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TUNBRIDGE WELLS LOCAL PLAN

Site 4 Brook Farm
Five Oak Green Road
Capel Kent

TUNBRIDGE WELLS LOCAL PLAN

SITE 4 - BROOK FARM, OAK GREEN ROAD, CAPEL

1 INTRODUCTION

1 1 In June 1992 an Agricultural Land Classification (ALC) was carried out on 2 38 hectares of land at Brook Farm Capel Kent ADAS was commissioned by MAFF to determine the land quality affected by the proposal to include this site as part of the Tunbridge Wells Local Plan

1 2 The survey work was carried out by members of the Resource Planning Team within the Guildford Statutory Group The site was free surveyed a total of 2 borings were described using MAFF s revised guidelines and criteria for grading the quality of agricultural land (MAFF 1988) The guidelines provide a framework for classifying land according to the extent to which its physical and chemical characteristics impose long term limitations on its agricultural use

1 3 The distribution of grades is shown on the attached ALC map The area and extent is given in the table below The map has been drawn at a scale of 1 5 000 and enlargement of this would be misleading

Distribution of Grades and Subgrades

Grade	Area (ha)	% of total agricultural land
3a	0 80	41
3b	1 16	59
Total Agricultural Area	1 96	100
Urban	0 38	
Non Agricultural	0 04	
Total Area of site	2 38	

1 4 Grades 3a and 3b have been mapped at this locality The higher quality land is placed in subgrade 3a as a result of minor wetness limitations Subgrade 3b soils experience significant wetness problems as a result of shallow slowly permeable horizons

2 PHYSICAL FACTORS AFFECTING LAND QUALITY

Relief

2 1 The site is at an altitude of approximately 25m A O D and is generally flat Nowhere on the site does gradient or altitude represent a significant limitation to agricultural land quality

Climate

2 2 Estimates of climatic variables were obtained for a representative location in the survey area by interpolation from a 5 km grid database (Met Office 1989)

Climatic Interpolation

Grid Reference	TQ 603 455
Altitude (m A O D)	25
Accumulated Temperature (days Jan-June)	1487
Average Annual Rainfall (mm)	718
Field Capacity Days	149
Moisture Deficit Wheat (mm)	114
Moisture Deficit Potatoes (mm)	109

2 3 Climatic factors alone place no limitation on agricultural land quality but do affect the interactive limitation between soil and climate namely soil wetness and droughtiness

Geology and Soils

2 4 British Geological Survey Sheet 287 Sevenoaks (1971) shows the site to be underlain by Alluvium except for a small area towards the eastern corner of the site which is underlain by Head deposits

2 5 Soil Survey of England and Wales Sheet TQ64 (1971) shows the site to comprise two soil mapping units The site is predominantly mapped as the Conway Series The soils typically comprise Deep stoneless fine silty soils alluvial gley soils (SSEW 1984) Soils of the Wickham Series occur in a localised area towards the eastern edge of the site and are Typical Stagnogleys fine loamy or fine silty over clayey subsoils (SSEW 1984)

2 6 Detailed field examination indicates soils similar to those described by the Soil Survey of England and Wales

3 AGRICULTURAL LAND CLASSIFICATION

3 1 The ALC grading of the site is primarily determined by the interaction between climate and soil factors namely soil wetness and droughtiness Soil wetness is the overriding limitation to land quality at this site

Grade 3a

3 2 Land of this quality is mapped towards the west of the site Topsoils typically comprise non calcareous silt loams over similar textures or medium silty clay loams becoming heavier with depth Profiles are gleyed and slowly permeable from 45 cm wetness class III is thus assigned to such profiles Grade 3a land at this locality is limited by minor wetness limitations

Grade 3b

3 3 Grade 3b land is mapped towards the east of the site Profiles typically comprise non-calcareous silt loams over gleyed and slowly permeable heavy silty clay loam Land within this grade is limited by soil wetness as a result of relatively shallow depths over slowly permeable horizons wetness class IV is therefore assigned

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Resource Planning Team
Guildford Statutory Group
ADAS

SOURCES OF REFERENCE

BRITISH GEOLOGICAL SURVEY (1971) Sheet 287 Sevenoaks

MAFF (1988) Agricultural Land Classification of England and Wales Revised guidelines and criteria for grading the quality of agricultural Classification

METEOROLOGICAL OFFICE (1989) Climatological datasets for Agricultural Land Classification

SOIL SURVEY OF ENGLAND AND WALES (1977) Sheet TQ64 Soils of Paddock Wood

SOIL SURVEY OF ENGLAND AND WALES (1984) Soils and their use in South East England Bulletin 15

				MOTTLES			PED		STONES			STRUCT/	SUBS				
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL	GLEY	2	6	LITH TOT	CONSIST	STR	POR	IMP	SPL	CALC
1	0 30	zl	10YR42 00						0	0	0						
	30 70	hzcl	05Y 71 00	75YR68 00	M			Y	0	0	0		P		Y		Imp 70+ stones
2	0 26	zl	10YR42 00						0	0	0						
	26 46	zl	10YR54 53						0	0	0		M				
	46 53	mzcl	10YR53 63	10YR66 00	C		05Y 72 73	Y	0	0	0		P		Y		Few Mn concs
	53 75	hzcl	05Y 71 00	75YR68 00	C			Y	0	0	0		P		Y		Imp 75+ msst

SAMPLE			ASPECT			WETNESS	WHEAT		POTS		M REL	EROSN	FROST	CHEM	ALC	
NO	GRID REF	USE	GRDNT	GLEY	SPL	CLASS GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT	COMMENTS
1	TQ60354560	GRS	030	030	4	3B	105	9	117	8	3A				WE 3B	
2	TQ60274546	GRS	046	046	3	3A	124	10	133	24	2				WE 3A	