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SHEPWAY DISTRICT LOCAL PLAN
SITE 5: HARDEN ROAD, LYDD
AGRICULTURAL LAND CLASSIFICATION
ALC MAP & REPORT
JULY 1993

**SHEPWAY DISTRICT LOCAL PLAN
SITE 5; HARDEN ROAD, LYDD**

1.0 Summary

1.1 In June 1993, a detailed Agricultural Land Classification (ALC) survey was made on approximately 2 hectares of land adjacent to Harden Road in Lydd, Kent.

1.2 The work was conducted by members of the Resource Planning Team in the Guildford Statutory Group of ADAS in response to a commission by MAFF's Land Use Planning Unit to provide information on the quality of agricultural land being considered for inclusion in the Shepway District Local Plan.

1.3 The classification has been made using MAFF's revised guidelines and criteria for grading the quality of agricultural land (MAFF 1988). These guidelines provide a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on its use for agriculture.

1.4 The fieldwork was carried out with an observation density of approximately one per hectare. A total of 2 borings and 1 soil pit were examined

1.5 The table below provides the details of the grades found across the site. The majority of the land is classified as grade 3A. The key limitation is droughtiness.

Table 1 : Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area (ha)</u>	<u>%of Site</u>	<u>% of Agricultural Area</u>
3A	1.62	100	100

1.6 The distribution of the ALC grades is shown on the attached map. The information is presented at a scale of 1:5000 ; it is accurate at this level but any enlargement would be misleading. This map supercedes any previous ALC information for this site.

1.7 At the time of survey the land use on the site was set-aside.

1.8 A general description of the grades and sub-grades is provided as an appendix. The main classes are described in terms of the type of limitation that can occur, the typical cropping range and the expected level and consistency of yield.

2.0 Climate

2.1 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.

2.2 The main parameters used in the assessment of the overall climatic limitation are average annual rainfall, as a measure of overall wetness, and accumulated temperature, as a measure of the relative warmth of a locality.

2.3 A detailed assessment of the prevailing climate was made by interpolation from a 5km gridpoint dataset (Met. Office, 1989). The details are given in the table below and these show that there is no overall climatic limitation affecting the site.

2.4 No local climatic factors such as exposure or frost risk affect the site.

Table 2 : Climatic Interpolation

Grid Reference:	TR048 210
Altitude (m):	5
Accumulated Temperature (days):	1510
Average Annual Rainfall (mm):	665
Field Capacity (days):	136
Moisture Deficit, Wheat (mm):	129
Moisture Deficit, Potatoes (mm):	127
Overall Climatic Grade:	1

3.0 Relief

3.1 The site is level at an altitude of 5m A.O.D. Nowhere on the site do altitude or relief affect agricultural land quality.

4.0 Geology and Soil

4.1 The published geological sheet for the site (BGS, 1978, sheet 320/321, Hastings and Dungeness) shows the underlying geology to be Marine Alluvium Sand.

4.2 The main soil type that occurs on the site is, of the Lydd series, as mapped by the Soil Survey of England and Wales (1982, Sheet 6). These are described as well drained sandy loams.

4.3 Detailed field examination of the soils on the site broadly confirms this although soils were found to be more of a sandy clay loam variety as opposed to sandy loam, but were found to be well drained.

5.0 Agricultural Land Classification

5.1 Table 1 provides the details of the area measurements for each grade and the distribution of each grade is shown on the attached ALC map.

5.2 The location of the soil observation points is shown on the attached sample point map.

5.3 Subgrade 3a :

The entire site has been mapped as good quality, grade 3a land. Profiles typically consisted of sandy cly loams throughout with occasional; profiles passing to sandy clay in the lower subsoil. Gleying was evident but given that it occurred below 43cm from the surface all profiles were assigned to wetness class 1. The land is limited by soil droughtiness due to the combination of relatively sandy textured soils and the low rainfall which characterises this area. The available water capacity of the soils will be insufficient to meet the demands of some crops and consequently they may suffer drought stress particularly through the summer months.

**ADAS REFERENCE : 2010/75/93
MAFF REFERENCE : EL 20/00109**

**Resource Planning Team
Guildford Statutory Group
ADAS Reading**

(ALC MAP)

(ASP MAP)

APPENDIX I

DESCRIPTION OF THE GRADES AND SUB-GRADES

Grade 1 : Excellent Quality Agricultural Land

Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft, fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 : Very Good Quality Agricultural Land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural or horticultural crops can usually be grown but on some land on the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 : Good To Moderate Quality Agricultural Land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. When more demanding crops are grown yields are generally lower or more variable than on land in grades 1 and 2.

Sub-grade 3A : Good Quality Agricultural Land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Sub-grade 3B : Moderate Quality Agricultural Land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass, or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Grade 4 : Poor Quality Agricultural Land

Land with severe limitations which significantly restrict the range of crops and/or the level of yields. It is mainly suited to grass with occasional arable crops (eg. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. the grade also includes very droughty arable land.

Grade 5 : Very Poor Quality Agricultural Land

Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Urban

Built-up or 'hard' uses with relatively little potential for a return to agriculture : housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural

'Soft' uses where most of the land could be returned relatively easily to agriculture, including : private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports/airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland.

Agricultural Buildings

Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (eg. polythene tunnels erected for lambing) may be ignored.

Open Water

Includes lakes, ponds and rivers as map scale permits.

Land Not Surveyed

Agricultural land which has not been surveyed.

Where the land use includes more than one of the above, eg. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will be shown.

APPENDIX II

REFERENCES

- * *Soil Survey of England and Wales (1983) Sheet 6, Soils of South East England (1:250,000) and accompanying legend.*
- * MAFF (1988), *Agricultural Land Classification of England And Wales : revised guidelines and criteria for grading the quality of agricultural land.*
- * Meteorological Office (1989), *Climatological Data for Agricultural Land Classification.*
- * British Geological Survey (1987), *Sheet No. 320/321 , Hastings and Dungeness, 1:50,000.F*

APPENDIX III

DEFINITION OF SOIL WETNESS CLASSES

Wetness Class I

The soil profile is not wet within 70cm depth for more than 30 days in most years.

Wetness Class II

The soil profile is wet within 70cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 90 days, but not wet within 40cm depth for more than 30 days in most years.

Wetness Class III

The soil profile is wet within 70cm depth for 91-180 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 70cm for more than 180 days, but only wet within 40cm depth for 31-90 days in most years.

Wetness Class IV

The soil profile is wet within 70cm depth for more than 180 days but not wet within 40cm depth for more than 210 days in most years or, if there is no slowly permeable layer within 80cm depth, it is wet within 40cm depth for 91-210 days in most years.

Wetness Class V

The soil profile is wet within 40cm depth for 211-335 days in most years.

Wetness Class VI

The soil profile is wet within 40cm depth for more than 335 days in most years.

(The number of days is not necessarily a continuous period. 'In most years' is defined as more than 10 out of 20 years.)

APPENDIX IV

SOIL PIT AND SOIL BORING DESCRIPTIONS

- Contents :
- * Soil Abbreviations : Explanatory Note
 - * Soil Pit Descriptions
 - * Database Printout : Boring Level Information
 - * Database Printout : Horizon Level Information

(SOIL ABBREVIATIONS : EXPLANATORY NOTE)

(SOIL PIT DESCRIPTIONS : A4)

(DATABASE PRINTOUT : BORING LEVEL INFORMATION)

(DATABASE PRINTOUT : HORIZON LEVEL INFORMATION)