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East Hampshire Local Plan
Site 628 : Land at Winchester Road,
Petersfield
Agricultural Land Classification
ALC Map and Report
February 1995

AGRICULTURAL LAND CLASSIFICATION REPORT

EAST HAMPSHIRE LOCAL PLAN

SITE 628 : LAND AT WINCHESTER ROAD, PETERSFIELD

1. Summary

- 1.1 ADAS was commissioned by MAFF's Land Use Planning Unit to provide information on land quality for a number of sites in East Hampshire. This work forms part of MAFF's statutory input to the preparation of the East Hampshire Local Plan.
- 1.2 Approximately 9 hectares of land around Buckmore Farm, to the north east of Petersfield was surveyed in February 1995. The survey was undertaken at a detailed level of approximately one boring per hectare. A total of 12 soil auger borings and 2 soil inspection pits were described in accordance with 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 a long term limitation on its use for agriculture.
- 1.3 The work was carried out by members of the Resource Planning Team in the Guildford Statutory Group of ADAS.
- 1.4 At the time of the survey the land use on the site was permanent grassland.
- 1.5 The distribution of grades and subgrades is shown on the attached ALC map and the areas are given in the table below. The map has been drawn at a scale of 1:10,000. It is accurate at this scale, but any enlargement would be misleading.

Table 1 : Distribution of Grades and Subgrades

Grade	Area (ha)	% of Site	% of Agricultural Area
2	0.5	5.7	6.0
3a	4.9	55.7	59.0
3b	2.1	23.8	25.3
4	0.8	9.1	<u>9.7</u>
Non-Agricultural	0.2	2.3	100% (8.3 ha)
Urban	0.2	2.3	
Farm Buildings	<u>0.1</u>	<u>1.1</u>	
Total area of site	8.8	100%	

- 1.6 Appendix 1 gives a general description of the grades and landuse categories identified in this survey. The main classes are described in terms of the type of limitation that can occur, the typical cropping range and expected level and consistency of yield.

- 1.7 The majority of the site comprises good quality, Subgrade 3a land, the key limitation being soil droughtiness and/or soil wetness. In the north west corner of the site a small area of well drained very good quality (Grade 2) land has been mapped. The north east corner, on the otherhand, comprises poorly drained soils of moderate quality (Subgrade 3b). At the southern end of the site an area of saturated land, caused by seepage has been classified as poor quality, Grade 4.

The soils are derived from the Lower Greensands and as such comprise coarse loamy over clayey or sandy lower subsoils. The sandier profiles are better drained and therefore represent the higher quality land.

2. 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 an 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 grid point 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. However, climatic factors do interact with soil factors to influence soil wetness and droughtiness limitations. At this locality the high average annual rainfall and high field capacity days, in a regional context, together with low crop adjusted soil moisture deficits increase the likelihood of soil wetness, whilst reducing the chances of soil droughtiness being a problem.
- 2.4 No local climatic factors such as exposure or frost risk are believed to affect the site.

Table 2 : Climatic Interpolations

Grid Reference	SU737241	SU737238
Altitude (m, AOD)	80	70
Accumulated Temperature (degree days, Jan-June)	1453	1464
Average Annual Rainfall (mm)	958	956
Field Capacity (days)	210	210
Moisture Deficit, Wheat (mm)	93	92
Moisture Deficit, Potatoes (mm)	83	81
Overall Climatic Grade	1	1

3. Relief

- 3.1 The site lies at about 80m AOD in the north and 70m AOD in the south. The gently undulating slope between these two points does not affect the agricultural land quality on this site. However, a small area of land towards the south has been assessed as Subgrade 3b due to a microrelief limitation arising from the occurrence of closely spaced steep valley sides which will prohibit the use of agricultural machinery.

4. Geology and Soil

- 4.1 British Geological Survey (1975), Sheet 300, Alresford shows the entire site to be mapped as the Folkestone Beds of the Lower Cretaceous Lower Greensands.
- 4.2 The Soil Survey map of the area (SSEW, 1983, 1:250,000), shows that the soils on this site comprise Fyfield 4 association. These soils are described as 'brown, coarse loamy typical argillic brown earths which pass down to sand or sandstone. Deep, stoneless, well drained soils'. (SSEW, 1983).
- 4.3 Detailed field examination on the site broadly confirmed the existence of soils similar to those described in paragraph 4.2. Some more clayey soils with moderate to significant drainage imperfections were also noted.

5. 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 are shown on the attached sample point map.

Grade 2

- 5.3 A small area of land to the northwest of the site comprises deep, almost stonefree, soil profiles which have been assessed as being very good quality. Here medium sandy loam topsoils overlie similar or coarser textured subsoils before passing to poorly structured sandy clay loam lower subsoils at 78-80 cm from the surface. These slowly permeable lower subsoils are responsible for a very slight drainage impedance which, in combination with the locally wet climatic regime, has been assessed as being consistent with Wetness Class II, Grade 2. Very slight soil wetness such as this can lead to minor inconsistencies in crop growth and yields as well as increasing the risk of structural damage through trafficking by agricultural machinery or poaching by grazing livestock. Occasional borings of higher quality were also recorded in this area, but their limited number and extent does not warrant a separate mapping unit.

Subgrade 3a

- 5.4 The majority of the site was classified as good quality, Subgrade 3a, land due to a slight soil wetness and/or soil droughtiness limitation. Most Subgrade 3a profiles, limited by soil wetness, are similar to those described in paragraph 5.3. However, drainage is slightly more impeded in these profiles due to a clay lower subsoil, encountered between 60-78 cm depth, which gives rise to gleying within the profile. Wetness Class III, Subgrade 3a, is appropriate given the interaction between soil drainage status and the local climate.

A smaller area of Subgrade 3a land is limited by soil droughtiness where sandy loam topsoils were found to overlie coarser textured subsoils of loamy sand and sand. Soil inspection pit 2 revealed the loamy medium sand upper subsoils to be well structured and thus contain more profile available water than a moderately structured equivalent. This, in combination with the locally wet climatic regime, helps to offset reduced profile available water caused by the moderately structured medium sand lower subsoil and thus reduces the likelihood of significant soil droughtiness. This land is therefore considered to be of good quality with a moderate soil droughtiness limitation which may reduce the range and yields of crops grown here.

Subgrade 3b

- 5.5 At the north eastern end of the site an area of poorly drained land has been classified as moderate quality (Subgrade 3b). Profiles here comprise medium sandy loam topsoils and upper subsoils over poorly structured heavy or sandy clay loams from 40 cm depth. These lower subsoils significantly impede drainage as evidenced by prominent gleying in the upper horizons. The locally wet climatic regime, in combination with such drainage characteristics restricts land quality in this area as wet soils can inhibit crop development and reduce cultivation opportunities where trafficking by agricultural machinery or grazing livestock may cause structural damage. Occasional lighter textured profiles on the lower land were included within this mapping unit as they experience significant seepage problems associated with drainage from higher up slope. Here water runs down the hillside, instead of percolating through the ground, and saturates the soils down slope.

Grade 4

- 5.6 In the southern extreme of the site hydrophilic vegetation, such as Juncus spp, is prolific suggesting that the profiles are saturated for much of the year. A geological boundary between the Folkestone Beds and the Sandgate Beds has been mapped just to the south of the site and may be responsible for poor drainage and/or seepage problems at this locality. The agricultural use of this part of the site is therefore restricted to seasonal grazing.

ADAS Ref: 1502/014/95
MAFF Ref: EL15/468

Resource Planning Team
Guildford Statutory Group
ADAS Reading

SOURCES OF REFERENCE

British Geological Survey (1975), Sheet No 300, Alresford, 1:50,000 (drift edition).

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.

Soil Survey of England and Wales (1983), The Soils of South-East England and accompanying legend.

APPENDIX I

DESCRIPTION OF THE GRADES AND SUBGRADES

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 of this 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 land.

Grade 3 : Good to Moderate Quality Land

Land with moderate limitations which affect the choice of crops, the 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.

Subgrade 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.

Subgrade 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 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 including: 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. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland

Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm 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

FIELD ASSESSMENT OF SOIL WETNESS CLASS

SOIL WETNESS CLASSIFICATION

Soil wetness is classified according to the depth and duration of waterlogging in the soil profile. Six soil wetness classes are identified and are defined in the table below.

Definition of Soil Wetness Classes

Wetness Class	Duration of Waterlogging ¹
I	The soil profile is not wet within 70 cm depth for more than 30 days in most years. ²
II	The soil profile is wet within 70 cm depth for 31-90 days in most years or, if there is no slowly permeable layer within 80 cm depth, it is wet within 70 cm for more than 90 days, but only wet within 40 cm depth for 30 days in most years.
III	The soil profile is wet within 70 cm depth for 91-180 days in most years or, if there is no slowly permeable layer present within 80 cm depth, it is wet within 70 cm for more than 180 days, but only wet within 40 cm depth for between 31-90 days in most years.
IV	The soil profile is wet within 70 cm depth for more than 180 days but not wet within 40 cm depth for more than 210 days in most years or, if there is no slowly permeable layer present within 80 cm depth, it is wet within 40 cm depth for 91-210 days in most years.
V	The soil profile is wet within 40 cm depth for 211-335 days in most years.
VI	The soil profile is wet within 40 cm depth for more than 335 days in most years.

Soils can be allocated to a wetness class on the basis of quantitative data recorded over a period of many years or by the interpretation of soil profile characteristics, site and climatic factors. Adequate quantitative data will rarely be available for ALC surveys and therefore the interpretative method of field assessment is used to identify soil wetness class in the field. The method adopted here is common to ADAS and the SSLRC.

¹The number of days specified is not necessarily a continuous period.

²'In most years' is defined as more than 10 out of 20 years.

APPENDIX III
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 PROFILE DESCRIPTIONS : EXPLANATORY NOTE

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

Boring Header Information

1. **GRID REF** : national 100 km 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	FLW : Fallow
PGR : Permanent Pasture	LEY : Ley Grass	RGR : Rough Grazing
SCR : Scrub	CFW : Coniferous Woodland	DCW : Deciduous Wood
HTH : Heathland	BOG : Bog or Marsh	FLW : Fallow
PLO : Ploughed	SAS : Set aside	OTH : Other
HRT : Horticultural Crops		

3. **GRDNT** : Gradient as estimated or measured by a hand-held optical clinometer.
4. **GLEYSPL** : Depth in centimetres (cm) to gleying and/or slowly permeable layers.
5. **AP (WHEAT/POTS)** : Crop-adjusted available water capacity.
6. **MB (WHEAT/POTS)** : Moisture Balance. (Crop adjusted AP - crop adjusted MD)
7. **DRT** : Best grade according to soil droughtiness.
8. If any of the following factors are considered significant, 'Y' will be entered in the relevant column.

MREL : Microrelief limitation	FLOOD : Flood risk	EROSN : Soil erosion risk
EXP : Exposure limitation	FROST : Frost prone	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 : Erosion Risk	WD : 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
ZL :	Silt 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 the following 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 using Munsell notation.
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 using Munsell notation.
6. **GLEY** : If the soil horizon is gleyed a 'Y' will appear in this column. If slightly gleyed, an 'S' will appear.
7. **STONE LITH** : Stone Lithology - One of the following is used.

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

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

8. **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

9. **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

10. **SUBS STR** : Subsoil structural condition recorded for the purpose of calculating profile droughtiness : **G** : good **M** : moderate **P** : poor

11. **POR** : Soil porosity. If a soil horizon has less than 0.5% biopores >0.5 mm, a 'Y' will appear in this column.

12. **IMP** : If the profile is impenetrable to rooting a 'Y' will appear in this column at the appropriate horizon.

13. **SPL** : Slowly permeable layer. If the soil horizon is slowly permeable a 'Y' will appear in this column.

14. **CALC** : If the soil horizon is calcareous, a 'Y' will appear in this column.

15. 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

SAMPLE NO.	GRID REF	ASPECT		--WETNESS--				-WHEAT-		-POTS-		M. REL		EROSN	FROST	CHEM	ALC	COMMENTS
		USE	GRDNT	GLEY	SPL	CLASS	GRADE	AP	MB	AP	MB	DRT	FLOOD	EXP	DIST	LIMIT		
1	SU73702420	PGR	S	04			1	1	152	59	114	31	1				1	
1P	SU73702385	PGR	S	03	040	060	3	3A		0		0				WE	3A	SPL 60
2	SU73702410	PGR	S	01	0	078	3	3A		0		0				WE	3A	SPL 78
2P	SU73602400	PGR	S	04			1	1	90	-3	74	-9	3A			DR	3A	
3	SU73802410	PGR	S	03	030	040	4	3B		0		0				WE	3B	SPL 40
4	SU73602400	PGR	S	04			1	1	100	7	84	1	2			DR	3A	See Pit 2
5	SU73702400	PGR	N	01	075	075	3	3A		0		0				WE	3A	SPL 75
6	SU73802400	PGR	S	01			1	1	118	25	95	12	2			WE	3B	Seepage
7	SU73602390	PGR	S	02	040	070	3	3A		0		0				WE	3A	SPL 70
8	SU73702392	PGR	SE	01			1	1	100	7	81	-2	2			DR	2	3A unit
9	SU73802390	PGR	SE	01	065	065	3	3A		0		0	1			WE	3A	S1. gleyed 38
10	SU73702385	PGR	S	03	045	055	3	3A		0		0				WE	3A	SPL 55
11	SU73872410	PGR	S	03	030	040	4	3B		0		0				WE	3B	SPL 40
12	SU73772417	PGR	S	03	078	078	2	2	138	45	106	23	1			WE	2	SPL 78

SAMPLE	DEPTH	TEXTURE	COLOUR	---MOTTLES---			PED	---STONES---			STRUCT/	SUBS	SPL	CALC		
				COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT			CONSIST	STR
1	0-30	ms1	10YR43 00					0	0	HR	1					
	30-70	mc1	10YR44 00					0	0	HR	1	M				
	70-120	hc1	10YR54 00					0	0	HR	1	M				
1P	0-30	ms1	10YR32 00					0	0	HR	1					
	30-40	ms1	10YR42 00					0	0	HR	1	MDCSAB	FR	M		
	40-60	hc1	10YR53 00	75YR56	00	C		Y	0	0	HR	1	MDCSAB	FR	M	
	60-90	c	25Y 63 00	75YR56	00	M		Y	0	0	HR	1	MASSVE	FM	P	Y
2	0-30	ms1	10YR42 00	75YR46	00	C		Y	0	0	HR	2				
	30-50	ms1	10YR53 00	75YR58	00	C		Y	0	0	HR	2	M			
	50-78	sc1	25Y 62 00	10YR58	00	C		Y	0	0	HR	2	M			
	78-120	sc1	25Y 62 00	10YR58	00	M		Y	0	0	HR	2	P	Y	Y	Very wet Drier/heavier
2P	0-30	ms1	10YR42 00					3	0	HR	7					
	30-40	lms	10YR43 00					0	0	HR	4	WKCB	FR	G		
	40-120	ms	10YR64 00					0	0		0	WKMB	VF	M		
3	0-30	ms1	10YR42 00					0	0	HR	2					
	30-40	ms1	25Y 62 00	10YR58	00	C		Y	0	0		0	M			
	40-90	hc1	25Y 68 00	10YR58	00	M		Y	0	0		0	P	Y	Y	
4	0-30	ms1	10YR42 00					0	0	HR	2					
	30-60	lms	10YR54 00					0	0	HR	1	G				
	60-120	ms	10YR56 00					0	0		0	M				
5	0-35	ms1	10YR42 00					0	0	HR	2					
	35-50	ms1	10YR43 00					0	0	HR	2	M				
	50-75	lms	10YR54 00					0	0	HR	2	G				
	75-98	c	25Y 64 00	10YR58	00	C		Y	0	0	HR	5	P	Y	Y	
6	0-40	ms1	10YR32 00					0	0	HR	5					
	40-65	lms	10YR54 00					0	0	HR	5	G				
	65-85	ms1	10YR54 00	10YR58	00	C		S	0	0	HR	10	M			
	85-100	sc1	10YR54 00	10YR58	00	C		S	0	0	HR	10	M			

Saturated
Saturated
Saturated
Saturated

SAMPLE	DEPTH	TEXTURE	COLOUR	----MOTTLES-----			PED	----STONES----			STRUCT/	SUBS						
				COL	ABUN	CONT	COL.	GLEY	>2	>6	LITH	TOT	CONSIST	STR	POR	IMP	SPL	CALC
10	0-30	ms1	10YR32 00					0	0	HR	2							
	30-45	ms1	10YR43 00					0	0	HR	2		M					
	45-55	hc1	10YR53 00	10YR58 00	C			Y	0	0	HR	2		M				
	55-80	c	05Y 62 00	75YR58 00	M			Y	0	0	HR	2		P	Y		Y	
11	0-30	ms1	10YR32 00					0	0	HR	2							
	30-40	ms1	10YR53 00	10YR58 00	C			Y	0	0	HR	2		M				
	40-90	sc1	05Y 52 00	10YR58 00	M			Y	0	0	HR	2		P	Y		Y	Almost clay
12	0-40	ms1	10YR32 00					0	0	HR	2							
	40-60	ms1	10YR42 00					0	0	HR	2		M					
	60-78	lms	10YR53 00					0	0	HR	2		G					
	78-120	sc1	10YR52 00	10YR58 00	M			Y	0	0	HR	2		P	Y		Y	Almost clay

SOIL PIT DESCRIPTION

Site Name : EAST HANTS LP,SITE 628 Pit Number : 1P

Grid Reference: SU73702385 Average Annual Rainfall : 956 mm
 Accumulated Temperature : 1464 degree days
 Field Capacity Level : 210 days
 Land Use : Permanent Grass
 Slope and Aspect : 03 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	MSL	10YR32 00	0	1	HR					
30- 40	MSL	10YR42 00	0	1	HR		MDCSAB	FR	M	
40- 60	HCL	10YR53 00	0	1	HR	C	MDCSAB	FR	M	
60- 90	C	25Y 63 00	0	1	HR	M	MASSVE	FM	P	

Wetness Grade : 3A Wetness Class : III
 Gleying : 040 cm
 SPL : 060 cm

Drought Grade : APW : mm MBW : 0 mm
 APP : mm MBP : 0 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Wetness

SOIL PIT DESCRIPTION

Site Name : EAST HANTS LP,SITE 628 Pit Number : 2P

Grid Reference: SU73602400 Average Annual Rainfall : 956 mm
 Accumulated Temperature : 1464 degree days
 Field Capacity Level : 210 days
 Land Use : Permanent Grass
 Slope and Aspect : 04 degrees S

HORIZON	TEXTURE	COLOUR	STONES >2	TOT.STONE	LITH	MOTTLES	STRUCTURE	CONSIST	SUBSTRUCTURE	CALC
0- 30	MSL	10YR42 00	3	7	HR					
30- 40	LMS	10YR43 00	0	4	HR		WKCAB	FR	G	
40-120	MS	10YR64 00	0	0			WKMAB	VF	M	

Wetness Grade : 1 Wetness Class : I
 Gleying : cm
 SPL : No SPL

Drought Grade : 3A APW : 90 mm MBW : -3 mm
 APP : 74 mm MBP : -9 mm

FINAL ALC GRADE : 3A
 MAIN LIMITATION : Droughtiness