

AGRICULTURAL LAND CLASSIFICATION
NOVA SCOTIA FARM, EARSWICK
YORK
PROPOSED GOLF COURSE
JULY 1993

ADAS
Leeds Statutory Group

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SUMMARY

A semi-detailed Agricultural Land Classification Survey of 70.9ha of land at Nova Scotia Farm, Earswick, York, was carried out in July 1993.

58.9ha of this was in agricultural use of which 29.9ha is Subgrade 3a. Two main soil types fall within this subgrade. The first consists of imperfectly and poorly drained (Wetness Classes III and IV) variable light to medium textured topsoils over gleyed clay which is slowly permeable within 55cm depth. These soils are limited to Subgrade 3a by slight soil wetness. The second consists of light textured topsoils over light upper subsoils and clay lower subsoils which are restricted to Subgrade 3a by slight summer droughtiness and risk of wind erosion. Other soils in this subgrade consist of light textured organic topsoils over light textured subsoils (typically fine or medium sand). These soils are limited to Subgrade 3a by slight summer droughtiness.

The remaining agricultural land on the site (29.0ha) falls within Subgrade 3b. Two main soil types occur within this subgrade. The heavier soils consist of poorly drained (Wetness Class IV) medium clay loam or heavy clay loam topsoils over gleyed clay subsoils, which are slowly permeable within 45cm. These soils are limited to Subgrade 3b by soil wetness and workability restrictions. Light land within this subgrade consists of well drained (Wetness Class I) loamy medium sand or medium sand topsoils and subsoils limited to Subgrade 3b by severe summer droughtiness and risk of wind erosion.

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AGRICULTURAL LAND CLASSIFICATION REPORT ON LAND AT NOVA SCOTIA
FARM, EARSWICK, YORK: PROPOSED GOLF COURSE

1. INTRODUCTION AND SITE CHARACTERISTICS

1.1 Location and Survey Methods

The site is located 3km east of Haxby and is centred on Grid Reference SE 635573. Survey work (semi-detailed) was carried out in July 1993 when soils were examined by hand auger borings at a density of one every two hectares at points predetermined by the National Grid. Land quality was assessed using the methods described in "Agricultural Land Classification of England and Wales: Revised criteria for grading the quality of agricultural land" (MAFF 1988). (Because of the semi-detailed nature of the survey additional work may be necessary if the classification of the site is disputed).

1.2 Land Use and Relief

At the time of survey 83.1% of the site was in agricultural production. The remainder consists of Farm Woodland, Non Agricultural, Farm Buildings and Urban land. The site is level and lies at 18m AOD.

1.3 Climate

Grid Reference	: SE 635573
Altitude (m)	18
Accumulated Temperature above 0°C (January-June)	: 1380 day°C
Average Annual Rainfall (mm)	: 625
Climatic Grade	: 1
Field Capacity Days	: 142
Moisture Deficit (mm) Wheat	: 109
Moisture Deficit (mm) Potatoes	: 100

1.4 Geology, Soils and Drainage

The site is underlain by Bunter sandstone over which there is a thick cover of drift consisting of Warp, lacustrine clay and glaciofluvial and aeolian sand.

Soils are variable, reflecting differences in the texture and thickness of the drift deposits. Soils forms over lacustrine clay are stoneless and imperfectly or poorly drained (Wetness Class III to IV), consisting usually of medium or heavy textured topsoils (typically medium sandy loam, sandy clay loam or medium clay loam) over gleyed, slowly permeable clay subsoils. Soils on deep sand deposits are stoneless and well drained, falling within Wetness Class I. Profiles consist of light textured material (loamy fine sand or loamy medium sand) throughout the profile, with organic topsoils in places. In some parts of the site, light textured material overlies clay at depth.

2. AGRICULTURAL LAND CLASSIFICATION

The ALC grades occurring on this site are as follows-

<u>Grade/Subgrade</u>	<u>Hectares</u>	<u>Percentage of Total Area</u>
1		
2		
3a	29.9	42.2
3b	29.0	40.9
4		
5		
(Sub total)	(58.9)	(83.1)
Urban	2.0	2.8
Non Agricultural	2.1	3.0
Woodland - Farm	5.0	7.0
- Commercial		
Agricultural Buildings	2.9	4.1
Open Water		
Land not surveyed		
(Sub total)	(12.0)	(16.9)
TOTAL	70.0	100

2.1 Subgrade 3a

Two areas of Subgrade 3a land occur over the site: one in the north and one in a band running west to east from Nova Scotia Farm to the south of Big Coppice. Two main soil types occur within this subgrade. The first type comprises deep, stoneless, well drained (Wetness Class I) soils, with medium to light textured topsoils (generally loamy fine sand or fine sandy loam) over light upper subsoils (generally fine or medium sand) and clay subsoils. These soils are restricted to Subgrade 3a by slight summer droughtiness and a risk of wind erosion. The second soil type consists of deep, stoneless, imperfectly (Wetness Class III) or poorly drained (Wetness Class IV) drained profiles. Topsoil texture is variable, typically loamy fine sand, fine sandy loam, sandy clay loam or medium clay loam, but all profiles contain a slowly permeable clay layer within 55cm depth. These soils are limited by Subgrade 3a by slight wetness.

Other soils falling within this subgrade have light textured organic topsoils (typically organic loamy fine sand) over medium sand. These soils are deep, stoneless and well drained (Wetness Class I), and are restricted to Subgrade 3a by slight summer droughtiness.

Subgrade 3b

The remaining agricultural land on the site falls within Subgrade 3b. Two main soil types occur within this subgrade. Poorly drained soils (Wetness Class IV) consist of medium to heavy textured topsoils (typically sandy clay loam, medium clay loam or heavy clay loam) over gleyed clay which is slowly permeable within 45cm depth. These soils are restricted to Subgrade 3b by wetness and workability problems.

The second soil type within this subgrade consists of deep, stoneless, well drained soils (Wetness Class I) formed of light textured material (loamy medium sand or medium sand) throughout the soil profile. These soils are limited to Subgrade 3b by severe summer droughtiness.

Urban

This consists of the farm house at Nova Scotia and a cinder surfaced access road running on to the site from the south.

Non Agricultural

A narrow strip of land adjoining the southern access road has been fenced off and taken out of agricultural use. Several former dew ponds in the north of the site support scrub vegetation and are not cultivated.

Farm Woodland

This consists of the woodland at Big Coppice and Earswick Moor.

Agricultural Buildings

Barns and sheds occupy land to the west of Wisker Lane.

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MAP