

AGRICULTURAL LAND CLASSIFICATION

PRESTON FARM, EAGLESCLIFFE  
CLEVELAND

Proposed Residential Development

MAFF

Leeds Regional Office

September 1990

2 FBS 4899

Lds.AL2.Pston.Fm

AGRICULTURAL LAND CLASSIFICATION REPORT ON THE PROPOSED RESIDENTIAL  
DEVELOPMENT AT PRESTON FARM, EAGLESCLIFFE, CLEVELAND

INTRODUCTION

This 58.6 hectare site is located about 2 km north east of Eaglescliffe in Cleveland (National Grid Reference NZ 435 160) and was surveyed in July 1990. Soils were examined by hand auger borings at 58 (one per hectare) points predetermined by the National Grid. In addition soil profile pits were dug to provide more detailed information on soil morphology.

Climate and Relief

Salient climatic parameters at the site are as follows:-

Average Annual Rainfall (mm)	605
Accumulated Temperature above 0°C (Jan-June)	1367
Field Capacity Days	145
Moisture Deficit Wheat (mm)	106
Potatoes (mm)	96

These factors imposed no overall climatic limitation although light textured soils may be droughty.

All the land is either gently or moderately sloping. Steepest slopes occur north of the flood plain around Chapel Hill. Average altitude is 15 m a.o.d

Geology Soils and Drainage

Two distinct soil types occur on the site. Light textured well drained soils (Wetness Class I or II) have developed an alluvial deposits adjacent to the River Tees. In the remainder of the site soils are formed on reddish boulder clay and are subject to a soil wetness limitation. On this material topsoils tend to be either of medium or heavy clay loam over similar or slightly heavier textured slowly permeable subsoils.

## Agricultural Land Classification

### Grade 2 (18.3 ha (31.2% of total area))

Most of the Grade 2 land occurs on the well drained easily worked alluvial soils. Soil wetness is slightly limiting as is droughtiness, preventing these soils from being placed any higher than Grade 2. A further small area of Grade 2 land north of Preston Farm consists of a medium clay loam top and upper subsoil over a reddish clayey slowly permeable lower subsoil. Slight soil wetness is the principal limiting factor in this area.

### Subgrade 3a (22.9 ha/39.1% of total area)

The 3a land is confined to soils developed on Boulder clay. Topsoils and upper subsoils are usually of medium clay loam which is sometimes slightly gleyed. The lower subsoil consists of slowly permeable clay (soil wetness Class III). Soil wetness is the main limiting factor on this land.

### Subgrade 3b (17.4 ha/22.97 % of total area)

Subgrade 3b land consists typically of medium or heavy clay loam topsoils over clayey subsoils. Soil wetness and workability problems are the over-riding limiting factors.

Resource Planning Group  
Leeds Regional Office