Table 2 : No. 1 Poultry (Roman); Facies Types (soil microfabric types and associated data)

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 1a/ Soil Microfabric Type 1a	**M1037(2)**; BD 1037(2b)	SM: Coarsely heterogeneous, massive with relic coarse subangular blocky; traces of bedding present; humic sandy silt loam; 15% voids, very dominant fine (0.2 mm) to coarse (2-4 mm) channels and chambers; Coarse:Fine (limit at 10 µm), C:F, 80:20, very dominant medium to coarse silt-size and very fine sand size angular to sub-rounded quartz (and very few quartzite and feldspar); few medium-size sand; very few micas; very pale speckled and speckled very dark yellowish brown (PPL), moderately high interference colours (close porphyric, speckled and granostriate b-fabric, XPL), very pale brown to brown (OIL); rare fleshy (semi-aquatic?) and now blackened plant roots; rare browned and blackened plant fragments (and seed cases?) and rare charcoal, and i*n situ* root traces; very abundant organic staining of clay (humic clay), occasional to very abundant amorphous organic matter fragments, and rare to occasional tissue, and rare organ fragments; rare to occasional phytoliths; spores and pollen present; rare inwashed calcium carbonate and vivianite (?); very thin organic excrements. BD: slightly acid (pH 6.0), moderately poorly humic (3.9% LOI), moderately phosphatic (500 ppm P_2O_5), with P ratio of 1.2, and with an extremely low MS (4 x 10^{-8} SI kg^{-1})	Natural [18309], Open Area 1 (Period 1): Fine sandy silt loam colluvium/alluvium in the valley/tributary of the Walbrook, formed into a gley soil; bedding is partially preserved from the burrowing and mixing by acidophyle fauna living in the ephemeral humic topsoils, prior to major peat formation; rooting by semi-aquatic plants.
Facies 1b/ Soil Microfabric Type 1b	**M1037(2)**; BD 1037(2a)	SM: Coarsely heterogeneous, massive, very finely (0.8 mm) laminated, with finely (4 mm) bedded, 15- 20 mm thick peat within humic fine sands and silts (minerogenic peat)(as SMT 1a); 10-15% voids; common planes and common channels; C:F, of minerogenic peat 80:20, C:F of peat, 10:90 (amorphous peat), 80:20 (silly laminated peat); Fine fabric of peats - yellowish brown to dark reddish brown (PPL), isotic, very low to medium interference colours (open porphyric, grano- and parallel-striate b-fabric, XPL), bright yellow, brown to black (OIL); abundant coarse tissue fragments; very abundant amorphous organic matter; rare organ (roots and seeds?); rare spores, pollen, phytoliths; rare charcoal; rare concentrations of diatoms; rare vivianite/carbonate; rare organic excrements. BD: Humic (9.3% LOI) moderately phosphatic (520 ppm P_2O_5), with high P ratio of 2.3, and with an extremely low MS (5 x 10^{-8} SI kg^{-1})	Natural, Open Area 1 (Period 1): fine colluviation/alluviation and peat formation.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 1c/ Soil Microfabric Type 1c	**M897(7)**	SM: as SMT 1a, prismatic and subangular blocky structured with frequent gravel size quartz at the base, and scattered throughout; and more humic, C:F, 60:40, Fine material: dotted reddish brown (PPL), isotic, very low interference colours (close porphyric, speckled b-fabric, XPL), dark reddish brown (OIL); very abundant amorphous organic matter, occasional tissues, occasional phytoliths and rare diatoms; very few coarse charcoal, root fragments and *in situ* fleshy roots; inclusions of likely earthworm excrements of reddish brown humified organic matter. BD: acid (pH 3.7), humic (11.4% LOI), with low phosphate (510 ppm P_2O_5) content and high P ratio (2.1), and very low MS (2 x 10^{-8} SI kg^{-1}).	Natural [12965], Open Area 1(Period 1)/18 (Period 2) boundary: Humic topsoil formed in alluvial sands (gravels); acidic gleysol.
Facies 1e/ Soil Microfabric Type 1e	**M907** BD: 907a	SM: upper 110 mm bedded organic and mineral: moderately coarsely (8 mm) bedded microstructure, alternating organic and mineral layers, with coarse (10 mm) angular to subangular brickearth clasts in upper 50 mm; and very few charcoal. 80 mm: intercalated amorphous organic matter, tissue and organ fragments, and silt; coarse inclusions of brickearth soils; possible rare (x3) omnivore coprolitic fragments (1 mm), amorphous organic matter, with fine charcoal, phytolith and organic matter fragment inclusions; some iron stained. 25 mm: peaty, amorphous, dark reddish brown (PPL), layered tissues; isotic to very low interference colours (XPL), dark brown dark orange brown (OIL), very abundant tissue and amorphous organic matter; very few silt; occasional likely vivianite pseudomorphs. BD: very humic (23.6% LOI), and moderately phosphatic 1550 ppm P_2O_5, P ratio 1.1), with very low MS (16 x 10^{-8} SI kg^{-1})(MS550 1294 x 10^{-8} SI kg^{-1})..	Natural/Period 2 [13013], Open Area 1(4?): Initial deposition of mineralogenic silts, sands and gravels, and few plant fragments; succeeded by 25 mm of peat; then interbedded silts, and coarse fragments of brickearth soil; possible inclusion of animal waste and animal bedding/stabling?
Facies 1d/ Soil Microfabric Type 1d	**M907, M907 bottom**; BD: 907b	SM: 6 mm of basal minerogenic layers: As SMT 1b, but .without contamination/vivianite; mineralogenic sandy silt loam with relic traces of bedding formed by horizontal organic fragments BD: acid (pH 3.3), poorly humic (4.0% LOI) with low phosphate (490 ppm P_2O_5, P ratio 1.3) and very low MS (7 x 10^{-8} SI kg^{-1}).	Natural/Period 1 [13020], Open Area 1(4?): humic colluvial mineralogenic and valley side peat formation.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 2a/ Soil Microfabric Type 2a	**M973(5)**; BD: 973(5)a	SM: As humic SMT 2b, but less coarse, and more finely bedded and humic, with more secondary iron; very few gravel size flint and few gravel-size brickearth soil clasts; very abundant amorphous organic matter, tissue and occasional organ plant fragments; intercalated with silt; occasional coarse fragments of amorphous peat; occasional charcoal; many ferruginous impregnations of plant material. Overlying minerogenic layer is a massive sandy silt loam (brickearth) deposits; abundant void infills of yellowish brown, finely dusty clay and associated intercalations. BD: Acid (pH 3.2) and humic (9.3% LOI), with very low MS (14 x 10^{-8} SI kg^{-1}), but high qualitative MS550 (1130 x 10^{-8} SI kg^{-1}); moderately high phosphate (1730 ppm P_2O_5) and P ratio of 1.2.	Roman Open Area 4 (Period 2)[15726]: intercalated organic (and minerogenic) colluviation; hillwash includes fragments brickearth soil, with phosphate, charcoal and fine specks of burned soil inferring an increasing anthropogenic presence; secondary iron impregnation is also indicated by high MS550; sandy silt loam minerogenic layer is a colluvial slurry formed from brickearth; some input of stabling waste?
	M973(4); BD: 973(4)a	As M973(5), but is characterised by coarse (7 mm wide) burrow with loose infill of thin to very broad organic excrements; includes occasional coarse wood charcoal. BD: weakly acid (pH 6.0) and poorly humic to moderately humic (2.8-6.8% LOI), with very low MS (8-19 x 10^{-8} SI kg^{-1}); moderately low phosphate (600-640 ppm P_2O_5), with P ratio of 1.2-1.4. Probe: Elemental maps and line analysis demonstrate sandy (Si, mean 17.2%, max. 35.8%) laminae alternate with weakly formed iron pans (Fe, mean 0.177%, max. 1.57%), featuring small concentrations of Al (mean 2.24%, max. 7.54%)(clay) and K (mean 1.28%); Ca (mean 0.20%, max. 0.40%) and Mn (mean 0.01%, max. 0.75%) appear to be leached out; patchy traces of P (mean 0.03%, max. 0.18%) occur throughout.	[15722/24]Massive, generally leached brickearth slurries and laminated organic deposits, with likely some secondary iron/phosphate contamination.
Facies 2b/ Soil Microfabric Type 2b	**M973(5)**; BD973(5) b	SM: Sloping, coarse (20 mm) bedded minerogenic, encompassing fine (0.5-1 mm) laminae; Sandy silt loam minerogenic bed: massive with finely laminated organic stringers (20 µm thick); 5-10% voids, dominantly moderately well accommodated fine planes, with very few channels; moderately well sorted laminae of coarse silt to medium sands, and clay, silt and fine sandy layers; speckled and dotted pale brown (PPL), low to moderately high interference colours (speckled or grano-striate b-fabric, XPL);pale orange brown, with rare red and occasional black specks (OIL); occasional fine amorphous organic matter, rare phytoliths; coarse organic fragments include rare coarse charcoal, and many horizontally oriented tissue fragments. BD: Acid (pH 3.5) and poorly organic (3.3% LOI), with very low MS (7 (5 x 10^{-8} SI kg^{-1}) and low phosphate content (480 ppm P_2O_5) and P ratio of 1.3.	Early Roman Open Area 4 (Period 2)[15726]: intercalated minerogenic (and organic) colluviation; rare charcoal and fine specks of burned soil inferring an anthropogenic presence.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 3/ Soil Microfabric Type 3	**M973(3) bottom**; BD973(3) c	SM: Massive, weakly heterogeneous; brickearth slabs; C:F, 70:30-60:40, sandy silt loam variants, with few to frequent medium sand, common to dominant fine and very fine sand, and common silt; speckled pale brown (frequent grey brown)(PPL), very low interference colours or high interference colours (close porphyric, speckled or crystallitic b-fabric; XPL), very pale yellowish brown (OIL); rare amorphous organic matter fragments, with occasional patches of abundant amorphous organic matter; very few charcoal and rare bone; occasional iron staining and likely iron and phosphate staining; very few *in situ* roots. BD: Neutral/alkaline (pH 7.6), poorly humic (2.8% LOI) and phosphatic (730 ppm P_2O_5, P ratio 1.1), with very low MS (13 x 10^{-8} SI kg^{-1}).	Early Roman Open Area 4 [15723]: ground raising and levelling with brickearth from both upper and lower (calcareous) subsoils.
Facies 4a/ Soil Microfabric Type 4	**M973(3) bottom**;	40 mm of accumulation SM: aggregated microstructure, with gravel-size brickearth (see F3) separated by humic soil infillings/coatings (see floor surface below); occasional to many organo-mineral excrements, and a s compacted soil around aggregates; rare secondary CaCO3. 3 (10 mm) mm occupation surface/ “floor”: layered, heterogeneous and humic; as F3, with dominant dark reddish brown (PPL), very low interference colours (close porphyric, speckled b-fabric; XPL), reddish brown with black inclusions (OIL); very abundant amorphous organic matter and occasional tissue/organ fragments; occasional phytoliths; many coarse charcoal, occasional pottery, shell and bone; many likely dung and stabling crust fragments.	Early Roman Open Area 4 [15722]: Likely (human) trampled brickearth soil accumulation, with in-mixed dung, charcoal etc; [15721] Trampling spread from local byres – floor?.
Facies 4b/ Soil Microfabric Type 4	**M973(3) top**; BD973(3) b	0-35 mm and 90-110 mm: SM: Heterogeneous with variety of brickearth fragments (F3); compact and massive; very few medium (2 mm) channels; very few anthropogenic inclusions; burrow fills of humic soil, bone, organic matter impregnated with $CaCO_3$; rare secondary Fe/P nodular impregnation. BD: Neutral (pH 7.3), poorly humic (3.0% LOI) and phosphatic (610 ppm P_2O_5, P ratio 1.2), with very low MS (24 x 10^{-8} SI kg^{-1}).	Early Roman Building 16 [15718]: mixed dump of brickearth material, for ground raising?/floor; later burrows and Fe/P contamination.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 5/ Soil Microfabric Type 5	**M973(3) top;** [973(2)c	35-90 mm: SM: Charcoal rich and layered; C:F, 60:40, with common fine sand and silt, frequent brickearth fragments (tabular fragments), very few bone, shell, fused silica (phytolith) waste, grindstone (common wood charcoal); Fine material: various; dominant darkish grey to yellowish grey (PPL), low, moderate to high interference colours (porphyric, crystallitic b-fabric, XPL), grey to whitish grey, occasional to abundant black specks (OIL); occasional to abundant amorphous and charred organic matter; occasional to many phytoliths; occasional to many (to generally micritic) ash; rare secondary calcium carbonate impregnation of woody fragments; amorphous (Fe/P) yellowish nodular cementation of organic mater and coarse material, with vivianite ghost; BD: Humic (13.9% LOI) and phosphatic (3270 ppm ppm P_2O_5, P ratio 1.6), with relatively high MS (227 x 10^{-8} SI kg^{-1}).	Period 3, Early Roman Building 16: trampling spreads, possibly in partially protected/roofed environment; ashes, charcoal, cereal processing waste, grindstone coming from partially exposed, weathered environment.
Facies 4c/ Soil Microfabric Type 4c	**M973(2)** BD: 973(2)a	0-120 mm: SM: as F3, with common (burned subsoil Bt brickearth) speckled reddish brown (PPL), moderately high interference colours (close porphyric, grano-striate b-fabric, XPL), bright orange with many red specks (OIL); rare amorphous organic matter and few (burned daub) speckled and dotted greyish brown (PPL), low to medium interference colours (close porphyric, grano and uni-striate b-fabric, XPL), greyish brown with red and black specks (OIL); occasional to many amorphous organic matter and rare phytoliths. BD: Neutral (pH 7.4), poorly humic (2.6% LOI), with moderate amounts of phosphate (1590 ppm P_2O_5, P ratio 1.3), and relatively moderately high MS (109 x 10^{-8} SI kg^{-1}).	Period 5 [15717], Post-Boudicaan Open Area 27: mixed dump of brickearth material, for ground raising?; incorporation of large amounts of burned brickearth and manufactured humic/calcareous daub; later burrowing and Fe/P contamination.
Facies 4d/ Soil Microfabric Type 4d	**M973(1)** BD: 973(1)b	70-140 mm: SM: Massive and compact, with medium (2 mm) channel microstructure, F3, 4b, 4c; but with frequent pottery/tile/burned daub, and very few mortar, and abundant i) ferruginous/amorphous Fe/P nodular impregnations (and many vivianite), and hypocoatings, and ii) occasional to many micritic impregnations and rare to occasional microspartic calcite infills and rare vivianite infills; amorphous Fe/P and vivianite. BD: Neutral (pH 7.5), poorly humic (2.9% LOI), with moderate amounts of phosphate (1090 ppm P_2O_5, P ratio 1.3), and relatively moderate MS (71 x 10^{-8} SI kg^{-1}).	Period 6 [15716], Roman Open Area 51: compact deposit of brickearth and building debris, that has weathered *in situ*, leading to mobilisation and redeposition of calcium carbonate, for example down root holes. (Later likely contamination with iron and phosphate from post-Roman cess pits?)

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 6/ Soil Microfabric Type 6	**M973(1)** BD: 973(1)a	0-70 mm: SM: massive with medium channel microstructure; homogeneous brickearth soil mineral (as F3 and 4b); few gravel and coarse wood charcoal and occasional bone; speckled and dotted greyish brown (PPL), low to high interference colours (close porphyric, speckled and crystallitic b-fabric, XPL), grey with occasional red and black specks (OIL); occasional to many amorphous and charred organic matter and occasional phytoliths; Pedofeatures: as F4d.	Period 6 [15716], Roman Open Area 51: weathered and biologically homogenised "dark earth"-like subsoil formed weathered brickearth dumps; affected by redeposited calcium carbonate and later Fe/P contamination from post-Roman (?) cess pits; later compacted.
Facies 7/ Soil Microfabric Type 7	**M972** BD: 972a, b, c	i) 0-25 mm: SM: as F2a, but non-bedded and containing very abundant coarse wood charcoal. BD: neutral (pH 6.5), moderately humic (5.8% LOI), with moderate amounts of phosphate (1500 ppm Pcitric, P ratio 1.1), and low MS (35 $^{10-8}$ Sikg^{-1}).	Period 5 (Post-Boudicaan), Road 2: washed (brickearth derived) silts containing wood charcoal and with secondary phosphate inwash.
		ii) 25-100 mm: massive with packing voids; very dominant poorly sorted (1 mm to 20 mm) wood charcoal; very few flint gravel and silt; abundant yellow to reddish brown (PPL), isotic, yellow to orange (OIL) void (e.g., cell) coatings and infills of likely Fe/P. BD: neutral (pH 6.5), very organic (35.3% LOI), with moderate high amounts of phosphate (2950 ppm Pcitric, P ratio 1.4), and very low MS (16 $^{10-8}$ Sikg^{-1}).	Period 5 (Post-Boudicaan), Road 2: washed and leached wood charcoal deposit, with later preferential accumulation of inwashed phosphate.
		100-130 mm: iii) SM: as F2a, but non-bedded and poorly sorted; many infills of likely Fe/P.. BD: weakly acid (pH 6.3), moderately poorly humic (4.7% LOI), with moderately high amounts of phosphate (2410 ppm Pcitric, P ratio 1.1), and moderately low MS (69 $^{10-8}$ Sikg^{-1}).	Period 5 (Post-Boudicaan), Road 2: washed poorly sorted brickearth silts, coarse sand and gravel, with later phosphate contamination.
Facies 8/ Soil Microfabric Type 8	**M967** BD: 967b	i) 0-35 mm: SM: as F4c, with primary 10 mm thick layer of gravel, sand, burned soil inclusions, and gravel-size fragment of layered, and articulated phytoliths, with silt-intercalations (leached fragment of stabling crust); below brickearth and burned daub slab; many amorphous iron and phosphate mottling/impregnation/void infills.. BD: Poorly humic (3.2% LOI), with moderately high amounts of phosphate (2540 ppm Pcitric, P ratio 1.0), and moderate MS (153 $^{10-8}$ Sikg^{-1}).	Period 5 (Post-Boudicaan), Open Area 23; spread/wash of gravel, sands and likely fragment of stabling crust, followed by ground-raising/surface re-construction using a gravel base and a mixed brickearth and daub slab; over –
		ii) 35-130 mm: SM: as F4c, but includes very dominant amounts of rubified brickearth and brickearth daub (with parallel sided voids, relics of plant tempering); upper most layer comprises 55 mm long and 25 mm thick, slightly surface rubified brickearth slab; many to abundant amorphous Fe/P and associated rare vivianite; rare secondary micritic and microsparitic calcite. BD: weakly acid (pH 6.4), very poorly humic (1.8% LOI), with high amounts of phosphate (3120 ppm Pcitric, P ratio 1.1), and very high MS (948 $^{10-8}$ Sikg^{-1}).	Period 3, Early Roman floor construction(s) using brickearth slabs, and burned brickearth and daub as hard core. Possibly floor burned *in situ*.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 9/ Soil Microfabric Type 9	**M966** BD: 966	i) 0-7 mm: SM: massive sand with packing voids; C:F, 85:05, very dominant well-sorted rounded medium quartz sand with very few gravel; speckled brown (PPL), moderate interference colours or isotic (coated [chitonic], speckled and crystallitic b-fabric, XPL), yellow (OIL); many likely Fe/P amorphous coatings.	Period 5 (post-Boudicaan) Road 2:construction of road surface with well-sorted sandy subsoils (river sands), as found in Southwark.
		ii) 7-22 mm: SM: compact, massive with sub-laminar structure – as F9iii below.	Compacted post-Boudicaan “dark earth”; CaCO3 and phosphate contamination from overlying road.
		iii) 22-100 mm: SM: as F6, channel and vughy microstructure, with upper 30 mm being darker with very abundant charred and amorphous organic matter; many phytoliths, rare ash crystals; many coarse wood charcoal (becomes less humic down-profile); with frequent inclusion of burned daub and calcareous brickearth building clay (cob mortar); abundant broad (> 2mm) organo mineral excrements and burrow fills, with occasional thin and very thin excrements; occasional to many secondary calcium carbonate (mictic and microspartitic) and amorphous Fe/P, and associated vivianite or vivianite ghosts. BD: alkaline (pH 8.2), moderately humic (5.8% LOI), with moderately high amounts of phosphate (2910 ppm Pcitric, P ratio 1.5), and moderately low MS (54 $^{10-8}$ Sikg^{-1}).	Post-Boudicaan “dark earth”/moderately humic calcareous brown earth formation, with relic burned materials and ash, strongly homogenised and burrowed by earthworms and smaller soil fauna. Possibly suggests use of soil as garden/horticulture. Contamination of soil by inwash from road surface.
Facies 10/ Soil Microfabric Type 10	**M905** BD: 905a and 905b	i) 0-50 mm: SM: as F4a, later ferruginisation of mixed humic soil.	Period 8 Road 2: trampled accumulation of brickearth fragments and humic soil and plant fragments.
		ii) 50-90(100) mm: SM: very dominant layered charred wood. BD: neutral (pH 6.9), moderately poorly humic (4.0% LOI), with relatively low amounts of phosphate (950 ppm Pcitric, P ratio 1.3), and very low MS (24 $^{10-8}$ Sikg^{-1})	Early Roman (Period 3) Building 15, Room C: layer of burned wood (destruction level), overlying;
		iii) 90(100)-105 mm: SM: as F3, but strongly compact, with very abundant fine charred and amorphous organic matter; includes 3 mm size grouped scatter of pale grey (“leached”) bone, some 0.4 mm in size – a likely example of a raptor (owl?) pellet. BD: acid (pH 4.9), humic (2.9% LOI), with low amounts of phosphate (430 ppm Pcitric, P ratio 1.5), and very low MS (9 $^{10-8}$ Sikg^{-1})	Abandoned house “occupation” soil deposits, containing accumulation of brickearth silts from walls (little P), blown-in charcoal and humus accumulation, along with likely raptor (owl?) pellets.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 11/ Soil Microfabric Type 11	**M901** BD: 901a, 901b	i) 7.62-7.58 m: SM: as F1b, but with both common silt and frequent gravel; becomes yellowish brown towards the top – abundant Fe/P impregnation, rare secondary micriitic impregnation. BD: very acid (pH 3.5), humic (8.3% LOI), with moderate amounts of phosphate (1110 ppm Pcitric, P ratio 1.1), and very low MS (18 $^{10-8}$ Sikg^{-1}) ii) 7.58-7.50 m: SM: as F1b, but with few coarse wood charcoal; occasional coarse burrows and thin excrements. BD: very acid (pH 3.0), humic (9% LOI), with low amounts of phosphate (540 ppm Pcitric, P ratio 1.7), and very low MS (19 $^{10-8}$ Sikg^{-1})	Period 5, Open Area 22: colluvial fluvial deposit of acid, humic, poorly sorted silts sand and gravel; post-depositional rotting and later phosphate contamination, over; Slightly more humic bedded silts, with few charcoal and gravel; minor rooting and burrowing.
Facies 12/ Soil Microfabric Type 12	**M894(1), M894(2)** BD: 894(1)a 894(2)b	i) 8.12-8.10 m SM: ii) 8.10-8.00 m SM: BD: neutral (pH 6.8), poorly humic (3.6% LOI), with moderate amounts of phosphate (2010 ppm Pcitric, P ratio 0.5), and very low MS (23$^{10-8}$ Sikg^{-1}) iii) 8.02-7.94 m SM: BD: neutral (pH 6.9), poorly humic (3.6% LOI), with moderate amounts of phosphate (1630 ppm Pcitric, P ratio 0.5), and very low MS (22 $^{10-8}$ Sikg^{-1}) iv) 7.94-7.90 m SM:	Period 6, Building 32, Room A: brickearth clay floor constructed over; Early Roman Period 3, Building 12 poorly sorted, possible sweepings and wash from stabling area; major secondary vivianite formation in this wet deposit. Poorly sorted, possible sweepings and wash from stabling area, commencing with humic stabling debris that may include pig-like coprolite; major secondary vivianite formation in this wet deposit; over; Period 3 Brickearth clay floor.
Facies 13/ Soil Microfabric Type 13	**M891** BD: 891a, 891b	i) 7.99-7.95 m SM: BD: neutral (pH 6.5), very organic (18.9% LOI), with very high amounts of phosphate (3950 ppm Pcitric, P ratio 1.0), and very low MS (16 $^{10-8}$ Sikg^{-1}) ii) 7.95-7.87 m SM: BD: neutral (pH 6.7), very organic (20.9% LOI), with very high amounts of phosphate (3960 ppm Pcitric, P ratio 1.0), and very low MS (25 $^{10-8}$ Sikg^{-1})	Period 5, Open Area 22: highly organic and phosphate-rich intercalated silts and organic matter, accumulated and dumped from likely stabling waste; a wet site with *in situ* rooting but little faunal activity.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 14/ Soil Microfabric Type 14	**M887** BD: 887a 887b	i) 8.43-8.37 m SM: BD: neutral (pH 7.2), poorly humic (4.3% LOI), with moderate amounts of phosphate (1750 ppm Pcitric, P ratio 1.1), and moderate MS (91 $^{10-8}$ Sikg^{-1}) ii) 8.37-8.31 m SM: BD: neutral (pH 7.2), very poorly humic (2.9% LOI), with moderately low amounts of phosphate (1120 ppm Pcitric, P ratio 0.8), and moderate MS (93 $^{10-8}$ Sikg^{-1})	Period 7, Building 37: finely fragmented and accumulated trample (beaten floor), mainly fine deposit of brickearth occupation soil containing small amounts of fine charcoal; secondary amorphous iron and phosphate deposition, over; Building 37: dump of gravel/small stone size fragments brickearth, burned daub and charcoal, that have been probably compacted by trampling to form a hard core layer.
Facies 15/ Soil Microfabric Type 15	**M468** BD: 468	i) 8.07-7.98 m SM: BD: neutral (pH 7.2), organic (16.2% LOI), with very high amounts of phosphate (3920 ppm Pcitric, P ratio 1.0), and very low MS (27 $^{10-8}$ Sikg^{-1}) ii) SM: BD:	Period 7, Building 24, Room D: finely bedded organic and phosphate-rich deposit of intercalated silts and organic matter, much humified, inferring a possible accumulation of, now “weathered” stabling waste/crust over: Period 6, S20: trampled floor deposit rich in burned bone and burned organic matter, some likely derived from animal stabling; deposit affected by secondary vivianite probably Fe/P derived from overlying weathered stabling waste..
Facies 16/ Soil Microfabric Type 16	**M437** BD: 437a 437b	i) 2.16-2.10 m SM: BD: Extremely humic (36.5% LOI) , with very high amounts of phosphate (4170 ppm Pcitric, P ratio 1.2), and very low MS (16 $^{10-8}$ Sikg^{-1}) ii) 2.10-2.07 m SM: BD: neutral (pH 6.6), moderately organic (5.8% LOI), with moderate amounts of phosphate (1770 ppm Pcitric, P ratio 0.9), and low MS (40 $^{10-8}$ Sikg^{-1})	Period 7, Open Area 35: finely bedded accumulation of very organic, very phosphatic material, relic of animal bedding/stabling waste including possible foreshore plants (gypsum/bassanite), over; Mixed dump of brickearth building debris, and small amounts of domestic and stabling debris; weathering and biological activity.

Material	Sample Number examples	Soil Micromorphology (M), Bulk Data (BD), Microprobe (Probe) and Elemental Map (EM).	Interpretation and Comments
Facies 17/ Soil Microfabric Type 17	**M432** BD: 432	i) 1.66-1.57 m SM: BD: Neutral (pH 6.9), extremely humic (28.3% LOI) , with very high amounts of phosphate (4300 ppm Pcitric, P ratio 1.1), and very low MS (14 $^{10-8}$ Sikg^{-1}) ii) 1.57-1.54 m SM:	Period 6, Open Area 37: highly organic and phosphatic deposit of plant fragments, amorphous organic matter, sometimes intercalated with silts, all possibly of animal bedding and stabling waste origins; wet dump, over, Poorly sorted minerogenic and likely washed deposit; weathering and biological activity.
Facies 18/ Soil Microfabric Type 18	**M422** BD: 422	c. 1.66-1.45 m SM: BD: Neutral (pH 6.6), extremely humic (34.6% LOI) , with very high amounts of phosphate (4170 ppm Pcitric, P ratio 1.1), and very low MS (14 $^{10-8}$ Sikg^{-1})	Period 7, Open Area 32: highly organic and phosphatic deposit of plant fragments, amorphous organic matter, sometimes intercalated with silts, all possibly of animal bedding and stabling waste origins; wet dump/wash, over, Wet , washed brickearth silts.
Facies 19/ Soil Microfabric Type 19	**M994** BD: 994a 994b	i) 5.46-5.38 m SM: BD: neutral (pH 7.3), moderately poorly humic (4.5% LOI), with moderate amounts of phosphate (1520 ppm Pcitric, P ratio 1.1), and low MS (43$^{10-8}$ Sikg^{-1}) ii) 5.38-5.35 m SM: BD: neutral (pH 7.4), poorly humic (2.4% LOI), with moderate amounts of phosphate (1350 ppm Pcitric, P ratio 0.9), and very low MS (14 $^{10-8}$ Sikg^{-1})	Period 10, Open Area 75: dominantly a mineralogenic, likely trample of building brickearth material, with low amounts of possible stabling waste and very little domestic debris; physical mixing and minor biological activity, formed over; A compact brickearth slab constructional layer.
Facies 2c/ Soil Microfabric Type 2c	**M968(7)**	8.90-9.03 m BD: neutral (pH 7.3), moderately poorly humic (4.5% LOI), with moderate amounts of phosphate (1520 ppm Pcitric, P ratio 1.1), and low MS (43$^{10-8}$ Sikg^{-1})	