7
Land not surveyed		
(Sub total)	(11.6)	(26.0)
 TOTAL	 <u>44.6</u>	 <u>100.0</u>

2.1 Subgrade 3a

Land in this subgrade occurs over two small areas in the south and east of the site. Profiles are imperfectly drained (Wetness Class III) and consist of stoneless medium clay loam topsoils over gleyed and slowly permeable heavy clay loam and clay subsoils. Slowly permeable layers begin at between 50cm and 60cm depth, thus limiting the land to Subgrade 3a on soil wetness.

2.2 Subgrade 3b

Land in this subgrade occurs over the remaining agricultural land. Soils consist of imperfectly and poorly drained (Wetness Class III and IV), stoneless to very slightly stony heavy clay loam topsoils over gleyed and slowly permeable heavy clay loam and clay subsoils. Profiles are slowly permeable from between 30cm and 60cm depth and the land is limited to Subgrade 3b by soil wetness and topsoil workability problems. Three areas, to the north, south and east by the back of the farmhouse are also limited to Subgrade 3b by slopes of between 8° and 9°.

2.3 Non-Agricultural

Non-agricultural land consists mainly of the area to the north of the farm consisting of common grassland with recently planted shrubs and trees. A smaller area immediately to the east of the farmhouse was being raised above the surrounding ground level with additional soil at the time of the survey.

2.4 Urban

Urban land consists of a hard roadway leading to the farmhouse and down to Stainsby Hall Farm.

2.5 Farm Buildings

Farm buildings consist of Stainsby Hill Farm, outbuildings and greenhouses.

2.6 Open Water

A small pond occurs within the non-agricultural area to the north of the site.

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MAP