

**FILE NOTE EL 40/01210  
COMMISSION CO1979**

**LAND EAST OF M25 AND NORTH OF BARNET WOOD LANE,  
LEATHERHEAD**

**PROPOSED SPOIL DISPOSAL**

1. Land on this site (see attached plan) was briefly visited on 14 June 1995. At the time of survey the land was in arable use (wheat), although the land south of the railway was in a rather unmanaged state.
2. 8 auger borings were made with a 1.2 m dutch soil auger to provide a record of topsoil and subsoil resources prior to their removal to facilitate spoil disposal. The brief details of these are appended.
3. As the main purpose of the survey was to record the soil resources present, a formal ALC assessment was not undertaken and no soil pits were dug. However, the findings of the survey indicate the likely presence of both subgrade 3a and 3b land; the poorer land being noted in the vicinity of the railway line. Soil wetness being the key limitation. Some soil disturbance was also observed, particularly immediately north of the railway line. A previous ALC reconnaissance survey undertaken in 1980 around Leatherhead (ADAS Ref: 4004/32/80) also indicates the presence of grades 3a and 3b land in the vicinity of the site.

Topsoils

4. The soil data collected indicated a mean topsoil depth of 28 cm with a range between 25 cm and 32 cm. Topsoil texture was a fairly uniform medium clay loam of a dark greyish brown colour (10YR 4/2). Profiles were generally slightly stony with some profiles being very slightly calcareous (<1% CaCO<sub>3</sub>).

Subsoils

5. Subsoils generally comprised an upper heavy clay loam horizon with a significant sand component, brown, dark greyish brown, or yellowish brown in colour (10YR 5/3; 10YR 6/2; 10YR 5/4) with few to common ochreous mottles (10YR 5/6-5/8). This was difficult to auger due to the dry soil conditions, and presence of flints. In many instances augering was not possible below 50-60 cm, due to the dry conditions and presence of a few flints, consequently a full record of the subsoils to 120 cm was not possible. Where penetrated to deeper levels (ie. below c.50 cm) clay lower horizons were noted, probably derived from the London Clay geology. It is considered that this subsoil resource would extend to at least 120 cm.

Stripping Recommendations

6. It is recommended that 28 cm of topsoil is removed over the whole area and stored separately. A minimum of 72 cm depth of subsoil should also be retained, but 92 cm depth would be preferably to allow a final restored profile (of indigenous material) to 120 cm. Depending upon the source and nature of the imported spoil it may be possible to substitute this for some of the indigenous subsoil material if the former has superior characteristics, particularly if more permeable.

June 1995

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ADAS Reading

ADAS Ref: 4004/135/95  
MAFF Ref: 40/01201

**LAND EAST OF M25 AND NORTH OF BARNET WOOD LANE,  
LEATHERHEAD**

Proposed Spoil Disposal

Description of auger borings examined on 14.6.95

Boring No:		Profile Description
1.	0-30 cm	MCL; dk greyish brown (10YR 4/2); slightly stony.
	30-75	C; brown (10YR 5/3) with common ochreous mottles (10YR 5/8); sandy lenses; slightly stony, increasing with depth.
	75+	Impenetrable - stones in profile.
2.	0-27 cm	MCL; dk greyish brown (10YR 4/2); slightly stony.
	27-40	HCL(S); brown (10YR 5/3) with common light grey brown (10YR 6/2) and ochreous mottles (10YR 5/6-5/8).
	40-60	SCL; colours as above.
	60-90	C/SC; colours as above.
3.	0-28 cm	MCL(S); dk greyish brown (10YR 4/2) slightly stony.
	28-55	HCL(S); brown (10YR 5/3) with light grey brown (10YR 6/2) and ochreous mottles (10YR 5/6-5/8).
	55-60	As above becoming MSL; stony.
	60+	Impenetrable - stones in profile.
4.	0-27 cm	MCL(S); dk greyish brown (10YR 4/2) slightly stony; slightly calc.
	27-45	HCL; yellowish brown (10YR 5/4) few faint ochreous mottles.
	45-100	C; light greyish brown (10YR 6/2) and brown (10YR 5/3). Common ochreous mottles (10YR 5/6).
5.	0-28 cm	MCL(S); dk greyish brown (10YR 4/2).
	28-35	HCL(S); slightly stony yellowish brown (10YR 5/4) few faint ochreous mottles.
	35-50	HCL(S); light greyish brown (10YR 6/2) and brown (10YR 5/3) with common ochreous mottles; slightly stony
	50+	Impenetrable - stones in profile.
6.	0-32 cm	HCL; dk greyish brown (10YR 4/2); v.slightly calcareous; slightly stony.
	32-40	HCL(S); yellowish brown (10YR 5/4) common faint ochreous mottles.
	40-50	HCL(S); brown (10YR 5/3) and yellowish brown (10YR 5/4) with common ochreous mottles (10YR 5/8); slightly stony.
	50-60	C; colours as above; slightly stony.

- 7.
  - 60+ Impenetrable - stones in profile.
  - 0-28 cm MCL; dk greyish brown (10YR 4/2); slightly stony.
  - 28-45 HCL(S); yellowish brown (10YR 5/4) common faint ochreous mottles; slightly stony.
  - 45-50 HCL(S); light greyish brown (10YR 6/2) and brown (10YR 5/3) with common ochreous mottles; slightly stony.
  - 50-60 C; colours as above; slightly stony.
  - 60+ Impenetrable - stones in profile.
  
- 8.
  - 0-25 cm MCL; dk greyish brown (10YR 4/2); slightly stony.
  - 25-50 C; grey brown (10YR 5/2) and brown (10YR 5/3) with common ochreous mottles. Chalky fragments; significant inclusions of topsoil material (disturbed?).
  - 50-70 HCL(S); Brown (10YR 5/3) and yellowish brown (10YR 5/4) with common ochreous mottles (10YR 5/6).
  - 70+ Impenetrable - dry and hard.