AML Report 4445 Site Number 91

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Soil Report on St Thomas Street, Southwark

Macphail, R.I. Oct 1984

In the Spring of 1982 St Thomas Street, Southwark was excavated by the Southwark and Lambeth Archaeological Excavation Committee (Director Harvey Sheldon). Natural sands (sample 1), early (100-150 AD according to pottery dates, Pete Hinton, pers comm) occupation deposits, termed "grey" Dark Earth (sample 2), and Late Roman (2nd to 4th Century onwards) Dark Earth deposits (sample 3) were exposed. These were sampled for standard physical and chemical analyses and micromorphological studies. Details are given in Macphail and Courty (in press), of the methods and archaeological contexts. The analytical results are presented in Table 1, Micromorphological Description and in Plates 1 and 2. A full introduction to Dark Earth studies, the above findings and their integration into a general investigation of urban deposits is given in Macphail and Courty (in press). A "Note on coarse inclusions" (Macphail, AML Library) discusses the anthropogenic origin of the Dark Earth deposits.

References

Macphail, R.I. and Courty, M.A. In press. Interpretation and significance of urban deposits in (H. Jugner) ed. Nordic Archaeometry 3 ISKOS, Finnish Archaeological Society (copy also in AML Library).

Macphail, R.I. Note on coarse inclusions in Dark Earth from urban sites. AML Library.

Micromorphological Description :Coarse/Fine Limit 20 um.

St. Thomas St, Southwark

B(g)

Structure. Massive; single grain to integrain micro-aggregate structure: Porosity (20%) simple and compound packing voids; few channels: Mineral Coarse Limit 50mm Fine; 90/10: Coarse very dominant fine and medium sandy size sub-angular to sub-rounded quartz; poorly sorted: few flints: very few opaques (eg limonite), sharp-edged nodules; glauconite present: Fine: a) common brown (PPL), pale orange (RL), undifferentiated; b) common dark brown to black (PPL), brown to black (RL) undifferentiated: Organic: Coarse: Very few charcoal: Fine: very few fine charcoal/charred material and amorphous organic matter: Groundmass: monic and gefuric: Pedofeatures: Textural very few layered silt and impure clay channel coatings: Depletion frequent fine areas adjacent to channels depleted of silt and fine fabric: Amorphous dominant ferruginous, frequent ferro-manganiferous impregnations and coatings; multi-phase.

"Grey" "Dark Earth"

Structure: Medium clods; intergrain microaggregate structure: Porosity (25%) compound packing voids: very few, elongate (7cm), wide (4mm) crack/channel: little Porosity (10/15%) within fine fabric; few small (30um by 300um) channels: Mineral Coarse/Fine, 65/35: Coarse: very dominant fine (angular-sub-angular) fine medium and coarse (sub-angular to subrounded) sandy size quartz; unsorted: frequent flints: very few opaques and sharp edged nodules limestone fragments: glauconite present: frequent artefacts; few mortar; very few pottery, burned daub, brickearth fragments - (dominant very fine sand size, coarse silty size angular quartz well sorted: few fine silt and clay: brown (PPL), orange (RL): very few organic matter: undifferentiated; porphyric: very few to frequent clay coatings dominant weak impregnative ferruginous nodules; other soil fragments, bone; shell, hammerscale present: Fine: a) dominant light brown to brown (PPL), orange brown (RL); low ash b) common very dark brown to black (PPL), dark brown (RL); low ash c) very few light brown (PPL), pale orange brown (RL); medium ash d) grey (PPL), grey brown (RL), and e) brown (PPL), orange (RL) present: Organic: Coarse: very few charcoal; organic matter present: fine: in fine fabric a) very few charcoal/charred plant material, few to frequent amorphous organic matter single cells: b) dominant charcoal/

Plate 1.

Captions St Thomas Street

Plate 1 Photomicrograph: "Grey" Dark Earth: "thin" fine fabric contains few fine charred plant material. Plane Polarised Light (PPL). Length of frame is 340 um.

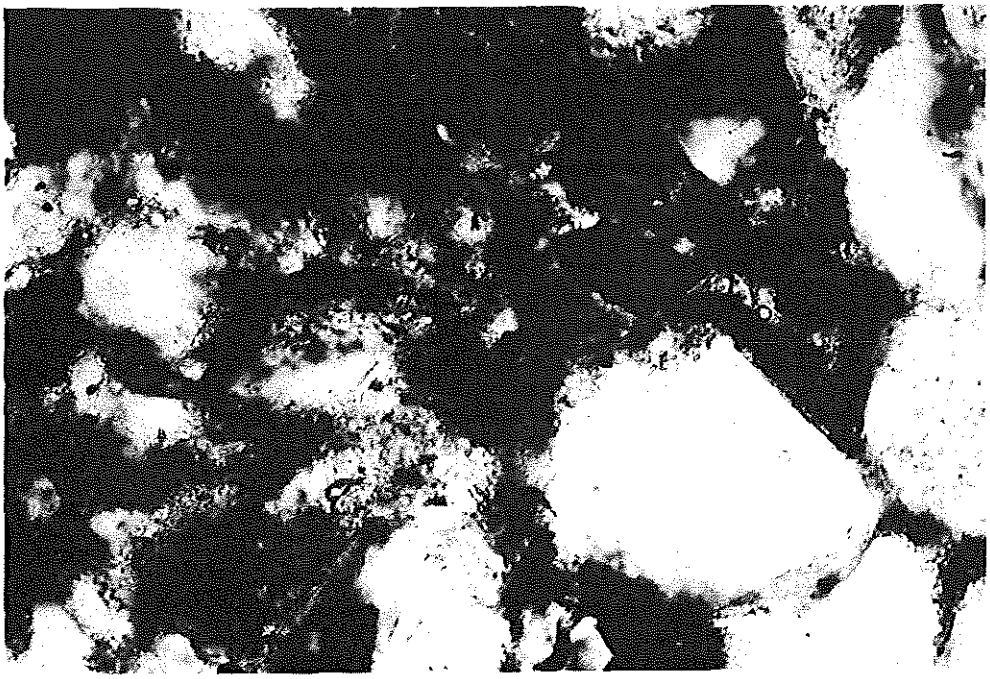

Plate 2 Photomicrograph: Dark Earth: "thin" fine fabric contains dominant fine charred plant material. PPL. Length of frame is 340 um.