SHROPSHIRE STRUCTURE PLAN
MUCH WENLOCK
LAND SOUTH OF STRETTON ROAD,

Agricultural Land Classification
ALC Map and Report

May 1999

Resource Planning Team
Northern Region
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AGRICULTURAL LAND CLASSIFICATION REPORT

SHROPSHIRE STRUCTURE PLAN
MUCH WENLOCK, LAND SOUTH OF STRETTON ROAD

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey of 2.5 ha of land south of Stretton Road, to the west of Much Wenlock, Shropshire. The survey was carried out in March 1999.

2. The survey was undertaken by the Farming and Rural Conservation Agency (FRCA)[1] on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF). This survey was carried out in connection with MAFF's statutory input to the Shropshire Structure Plan. This survey supersedes any previous ALC information for this land.

3. The work was conducted by members of the Resource Planning Team in the Northern Region of FRCA. The land has been graded in accordance with the published MAFF *ALC guidelines and criteria (MAFF, 1988).* A description of the ALC grades and subgrades is given in Appendix I.

4. At the time of survey the site was under permanent pasture and root vegetables. A belt of recently planted tress along part of the sites south-eastern boundary was mapped as 'Other land'.

SUMMARY

5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10 000. It is accurate at this scale but any enlargement would be misleading.

6. The area and proportions of the ALC grades and subgrades on the surveyed land are summarised in Table 1.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% Total agricultural land area	% Total survey area
1	-	-	-
2	2.4	100	96
3a	-	-	-
3b	-	-	-
4	-	-	-
5	-	-	-
Agricultural land not surveyed	-	-	-
Other land	0.1	-	4
Total agricultural land area	2.4	100	-
Total survey area	2.5	-	100

[1] FRCA is an executive agency of MAFF and the Welsh Office

7. The fieldwork was conducted at an average density of 1 boring per hectare of agricultural land. A total of 3 borings and 1 soil pit was described.

8. The agricultural land on this site has been classified as Grade 2 (very good quality). The principal limitation to the agricultural use of this land is soil wetness.

9. Land of very good quality (Grade 2) is found across the site. Soils comprise a medium silty clay loam topsoil over a medium silty clay loam upper subsoil and heavy clay loam lower subsoil. Soil wetness is the principal limitation to the agricultural use of this land.

FACTORS INFLUENCING ALC GRADE

Climate

10. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

11. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using the standard interpolation procedures (Met. Office, 1989).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SO610994
Altitude	m, AOD	195
Accumulated Temperature	day°C (Jan-June)	1271
Average Annual Rainfall	mm	766
Field Capacity Days	days	178
Moisture Deficit, Wheat	mm	80
Moisture Deficit, Potatoes	mm	64
Overall climatic grade	N/A	Grade 2

12. The climatic criteria are considered first when classifying land as climate can be overriding in the sense that severe limitations will restrict land to low grades irrespective of favourable site or soil conditions.

13. The main parameters used in the assessment of an overall climatic limitation are average annual rainfall (AAR), as a measure of overall wetness, and accumulated temperature (AT0, January to June), as a measure of the relative warmth of a locality.

14. The combination of rainfall and temperature at this site means that the land experiences a climatic limitation consistent with Grade 2. As a result land cannot be graded higher than Grade 2.

Site

15. The site lies at an altitude of 185-200m AOD, and slopes to the east. The site is bordered to the north by Stretton Road, to the west by agricultural land, and to the south-east by a small industrial development and dismantled railway line.

Geology and soils

16. The most detailed published solid geological information for this area (BGS, 1952) maps the site as being underlain by Lower Ludlow Shales and Wenlock Limestone. Drift geological information for this area (BGS, 1974) indicates that the south of the site is underlain by Boulder Clay.

17. The most recent published soils information for this area (SSEW, 1983) shows the site to comprise soils of the Yeld association. This association, which occur over shales and associated limestones, includes soils described as 'fine silty and calcareous fine loamy' (SSEW 1984).

18. Upon detailed field examination, soil profiles broadly consistent with the above description were found across the site.

AGRICULTURAL LAND CLASSIFICATION

19. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1, page 1.

Grade 2

20. Land of good quality occupies 2.4 ha (96%) of the total survey area, and is found across the site. The principal limitation to the agricultural use of this land is soil wetness.

21. Within the Grade 2 mapping unit, soils comprise stoneless or very slightly stony medium silty clay loam topsoils, which overlie slightly stony medium silty clay loam upper subsoils and moderately stony heavy clay loam lower subsoils. These well drained soils were assigned to Wetness Class I and Grade 2.

William Fearnehough
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SOURCES OF REFERENCE

British Geological Survey (1952) *Sheet No. 152, Shrewsbury. (1:63630).*
BGS: London.

British Geological Survey (1974) *Sheet No. 152, Shrewsbury. (1:63630).*
BGS: London.

Ministry of Agriculture, Fisheries and Food (1988) *Agricultural Land Classification of England and Wales: Revised guidelines and criteria for grading the quality of agricultural land.*
MAFF: London.

Met. Office (1989) *Climatological Data for Agricultural Land Classification.*
Met. Office: Bracknell.

Soil Survey of England and Wales (1983) *Sheet 3, Soils of Midland and Western England. (1:250 000).*
SSEW: Harpenden.

Soil Survey of England and Wales (1984) *Soils and their use in Midland and Western England.*
SSEW: Harpenden.

APPENDIX I

DESCRIPTIONS OF THE GRADES AND SUBGRADES

Grade 1: Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2: Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land of this grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1 land.

Grade 3: Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown, yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a: Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b: Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4: Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5: Very Poor Quality Agricultural Land

Land with severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

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program: ALC012 LIST OF BORINGS HEADERS 06/05/99 MUCH WENLOCK SITE D1 page 1

SAMPLE NO.	GRID REF	ASPECT USE	GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M.REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT		ALC	COMMENTS
1	SO61209950	GRA	01			1	2	126	46	123	59	1				CL		2	
1P	SO61049942	SWE	02			1	2	116	36	107	43	1				CL		2	
2	SO61109940	SWE	01			1	2	135	55	124	60	1				CL		2	
3	SO61049942	SWE	02			1	2	96	16	99	35	2				CL		2	

				----MOTTLES----			PED		----STONES----				STRUCT/	SUBS			
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0-28	mzcl	10YR33 00						0	0	HR	3						
	28-80	mzcl	75YR44 00						0	0		0				M		
	80-87	hcl	75YR43 00						0	0		0				M		
1P	0-25	mzcl	10YR32 00						0	0		0						
	25-45	mzcl	75YR44 00						0	0	HR	10	MDCSAB	FR		M		
	45-95	hcl	75YR44 53						0	0	HR	30	WKCAB	FR		M		
2	0-35	mzcl	10YR32 00						0	0	HR	3						
	35-70	mzcl	75YR44 00						0	0		0				M		
	70-95	hcl	75YR44 00						0	0		0				M		
3	0-28	mzcl	10YR33 00						0	0		0						
	28-55	mzcl	10YR44 00						0	0		0				M		