AGRICULTURAL LAND CLASSIFICATION
VULCAN VILLAGE (PROPOSED GOLF COURSE)
ST HELENS MBC

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR VULCAN VILLAGE (PROPOSED GOLF COURSE), ST HELENS MBC

1 SUMMARY

1.1 The Agricultural Land Classification (ALC) Survey for this site shows that the following proportions of ALC grades are present:

Grade/Subgrade	ha	% of site
3a	10.4	71
3b	3.1	21
4	0.9	6
Other land		
Non-Agricultural	0.2	1
Urban	0.1	1

1.2 The main limitations to the agricultural use of land in Subgrade 3a are soil droughtiness and soil wetness.

1.3 The main limitation to the agricultural use of land in Subgrade 3b is soil wetness.

1.4 The main limitation to the agricultural use of land in Grade 4 is soil depth and soil droughtiness.

2 INTRODUCTION

2.1 The site was surveyed by the Resource Planning Team in March 1995. An Agricultural Land Classification survey was undertaken according to the guidelines laid down in the "Agricultural Land Classification of England and Wales - Revised Guidelines and Criteria for Grading the Quality of Agricultural Land" (MAFF 1988).

2.2 The 14.7ha site is situated to the south of Newton-Le-Willows. The land immediately to the south and west of the site is predominantly in agricultural use. The land immediately to the north and east is in urban and non-agricultural use. The site is bounded to the east by a railway and to the west and south by a disused canal.

2.3 The survey was requested by MAFF in connection with the ad hoc development proposal for a golf course.

2.4 At the request of the Land Use Planning Unit of MAFF, this was a detailed grid survey at 1:10000 with a minimum auger boring density of 1 per hectare. The attached map is only accurate at the base map scale and any enlargement would be misleading.

2.5 At the time of the survey the site was under grass and cereals.

3 CLIMATE

3.1 The following interpolated data are relevant for the site (SJ 585 936) :

Average Annual Rainfall (mm)	862
Accumulated Temperature above 0°C January to June (day °C)	1435

3.2 There is no overall climatic limitation on the site

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	204
Moisture Deficit Wheat (mm)	87
Moisture Deficit Potatoes (mm)	74

4 SITE

4.1 Three site factors of gradient, micro relief and flooding are considered when classifying land.

4.2 These factors do not impose any limitations on the agricultural use of the land.

5 GEOLOGY AND SOILS

5.1 The solid geology of the area is comprised of Triassic Bunter Pebble Beds - British Geological Survey Sheet 97 Runcorn 1:63,360. This is overlain with deposits of Quaternary alluvium and fluvio-glacial gravel and boulder clay.

5.2 The underlying geology influences the soils which either have a sandy loam or sandy clay loam texture or a clay loam texture near Newton Brook.

6 AGRICULTURAL LAND CLASSIFICATION

6.1 Subgrade 3a - occupies 10.4 ha (71%) of the survey area. The soil in this subgrade is of two distinct types.

6.1.1 Firstly there are the soils that have a sandy loam or sandy clay loam texture overlying loamy sand and sand to depth, with few stones within the profile. Occasionally sandy clay loam occurs in part or throughout the subsoil. The moisture balance places these soils into subgrade 3a. There are isolated auger borings of Grade 2 quality within this unit, but they cannot be mapped separately at this scale.

6.1.2 Secondly there are the soils to the south of Newton Brook which have a sandy clay loam texture over loamy sand and/or silty clay to depth. The profiles have a slightly stony topsoil with subsoils becoming very stony. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class II.

6.1.3 The main limitations to the agricultural use of this land are soil droughtiness and soil wetness.

6.2 Subgrade 3b - occupies 3.1 ha (21%) of the survey area and is found in the north of the site and adjacent to Newton Brook.

6.2.1 The soil typically has a clay loam or silty clay loam texture overlying silty clay or clay to depth. Occasionally there are lenses of loamy sand and sand in the subsoil. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class IV.

6.2.1 The main limitation to the agricultural use of this land is soil wetness.

6.3 Grade 4 - occupies 0.9 ha (6%) of the survey area and is found adjacent to Newton Brook and the disused canal. The soils in this Grade are again of two distinct types.

6.3.1 Firstly there are the soils adjacent to Newton Brook which have a heavy silty clay loam texture over silty clay, with few stones throughout the profile. Observations of gleying and the depth to the slowly permeable layer place these soils in Wetness Class IV.

6.3.2 The main limitation to the agricultural use of this land is soil wetness.

6.3.3 Secondly there are the soils in the north west of the site, adjacent to the disused canal. These soils have a heavy clay loam texture over a rubble and clay matrix. This land has been extensively disturbed.

6.3.4 The main limitations to the agricultural use of this land are soil depth and soil droughtiness.

6.4 Other land includes non-agricultural which occupies 0.2ha (1%) of the survey area as a picnic area and an area by a pylon and urban - covering 0.1ha (1%) of the survey area in the south (there is a trackway to the south of Newton Brook adjacent to the railway which cannot be mapped separately at this scale).

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
3a	10.4	71	72
3b	3.1	21	22
4	0.9	6	6
Other land			
Non-Agricultural	0.2	1	-
Urban	0.1	1	-
Totals	**14.7**	**100**	**100**