WREKIN LOCAL PLAN SITE 3
DONNINGTON

Agricultural Land Classification
ALC Map and Report
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AGRICULTURAL LAND CLASSIFICATION REPORT
WREKIN LOCAL PLAN, SITE 3
DONNINGTON

INTRODUCTION

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 34.3 hectares of land. The results of this survey supersede any previous ALC information for this land. The land is located at Donnington, north of Telford, centred on grid reference SJ 708 148. The site is bounded to the south by the A518 and to the north and west by a Ministry of Defence depot and housing, and to the east by agricultural land. The survey was in connection with the Wrekin Local Plan.

2. The survey was undertaken on behalf of the Ministry of Agriculture, Fisheries and Food (MAFF) in May 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 a fruit and horticulture enterprise in the western field, and winter wheat in the eastern field.

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	21.4	76	62
3a	6.9	24	20
3b	-	-	-
4	-	-	-
5	-	-	-
Agricultural land not surveyed	1.7	N/A	5
Other land	4.3	N/A	13
Total surveyed area	28.3	100	-
Total site area	34.3	-	100

7. The agricultural land on this site has been classified as Grade 2 (very good quality) and Subgrade 3a (good quality). The key limitations to the agricultural use of this land are soil wetness, droughtiness and stoniness.

8. Very good quality land occurs throughout the site. The soils commonly comprise either a sandy loam or sandy clay loam topsoil, overlying either a sandy loam, loamy sand or sandy clay loam subsoil. Occasionally the profiles may go on to heavy clay loam and clay subsoils at depth.

9. The area of good quality land is mapped as a single unit in the centre of the site. The soils commonly comprise a sandy clay loam topsoil, over heavy clay loam and clay subsoils. Occasional borings went on to loamy sand and sand subsoils.

FACTORS INFLUENCING ALC GRADE

Climate

10. Climate affects the grading of land through the assessment of an overall climatic limitation and also through interactions with soil characteristics.

11. 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).

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 711 149
Altitude	m, AOD	70
Accumulated Temperature	day°C (Jan-June)	1404
Average Annual Rainfall	mm	682
Field Capacity Days	days	152
Moisture Deficit, Wheat	mm	100
Moisture Deficit, Potatoes	mm	89
Overall climatic grade	N/A	Grade 1

12. 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.

13. 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 (ATO, January to June), as a measure of the relative warmth of a locality.

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

Site

15. The site lies at an altitude of 66 - 70 metres AOD. The land form is predominantly level. The south west of the site is taken over by a car park and buildings associated with Green Field Garden Centre. A farm track runs roughly north-west to south-east through the centre of the site.

16. The three site factors of gradient, microrelief and flooding are considered when classifying the land.

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

Geology and Soils

18. The solid geology of the area is comprised of soft red Lower Mottled Sandstone - British Geological Survey (1958). Drift deposits only cover part of the site and consist of boulder clay in a strip through the centre of the site, and laminated clay in the north western corner - British Geological Survey (1948).

19. The soils that have developed on this geology are generally of either a sandy clay loam or sandy loam topsoil texture, over a sandy loam, loamy sand and sand subsoil, or alternatively a sandy clay loam topsoil over a heavy clay loam and clay subsoil.

Agricultural Land Classification

20. 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

21. Land of very good quality occupies 21.4 hectares (62 %) of the site area and extends throughout the site. Three types of profile are described within this unit.

22. In the east of the site the soils commonly comprise a medium sandy loam topsoil, on to a medium sandy loam and loamy medium sand subsoil, and occasionally onto sandy clay loam at depth. The moisture balance places these soils in Grade 2.

23. Over the most of the rest of the Grade 2 area the soils commonly comprise either a sandy clay loam or a medium sandy loam topsoil, onto either a sandy clay loam, medium sandy loam or heavy clay loam upper subsoil, overlying a heavy clay loam lower subsoil and occasionally clay at depth. The depths to gleying and a slowly permeable layer place these soils in Wetness Class II.

24. A few borings in the west of the site contained common stones within the topsoil. The stone content places these soils in Grade 2.

25. Within the Grade 2 area there are a few isolated borings of excellent quality land. These profiles cannot be shown separately at this scale of mapping.

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

Subgrade 3a

27. Land of good quality occupies 6.9 hectares (20 %) of the site area and occurs in a strip through the centre of the site. Two types of profile occur within this area.

28. The soils commonly comprise a sandy clay loam topsoil, over a heavy clay loam and clay subsoil with few to common stones within the profile. The depths to gleying and a slowly permeable layer place these soils in Wetness Class III.

29. Within the centre of this area soils commonly comprise a sandy clay loam topsoil, over either a medium sandy loam or loamy medium sand upper subsoil, overlying loamy sand and sand at depth. The moisture balance places these soils in Subgrade 3a.

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

Agricultural Land Not Surveyed

31. Agricultural land not surveyed occupies 1.7 hectares (5 %) of the site area. This land, located to the west of the farm track that runs through the centre of the site, consists of poly tunnels under which strawberries were being grown.

Other Land

32. Other land occupies 4.3 hectares (13 %) of the site area and is found as a farm track and a car park and buildings associated with Green Field Garden Centre located in the south west corner of the site.

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SOURCES OF REFERENCE

British Geological Survey (1958) Sheet 153, Wolverhampton, Solid Edition.
1:63 360 Scale.
BGS: London.

British Geological Survey (1948) Sheet 153, Wolverhampton, 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.