

AGRICULTURAL LAND CLASSIFICATION

NEWSHAM GRANGE, ROMANBY,  
NORTHALLERTON  
PROPOSED RESIDENTIAL DEVELOPMENT

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**AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND  
AT NEWSHAM GRANGE, ROMANBY, NORTHALLERTON**

**1.1 Introduction**

9.2 hectares of land at Newsham Grange (National Grid Reference SE 359922) about 2 km South West of Northallerton Town Centre, were surveyed in June 1989. All the land is currently in agricultural use growing cereals.

Soils were examined by hand auger borings at 16 points predetermined by the National Grid at a boring density of just under two per hectare. In addition profile pits were dug to collect samples for laboratory analysis and to interpret soil morphology. Land quality assessments were made using the revised guidelines published by MAFF in 1988.

**1.2 Climate and Relief**

Salient climatic parameters at Newsham Grange are as follows:-

Average Annual Rainfall		661 mm
Accumulated Temperature Above 0°C (Jan-Jun)		1347 day °C
Field Capacity Days		150
Soil Moisture Deficit	wheat	102 mm
	potatoes	91 mm

Except for droughtiness limitations on light textured soils these figures indicate that there is no overall climate limitation on ALC grade in this area.

Most of the land is level except on the gravelly hill north of Newsham Grange where slopes are moderate. Average altitude is 39 m a.o.d.

### 1.3 Geology, Soils and Drainage

Soils are all developed on glacial and post glacial drift. At the northern edge of the site near Lees Lane the drift is predominantly coarse loamy, but with a clayey basal layer at less than 1 m depth. Elsewhere it is coarse loamy to a depth of more than 1 m. Topsoils consist usually of medium sandy loam. Subsoils are similar except along Lees Lane where the heavier basal layer gives clayey slowly permeable subsoils. The small hill north of Newsham Grange contains stony, very light soils, usually of deep loamy sand. Soil wetness is limiting only on the soils with a clayey, slowly permeable subsoil (wetness class III). All other soils are free from any wetness limitation and fall within wetness class I. These profiles however have a small available water capacity and will be droughty for wheat and potatoes.

### 1.4 Agricultural Land Classification

Grade	Area (Hectares)	% of land area
2	4.4	48
3a	2.4	26
3b	1.8	20
Farm Buildings	0.6	6
Total	<u>9.2</u>	<u>100</u>

#### 1.4.1 Grade 2

Topsoils are coarse loamy and subsoils are similar or marginally lighter in texture. Profiles are slightly stony throughout. Droughtiness is slightly restricting for both wheat and potatoes and is the main factor

limiting this land to Grade 2.

#### **1.4.2 Subgrade 3A**

This land contains a clayey, slowly permeable subsoil which results in soil wetness problems and the area is restricted to subgrade 3A for this reason.

#### **1.4.3 Subgrade 3B**

This is the lightest textured and most stony land on the site. It is likely to be significantly droughty for both wheat and potatoes and for this reason is limited to subgrade 3b.

#### **1.4.4 Farm Buildings**

Newsham Grange and its complex of outbuildings are placed in this category.

#### Reference

Revised guidelines and criteria for grading the quality of agricultural land, MAFF (1988).