AGRICULTURAL LAND CLASSIFICATION

OLD BURDON FARM, SEAHAM
PROPOSED GOLF COURSE

MAFF
Leeds Regional Office

August 1991
File Ref: 2FCS 5462
Project No: 65/91

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AGRICULTURAL LAND CLASSIFICATION REPORT, OLD BURDON FARM, SEAHAM, TYNE AND WEAR

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:- NZ 385 505
Location Details:- 7 km SSW of Sunderland and south of the A19.

Site Size:- 55 ha

1.2 Survey Methods

Date Surveyed:- 17 July 1991

Boring Density and Spacing Basis:- 1 boring per hectare at 100 m intervals, predetermined by the National Grid.

Sampling Method:- Hand auger borings to 1 m depth.

Number of Borings:- 54

All land quality assessments were made 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)".

1.3 Climate and Relief

Average Annual Rainfall (AAR):- 667 mm

Accumulated Temperature above 0°C (January-June):- 1237 day °C

Field Capacity Days:- 162 days

Altitude average:- 110 m a.o.d.
maximum:- m a.o.d.
minimum:- m a.o.d.

Climatic limitation (based on interaction of rainfall and temperature values:- Grade 2

Gradient Limitation None

1.4 Geology and Soil

Solid Strata:- Permian Magnesian limestone
Depth of solid rock from surface:- <1 m on much of the site.
Drift types:- Medium textured till.
Thickness of drift and distribution:- <1 m on much of the site.

Soil Types and Distribution:- Lighter textured topsoils dominant in the north of the site and medium textured topsoils in the south of the site.

Soil Textures (topsoils and subsoils):- Soils consist of medium sandy loam to medium clay loam topsoils over similar shallow subsoils.

Soil Series/Associations:-

On 1/250000 map:- Nercwys Association

Soil Limitations and type:- Soil droughtiness resulting from shallow depth to magnesian limestone is the main limiting factor.

1.5 Drainage

Soil type and Wetness Class:- Wetness Class I, well drained soils.

Drainage Limitations:- None.

2.0 Agricultural Land Classification Grades

The ALC grades occurring on the site are as follows:-

Grade/Subgrade	Hectares	Percentage of Total Area
2	10.60	19%
3a	43.35	76%
3b	2.40	4%
4		
5		
Urban	0.35	1%
Total	56.70	100

Grade 2

Distribution on site:- Land in this grade has a patchy distribution across the site depending on depth to rock.

Soil Type(s) and Texture(s):- Soils consist of medium sandy loam to medium clay loam subsoils with heavy clay loam lower subsoils in places.

Depth to Slowly Permeable Layers:- 75 cm or more when present.

Wetness and Drainage Class:- Wetness Class I or II depending on presence of slowly permeable layer at depth (well drained and moderately well drained).

Stone Percentage and Type:- 5-10% limestone and sandstone greater than 2 cm in the top 25 cm of profiles.

Grade Limiting Factors:- Slight soil droughtiness.

Subgrade 3a

Distribution on site:- Dominant grade on the site, occurring in both the north and the south of the site.

Soil Type(s) and Texture(s):- Soils consist of medium sandy loam to medium clay loam topsoils over similar subsoils.

Depth to Slowly Permeable Layers:- When present occurs between 44 to 62 cm.

Wetness and Drainage Class:- Wetness Class III (imperfectly drained).

Stone Percentage and Type:- 10 to 15% of limestone and sandstone greater than 2 cm in the top 25 cm.

Grade Limiting Factors:- Although soil droughtiness is the main limitation on land in this grade, wetness and workability problems are limiting in some places.

Subgrade 3b

Distribution on site:- Land in this grade is Common in the NW corner of the site.

Soil Type(s) and Texture(s):- Soils are shallow, consisting of medium sandy loam topsoils over similar upper subsoils, passing to impenetrable stony material at depth.

Depth to Slowly Permeable Layers:- No slowly permeable layers present.

Wetness and Drainage Class:- Wetness Class I, well drained soils.

Stone Percentage and Type:- 15 to 35% sandstone and limestone greater than 2 cm in the top 25 cm of soil.

Grade Limiting Factors:- Soil droughtiness due to shallow nature of soil profiles.

Urban

Type of land use included:- Farm track.

Resource Planning Group
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