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ADUR DISTRICT LOCAL PLAN
LAND AT SOUTHWICK HILL SOUTHWICK
AGRICULTURAL LAND CLASSIFICATION
ALC MAP & REPORT
MAY 1993

ADUR DISTRICT LOCAL PLAN LAND AT SOUTHWICK HILL SOUTHWICK AGRICULTURAL LAND CLASSIFICATION REPORT

1 0 Summary

1 1 In May 1993 a detailed Agricultural Land Classification (ALC) was made on approximately 39 hectares of land at Southwick Hill on the northern edge of Southwick in West Sussex

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 affected by the possible inclusion in the Adur District Local Plan

1 3 The table below provides the details of the grades found across the site The majority of the land is classified as Sub grade 3B with a smaller amount of sub grade 3A The key limitation is soil droughtiness related to depth to Chalk or other stony layers and the degree of root penetration to extract moisture reserves

Table 1 - Distribution of Grades and Sub grades

Grade	Area (ha)	%of Site	% of Agricultural Area
3A	11 9	30 4	30 8
3B	26 7	68 1	69 2
Non Agric	0 6	1 5	100% (38 6 ha)
TOTAL	39 2	100%	

1 4 The distribution of the ALC grades is shown on the attached map The information is presented at a scale of 1 5 000 it is accurate at this level but any enlargement would be misleading This map supercedes any previous ALC information for this site

1 5 The classification has been made using MAFF s revised guidelines and criteria for grading the quality of agricultural land 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 6 The fieldwork was carried out with an observation density of approximately one per hectare A total of 37 borings and 2 soil pits was examined

1 7 At the time of survey the whole of the land was not in current agricultural production but was under a Set Aside use

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 annual average 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 The details are given in the table below and these show that there is no overall climatic limitation affecting the site

2 4 The site occupies an elevated position which lies open to direct winds from the south and south west Exposure is therefore an important local climatic factor None of the site has been considered eligible for Grade 2 as the windiness would prohibit the growing of the more sensitive horticultural crops

Table 2 - Climatic Interpolations

Grid Reference	TQ242068
Altitude (m)	65
Accumulated Temperature (days)	1466
Average Annual Rainfall (mm)	789
Field Capacity (days)	165
Moisture Deficit Wheat (mm)	112
Moisture Deficit Potatoes (mm)	106
Overall Climatic Grade	1

3 0 Relief

3 1 The majority of the land is gently sloping (< 7 degrees) but part of the 3B classification west of the track relates to slopes that are locally steep (7 11 degrees) Altitude ranges from 40-80 metres

4 0 Geology and Soil

4 1 The relevant geological sheet for the site shows the underlying geology to be mostly Clay With Flints to the east of the track with Upper Middle Chalk west of the track The augering of the site revealed that most of the soils were developed over Chalk at varying depths

5 0 Agricultural Land Classification

5 1 Table 1 provides the details of the area measuements for each grade 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 auger sample point map

5 3 Sub grade 3A Where the soil resource extends to >35 cm before the Chalk is encountered there is sufficient moisture to be extracted for the soils to qualify for this grade but no higher Roots penetrate approximately 40 cm into the Chalk

Some soils are limited by soil droughtiness others like Pit 2 which have more water reserves are limited by exposure Pit 2 relates to those soils with no Chalk rock encountered in the profile They are typically Heavy Clay Loams overlying Clay stony subsoils with some Chalk stones at depth

5 4 Sub grade 3B Pit 1 is typical of the soils that are shallow over the Chalk The soil resource extends to less than 35 cm with rooting observed for another 40 cm into the Chalk before it becomes too compact for common penetration and extraction of further moisture Soil droughtiness limits these soils to 3B.

5 5 The area marked as Non-agricultural relates to a track

ADAS REFERENCE 4201/56/93
MAFF REFERENCE EL 9129

Resource Planning Team
Guildford Statutory Group

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 re claimed 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

* 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 (1984) Sheet No 318/333 Brighton & Worthing 1 50 000

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 PROFILE DESCRIPTIONS EXPLANATORY NOTE

Soil pit and auger boring information collected during ALC fieldwork is held on a database. This has commonly used notations and abbreviations as set out below

Boring Header Information

1 **GRID REF** national grid square and 8 figure grid reference

2 **USE** Land use at the time of survey The following abbreviations are used

ARA Arable **WHT** Wheat **BAR** Barley **CER** Cereals **OAT** Oats **MZE** Maize **OSR** Oilseed rape
BEN Field Beans **BRA** Brassicae **POT** Potatoes **SBT** Sugar Beet **FCD** Fodder Crops **LIN** Linseed
FRT Soft and Top Fruit **HRT** Horticultural Crops **PGR** Permanent Pasture **LEY** Ley Grass **RGR** Rough Grazing
SCR Scrub **CFW** Coniferous Woodland **DCW** Deciduous Woodland **HTH** Heathland **BOG** Bog or Marsh
FLW Fallow **PLO** Ploughed **SAS** Set aside **OTH** Other

3 **GRDNT** Gradient as measured by a hand held optical clinometer

4 **GLEY/SPL** Depth in cm to gleying or slowly permeable layers

5 **AP (WHEAT/POTS)** Crop-adjusted available water capacity

6 **MB (WHEAT/POTS)** Moisture Balance

7 **DRT** Best grade according to soil droughtiness

8 If any of the following factors are considered significant an entry of Y will be entered in the relevant column

MREL Microrelief limitation **FLOOD** Flood risk **EROSN** Soil erosion risk **EXP** Exposure limitation **FROST** Frost
DIST Disturbed land **CHEM** Chemical limitation

9 **LIMIT** The main limitation to land quality The following abbreviations are used

OC Overall Climate **AE** Aspect **EX** Exposure **FR** Frost Risk **GR** Gradient **MR** Microrelief
FL Flood Risk **TX** Topsoil Texture **DP** Soil Depth **CH** Chemical **WE** Wetness **WK** Workability
DR Drought **ER** Soil Erosion Risk **WD** Combined Soil Wetness/Droughtiness **ST** Topsoil Stoniness

Soil Pits and Auger Borings

1 **TEXTURE** soil texture classes are denoted by the following abbreviations

S Sand **LS** Loamy Sand **SL** Sandy Loam **SZL** Sandy Silt Loam **CL** Clay Loam **ZCL** Silty Clay Loam
SCL Sandy Clay Loam **C** Clay **SC** Sandy Clay **ZC** Silty Clay **OL** Organic Loam **P** Peat **SP** Sandy Peat
LP Loamy Peat **PL** Peaty Loam **PS** Peaty Sand **MZ** Marine Light Silts

For the sand loamy sand sandy loam and sandy silt loam classes the predominant size of sand fraction will be indicated by the use of prefixes

F Fine (more than 66% of the sand less than 0 2mm)
M Medium (less than 66% fine sand and less than 33% coarse sand)
C Coarse (more than 33% of the sand larger than 0 6mm)

The clay loam and silty clay loam classes will be sub-divided according to the clay content

M Medium (<27% clay) **H** Heavy (27 35% clay)

2 **MOTTLE COL** Mottle colour

3 **MOTTLE ABUN** Mottle abundance expressed as a percentage of the matrix or surface described

F few <2% **C** common 2 20% **M** many 20-40 **VM** very many 40% +

4 **MOTTLE CONT** Mottle contrast

F faint indistinct mottles evident only on close inspection **D** distinct mottles are readily seen
P prominent mottling is conspicuous and one of the outstanding features of the horizon

5 **PED COL** Ped face colour

6 **STONE LITH** One of the following is used

HR all hard rocks and stones **MSST** soft medium or coarse grained sandstone
SI soft weathered igneous or metamorphic **SLST** soft oolitic or dolimitic limestone
FSST soft fine grained sandstone **ZR** soft argillaceous or silty rocks **CH** chalk
GH gravel with non porous (hard) stones **GS** gravel with porous (soft) stones

Stone contents (>2cm >6cm and total) are given in percentages (by volume)

7 **STRUCT** the degree of development size and shape of soil peds are described using the following notation

degree of development **WK** weakly developed **MD** moderately developed **ST** strongly developed

ped size **F** fine **M** medium **C** coarse **VC** very coarse

ped shape **S** single grain **M** massive **GR** granular **AB** angular blocky **SAB** sub angular blocky **PR** prismatic **PL** platy

8 **CONSIST** Soil consistence is described using the following notation

L loose **VF** very friable **FR** friable **FM** firm **VM** very firm **EM** extremely firm **EH** extremely hard

9 **SUBS STR** Subsoil structural condition recorded for the purpose of calculating profile droughtiness

G good **M** moderate **P** poor

10 **POR** Soil porosity If a soil horizon has less than 0 5% biopores >0 5 mm a Y will appear in this column

11 **IMP** If the profile is impenetrable a Y will appear in this column at the appropiate horizon

12 **SPL** Slowly permeable layer If the soil horizon is slowly permeable a Y will appear in this column

13 **CALC** If the soil horizon is calcareous a Y will appear in this column

14 Other notations

APW available water capacity (in mm) adjusted for wheat
APP available water capacity (in mm) adjusted for potatoes
MBW moisture balance wheat
MBP moisture balance potatoes

SOIL PIT DESCRIPTION

Site Name SOUTHWICK ADUR DIST LP Pit Number 1P

Grid Reference TQ

Average Annual Rainfall 789 mm
Accumulated Temperature 1466 degree days
Field Capacity Level 165 days
Land Use
Slope and Aspect 03 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 27	MZCL	10YR43 00	0	2		
27- 65	CH	00XX00 00	0	0		

Wetness Grade 1

Wetness Class I
Gleying 000 cm
SPL No SPL

Drought Grade 3B

APW 084mm MBW -28 mm
APP 089mm MBP -17 mm

FINAL ALC GRADE 3B
MAIN LIMITATION Droughtiness

SOIL PIT DESCRIPTION

Site Name SOUTHWICK ADUR DIST LP Pit Number 2P

Grid Reference TQ

Average Annual Rainfall	789 mm
Accumulated Temperature	1466 degree days
Field Capacity Level	165 days
Land Use	Permanent Grass
Slope and Aspect	03 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT STONE	MOTTLES	STRUCTURE
0- 27	HCL	10YR44 00	6	11		
27- 55	C	75YR56 00	0	15		
55- 90	C	10YR68 00	0	25		
90-120	HCL	10YR56 00	0	10		

Wetness Grade 2

Wetness Class	I
Gleying	000 cm
SPL	No SPL

Drought Grade 2

APW	127mm	MBW	15 mm
APP	097mm	MBP	-9 mm

FINAL ALC GRADE 2

MAIN LIMITATION Droughtiness

SAMPLE NO	GRID REF	ASPECT USE		GRDNT	GLEY	SPL	--WETNESS-- CLASS	GRADE	-WHEAT- AP	MB	-POTS- AP	MB	M REL DRT	FLOOD	EROSN EXP	FROST DIST	CHEM LIMIT	ALC	COMMENTS
1P	TQ	SAS	S	03	000		1	1	084	-28	089	-17	3B		Y		DR	3B	ROOT 65
2P	TQ	PGR	S	03	000		1	2	127	15	097	-9	2		Y		DR	2	Q 3A EX
3	TQ	SAS	S	03	000		1	2	078	-34	083	-23	3B				DR	3B	IMP 30
7	TQ	SAS	S	03	000		1	3A	118	6	108	2	2		Y		WE	3A	IMP 70
8	TQ	SAS	S	03	000		1	2	095	-17	096	-10	3A				DR	3A	IMP 45
9	TQ	SAS	S	03	000		1	2	090	-22	097	-9	3B		Y		DR	3A	IMP X 2
10	TQ	SAS	S	02	000		1	2	074	-38	074	-32	3B		Y		DR	3B	IMP 45
11	TQ	SAS	S	01	000		1	2	000	0	000	0			Y		DR	3B	IMP 40
12	TQ	SAS	N	03	000		1	2	093	-19	095	-11	3A				DR	3A	IMP 40
15	TQ	SAS	S	04	000		1	2	081	-31	086	-20	3B				DR	3B	IMP 30
16	TQ	PGR	S	06	000		1	1	081	-31	085	-21	3B				DR	3B	CH 26
17	TQ	SAS	SW	05	000		1	2	043	-69	043	-63	4				DR	3B	IMP X 2
18	TQ	RGR	S	04	000	029	4	3B	125	13	102	-4	2				WE	3B	SPL 29
19	TQ	PGR	S	05	000		1	2	096	-16	092	-14	3A				DR	3A	CH 45
20	TQ	PGR	S	04	000		1	2	064	-48	064	-42	3B				DR	3B	IMP40
21	TQ	PGR	S	04	000		1	2	099	-13	095	-11	3A				DR	3A	CH 45
22	TQ	SAS			000		1	2	108	-4	094	-12	3A				DR	3A	IMP 65
24	TQ	PGR	W	05	000		1	1	087	-25	092	-14	3B				DR	3B	CH 29
25	TQ	PGR	W	03	000		1	1	087	-25	092	-14	3B				DR	3B	ROOT 69
26	TQ	SAS	S	04	000		1	1	085	-27	091	-15	3B				DR	3B	IMP 32
27	TQ	SAS	S	05	000		1	1	157	45	122	16	1					1	
28	TQ	SAS	SW	05	000		1	2	099	-13	110	4	3A				DR	3A	IMP 75
29	TQ	SAS	S	03	000		1	2	084	-28	088	-18	3B				DR	3B	IMP 30
30	TQ	SAS	S	04	000		1	2	084	-28	090	-16	3B				DR	3B	CH 30CM
31	TQ	SAS	S	06	000		1	2	083	-29	083	-23	3B				DR	3A	IMP Q DR
32	TQ	SAS	S	05	000		1	2	043	-69	043	-63	4				DR	3B	IMP X 3
33	TQ	SAS	SW	03	000		1	2	057	-55	057	-49	4				DR	3B	IMPX3QDR
34	TQ	PGR	W	06	000		1	1	082	-30	087	-19	3B				DR	3B	CH 26
35	TQ	PGR	W	04	000		1	1	112	0	101	-5	3A				DR	3A	CH 55
36	TQ	PGR	W	03	000		1	1	088	-24	094	-12	3B				DR	3B	ROOT 70
37	TQ	SAS	S	05	000		1	2	060	-52	060	-46	4				DR	3B	IMP Q DR
38	TQ	SAS	S	04	000		1	2	083	-29	083	-23	3B				DR	3A	IMP Q DR
39	TQ	SAS	SW	04	000		1	2	110	-2	102	-4	3A				DR	3A	CH 50CM
40	TQ	SAS	SW	02	000		1	2	086	-26	092	-14	3B				DR	3B	CH 30CM
41	TQ	SAS	SW	03	000		1	2	051	-61	051	-55	4				DR	3B	IMPX3QDR
42	TQ	SAS	S	03	000		1	2	041	-71	041	-65	4				DR	3B	IMPX3QDR

				----MOTTLES-----			PED		----STONES----				STRUCT/	SUBS			
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
1P	0-27	mzcl	10YR43 00						0	0	CH	2						Y
	27-65	ch	00XX00 00						0	0		0		M				
2P	0-27	hcl	10YR44 00						6	0	HR	11						Y
	27-55	c	75YR56 00				00MN00 00		0	0	HR	15		M				Y
	55-90	c	10YR68 00				00MN00 00		0	0	HR	25		P				
	90-120	hcl	10YR56 00						0	0	CH	10		M				Y
3	0-26	hcl	75YR46 00						0	0	CH	10						Y
	26-66	ch	10YR81 00						0	0	HR	5		P				Y
7	0-26	c	10YR46 00						0	0	HR	2						Y
	26-65	c	75YR56 00						0	0	HR	5		M				Y
	65-105	ch	10YR81 00						0	0	HR	5		P				Y
8	0-29	hcl	10YR46 00						0	0	HR	2						Y
	29-38	c	75YR56 00						0	0	HR	2		M				Y
	38-78	ch	00ZZ00 00						0	0	HR	5		P				Y
9	0-30	hcl	10YR44 00						0	0	HR	5						Y
	30-60	c	75YR46 00						0	0	HR	5		M				
10	0-28	hcl	10YR46 00						0	0	HR	3						
	28-45	c	75YR56 00						0	0	HR	7		M				
11	0-33	hcl	10YR44 00						0	0	CH	10						Y
	33-73	ch	00ZZ00 00						0	0	HR	5		P				Y
12	0-35	hzcl	10YR44 00						0	0	CH	15						Y
	35-75	ch	10YR81 00						0	0	HR	5		P				Y
15	0 27	hzcl	10YR43 00						0	0	CH	20						Y
	27-67	ch	00ZZ00 00						0	0		0		P				Y
16	0-26	mcl	10YR44 00						0	0	HR	3						Y
	26-66	ch	00CH00 00						0	0		0		P				Y
17	0-25	hcl	10YR44 00						0	0	HR	5						
18	0-29	hcl	10YR44 00						0	0	HR	3						Y
	29-59	c	75YR56 00	75YR58 00	F		00MN00 00		0	0	HR	5		P		Y		
	59-90	c	75YR56 00	75YR58 00	C		00MN00 00		0	0	CH	15		P		Y		Y
	90-120	ch	10YR81 00						0	0	HR	2		P		Y		Y
19	0-25	hcl	10YR44 00						0	0	HR	3						
	25-35	c	75YR56 00				00MN00 00		0	0	HR	2		P				
	35-45	c	10YR56 00						0	0	CH	90		P				Y
	45-85	ch	00CH00 00						0	0		0		P				Y

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES----- COL	ABUN	CONT	PED COL	GLEY	----STONES---- >2	>6	LITH	TOT	STRUCT/ CONSIST	SUBS STR	POR	IMP	SPL	CALC
20	0-25	hcl	10YR44 00						0	0	HR	3						Y
	25-35	c	75YR56 00						0	0	HR	10		M				
	35-40	mzcl	10YR54 00						0	0	CH	70		M				Y
21	0-25	hcl	10YR44 00						0	0	HR	2						
	25-45	c	75YR56 00	75YR58 00	F		00MN00	00	0	0	HR	2		P				
	45-85	ch	00CH00 00						0	0		0		P				Y
22	0-32	hcl	10YR46 00						0	0	CH	5						Y
	32-60	hzcl	75YR66 82						0	0	CH	95		P				Y
	60-100	ch	00ZZ00 00						0	0	HR	5		P				Y
24	0-29	mzcl	10YR53 00						0	0	CH	5						Y
	29-69	ch	00CH00 00						0	0	HR	5		P				Y
25	0-29	mzcl	10YR53 00						0	0	CH	5						Y
	29-69	ch	00CH00 00						0	0	HR	5		P				Y
26	0-28	mzcl	10YR43 00						0	0	CH	10						Y
	28-68	ch	00ZZ00 00						0	0		0		P				Y
27	0-32	mzcl	10YR43 00						0	0	CH	5						Y
	32-120	hzcl	10YR54 00						0	0	HR	3		M				Y
28	0-28	hcl	10YR44 00						0	0	HR	5						Y
	28-75	c	75YR56 00						0	0	HR	8		M				
29	0-26	hzcl	10YR44 00						0	0	HR	2						Y
	26-66	ch	00ZZ00 00						0	0		0		P				Y
30	0-25	hcl	10YR44 00						0	0	HR	5						
	25-30	hcl	10YR54 00						0	0	HR	10		M				Y
	30-70	ch	00XX00 00						0	0		0		M				
31	0-30	hcl	10YR44 00						0	0	HR	2						
	30-50	hcl	10YR44 00						0	0	HR	5		M				
32	0-25	hcl	10YR44 00						0	0	HR	5						
33	0-25	hcl	10YR44 00						0	0	HR	5						
	25-35	hcl	10YR54 00						0	0	HR	10		M				
34	0-26	mzcl	10YR44 00						0	0	CH	3						Y
	26-66	ch	00CH00 00						0	0	HR	5		P				Y
35	0-35	mcl	10YR54 00						0	0	CH	2						Y
	35-42	hcl	10YR44 00						0	0	CH	5		M				Y
	42-55	hcl	10YR44 81						0	0	CH	90		P				Y
	55-95	ch	00CH00 00						0	0	HR	5		P				Y

				----MOTTLES-----			PED	----STONES----				STRUCT/	SUBS			
SAMPLE	DEPTH	TEXTURE	COLOUR	COL	ABUN	CONT	COL	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
36	0-30	mzcl	10YR53 00						0	0	CH	5						Y
	30-70	ch	00CH00 00						0	0	HR	5		P				Y
37	0-25	hcl	10YR54 00						0	0	HR	2						Y
	25-35	hcl	10YR64 00						0	0	CH	10		M				Y
38	0-25	hcl	10YR43 00						0	0	HR	2						Y
	25-50	hcl	10YR44 00						0	0	HR	2		M				Y
39	0-25	hcl	10YR43 00						0	0	HR	2						Y
	25-40	hcl	10YR44 00						0	0	HR	5		M				Y
	40-50	hcl	10YR54 00						0	0	CH	10		M				Y
	50-90	ch	00XX00 00						0	0		0		M				
40	0-25	hcl	10YR43 00						0	0	CH	5						Y
	25-30	hcl	10YR54 00						0	0	CH	10		M				Y
	30-70	ch	00XX00 00						0	0		0		M				
41	0-30	hcl	10YR44 00						0	0	HR	5						
42	0-25	hcl	10YR44 00						0	0	HR	10						