

**SHARESHILL SOUTH  
MAJOR INVESTMENT SITE PROPOSAL**

**Agricultural Land Classification Survey  
ALC Map and Report  
December 1996**

**Resource Planning Team  
ADAS Statutory Group  
ADAS Wolverhampton**

**ADAS Reference: 024/96, 25/RPT/0781  
MAFF Reference: EL 37/11272  
LUPU Commission: WO1981**

**AGRICULTURAL LAND CLASSIFICATION REPORT  
SHARESHILL SOUTH  
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**INTRODUCTION**

1. This report presents the findings of a detailed Agricultural Land Classification (ALC) survey on 100.2 hectares of land. The land is located to the east of Shreshill and is bounded by the M6 motorway to the east, the A460 trunk road to the west and Hilton Lane to the south. The survey was undertaken by the Resource Planning Team at Wolverhampton (Northern ADAS Statutory Centre) during November and December 1996.
2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) from its Land Use Planning Unit in Crewe. The survey was in connection with the major investment sites (MIS) study in the West Midlands. The results of this survey supersede any previous ALC information for this land.
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 grass, cereals, oilseed rape and fodder crops, part had been recently ploughed and a small area was under set aside.

**SUMMARY**

5. The findings of the survey are shown on the attached ALC map. At the request of the Land Use Planning Unit this was a detailed grid survey at a scale of 1:10 000 with a minimum auger boring density of 1 per hectare. The ALC map is only accurate at the 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 below.

Table 1: Area of grades and other land

Grade/Other land	Area (hectares)	% site area	% surveyed area
2	52.2	52	56
3a	31.6	31	34
3b	7.6	8	8
4	1.5	2	2
Other Land	7.3	7	-
Total surveyed area	92.9	-	100
Total site area	100.2	100	-

7. The agricultural land on this site has been classified as Grade 2 (very good quality), Subgrade 3a (good quality), Subgrade 3b (moderate quality) and Grade 4 (poor quality), the key limitations being soil wetness, soil droughtiness, topsoil content and gradient.

8. The area of very good quality land is mapped in the west and centre of the site with a small area along the eastern boundary. The soils have either a sandy loam topsoil overlying sandy loam or loamy sand and sand to depth or sandy loam and sandy clay loam topsoils overlying a sandy clay loam subsoil to depth occasionally reaching sand or clay at depth.

9. The area of good quality land is located in the south, north and east of the site. In the north the soils commonly comprise of a sandy loam topsoil overlying sandy loam, loamy sand and sand to depth and are slightly to moderately stony. In the south and east, the soils have a sandy clay loam topsoil overlying sandy clay loam and clays occasionally at depth.

10. The area of moderate quality land is mapped in the centre and east of the site. The soils in this area have either a sandy loam topsoil overlying a loamy sand and sand subsoil and are slightly to moderately stony or a sandy loam topsoil overlying variable sandy clay loam and sandy loam subsoils. The areas have been mapped as Subgrade 3b as the gradient is between 7° and 11°.

11. The area of poor quality land is mapped in the east of the site, bordering the stream. The soils have a clay loam topsoil overlying clay subsoil.

## FACTORS INFLUENCING ALC GRADE

### Climate

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

13. The key climatic variables used for grading this site are given in Table 2 below and were obtained from the published 5km grid datasets using standard interpolation procedures (Met. Office, 1989).

14. 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.

Table 2: Climatic and altitude data

Factor	Units	Values
Grid reference	N/A	SJ 954 060
Altitude	m, AOD	136
Accumulated Temperature	day°C	1327
Average Annual Rainfall	mm	716
Field Capacity Days	days	168
Moisture Deficit, Wheat	mm	89
Moisture Deficit, Potatoes	mm	76

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15. 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 (AT0, January to June), as a measure of the relative warmth of a locality.

16. The combination of rainfall and temperature at this site means that there is no overall climatic limitation. Local climatic factors, such as exposure and frost risk, are not believed to significantly affect the site. The site is climatically Grade 1.

### Site

17. The site lies at an altitude ranging from 125m to 152m AOD. The land falls away from the highest point in the centre of the site and is crossed by two tributaries of the River Penk which contribute to its undulating nature.

18. Three site factors of gradient, microrelief and flooding are considered when classifying the land.

19. Gradient imposes a limitation on the agricultural use of four areas of land in the centre and north east of the site. Gradients of 9-11° limit these areas to Subgrade 3b.

20. Microrelief and flooding do not impose any limitations on the agricultural use of this land.

### Geology and soils

21. The solid geology of the area is comprised of Carboniferous Keele Beds and Bunter Pebble Beds. These are overlain with deposits of unbedded glacial sands and gravels glacial till and recent alluvium - British Geological Survey Sheet, (1948, 1958).

22. The soils that have developed on this geology are either of a sandy loam texture over loamy sand and sand to depth or a sandy clay loam texture overlying sandy clay loam and occasionally clay to depth, the soils are variably stony.

### Agricultural Land Classification

23. The details of the classification of the site are shown on the attached ALC map and the area statistics of each grade are given in Table 1.

#### Grade 2

24. Land of very good quality occupies 52.2 hectares (52%) of the site area and extends across the majority of the western side of the site in a single unit, smaller areas have been identified in the centre and east of the site.

25. In the west of the site the soil has a sandy loam texture over either loamy sand and sand to depth or sandy loam and sand to depth the profiles are slightly stony. The moisture balance places these soils in Grade 2 and topsoil stone content also limits some of these soils to Grade 2.

26. The main limitations to the agricultural use of this land are soil droughtiness and topsoil stone content.

27. In the centre and east of the site, the soils have a sandy clay loam or sandy loam topsoil texture overlying a sandy clay loam subsoil. The depth to gleying and the slowly permeable layer places these soils into Wetness Classes II and III. The topsoils are variably stony.

28. The main limitations to the agricultural use of this land are soil wetness and topsoil stone content.

#### *Subgrade 3a*

29. Land of good quality occupies 31.6 hectares (31%) of the site area and is found across the north, centre, south and east of the site in isolated blocks.

30. In the north and centre of the site the soil has either a sandy loam or sandy clay loam topsoil texture, overlying a loamy sand and sand subsoil to depth, the soils are slightly to moderately stony and the moisture balance places these soils in Subgrade 3a.

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

32. In the south and west of the site around Hollybush Lane, the soils have a sandy clay loam texture overlying either sandy clay loam to depth or sandy clay loam and clay to depth. The depth to gleying and the slowly permeable layer places these soils into Wetness Class IV. Occasionally topsoil stone content limits the soils to Subgrade 3a.

33. In the extreme south of the site, along Hilton Lane, isolated borings of Subgrade 3b land were found, but these were too small to map at this scale.

34. The main limitations to the agricultural use of this land are soil wetness and occasionally topsoil stone content.

#### *Subgrade 3b*

35. Land of moderate quality occupies 7.6 hectares (8%) of the site area and is found in the centre and east of the site.

36. The soils have a sandy loam or sandy clay loam topsoil texture, which overlies either loamy sand and sand to depth or sandy clay loam to depth. Gradients of 9-11° limit these areas to Subgrade 3b.

37. The main limitation to the agricultural use of this land is gradient.

#### *Grade 4*

38. Land of poor quality occupies 1.5 hectares (2%) of the site area and is found in the east of the site bordering the stream.

39. The soil has a clay loam topsoil texture overlying clay to depth. The depth and duration of waterlogging in the soil profile places these soils into Wetness Class V.

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

*Other Land*

41. Other land occupies 7.3 hectares (7%) of the site area and comprises, farm buildings, woodland, ponds and water courses, residential buildings and metalled trackways.

Resource Planning Team  
Wolverhampton Statutory Group  
ADAS Wolverhampton

## SOURCES OF REFERENCE

British Geological Survey (1948) *Sheet 153, Wolverhampton Drift Edition. 1:63 360 Scale.*  
BGS: London.

British Geological Survey (1958) *Sheet 153, Wolverhampton Solid 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.*  
Met. Office: Bracknell.

# CARTOGRAPHIC WORK REQUEST FORM

DATE WORK SUBMITTED 17-12-96.

CONSULTANT / R.O. SUZANNE HUNTER.

JOB TITLE SHARESHILL SOUTH.

MAJOR INVESTMENT SITE PROPOSAL.

FILE No. 25/RPT 0781 JOB No. 24/96.

WORK RECORDING CODE ME 2A5DR.

IS THIS PART OF A SERIES i.e Local Plan Y/N? Yes. (MIS)

DATE/TIME REQUIRED Thurs am. 19/12 196.

DATE/TIME AREAS REQUIRED (where applicable) wed 18/96.

MAP REFERENCE SJ 90 NW/NE.

SCALE 1:10 000 GRID INTERVAL (m)

SIZE (A4, A3 etc.) A4 COLOUR OR BW Colour.

TO BE RETURNED TO S. Hunter

ALTERNATIVE CONTACT R. Metcalfe.

MAP TYPE AND NUMBER OF COPIES AFTER CHECKING

FIELD SHEET/MAP BORE		SOIL RESOURCE MAP	
ALC & AREAS	<u>12</u> <del>11</del>	LOCATION MAP	
AUGER BORINGS & PITS		OTHER	

GRADES TO BE PLACED ON FOLIO SHEETS (Y/N) Yes.

CHECKED BY AND READY FOR FINAL COPIES

CARTOGRAPHER(S) AB

TIME TAKEN DATE RETURNED

AREA OF GRADES

1	<u>52.2</u>	3a	<u>31.6</u>	3b	<u>7.6</u>	4	<u>1.5</u>	5
URBAN		NON-AG	<u>7.3</u>	WOOD				
AG. BLDNGS.		WATER		NOT SURVD.				

TOTAL AG. LAND 92.9 TOTAL SITE AREA 100.2

COMMENTS

**N.B. WORK SUBMITTED WITH INCOMPLETE REQUEST FORMS, MAY BE RETURNED!**

394750    305450

396150    306700

Ruth

These MIS files are still floating around my desk from before Xmas. I think you said to put them back down in your room. . . . .

Andy

		9/25th	9/25th
Gr 2.	52.2	52.1	30.2
Gr 3a.	31.6	31.5	34.0
Gr 3b	7.6	7.6	8.2
Gr 4	1.5.	1.5	1.6
Non ag.	7.3.	7.3	
	<hr/>	<hr/>	<hr/>
Total Ag	92.9.		100
Total site	100.2.		