

FAST FOOD IN THE MEDIEVAL CITY: EXCAVATIONS AT 29–30 QUEEN STREET AND 1–7 GREAT ST THOMAS APOSTLE, LONDON EC4

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With contributions by Anne Davis (plant remains), Rupert Featherby (Roman pottery), Nigel Jeffries (post-Roman pottery), Jackie Keily (accessioned finds), Alan Pipe (animal bone), and Terence Paul Smith (building material)

There is in London on the river bank among the wines for sale in ships and in the cellars of the Vintners a public cook-shop. There daily you may find food according to the season, dishes of meat, roast, fired and boiled, large and small fish, coarser meats for the poor and more delicate for the rich, such as venison and big and small birds ... For this is a public kitchen, very convenient to the City, and part of its amenities.

William FitzStephen (12th century)

SUMMARY

Fieldwork carried out at 29–30 Queen Street and 1–7 Great St Thomas Apostle between 1989 and 2001 revealed activity from the Roman to the post-medieval periods. The sequence was dominated by substantial medieval chalk and ragstone walls and a series of pitched tile hearths, dating from the 13th to the 17th centuries. The hearths appeared to be situated outside the building represented by the walls, in an area which may have been a cookshop or food stall. Although set back from the Thames-side cookshops noted by FitzStephen, the site provided important evidence for food preparation in medieval London.

INTRODUCTION

This article presents the results of archaeological work carried out by the Museum of London Archaeology Service on the site of 29–30 Queen Street and 1–7 Great St Thomas Apostle, London EC4 (QUS00, NGR 532400 180930) (Fig 1). It refers largely to archaeological investigations between September 2000 and February 2001

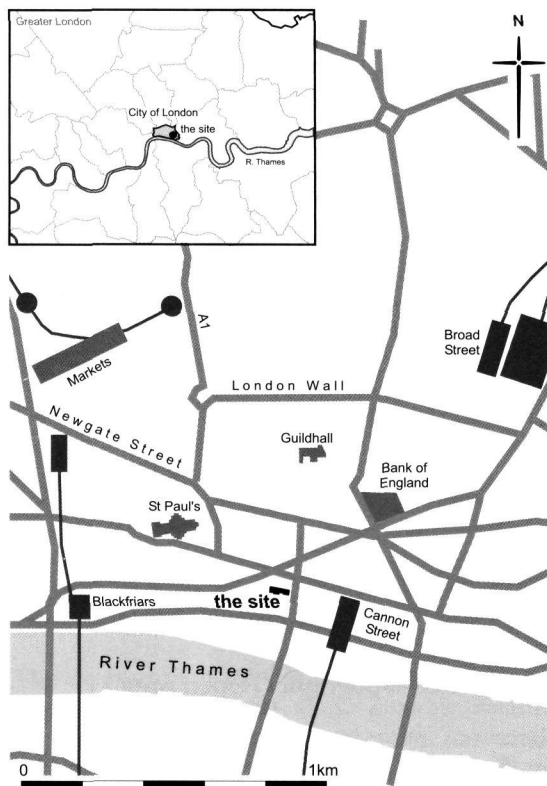


Fig 1. Site location plan

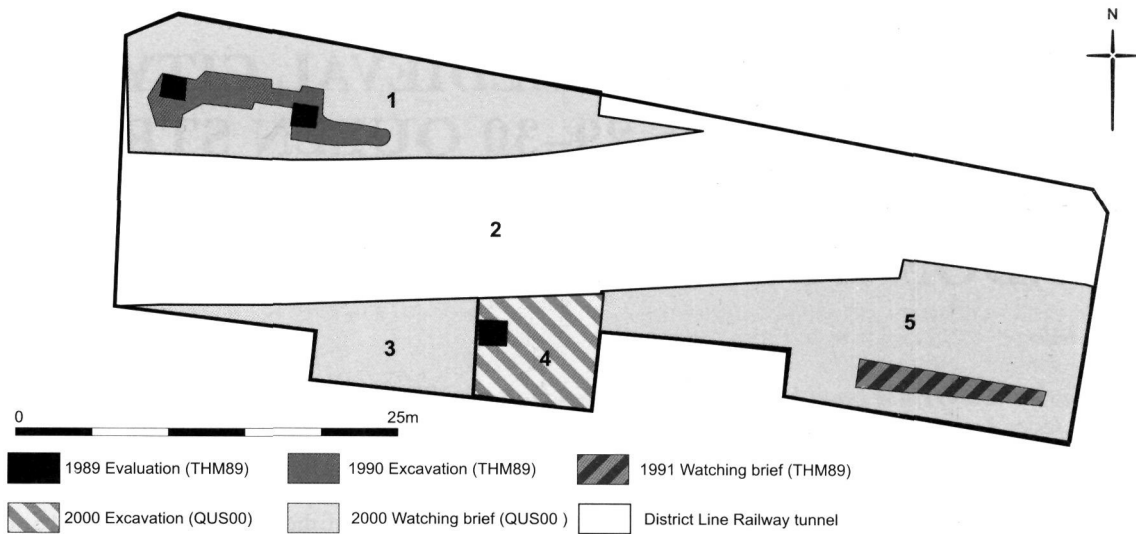


Fig 2. Plan showing phases and numbered areas of fieldwork

(QUS00), but also attempts to integrate previous fieldwork by the DUA between 1989 and 1991 (THM89; Goode & Pope 1989; Lawrence 1990; Elsdon 1991). The specialist results refer solely to the most recent investigation of QUS00. The site was divided into five areas and each phase of fieldwork is illustrated in Fig 2. The main area of excavation in 2000–2001 was Area 4, which was the only part of the site not to have been previously basemented. The work was commissioned by Berkeley Homes and the site archive will be deposited in the London Archaeological Archive and Research Centre.

Prior to clearance, the site housed a mixture of Victorian and Edwardian commercial buildings, including the Vintry Public House. In addition, the London Underground District Line tunnel runs east–west through the middle of the site (represented by Area 2). The proposed development involved the construction of new retail and residential units, requiring extensive new foundations and piling, which had an archaeological impact.

Geology and topography (Open Area 1)

There was no evidence of pre-Roman activity on the site. The natural subsoil encountered throughout the fieldwork was brickearth, although gravel was seen in Area 1 during piling.

The height of the brickearth varied from 8.93m OD in Area 1 to 6.95m OD in Area 5. Despite the impact from Roman and modern truncation, the Ordnance Datum levels of the brickearth across the site reflect the downward slope in the natural terrain towards the River Thames to the south.

Archaeological background

The site and others in the immediate vicinity (Sites 1–10, see Fig 3) have produced a number of Roman features including ragstone foundations, beam slots of timber-framed buildings, and timber-lined drains, as well as quarry, rubbish, and cess pits. The dating of these features suggests that the area was not fully developed until the 2nd century AD. An excavation at Site 6 also revealed an early Roman pottery kiln whose demise appeared to have coincided with the Boudican revolt.

The site is in Vintry Ward, which stretched from just north of Great St Thomas Apostle down to the Thames; in 1320 this was the second richest ward in the City with four parish churches and six company halls. Just to the north-west of the site stood Ormond Place. Originally built by the earls of Ormond, it was given by Edward IV to his wife Elizabeth in the second half of the 15th century, but was demolished shortly afterwards to make way for tenements.

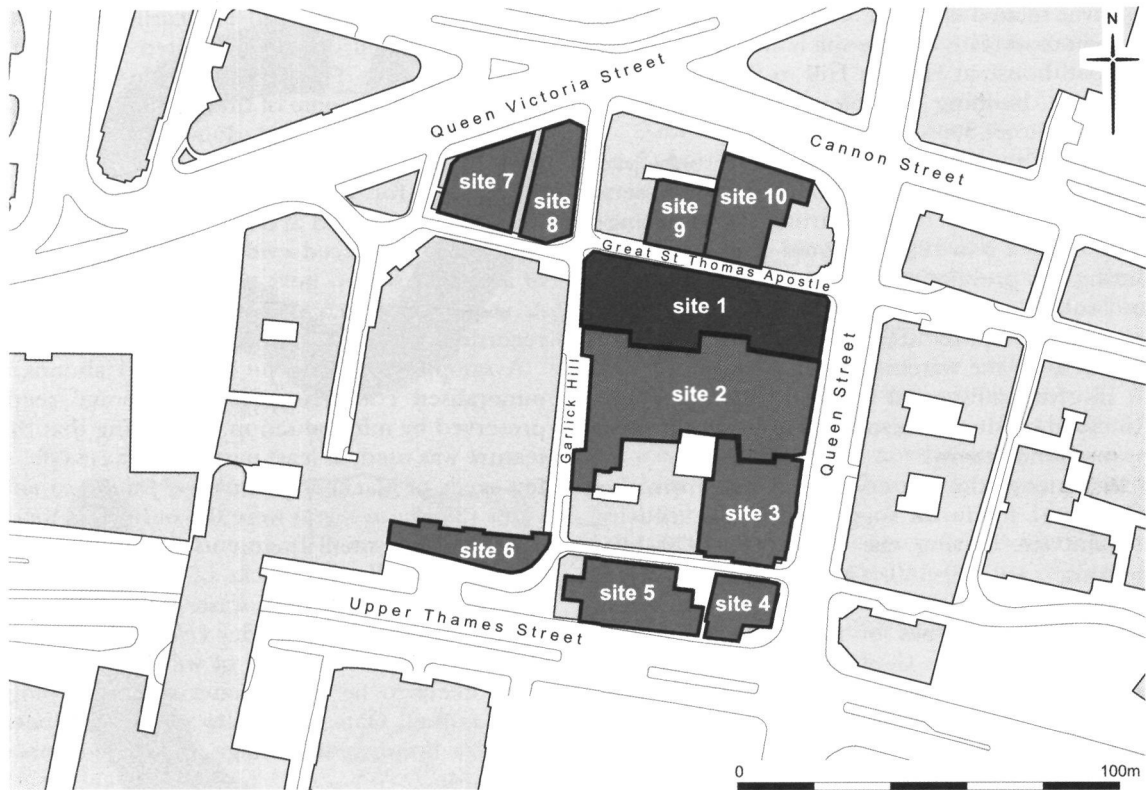


Fig 3. Previous archaeological sites in the vicinity. Key: Site 1: (The Site) 1–7 Great Thomas Apostle, 29–30 Queen Street, EC4 (THM89 and QUS00); Site 2: 32–35 Queen Street, 6A Great St Thomas Apostle, 21–26 Garlick Hill, EC4 (QUE88 and GRL88); Site 3: 2–4 Skinner's Lane, 36–39 Queen Street, EC4 (SKI83); Site 4: 40 Queen Street, 1 Skinner's Lane, EC4 (QSK89); Site 5: St James Garlickhithe Church, Garlick Hill, EC4 (JAS91); Site 6: 14 Garlick Hill (Sugar Loaf Court), EC4 (SLO82); Site 7: Ormond House, 62–63 Queen Victoria Street, EC4 (ORM88); Site 8: Mansion House Underground Station, 38 Cannon Street, EC4 (ORM88); Site 9: 13–14 Great St Thomas Apostle, EC4 (GTA89); Site 10: 48–50 Cannon Street, EC4 (CS75).

The church of St Thomas the Apostle stood on the northern side of Great St Thomas Apostle, formerly part of Knightrider Street. It was first mentioned in 1170, but was destroyed in the Great Fire and never rebuilt. Most of Knightrider Street disappeared when Queen Victoria Street was built.

The Great Fire created the opportunity for the construction of Queen Street, named in honour of Catherine of Braganza, the wife of King Charles II. With King Street, Queen Street provided direct access from the Guildhall to the Thames, a route used by the Lord Mayor and Aldermen to board a boat to Westminster Hall. Southwark Bridge was built at the end of Queen Street at the beginning of the 19th century.

The widening of Queen Street in the mid-19th century led to the clearance of the remaining

graveyard of St Thomas the Apostle. The area was further disrupted by the construction of the London Underground in the 1870s, when the District Line cut a wide trench across the site.

THE ARCHAEOLOGICAL INVESTIGATION

The Roman period

Urban activity in the 1st–4th centuries (Open Area 2)

The excavation in 1990 (Fig 2, Area 1) produced evidence of structural slots, possibly relating to a building, as well as an earlier boundary fence, both on a north–south alignment. These discoveries add to evidence from nearby sites, which included dwellings (Sites 2, 3, 4, 6, and

9), river related drainage (Sites 4 and 10), and a Roman road (Site 7). The site is located between the bathhouse at Huggin Hill to the south-west and the building complex excavated below Cannon Street Station.

Across the remainder of the site, only pits and dumps were observed. A single tessera (mosaic tile) was found during the watching-brief in Area 5 in 1991. It would seem that early pitting was prevalent in the area: Roman quarry and rubbish pits were recorded on sites in the immediate vicinity (Sites 7 and 8). Although the areas of the watching-brief (Areas 1, 3, and 5) involved substantial modern truncation, the Roman deposits had also been heavily truncated by medieval activity.

In general, the pottery assemblage from the 2000–2001 fieldwork suggests domestic activity on the site during the period *c.*AD 70–140, peaking *c.*AD 120–140. One deposit, however, dating to *c.*AD 70–100, contained sherds from three different types of amphora, one from Spain and two from Gaul. Each form is thought to have carried a distinctive foodstuff: olive oil within the Spanish amphora and olives and wine or fish paste in the two French amphorae. This concentration of amphora is more than might be expected in one home and could possibly represent either the storage area of a shop or a dry-rising area, with the amphorae allowing the circulation of air in a basement.

The Roman pits and dumps produced a number of very corroded and unidentifiable fragments of iron and copper alloy. Fragments of Roman vessel glass were found residually in later post-Roman contexts.

Only a few fragments of adult ox mandible, vertebra, rib, and femur, and adult sheep/goat vertebra and rib were recovered from this phase. They indicate waste derived from consumption of good quality beef and mutton. An ox vertebra showed transverse and mid-line chop marks indicating splitting of the carcass into sides, with subsequent division into ‘chops’.

The medieval period

Backyard cess pits (Open Area 3), 1050–1150

There was no evidence of Saxon activity on the site: this had probably been truncated. A number of Saxo-Norman pits, however, were recorded at Sites 7 and 9 and sporadic finds from elsewhere in the surrounding area have generally also dated

to the later Saxon period. The earliest medieval activity recorded on the site dated to the 11th or 12th century. This consisted of a number of intercutting pits, some of them wattle-lined. The pits contained cess and domestic refuse and presumably lay in garden areas.

Evidence for wattle-lined pits was found in Areas 3, 4 and 5 and at Site 7, to the north-west. Site 7 also produced evidence for the remains of a privacy screen next to one of the cess pits. A sequence of contemporary pits has been recorded on Sites 3, 7, 8, and 10.

A sample from one pit contained abundant mineralised concretions and occasional seeds preserved by mineralisation, suggesting that the feature was used, at least partially, as a cess pit. A few seeds of blackberry (*Rubus cf. fruticosus*) and elder (*Sambucus nigra*) were the only plant foods surviving, but small fragments of fishbone and scales, eggshell, and flecks of marine mollusc shell also indicated food waste. Charred grains of oats (*Avena* sp) and barley (*Hordeum sativum*), together with a few seeds of wild grasses, were most likely to be waste material or sweepings used as fuel. Oats and barley could have been used for brewing, in pottage, or to feed horses and cattle.

Fills of two wattle-lined pits in the same area also contained abundant mineralised concretions, some with impressions of plant stems, as well as occasional mineralised grape (*Vitis vinifera*), blackberry, and elder seeds, sloe/plum stones (*Prunus* sp), and possible fruit skin, all preserved by mineralisation. Small fish bones and remains of marine mollusc shells were again quite frequent, showing that these pits were also used for the disposal of cess and probably kitchen waste.

Small groups of bone recovered from three wattle-lined pits reflected an increasingly varied meat diet. This material included the major domesticates, with occasional fragments of herring family (*Clupeidae*), eel (*Anguilla anguilla*), chicken (*Gallus gallus*), goose (*Anser anser*), wild duck, and rabbit (*Oryctolagus cuniculus*). The bulk of the bird and mammal material derived from adults, although there was a fragment of juvenile chicken radius; tooth eruption and wear on a pig mandible indicated a sub-adult animal between six months and a year old. A butchered ox metacarpal had been partially worked into an ice-skate blank — the only evidence of bone working from this group.

The wattle-lined pits produced limited evidence

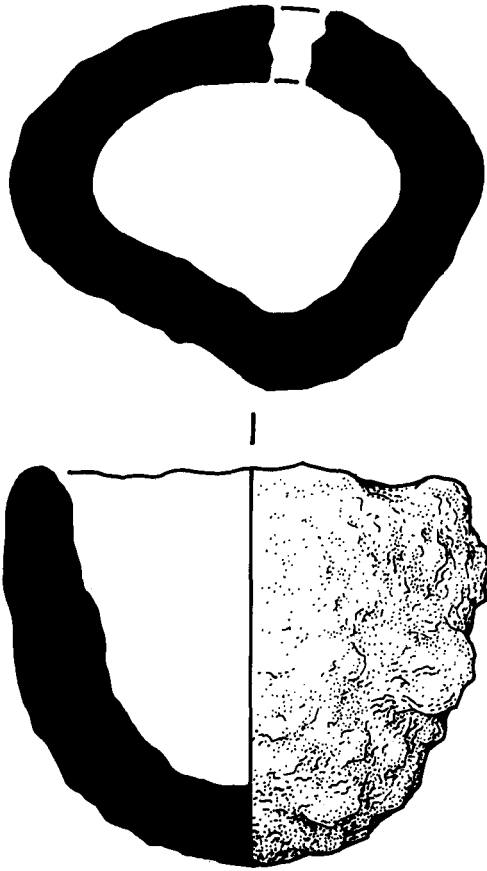


Fig 4. Crucible <104> (Scale 1:1)

for metalworking in the area, in the form of a small fragment from a ceramic mould <174>, probably used in the production of cast copper-alloy vessels, and a crucible <104> (Fig 4). The latter contained copper alloy residues. In addition, a number of very small, corroded fragments of copper alloy were recovered, some of which may have been heat-affected. Other finds comprised a fragment of Roman bottle glass and a worn stone hone.

Residential house (Building 1), c.1100

A north–south aligned ragstone wall with a return was recorded at the western end of Area 4 (not illustrated). The structure probably represented a cellar at the eastern end of a property. Confirmed earlier and later features give it an approximate date.

Residential house and garden (Building 2, Structures 1 and 2 and Open Area 4), 1080–1150

Substantial ragstone and chalk walls (Fig 5) had been built on top of Building 1, on a slightly different alignment, with a later addition appearing to form a return to the west. These later walls possibly represented two buildings, or a single building with a later addition: interpretation was complicated by modern truncation. They appeared to be external: the interior of the building would have been to the west, within Area 3. A contemporary wall segment (Structure 1) was recorded in the north-eastern corner of Area 4 (see Fig 6). This may have represented a third building.

Across the site, sections of chalk foundation may have represented up to five different buildings or structures (Fig 6). Remains were also recorded on other sites in the immediate vicinity, namely Sites 6, 7, 8, and 9. Site 6 produced evidence of a medieval undercroft, as well as a chalk foundation with associated occupation layers dating to the 12th century.

In Area 4, this period also included an area of homogeneous garden soil, which had built up against the outside of Building 2 and over Structure 1. This open area was possibly used for gardening, or simply allowed to build up over time. It had been truncated by another, later segment of chalk and ragstone wall (Structure 2) to the south-east (Fig 6).

The garden soil from this period yielded abraded groups of medieval pottery deposited between 1080 and 1150. The ratio of sherds (106) to number of vessels (104) could have resulted from gradual sporadic deposition and the abrasion caused by possible trampling and weather erosion, which corresponds with the use of this area as open ground.

The garden soil also produced a number of accessioned finds, including two small, undiagnostic fragments of ceramic metalworking mould <175>, and small fragments (89g) of corroded copper alloy <12> and <73>, some of it molten waste. A very small fragment of ceramic crucible <193> was also found, as well as part of a lead-alloy bar ingot <149> (Fig 7). A series of dumps and pits, either cut into or overlying the garden soil, produced a large assemblage of accessioned finds, including many small fragments of heavily corroded copper alloy and



Fig 5. North–south aligned ragstone and chalk walls forming the eastern end of Building 2, view looking west

iron. Identifiable objects comprised an iron pintle <97>, part of a possible iron padlock slide key <189>, a copper-alloy bar mount <26> with two rounded terminals, probably for use

on a strap, as well as various fragmentary iron and copper-alloy mounts. The most interesting object, however, is a balance fork from which a small balance could be suspended <40> (Fig

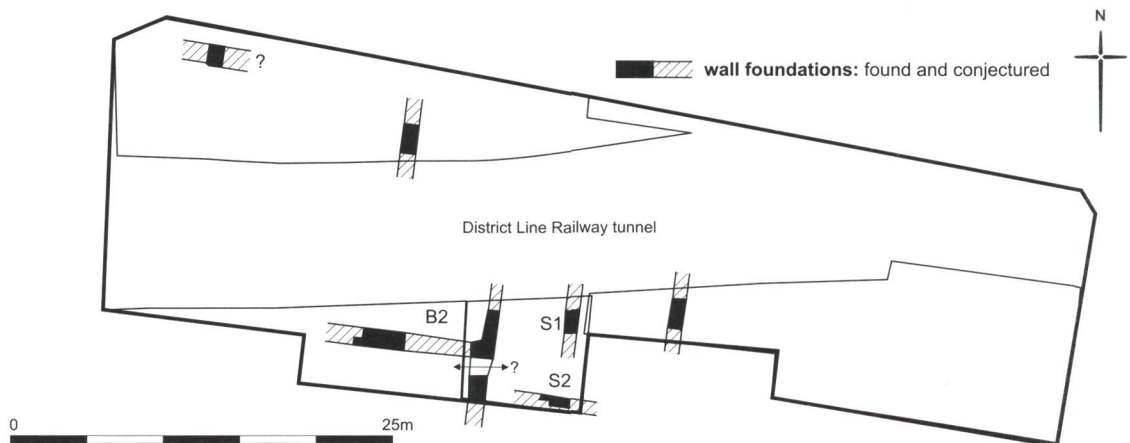


Fig 6. Plan showing remains of medieval wall foundations across the site

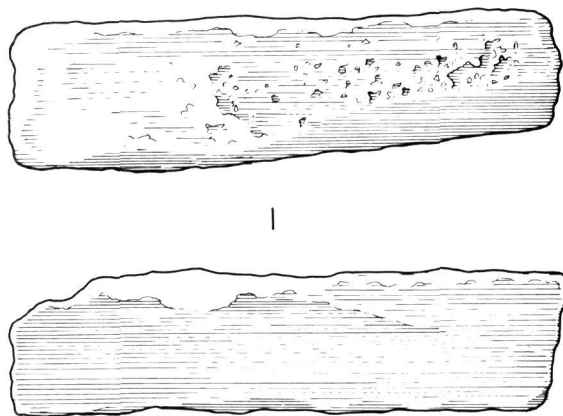
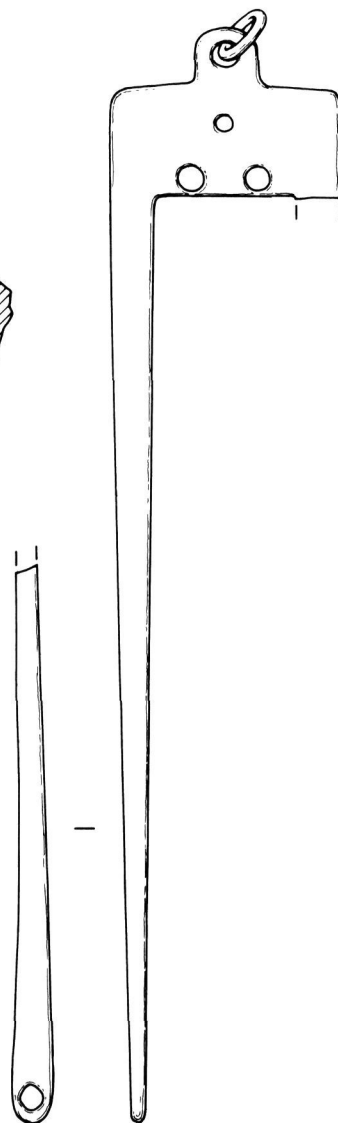


Fig 7. Lead ingot <149> (Scale 1:2)

Fig 8. Balance fork <40> (Scale 1:1)



8). This may have been used for weighing small items, such as precious metals or spices. Some of the unidentifiable copper alloy may be waste but is too corroded to identify. Small fragments of burnt, vitrified ceramic hearth lining were also found, some with traces of copper alloy.

The dumps and pits also yielded a substantial animal bone assemblage derived mainly from ox, sheep/goat and pig, with occasional fragments of chicken and single fragments of wild duck and horse (*Equus caballus*). All the material was derived from adults. There was some evidence of charring on a pig femur. A sheep/goat scapula unusually showed a hole bored through the origin of the distal end.

Backyard cess pits (Open Area 4 retained), 1180–1220

A series of dumps and pits overlay or cut the garden soil, including two pits that were wattle-lined. Although Structure 2 had gone out of use by this stage, it would appear that the walls of Building 2 stayed in use until the early post-medieval period.

The deposits yielded a total of 419 sherds from 270 vessels. Pottery recovered from one of the wattle-lined pits is typical of the area: two episodes of backfilling produced pottery, which, although highly fragmented, contained substantial remains of the rim from an early medieval shell-tempered ware (EMSH) cooking

pot and the base of a London-type coarseware (LCOAR) jug.

The fills from one of the wattle-lined pits in this phase also suggest its use as a cess pit. Many mineralised concretions and plant stem fragments were seen in the samples and the same food plants as were found in samples from the previous open area, including a great many blackberry seeds. The stems, which are often found in this sort of deposit, may come from hay or straw used to dampen smells from the pit. All samples also included charcoal fragments and animal bones, indicating that these pits were used for various types of domestic waste.

The most unusual pottery fabric identified from this phase was from the excavation in Area 4. Sherds from a Winchester ware pitcher (WINC) were recovered from two pits. WINC is a fine, often highly decorated, white-fired fabric, thought to date between c.970 and 1100. It has been recorded on several other sites in the City, but appears most frequently on port sites such as Queenhithe. The discovery of WINC from another site near the medieval port is significant in our understanding of the distribution of this fabric. The only occurrence of this fabric in London outside the City has been in Southwark.

Cookhouse (Building 3), 1135–1400

Building 3 took the place of the previous garden area and appeared to have used the exterior eastern wall of Building 2 as its own western wall. A total of eight hearths and a possible oven were recorded within this phase of occupation. Seven of the hearths were constructed with pitched tile. Due to the presence of numerous floor layers associated with the hearths, it seems likely that a roof would have existed (although no trace was found of this or of supporting walls or posts) and the area may have been a kitchen or, perhaps more likely, a cookshop or food stall.

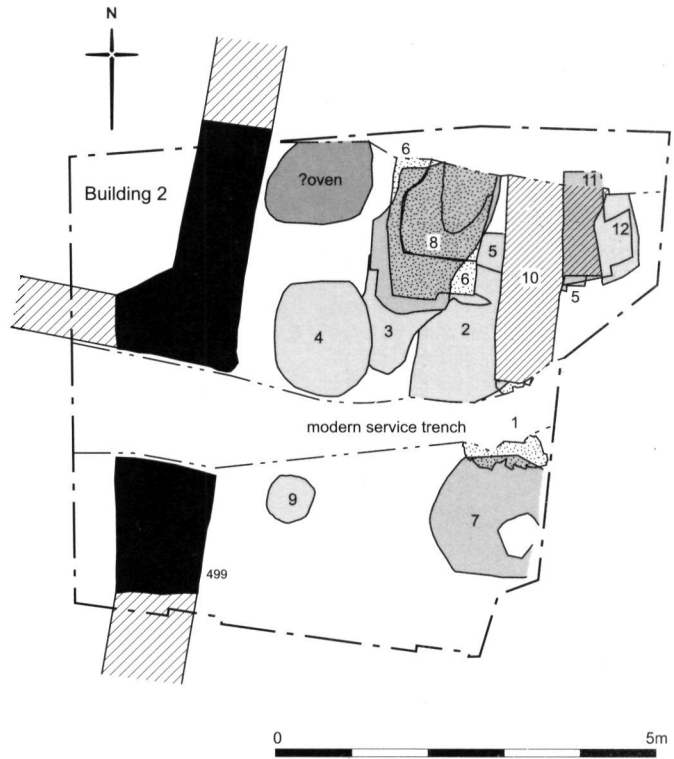


Fig 9. Plan of Building 2 and sequence of hearths to its east

Descriptions of the hearths and related structures have been listed in Table 1; this should be read in conjunction with Fig 9.

Table 1. Medieval hearths and structures

Structure	Date	Description	Dimensions
Hearth 1	1135–1220	Ragstone and flint hearth	1.35m N–S x 1.10m E–W
Oven	1170–1350	Possible crude and unstructured oven	1.20m N–S x 1.38m E–W
Ragstone and flint structure	c.1270	Ragstone and flint within rectangular cut: base for Hearth 2? Separate hearth? (not illus)	1.55m N–S x 1.15m E–W
Hearth 2	c.1270	Rectangular pitched tile hearth, with stones set into sand along northern edge	2.10m N–S x 1.26m E–W
Cobble structure	1170–1350	Cobbles set into clay bed: floor? hearth? (not illus)	2.50m N–S x 1.50m E–W
Hearth 3	1150–1280	Irregular pitched tile hearth, with stones in SW corner	1.70m N–S x 1.65m E–W
Hearth 4	?c.1200	Ovular pitched tile hearth, with sections of tile aligned in different directions	1.53m N–S x 1.26m E–W
Hearth 5	1180–1350	Rectangular pitched tile hearth	0.55m N–S x 1.50m E–W
Hearth 6	1340–1350	Rectangular pitched tile hearth with cobbled surround (Fig 10)	Tiled area: 0.90m N–S x 0.70m E–W. Total area: 1.75m N–S x 1.60 E–W
Hearth 7	1350–1400	Circular pitched tile hearth, with central gap for likely flue (Fig 11)	1.62m N–S x 1.42m E–W
Hearth 8	1350–1400	Rectangular pitched tile hearth with gutter and central square of flints	2.06m N–S x 1.10m E–W

Charred cereal grains and weed seeds were found in a sample associated with the disuse of the possible oven. About 40 grains were present (equivalent to 80 grains per litre of soil), consisting of a mixture of free-threshing wheat (*Triticum cf aestivum*) and barley (*Hordeum sativum*), with smaller quantities of oats and rye (*Secale cereale*). The sample also contained a single rachis node of barley and a number of small weed seeds, as well as several medium sized vetch seeds (*Lathyrus /Vicia* sp) which could not be reliably identified to species, but resembled common vetch (*Vicia sativa*) in general size and shape. Common vetch was frequently grown as a fodder crop during the medieval period. This assemblage may be the remains of one or more crops burnt accidentally during food preparation, or possibly crop cleanings or straw used to fuel the oven. There was little sign of these waste products in the assemblage, but it is possible that the grains, being more robust, may have survived the high temperatures while straw

and chaff were destroyed. Only single fragments of unidentified fish fin ray and goose toe phalange were associated with the oven, while a single fragment of juvenile ox mandible was recovered from a contemporary trample layer.

A dump contemporary with Hearth 1 produced a small diverse group of bone from fish, poultry, domestic mammals, and 'game', including herring family, eel, cod family (*Gadidae*), dove (*Columba livia/c.oenas*), chicken, goose, grey partridge (*Perdix perdix*), wild duck, passerine bird, ox, sheep/goat, and pig. The major domestic material produced clear butchery marks indicating marrow extraction, disarticulation, and splitting by use of cleavers.

A dump associated with Hearth 2 produced only a single fragment of infant pig skull. Fragments of ox femur and sub-adult sheep/goat tibia were contemporary with Hearth 4. No animal bone was recovered from any deposits associated with Hearths 3 or 5.

Occupation deposits associated with Hearth



Fig 10. Hearth 6 (1340–1350), view looking east



Fig 11. Hearth 7 (1350–1400), view looking south-east

6 showed an increase in species diversity and included wild duck, grey partridge, mallard/domestic duck (*Anas platyrhynchos*), and rabbit. Pheasant (*Phasianus colchicus*) makes its only appearance in this phase and brown hare (*Lepus europaeus*) its first. Although the majority of the material derived from adults, there was again considerable recovery of juvenile chicken. Hearth 6 was particularly grand in style (Fig 10), with an inner, pitched tile area skirted by a band of small cobbles, and an outer edging of large square cobbles. It was also one of the largest hearths and its grandeur is reflected in the type of fare associated with it.

Deposits associated with Hearths 7 and 8 included gurnard (*Triglidae*), the first recovery of this species from the site. One dump contained a single fragment of plaice/flounder, an unidentified wading bird, and swan (*Cygnus* sp). There was also occasional recovery of juvenile

chicken, which increased in the later medieval material, suggesting that poultry were reared in the locality. Hearths 7 and 8 may not have been in use simultaneously: a modern service trench had bisected Area 4 and so definite relationships were lost across the site; it is known only that the structures were broadly contemporary. The two hearths were very different in shape and design and may represent two separate rooms within Building 3. Hearth 7 (Fig 11) was circular in design: there was a deliberate gap left in the pitched tile, near its centre; this was likely to have accommodated a flue. The remains of a large quernstone had been laid on the deposit overlying the hearth, suggesting baking, in addition to cooking, on the site.

This series of hearths and associated occupation dumps and make-up layers produced small, corroded fragments of metal, some from fittings such as fragmentary mounts possibly for caskets

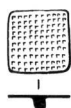


Fig 12. Copper-alloy stud <108>
(Scale 1:1)

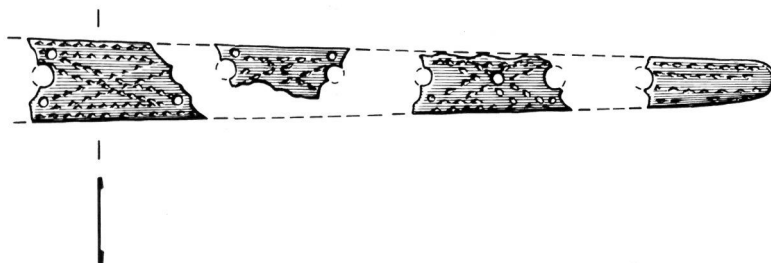


Fig 13. Copper-alloy strap mount <50> (Scale 1:1)

or furniture, others unidentifiable and possibly waste. These appeared to be redeposited, rather than directly associated with the hearths, and included a small undiagnostic fragment of ceramic mould with associated copper-alloy waste attached <44>. A dense lump of molten copper alloy was also probably a by-product of metalworking, although it is fragmentary and its specific form or function is uncertain. Other identifiable finds are either of a more domestic nature (fragments of stone mortars <126> and <157>, a hone <128>, a corroded iron knife with fragmentary wooden handle <14>) or associated with horses (fragmentary iron horseshoe <20>, probably dating to the 12th–14th centuries), or possibly commerce (a lead-alloy disc weight <118>).

Possible dress accessories included small copper-alloy studs with plain, convex heads, another, <108>, with a flat, square head decorated with rows of fine dots (Fig 12), and a strap-end and strap mounts <50> (Fig 13), all decorated and with traces of what has been identified by the MoL conservation laboratory as silver plating.

The post-medieval period

Cookhouse (Building 3), 1400–1650

The sequence of hearths continued into the 16th

and 17th centuries, up until the time of the Great Fire (Table 2). All four hearths were constructed with pitched tile, although the purpose of the additional stone structure was unclear, unless it was simply to provide a solid base for Hearth 11. Hearths 9 and 10 may not have been in use simultaneously. As with Hearths 7 and 8, the two hearths were very different in shape and design and may represent two separate rooms or food stalls.

Deposits associated with Hearth 9 produced the largest and most diverse animal bone assemblage from the site. Although dominated by domesticates, there was a considerable component of fish and ‘game’ species, including plaice, eel, grey partridge, and rabbit, and, for the first time, conger eel (*Conger conger*), woodcock (*Scolopax rusticola*), and fallow deer (*Dama dama*). There was also considerable recovery of infant and juvenile chicken and sheep/goat, and occasional recovery of foetal or neonate pig. No animal bone was recovered from any deposits associated with Hearth 10.

Trample, dump, and floor deposits associated with Hearth 11 produced small groups of fragmented bone derived from a diverse range of domesticated and wild species. Small components of cod family, conger eel, chicken, rabbit, and brown hare were recovered. A floor deposit also produced a single fragment of rat. There was

Table 2. Post-medieval hearths and structure

Structure	Date	Description	Dimensions
Hearth 9	1400–1500	Circular pitched tile hearth	0.64m N–S x 0.60m E–W
Hearth 10	1400–1500	Rectangular pitched tile hearth with tile edging	2.72m N–S x 1.35m E–W
Stone structure	1480–1550	Stone base: hearth? pad? (not illus)	1.37m N–S x 0.56m E–W
Hearth 11	1500–1600	Rectangular pitched tile hearth with tile gutter	1.50m N–S x 0.90m E–W
Hearth 12	1580–1650	Rectangular pitched tile hearth	1.15m N–S x 0.55m E–W

also occasional recovery of foetal/neonate and infant sheep/goat and pig.

Rubbish pits contemporary with Hearth 12 produced small numbers of fragments derived from chicken, ox, and sheep/goat, with single fragments of gadid fish and rabbit. There were occasional finds of juvenile ox and sheep/goat.

The almost identical style and position of the stone structure and Hearths 11 and 12 suggest an alteration in occupation and activity at the site between about 1500 and 1650. In addition, a pit contemporary with Hearth 12 had truncated the top of one of the ragstone and chalk walls, with which the other hearths had been associated. It is therefore likely that the layout of Building 3 changed in the 16th century and, although no further evidence was recovered to substantiate this, the change is likely to be connected with the redevelopment of the vicinity, as mentioned by Stow in 1598. Most of the pottery from this last phase of occupation was recovered from the pit, which dated to between 1580 and 1650. The material included a smashed Martincamp stoneware costrel (MART I; made in Northern France), a range of white Surrey/Hampshire

border ware (Pearce 1992), and early London coarse red earthenware (Nenk 1999, 237) fabrics and forms. Other vessels included the substantial remains of a PMRE sprinkler, used for horticultural purposes, which was found in a demolition layer.

The finds from post-medieval activity in this area are similar to those from the earlier phases: small fragments of corroded iron and copper alloy, some of the latter probably debris from metalworking in the area. They also included a fragment of a residual Roman glass vessel handle <146> and a small fragment of medieval window glass <159>, the latter possibly associated with a nearby church or well-to-do household. Other finds included domestic items (half a stone mortar with two lugs remaining <176> (Fig 14) and a small, copper-alloy curving rod handle <19>, probably from a cast vessel) and dress accessories (a copper-alloy lace chape <59>, an incomplete copper-alloy buckle frame <3>, and a copper-alloy stud <109> with a flat, circular head).

One of the most interesting finds is a copper-alloy tomb inscription letter <62>: a Lombardic

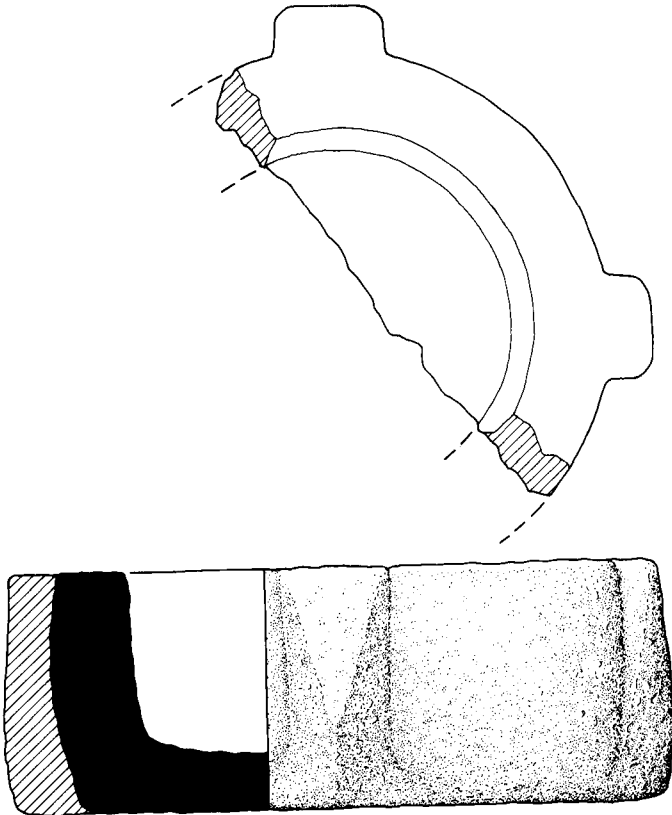


Fig 14. Stone mortar <176> (Scale 1:4)

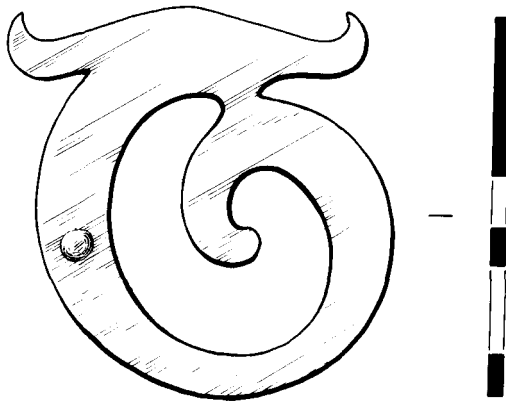


Fig 15. Copper-alloy tomb inscription letter (Lombardic 'T') <62> (Scale 1:1)

letter 'T' (Fig 15), possibly from a funerary monument associated with the nearby church of St Thomas the Apostle, which lay to the north. The size indicates that it belongs to Blair's 'Main Group size 1' (Blair 1987, 140), dating from the late 13th to the mid-14th century. From the early 14th century, this size of lettering was normally used on full-scale figure brasses (*ibid*, 144). It is of interest to note that this phase also produced two fragments of stone moulding, one of which could be dated stylistically to before the mid-14th century and possibly also originated in the church of St Thomas the Apostle.

There was a small but interesting assemblage of early post-medieval vessel glass and a small fragment possibly from a glass mirror <166>; two fragmentary vessels, both probably beakers, are of particular note. Two small fragments from a beaker in deep blue glass have painted decoration in white and gold <153> (Fig 16) and may date to the late 15th century or later. The other beaker is in colourless glass with applied, marvered spiral threads of opaque white glass (*latimo*) <130> and <152>; this form of decoration is called *vetro a fili* and such glass is imported, possibly from Venice, and dates to the late 16th to 17th century.

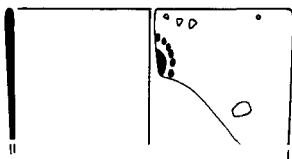


Fig 16. Glass beaker <153> (Scale 1:2)

Accessioned find <167> is a complete upper stone from a rotary quernstone in Mayen lava from northern Germany. The upper surface is roughly pecked and has traces of mortar, presumably from re-use. It is plain with no ridge around the central hopper.

The metalworking evidence continues into the post-medieval period. Small square and triangular fragments of copper-alloy sheet are off-cuts from sheet-working and a small angled fragment of copper alloy <195> may be waste from buckle-making. A copper-alloy bar ingot <71> with a circular section was also found. Small fragments of molten runnels and blobs (total weight 25g) may be residual from earlier deposits or may indicate that casting continued into the post-medieval period too. Fragments of copper-alloy wire of varying gauges, <28> and <80>, may be waste from metalworking or from the production of items such as headdresses: two of the pieces have one end bent to form a loop and a third (the thickest fragment) has been bent at an angle, possibly to form a frame for a headdress.

This dumping also produced an assemblage of small copper-alloy mounts and studs of varying forms: plain convex heads with no shafts, some with traces of lead-alloy solder inside the head (x 4), domed convex head with a moulded five petal design (x 1), small studs with plain convex heads (x 4), plain convex mounts with an off-centre hole (x 2), plain convex mounts with a central hole (x 1), and a small, square pyramidal mount (x 1). It is unclear whether these may have been collected for recycling or are merely discarded or lost items. Other finds included a fragmentary iron horseshoe <138> dating to the 14th century, part of a very corroded copper-alloy lace chape <55>, iron mounts, some possibly from boxes or furniture, a lock <142>, a plain D-shaped iron buckle <132>, and iron buckle frame fragments <143> and <145>.

DISCUSSION

Roman

It would appear that the area of the site was residential in the Roman period. Patterns of land use can be broken down into episodes of pitting, early timber-framed buildings, and, later, grander ragstone buildings with tessellated floors.

The Roman pottery assemblage comprised a range of vessels that appeared to be domestic:

bowls, jars, fine wares, and mortaria. The assemblage as a whole dates from *c.*AD 70, suggesting that there was little or no activity on the site until the Flavian period. The presence of late Roman fabrics, such as Alice Holt/Farnham (*c.*AD 250–400) and Oxfordshire red/brown colour-coated wares (*c.*AD 270–400), suggests that there was also late Roman activity across the area.

Medieval and post-medieval

Building 1

This possible cellar structure represented the south-eastern corner of a building and had been built on an alignment with Garlick Hill, to the west, possibly fronting it.

The hearth structures

The hearths in Area 4, which spanned about five hundred years, showed an interesting diversity in position, type and layout of materials, size, and shape. Their construction and use in the area to the east of Building 2 and their lack of continuity in position suggest that the area could represent a succession of food stalls. These would have been rebuilt more frequently than if they had belonged to the kitchen of a residential property, where the fireplace and chimney would have had a more consistent position.

The design of the hearths appeared fairly eclectic and there were few obvious signs of style evolution. Hearths between the 12th and 13th centuries encompassed a wide variety of styles: flint, tile with stones, rectangular, circular. Circular hearths seem to have been less common than rectangular ones, but appeared on the site at the end of the 13th century (ovular), in the second half of the 14th century, and again in the 15th century. While it is possible that they served a different culinary function, there is no faunal or botanical evidence to substantiate this.

During the 14th century, the hearths became slightly more sophisticated, in general appearing bigger and also more robust. This change is evident in Hearth 6, with its large cobbled surround, and also in the sturdy circular design and flue of Hearth 7. Hearth 10, constructed during the 15th century, was by far the largest structure, measuring nearly 3m in length. This type of scale supports the likelihood of commercial rather than domestic activity on the site.

The end of the 14th century is the only point at which a change in hearth design can be pinpointed. This is represented by Hearth 8, which was the first hearth to contain a gutter along its edge and the last hearth to contain both tile and flint. In addition, this hearth had a central square of flints; in earlier hearths containing both materials, the stones or flints were contained along one side or in one corner. The layout of the pitched tiles also varied from structure to structure: Hearth 4, in particular, had areas of tiles facing every direction. This may have represented periodic enlargement of the fireplace, but seen *in situ* appeared to have been part of the hearth's original design. It is possible that the diversity of the hearth styles reflected a variety of shop proprietors, as well as illustrating design influences of the times.

The environmental evidence

The early medieval material indicates consumption of a varied meat diet based on good quality beef, mutton, and pork, but also including marine/estuarine and migratory fish, poultry, and bird and mammal 'game' species.

Although much of the major domesticate material derives from carcass areas of good meat-bearing quality, occasional recovery of elements of the head and feet suggests that the deposits may include waste resulting from primary carcass-processing as well as post-consumption disposal.

Varieties of herring are still abundant in the lower tidal Thames (Wheeler 1979, 172–3); they would have been fished for as adults, and also as mixed shoals of juveniles ('whitebait'), which were a major seasonal fishery in the Thames estuary and regarded as a London dish *par excellence* (*ibid* 1979, 70). Eels are extremely abundant throughout the Thames estuary and river system, and are staple components of the fish diet throughout the medieval and post-medieval deposits in London. Grey/common partridge are abundant as a breeding species on suitable agricultural land in the area surrounding London (Holloway 1996, 142) and would have been available from markets and game dealers in London.

The later medieval material shows a broadly similar composition, although with the increased species diversity of plaice, gurnard, pheasant, rabbit, and brown hare. Tub and red gurnard are the most significant as food species, with

tub gurnard providing the best eating quality. A deposit dating to between 1350 and 1400 produced additional 'game' components: an unidentified wader and a swan. Since at least the late 12th century (Birkhead & Perrins 1986, 19–20) swans have been regarded as Royal Birds, with consumption very much limited to the upper ranks of society, and even then confined to special days such as church festivals (Wilson 1976, 125). The Dyers' Guild, which met in a hall directly to the south of the site, was given the privilege of keeping swans on the Thames (heraldicmedia.com). Recovery of swan from a medieval or post-medieval archaeological deposit suggests consumption at a high level of social status.

The recovery of juvenile chicken increases in the later medieval material and may imply that poultry were reared in the vicinity.

The post-medieval material shows a further increase in species diversity with the recovery for the first time of conger eel, woodcock, and fallow deer, in addition to plaice, grey partridge, rabbit, and brown hare. Conger eel is a marine species only occasionally caught in the outer Thames estuary and generally rather uncommon in the southern North Sea (Wheeler 1979, 171). It has a strong preference for rocky shores and offshore sites such as wrecks. Although of good eating quality and still widely available from London fishmongers and markets, it has never been widely esteemed as a staple food fish (Wheeler 1978, 63). There was no recovery of true freshwater species from the site and a complete reliance on marine/estuarine and migratory fish.

Woodcock are an esteemed 'game' species and occur in the London archaeological record from the Roman to the post-medieval periods. Brown hare is an indigenous, highly esteemed game species available from agricultural land close to London and still seasonally available from London markets and game dealers.

Fallow deer are an introduced species in the British Isles; they are now widespread, particularly throughout southern Britain, in mature deciduous or mixed woodland (Arnold 1993, 133). Hunting and consumption of fallow, as with red and roe deer, was confined to a limited proportion of the population and recovery of this species has definite implications for the presence of high-status consumers. As with the later medieval material, there is definite recovery of very young individuals of chicken,

sheep/goat, and pig, suggesting some level of local stock rearing, and consumption of young fowls, lambs, and suckling pigs, again with implications for the status of local consumption.

The dating evidence

The bulk of the building material from the site was early medieval roofing tile. Two distinct types of roofing system were represented: the flanged and curved tile system which is based on the Roman *tegula* and *imbrex* style of roofing, and the peg tile system. Shouldered peg tile, an early form of peg tile, was present, and both this and the flanged and curved tiles are typical of ceramic roofing in London in the period c.1135–1220. All of the early types were superseded by plain rectangular peg tiles: those recovered included both medieval and post-medieval types. Three ridge tiles were also present.

Several fragments of 'Westminster' floor tiles were recovered from occupation dumps. Two were decorated, one with design W5 (Betts 2002, 51), the other too fragmentary for identification. The rest, including one of triangular shape, are plain. They date from the second half of the 13th century and were made in the London area. Of the few Penn tiles from Buckinghamshire, made in the second half of the 14th century, the one clearly recognisable design is Eames 2820 (Eames 1980, vol 2, pl 2820). Also present were some yellow plain-glazed tiles imported from the Low Countries in the 14th and 15th centuries. None of the floor tiles were *in situ* and it is possible that they came from the church of St Thomas the Apostle.

A Caen stone capital was also recovered. Its foliate angles appeared to be prototypes of the more common water-leaf, annular chevron decoration replacing the more usual astragal. The bedface of the circular shaft shows a small hole formed by the dividers used to describe the circle. A 12th-century date is likely and the stone possibly originates from St Thomas the Apostle. The other examples of worked stone, possibly also from the church, are Reigate; they include voussoirs with diverse mouldings and of various dates, one with a hole in its bedface for an iron reinforcing rod. Some paving slab fragments of Kentish Ragstone and laminated sandstone appeared to have been reused as hones.

The most dominant type within the medieval pottery assemblage was handmade early medieval coarsewares (see Vince & Jenner 1991),

dating to between 1050 and 1150; these comprise a range of sand-tempered (EMSS; 8.6% of the total sherd count), local greyware (LOGR; 19.3%), and sand- and shell-tempered fabrics (EMSH; 10.1%). The most significant quantities of glazed wheel-thrown coarsewares found were South Hertfordshire greywares (SHER; 7.1%). SHER is one of the major suppliers of coarse, unglazed jars and jugs into London between c.1170 and 1350 and has been used to date many of the later phases of Building 3.

The post-medieval pottery assemblage consisted of 264 sherds (ENV total of 113); it was generally dated no later than c.1650 and found in a poor condition. The majority of vessels (by sherd count) were kitchen wares (*ie* cauldrons and tripod pipkins) and storage/transport wares (represented solely by the MART costrel). In common with the medieval pottery, none of the later vessels were identified as having a specific industrial use.

There is evidence on the site for the production of both cast and cold-hammered copper-alloy objects, although this is quite limited and appears to be indicative of metalworking in the general area rather than necessarily at this particular site. The evidence comes from both the medieval and early post-medieval periods. Early medieval activity produced crucible fragments, molten copper alloy waste, and small fragments of ceramic mould used in the production of cast copper-alloy objects, probably vessels. In the medieval period, metal industries tended to be concentrated in towns and usually, as the scale of production increased, in particular areas (Bayley *et al* 2001, 4); in London such concentrations have already been identified in the Gresham Street/Foster Lane/Cripplegate area (Schofield with Maloney 1998, 36–7 and 185–6; Tobert 1982) and evidence for the mass production of small dress accessories has been found in both the Guildhall and Cophall Avenue areas (Egan 1991, 122–3; Egan 1996, 85–7). To the south-east of the site, at the waterfront site of the Thames Exchange, an assemblage of waste material and discards from a foundry was recovered (Egan 1996, 86).

Late medieval and early post-medieval activity produced more copper sheet off-cuts and trimmings, as well as a small circular-sectioned bar ingot. Again the evidence is quite limited and is probably redeposited from a metalworking centre in the vicinity of the site. The presence of a number of small fittings/mounts may simply

be due to accidental loss and careful retrieval or may represent material collected for recycling or waste from a workshop.

The remaining identifiable finds are a mix of domestic items, dress accessories, two fragmentary horseshoes, and various mounts and fittings. The material is typical of that found in dumps in the medieval and early post-medieval city. The small fragments of imported glass vessels, the stone mortars, and the silver plated strap mounts indicate the likelihood of a well-to-do household nearby; the tomb inscription letter, possibly from the church of St Thomas the Apostle, is a reminder of the many medieval funerary monuments, and indeed medieval churches, that no longer exist in London.

CONCLUSIONS

The area of the site exhibited signs of high status in the medieval and post-medieval periods. Finds such as the 14th-century silver plated mounts, the late 15th-century beaker, and the expensive, fine imported glassware from the 17th century substantiate this trend. In addition, evidence of delicacies such as pheasant, sturgeon, swan, and fallow deer suggest wealthy consumers, particularly between the 14th and 16th centuries.

The wide variety of animal bone consistently associated with the hearths could relate to that produced by a series of cookshops occupying the same property. Hearth I is roughly contemporary with the writings of William FitzStephen, whose description of a Thames-side cookshop is cited at the beginning of this article. The evidence from the hearths suggests a commercial, rather than a domestic undertaking and one which could have accommodated less affluent social groups, as well as appealing to those with more expensive tastes.

In Stow's *Survey of London* from 1598, he writes that cookshops in the Vintry Ward were taken over by vintners in the 14th century and grumbles that taverns started to sell food in addition to wine. It is possible that the hearths were associated with a tavern, although their nature suggests a more transient situation, rather than belonging to a kitchen with an established chimney. Further north, in the Cheap Ward, there is evidence for cookshops leading north from Cat Street to the Guildhall. These serviced the community in the 12th and 13th centuries (Bowsher *et al* in prep).

The recovery of certain species of expensive

fish and 'game' appears to correlate with either an increase in size and grandeur of hearth or a period when two hearths may have been in use at the same time. The recovery of the pheasant bone, for example, was associated with Hearth 6, possibly the largest and grandest of the fireplaces. Swan consumption is contemporary with Hearths 7 and 8. The trend towards high-status consumers continues into the 15th century, with recovery of fallow deer from Hearth 9. The fact that tiles from the hearths contained no industrial or baking residue suggests that they were simply used for heating and cooking food, and the presence of three mortars and a quernstone suggests food preparation.

Stow frequently mentions links between the Vintry Ward and royalty, mayors, and merchants. This appears to be significant in relation to the evidence from the site: the taverns may have attracted a wealthier customer with a more discerning palate and a liking for elegant glassware.

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BIBLIOGRAPHY

ARNOLD (1993), H R Arnold 'Atlas of mammals in Britain' *ITE Research Publication* 6
BAYLEY *et al* (2001), J Bayley, D Dungworth & S Painter *Centre for Archaeology Guidelines: Archaeometallurgy*
BETTS (2002), I M Betts *Medieval 'Westminster' Floor Tiles* MoLAS Monograph 11
BIRKHEAD & PERRINS (1986), M Birkhead & C Perrins *The Mute Swan*
BLAIR (1987), J Blair 'English monumental brasses before 1350: types, patterns and workshops' in J Coales (ed) *The Earliest English Brass: Patronage, Style and Workshops 1270–1350*, 133–74
BOWSHER *et al* (in prep), D Bowsher, N Holder, I Howell & T Dyson *The London Guildhall: the*

Archaeology and History of the Guildhall Precinct from the Medieval Period to the 20th Century MoLAS Monograph
EAMES (1980), E S Eames *Catalogue of Medieval Lead-glazed Earthenware Tiles in the Department of Medieval and Later Antiquities British Museum* (2 vols)
EGAN (1991), G Egan 'Buckles' in G Egan & F Pritchard *Dress Accessories c1150–c1450, Medieval Finds from Excavations in London: 3*, 50–123
EGAN (1996), G Egan 'Some archaeological evidence for metalworking in London c1050–c1700 AD' *Hist Metallurgy Soc* 30 (2), 83–94
ELSDEN (1991), N Elsden *Archaeological Watching Brief at 30 Queen Street, EC4* (THM89) DUA unpub report
FITZSTEPHEN (12th century), W FitzStephen 'Description of London' in D Douglas & G Greenaway *English Historical Documents II* (1981), 958
GOODE & POPE (1989), C Goode & S Pope *Test Pit Survey, 1–3 and the Courtyard of 6a Great St Thomas Apostle, EC4* (THM89) DUA unpub report
HOLLOWAY (1996), S Holloway *The Historical Atlas of Breeding Birds in Britain and Ireland 1875–1900*
HUSTINGS ROLLS 141 (29), July 1413, City of London Records Office
LAWRENCE (1990), D Lawrence *Archaeological Investigations at 1–3 Great Saint Thomas Apostle, EC4* (THM89) DUA unpub report
NENK (1999), B Nenk with a contribution by M Hughes 'Post-medieval redware pottery of London and Essex' in G Egan & R L Michael (eds) *Old and New Worlds, Historical/Post-medieval Archaeology Papers from the Societies, Joint Conferences at Williamsburg and London 1997*, 235–45
PEARCE (1992), J E Pearce *Post-medieval Pottery in London, 1500–1700: 1 Border Ware*
SCHOFIELD with MALONEY (1998), J Schofield with C Maloney *Archaeology in the City of London 1907–91: a Guide to Records of Excavations by the Museum of London and its Predecessors* Archaeol Gazetteer Series 1
STOW (1598), J Stow *A Survey of London* (edn H Morley Ltd, 1994), 238–9
TOBERT (1982), N Tobert *Foster Lane 1982: the Finds, an Appraisal Report* (OST82) unpub DUA appraisal report
VINCE & JENNER (1991), A G Vince & A Jenner 'The Saxon and early medieval pottery of London' in A G Vince (ed) *Aspects of Saxon and Norman London 2: Finds and Environmental Evidence* London Middlesex Archaeol Soc Spec Pap 12, 19–119
WHEELER (1978), A Wheeler *Key to the Fishes of Northern Europe*
WHEELER (1979), A Wheeler *The Tidal Thames: the History of a River and its Fishes*
WILSON (1976), C A Wilson *Food and Drink in Britain from the Stone Age to Recent Times*
<http://www.heraldicmedia.com/site/info/livery/livcomps/comp013a.html>