# AGRICULTURAL LAND CLASSIFICATION

Greater York, Site I Osbaldwick and Heworth

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# MAP

1. Agricultural Land Classification

# AGRICULTURAL LAND CLASSIFICATION REPORT GREATER WORK, SITE I, OSBALDWICK AND HEWORTH

#### 1. Introduction

The site is located around grid reference SE 637532 between the A64(T) York Ring Road, and the city boundary. It covers 273 hectares 96% of which is in agricultural production.

Survey work was carried out over a period of several months during 1988 when soils were examined by hand auger borings at points predetermined by the National Grid. The overall boring density was approximately one boring per hectare.

All assessments of agricultural land quality were made using the methods described in "Agricultural Land classification of England and Wales - Revised Guidelines and Criteria for grading of Agricultural Land" (MAFF October 1988).

#### Climate and Relief

Average Annual Rainfall in the area is approximately 611 mm. Accumulated Temperature 0 above  $0^{\circ}C$  (January to June) is 1386 day  $^{\circ}C$  and the field capacity period is about 137 days. These characteristics indicate that there are no overriding climatic limitations on ALC grade.

Summer Moisture Deficits of 111 mm for winter wheat and 103 mm for potatoes, however, mean that soil droughtiness is likely to be slightly limiting on coarse loamy soils, and moderately limiting on sandy soils. Both these soil types are common in the area.

The site is virtually level at a mean altitude of 14 metres aod.

### Land Use

The whole area is in mixed arable and grassland use. Permanent and ley grassland tends to be more common on the heavier wetter soils, with arable crops, especially potatoes and sugar beet, being more widespread on lighter more easily worked land. Vegetable crops are grown on some of the sandy soils, especially in the Stockton Lane area.

## Soils and Geology

The area is covered by glacial and post glacial drift consisting of lacustrine clay overlain by a patchy cover of aeolian sand. Soils broadly reflect this pattern with the lightest and most easily worked land corresponding with the deeper sand deposits.

## 2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows.

Grade	Hectares	Per cent of total site area
2	21.6	8%
3a	105.2	39%
3b	135.1	49%
Urban	6.7	2%
Farm Buildings	4.4	2%
Total	273.0	100%

Grade 2

Grade 2 land occurs mainly along Bad Bargain Lane and South of Cottage Farm.

Soils consist typically of sandy loam topsoils over similar subsoils which become lighter with depth. Soil droughtiness is the main grading limitation except where gleyed and slowly permeable clay or silty clay occurs in the lower subsoil. Soils of this type fall within Wetness Class III and are limited to grade 2 by a combination of winter soil wetness and workability problems.

## Subgrade 3a

Land in this subgrade is widespread south of Bad Bargain Lane. It also occurs as isolated areas around Cow Moor Farm, Westfield Farm and Sugar Hill.

South of Bad Bargain Lane, in the south western corner of the site, soils consist of sandy loam topsoils over gleyed and slowly permeable sandy clay loam, clay loam and clay. These profiles fall within Wetness Class IV and are limited by soil wetness and associated workability problems.

Topsoil workability problems also limit land around Cow Moor Farm. Soils here generally fall within Wetness Class III and consist of sandy clay loam or clay loam topsoils over gleyed similarly textured upper subsoils. These pass into slowly permeable clay at depth.

Remaining areas in this subgrade consist usually of sandy loam topsoils over loamy sand and sand to depth. Soil droughtiness is limiting for potatoes and is the main grading limitation in these areas

Subgrade 3b

Subgrade 3b is the predominant grade on the site. Soils, which are restricted to Wetness Classes III and IV, consist of heavy clay loam topsoils over gleyed and slowly permeable clay and silty clay subsoils. Soil wetness, combined with associated topsoil workability problems, are the main limitations on ALC grade.

Urban

This consists mainly of housing on the edge of the site.

Farm Buildings

These are concentrated around the main farmsteads across the site