ROMAN AND MEDIEVAL ACTIVITY IN THE UPPER WALBROOK VALLEY: EXCAVATIONS AT 12–18 MOORGATE, CITY OF LONDON, EC2, 1997

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SUMMARY

In January and February 1997 AOC Archaeology Group undertook a programme of excavations at 12-18 Moorgate, EC2 (NGR TQ 3268 8139). The site lay on the western side of the Upper Walbrook Valley. In Roman times this area was generally fairly flat, at an average height of 9.50m OD. The earliest evidence of occupation took the form of small scale quarrying of the natural sand and gravel in the early 2nd century AD, and some sub-division of the site by a fenced boundary. By c.AD 120 this area of the City had been developed, with large scale dumping followed by the laying out of a road and at least one adjacent building, which may have been a taverna or had a relationship with the known pottery production site to the north-west. During the post-Roman and earlier Saxon periods there was no evidence of activity on the site; the earliest clear indication of re-occupation was a Saxo-Norman sunken featured building. During the medieval period the dominance of dumps, ditches and pits is indicative of backyard activities. Finds within these deposits were principally derived from domestic refuse, together with smaller quantities of building materials and industrial debris. The majority of the medieval deposits were dated from the mid-11th to early 13th centuries, with later 13th- to 15th-century material occurring in smaller quantities, mostly from a limited range of cut features.

INTRODUCTION AND CIRCUMSTANCES OF FIELDWORK

Following a field evaluation conducted in April 1996 (Bruce & Moore 1996), an excavation was carried out by AOC Archaeology Group during January and February 1997, in advance of redevelopment by Abbey National plc of their offices at 12–18 Moorgate, EC2 (NGR TQ 3268 8139). The site is located to the east of Moorgate, bounded by Telegraph Street to the south and Copthall Close to the north, and abutted by Kent House, 11–16 Telegraph Street, to the east (Fig 1). Archaeological work on the site was recorded under Museum of London site code MGE96.

Due to the logistics of excavating between standing buildings and extant streets, the archaeological investigation could not be conducted in a single, phased excavation. It was first necessary to excavate archaeological deposits around the perimeter of the site within small bays (c.1.5–4m square), followed by open area excavation of the remaining archaeology.

The following report presents the findings as a continuous narrative incorporating information from several specialist reports. For further information and specialist appendices please refer to the archive report. The full archive is available for consultation

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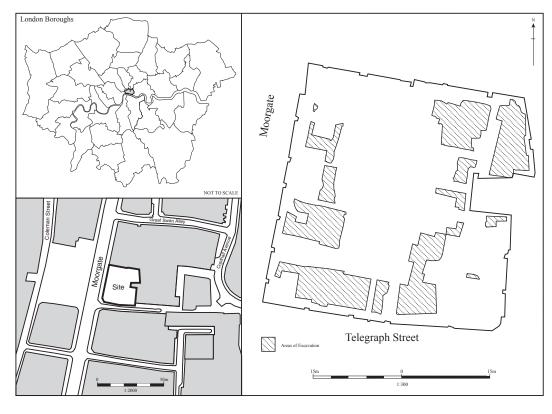


Fig 1. Site location

on request at the London Archaeological Archive and Research Centre (LAARC).

TOPOGRAPHICAL AND ARCHAEOLOGICAL BACKGROUND

The site is situated on the eastern edge of a gravel spur projecting into the Walbrook Valley, approximately 2–3m above the level of the floor of the basin (Bruce & Moore 1996, 18). The Walbrook and its tributaries have been a major topographical influence on occupation within this part of the City through much of history. The promontory on which the site is located was formed by the bend of one of its three principal tributaries which, fed by springs to the north of London Wall, crossed the Moorgate area and converged near the site of St Margaret's Lothbury. To the south of London Wall these three streams shared a flood plain up to 150m wide. Excavations in the surrounding area have indicated the presence of a Roman industrial suburb utilising the waters of the Walbrook streams. The Upper Walbrook Valley was formally laid out with Roman streets *c*.AD 120 (Maloney 1990); the level of public investment involved suggests that this was perhaps a planned replacement of the industrial quarter cleared to make way for an enlarged forum in AD 100–130 (Milne 1992). This part of Roman London contracted in the late 2nd and 3rd centuries and, although 4th-century deposits are found on several sites, the structural remains of this period are ill-preserved and inconsequential.

There was no continuity of urban life from the Roman to Anglo-Saxon periods, and the Upper Walbrook reverted to marsh (with few, if any, drainage channels left free-flowing). Resettlement in the area is generally dated to the late 11th to 12th centuries. The main north–south medieval street in the area was Coleman Street, parallel to Moorgate and one modern block to the west, dating at least from the 1180s. The 'Moor Gate' itself was a medieval postern gate built in 1415, without a Roman antecedent. Moorgate (the street)







was laid out in the 1840s after the demolition of the gate in the 18th century. It cut across several alleys running east from Coleman Street, such as Love Lane and King's Alley, which can be traced back to the late medieval period. The mid-16th-century 'Copperplate Map' shows this area as covered in gardens and backyards and it was within the part of the City destroyed by the Great Fire of London in 1666. The basemented 1840s developments would have swept away any 17th- to 19th-century remains.

THE SITE SEQUENCE

Natural topography

The Upper Walbrook Valley area was generally fairly flat, at an average height of 9.50m OD, although there was some evidence for a slightly higher area along the west side of the site. In the extreme north-east corner of the site, the top edge of the channel slope was encountered, dropping down to a lowest point of 9.10m OD. A steep slope was encountered on both the south and east sides of the site, with a gentler slope to the north, suggesting perhaps that the site lay adjacent to the apex of a westward bend in the stream. Insufficient remnants of the floodplain deposits were encountered in the north-east corner to allow more exact interpretation. The natural deposits over which the site lay ranged from compacted, orange gravels, to loose, pale yellow, fine sands.

Phase 1. Late 1st to early 2nd century

The earliest archaeological features on the site were a series of postholes and pits, cut directly into the natural subsoil (Fig 2). The majority of the postholes formed a band c.1m wide running roughly north-south for around 10m, before turning west through a right angle at the south end and running for a further 2.5m to the limit of excavation. Datable ceramic finds were present in a small number of the postholes which indicated a date range of late 1st to early 2nd century AD. These postholes may have formed a fenced property boundary; the replacement of some of the posts suggests that the fence stood for long enough to need repair. Other occasional small groups of post and stakeholes were

seen elsewhere on the site but these did not display any clear patterns.

It is not clear whether the posthole alignments played some part in the laying out of the Phase 2 road (discussed below). It seems likely that the road was following pre-established property lines dating from Phase 1. As such, there may have been one, or possibly two properties represented by the postholes. No clear pattern has emerged of the spatial distribution of refuse disposal within these areas of property sub-division, which precludes any definitive statement on the nature of Phase 1 land division.

In addition to the postholes there were a small number of pits of a similarly early date. They were scattered over much of the site and seem to represent a fairly low intensity of land use (for example, isolated pit [2039]). One of the pits is likely to have been formed by tree roots [2223] and had a very poorly defined base and edges. The fills of most of these early pits contained a relatively limited range of inclusions. For example, one pit [1388] contained the semi-articulated, rear leg bones of a small adult horse but no other finds, whilst another [2037] contained only large quantities of burnt, but otherwise fairly unabraded, daub. The presence of daub suggests that early buildings existed in close proximity to the site, even if they were not constructed on it, and that the products of demolition by burning, accidental or otherwise, were at least in part disposed of on the site.

Towards the west edge of the site was another pit [1120] which had vertical sides, was 1.3m deep and contained a more complex sequence of fills. This had been used as a rubbish pit with soft dark grey clay silt fills, (1118), (1119), (1212) and (1236), containing organic remains, sealed by dumps of clean, redeposited natural sand and gravel on two separate occasions, represented by (1211) and (1223). The organic fills contained pottery dating from the late 1st to early 2nd centuries. The pit had been used for disposal of a wide range of materials, such as animal, fish and bird bone and pottery. There was also evidence for iron working, in the form of hammer scale, slag and four smithing hearth bottoms, indicating forging and welding of iron artefacts, though the actual work represented by the recovered

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Fig 2. Phase 1, early Roman: late 1st to early 2nd century

material may be minimal. The lack of any clear hearths on the site would seem to indicate that this material was generated nearby and then discarded within this pit. A single fragment of a dung beetle was recovered from one of the fills, suggesting that an even broader range of material was included in the backfilling of this pit.

In the north-east part of the site was a series of intercutting pits suggesting a localised area of more intensive exploitation (see [1900], [1903] and [1910] on Fig 2). This group of pits generally contained domestic rubbish, including early 2nd-century pottery.

A number included clean sand and gravel primary fills, (1579), (1274) and (1854), with few or no finds, suggesting that the sides had weathered whilst they had been left open for a short period of time. They had subsequently been filled with dumps of rubbish containing pottery of late 1st- to early 2nd-century date. This would seem to be indicative of quarrying of the natural deposits, presumably on a relatively *ad hoc* basis, followed by dumping of rubbish in the available open pits.

Placed directly upon the base of one of the pits [1794] was a complete inverted mica-





dusted bowl (1304) dated to the early 2nd century. This was of a type made locally, possibly at Northgate House, 20–28 Moorgate [MRG95], immediately to the north of the site (Seeley & Drummond-Murray 2005; Merrifield 1965, 229; Marsh 1978). The bowl had been covered by dark brownish grey clay silt (1793) containing early 2nd-century pottery and it showed no signs of post-depositional damage, implying that the fill was laid down fairly carefully, rather than simply being dumped into the pit.

A much larger intrusion [2221] was also found in the north-east corner of the site, continuing beyond the eastern edge of excavation. If this represents a pit then it is on a scale that is unique during the earliest activity on the site, being over 3.8m in length and 0.9m in depth. This is likely to have been dug for quarrying of the natural sand and gravel and was backfilled with browngrey sandy clay (2185) containing fragments of bone, tile and early to mid-2nd-century pottery. The date of this backfilling suggests that it is related to the episode of large scale dumping found elsewhere on the site, but no direct relationship survived due to truncation by modern foundations.

Phase 2. Early 2nd to mid-3rd century

This early, fairly small scale occupation of the site was sealed in many places by much more extensive activity (Fig 3), which initially took the form of dumping of layers of redeposited natural clay, sand and gravel, up to 0.5m thick. Finds were rare within these dumps, but occasional sherds of pottery dated to the late 1st to early 2nd century were present. This dumping would appear to be related to the phases of land reclamation found on many of the sites in the area (8 Telegraph Street [TEL83] and 4-6 Copthall Avenue [CHL84] (Maloney 1990, 26, 40)). The dumps at 12-18 Moorgate almost certainly form part of the programme of large scale reclamation works attempting to bring the Upper Walbrook Valley into the area of main Roman occupation. The dating evidence for the dumping and the subsequent occupation of the site conforms to that found elsewhere in the valley.

The expansion of Roman occupation was most clearly indicated by the extension of the

street grid onto the site. The western side of the site was crossed by a NNE-SSW metalled road. The initial deposit was compact, light orange-brown sand with fine gravel, around 0.1m thick (2200). This formed the bedding for three phases of surface, (2197), (2198) and (2199), with a total thickness of 0.4m. These were all similar in composition, being comprised of compacted sands and gravels with a slight clay component, and were only divided by virtue of subtle colour differences. The later surfaces had been heavily disturbed by post-Roman intrusions and only survived in fairly small areas. Due to this truncation the maximum extent and alignment of the road were provided by the bedding layers rather than the surfaces. The road ran for a total length of 15.5m within the site and had a maximum surviving width of 3.6m. The only finds present in any of these layers of road were occasional small fragments of undiagnostic Roman brick or tile.

This road can be equated with Road 1 as discussed by Maloney (1990, 26–39). Where previously examined, Road 1 has been seen to comprise two slightly diverging phases of construction (*ibid*, 120). On the present site no clear divergence was found, although there was the possibility of a very slight change in direction towards the southern end. The stretch of road excavated on the present site also seems to be rather narrower than those encountered further north, being 3.6m wide rather than 5.0–5.5m.

In places the road alignment could only be established by the presence of ditches and drains. The form of these varied along the length of the road, from a broad irregular ditch along the northern part of the west side, [1925], [1953], [1947] and [2138], to a narrow, timber-lined, and probably timbercapped, drain to the south of this, and on part of the east side [1721]. The northern limit of the drain on the east side of the road formed a rounded butt end, creating a possible causeway between road and building (Building 1, see below). The change from ditch to drain on the west side appeared to coincide with the possible change in alignment mentioned above. The ditch contained a large number of driven stakes, mostly along its eastern edge, which appear to represent attempts to maintain the edge of the road. It had also been cleaned or recut, with the







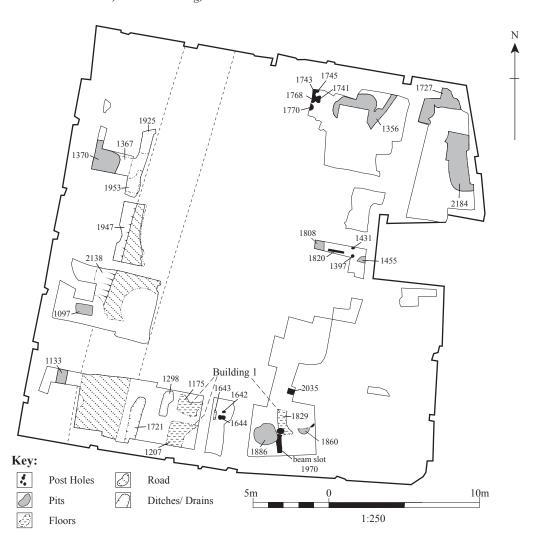


Fig 3. Phase 2, Roman: early 2nd to mid-3rd century

final recutting infringing slightly upon the edge of the road itself. The fills of the ditch and drains were dark grey and brown sandy silts, (1097), (1864), (1923), (2137), (1823) and (1668), and contained pottery in the form of small abraded fragments of wide date range, running from the mid-3rd to late 4th century. This suggests that accumulation of the ditch and drain fills was taking place over a considerable period. Deposits of this date were otherwise infrequent from the site and they would appear to mark the period from which the drainage system for the road was no longer being fully maintained, but was

apparently still in use. The possible drain at the southern end of the west side differed from the other drainage features associated with the road in that it appeared to have been deliberately backfilled at a considerably earlier date; none of the pottery in [1131] post-dated the early 2nd century.

The laying of the road was accompanied or very closely followed by the construction of a building (Building 1) on its east side. Whilst this building was constructed on the surface of the large scale dump deposits, it was stratigraphically separated from these deposits by the digging and backfilling of





a large sub-circular pit [1886]. This had a maximum diameter of 1.40m and was 0.70m deep. The primary fill (1971) was yellowishbrown gravelly sand, which was clearly derived from the local natural subsoil. This surrounded a single large jar (1885) made of North Kent Shelly Ware of late 1st- to early 2nd-century date, which appeared to have collapsed *in situ*. The pit had then been filled with a mixed rubbish deposit (1957) which again contained late 1st- to early 2nd-century pottery. These deposits would appear to represent the deliberate burial of a complete vessel. This may have been buried as a foundation deposit, during the construction of the building, or have been in use as a storage vessel within its floor and subsequently buried. Later intrusions had removed the relationships which might have assisted clarification of these interpret-

Estimating the extent of Building 1 is difficult due to its truncation to the north and south by modern foundations and to the west by the sunken part of Building 2 (Phase 3). The base of a probable beam slot [1298] was found beneath the later structure and this may have formed the front wall of Building 1. A similar beam slot [1970] and small group of postholes found further to the east possibly form the eastern limit of the building, which would therefore measure approximately 10m from east to west. Alternatively these features may have formed part of an internal division, in which case the eastern elements of the building have been destroyed by modern intrusions.

The main structural evidence for the building was in the form of small patches of clay, (1204), (1207) and (1829), gravel, (1079), (1202) and (1643), and mortar, (1175), (1203) and (1642), floors. Although these had been heavily disturbed, it was possible to discern at least two phases of flooring. Other structural elements, such as postholes [1860], [2096] and [2035], post pad [1644] and two short lengths of probable beam slots [1298] and [1970], were present. Most of the timbers had rotted in situ but one of the beams and one of the posts had been removed, with mixed refuse deposits (1297) and (1827) being used to backfill the resulting holes. The backfill deposits included fragments of animal bone,

pottery and glass dating from the mid-1st to mid-2nd centuries. As with the road, dating evidence for the construction of this building was scarce. However, a small quantity of datable material from the floor layers (1079) and (1829), together with stratigraphic information, suggests a construction date in the early to mid-2nd century. The post pad and patches of the floors were overlain by a compacted, sandy silt deposit (1570) which may have formed the final occupation surface, following removal of an internal division. This contained mid- to late 2nd-century pottery.

There is little direct evidence for the function of this building. Driven into one of the largest areas of floor surface were a large number of stakeholes. Some tentative alignments were observed but these were far from certain. However, they appear to represent a series of structures, rather than single, replaced stakes, which are likely to have been lifted and repositioned or replaced at fairly frequent intervals. They may have been some form of furniture, such as racks, used in an industrial or commercial process. Recent excavations at Northgate House, 20-28 Moorgate [MRG95] have provided evidence of pottery kilns and associated drying racks; the latter manifest as stakehole arrangements (Seeley & Drummond-Murray 2005, 14). The construction date of early to mid-2nd century is likely to be contemporary with pottery production at Northgate House and the inset vessel in the floor follows a pattern seen at other pottery production sites where similar jars were used to store water or slip.

Approximately 10m to the north of Building 1, within an area that was heavily disturbed by medieval and modern intrusions, another beam slot [1820] and two further postholes, [1397] and [1431], were found. The beam slot was orientated east-west, and contained a clean grey-brown clay silt fill (1819) with no datable finds present, suggesting that the beam had rotted in situ. The fill of one of the postholes (1396) contained a small quantity of fairly undiagnostic Roman ceramic building material, whilst the other contained no finds. No related floor surfaces were found in this area to confirm whether these features formed part of a building, but their position, between 9m and 12m from

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the projected edge of the road, would fit with the rear of a building fronting onto the road

A further group of possible postholes, [1741], [1743], [1745], [1768] and [1770], was excavated towards the northern edge of excavation and may represent structural remains. The fills contained moderate fragments of domestic refuse, suggesting that the posts had mainly been removed. At least two phases of activity were present, with some of the postholes clearly intercutting. These were again very heavily truncated by medieval and post-medieval features and no clear spatial arrangement could be ascertained. The postholes may represent building remains, being approximately 6m from the projected line of the road, but lack any associated floor or occupation deposits. Alternatively they may have formed a fenced boundary between the roadside activity and the top of the slope of the Walbrook Valley.

There was no evidence for any other buildings of Roman date on the site. Excavation of a number of pits, apparently contemporaneously with the occupation of Building 1, took place towards the northeast corner of the site, in the same area that the earlier pit sequence had been situated. This area also included a large number of post-Roman cut features, which truncated the earlier pits (Fig 3). Whilst it is possible that some of the earliest pits were primarily dug to extract the natural sand and gravel, many of the later ones cut into earlier backfills and would therefore not have been effective as quarries. Almost all of the pits appear to have been used for the disposal of a range of refuse material. The animal bone assemblage retrieved from these pits was unsurprisingly dominated by domesticated animals, specifically cattle, sheep/goat and pig. Much of the small assemblage of bird bones was unidentifiable, although domestic fowl were certainly present, while a range of predominantly marine and estuarine fish and shellfish was also present. This mixture of species would support the suggestion that the bulk of the bone assemblage represents disposal of food waste, rather than industrial working of bone.

One large sub-rectangular pit [1370] was found to the west side of the road. This originally had a clay lining, which

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incorporated mid to late 2nd-century pottery and had largely collapsed prior to the pit being backfilled with sandy gravel, also containing mid to late 2nd-century pottery and ceramic building material. The latest cutting of the roadside ditch [1367] had cut into the edge of this pit, but the alignment of the surviving side respected the line of the road, suggesting that they were originally in use at the same time.

As has already been stated in relation to the roadside ditch fills, deposits securely dated to the later Roman period were infrequent. The majority of the later Roman pottery was found residually in medieval deposits and it would seem likely that this had been brought onto the site at this later date, rather than deriving from reworked late Roman layers. The little activity of 3rd- or 4th-century date that does occur is limited to the extreme north-east corner of the site and is restricted to the digging of a possible drainage gully [1727] with associated dumping, (1661) and (1662).

The Roman pottery assemblage contained a predominance of flagon forms; the high proportion suggests that the storage and pouring of liquids was a major activity on the site, possibly indicating the presence of a taverna, or a residence of relatively high quality. Drinking vessels, beakers and cups are also quite well represented, as are wine amphorae from South Gaul and one from an Italian source. The amphorae consist of a wide range of types, some of which contained rarer ingredients, such as olive oil from a probable North African source and fish sauce from Cadiz. These suggest that there was culinary activity on the site, as does the presence of cooking wares, mainly jars and bowls in reduced fabrics. Table wares account for almost 10% of the assemblage and consist of fine ware products. Almost all of the dishes are represented by samian vessels. In addition there are several examples of mould-decorated samian bowls in both South and Central Gaulish fabrics which are indicative of high status.

The immediately post-Roman and Saxon periods represent a hiatus of activity on the site, although some late Saxon pottery was recovered from medieval contexts. Marsh formation in low lying areas, such as that found at 15–35 Copthall Close [KEY83],





containing 4th- and 11th-century pottery, in general represented the long term abandonment of the area (*ibid*, 79) between these dates. Whilst the drier nature of the land on which the present site lies meant that no marsh deposits were present, a similar period of abandonment had occurred. This would also conform to the known abandonment of the majority of the City during the Saxon period in favour of the *Lundenwic* settlement further upstream (see, for example, Cowie 1988).

Phase 3. Early medieval: Building 2 (Fig 4)

The earliest clear indication of re-occupation of the site was found towards the southern edge of excavation, where a sunken feature building [1208] and [1667] (Building 2) had been cut into the eastern edge of the Roman road. This was broadly rectangular, a minimum of 4.2m in length, 3.6m in width and up to 0.4m deep. The sides were steep, with a slight step on the western edge and a fairly flat base. Along the west side of the cut was a regular line of stakeholes, whilst towards the east edge were a number of



Fig 4. Phase 3, early medieval







larger, irregularly spaced postholes. There was no evidence of floors or hearth structures so these posts and stakes probably supported a raised floor. Pit [1289] was located on the eastern side of the sunken feature building, near the southern limit of excavation. The pit had a maximum diameter of 0.90m and was 0.37m deep. Below the base of this pit light greyish brown staining of the natural subsoil was encountered in two places which were interpreted as the ends of rotted-out posts; it is thought the pit may have been dug to remove the upper parts of these posts once they had started to rot.

Immediately to the west of the top edge of the sunken feature building, and also cutting into the Roman road, was a shallow, northsouth orientated trench [1609]. It was 0.55m wide, with a broad U-shaped profile, and ran for a minimum length of 1.75m, with a maximum depth of 0.09m. In its base was a series of small, circular stakeholes, generally 0.05-0.1m in diameter, and less than 0.10m deep, together with a larger (0.2m) semicircular stake against the east side of the cut, and a probable plank slot, 0.05m wide, 0.8m long, and 0.15m deep, which was similarly tight against the western edge. The edges of this feature and the adjacent sunken feature respect one another, suggesting that they were contemporary structures. This may represent the remains of a wattle wall or a boundary fence/screen.

A posthole [1899] 0.5m in diameter and a disturbed post pad [1826] constructed of chalk rubble set in a hard white, sandy mortar, were found c.10.5m to the east of this wattled wall. The fill of the posthole (1898) was a loose, dark grey silty clay, containing fragments of bone and mid-11th- to mid-12th-century pottery, which suggested the intentional removal of the post. These features are indicative of some form of structural activity, possibly related to the sunken feature building, although their relationship is uncertain.

Dating its construction and period of use is also, to some extent, problematic. The posthole and post pad to the east were cut into shallow dump deposits containing mid-11th- to mid-12th-century pottery. If these represent part of the same building phase, then construction of this date would accord with another probable wattle-walled

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building excavated to the south of the site at 8 Telegraph Street (TEL83; Chitwood 1987, 199). The sunken feature building had been rapidly backfilled with dark greybrown, sandy clay dumps (1134) and (1624), containing bone, shell and tile fragments, together with pottery which was dated to c.1140-1220.

The position of this building, towards the southern edge of the site and adjacent to the Roman road, corresponds to what would have been the driest area of the site, at a time when marsh to the north and east would have made the construction of simple cellars impractical. It is also possible that the road itself was still functioning to some extent, either as a localised area of hard standing, or as a minor thoroughfare linking the marginal area of the Upper Walbrook with the core areas of occupation to the south.

Phase 4. Later medieval: pits, ditches and dumping (Fig 5)

In addition to the possible building described above, further medieval activity across the site was dominated by dumping and the digging of pits and ditches. Whilst Building 2 is certainly earlier than many of the medieval features within the same area of the site, it is probable that some of the dumping and pit and ditch digging is contemporary with the building's occupation and related to its function. The nature of the features excavated means that it is highly likely that some degree of overlap occurred, although dating of the available pottery is not sufficiently precise as to ascertain which should be grouped together if a purely chronological approach is maintained.

The dumped deposits were typically dark grey, brown and black silty clays, containing fragments of pottery, ceramic building material, animal bone and, less frequently, industrial residues. The dumps were found across the entire site, to a maximum depth of 0.5m, except where later truncation occurred. Whilst these were generally homogeneous, subtle variations in colour and concentrations of inclusions suggested that these deposits were formed by a large number of tips of similar material rather than the accumulation of a soil horizon via pedogenesis. A degree of post-depositional





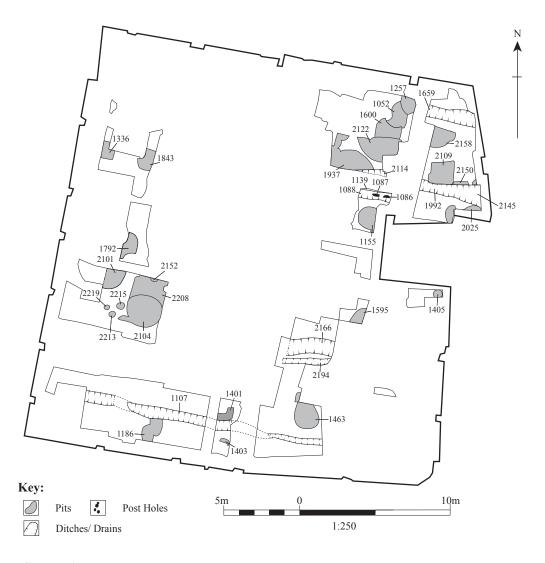


Fig 5. Phase 4, later medieval

reworking, apparently by plant action, had, in many cases, blurred the boundaries between the individual tips. Plant root holes were frequently seen cutting into the surface of the paler coloured Roman layers underlying these dump deposits. Much of the pottery recovered from these dump layers was of Roman date and clearly residual, as were a smaller number of late Saxon sherds. Pottery of mid-11th-to mid-12th-century date was also recovered from these dumps and appears to provide a more likely deposition date for the majority of the dumping. Smaller quantities of later medieval pottery were present but

these may have been derived from intrusive features that were not recognised at the time of excavation or may indicate that a degree of post-depositional disturbance and mixing had taken place.

A large number of pits had been dug across the entire site; these appeared to be broadly contemporary with the dumped deposits and exhibited a high degree of intercutting. They ranged in size from 0.6m to 2.0m across and up to 1.0m in depth, and varied in shape from sub-circular to rectangular. The fills were homogeneous dark grey and greyish brown silty clays, containing fragments of





pottery, ceramic building material, animal bone and shell, making differentiation of adjacent pits extremely difficult. In the northwest part of the site was a pit [1336] which, in addition to the domestic refuse dated to the mid-11th to mid-12th centuries, contained industrial residues from copper working, possibly derived from the floor of a hearth area, (1243) and (1335). One pit [1843] also included a small fragment of human skull. Although much of the pottery and all of the small quantity of glass present within these fills was of Roman date, medieval wares were also present in smaller quantities in a number of the pits. This suggests that they are likely to be roughly contemporary and medieval, around the mid-11th to mid-12th century in date.

Further to the south was a sequence of cut features that could be distinguished from the majority of the pits in this area of the site. The earliest was a heavily truncated, but probably originally sub-rectangular pit [2208], a maximum of 2.28m across, with a near vertical side approximately 0.40m deep. Within the base of this were three broadly parallel, shallow slots or gullies, [2205], [2206] and [2207], between 0.60m and 0.85m wide, running roughly south-west to north-east and cutting into road bedding (2200). Their fills (2202), (2203) and (2204) were almost identical — firm, dark greyish brown sandy clay with occasional pebbles but no finds. They were overlain by the main fill of the pit (2146), which was also a firm greyish brown sandy clay, but was distinguishable from the underlying fills by its slightly darker colour and the presence of fragments of bone, ceramic building material and pottery of mid-12th- to early 13th-century date. This fill was clearly a backfill representing disuse, derived from domestic refuse. The function of the gullies, and therefore the original function of the pit, is unclear, as is the relationship between them. They may have all been open at the same time, or have been excavated and filled successively. Their alignments respect each other, suggesting that they are likely to have been contemporary and formed the original base of the pit.

Pit [2208] was cut by a large, steep sided, sub-circular pit [2104], 2.4m in diameter and c.1.5m deep. The primary fill (2130) was

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a dark reddish brown sandy silt with a high organic content, containing predominantly residual Roman pottery, together with material dating to the mid-11th to mid-12th century. This was sealed by a clean yellowish grey sandy clay (2103), containing mid-13th- to mid-14th-century pottery, and dark grey sandy clay fills (2100) and (2098), containing domestic refuse, indicating disuse and levelling of the pit. A small group of four postholes, [2152], [2213], [2215] and [2219], formed a fence around the west and north-west sides of pit [2104]. Pottery from the fill of one of these (2151) was dated as 11th- to mid-12th-century.

Towards the southern edge of the site was a large oval pit [1463] which originally appears to have been lined with wattle; following the collapse of the lining, the pit appears to have been gradually filled with a mixture of industrial material and refuse. The pit was 1.80m in diameter and 1.50m deep; the sides were very steep, coming down to a rounded bottom edge and fairly flat base. The primary fill (1676) did not cover the base, but was concentrated against the bottom of the south side, to a maximum depth of 0.30m, suggesting that it had been dumped rather than gradually accumulated within a disused pit. This fill was a mid-brown organic silty clay, containing frequent fragments of animal bone, occasional pottery (of mid-12th- to early 13th-century date) and Roman glass, in the form of a plain bead and a fragment of bottle, together with a little industrial waste. The animal bone assemblage from the fill consisted of a wide range of domestic and wild species: cow, sheep, goat, pig, horse, dog, cat, wild boar, frog, whiting, mackerel, lemon sole and domestic fowl.

Sealing the primary fill, and covering the rest of the base of the pit, was a greyish black silty clay fill (1664), up to 0.2m thick, and containing fragments of ceramic building material, a small quantity of hammer scale, bone, and imported pottery dated 11th to mid-12th century and 10th to mid-13th century. It also contained lenses of highly decomposed organic material that may have originally been wattling. This suggests that the pit had originally had a wattle lining which had collapsed over the first two fills, (1676) and (1664), as does the presence of two very poorly preserved stakes (1626) and





(1627), which appeared to have collapsed from the southern edge of the pit.

The possible lining had then been sealed by a 0.6m-thick, dark greyish brown silty clay fill (1641), which contained fragments of animal bone, ceramic building material, shell and mid-12th- to early 13th-century pottery. Overlying this fill was a thin (0.02m) layer of mid-brownish grey clay (1628), containing occasional fragments of ceramic building material. The surface of this formed a shallow hollow within the upper levels of the pit, [1463], over which was another thin layer (0.03m), this time of mid-brown organic clay (1464). This may have formed gradually above the poorly-drained surface of the clay whilst the pit remained open. The final fill (1462) was a 0.60m-thick dump of brownish-grey sandy clay, containing fragments of animal bone, industrial residue in the form of hammer scale and possible tin or lead slag, ceramic building material, and mid-11th- to mid-12th-century pottery. The animal bone assemblage from this fill consisted of a wide variety of species, including cow, sheep, goat, pig, dog, cat, wild boar, red deer, domestic fowl, goose, cod, herring, eel and stickleback. There was a high percentage of juvenile pig bones within the assemblage, which may indicate that adult pigs with their litters were kept on site. In addition, the bones of immature geese were present, which may suggest the breeding of these birds on or near the site. A cow scapula from this assemblage was carved and intricately shaped, probably a practice piece for decorative bonework.

Towards the eastern side of the site were three pits which all appeared to have contained some form of timber lining. Two of these, [1405] and [1595], were barrellined, with the barrels represented by staining against their sides; they had been backfilled with dumps of domestic rubbish (1389) and (1392), including mid-13th- to early 15th-century pottery. To the north of these was another circular pit [1155] with the possible remains of a timber lining collapsed into the fill. This was considerably later in date, containing mid-14th- to early 16th-century pottery, and a sherd of postmedieval, probably intrusive, pottery.

Towards the northern edge of site were two pits which merit more detailed description because of the survival of a more complex sequence of fills. Pit [1257] was subrectangular, up to 1.0m across, with vertical sides down to a flat base at a maximum depth of 0.7m. The primary fill was a thick layer of mid-grey-brown clay silt (1358), with occasional charcoal, chalk, animal bone, ceramic building material, and pottery of both Roman and mid-12th- to early 13thcentury date. This was covered with reddish brown silt (1256), from which only residual Roman pottery was recovered, followed by a layer of redeposited natural sand (1218). This marked a change in the nature of the fills, with all subsequent deposits being mixed dumps of clayey silts and sandy silts, (1008), (1166), (1171) and (1216), containing fragments of chalk, shell, animal bone and occasional pottery. Whilst most of the pottery was of Roman date, a single sherd was recovered from the final fill which was dated to the mid-10th to mid-13th centuries. The second pit in this area [1600] had a maximum diameter of 1.8m, and vertical sides to a rounded base at a depth of 1.0m. The primary fill (1599) was a thin layer of dark grey clay silt, which contained no finds and appeared to have accumulated naturally in the base of the open pit. This had been sealed by a dump of redeposited natural sandy gravel (1598). This was followed by three dumps of grey clay silt, (1559), (1596) and (1597), containing a range of domestic rubbish including 11th- to 12th-century pottery.

Pits were being dug throughout the medieval occupation of the site and almost all are probably best interpreted as functioning as rubbish pits. This may, however, be a reflection of the final function, with domestic rubbish being dumped to fill earlier pits. Alternative interpretations for the original excavation of the pits should be considered. Where linings within these pits have been tentatively recognised, it is likely that they were constructed in such a way as to allow them to be emptied at various times during the time of their use. Lined pits are frequently interpreted as cesspits, but environmental sampling failed to recognise cess deposits definitely. This may, of course, have been due to their having been emptied and subsequently backfilled with other forms of rubbish, although such complete







and efficient emptying seems unlikely. It is possible that some of the pits were dug for industrial processes, such as tanning, although the finds assemblage does not necessarily indicate this activity.

In addition to the dumps and pits, a number of ditches were excavated, the majority of which were concentrated in the north-east corner of the site. The ditches were all orientated approximately east-west, but otherwise displayed a degree of variation in construction, fills and probable function. Due to subsequent truncation none of these were traced for more than 4m and for some only one edge could be found.

The most complete length of ditch in this part of site was excavated towards the eastern edge of excavation. Ditch [1992] and [2145] was 4m in length and widened from 0.75m at the western end to 1.6m at the eastern edge of the excavation. It also sloped appreciably from west to east, a vertical drop of 0.4m in the 4m excavated, a 1:10 gradient. It had been lined with chalk rubble set in light to mid-grey silty clay, (2023) and (2144), which was sealed by dark grey clay silt, containing mid-12th- to early 13th-century pottery, (1964), (2022) and (2142). These silty fills were sealed by dark reddish brown silty sand (1991) which contained a single fragment of hearth lining, a bone toggle and pottery which was also dated to the mid-12th to early 13th century; this marked the disuse of the ditch. This ditch was clearly constructed for drainage purposes, carrying water down towards the Walbrook stream to the east of the site. To the west of this ditch were elements of two other heavily truncated ditches [1139] and [2114], which also contained silty fills, (2113) and (1138), suggesting that they also functioned as drains. Chalk fragments were again found in one of these which had possibly derived from eroded linings, together with mid-11th- to mid-12th-century pottery.

Two of the ditches, [1088] and [1659], in this north-east area contained postholes within their bases, suggesting that they may have incorporated fenced boundaries. One of these features [1088] had a much less silty fill, having been deliberately backfilled rather than gradually filled up, whilst the other [1659] sloped down to the east and included a possible clay lining with silting

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above it, indicating that it functioned both as a boundary and a drain.

None of the remaining ditches in this area contained evidence for either posts or linings; all appeared to have fairly flat bases, and there was some evidence for recutting or replacement, [1114], [1164] and [1748]. The degree of truncation hindered clear interpretation, but the fills indicated a mixture of backfilling and silting and it is likely that they combined the functions of both drainage and boundaries.

In addition to the concentration of ditches in the north-east of the site, three more were excavated further to the south, which also followed an east-west orientation. A fairly small ditch [2194], 0.40m wide and 0.24m deep, was cut into the surface of the natural gravel and contained a mixed fill (2193), containing fragments of residual Roman pottery and 12th-century ceramic building material. This had then been sealed by layers of dark dump material and partially cut by a much larger and later ditch [2166]. This was 1.30m wide and 0.80m deep with vertical sides and a V-shaped base, and contained a more complex sequence of fills. The primary fill was a soft mid-brown organic clay (2148), which covered the sides as if it represented a decayed lining, but was up to 0.40m thick in the base. This was probably due to the collapse and reconstruction of the lining during the use of the feature. A small quantity of pottery from this fill was dated to the mid-11th to mid-12th century. The suggestion that the lining was renewed is strengthened by the second fill (2033), a thin layer of yellow-orange gravel covering the southern side of the ditch and the surface of fill (2148), probably in the form of a repair. This fill also contained mid-11th- to mid-12th-century pottery. The remainder of the ditch was filled by a dark grey-brown silty clay layer (2032), which continued beyond the top edge and spread over the surface of the dark dumps through which the ditch was cut, clearly marking its disuse. This contained mid-14th- to mid-15th-century pottery, ceramic building material dated to the 13th to 14th centuries, and a single fragment of copper alloy slag. This layer was sealed by two further brown clay silt deposits which had slumped into the area of the ditch, (2048) and (2049), which also contained





ceramic building material dated up to the end of the 15th century, and pottery of mid-13th- to early 15th-century date.

Narrow ditch [1107] ran 16m east to west across the southern edge of the site; it was a maximum of 0.8m wide and 0.3m deep. A very slight slope down from west to east was recorded in the base of this gully (0.20m drop over 16m length: a gradient of 1:80). Although this may have facilitated drainage down towards the Walbrook stream, the primary function of the ditch was probably as a boundary. Although slight variations occurred along its length, the fill was generally dark grey to dark greyish brown sandy clay, with fragments of ceramic building material, animal bone, shell, and pottery dated as mid-12th- to early 13thcentury, (1106), (1144), (1566), (1568), (1639) and (1785). Part of a scale handle and a bone needle were in the ditch fill and may be indicative of bone working at the site. The fills were not particularly silty and contained fairly frequent finds, suggesting that they had been dumped as backfilling when the gully was no longer required.

The most prevalent species from the medieval animal bone assemblage were cattle, sheep/goat and pig. The dominance of piglets and the presence of young geese may suggest breeding was taking place on or near the site. Cattle bones dominate the butchery evidence; there is comparatively little evidence of butchery on pig bones. The most common category of butchery evidence is tertiary butchery (filleting, reduction to household or pot-sized pieces, and splitting for marrow) which is most common in cattle in the later medieval phase. A number of pieces of worked bone, in the form of scale handles, toggles and a decoratively carved cow scapula, may be indicative of boneworking at the site in the medieval period.

The metalworking residues from this phase suggest that iron working and copper working were taking place on or in the vicinity of the site in the medieval period. The evidence for copper working comes in the form of copper alloy slag with lesser amounts of hearth lining and possible mould fragments; both casting and forging appear to have been carried out. The iron-working evidence was principally in the form of smithing hearth bottoms. Six complete or nearly complete

smithing hearth bottoms were found which represent accumulation of slag from 3–6 days of medieval iron working.

Subsequent development of the area had been truncated by the basement of the most recent building on site. A small number of post-medieval remains were encountered, mainly in the form of drains and badly truncated foundations.

CONCLUSIONS

The natural location of the site, on a spur of land overlooking the Walbrook Valley, failed to attract activity in the earliest Roman period, and no evidence was found suggesting pre-Roman land use. The earliest occupation took the form of small scale quarrying of the natural sand and gravel in the early 2nd century, and some sub-division of the site by a fenced boundary, possibly suggesting two parcels of property (*insulae*). By c.AD 120 the site came within the overall development of this area of the City, with large scale dumping, followed by the laying out of a road and at least one adjacent building.

The peripheral nature of the site and its limited period of occupation are also evident in the relative poverty of the finds generated by the excavation. Whilst the more durable materials, principally pottery and ceramic building material, were present in significant quantities, much of this was derived from medieval contexts and was therefore of uncertain provenance. A notable exception to this was the mid-2nd-century pottery assemblage, which suggests a brief period of greater prosperity.

Of particular note were the relatively small amounts of material indicative of specific industrial processes. No direct evidence of pottery production was seen at the site. At the adjacent site of Northgate House, two phases of Roman kiln activity were found with an associated metalled alley leading to a workshop for the potters (Seeley & Drummond-Murray 2005). During the evaluation a fragment of glass-working waste had been recovered (Bruce & Moore 1996), and this industry has previously been located in the area during the Roman period (Maloney 1990, 124; Seeley & Drummond-Murray 2005, 147–55). The excavation, however, produced no further evidence for

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glass working, indicating that the material found during the evaluation was an isolated example which was probably brought onto the site from another local source.

Another industry which is well represented in the Upper Walbrook area is leather working and tanning (*ibid*, 124). The conditions on the present site were not conducive to the preservation of organic materials, such as leather, so the absence of direct evidence for leather working is unsurprising. Whilst some of the pits excavated on the site may have been dug for tanning, very few included any form of lining and the sand and gravel natural into which they were cut would not have held liquid. Such a function therefore would seem to be very unlikely.

Evidence for the nature of Roman occupation on the site is, therefore, to some extent ambiguous. The site is situated within an area generally seen as an industrial suburb, with fairly low status buildings. The excavated buildings would clearly fit within such an area, but could not be unequivocally described as industrial.

It is interesting to note that a substantial proportion of the pottery forms present are indicative of the storing, preparation and serving of food and drink. This was on a scale in excess of the likely domestic requirements for such a relatively low status residence, and therefore may represent commercial activity, such as a *taverna* of some type. Industrial areas would be likely to have contained such hostelries; it may be that this building was a source of refreshment for those individuals working nearby, including the adjacent potters.

During the medieval period the site was clearly within marginal land; this was at least in part due to the post-Roman formation of the marsh, which limited occupation. The dominance within the archaeological record of dumps, ditches and pits is indicative of backyard activities. The majority of the medieval deposits were dated to the mid-11th to early 13th century; inclusions within these deposits display a mixture of origins, including domestic refuse as well as industrial waste. Excavations at the adjacent sites of Northgate House [MRG95] and Kent House [KHS98] show this large area being used for a range of industrial activities, including an area for dumping butchery waste (Drummond-Murray & Liddle 2003, 93). The medieval animal bone assemblage from 12–18 Moorgate is comparable to that from the adjacent sites in that it is dominated by cattle bone from mature animals with evidence of tertiary butchery, *ie* filleting, reduction to household or pot-sized pieces, and splitting for marrow.

The butchery, bone working and possible tanning evidence from the site ties in with the butchery, horn working, tanning and furrier waste found at Northgate House and Kent House (Drummond-Murray & Liddle 2003, 93); clearly carcasses were being prepared and modified nearby or at the site for consumption and industrial use. Drummond-Murray and Liddle (2003) suggest this waste originated from the meat markets within the City.

The excavations at 12–18 Moorgate indicate that metal working was taking place on or in the vicinity of the site in the medieval period. As at Northgate House and Kent House (Drummond-Murray & Liddle 2003, 93), no evidence of *in situ* activity was found, yet evidence of medieval iron and copper working was found as redeposited waste in pits, dumps and ditches.

The early post-medieval cartographic evidence (such as the map attributed to 'Agas'), shows that the open land, indicated by this excavated medieval archaeology, had been more formally incorporated into the urban landscape, in the form of gardens for larger properties fronting onto Coleman Street [MOG86] (Schofield & Maloney 1998, 231). Subsequent basemented development of the area, during the construction of Moorgate, had removed any traces of this later formalisation of the site; however see Sygrave (this volume, 91–108) for developments of this period on the nearby site at 19–31 Moorgate.

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