

Itchen Abbas Road, Hants., Watching Brief - Report on the Soils.
By Helen C.M. Keeley, Ancient Monuments Laboratory.

A watching brief was carried out under the direction of Mr. P. Fasham (Trust for Wessex Archaeology) at the M3 construction site at Itchen Abbas Road, near Easton, Hants., during the summer of 1983, which included limited excavation of features. A section 130 metres in length through hillwash down to the river was examined by the author and profiles described at intervals along it.

The topsoil overlay a fairly thin layer of colluvium which filled undulations in the surface of the chalk. In the floodplain, closer to the river, the colluvium petered out and topsoil overlay a gravelly, sandy, chalky subsoil. Approximately 2 metres of peat occurred close to the river but this did not contain pollen due to the fluctuating water table (Fasham, pers. comm., 1983). Various features were apparent in the colluvium and the top of the weathering chalk and patches of clay with flints occurred over the site.

Description of sections:

Section 1 - about 6m. up from CH9600.

The site was freely drained and on a gentle slope (c. 4 degrees). There was a wheat crop in the field. Stones were mainly flint, with some chalk, and earthworms were present throughout the profile.

0-25cms. was dark brown (10YR3/3) moderately friable fine sandy loam with moderate medium subangular blocky structure. Stones were 10% gravel to large angular flints and chalk fragments; roots common coarse to fine fibrous.

25-70cms. (colluvium) was yellowish brown (10YR5/6) moderately friable fine sandy (clay) loam with moderate medium angular blocky structure. Stones were 10% gravel to large chalk fragments and angular flints, increasing with depth to 30%; roots few fine fibrous.

Below 70cms. was weathering chalk with many angular flints, containing patches of friable coarse to fine loamy sand with weak subangular blocky structure and abundant coarse distinct strong brown (7.5YR5/8) mottles.

Section 2 - about 11m. up from CH9560.

The topsoil was similar to that at Section 1. The colluvium, which had a stony layer at its base, had thinned to 20cms., overlying about 20cms. of mottled, relatively stone-free, weathering chalk.

Down from CH9560 the colluvium was more stony, thickening to 50cms. but with stones throughout, rather than at the base as seen further up-slope. Below CH9540 the colluvium thinned again to about 30cms. depth. The depth of topsoil remained relatively constant at about 25cms.

Section 3 - 2m. up from CH9520.

The topsoil was as usual (0-25cms.) but contained 15% stones. The colluvium (25-40cms.) contained 20% stones. Below 40cms. the weathering chalk contained 60% gravel to large stones (angular flints and a few chalk fragments).

The colluvium finally petered out around CH 9500 and the profile consisted of topsoil over gravelly chalk.

Section 4 - about 3m. down from CH9500. Flat site.

The topsoil (0-25cms.) was slightly more silty than previous and contained 10% stones. 25-70cms. was fine sandy loam with 70% gravel to large stones (flints and weathering chalk fragments). Below 70cms. was weathering chalk with 90% stones.

3m. further downslope the subsoil was mainly fine gravel - weathering chalk with a few flints.

About 10m. down from CH9500 waterlain material was encountered (i.e. the old flood plain), which ran into peat near the river.

Section 5. Flat site.

0-30cms. was very dark greyish brown (10YR3/2) moderately friable fine sandy loam with moderate medium subangular blocky structure. Stones were 10% gravel to large angular flints and a few chalk fragments; roots common, medium to fine fibrous.

30-60cms. was dark brown (10YR3/3) friable fine sandy clay loam with weak medium subangular blocky structure. Stones were 30% gravel to large; roots few fine fibrous.

60-80cms. Similar to layer above but mainly stones and weathering chalk fragments.

Below 80cms. was black (10YR2/1) firm, humic, fine sandy silty clay loam with moderate medium angular blocky structure. Stones were 10% gravel to large; roots absent. This material was interspersed with gravelly patches approaching the river.

The ditch at the top of the site, which contained Roman pot:

This feature consisted of 4 layers. The upper 0 to 50 cms. (context 7407) consisted of homogenous fine sand containing a few gravel size stones. 50 to 55cms was a layer of gravel (context 7406). 55 to 60cms. (context 7405) was fine sand, overlying stones and gravel. The sediments contained very little organic matter (loss on ignition range 1.13-1.82, mean 1.62), had slightly alkaline pH (7.32-8.03, mean 7.64) and contained molluscs. The latter are being reported on by Mrs. Beverley Meddens and it is hoped that the results will throw some light on the nature of these sediments.