



Plate 7: Mature trees alongside grass area

Plate 8: Rough mown grass and semi-mature trees

3.3 Soil Sampling and Examination Protocol

A series of trial holes (32 no.) were constructed in accordance with the required distribution of sampling locations on the supplied site plan produced by J&L Gibbons (ref. 581_SK_160909_JLG mark-up).

All trial holes were excavated by hand using a spade and/or soil auger to a maximum depth of 1.0m. The locations of our trial holes are indicated on a site plan presented in Appendix 1.

At certain locations, excavation beyond a depth of 400-450mm was not possible on account of the compacted and stony nature of the soil (see trial hole record in Appendix 2 for indication of locations).

At each trial hole the soils were examined with reference to the Soil Survey Field Handbook (Soil Survey Technical Monograph No.5 (3rd Edition) SILSOE 1997). Important physical soil properties were recorded, including texture, structure, Munsell colour, compaction, drainage and aeration characteristics, topsoil depths and the presence of deleterious materials. At the same time, representative soil samples were taken for laboratory analysis. Where the soils were consistent in visual appearance, the samples were combined to form representative composite samples for laboratory analysis.

The findings from this exercise are summarised in Section 4.0 below.

4.0 SOIL TYPES

The site assessment found the soils to be variable in texture over the site, with 3 typical soil profiles encountered, as outlined below:

- Profile 1 Light to Medium Textured Soils. Sandy loam topsoil over sandy loam or sandy clay loam subsoil. This was the most commonly recorded profile and was found at TH1 TH4, TH19 and TH21 TH32.
- Profile 2 Woodland Soils. Similar to Profile 1, including a distinct surface humic layer. Observed within the areas of woodland at TH5 TH8 and TH15 TH18.
- Profile 3 Heavy Textured Soils. Clay loam topsoil over clay loam or clay subsoil. Recorded within the southern part of the site towards the River Thames at TH9 TH11 and TH20.

These soil profiles are described in further detail below and identified for each trial hole (with recorded horizon depths) within the outline trial hole record given in Appendix 2.

Profile 1

Profile 1 – Light to Medium Textured Soils is described as:

P1 Topsoil	Dark brown (Munsell Colour 10YR 3/3) to brown (Munsell Colour 10 YR 4/3), dry to slightly moist, friable, non-calcareous SANDY LOAM. The topsoil typically had a moderately defined but weakly developed, fine to medium granular structure, occasionally with a blocky structure. Slightly stony with subangular to subrounded, small to medium sized (20-50mm) stones and occasional large stones (>50mm). Occasional small brick fragments recorded, with no further foreign matter observed.
P1 Subsoil	Yellowish brown (Munsell Colour 10YR 5/4) to strong brown (Munsell Colour 7.5YR 5/8), dry to slightly moist, non-calcareous to slightly calcareous SANDY LOAM to SANDY CLAY LOAM. Virtually stone-free to slightly stony.
	Slight mottling was observed within the subsoil at TH24, TH29 and TH30. No other evidence of impeded drainage was observed.
	The proportion of clay within the subsoil generally increased from depths c. 850-900mm bgl.
	Note, at TH3, TH12 and TH21, the subsoil was heavier in texture, comprising a CLAY LOAM ("Profile 3 Subsoil").