AGRICULTURAL LAND CLASSIFICATION
SELBY LOCAL PLAN
(OBJECTORS SITES)
NORTH YORKSHIRE
FEBRUARY 1996

ADAS

Leeds Statutory Group

Job No - 20 - 23/96

MAFF Ref - EL 48/91A

Commission No - N2356

SUMMARY

Detailed Agricultural Land Classification (ALC) surveys of four sites within Selby District (" Selby Local Plan, Objectors' Sites") were carried out in February 1996 The following table summarises the grade areas found on each site

	Area (ha)			
Site	Grade 2	Subgrade 3a	Subgrade 3b	Other Land
NS BYR IV	7 4	-	-	-
NS CAR I	4 3	-	2 3	0 2
NS FBN II	11 7	12 8	6 4	3 1
NS STM V/VI	-	6 3	5 4	0 3

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AGRICULTURAL LAND CLASSIFICATION REPORT ON OBJECTORS' SITES FOR SELBY LOCAL PLAN, NORTH YORKSHIRE

1 Introduction

Detailed Agricultural Land Classification (ALC) surveys of four sites within Selby District were carried out in February 1996, when the soils were examined by hand auger borings at 100 m intervals predetermined by the National Grid Additional borings were made where necessary to refine grade boundaries and at least two soil pits were dug on each site to allow full profile descriptions to be made

The land quality in each case was assessed 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)

2 SITE NS BYR IV

2 1 Location, Land Use and Relief

The site lies approximately 3 km east of Castleford, between the village of Byram and the south-bound carriageway of the A1 It is centred on National Grid reference SE 487252 At the time of the survey all of the site was in agricultural use growing winter cereals

Site altitude ranges from 10 m in the west to 20 m in the east The site is level to moderately sloping (0 - 4°) with a south-westerly aspect

2 2 Climate

Grid Reference	SE 487252
Altitude (m)	15
Accumulated Temperature above 0°C (January - June)	1400 day °C
Average Annual Rainfall (mm)	602
Climatic Grade	1
Field Capacity Days	127
Moisture Deficit (mm) Wheat	107
Moisture Deficit (mm) Potatoes	98

2 3 Geology, Soils and Drainage

The north-east of the site is underlain by Upper Magnesian Limestone over which there is a covering of glacial till The remainder of the site is underlain by Permian Marl

Soils consists of medium clay loam topsoils and upper soils which, in some places are gleyed within 40 cm depth Lower subsoils consist of medium clay loam or heavy clay loam and are occasionally slowly permeable below 55 cm depth Soils are well drained or moderately well drained falling within Wetness Class I to II

2 4 Agricultural Land Classification

The ALC grades occurring on this site are as follows

Grade/Subgrade	Hectares	% of Total Area
1		
2	7 4	100
3a		
3b		
4		
5		
(Sub total)	(7 4)	(100)
Other land		
TOTAL	7 4	100

2 4 1 Grade 2

All of the site is Grade 2 The soils are well drained or moderately well drained (Wetness Class I or II) and consist of stoneless or very slightly stony (0 to 9% total, hardstones) over similar upper subsoils which are occasionally gleyed within 40 cm depth Lower subsoils consist of stoneless to very slightly stony (0 to 5% total, hardstones and limestones) medium clay loam or heavy clay loam and are occasionally slowly permeable below 55 cm depth

Soils are well drained or moderately well drained (Wetness Class I - II) and the land is limited to Grade 2 by slight soil wetness and droughtiness

3 SITE NS CAR I

3 1 Location, Land Use and Relief

Site NS CAR I lies 8½ km south-south-east of Selby, on the north side of the village of Carlton At the time of the survey 97% of the site was in agricultural use (growing winter cereals or having been recently ploughed) whilst the remaining 3% consisted of a track in the north

Site altitude varies between 3m AOD in the west and approximately 6 m AOD in the east The land is level in the west and centre, and gently sloping (2°) in the east with a westerly aspect

3 2 Climate

Grid Reference	SE645 246
Altitude (m)	4
Accumulated Temperature above 0°C (January - June)	1409 day °C
Average Annual Rainfall (mm)	600
Climatic Grade	1
Field Capacity Days	125
Moisture Deficit (mm) Wheat	111
Moisture Deficit (mm) Potatoes	104

3 3 Geology, Soils and Drainage

The area is underlain by Triassic Sherwood Sandstone, over which lie superficial deposits of fluvioglacial sand and gravel in the east and wind-blown (aeolian) sand in the west

The soils on the site are well to moderately well drained (Wetness Classes I and II) and consist of loamy medium sand topsoils overlying medium sand subsoils in the east, and fine sandy loam, sandy clay loam or medium clay loam topsoils overlying gleyed fine sand, loamy fine sand, fine sandy loam or sandy clay loam in the west The soils on the site correspond to the Newport (in the east) and Everingham (in the west) associations as mapped by the Soil Survey and Land Research Centre

3 4 Agricultural Land Classification

The ALC grades occurring on this site are as follows

Grade/Subgrade	Hectares	% of Total Area
1		
2	4 3	63 3
3a		
3b	2 3	33 8
4		
5		
(Sub total)	(6 6)	(97 1)
Other land	0 2	2 9
	6 8	100
TOTAL		

3 4 1 Grade 2

Grade 2 land occurs in the west of the site The soils are well or moderately well drained (Wetness Classes I and II) and consist of stoneless fine sandy loam, sandy clay loam or medium clay loam topsoils overlying fine sand, loamy fine sand, fine sandy loam or sandy clay loam subsoils The subsoils are generally gleyed below 40 cm depth and slowly permeable layers begin in places at between 45 cm and 70 cm depth The ALC grade of this land is limited by slight soil wetness and by a pattern limitation which prevents any areas of Grade 1 land being mapped separately

3 4 2 Subgrade 3b

The agricultural land in the east of the site falls in Subgrade 3b Stoneless loamy medium sand topsoils overlie stoneless medium sand subsoils These soils are well drained (Wetness Class I) but have a low water holding capacity and soil droughtiness is the factor restricting the ALC grade of this land

3 4 3 Other Land

This consists of a track in the north of the site

RPT File 2FCS 11242

4 SITE NS FBN II

4 1 Location, Land Use and Relief

This site lies 5½ km east-north-east of Castleford town centre, on the eastern side of the village of Fairburn The eastern edge of the site had been subject to an ALC survey in 1990 (Reference 63/90) in relation to the upgrading of the A1(T) to motorway standard between Ferrybridge and Hook Moor and the additional information obtained during the 1996 survey was used to refine grade boundaries in this area

At the time of the February 1996 survey 90 8% of the land was in agricultural use (principally in winter cereals, cereal stubble, or having been recently ploughed) while 9 2% consisted of roads, farm buildings, houses and gardens, and woodland

Site altitude varies from 35m AOD in the west to 20 m AOD in the east The land is generally level to gently sloping (0 - 3°) with an easterly or southerly aspect

4 2 Climate

Grid Reference	SE 476279
Altitude (m)	27
Accumulated Temperature above 0°C (January - June)	1386 day °C
Average Annual Rainfall (mm)	619
Climatic Grade	1
Field Capacity Days	132
Moisture Deficit (mm) Wheat	105
Moisture Deficit (mm) Potatoes	96

4 3 Geology, Soils and Drainage

This area is underlain by Upper Magnesian Limestone, which outcrops to within one metre of the soil surface over much of the site In some places there is a thin drift cover of glacial sand

The soils developed over limestone are generally well drained (Wetness Class I) and consist of medium clay loam topsoils overlying medium clay loam, heavy clay loam or clay subsoils, with weathering limestone beginning at between 30 cm and 100 cm depth Where deposits of glacial sand occur the profiles are also well drained (Wetness Class I) but consist of medium sandy loam or sandy clay loam topsoils overlying loamy medium sand, medium sandy loam or sandy clay loam subsoils

The soils on the site correspond to the Aberford and Arrow associations as described by the Soil Survey and Land Research Centre

4 4 Agricultural Land Classification

The ALC grades occurring on this site are as follows

Grade/Subgrade	Hectares	% of Total Area
1		
2	11 7	34 4
3a	12 8	37 6
3b	6 4	18 8
4		
5		
(Sub total)	(30 9)	(90 8)
Other land	3 1	9 2
TOTAL	34 0	100

4 4 1 Grade 2

Grade 2 land covers 11 7 ha of the site The soils are generally well drained (Wetness Class I) and consist of either medium-textured topsoils overlying medium to heavy-textured subsoils, or light to medium-textured topsoils overlying very light to light-textured subsoils, depending on whether the soils are derived from weathering limestone or glacial drift The topsoils and subsoils are typically very slightly to slightly stony, with between 3% and 9% hard stones or limestones, and weathering limestone frequently begins at between 75 cm and 110 cm depth In both cases soil droughtiness is the grade-limiting factor

4 4 2 Subgrade 3a

Subgrade 3a land covers much of the centre of the site The soils are well drained (Wetness Class I) and generally consist of either medium clay loam topsoils and subsoils overlying weathering limestone at around 60 cm depth, or medium sandy loam topsoils overlying medium sandy loam and loamy medium sand subsoils In both cases soil droughtiness is the factor restricting the land to Subgrade 3a

4 4 3 Subgrade 3b

Land in this subgrade occurs in the north-east and south-west Generally medium clay loam topsoils and, in place, upper subsoils, overlie weathering limestone at between 25 cm and 45 cm depth These soils are well drained (Wetness Class I) but severe soil droughtiness restricts the ALC grade of the land In a small part of the north-east some profiles are poorly drained (Wetness Class IV), with medium clay loam topsoils overlying gleyed and slowly permeable clay subsoils at around 30 cm depth In this case soil wetness is the grade-limiting factor

4 4 4 Other Land

Other land, consisting of houses and gardens, agricultural buildings, a minor road and, in the south-west, woodland, covers 3 1 ha on this site

RPT File 2FCS 11243

5 SITES NS STM V AND NS STM VI

5 1 Location, Land Use and Relief

The sites lies to the south of the Leeds-Selby railway line, east of Mill Lane in South Milford, around National Grid Reference SE 494319 At the time of the survey, 97 5% of the site was in agricultural use, growing cereals The remainder consists of a small building, and an area of scrub classed as "Other Land "

Site altitude ranges from 15 m to 25 m AOD and the land is level to gently sloping (0 to 2°) with a southerly to south-westerly aspect

5 2 Climate

Grid Reference	SE 494319
Altitude (m)	20
Accumulated Temperature above 0°C (January - June)	1392 day °C
Average Annual Rainfall (mm)	602
Climatic Grade	1
Field Capacity Days	138
Moisture Deficit (mm) Wheat	105
Moisture Deficit (mm) Potatoes	96

5 3 Geology, Soils and Drainage

The site is underlain by Upper Magnesian Limestone Thin deposits of alluvium and clayey drift are confined to the south and east Soils are shallow in places, particularly in the west, with bedrock occurring at between 35 cm and 75 cm Soils are well drained to imperfectly drained (Wetness Class I to III) and generally consist of stoneless to slightly stony (0 - 8%, total, small and medium limestones) medium clay loam topsoils over similar upper subsoils Slowly permeable, heavy clay loam or clay subsoils occur below 55 cm depth in places

Soils are similar to those of the Aberford Association as mapped by the Soil Survey and Land Research Centre

5 4 Agricultural Land Classification

The ALC grades occurring on this site are as follows

Grade/Subgrade	Hectares	% of Total Area
1		
2		
3a	6 3	52 5
3b	5 4	45 0
4		
5		
(Sub total)	(11 7)	(97 5)
Other land	0 3	2 5
	12 0	100
TOTAL		

5 4 1 Subgrade 3a

The eastern part of the site falls within Subgrade 3a Soils consist of medium clay loam topsoils and upper subsoils over medium clay loam or heavy clay loam lower subsoils which are occasionally slowly permeable at below 55 cm depth Bedrock occurs within 55 to 75 cm depth in places Soils are well drained or imperfectly drained (Wetness Class I to III) and the land is limited to Subgrade 3a by droughtiness and, in places, soil wetness

5 4 2 Subgrade 3b

Land in the west of the site falls within Subgrade 3b Soils are well drained (Wetness Class I) and shallow, with medium clay loam topsoils overlying limestone rock at 35 to 40 cm depth This land is restricted to Subgrade 3b by a more severe droughtiness limitation

5 4 3 Other Land

This comprises a building and a strip of scrub in the east of the site

RPT File 2FCS 11244