CREWE AND NANTWICH LOCAL PLAN: FIRST REPLACEMENT

Land East of Haslington

Agricultural Land Classification ALC Map and Report November 1998

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AGRICULTURAL LAND CLASSIFICATION REPORT CREWE AND NANTWICH LOCAL PLAN: FIRST REPLACEMENT Land East of Haslington

INTRODUCTION

- 1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 27.9 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located to the east of Crewe at Haslington, centred on grid reference SJ 743 562. The site is bounded to the north, east and south by residential development and bounded by agricultural land on the west of the site. The survey was in connection with the Crewe and Nantwich Local Plan (First Replacement 2011).
- 2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in November 1998 by the Resource Planning Team of the Farming and Rural Conservation Agency (FRCA)- Northern region of FRCA.
- 3. The land has been graded in accordance with the publication "Agricultural Land Classification of England and Wales Revised guidelines and criteria for grading the quality of agricultural land" (MAFF 1988).
- 4. At the time of survey the agricultural land on this site was under maize, grass and stubble.

SUMMARY

- 5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:10000 with an average auger boring density of 1 per hectare. The ALC map is only accurate at this base map scale and 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)	% surveyed area	% site area
1	-	-	_
2	17.7	82	63
3a	3.8	18	14
3b	-		-
4	-	-	-
5	_	[- [-
Agricultural land not surveyed	6.2	-	22
Other land	0.2	-	1
Total surveyed area	21.5	100	
Total site area	27.9		100

- 7. The agricultural land on this site has been classified as Grade 2 (very good quality) and Subgrade 3a (good quality). The key limitation to the agricultural use of this land is soil droughtiness and soil wetness.
- 8. Very good quality land is found throughout the site. The soils commonly comprise either a sandy clay loam or a sandy loam topsoil, overlying either a sandy loam or a loamy sand subsoil onto sand at depth. Occasionally, clay loam subsoils are present.
- 9. Good quality land is found in the north east of the site. The soils commonly comprise a sandy loam topsoil overlying either a sandy loam or a loamy sand subsoil onto sand at depth. Occasionally sand subsoils are present.

FACTORS INFLUENCING ALC GRADE

Climate

- 9. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.
- 10. The key climatic variables used for grading this site are given in Table 2 and were obtained from the published 5km grid datasets using standard interpolation procedures (Meteorological Office, 1989).

Factor	Units	Values
Grid reference	N/A	SJ 743 562
Altitude	m, AOD	60
Accumulated Temperature	day°C (Jan-June)	1397
Average Annual Rainfall	mm	751
Field Capacity Days	days	173
Moisture Deficit, Wheat	mm	92
Moisture Deficit, Potatoes	mm	80
Overall climatic grade	N/A	Grade 1

Table 2: Climatic and altitude data

- 11. 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.
- 12. 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.
- 13. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. The site is climatically Grade 1.

Site

- 14. The site lies at an altitude of 60 metres AOD. The topography of the site is generally flat in nature, gently falling towards a drain running south east through the centre of the site
- 15. The three site factors of gradient, microrelief and flooding are considered when classifying the land.
- 16. These factors do not impose any limitations on the agricultural use of this land.

Geology and Soils

- 17. The solid geology of the area is comprises of Middle Keuper Marl British Geological Survey (1990). The drift geology of the site comprises of Boulder Clay British Geological Survey (1968).
- 18. The soils that have developed on this geology are generally of slightly stony sandy loam topsoil passing to horizons of slightly stony loamy sand onto sand at depth.

Agricultural Land Classification

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

Grade 2

- 20. Land of very good quality occupies 17.7 hectares (63%) of the site area.
- 21. The soils commonly comprise either a sandy clay loam or a sandy loam topsoil, overlying either a sandy loam or a loamy sand subsoil onto sand at depth. Occasionally, sandy clay loam subsoils are present. The moisture balance places these soils in Grade 2. Occasionally, heavier textured profiles occur where clay loam subsoils are present. The depth to gleving and the absence of a slowly permeable layer places these soils in Wetness Class II.
- 22. The main limitation to the agricultural use of this land is soil droughtiness and soil wetness.

Subgrade 3a

- 23. Land of very good quality occupies 3.8 hectares (14%) of the site area.
- 24. The soils commonly comprise a sandy loam topsoil overlying either a sandy loam or a loamy sand subsoil onto sand at depth. Occasionally sand subsoils are present. The moisture balance places these soils in Subgrade 3a.
- 25. The main limitation to the agricultural use of this land is soil droughtiness.

Agricultural land not surveyed

26. Agricultural land not surveyed occupies 6.2 hectares (22%) of the site. At the time that the survey was carried out, this area was under maize restricting access.

Other land

27. Other land occupies 0.2 hectares (1%) of the site and is found as a track.

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SOURCES OF REFERENCE

British Geological Survey (1990) Sheet 110, Macclesfield, Solid Edition. 1:50 000 Scale.

BGS: London.

British Geological Survey (1968) Sheet 110, Macclesfield, Drift Edition. 1:63 360 Scale. 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.

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