

**Agricultural Land Classification
Walton MSA, Stone**

**ADAS
Wolverhampton Statutory Group**

**Job No: 045/93
MAFF Ref: EL37/10152**

AGRICULTURAL LAND CLASSIFICATION REPORT FOR WALTON MSA, STONE

1. Summary

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

Grade 2	3.7 ha	(16.5% of the site)
Sub-grade 3a	15.6 ha	(65.5% of the site)
Sub-grade 3b	4.5 ha	(19.0% of the site)

1.2 The main limitations to the agricultural use of the Grade 2 land are soil wetness and droughtiness.

1.3 The main limitation to the agricultural use of land in sub-grade 3a and 3b is wetness.

2. Introduction

2.1 The site was surveyed by the Resource Planning Team in July 1993. An Agricultural Land Classification (ALC) 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 the Land" (MAFF 1988).

2.2 This 23.8 ha site is situated directly southwest of Stone at the south junction of the M6 and the B6026. (NGR - SJ888 322). The surrounding land is predominantly in agricultural use.

2.3 The survey was requested by MAFF in connection with an ad hoc development proposal for a motorway service station.

2.4 MAFF's Land Use Planning Unit requested that this was a "detailed grid survey" at 1:10,000 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 survey the site was under permanent grass, cereals and maize.

3. Climate

3.1 The following interpolated data are relevant for the site.

Altitude	120 m	112 m
NGR	SJ900318	SJ888324
Average Annual Rainfall (AAR)	743	764
Accumulated Temperature above 0°C January to June	1336	1345
Field Capacity Days	183	186
Moisture Deficit Wheat	89	90
Moisture Deficit Potatoes	75	76

3.2 There is no overall climatic limitation on the site.

4. Site

4.1 The assessment of site factors is primarily concerned with the way in which topography influences the use of agricultural machinery. These include gradient, microrelief and flooding.

4.2 The site itself is relatively flat with the altitude varying between 112 m in the north and 120 m in the south.

4.3 Gradient, microrelief and flooding 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 mapped as Triassic Keuper Marl interbedded with thin sandstone, rocksalt and gypsum - British Geological Survey Sheet 139, Stafford 1 inch, overlain by deposits of Quaternary Boulder Clay.

5.2 The underlying geology influences the soils which either have a clay loam, sandy clay loam, clay texture or occasionally a sandy loam texture.

6. Agricultural Land Classification

6.1 Grade 2 - occupies 3.7 ha (15.5%) of the survey area and is found as a band along the north-eastern part of the site around Walton Heath Farm.

6.1.1 These soils typically have a medium sandy loam topsoil which overlies a subsoil of either sandy clay loam, sandy loam, loamy sand or clay to depth. There are few stones within the profile.

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

- 6.2 Sub-grade 3a - occupies 15.6 ha (65.5%) of the survey area and is found in the Northwest of the site and as a narrow strip along the south.
- 6.2.1 The soils have either a clay loam or sandy clay loam texture overlying sandy clay loam and clay. Generally there are few stones within the topsoil with few - moderate stones in the subsoil.
- 6.2.2 The main limitation to the agricultural use of this land is soil wetness.
- 6.3 Sub-grade 3b - occupies 4.5 ha (19.0%) of the survey area and is found in the southern part of the site.
- 6.3.1 The soil has a medium clay loam texture overlying heavy clay loam or clay subsoils. Occasionally these soils overlie clay and sandy clay loams to depth. There are few or no stones within these profiles.
- 6.3.2 The main limitation to the agricultural use of the land is soil wetness.
- 6.4 Summary of Agricultural Land Classification Grades.

Grade	Area in Hectares	% of Survey Area	% of Agricultural Land
2	3.7	15.5	15.5
3a	15.6	65.5	65.5
3b	4.5	19.0	19.0
Totals	23.8	100.0	100.0

**Resource Planning Team
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