

**AGRICULTURAL LAND CLASSIFICATION  
CHESHIRE MINERALS PLAN  
SITE 4: STATION ROAD, DELAMERE  
(CONSTRUCTION SAND)**

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**AGRICULTURAL LAND CLASSIFICATION REPORT FOR  
CHESHIRE MINERALS PLAN  
SITE 4: STATION ROAD, DELAMERE (CONSTRUCTION SAND)**

**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	8.5	43.0
3b	11.0	55.5
Other land		
Woodland	0.3	1.5

1.2 The main limitation to the agricultural use of land in Subgrade 3a is soil droughtiness.

1.3 The main limitations to the agricultural use of land in Subgrade 3b are gradient, microrelief and pattern.

**2 INTRODUCTION**

2.1 The site was surveyed by the Resource Planning Team in December 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 19.8 ha site is situated to north east of Delamere. The land immediately to the north of the site is predominantly in agricultural use, land immediately to the south of the site is woodland and land immediately west of the site is occupied by old sand and gravel workings which have been flooded to form lakes.

2.3 The survey was requested by MAFF in connection with the Cheshire minerals 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 grass.

### 3 **CLIMATE**

3.1 The following interpolated data are relevant for the site (SJ 568 695) :

Average Annual Rainfall (mm)	800
Accumulated Temperature above 0°C January to June (day °C)	1378

3.2 There is no overall climatic limitation on the site

3.3 Other relevant data for classifying land include:

Field Capacity Days (days)	186
Moisture Deficit Wheat (mm)	85
Moisture Deficit Potatoes (mm)	71

### 4 **SITE**

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

4.2 Gradient and microrelief impose limitations on the agricultural use of the land.

### 5 **GEOLOGY AND SOILS**

5.1 The solid geology of the area is comprised of Lower Keuper Marl Saliferous Beds - British Geological Survey Sheet 109 Chester 1 Inch. This is overlain with deposits of Glacial sand and gravel.

5.2 The underlying geology influences the soils which have a sandy texture.

6 **AGRICULTURAL LAND CLASSIFICATION**

6.1 Subgrade 3a - occupies 8.5 ha (43%) of the survey area and is found mainly in the north east and north west of the site adjacent to Farm Road.

6.1.1 The soil has loamy sand texture over sand to depth, with few or no stones within the profile. The moisture balance places these soils into Subgrade 3a.

6.1.2 The main limitation to the agricultural use of this land is soil droughtiness.

6.2 Subgrade 3b - occupies 11 ha (55.5%) of the survey area and is found in the south and central part of the site.

6.2.1 The soil typically has a loamy sand texture overlying sand to depth, with few or no stones within the profile.

6.2.2 The main limitation to the agricultural use of this land is gradient and microrelief. The gradient of slopes over the site limit the area to Subgrade 3b. Occasional slopes exceed the upper limit of 11° for Subgrade 3b but these areas are too small to be mapped separately at this scale. The microrelief of the southern part of the site also acts as a limiting factor, with hollows containing peaty soils being surrounded by the lighter sandy soils. The undulating surface and change in soil type imposes a pattern limitation to the agricultural use of this land.

6.3 Other land includes woodland - occupying 0.3 ha (1.5%) of the survey area to the south east of the site.

6.4 **SUMMARY OF AGRICULTURAL LAND CLASSIFICATION GRADES**

Grade/Sub-grade	Area in Hectares	% of Survey Area	% of Agricultural Land
3a	8.5	43.0	43.6
3b	11.0	55.5	56.4
Other land			
Woodland	0.3	1.5	
<b>Totals</b>	<b>19.8</b>	<b>100.0</b>	<b>100.0</b>