



AGRICULTURAL LAND CLASSIFICATION
BEVERLEY BOROUGH LOCAL PLAN
SITE 8, ABBEY LANE, WILLERBY

DECEMBER 1992

135/92

ADAS
Leeds Statutory Group

Job No:- 135/92
MAFF Ref:-

SUMMARY

An Agricultural Land Classification survey of approximately 37 ha of land at Abbey Lane, Willerby was carried out in December 1992.

36 ha of this is in agricultural use, of which 18 ha falls with Grade 2. Soils within this grade are either well drained, where both topsoil and subsoil consist of deep permeable medium sandy loam or sandy clay loam or, imperfectly drained, where the light and medium textured upper horizons pass into slowly permeable clay at depth. The well drained soils (mainly in the southern part of the site) are limited to Grade 2 by slight droughtiness. The imperfectly drained profiles (northern area) are limited by slight wetness.

Subgrade 3a land covers 12 ha. Soils are imperfectly drained and consist of medium clay loam or occasionally medium sandy loam topsoils over permeable medium and heavy clay loam upper subsoils. Lower subsoils at or below 50 cm, consist of slowly permeable heavy clay loam and profiles are limited to Subgrade 3a by wetness and workability problems.

Subgrade 3b land covers 6.5 ha. Profiles are poorly drained and formed of medium clay loam topsoils over slowly permeable heavy clay loam or clay subsoils. They are limited to Subgrade 3b.

CONTENTS

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

MAP

1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT: BEVERLEY BOROUGH LOCAL PLAN
SITE 8, ABBEY LANE, WILLERBY

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods.

The site lies 6 km west north west of Hull City centre and 1 km east of Willerby and is centred on National Grid Reference TA030308. Survey work was carried out in December 1992 when soils were examined by hand auger borings at a density of 1 boring 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 guidelines and criteria for grading the quality of agricultural land." (MAFF 1988).

1.2 Land Use and Relief

At the time of the survey 97% of the site was in permanent pasture or arable production. The remainder consisted of farm buildings and roads.

Site altitude varies from 15m AOD to 30m AOD and the land is level or very gently sloping.

1.3 Climate

Grid Reference	:	TA030308
Altitude (m)	:	15
Accumulated Temperature above 0°C (January-June)	:	1385
Average Annual Rainfall (mm)	:	658
Climatic Grade	:	1
Field Capacity Days	:	146
Moisture Deficit (mm) Wheat	:	105
Moisture Deficit (mm) Potatoes	:	96

1.4 Geology, Soils and Drainage

The area is underlain by Cretaceous Chalk over which there is a cover of boulder clay and post glacial drift. Soils consist of medium and fine sandy loam or medium clay loam topsoils over similar or heavier subsoils. Drainage varies from well drained and moderately well drained (Wetness Classes I and II) where subsoils are light, or formed of permeable medium clay loam, to imperfectly or poorly drained (Wetness Classes III and IV) where subsoils are heavy and slowly permeable.

Groundwater rising from natural springs produces some additional surface wetness in the eastern part of the site, during the winter and early spring.

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	17.9	47.6
3a	12.0	31.9
3b	6.5	17.3
4		
5		
(Sub total)	(36.4)	(96.8)
Urban	0.9	2.4
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings	0.3	0.8
Open Water		
Land not surveyed		
(Sub total)	(1.2)	(3.2)
	_____	_____
TOTAL	37.6	100
	_____	_____

2.1 Grade 2

Land in this grade occurs mainly over the central and eastern parts of the site. Topsoils consist of stoneless or very slightly stony unmottled medium clay loam or medium and fine sandy loam. Subsoils are formed of stoneless unmottled permeable (Wetness Classes I, II) medium sandy loam or sandy clay loam in the southern part of this area. In the north upper subsoils consist of permeable stoneless medium or heavy clay loam but pass at about 65 - 70 cm depth into slowly permeable mottled and gleyed heavy clay loam. Profiles of this type fall within Wetness Classes II and III. The well or moderately well drained southern areas are limited to Grade 2 by slight droughtiness. The northern area containing slowly permeable lower subsoils is limited by slight wetness. Groundwater rising from natural springs causes localised waterlogging problems, especially in the southern part of the Grade 2 area, but could probably be lowered to a suitable level by an improved drainage system.

2.2 Subgrade 3a

Land in this subgrade occurs mainly in the west with two smaller areas in the south and north. Topsoils consist of stoneless or very slightly stony unmottled medium clay loam or occasionally medium sandy loam over mottled or unmottled stoneless to very slightly stony permeable medium and heavy clay loam upper subsoils. Lower subsoils consist of stoneless or very slightly stony gleyed slowly permeable (at or below 50 cm) heavy clay loam. Profiles are imperfectly drained (Wetness Class III) and limited to Subgrade 3A by wetness.

2.3 Subgrade 3b

Land in this subgrade occurs in three separate areas in the north west, central and north eastern parts of the site. Topsoils consist of stoneless or very slightly stony unmottled medium clay loam or sandy clay loam and overlies, gleyed slowly permeable (at or above 40 cm) heavy clay loam or clay subsoils. Profiles are poorly drained (Wetness Class IV) and the land is limited to Subgrade 3b by wetness and workability problems. Groundwater from springs also causes waterlogging in the north eastern area of Subgrade 3b land.

2.4 Urban

This consists of the road running along the southern edge of the site.

2.5 Agricultural Buildings

These consist of the buildings at Bellfield Farm.

MAP