AGRICULTURAL LAND CLASSIFICATION

LIDICE ROAD, GOOLE

HUMBERSIDE

PROPOSED DEVELOPMENT SITE

JUNE 1993

ADAS

Leeds Statutory Group

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lidice.doc.nmc

SUMMARY

An Agricultural Land classification survey of 6.6 ha of land at Lidice Road, Goole was carried out in two stages in April 1988 and in September 1992.

Grade 2 land covers 6.1 ha. Soils consist of moderately well drained (Wetness Class II) heavy calcareous silty clay loam or silty clay topsoils over similar subsoils some of which pass into strongly gleyed clay at depth. Soils are limited to Grade 2 by slight soil wetness and workability problems.

Subgrade 3a land covers 0.5 ha. Soils are imperfectly drained (Wetness Class III) and consist of calcareous heavy silty clay loam or silty clay topsoils and upper subsoils which pass into gleyed slowly permeable clay at about 40cm depth. These soils are limited to subgrade 3a by wetness.

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1. *INTRODUCTION AND SITE CHARACTERISTICS*

1.1 Location and Survey Methods

The site is located at National Grid Reference 726234, southeast of Junction 36 of the M62 motorway, approximately 1km west of Goole. Survey work was carried out in April 1988, when most of the site fell within a larger application covering the surrounding areas, and in September 1992 when a small additional area in the northeast corner was surveyed. Soils were examined by hand auger borings at a density of at least 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 times of survey all of the site was in arable use. The site is flat and lies at an altitude of approximately 2-3m AOD.

1.3 Climate

Grid Reference	: SE726234
Altitude (m)	: 3
Accumulated Temperature above 0°C (January-June)	: 1410 day °C
Average Annual Rainfall (mm)	: 592
Climatic Grade	: 1
Field Capacity Days	: 125
Moisture Deficit (mm) Wheat	: 112
Moisture Deficit (mm) Potatoes	: 106

1.4 Geology, Soils and Drainage

Soils are developed on Recent silty clay warp which forms a thick cover over the underlying lacustrine clay. The boundary between these two deposits is marked by a buried topsoil at approximately 60 cm depth. Topsoils consist of calcareous heavy silty clay loam or silty clay over silty clay upper subsoils which pass into the underlying lacustrine clay at depth. In a few places lenses of loamy sand and sand also occur within the profile.

Most profiles are moderately well to imperfectly drained (Wetness Class II and III), with most soils being distinctly mottled between about 35 and 50 cm depth. The natural calcareous nature of these soils results in a good soil structure which assists soil water infiltration. Structure is also likely to repair easily after heavy trafficking in wet conditions, thus improving the flexibility of the land.

2 AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
1		
2	6.1	92.4
3a	0.5	7.6
3b		
4		
5		
(sub total)	(6.6)	(100)
Urban		
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land Not Surveyed		
(sub total)		
	6.6	100

2.1 Grade 2

Most of the site falls within Grade 2. Soils consist of calcareous heavy silty clay loam or silty clay topsoils over similar but mottled upper subsoils. Sandy silt loam and loamy fine sand losses occur at depth in places especially in the southern part of the site. In the north the underlying lacistrine clay, often marked by a buried topsoil, occurs at a depth of about 60cm. Most profiles are moderately well drained (Wetness Class II) or imperfectly drained (Wetness Class III) and are limited to Grade 2 by slight workability problems.

2.2 Grade 3a

Land within this subgrade occurs in the northeast corner of the site where the underlying lacustrine clay is close to the surface. Soil profiles consist of calcareous silty clay topsoils and mottled silty clay upper subsoils over gleyed slowly permeable clay at a depth of 35-40 cm. Profiles of this type are imperfectly drained (Wetness class III) and limited to Subgrade 3a by wetness and workability problems.

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