

**AGRICULTURAL LAND CLASSIFICATION
CHESHIRE MINERALS SUBJECT PLAN, SILICA SAND, SITE 7.**

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AGRICULTURAL LAND CLASSIFICATION REPORT FOR CHESHIRE MINERALS SUBJECT PLAN, SILICA SAND, SITE 7

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
2	56.3	48.0
3a	14.9	12.7
3b	43.2	36.9
Other land	2.8	2.4

- 1.2 The main limitations to the agricultural use of land in Grade 2 are soil wetness, soil droughtiness and overall climatic limitation.
- 1.3 The main limitation to the agricultural use of land in Subgrade 3a is soil wetness.
- 1.4 The main limitation to the agricultural use of land in subgrade 3b is soil wetness and gradient.

2 INTRODUCTION

- 2.1 The site was surveyed by the Resource Planning Team in January 1996. 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 117.2 ha site is situated 2 Km north of Congleton and is bisected by the A34. The land surrounding the site is predominantly in agricultural use.
- 2.3 The survey was requested by MAFF in connection with the Cheshire Minerals Subject Plan.
- 2.4 At MAFF Land Use Planning Unit's request 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 permanent grass, cereals, cereal stubble and bare ground.

3 CLIMATE

3.1 The following interpolated data are relevant for the site

Grid Reference	SJ855661	SJ863660
Average Rainfall	824	841
Accumulated Temperature above 0° January to June (day °C)	1333	1319

3.2 There is an overall climatic limitation of Grade 2 on the site

3.3 Other relevant data for classifying land include:

Grid Reference	SJ855661	SJ863660
Field Capacity Days (days)	203	205
Moisture Deficit Wheat (mm)	81	78
Moisture Deficit Potatoes (mm)	66	63

4 SITE

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

4.2 Two small areas to the south-east and south-west of Sandhole Farm are classified as subgrade 3b where gradients of 8° are a limitation to the agricultural use of the land. A larger area at the southern edge of the site, directly south of Sandhole Farm, is also restricted to Subgrade 3b by gradient.

4.3 Neither micro-relief nor flooding 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 Middle and Lower Keuper Marl - British Geological Survey Sheet 110 Macclesfield 1 Inch. This is overlain with deposits of sand and gravel, fluvio-glacial deposits and boulder clay.

5.2 The underlying geology influences the soils which generally have a sandy loam topsoil texture across the centre and east of the site or a clay loam topsoil texture over the remainder of the site.

6 AGRICULTURAL LAND CLASSIFICATION

6.1 Grade 2 - occupies 56.3 ha (48%) of the survey area and is found in the centre and east of the site, with a small area to the south-west.

6.1.1 These soils generally have a sandy loam texture overlying sandy loam, sandy clay loam or sand to depth, although clay occurs at depth in places with few stones within the profile. The moisture balance places these soils into Grade 2, and observations of gleying place these soils into Wetness Classes I and II.

6.1.2 The main limitation to the agricultural use of this land are soil droughtiness, soil wetness and climate.

6.2 Subgrade 3a - occupies 14.9 ha (12.7%) of the survey area and is found in three areas located on the western boundary, across the centre of the site and south west of Fields Farm.

6.2.1 The soil has either clay loam or sandy clay loam topsoil textures overlying clay loam, sandy clay loam or sandy loam and heavy clay loam and clay to depth. Observations of gleying and depth to the slowly permeable layer place these soils in the Wetness Classes II and III.

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

6.3 Subgrade 3b - occupies 43.2ha (36.9%) of the survey area and is found across the west of the site and in patches around Gorsey Moor Farm and Fields Farm.

6.3.1 The soil typically has a clay loam texture overlying heavy clay loam and clay or clay to depth. Observations of gleying and the depth to the slowly permeable layer places 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 Gradient of 8° are found in three small areas of land, to the south, south west and south east of Sand Hole Farm. The main limitation to the agricultural use of the land is gradient.

6.4 Other land covers 2.8 ha (2.4%) of the site at woodland, open water, Sandhole Farm buildings and the metalled track to Sandhole Farm.

6.5 SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	56.3	48.0	49.2
3a	14.9	12.7	13.0
3b	43.2	36.9	37.8
Other land	2.8	2.4	
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Totals	117.2	100	100
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