AGRICULTURAL LAND CLASSIFICATION

Proposed Development Site at the Junction of Ermine Street and the A18 South of Broughton, Scunthorpe

MAFF
Leeds Regional Office

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT THE JUNCTION OF THE A18 AND ERMINE STREET SOUTH OF BROUGHTON, SCUNTHORPE

## Introduction

This 12.1 hectare site (National Grid Reference SE 958068) was surveyed in late April 1990. Soils were examined by hand auger borings at a density of one boring per hectare. Further borings were made where necessary to check upon and refine grade boundaries. Soils profile pits were also dug at a number of locations to study soil morphology in greater detail and to collect samples for laboratory analysis. Land quality assessments were made using the revised guidelines published by MAFF in 1988.

## Climate and Relief

Salient climatic parameters at the site are as follows:-

Average Annual Rainf	Fall (mm)	625
Accumulated Temperat	cure Above 0°C (Jan-June)	1369
Field Capacity Days		134
Moisture Deficit	Wheat (mm)	104
	Potatoes (mm)	95

These factors indicate that although there is no overall climatic limitation on ALC grade shallow and/or light textured soils will be droughty.

The land slopes very gently, eastwards from 40 m a.o.d in the west to 35 m a.o.d on the eastern boundary.

## Geology Soils and Drainage

Drift deposits are thin or absent and most soils have developed directly from weathering Jurassic Limestone. Topsoils are usually formed of slightly to moderately stony, sandy clay loam or medium sandy loam. Subsoils are similar in texture and stoniness and pass on to a weathered bedrock at between 50 and 100 cm. All soils are freely drained and meet the requirements for soil Wetness Class I. Most soils on the site are subject to some degree of drought limitations, the severity of which depends on soil thickness and stone content.

Agricultural Land Classification

Grade 2 (2.9 hectares, 24% total area).

This land in the south eastern quarter is free from any soil wetness limitation and has stoneless or slightly stony top and subsoils. Bedrock is usually encountered at between 85 and 100 cm. A slight droughtiness limitation is the main restriction on ALC grade.

Subgrade 3a (6.6 hectares; 55% of total area).

Although similar in character to the grade 2 land, soils tend to be slightly thinner and stonier. This reduces the available water capacity making droughtiness a more severe limitation. Included within this subgrade is a strip of land in the south east part of the site where excavations for a pipeline have increased the stone content of the top and subsoil.

Subgrade 3b (2.6 hectares; 21% of total area).

Topsoils in these areas contain many stones and this is the overriding limitation on ALC grade.

Resource Planning Group Leeds Regional Office May 1990

Map