AGRICULTURAL LAND CLASSIFICATION

LANGBAURGH LOCAL PLAN
CLEVELAND

SITES A-E

GUISBOROUGH

ADAS APRIL 1992

Leeds File Ref: 2FCS/5780

Project Nos: 11-15/92

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan
SITE A
Scugdale Farm
Guisborough, Cleveland

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- 2. AGRICULTURAL LAND CLASSIFICATION GRADES

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference: - NZ 592 157

Location Details:- 1.5km west of Guisborough adjoining the

A173.

Site Size:- 15 hectares

1.2 Survey Methods

Date Surveyed:- 5th March 1992

Boring Density and Spacing Basis:- One boring per hectare on a 100 metre

grid pattern predetermined by the

National Grid.

Sampling Method:- Hand auger borings to a depth of 1

metre.

Number of Borings:- 15

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)" This detailed survey supersedes the previous "1" to one mile" survey of the area.

1.3 Land Use:-

At the time of survey most land was under cereal production. There is also a small area of scrubland in the east.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 768 mm

Accumulated Temperature above

0°C (January-June):- 1261 day °C

Field Capacity Days:- 190 days

Altitude average: - 100 m a.o.d.

maximum:- 105 m a.o.d.

minimum:- 95 m a.o.d.

Climatic limitation (based on interaction of rainfall and

temperature values:- Grade 2

Relief:- Undulating with a general north westerly

0 - 5°

aspect.

Gradient Limitations:- None

1.5 Geology and Soil

Slopes (°):-

Soil Strata:- Jurassic lower lias shales and limestone

Depth of solid rock from surface:- Greater than 1 metre

Drift types:- Boulder clay

Thickness of drift

and distribution:- Greater than 1 metre

Soil Types and Distribution:- Medium and heavy textured soils cover

the whole site.

1.5 Geology and Soil contd.

Soil Textures (topsoils and subsoils).

Topsoils consist of medium clay loam or occasionally heavy clay loam over clay or heavy clay loam subsoils.

Soil Series/Associations:-

Dunkeswick

Soil Limitations and type:-

Workability problems caused by heavy topsoil texture, especially in the southwest.

1.6 Drainage

Soil type and Wetness Class:-

Medium/heavy soils fall within Wetness Class III or IV. Heavy soils fall within Wetness Class IV.

Drainage Limitations:-

Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u> Hectares</u>	Percentage of	Percentage of
		Agricultural Area	Total Area
1			
2			
3a	3 <i>•</i> 0	21.0	20
3b	8.1	56.6	54
4	3.2	22.4	21.3
5			
Non Agricultural	0.7		4.7
Agricultural Buildings			
Urban			
Other			
Total	15.0	100	<u> 100</u>

Subgrade 3a

Distribution on site:-

Along the lower northern edge.

Soil Types and Textures:-

Medium/heavy soils with medium clay loam topsoils over heavy clay loam or clay subsoils.

Depth to Slowly Permeable Layers:-

60 - 70 cm.

Wetness and Drainage Class:-

Wetness Class III - imperfectly drained.

Stone Percentage and Type:-

Stoneless

Grade Limiting Factors:-

Soil wetness and workability problems.

Subgrade 3b

Distribution on site:-

This subgrade covers the majority of the site.

Soil Types and Textures:-

Medium/heavy soils with medium clay loam topsoils over heavy clay loam or clay subsoils.

Depth to Slowly Permeable Layers:-

Wetness Class IV - poorly drained.

Grade Limiting Factors:-

Soil wetness and workability problems.

Grade 4

Distribution on site: -

The western part of the site.

Soil Types and Textures:-

Heavy with heavy clay loam topsoils over clay subsoils.

Depth to Slowly Permeable Layers:-

30cm.

Wetness and Drainage Class:-

Wetness Class IV - poorly drained.

Grade Limiting Factors:-

Heavy topsoil texture along with soil wetness and workability problems.

Non Agricultural

Type and location of land included: - A small area of scrub in the east.

MAP

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan
SITE B
Lowcross Farm
Guisborough, Cleveland

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference:-

Location Details:-

NZ 590 153

1.5km west of Guisborough, Cleveland,

immediately south of the A173

Site Size:-

25 hectares

1.2 Survey Methods

Date Surveyed: -

5th March 1992

Boring Density and Spacing Basis:-

One boring per hectare at 100m intervals on a grid pattern, predetermined by the national grid.

Sampling Method: -

Hand auger borings to a depth of 1m

Number of Borings:-

23

All land quality assessments are 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)".

This detailed survey supersedes the previous "1" to one mile" survey of the area.

1.3. Land Use:-

The majority of the agricultural land is permanent grassland. There are also several areas of non agricultural land including farm buildings, farm woodland, a covered reservoir and an access road.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 768 mm

Accumulated Temperature above

0°C (January-June):- 1261 day °C

Field Capacity Days:- 190 days

Moisture Deficit:

wheat:- 84 mm potatoes 69 mm

Altitude average:- 100 m a.o.d.

maximum:- 125 m a.o.d.

minimum:- 90 m a.o.d.

Climatic limitation (based on interaction of rainfall and

temperature values:- ALC Grade 2

and steep, generally with a westerly

aspect.

Slopes (°):- 0 - 15°

Gradient Limitations:- Yes

Limiting gradients:- 7 - 15°

Grades/subgrades:- 3b (7-11°) 4 (11-18°)

Occurrence on site:- 3b - in the southern corner of the

site.

4 - in the centre of the site on

Slopes vary from gentle to moderate

Relief:-

slopes rising from Lowcross farm to the covered reservoir.

1.5 Geology and Soil

Solid Strata:-

Jurassic lias shales and limestones.

Depth of solid rock from surface:-

Greater than one metre over the whole

site.

Drift types:-

A mixture of medium and heavy textured

boulder clay.

Thickness of drift and distribution: - Greater than 1 metre over the whole

site.

Soil Types and Distribution:-

Medium and heavy textured soils cover

the whole site.

Soil Textures (topsoils and

subsoils):-

Topsoils consist of medium and heavy

clay loams, over similar or heavier

subsoils.

Soil Series/Associations:-

Identified on site:-

On 1/250000 map:-

Dunkeswick

Yes

Soil Limitations and type:-

Heavy topsoil textures - ALC grade 4.

1.6 Drainage

Soil type and Wetness Class:-

All soils fall within Wetness Class IV

(poorly drained).

Drainage Limitations:-

Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u>Hectares</u>	Percentage of	Percentage of
		Agricultural Area	Total Area
1			
2			
3a			
3b	12,7	58	50 .
4	9.3	42	37
5			
Non Agricultural	0.8		3
Agricultural Buildings	0.4		1.5
Urban	0.1		0.5
Farm Woodland	2.0		8.0
			
Total	25.3	100	100

Subgrade 3b

Distribution on site:-

Land in this subgrade covers much of the west, centre and south of the site, with a further area around Lowcross Farm in the West.

Soil Types and Textures:-

Medium to heavy textured soils, typically medium clay loam topsoils over heavy clay loam and clay subsoils.

Depth to Slowly Permeable Layers:-

Less than 52 cm

Wetness and Drainage Class:-

Wetness Class IV - Poorly drained.

Stone Percentage and Type:-

0 - 5% small and medium sandstones.

Grade Limiting Factors:-

Soil wetness and workability problems also gradient on slopes of between 8 - 11°.

Grade 4

Distribution on site:-

One large area extending around the northern and western slopes of Grove Hill, plus a smaller area adjoining the disused railway in the south.

Soil Types and Textures:-

Medium to heavy textured soils, typically medium or heavy clay loam topsoils over similar or heavier subsoils.

Depth to Slowly Permeable Layers:-

Less than 52cm.

Wetness and Drainage Class:-

Wetness Class IV - Poorly drained.

Stone Percentage and Type:-

0 - 5% small and medium sandstones.

Grade Limiting Factors:-

Heavy topsoil textures leading to soil wetness and workability problems and also gradient, particularly around Grove Hill, where gradients range from 12° to 15°.

Non Agricultural

Type and location of land included:-

Two main areas in the centre of the site and in the west around the dismantled railway. Land in the central area consists of farm woodland, a covered reservoir and rough scrubland; the area near the railway is disturbed.

Agricultural Buildings

Type and location of building included:-

Farmhouse and buildings around Lowcross
Farm near the western corner of the site.

Urban:-

Type of land use included:-

The access road to the covered reservoir.

MAP

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan
SITE C
Hunter Hill Farm
Guisborough, Cleveland

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference: -

onal Grid Reference:-

Location Details:-

NZ 615 146

On the southern edge of Guisborough

immediately north of the disused

railway.

Site Size:-

9.5 hectares

1.2 Survey Methods

Date Surveyed: -

6th March 1992

Boring Density and Spacing Basis:-

1 boring per hectare on a 100m grid

predetermined by the National Grid.

Sampling Method:-

Hand auger borings to a depth of 1

metre.

Number of Borings:-

9

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)". This detailed survey supersedes the previous "1" to one mile" survey of the area.

1	3	Land	Use:-
	3	Licitica	USE: -

All the agricultural land is under permanent grassland. Other land uses include allotments, roads and a farm house and associated buildings.

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 794 mm

Accumulated Temperature above

0°C (January-June):- 1244 day °C

Field Capacity Days:- 198 days

Altitude average:- 125 m a.o.d.

maximum:- 133 m a.o.d.

minimum:- 118 m a.o.d.

Climatic limitation (based on interaction of rainfall and

temperature values:- Grade 2

Relief:- Gently sloping from southeast to

northwest.

Slopes (°):- 1 - 3°

Gradient Limitations:- None

1.5 Geology and Soil

Solid Strata:-

Depth of solid rock from surface:-

Drift types:-

Thickness of drift

and distribution:-

Jurassic lower lias clays and limestone

Greater than 1 metre

Medium and heavy textured boulder clay.

Greater than 1 metre over the whole

site.

Soil Types and Distribution:-

Medium over heavy soils in the east;

heavy soils in the west.

Soil Textures (topsoils and

subsoils):-

Medium or heavy clay loam topsoils over heavy clay loam or clay subsoils. Heavy clay loam topsoils are most common in

the western part of the site.

Soil Series/Associations:-

On 1/25000 map:-

Crewe

Soil Limitations and type:-

Heavy topsoils in the western part of

the site.

1.6 Drainage

Soil type and Wetness Class:-

All soils fall within Wetness Class IV

(poorly drained).

Drainage Limitations:-

Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u> Hectares</u>	Percentage of	Percentage of
		Agricultural Area	Total Area
1			
2			
3a			
3b	4.6	61.3	47.4
4	2.9	38.7	29.9
5		,	
Non Agricultural	1.5		15.5
Agricultural Buildings	0.4		4
Urban	0.3		3.2
Other		• .	
Total	9.7	100	100

Subgrade 3b

Distribution on site:- This subgrade covers most of the eastern half of the

site.

Soil Types and Textures:- Medium and heavy textured soils with medium clay loam

topsoils over heavy clay loam or clay subsoils.

Depth to Slowly Permeable

Layers:- 15 - 35 cm

Wetness and Drainage Class:- Wetness Class IV - poorly drained

Stone Percentage and Type:- Stoneless

Grade Limiting Factors:- Soil wetness and workability problems.

Grade 4

Distribution on site:- Most of the western part of the site along with two

smaller areas to the east of Hunters Hill Farm.

Soil Types and Textures:- Heavy consisting of heavy clay loam topsoils over

clay subsoils.

Depth to Slowly Permeable

Layers:- 10 - 15 cm

Wetness and Drainage Class: - Wetness Class IV - poorly drained.

Stone Percentage and Type:- 0°

Grade Limiting Factors:- Heavy topsoil texture along with soil wetness and

workability problems.

Non Agricultural

Type and location of land included:- Allotments on the northern edge of the site along with a garden at Hunter Hill

Agricultural Buildings

Type and location of building included:

Farm house and out buildings at Hunter Hill Farm.

Urban

Type of land use included:-

Access roads

MAP

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan
SITE D
Belmont Farm
Guisborough, Cleveland

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 <u>Introduction</u> and Site Characteristics

1.1 Location

National Grid Reference:-

NZ 620 153

Location Details:-

On the southeastern edge of Guisborough

Site Size:-

8 hectares

1.2 Survey Methods

Date Surveyed: -

6th March 1992

Boring Density and Spacing Basis:- 1 boring per hectare at 100m intervals on a grid basis, predetermined by the

National Grid.

Sampling Method: -

Hand auger borings to a depth of 1m.

Number of Borings:-

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)". This detailed survey supersedes the previous "1" to one mile" survey of the area.

1.3 Land Use:-

All the agricultural land is under permanent grassland.

Gentle to moderate slopes with a

1.4 Climate and Relief

Average Annual Rainfall (AAR):- 775 mm

Accumulated Temperature above

0°C (January-June):- 1249 day °C

Field Capacity Days:- 193 days

Moisture Deficit:

wheat:- 84 mm

potatoes:- 68 mm

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

maximum:- 125 m a.o.d.

minimum:- 105 m a.o.d.

Climatic limitation (based on interaction of rainfall and

temperature values:- ALC Grade 2

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northerly aspect:

Slopes (°):- 0 - 8°

Gradient Limitations:- ALC grade 3b

Limiting gradients:- (8 - 11°)

Grades/Subgrades:-

Occurrence on site:- One small area at the centre of the

3b

site.

Relief:-

1.5 Geology and Soil

Solid Strata:-

Depth of solid rock from surface:-

Drift types:-

Thickness of drift

and distribution:-

Jurassic lower lias shales and limestone Greater than 1 metre over the whole site Medium and heavy textured boulder clay.

Greater than 1 metre over the whole

site.

Soil Types and Distribution:-

Medium to heavy textured soils cover the

whole site.

Soil Textures (topsoils and

subsoils):~

Topsoils consist of medium clay loam over heavy clay loam, clay or silty clay subsoils.

Soil Series/Associations:-

On 1/25000 map:-

Crewe

Soil Limitations and type:-

Heavy topsoil texture.

1.6 Drainage

Soil type and Wetness Class:~

All soils fall within Wetness Class IV

(poorly drained).

Drainage Limitations:-

Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u>Hectares</u>	Percentage of	Percentage of
		Agricultural Area	Total Area
1			
2			
3a	•		
3b	8.13	100	100
4			
5			
Non Agricultural			
Agricultural Buildings			
Urban			
Other			
Total	8.13	100	100

Subgrade 3b

Distribution on site:- All of the site falls within this subgrade.

Soil Types and Textures: - Medium and heavy textured soils. Typically medium clay loam topsoils over heavy clay loam, silty clay

or clay subsoils.

Depth to Slowly Permeable

Layers:- 15 - 45 cm

Wetness and Drainage Class: - Wetness Class IV - poorly drained

Stone Percentage and Type: - Stoneless

Grade Limiting Factors:- Soil wetness and workability problems; gradient and

local topography.

MAP

AGRICULTURAL LAND CLASSIFICATION

Langbaurgh Local Plan
SITE E
Foxdale Farm
Guisborough, Cleveland

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1. AGRICULTURAL LAND CLASSIFICATION

AGRICULTURAL LAND CLASSIFICATION REPORT

1.0 Introduction and Site Characteristics

1.1 Location

National Grid Reference: -

NZ 622 157

Location Details:-

The site is located to the East of

Guisborough adjoining the A171

Site Size:-

16 hectares

1.2 Survey Methods

Date Surveyed: -

6th March 1992

Boring Density and Spacing Basis:- 1 boring per hectare at 100m intervals

on a grid basis, predetermined by the

National Grid.

Sampling Method:-

Hand auger borings to a depth of 1m.

Number of Borings:-

15

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)". This detailed survey supersedes the previous "1" to one mile" survey of the area.

1.3 Land Use:-

Almost all of the land is under permanent grassland, except for one small field of cereals and a small area of farm buildings.

1.4 Climate and Relief

Average	Annual	Rainfall	(AAR):-	770	mm

Accumulated Temperature above

0°C (January-June):-	1255	day	°C
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Moisture Deficit:

wheat:-	85	mm
potatoes:-	70	mm

Altitude average:-	100	m	a.o.d.
maximum:-	110	m	a.o.d.
minimum:-	94	m	a.o.d.

Climatic limitation (based on interaction of rainfall and

ALC Grade 2 temperature values:-

Gentle slopes, which are slightly steeper towards the southern edge of the site.

 $0 - 3^{\circ}$ Slopes (°):-Gradient Limitations:-None

Relief:-

1.5 Geology and Soil

Solid Strata:Depth of solid rock from surface:Drift types:-

Thickness of drift and distribution:-

Jurassic lias shales and limestone

Greater than 1 metre over the whole site

Heavy textured boulder clay.

Greater than 1 metre over the whole site.

Soil Types and Distribution:-

Medium over heavy textured soils cover the whole site.

Soil Textures (topsoils and subsoils):-

Topsoils consist of medium clay loam over similar or more clayey subsoils.

Soil Series/Associations:-On 1/25000 map:-

Identified on site:-

Crewe Yes

Soil Limitations and type:-

1.6 Drainage

Soil type and Wetness Class:-

All soils fall within Wetness Class IV (poorly drained).

Drainage Limitations:-

Slowly permeable subsoils.

2.0 Agricultural Land Classification Grades

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

Grade/Subgrade	<u>Hectares</u>	Percentage of	Percentage of
		Agricultural Area	Total Area
		Surveyed	
1			
2		•	
3a			
3b	13.3	100	83
4			
5		•	
Non Agricultural			
Agricultural Buildings	0.05	(negligible)	
Urban		1	
Not surveyed (owner not			
known)	2.8		17
Other			
Total	16.1	100	100

Subgrade 3b

Distribution on site:- This subgrade covers all of the surveyed area of

agricultural land.

Soil Types and Textures:- Medium over heavy soils consisting of medium clay

loam topsoils over medium clay loam, heavy clay loam

and clay subsoils.

Depth to Slowly Permeable

Layers:- 30 - 50 cm

Wetness and Drainage Class:- Wetness Class IV - poorly drained

Stone Percentage and Type:- Stoneless

Grade Limiting Factors:- Soil wetness and workability problems.

MAP