•

v



Ministry of Agriculture Fisheries and Food

.

.

AGRICULTURAL LAND CLASSIFICATION NORTH YORKS MINERALS LOCAL PLAN GEBDYKES NORTH YORKSHIRE MARCH 1995

ADAS Leeds Statutory Group Job No:- 59/95 MAFF Ref:- EL 10096 Commission No:- 1703

2FCS10620

SUMMARY

A detailed Agricultural Land Classification survey of 41.7 ha of land at Gebdykes was carried out in March 1995 in connection with North Yorks Minerals Local Plan.

At the time of survey 32.5 ha of the land was in agricultural use and 9.2 ha was classed as Urban (mainly the existing quarry). 4.2 ha of the agricultural land falls in Grade 2. Very slightly stony medium-textured topsoils overlie medium to heavy-textured subsoils. Weathering limestone typically begins at between 60cm and 70cm depth and the land is limited to Grade 2 by slight soil droughtiness, a slight topsoil workability restriction, and the overall climate of the area.

24.0 ha of Subgrade 3a land occurs on the site. The soils are similar to those on the Grade 2 land but the weathering limestone begins at between 40cm and 55cm depth. A more serious soil droughtiness problem limits this land to Subgrade 3a.

The remainder of the agricultural land (4.3 ha) falls in Subgrade 3b. In these areas mediumtextured soils overlie weathering limestone at between 20cm and 35cm depth. A severe soil droughtiness limitation restricts the ALC grade of this land.

CONTENTS

2. AGRICULTURAL LAND CLASSIFICATION GRADES

MAP

1. AGRICULTURAL LAND CLASSIFICATION

1.

AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT GEBDYKES (NORTH YORKS MINERALS LOCAL PLAN)

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

This site lies approximately 1½km north-east of Masham and covers a total area of 41.7 ha. Survey work was carried out in March 1995 when the soils were examined by hand auger borings at 100m intervals predetermined by the National Grid. Two soil pits were dug to allow full profile descriptions to be made. The 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 survey 78% of the site was in agricultural use, mostly as arable land. The remainder consists of the existing quarry and adjoining buildings.

Site altitude varies from 144m AOD in the north to 132m AOD in the north-east and the land is generally level to gently sloping $(0-2^\circ)$ with variable aspect.

1.3 <u>Climate</u>

Grid Reference	:	SE 237 821		
Altitude (m)	:	135		
Accumulated Temperature above 0°C				
(January - June)	:	1244 day °C		
Average Annual Rainfall (mm)	:	791		
Climatic Grade	:	2		
Field Capacity Days	:	195		
Moisture Deficit (mm) Wheat	:	85		
Moisture Deficit (mm) Potatoes	:	68		

1.4 Geology, Soils and Drainage

This site is underlain by Lower Magnesian Limestone and there is evidence of a very thin covering of glacial drift in places.

The soils are well drained, falling in Wetness Class I, and consist of medium clay loam or medium silty clay loam topsoils overlying medium clay loam, medium silty clay loam, heavy clay loam or heavy silty clay loam subsoils. Weathering limestone bedrock typically occurs at between 30cm and 70cm depth.

The soils on the site correspond to the Aberford Association as mapped by the Soil Survey and Land Research Centre.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows:

Grade/Subgrade	Hectares	Percentage of Total Area
,		
1		10.1
2	4.2	10.1
3a	24.0	57.5
3b	4.3	10.3
4		
5		
(Sub total)	(32.5)	(77.9)
Urban	9.2	22.1
Non Agricultural		
Woodland - Farm		
- Commercial		
Agricultural Buildings		
Open Water		
Land not surveyed		
(Sub total)	(9.2)	(22.1)
TOTAL	41.7	100

2.1 <u>Grade 2</u>

An area of Grade 2 land occurs in the east of the site. The soils are well drained, falling in Wetness Class I, and consist of medium clay loam or medium silty clay loam topsoils overlying medium clay loam, medium silty clay loam, heavy clay loam or heavy silty clay loam subsoils. Weathering limestone bedrock occurs at between 60cm and 70cm depth in most cases. The topsoils are very slightly stony, containing up to 5% limestones, hard stones and sandstones but it is the overall climate of the area, slight soil droughtiness and a slight topsoil workability limitation which limit the land to Grade 2.

2.2 <u>Subgrade 3a</u>

Most of the site falls in Subgrade 3a. The profiles are well drained (Wetness Class I) and similar to those found on the Grade 2 land, with medium-textured topsoils overlying medium to heavy-textured subsoils. The topsoils are very slightly to slightly stony, containing 2-10% small, medium and large limestones, sandstones and hard stones. Weathering limestone occurs at between 40cm and 55cm depth in these areas and soil droughtiness is the factor limiting the land to Subgrade 3a.

2.3 <u>Subgrade 3b</u>

Subgrade 3b land occurs in the west of the site where medium clay loam or medium silty clay loam topsoils and, in places, thin subsoils, overlie weathering limestone at between 20cm and 35cm depth. These soils are well drained (Wetness Class I) but the land is limited to Subgrade 3b by severe soil droughtiness and, where limestone occurs within 30cm of the soil surface, by soil depth.

2.4 <u>Urban</u>

This category includes the existing quarry and adjacent buildings.

RPT File: 2 FCS 10680 Leeds Statutory Group •

MAP

.