



AGRICULTURAL LAND CLASSIFICATION
LEEDS GRAMMAR SCHOOL
ALWOODLEY GATES
WEST YORKSHIRE
FEBRUARY 1994

ADAS
Leeds Statutory Group

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SUMMARY

A detailed Agricultural Land Classification survey of 51.6 ha of land at Alwoodley Gates, Leeds was carried out in February 1991 and February 1994.

51ha of this land was in agricultural use of which 17 ha falls within Grade 2. Soils consist of well drained (Wetness Class I) sandy clay loam and sandy loam topsoils over similar textured slightly stony subsoils. Slight soil droughtiness limits this land to Grade 2.

13.7 ha falls within Subgrade 3a. Soils are similar to those graded 2 although shallower (bedrock at 60cm) and slightly more stony. Moderate soil droughtiness limits this land to Subgrade 3a.

14.3 ha of land was graded 3b. Soils are poorly drained (Wetness Class IV) with medium clay loam topsoils over clayey slowly permeable subsoils. Soil wetness and workability restrictions limit this land to Subgrade 3b.

6 ha of moderately steeply to steeply sloping land has been graded 4.

The remainder of the site is classed as urban.

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT ALWOODLEY GATES, LEEDS: PROPOSED RELOCATION OF LEEDS GRAMMAR SCHOOL

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site is located around National Grid Reference SE 319412, about 8 Km north of Leeds city centre and immediately east of the A61 Leeds to Harrogate road. Detailed survey work was first carried out in February 1991 when most of the area was subject to a planning application for a golf course. An area of land to the south which was not surveyed in 1991 was examined in detail in February 1994. On both occasions soils were examined by hand auger borings at a density of one boring per hectare. Two soil inspection pits were dug to examine soils in more detail and to collect samples for laboratory analysis. 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).

1.2 Land Use and Relief

Most of the site is under grass with some fields being left fallow. The site is gently to steeply sloping with an overall north easterly aspect. Slopes exceed 11° north of Manor House Farm, but elsewhere gradient is not limiting. Altitude ranges from 105m AOD along Sturdy Beck to 150m AOD south of Manor House Farm.

1.3 Climate

Grid Reference	: SE 319 412
Altitude (m)	: 150
Accumulated Temperature above 0°C (January-June)	: 1244 day°C
Average Annual Rainfall (mm)	: 759
Climatic Grade	: 2
Field Capacity Days	: 190
Moisture Deficit (mm) Wheat	: 81
Moisture Deficit (mm) Potatoes	: 65

1.4 Geology, Soils and Drainage

Most of the soils are formed from weathering Carboniferous sandstones. These produce freely drained (Wetness Class I) sandy loam or sandy clay loam topsoils over similar or lighter textured slightly stony subsoils. Weathering bedrock usually occurs at between 70 and 120cm depth. Towards Sturdy Beck soils are heavier textured and are formed from drift derived locally on higher land (Head). Profiles are usually medium clay loam or medium sandy loam over clayey slowly permeable subsoils (Wetness Class IV).

Boulder clay drift also occurs in the extreme south of the site. Soils are medium clay loam over clayey moderately stony slowly permeable subsoils (Wetness Class IV).

Soils on the site correspond to the Dunkeswick and Rivington 1 Associations as described by the Soil Survey and Land Research Centre.

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	17.0	32.9
3a	13.7	26.6
3b	14.3	27.7
4	6.0	11.6
5		
(Sub total)	(51.0)	(98.8)
Urban	0.6	1.2
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(0.6)	(1.2)
	_____	_____
TOTAL	51.6	100
	_____	_____

2.1 Grade 2

Land of this grade is found around and to the south of Manor House Farm. Topsoils are usually sandy clay loam or medium sandy loam over similar textured slightly stony subsoils. Bedrock usually occurs at between 80 and 120cm depth. Although freely drained (Wetness Class I) these soils are subject to a slight droughtiness limitation.

2.2 Subgrade 3a

Subgrade 3a land is common south west of Manor House Lane. Soils are similar to those graded 2 although subsoils tend to be slightly more stony and lighter textured, often a loamy medium sand. Again although freely drained (Wetness Class I), a moderate droughtiness limitation prevents this land from being graded better than 3a.

2.3 Subgrade 3b

This subgrade occurs mainly on the heavier textured soils in the north of the site. Topsoils are usually medium clay loam over clayey slowly permeable subsoils (Wetness Class IV). Soil wetness and workability restrictions limit this land to Subgrade 3b.

2.4 Grade 4

The steep slopes north of Manor House Farm have been graded 4. Slopes of between 11° and 18° are the limit on ALC grade.

2.5 Urban

This consists of Manor House Lane.

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MAP