

MINERALS APPLICATION : DOWN AMPNEY ESTATE, LAND WEST OF A419, LATTON,  
WILTSHIRE

Report of Survey

Agricultural Land Classification and Site Physical Characteristics

1. Summary

Following the submission of a planning application to extract sand and gravel by the CWS at its Down Ampney estate on land west of the A419, MAFF was consulted in November, 1991 and a field survey was conducted in order to assess the quality of land involved and to draw up a statement of site physical characteristics.

The application statement contained an agricultural section prepared by Reading Agricultural Consultants which provided an Agricultural Land Classification (ALC) map and maps showing the topsoil and subsoil units. The field survey by RAC took the form of boring descriptions at a density of one per hectare, but did not include detailed soil structural descriptions through pit examinations.

The MAFF survey was carried out by members of the Resource Planning Group (SW Region) and took the form of a field check of the consultant's information by locating soil pits in each of their main ALC and soil resource map units. A total of eight pits <sup>WAS</sup> were examined.

The distribution of the grades is shown on the attached map and illustrated in the table below. There is broad agreement for many of the RAC map units but MAFF has recognised a greater amount of higher quality land (Grade 2). This difference is related to the incorrect assessment of subsoil stone contents by RAC. None of the eight pits contain gravel deposits (ie. >70% stone). The soil resource therefore extends to depth as a stony sandy matrix which contains adequate moisture reserves to be placed in Grade 2 in terms of soil droughtiness.

This has important implications for the statement of site physical characteristics. Land that is to be restored to agriculture under its original characteristics will require a reinstatement of this deep lower subsoil.

Distribution of Grades and Sub-grades

<u>Grade</u>	<u>Area (ha)</u>	<u>% of Survey Area</u>	<u>% of Agricultural Area</u>
2	60.8	32.2	35.8
3A	14.0	7.4	8.3
3B	82.3	43.6	48.5
4	12.5	6.6	7.4
NAg	7.1	3.8	<u>Total 100% (169.6ha)</u>
U	11.2	5.9	
Fbd	0.9	0.5	
X <u>Total</u>	<u>188.8ha</u>	<u>100%</u>	

SOIL PROFILE DESCRIPTION

Date of Survey

NO	TEXTURE	COLOUR	DEPTH (CM)	SOIL PROEILE NOTES	TOPOGRAPHY NOTES
33	ZCL	BR	0-10	5% stones (less than 20 mm) 5% on surface up to 30 mm	Gradient 12° down-slope
	CL	R/BK	10-30	8% stones " " " "	
	MC		30-38	20% stones "	
	IMP				
33 i	As for profile 1 but IMP at 42 cm				
34	MZCL	BR	0-20	2% stones (less than 20mm) Surface stones as per profile 1	
	MZC	R/BR	20-30	5% " " " "	
	MZC		20-30	10% " " " "	
	HZC		40-48	15% " " " "	
	IMP				
35	MZCL	BR	0-15	2% stones (less than 20mm)	
	MZC	R/BR	15-40	5% " " " "	
	MZC		40-65	29% " " " "	
	HZC		65-80	4% " " " "	
	IMP				
36	MCL	BR	0-15	2% stones (less than 20 mm)	
	HCL	R/RB	15-30	5% " " " "	
	MC		30-35	5% " " " "	
	HC		35-45	5% " " " "	
	Raw C	OR	45-80+	15% shillet and soft sst frags	
37	HZCL	R/BR	0-15	5% stones (less than 20 mm)	
	MZC	R/BR	15-40	10% stones " " " "	
	HZC		40-50	20% stones " mainly shillet	
	IMP				
38	MZCL	R/BR	0-15	2% stones (less than 20 mm)	
	HZCL	R/BR	15-30	2% stones " " " "	
	MZC		30-48	5% stones " " " "	
	Raw ZC		48-60	10% stones " " " "	
	IMP				