Chichester District Local Plan
Reconnaissance Survey
Land around Selsey.
Agricultural Land Classification
Summary Report
December 1995

Resource Planning Team Guildford Statutory Group ADAS Reading

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### AGRICULTURAL LAND CLASSIFICATION REPORT

## CHICHESTER DISTRICT LOCAL PLAN RECONNAISSANCE SURVEY OF LAND AROUND SELSEY.

#### Introduction

- 1. This report presents the findings of a reconnaissance Agricultural Land Classification (ALC) survey of 55 ha of land to the north and west of Selsey in West Sussex. The survey was carried out during December 1995.
- 2. The survey was commissioned by the Ministry of Agriculture, Fisheries and Food (MAFF) from its Land Use Planning Unit, Reading in connection with the preparation of the Chichester District Local Plan.
- 3. The work was conducted by members of the Resource Planning Team in the Guildford Statutory Group of ADAS. The land has been graded in accordance with the published MAFF ALC guidelines and criteria (MAFF, 1988). A description of the ALC grades and subgrades is given in Appendix I. Information from adjacent objector sites (ADAS Refs: 4203/143-144/95) has been used in the classification of this site.
- 4. At the time of survey, the land on the site comprised permanent grassland. Other land on the site comprised private dwellings and gardens and a caravan park. An additional area of land for which access for survey purposes was not forthcoming has been the subject of a desk study, and is marked on the map accordingly.

#### **Summary**

- 5. The findings of the survey are shown on the enclosed ALC map. The map has been drawn at a scale of 1:12500; it is accurate at this scale but 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

Area (hectares)	% surveyed area
1.2	2.2
37.7	68.5
0.7	1.3
15.4	28.0
55.0	100%
	1.2 37.7 0.7 15.4

- 7. The fieldwork was conducted at an average density of approximately 2 borings per. hectare A total of 17 borings were described.
- 8. The majority of the land on the site has been classified as Subgrade 3a, good quality land, with soil wetness and droughtiness as the main limitations. Soil profiles across much of the site comprise stoneless medium silty clay loam topsoils which become heavier with depth, the lower subsoils comprising heavy silty clay loams. Profiles tend to be gleyed from the topsoil or upper subsoil, and the heavy silty clay loam lower subsoil is slowly permeable, causing a moderate drainage impedance. Therefore a classification of Subgrade 3a duzto wetness is appropriate. Similar soils were observed in the Grade 2 mapping unit towards the north-east of the site, although the deeper depth at which the heavy silty clay loam was observed means that the wetness restriction is less severe. Where soils become more stony towards the south of the site, soil droughtiness is the principal limitation. This stony nature of the soils cause a restriction upon the amount of profile available water, which in turn will affect the level and consistency of crop yields resulting in a classification of Subgrade 3a. Grade 5 land mapped towards the south of the site occurs on very poorly drained land which is only suitable for rough grazing.

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ALC GRADE (1" MAP): Sheet 181: the parish area is shown to be dominated by Grades 1 and 2 stretching from the north of Selsey, as far as Pagham Harbour. In the south-west of the parish, notably on the lower lying land along the course of Broad Rife, the provisional classification is Grade 3.

**SITE RESTRICTIONS ?:** None, the area tends to be relatively flat and lowlying.

GEOLOGY: BGS (1975), Sheet 332, Bognor Regis.

The geology of the parish is dominated by the brickearth overlying Bracklesham Beds. Alluvium is mapped around Broad Rife, with a finger of marine gravel mapped along the north-western boundary of Selsey.

**SOILS:** SSGB (1967) Soils of the West Sussex Coastal Plain.

Relatively deep and stoneless soils of the Park Gate, Hamble and Hook series predominate on the brickearth. Occasionally, these are mapped as shallow phases over loamy pebbly drift, which may be associated with the presence of some marine gravel. Alluvial groundwater gley soils of the Arundel complex is mapped along Broad Rife.

CLIMATE DATA: The climate of the area is distinctly affected by its proximity to the English Channel. The Coastal Plain has an average annual rainfall of 760 mm, although in the extreme south, around Selsey, it can be as low as 700 mm. The average accumulated temperature of the area is approximately 1550 (Day °C). The area also experiences high light levels due to the proximity to the sea, Some parts can be rather exposed, although in some instances this may be partially ameliorated due to sheltering from urban areas of Selsey.

Grid Reference	SZ 866 940
Altitude (m)	4
Accumulated Temperature	1550
(Day °C, Jan-June)	
Average Annual Rainfall (mm)	701
Field Capacity (days)	141
Moisture Deficit, Wheat (mm)	125
Moisture Deficit, Potatoes (mm)	123
Overall Climatic Grade	1

PREVIOUS SURVEYS: 2 sites in the area have been surveyed under the post 1988 system, in connection with the ongoing Chichester District Local Plan work. During the course of these surveys, soils were found to be deep, silty and relatively stoneless. However, subsoils over much of the surveyed area were found to be slowly permeable, resulting in a classification of Subgrade 3a. Where slowly permeable subsoils were noted deeper in the profile the resultant classification is Grade 2.

**POSSIBLE ALC GRADES & DISTRIBUTION:** The accompanying map is designed to give an overall view of possible land quality within the Selsey area.

#### Likely to be B+MV land:

Mapped over the brickearth soils which are predominant around Selsey, resulting in the presence of deep stoneless silty soils of the Hook, Hamble and Park Gate series. It is possible to say that Grade 2 and Subgrade 3a land will be present, perhaps with some pockets of Grade 1 land. Subgrade 3a land may predominate over the aforementioned area of marine gravel to the north of Selsey.

#### Not likely to be B+MV.

Mapped along the course of Broad Rife, where alluvial gley soils of the Arundel complex, which tend to be poorly or very poorly drained and liable to flooding. Attempts may have been made to control groundwater level, yet the majority of the land in this mapping unit is possibly only suitable for carefully managed grazing.

If further fieldwork is to be undertaken in this area, a visual assessment of the drainage status and landuse within this mapping unit may be advisable whilst in the area.

**SUMMARY:** Agricultural land in the immediate vicinity of Selsey is likely to be either Grade 2 or Subgrade 3a. The poorest is likely to be adjacent to Broad Rife, with land quality improving once again on the other side of the rife.

**HEALTH WARNING:** The data sources used to be prepare this desk study are at varying scales and levels of detail. Consequently there are inevitable limitations in the reliability of the data. The results are therefore presented to give a general impression of the likely land quality and provide a companion to the published 1" ALC maps.

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