

Contents

List of presidents and officers.....	v
152nd Annual Report of LAMAS Council for the year ending 30th September 2007	vi
Income and Expenditure Account for the year ending 30th September 2007 and Balance Sheet as at 30th September 2007	ix
Excavations at Buckle Street/Leman Street <i>Charlotte Thompson</i>	1
Excavations adjacent to the River Crane on the site of the former Marshalling Yards, Feltham <i>Isca Howell</i>	5
An excavation at 5–27 Long Lane, London Borough of Southwark, London SE1 <i>Alistair Douglas</i>	15
Late Roman burials and extramural medieval and later development at Premier Place, Devonshire Square, Houndsditch, London EC2 <i>David Sankey and Brian Connell</i>	53
Roman field boundaries at Syon Lodge, London Road, Isleworth <i>Siân Anthony and Steve Preston</i>	79
Two multi-period excavations along the Roman road from <i>Londinium</i> to Silchester at Brentford <i>Lorraine Darton</i>	89
Medieval and post-medieval activity at Victors Way, Barnet <i>Catherine Edwards</i>	141
Moselle Place: from a high status medieval farmhouse to a Georgian house <i>Melissa Melikian</i>	151
Jack Cade at London Stone <i>John Clark</i>	169
On a brass formerly in the church of Saint Dunstan-in-the-West: addenda <i>Philip Whittemore</i>	191
Papers read at the LAMAS Local History Conference held at the Museum of London in November 2007: ‘They came to London: 1000 years of migration’.....	193
Reviews	207
Index to volume 58	225



58 2007 Transactions of the London and Middlesex Archaeological Society

Transactions Volume 58 2007



LAMAS

London and Middlesex Archaeological Society



Hon Archaeological Editor:

Nathalie Cohen
17 George Street
Sparrows Green
Wadhurst
East Sussex TN5 6TB
nathaliecohen1972@hotmail.com

Hon Local History Editor:

Eileen Bowlt
7 Croft Gardens
Ruislip
Middlesex HA4 8EY
01895 638060
c.bowlt@tiscali.co.uk

Production Editor:

Lynn Pitts
5 Whitehead Drive
Kenilworth
Warwicks CV8 2TP
01926 512366
l.pitts@btinternet.com

Reviews Editor:

John Schofield
Museum of London
London Wall
London EC2Y 5HN

Editors' note: the editors are happy to consider articles for publication in *Transactions*. New contributors are advised to ask the Production Editor for a copy of *LAMAS Notes for Contributors* before submitting papers.

LAMAS also welcomes the submission of books for review in *Transactions*.

NOTES FOR CONTRIBUTORS

1. Contributions should be sent to the Archaeology/Local History Editors (see inside front cover). All papers will be read by a referee. All authors will be required to sign a Licence to Publish form and are advised that it is their responsibility to obtain written permission from copyright holders of any text, line art or photographs they wish to use in their article.
2. Submission of articles on computer disk is usual. A clean print-out should also be supplied for editorial use; this should be on A4 paper, printed on one side only, in double spacing throughout, with generous margins all round. The disk and hard copy should be identical.
3. Editing is done using Word. Disks using other standard systems may be submitted, but to avoid loss of formatting it is recommended that whenever possible authors output onto the disk in Word.
4. *Transactions* style should be followed, but complex layout should not be attempted. For style refer to previous copies of *Transactions* (contact Production Editor for detailed style sheet). All papers should start with a summary of their aims, main points and conclusions. Tables usually need rekeying; they should be supplied in a separate file and a clear print-out on separate sheets provided. Figure and table positions should be noted in the margin of the print-out.
5. The type area of a page in *Transactions* measures 208 x 149 mm. All artwork should be designed to be reduced to or within such a space. Fold-outs are very expensive and should be avoided. Scales in metres should be provided on plans. Electronic submission of artwork is welcome but this must be on CD and a printed version must also be supplied. Files should be Tiff or Jpg and designed for black and white reproduction. Line drawings in particular should be saved at the highest resolution possible – ideally 1200 dpi or above.
6. On submission papers should be complete in every particular. Every alteration made by an author in proof means higher production costs. Unless there are exceptional circumstances first proofs only will be submitted to contributors.
7. Contributors will receive 6 offprints of articles gratis. Additional copies may be ordered at cost price.



LAMAS

Transactions of the
**London and Middlesex
Archaeological Society**

Volume 58
2007

Museum of London, London Wall, London EC2Y 5HN

© Published by the London and Middlesex Archaeological Society, 2008

Produced by Past Historic, Kings Stanley, Glos. GL10 3HW
Printed in Great Britain
ISBN 978 0 903290 61 6

Contents

List of presidents and officers	v
152nd Annual Report of LAMAS Council for the year ending 30th September 2007	vi
Income and Expenditure Account for the year ending 30th September 2007 and Balance Sheet as at 30th September 2007	ix
Excavations at Buckle Street/Leman Street	
<i>Charlotte Thompson</i>	1
Excavations adjacent to the River Crane on the site of the former Marshalling Yards, Feltham	
<i>Isca Howell</i>	5
An excavation at 5–27 Long Lane, London Borough of Southwark, London SE1	
<i>Alistair Douglas</i>	15
Late Roman burials and extramural medieval and later development at Premier Place, Devonshire Square, Houndsditch, London EC2	
<i>David Sankey and Brian Connell</i>	53
Roman field boundaries at Syon Lodge, London Road, Isleworth	
<i>Siân Anthony and Steve Preston</i>	79
Two multi-period excavations along the Roman road from <i>Londinium</i> to Silchester at Brentford	
<i>Lorraine Darton</i>	89
Medieval and post-medieval activity at Victors Way, Barnet	
<i>Catherine Edwards</i>	141
Moselle Place: from a high status medieval farmhouse to a Georgian house	
<i>Melissa Melikian</i>	151
Jack Cade at London Stone	
<i>John Clark</i>	169
On a brass formerly in the church of Saint Dunstan-in-the-West: addenda	
<i>Philip Whittemore</i>	191
Papers read at the LAMAS Local History Conference held at the Museum of London in November 2007: ‘They came to London: 1000 years of migration’	193

Reviews

J Lewis <i>et al</i> <i>Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations Vol 1, Perry Oaks</i> (reviewed by Timothy Darvill)	207
J Butler <i>Reclaiming the Marsh: Archaeological Excavations at Moor House, City of London 1998–2004</i> (reviewed by Peter Rowsome)	209
S Watson with K Heard <i>Development on Roman London's Western Hill: Excavations at Paternoster Square, City of London</i> (reviewed by Martin Millett)	210
D Seeley, C Phillpotts & M Samuel <i>Winchester Palace. Excavations at the Southwark Residence of the Bishops of Winchester</i> (reviewed by David Stocker)	211
P Miller & D Saxby <i>The Augustinian Priory of St Mary Merton, Surrey: Excavations 1976–90</i> (reviewed by Nigel Ramsay)	212
M Byrne & G R Bush (eds) <i>St Mary-le-Bow: a History</i> (reviewed by Ann Saunders)	213
S Blick (ed) <i>Beyond Pilgrim Souvenirs and Secular Badges: Essays in Honour of Brian Spencer</i> (reviewed by John Clark)	214
J Bettley & N Pevsner <i>Essex</i> (reviewed by Warwick Rodwell)	215
C M Barron & M Davies (eds) <i>The Religious Houses of London and Middlesex</i> (reviewed by Barney Sloane)	216
R H Thompson & M J Dickinson <i>Tokens of the British Isles 1575–1750, Part VII: City of London. Sylloge of Coins of the British Isles 59, The Norweb Collection, Cleveland Ohio, USA</i> (reviewed by Geoff Egan)	217
C A Newbery <i>Wartime St Pancras: a London Borough Defends Itself</i> (reviewed by Cathy Ross)	218
P and R Malcolmson (eds) <i>A Woman in Wartime London: the Diary of Kathleen Tipper, 1941–1945</i> (reviewed by Cathy Ross)	218
T Meacock <i>A Hundred Year History of St George's Church, Hornsey, now St Mary's with St George, the Parish Church of Hornsey</i> (reviewed by Eileen Bowlt)	220
R Ensing <i>Dunsford Manor 1851–1898: a Late-Victorian Manor in Wandsworth</i> (reviewed by Graham Javes)	220
A Chidley & C Wadsworth <i>Finchley Harriers: the Story of an Athletic Club</i> (reviewed by Diane Tough)	220
D A Hayes (ed) <i>Camden History Review 30</i> (reviewed by Ann Hignell)	220
M McAndrew <i>Lost Theatres of Haringey</i> (reviewed by Ann Hignell)	221
A Cornwall (ed) <i>Surrey History Vol VII No. 3</i> (reviewed by Ann Hignell)	221
B Cherry <i>Civic Pride in Hornsey: The Town Hall and its Surrounding Buildings</i> (reviewed by Patricia A Clarke)	222
C Welch <i>Noel Park: a Social and Architectural History</i> (reviewed by Patricia A Clarke)	222
C Melhuish <i>The Life and Times of the Brunswick Bloomsbury</i> (reviewed by David Marcus)	222
Index to volume 58	225

London & Middlesex Archaeological Society

Registered as a charity

ESTABLISHED IN 1855

Patrons: The Most Rev The Lord Archbishop of Canterbury; The Right Rev The Lord Bishop of London; The Right Hon The Lord Mayor of London; HM Lieutenant for Greater London and Custos Rotulorum; The Very Rev The Dean of St Paul's

Past Presidents: Rt Hon the Lord Londesborough, KCH, FRS, FSA (1855–1860); Rt Hon the Lord Talbot de Malahide, FRS, FSA (1860–1883); General A.L.F. Pitt-Rivers, FRS, VPSA (1883–1885); Edwin Freshfield, LL.D., FSA (1885–1910); Sir Edward W. Brabrook, CB, Dir.S.A. (1910–1930); Sir Montagu Sharpe, KC, DL (1930–1942); Rt Hon the Earl of Strafford, JP (1943–1946); Col the Rt Hon Lord Nathan of Churt, FSA (1947–1949); William F. Grimes, CBE, MA, FSA (1950–1958); D.B. Harden, FBA, CBE, MA (1959–1964); R. Michael Robbins, CBE, MA, FSA (1965–1970); Arnold J. Taylor, CBE, MA, D.Litt, FBA, Hon VPSA, FR Hist S (1971–1973); Ralph Merrifield, BA, FSA, FMA (1974–1976); M.G. Hebditch, MA, FSA, FMA (1977–1979); Dr Valerie Pearl, MA, D.phil, FSA, FR Hist S (1980–1981); Professor John Wilkes, BA, PhD, FBA, FSA (1982–1985); John Kent, BA, PhD, FBA, FSA (1985–1988); Derek Renn, PhD, FIA, FSA, FSS (1988–1991); Hugh Chapman, BA, PhD, FSA, AMA (1991–1992+); Derek Renn, PhD, FIA, FSA, FSS (1992–1993); Harvey Sheldon, BSc, FSA (1993–1996); Mark Hassall, MA, FSA (1996–1999); Derek Keene, MA, D.phil (1999–2002); Professor Clive Orton, MA, CStat, MIFA, FSA (2002–2005); Dr Simon Thurley (2005–2008)

President: Professor CAROLINE BARRON

Vice-Presidents: Miss E.D. Mercer, BA, FSA; W.J. Smith, MA, FR Hist S; N.M.D. Fuentes, BA; L.S. Snell, MA, FSA, FR Hist S, FRSA; A. Tribe, FCA, FSA, ATII; J.A. Clark, MA, FSA, AMA; K.A. Bailey, MA; D.R. Webb, BA, ALA; Miss J. Macdonald, BA, FSA

Council (*as from AGM February 2008*)

Eileen Bowlt, JP, BA (Chairman); Tim Carew; John Clark, MA, FSA, AMA; Nathalie Cohen, MA; Ann Hignell, BSc, BA; Graham Javes, MA; Laura Schaaf, FSA, MIFA; John Schofield, BA, MSc, PhD, FSA, MIFA; Barney Sloane, BA, PhD, FSA; Roy Stephenson, BA, FSA, MIFA; Kathryn Stubbs, MA, DipTP, MRTPI, IHBL; Kate Sutton, MA; Karen Thomas, BA (Hons)

Ex officio (the officers mentioned under Rule 9): **Honorary Treasurer** Martin Williams, MBA; **Honorary Secretary** Jackie Keily, MA; **Honorary Editor** (*Newsletter*) Meriel Jeater, MA, AMA; **Honorary Publications Secretary** Karen Thomas, BA; **Honorary Director of Lecture Meetings** Cheryl Smith, MA; **Honorary Librarian** Miss S. Brooks, MA; **Honorary Subscriptions and Membership Secretary** Patricia Clarke; **Production Editor** (*Transactions*) Lynn Pitts, MA, D.phil, FSA; **Publicity Officer** Mark Service

Publications Committee: Chairman, John Schofield, BA, MSc, PhD, FSA, MIFA

Archaeological Research Committee: Chairman, Harvey Sheldon, BSc, FSA

Historic Building and Conservation Committee: Chairman, J. Finney, DipArch, DipTP, IHGCC

Local History Committee: Chairman, Mrs Eileen Bowlt, JP, BA

Honorary Auditor: Mr A. Buss

Bankers: Barclays Bank Ltd (211 Regent Street Branch)

London and Middlesex Archaeological Society

152nd ANNUAL REPORT OF COUNCIL FOR THE SUBSCRIPTION YEAR ENDING
30th SEPTEMBER 2007

Council met five times during the year.

Members of Council and others continued to represent the Society at meetings of the Standing Conference on London Archaeology, the Southwark and Lambeth Archaeological Excavation Committee, the London Archaeological Forum and the Victoria County History (Middlesex).

Lecture meetings

The lecture series season, held on Wednesday evenings at the Museum of London and organised by Cheryl Smith, started in October 2006 with the First Annual Joint Lecture of LAMAS and the London Natural History Society by Ian Tyers. In November Charles Hind, Chief Curator and H.J. Heinz Curator of Drawings, RIBA British Architectural Library Drawings and Archives Collections spoke on 'Country House Visiting before the Coming of the Railways' and in December Dr Angela Wardle, of the Museum of London Archaeology Service gave a talk on 'Finds from Roman London'. From the start of the New Year the lectures were held in the Terrace Room of the Museum of London on Thursday evenings, due to long-term building work at the Museum. The talk in January, 'Diving into History: Nautical Archaeology, What's in it for Us?', was by Ian Barefoot of the Nautical Archaeology Society, and that in March was given by Joanna Corden, Archivist of the Royal Society, on 'Hooke and the Early Royal Society'. In April Bruce Watson, Senior Archaeologist, MoLAS spoke about 'The Old Welsh Bridge at Shrewsbury: A Newly Discovered Fortified Bridge' and in May, Dee Cook, Archivist, Society of Apothecaries, spoke on 'A History of the Worshipful Company of Apothecaries'.

At the AGM in February the President, Dr Simon Thurley, gave his second Presidential Address, on 'The Politics of Urban Display: The London Palaces of the Stuart Queens 1500–1750'.

Publications, Newsletter and Website

The *Newsletter* appeared three times under the editorship of Meriel Jeater, continuing to include a wide range of reviews and short articles as well as news of the activities of our own and other societies. *Transactions* volume 56 appeared and Council continues to appreciate the hard work carried out by our Production Editor Lynn Pitts. In addition we would like to thank Kim Stabler, who has resigned as Honorary Archaeological Editor. Our new Honorary Archaeological Editor is Natalie Cohen.

Council would like to thank Francis Grew for all his hard work managing the Society's website for the last number of years. This year a web design company, Creation Sports, was engaged to re-design and take over management of the website.

Membership

Paid-up membership for the year was 624, compared with 632 last year and 619 for 2005. 41 new members joined the Society, including 18 by way of the Society's website.

Publications Committee

In early September the Publications Committee met, consisting of John Schofield (Chair), Nathalie Cohen (Secretary), Eileen Bowlt, Tim Carew, Lynn Pitts, Barney Sloane, and Meriel Jeater. Issues discussed included policies for *Transactions* (ie the type and length of papers), copyright *re* reproducing text and illustrations in *Transactions*, and the possible re-launch of the Special Papers (but now re-named Occasional Papers). The Honorary Archaeology Editor is presently seeking funding and drafting a business plan with regard to the Occasional Papers.

Archaeology Committee

The Archaeology Committee met four times during the year, in January, April, June and September.

Regular reports on archaeological fieldwork and related matters were received from MoLAS, GLAAS, SCOLA and LAARC. Issues that continued to occupy the Committee's time included the South Mimms archive generated by the late John Kent, the closure of Wandsworth Museum, and the proposed setting up of a CBA Group for London.

The Committee organised the 44th Annual Conference of London Archaeologists, which, due to the closure of the Museum of London's lecture theatre for refurbishment, was held in the Wilberforce Lecture Theatre at the Museum in Docklands on Saturday 17th March 2007. A full house witnessed the presentation of the eleventh Merrifield Award to Barry Taylor and Amy Gray Jones for the Farthing Down Community Landscape Project, and then heard them give a presentation on the work in the morning session, alongside other talks on projects undertaken at Hayes, St Martin-in-the-Fields and the City.

The afternoon session was, appropriately enough in view of the location of the venue, given over to the archaeology of the East End, and was addressed by Hazel Forsyth (East goes West: London and Virginia), Gary Brown (the Olympic site), Lindy Casson (the East London Line), Chris Jarrett (post-medieval life in East London), and Roy Stephenson (public archaeology in the East End).

Local History Committee

The Committee held a total of two meetings, in January and June, 2007. [The third was held in October.]

The Annual Conference on 18th November 2006 was on the subject of *Lost London*, and proved to be an immensely popular topic, with tickets sold out within a month of going on sale. In the morning delegates heard talks on: 'The Tower of London — a Lost Palace', by Dr Jeremy Ashbee, 'Lost Churches and Convents of Medieval London' by Dr Vanessa Harding, and 'Lost London Revisited' by Hermione Hobhouse. Miss Hobhouse was originally booked to wind up the day with 'Concluding Remarks', but kindly stepped in with a full paper at short notice to replace the original speaker who was unable to attend. The afternoon covered: 'The Lost Rivers of London' by Nicholas Barton, 'London's Disused Underground Stations' by Jim Connor, and 'The Abercrombie Plan — a Lost Opportunity' by Kelvin MacDonald.

There were eleven submissions for the Annual Publications Award and the results, presented at the Conference were: 1st prize to Camden History Society for *The Streets of Kentish Town* by Steven Denford and David Hayes; 2nd prize to Merton Local History Society for *A Priory Revealed Using Material Relating to Merton Priory* by Lionel Green. The Committee are grateful, yet again, to Sally Brookes, MoL, and David Bradbury of Guildhall Library for acting as judges for the Award.

The Committee received six submissions for the 2007 Publications Award.

Historic Buildings and Conservation Committee

The Historic Buildings and Conservation Committee has met monthly throughout the year and has on average dealt with between 8 and 12 new cases at each meeting. Major projects have included the Commonwealth Institute; threatened by Government stealth at the beginning of the year but, by our October meeting, subject of a welcome Planning Brief from Kensington and Chelsea.

Another major building was Middlesex Guildhall where we supported the stance taken by SAVE and wrote to request that the application be called in. Proposals for the Regent Street Quadrant area came before the Committee on more than one occasion. We were, and still are, concerned about the proposals for the Regent Palace Hotel though other parts of the site have improved markedly.

Battersea Power Station was again in the news, for all the wrong reasons, and we would seem further from a satisfactory solution than we were last year. The gaunt shell of the building is a continuing and dramatic reminder of the failure to find a proper use. Smithfield Market is also in the news again, and the battle to retain Listed Buildings and the character of the area is still being fought out.

Other huge developments have been around stations, particularly Kings Cross/St Pancras and Victoria, with potentially dramatic impacts upon the sky-line, the setting of Listed Buildings and, of course, upon the Stations themselves. Local Authority buildings have included the St Pancras Public Baths, and the controversial proposals for Wandsworth Museum.

These schemes have been mixed with more modest proposals and small scale schemes such as the Jacobean Barn at Hall Place, Bexley, the renovation of a Boathouse at Chiswick, and a new dormer to the medieval Old Farm in Sidcup. It is this variety that constantly keeps us on our toes and makes the Committee's work so exhilarating and interesting.

Apart from the casework, we have, over the year, discussed PPG15, and the London Boroughs' differing approaches to consultation; e-planning notifications; the GLA's powers; the Government White Paper 'Heritage

Protection for the 21st Century'; Buildings at Risk, demolition of Locally Listed Buildings; and of course, Sustainability, particularly in relation to conservation issues.

Finally, we would like to report that in May, John Clark, after many years of hard work as Honorary Secretary, retired from the Committee. He is greatly missed. We have though been fortunate in that Vicki Fox has 'volunteered', and has coped admirably with our quirky ways. My thanks to her, and to the other Committee Members, for their commitment and hard work over the last year.

BY DIRECTION OF COUNCIL

Eileen Bowlt
Chairman of Council

Jackie Keily
Honorary Secretary



EXCAVATIONS AT BUCKLE STREET / LEMAN STREET

Charlotte Thompson

SUMMARY

Excavations at 24–26 Buckle Street and 19 Leman Street, London E1 revealed a small amount of Roman and post-Roman ceramic material. However, a shallow feature cut into the brickearth contained Neolithic Peterborough Ware sherds, which although not uncommon in the London area, are unusual as they are from east London; the majority of Peterborough Ware findspots are in the west and south-west of the London area.

INTRODUCTION

Between April and October 2003, an archaeological evaluation and watching-brief was carried out by the Museum of London Archaeology Service (MoLAS) on the site of 24–26 Buckle Street and 19 Leman Street, London E1, site code LEB03 (Miles 2003). The work was funded by Gilmac Building Services Limited and took place prior to the redevelopment of the site. The site is bounded by Leman Street to the west, Buckle Street to the north, and buildings to the east and south, including the St George's German Lutheran Church (Fig 1). The centre of the site is at OS National Grid Reference TQ 33974 81252. Modern ground level immediately adjacent to the site is c.13.40m OD.

THE POTTERY

Three sherds belonging to the rim and shoulder of a decorated Peterborough Ware vessel of Fengate type (Fig 2) were recovered from a shallow feature cut into the brickearth, context [24], which also contained some fragments of medieval or post-medieval bell mould. The sherds are made from a hard fabric with a dense

matrix with naturally occurring very fine to fine quartz or mica. The fabric is tempered with sparse to moderate, ill-sorted, very coarse (up to 5mm), crushed calcinated flint and sparse, very coarse (up to 6mm), 'pink' unburnt flint, and it also contains sparse, very coarse, sub-rounded (organic?) voids and very rare, medium rounded, metallic red inclusions. The matrix has a tendency towards a laminar fracture, a feature common to Peterborough Ware, and the use of flint and limited sand inclusions are also typical of this type of pottery (Woodward 2002, 107).

The collar is decorated with panels containing diagonal and vertical grooves; the internally bevelled rim has herringbone incisions on the top and also has possible horizontal grooves on the interior, below the bevel. The cavetto area has one clear, deep impression which has been made with a fingertip and the crescent of the fingernail can be seen at the bottom of the hole. There are also traces of two further impressions on the break of the sherds, suggesting that there was a horizontal band of fingertip impressions. Recent research, involving taking casts of the deep impressions on three vessels of Peterborough Ware recovered from the Thames, demonstrated that in these instances the impressions were variously made by slender fingertips, whittled sticks or twigs (Cotton & Johnson 2004, 128). Following this research, a cast of this fingertip impression was taken by Liz Goodman, MoLAS conservator, using addition-type silicone-based impression material (see *ibid*, 147 for methodology followed). The resulting cast clearly shows a fingertip impression, complete with a short fingernail, a contrast to the longer fingernails on the casts taken as part of Cotton and Johnson's research (2004, fig 15.3).

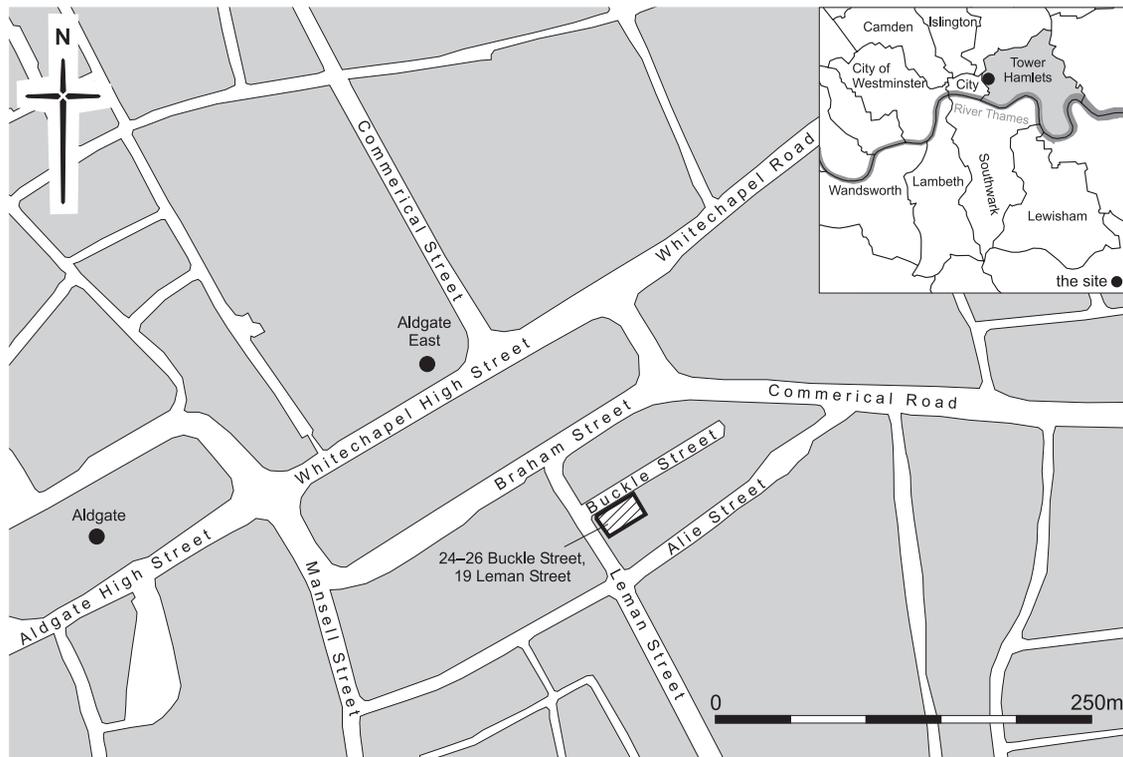


Fig 1. Location of the site (scale 1:5000)

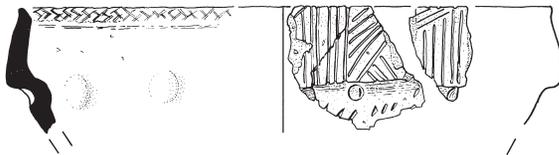


Fig 2. Peterborough Ware sherds from context [24] (scale 1:4)

Only a small part of the body of the vessel remains but from this it is clear that it was decorated with a row of oblique, relatively shallow fingernail impressions. The decorative schemes used and the form of the vessel fall into the categories of Peterborough Ware set out by Smith (1974).

DISCUSSION AND CONCLUSION

Peterborough Ware is part of the pan-British and Irish ‘impressed ware’ phenomenon, which appears shortly before 3300 BC (Gibson 2002, 81–2). Recent re-evaluation of the radiocarbon dates available for Peterborough Ware pottery indicates that all three of the Peterborough

Ware types — Ebbsfleet, Mortlake and Fengate — were fully developed by 3000 BC, and that the ware was ‘no longer in vogue’ by the middle of the third millennium (*ibid*, 80).

The general pattern for the Thames Valley is that Peterborough Ware has been recovered from pits, middens, monumental ditches, burials, and watery deposits (Barclay 2002, 85). In the London region most of the Peterborough Ware has come from pits (49 instances), and the next most common depositional context is a river channel or foreshore (16 instances) (Cotton & Johnson 2004, 145). It is of note that in the London area the vast majority of the complete and semi-complete vessels come from the Thames (*ibid*, 145). As the shallow feature at the site that contained the Peterborough Ware also contained some medieval or post-medieval material, the significance of the depositional context is unclear.

The site is less than 1km to the east of the City boundary, and so this vessel should be viewed in the light of recent work undertaken on the City’s prehistory as well as on Neolithic pottery in the London area. It has been noted that few

prehistoric finds have been recovered in the City of London and its immediate surrounding area, although a recent review of the evidence suggests that more than was previously acknowledged has been found (Holder & Jamieson 2003). As part of their survey, Holder and Jamieson plotted the findspots of material from different periods of prehistory within the area of the modern City of London, and, perhaps unsurprisingly, Neolithic pottery is poorly represented. Whether this is due to lack of activity or lack of preservation is debatable (see Holder & Jamieson 2003 for discussion), but this dearth of Neolithic pottery is also borne out in Cotton and Johnson's survey of Peterborough Ware in the London region as a whole (Cotton & Johnson 2004). Their work establishes that the Peterborough Ware found in the London region is unevenly distributed, with the south and the south-west of the London area being well represented, and the north and east of the London area being less so (*ibid.*, 134). Indeed, the closest findspots of Peterborough Ware are small sherds from Plantation Place (site code FER97) and Blossom's Inn (site code GHT00; Thompson 2004). In both of these cases the sherds are very small, and in the case of the Plantation Place material, it is not certain that they are Peterborough Ware, although they are almost certainly Neolithic in date. The nearest certain Peterborough Ware sherds are from Lefevre Walk Estate in Bow (Maloney & Holroyd 1999, 27), and there are further sherds in Walthamstow, Barking, and the Royal Dock's Community School (Cotton & Johnson 2004, 142).

Therefore, this discovery of a fragmentary Peterborough Ware vessel from 24–26 Buckle Street and 19 Leman Street is an important contribution to our knowledge of this type of pottery in the London area, which is currently dominated by vessels recovered from the river and from south and south-west London.

ACKNOWLEDGEMENTS

The author gratefully acknowledges the work of all those involved in the project. The post-excavation work was generously funded by Gilmac Building Services Limited and Nick Truckle of English Heritage monitored the site and provided advice and support. The MoLAS project manager was Dave Lakin and the MoLAS senior archaeologists were Jon Sygrave and Adrian Miles.

Thanks are also due to Jon Cotton, Curator (Prehistory), Museum of London, who very kindly read and commented on drafts of this paper. Gabby Rapson of MoLAS drew the vessel and the site plan was prepared by Ken Lymer of MoLAS. Liz Goodman, Conservator at MoLAS, and Karen Lovén, a UCL MSc student, prepared the cast of the fingertip impression.

BIBLIOGRAPHY

- BARCLAY (2002), A Barclay 'Ceramic lives' in A Woodward & J D Hill (eds) *Prehistoric Britain: The Ceramic Basis* Prehistoric Ceramics Research Group Occ Pub 3, 85–95
- COTTON & JOHNSON (2004), J Cotton & R Johnson 'Two decorated Peterborough bowls from the Thames at Mortlake and their London context' in J Cotton & D Field (eds) *Towards a New Stone Age: Aspects of the Neolithic in South-East England* CBA Research Report 137 British Archaeology, 128–47
- GIBSON (2002), A Gibson *Prehistoric Pottery in Britain and Ireland*
- HOLDER & JAMIESON (2003), N Holder & D Jamieson 'The prehistory of the City of London: myths and mythologies' *Archaeol Journ* 160, 23–43
- MALONEY & HOLYROD (1999), C Maloney & I Holyrod 'London fieldwork and publication round-up 1998' *London Archaeologist* 9 (supp 1)
- MILES (2003), A Miles *24–26 Buckle Street, 19 Leman Street, an Archaeological Watching Brief* MoLAS unpub report
- SMITH (1974), I Smith 'The Neolithic' in C Renfrew (ed) *British Prehistory: A New Outline*, 100–36
- THOMPSON (2004), C S Thompson *The Prehistoric Pottery from Blossom's Inn* (GHT00) MoLAS unpub report
- WOODWARD (2002), A Woodward 'Inclusions, impressions and interpretation' in A Woodward & J D Hill (eds) *Prehistoric Britain: The Ceramic Basis* Prehistoric Ceramics Research Group Occ Pub 3, 106–18

EXCAVATIONS ADJACENT TO THE RIVER CRANE ON THE SITE OF THE FORMER RAILWAY MARSHALLING YARDS, FELTHAM

Isca Howell

With contributions by Lyn Blackmore, Pippa Bradley, Lisa Gray, Louise Rayner and Terence Smith

SUMMARY

Excavations adjacent to the River Crane, on a site within the former railway marshalling yards, Feltham, revealed evidence for Late Bronze Age to Early Iron Age occupation and Middle Saxon settlement and agriculture. The evidence consisted of an assemblage of Late Bronze Age–Early Iron Age pottery sherds and radiocarbon dates for a corn drier and a hearth, calibrated to the Middle Saxon period. There were only a few Middle Saxon pottery sherds but plant remains from the corn drier, and associated daub fragments, indicate there was arable farming and a settlement in the vicinity.

INTRODUCTION

The Museum of London Archaeology Service (MoLAS) undertook an excavation on a site within the former railway marshalling yards to the south of Hounslow Heath, at OS grid reference TQ 1221 7364 (Fig 1). The site was bounded by a culvert for the Duke of Northumberland River to the west and by the railway to the north. To the east and south, the area of development extended to Hounslow Cemetery, Godfrey Way, and the back of housing along Curtis Road and Farm Road.

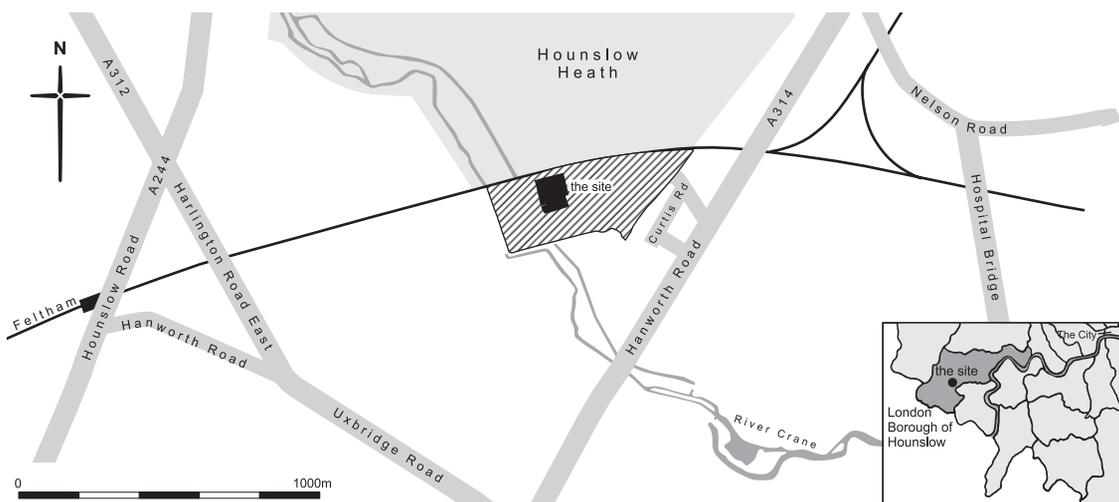


Fig 1. Area of the former railway marshalling yards, showing the site

The purpose of the excavation was to investigate the potential for further archaeological remains within the footprint of a proposed building, as suggested by a previous evaluation (Howell 1999). Prior to these excavations there had been no conclusive evidence for archaeological remains on the site.

GEOLOGY AND TOPOGRAPHY

The site lies to the east of the River Crane, mostly on the flat ground above the river's floodplain. The underlying geology of this area is the Taplow Terrace Gravels (BGS 1998) with a narrow strip of later alluvium, which has accumulated along the margins of the River Crane.

The construction of the marshalling yards had removed any remnants of earlier ground horizons and, presumably, had truncated the natural gravels. The marshalling yard deposits consisted of *c.*0.50m of ash and clinker overburden overlying the natural sand and gravel at *c.*18.50m OD, except along the southern edge of the site where a 'shunting hump' had raised the ground level by *c.*0.80m, and in the south-west corner, where the site extended into the river valley and the natural gravels sloped down to *c.*17m OD.

ARCHAEOLOGICAL SITE SEQUENCE

During the course of the investigations 265 postholes, 43 pits, 3 gullies, a corn drier, and a hearth were fully excavated and recorded (Fig 2). All these features were cut into the underlying gravels and were sealed by the marshalling yard deposits. There was no horizontal stratigraphy on the site. The only distinguishing characteristic of the fills of the features was the abundance of charcoal flecks in those in the vicinity of the hearth and corn drier (denoted by the shaded area on Fig 2) and the absence of charcoal flecks in those further away.

The only securely dated features were the corn drier and the hearth, as sealed charcoal-rich layers in each allowed for radiocarbon dating (see Table 1). All the other features either had no dating evidence or the dating evidence was potentially residual. Three groups of postholes were identified on the site: Structure 1, Structure 2 and Structure 3. Other possible groups were regarded as too speculative.

Structure 1 consisted of 14 postholes, aligned south-west–north-east, for a length of 17.3m. Two postholes at the southern end of Structure

1 contained Late Bronze Age–Early Iron Age pottery. It appeared to form a 'palisade' that may continue beyond the limit of excavation. There is an apparent density of postholes to the north-west of the palisade, whereas only a possible four-post structure was located to the south-east. This palisade may mark a division between the internal and external elements of a settlement. Alternatively, there may be returns to the structure at the southern and northern ends to suggest a rectilinear building. This implies a type of building that is more likely to be of Saxon date. On what appears to be the external side of Structure 1, four postholes define a square feature (Structure 2). Measuring approximately 3m on each side, the date and function of this structure are unknown other than it appears to be associated with the palisade or building. Structure 3 lies to the north of the hearth and, as such, appears to be associated with it (see below).

LATE BRONZE AGE TO EARLY IRON AGE OCCUPATION EVIDENCE

The evidence for Late Bronze Age to Early Iron Age occupation is derived from the analysis of the pottery. Of the identified features, only 49 contained sherds of Late Bronze Age–Early Iron Age pottery, including seven postholes that also contained sherds of Saxon pottery. Therefore it is highly likely that many of the sherds were residual in later Saxon features and, as a result, no individual features on the site have been assigned to this period (see Fig 2). However, the quantity of Late Bronze Age–Early Iron Age pottery sherds does suggest that there was significant activity on the site during the Late Bronze Age to Early Iron Age Transition period (*c.*8th–6th century BC).

The excavation produced 220 sherds (2,224g) of later prehistoric pottery. Nine fabrics have been identified on the basis of the main inclusion types present. There are three main fabric groupings — flint-tempered (FLIN1-5), sand-tempered (QU1-3), and shell-tempered (SH1) — with all nine fabrics apparently of local manufacture (see site archive for full details). Flint-tempered fabrics were commonly used in the Late Bronze Age in the Thames Valley region, as found at Runnymede Bridge (Longley 1991). During the Late Bronze Age to Early Iron Age Transition period the use of sand-tempered wares increased, resulting in primarily sandy

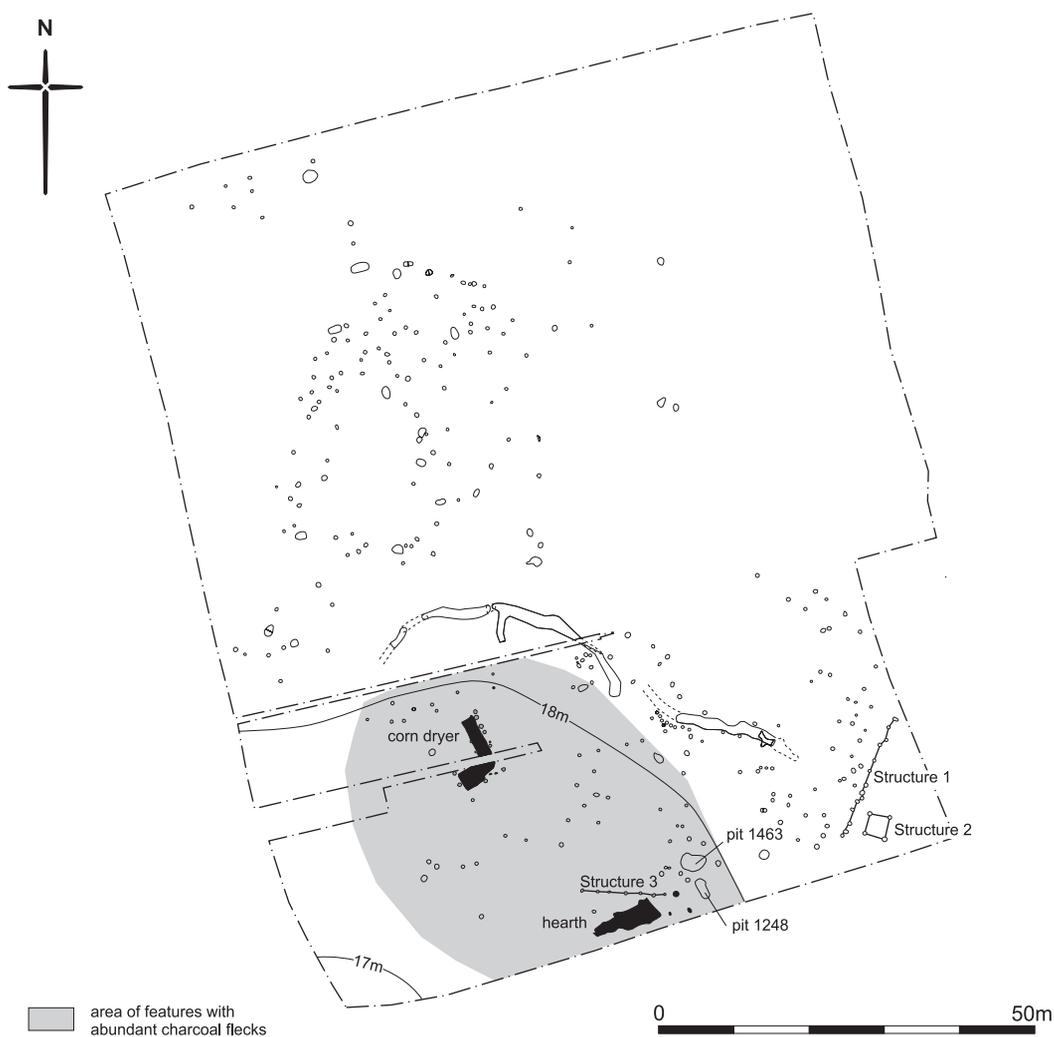


Fig 2. Plan of the site showing the archaeological features as recorded

wares in the Early Iron Age. Following this sequence, this assemblage falls within the Late Bronze Age to Early Iron Age Transition period, as flint-tempered, flint-with-sand, and sandy fabrics are all present (Barclay 1995, 10). Red iron-rich inclusions are present in all but one of the flint-tempered fabrics and in two of the sandy fabrics, suggesting they occurred naturally in the raw clay used for the manufacture of these vessels. The use of clays with iron-rich inclusions has been noted in other assemblages from the West London area. At Caesar's Camp, Heathrow all of the sherds had 'ferruginous pellets or iron-rich inclusions', which after petrological analysis

were considered to be naturally occurring in the clay, and likely to be of local source (Williams 1993, 351). Sherds of Late Bronze Age to Early Iron Age date from Snowy Field Way, Isleworth were also recorded in a flint and iron-rich fabric (Timby 1996, 46–7) and the presence of fabrics with ferruginous pellets was noted in an assemblage from Jewsons Yard, Uxbridge (Barclay 1995, 10).

With only ten rim sherds and two other featured sherds present, only a small proportion of the pottery could be assigned to any known forms. The diagnostic sherds are from coarse ware and fine ware jars (Barrett 1980, Class I &

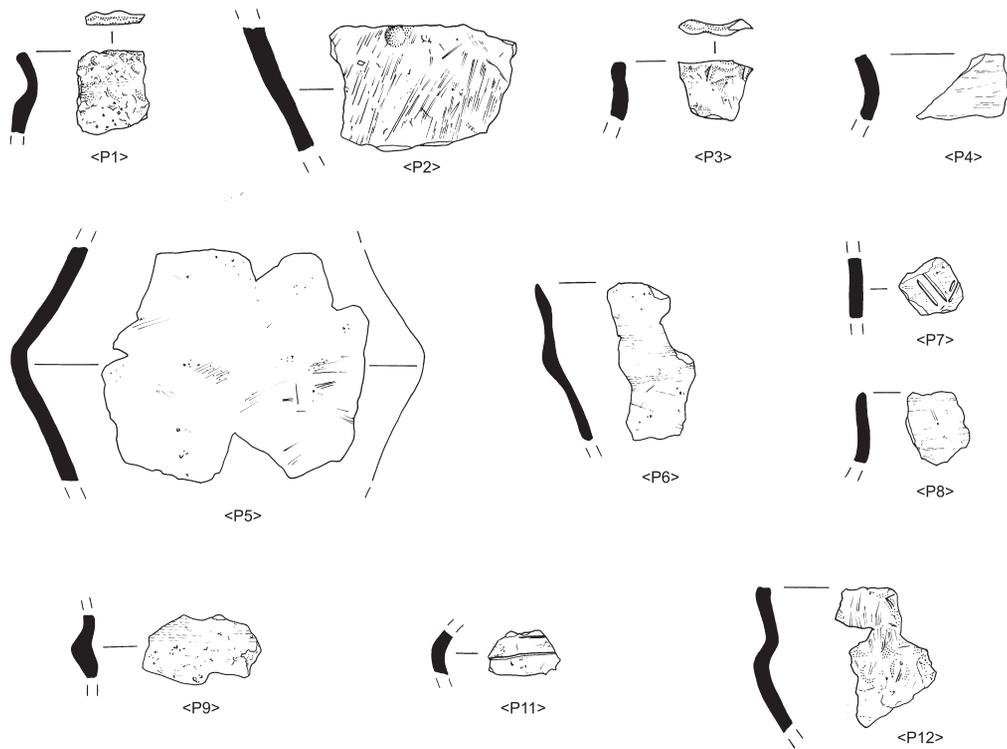


Fig 3. Selected Late Bronze Age—Early Iron Age pottery sherds (<P1>—<P3>, <P5>—<P9>, <P11> and <P12>) and Saxon pottery sherd (<P4>) (scale 1:4)

II) and fine ware bowls, including both bipartite and tripartite examples, such as <P6>, <P8> and <P11> (see Fig 3). The largest fragments came from the shoulder of a carinated jar, <P5>, with well burnished surfaces, conforming to Barrett Class II jars.

Decorated sherds are present in the assemblage, with finger-tipping and fingernail impressions on the shoulders and rims of coarse ware jars of Barrett Class I type (Fig 3, <P1>, <P2>, <P3>, <P12>). The cabling of rims is paralleled in the Late Bronze Age assemblage from Runnymede Bridge, which also has evidence of fingertip and fingernail impressions (Longley 1991, 165). The surfaces of these coarse jars have frequently been wiped, probably with organic matter, leaving striations on the surface. The fine ware vessels are smoothed and burnished and two examples of incised decoration are present (Fig 3, <P7>, <P11>). The small sherd <P7> with incised triangular decoration is similar to examples from Runnymede Bridge, where the use of combed decoration, hatched triangles, and incised lines is evidenced (Longley 1991, 165). The tripartite

bowl with incised lines on the shoulder, <P11>, is paralleled in the assemblage from Heathrow and is closely aligned to vessels in Cunliffe's Darmsden-Linton group (Canham 1978a, 20, fig 14, no. 30; Cunliffe 1991, 326, fig A:11).

The majority of the assemblage is treated here as one ceramic phase in the absence of stratigraphic information. This aside, the pottery has many traits comparable to other assemblages from the Thames Valley, especially those from Heathrow (Canham 1978a), Petters Sports Field, Egham (O'Connell 1986, 62), and Snowy Field Way, Isleworth (Timby 1996, 46). Unfortunately analysis did not reveal any obvious pattern to the spatial distribution of the pottery sherds, but in spite of this, the recovery of this pottery is important as it provides evidence for settlement in the vicinity. The presence of carbonised residues and sooting on some of the sherds suggests this activity included cooking and this is supported by a small amount of burnt flint.

Also recovered from the site were 234 pieces of burnt flint (weighing 1,595g). These were collected from a range of features, including

those associated with a corn drier (see below). The large quantity of burnt flint may reflect various domestic activities such as cooking, but may also have had a secondary use as temper for pottery. Burnt unworked flint is relatively common on prehistoric sites, becoming particularly abundant on later Bronze Age and Iron Age sites. In the vicinity, a number of sites have produced comparable material, including the former Jewsons Yard site at Uxbridge (Bradley 1995, 16–17).

Discussion

The significance of the west Middlesex tributaries in the Late Bronze Age to Early Iron Age is poorly understood compared to the field-systems that have been extensively excavated in the Heathrow area. What the functional use of these rivers was and whether they were used as trade routes has not been established. Finds such as the five copper-alloy socketed axes discovered near to the River Brent at Park Royal (Cotton & Wood 1996, 19–21) show the potential for further finds of this period in the catchment of the West London tributaries. The excavations at the former marshalling yards, considering the extensive horizontal truncation, have recovered a little evidence of what might have been a large settlement. However, the interpretation of the site in this period probably lies in understanding its relationship with the earthwork known as Hounslow Camp to the east. Although undated, Hounslow Camp is similar to other Bronze Age/Iron Age enclosures in the Thames Valley, such as St John's Camp, 3km to the north (Cotton 1990, 1–3), and another morphologically similar camp 400m to the west of the River Brent at Wyke Green.

MIDDLE SAXON SETTLEMENT AND AGRICULTURE

The highly truncated nature of the site presents the same problems for identifying features of Middle Saxon date as it does for the Late Bronze Age–Early Iron Age features. Seven postholes,

distributed across the site, contained sherds of pottery dated to the 5th–7th centuries AD. A possible indicator of Middle Saxon features is the presence of charcoal in the fill. These features (see Fig 2) are found in the vicinity of the corn drier and the hearth to the south of the site, which are presumably the origin of the debris. However the absence of charcoal in the pits and postholes to the north and east does not preclude them from being of Saxon date. The only secured dating on site came from radiocarbon dated samples from sealed contexts within a feature identified as a corn drier and another identified as a hearth (Table 1). Sample {104} was taken from a deposit [1522] in the corn drier and sample {109} from a carbon-rich deposit [1635] in the layers of debris in the hearth.

The corn drier

The 'L'-shaped corn drier (Fig 4) was located where the slope towards the river begins; it is made up of two components: the drying chamber and the flue. Measuring 2.90 x 2.50m and 0.60m deep, the pit of the drying chamber was clad with a 0.10–0.30m thick lining of reconstituted brickearth. Around the outer base of the pit 24 stakeholes were found cutting the lining, although they could have predated it. Overlying this construction was a charred grain-rich deposit [1522], from which the radiocarbon dating sample was retrieved. There was also an environmental sample (see below) taken from the same deposit (evaluation context [212] sample {2}). The charred material might be the result of a catastrophic event or an accumulation of grains falling through from a superstructure above. The main backfill deposit contained abundant daub fragments, many of which have wattle impressions on them (see below). The flue is 7.40m long, 1.70m wide and 0.38m deep, and, despite being truncated by the footings of the wagon repair shed at a crucial point, it appears to bend through 90 degrees to join the drying chamber. The sides of the flue were clad with the same material as the drying chamber,

Table 1. Radiocarbon dates calibrated by Beta Analytic, using INTCAL 98 (Stuiver et al 1998)

Sample no.	Laboratory no.	Uncalibrated Date	Calibrated Date (95% probability)
104	Beta-136729	1380±70 BP	AD 550 to 775
109	Beta-136730	1240±60 BP	AD 665 to 910 and AD 920 to 955

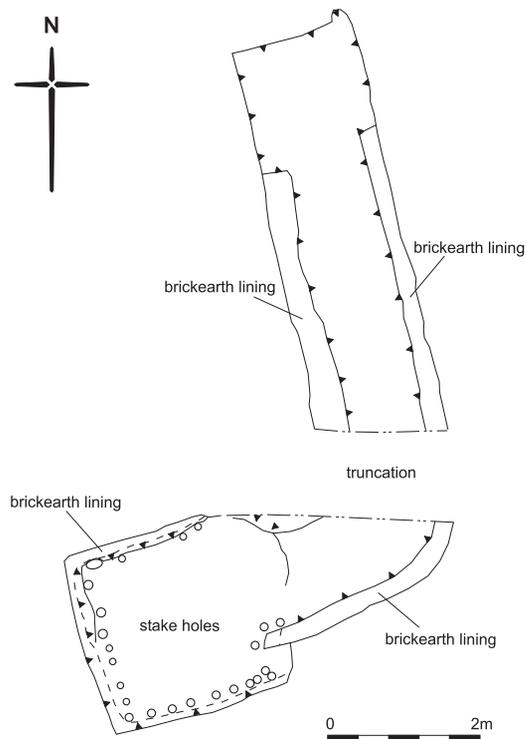


Fig 4. Plan of Middle Saxon corn drier (scale 1:100)

except at the northern end, where the absence of lining suggests the location of a stokehole. The brickearth cladding on the base of the drying chamber only extends a short length into the flue. There were no charred grain deposits in the drying chamber, only the general backfill deposits. It is possible that some of the gullies to the north and the irregular alignment of postholes to the south represent an enclosure for the corn drier. In addition, there are three sherds of pottery from a posthole and a stakehole in the immediate vicinity of the hearth ([1458], [1540]) and four sherds from a single jar are from a posthole to the north-east of the corn drier ([1426]).

A sample from the corn drier was dominated by charred grains and seeds. The most abundant identifiable grains were those of bread wheat (*Triticum aestivum* L) and barley (*Hordeum sativum* L). Also present were grains of rye/wheat (*Secale/Triticum* spp) and wheat (*Triticum* spp). No chaff was recorded, indicating that this grain-rich sample represents cleaned grain, ready for milling or drying. The weed seeds present are smaller than the grains so would have passed

through sieves as the grain was cleaned. The best preserved weed seeds were those of fat hen (*Chenopodium album* L) and stinking mayweed (*Anthemis cotula* L). Fat hen prefers nitrogenous soils and is common among vegetable crops and spring cereals (Hanf 1982, 202). Stinking mayweed thrives in nutrient-rich, waterlogged loams and clay soils (*ibid*, 235), confirming the location next to a slow-running river. Seeds of brome (*Bromus* spp) and vetch/tare/vetchling (*Lathyrus/Vicia* spp) were present but were too poorly preserved to allow closer identification; species of these plants are also common in arable land and among cereal crops.

Hearth

25m to the south-east of the corn drier, there is an irregular feature. Like the corn drier, it is located on the edge of the slope down to the river and has two components: a hearth and a flue. At its eastern end there was the following sequence of deposits. It had a clay base with a burnt surface. Over this was a layer of charcoal, from which the radiocarbon sample was obtained. Then another layer of burnt clay into which flint pebbles had been set. This was overlain by a layer of fire debris. The hearth measured 3 by c.2m and was 250mm thick. An irregular cut tapers for c.6.5m to the west from the hearth; its exact relationship to the hearth is unclear but presumably its function was to provide extra oxygen for more effective firing/heating.

To the north lies Structure 3 which appears to be the north wall of a building housing the hearth. At c.13m in length, this would suggest a sizeable, but not unusual, building for the early to mid-Saxon period (Bob Cowie, pers comm). There is no evidence of a return wall to the structure and little evidence that the two are even contemporary, as the post alignment is dated to the 5th–6th century AD, from a sherd of Early Saxon pottery from a posthole at the eastern end, while the hearth is at the earliest 7th-century.

One fragment of brick and two fragments of roofing *tegula* were found in the hearth, [1628]. They belong to a fabric which was manufactured at various kilns sites between London and St Albans and perhaps also to the south-west of London in the period between c. AD 50 and the mid-2nd century. Radiocarbon dates, however, indicate a Saxon date for the hearth, so this material must be residual.

Pits [1463] and [1248]

A third possible industrial feature is located *c.*6.5m to the north-east of the hearth. It consists of pit [1463] and pit [1248]. Both features have a light grey fine sandy silt fill and contain fragments of daub in their upper fills, which suggests a Saxon date. The pits are relatively large for the site, with pit [1463] 2.50–3.50m in diameter and 0.5m deep. The lowest fill of this pit is a light bluish-grey ash deposit, 0.30m thick, which suggests that the function of the pit was associated with a firing process. Heavily fragmented animal bone recovered from the upper fills had been calcined. To obtain the characteristic bluish-white appearance of calcined bone, temperatures in excess of 600°C need to be applied for a prolonged period of time (Liddle 2000). Pit [1248], to the south, appears to be associated with the former as it is elongated towards it. However the function of the two pits, whether associated or not, is unclear.

Pottery

The excavation produced a small assemblage of 16 sherds (113g) that could be of Saxon date. These were recovered from seven excavated contexts, all the fills of postholes and stakeholes. Six fabrics have been defined in this assemblage on the basis of the main inclusion types present (see site archive for full details). All but one are predominantly sand-tempered. The most distinctive feature of the sandy fabrics is the presence of iron-rich inclusions that occur as pellets and rounded nodules in all but one of the fabrics. This suggests that the clay is from the same source as that used for the prehistoric fabrics. Only one rim is present; this is of a simple everted form (Fig 3, <P4>). Most other sherds can be said to derive from jars; the chaff-tempered sherd is from part of a base, but more precise identification is impossible. No decorated sherds are present, and surface treatment is confined to burnishing. The pottery can be placed in the Early Saxon period (*c.*5th–7th century AD) and is treated here as one group, although some sherds could be of prehistoric date. Taken together, the lack of coarse sandstone-tempered wares, decorated sherds, and chaff-tempered wares, together with the homogeneous nature of the assemblage, might point to a date in the first half of the 6th century. This just falls on the edge of the earlier

bracket of one of the radiocarbon dates (see Table 1), but on the whole the latter appear to point towards a 7th-century date for at least some activity on the site. The assemblage is, however, too small and undiagnostic to offer anything but the broadest dating. Saxon pottery has not been found in this area before now.

Although limited in size, the assemblage is of importance in providing evidence for some form of settlement in the vicinity. The pottery also fits within a wider distribution pattern of Saxon features and finds from excavations in West London (Blackmore 1986; Cotton *et al* 1986, 69–74; Blackmore 1993). Here the distribution of Saxon occupation sites seems to be bimodal. Some sites are alongside the Thames, but an increasing number are being discovered in tributary valleys at some distance from the Thames. In the Crane valley itself, Saxon pottery has been recovered from sites upstream, in the Cranford area, at Harlington. In the Colne valley, there seems to have been a concentration of occupation at Harmondsworth (Laidlaw & Mephram 1996, 26–38; Laidlaw & Mephram 1999, 35–43). No Saxon finds have so far been recovered downstream from the Feltham site, but other settlements might be expected at the confluence of the Thames and the Crane. Other sites in the area include Northolt (Hurst 1961), a possible cemetery and settlement at Hanwell (Wheeler 1935, 136–8), and Brentford (Canham 1978b). It can be said that the proportions of sandy and sandstone-tempered wares decrease during the 5th century and into the 6th century, as chaff-tempered wares become more common, but, in the absence of diagnostic sherds, there is a serious problem in distinguishing 8th-century contexts from 6th- or 7th-century ones. This is mainly due to the fact that the forms of the undecorated chaff-tempered vessels changed little over time, and because imported wares such as are found in the 7th-to-9th-century trading settlement of *Lundenwic* have not yet been identified in the hinterland and may never have reached it.

Building material

A total of almost 77kg of daub was recorded, mostly from the pits and postholes that are a marked feature of the site. Most of the approximately 1,900 fragments are very small, although there are also a number of larger pieces, up to 160mm across. Some of the daub

preserves very good impressions of stakes and wattles and occasionally there are other impressions. A number of flat faces are present and these sometimes show evidence of surface treatment. The daub from the corn drier is dated by radiocarbon to the Saxon period and the rest is of similar date. Two principal fabrics have been recognised. Both are mainly reddish-brown in colour, but whereas one has a very fine sandy matrix, the other has much larger quartz grains. Similar distinctions have been noted in other assemblages of Saxon daub, for example from Middle Saxon occupation sites in *Lundenwic*, in the Covent Garden area of London (Goffin 1988, 115; Goffin 1989, 110). The distinction between the two types on this site is sometimes very marked, notably in context [1459]. Both types contain occasional large rounded pebbles. Some of the material has been burned, presumably accidentally, and some of this is light in weight with small voids, caused by organic grass, or straw, binders having rotted; such binders helped to prevent the daub cracking as it dried out. Some of the burnt pieces have grey interiors from where the material has been reduced during accidental firing; others have blackened surfaces. A few pieces in the finer fabric contain calcareous inclusions and are slightly pinkish in colour. There are occasional fine organic fibres, possibly plant roots, in the matrix; these may come from plants in the raw material or from plant matter present in animal dung added to the daub mix. The fibres would have acted as binders to the daub, though it is unlikely that such small fibres were deliberately added (other than as part of animal dung) in order to achieve this end. However, apart from these roots and the voids in some pieces mentioned above, the daub shows little evidence for the use of binders. This indicates that the daub dried slowly, suggesting that it was applied in the winter, or that the climate was cooler.

The larger pieces and some of the smaller pieces show clear evidence of their having been used as part of wattle-and-daub construction. The slightly curving impressions, round in section, from interwoven wattles are very well preserved in a number of examples. In diameter they range from 7mm to 20mm with most lying in the range 11–13mm. Some pieces also preserve the impressions of the vertical stakes around which the wattles would have been woven. These are slightly thicker than the wattles, ranging

between about 20 and 24mm in diameter. One piece found in the hearth, [1628], has the impression of a thin wooden lath rather than of wattles, indicating its use in lath-and-daub construction. Although wattle-and-daub, or lath-and-daub as an alternative, could be used on their own, their commonest deployment was as panel filling in timber-framed construction. One piece from context [1460] preserves what appears to be the impression of a probably circular post, although insufficient remains to determine its radius. This would indicate a fairly ‘primitive’ form of construction, with the wattles attached to a support of unsquared timbers. A piece from context [214], on the other hand, has the impression of a square timber, although once again its dimensions are not preserved. This may represent a post or stud from a timber-framed structure superior to that using the circular post, although equally it may represent no more than a door-post within a more ‘primitive’ structure of the sort employing the circular post.

A few pieces preserve their flat faces, which may have been either inside or outside the building. Most are fairly smooth, although a number from contexts [1460] and [1487] are fairly irregular. In a few instances there are faint fingerprints in these surfaces from where the daub was pressed into position between the wattles. Some also have faint straw or grass (hay) impressions in the surfaces. It is difficult to account for these unless the organic materials were lightly pressed into the surfaces to aid drying or possibly to help form a key for subsequent covering of the daub, either with limewash or with a more substantial plaster or render. No such coverings, however, survive on the fragments. One very small fragment from [214] shows what may be fine combing; this may have been intended as a key for limewash or some other finishing coat. A few surfaces show blackening from where they were burned.

Discussion

Large quantities of daub have shown evidence for wattle-and-daub and lath-and-daub panel filling in timber-framed constructions that suggests a settlement. The pottery, although scant, when interpreted with the radiocarbon dating suggests the Saxon settlement existed around the 7th century AD. The most significant features of this period are the corn drier and the

hearth, and these have been shown to indicate the preparation of grain for milling, further suggesting the proximity of a watermill.

If the site is a settlement, then the pottery does not appear to have been influenced by the major trading settlement at *Lundenwic*. However analysis of plant remains recovered from *Lundenwic* suggests that 'cleaned or semi-cleaned' wheat and barley grain was imported from the surrounding countryside (Davis & de Moulins 1988; de Moulins & Davis 1989). Although a direct trade link with *Lundenwic* cannot be proved, the existence of the corn drier at Feltham does suggest that the settlement may have been trading agricultural produce to this developing settlement.

Archaeological evidence for rural settlement in the early to mid-Saxon period in the London region is scarce, despite the high occurrence of placenames of Saxon origin. Charters dating from the 7th century onwards often refer to estates, possibly surviving from earlier Roman ones (Gelling 1979), or reusing Roman boundaries. Whether this site is part of such an estate is unclear. The recovery of Roman roof tiles from the flue of the hearth on this site and the evidence for a substantial late Roman building in the vicinity of Cranford Lane, 5km to the north-west (see Thompson *et al* 1998, 79), suggest the potential for future discoveries of Roman settlement in the vicinity of the River Crane. It remains to be seen whether this link can be made, but further research would benefit from analysis of Ralph Treswell's map of Sion (dated 1607) which shows a feature marked as 'castell', distinct from Hounslow Camp, located near to the site (Cotton 1990, 7). The definition of such an archaeological site may suggest a continuity of landuse that has been over-shadowed by the perceived remoteness of the heath in the medieval and post-medieval periods.

ACKNOWLEDGEMENTS

The MoLAS would like to thank MDA Group UK, who undertook this project on behalf of British Land Developments Ltd, for their financial support of the fieldwork, and also for funding the post-excavation analysis and the cost of publication. Particular thanks are due to Chris Wall and Mark Firth from MDA Group UK for their overall help and consideration and also to Nigel Webb of British Land Developments Ltd for his help during

the project. Thanks are also due to Simon Ganley and Tom Wenham from Birse for their assistance during the on-site phases of the programme of works, and the London Borough of Hounslow. Thanks are also extended to Robert Whytehead of the Greater London Archaeological Advisory Service. The support of the MoLAS Project Managers, David Lakin, Julian Ayre, Al Steele, Al Green and Mark Roberts, has ensured that this project has reached publication. The members of the MoLAS field team who worked on the site were Meredith Collins, Jago Cooper, Robert Cowie, Carl Crozier, Philip Frickers, Charlotte Grindley, Richard Hewett, Stewart Hoad, Mark Landymore, Maureen Pearson, Timothy Stevens, Tiziana Vitali, Mark Wiggins, Rebecca Wilcox, and Tristan Wood-Davies. MoLSS staff whose work is drawn upon in this article are Louise Rayner (prehistoric pottery), Lyn Blackmore (Saxon pottery), Lisa Gray (plant remains), Pippa Bradley (worked flint), Terence Smith (building material), and Jane Liddle (animal bone). The survey of the site was undertaken by Duncan Lees and Kate Pollard. The author would like to express his gratitude to Vanessa Bunton, Peter Hart-Allison and Sophie Lamb of the MoLAS Drawing Office for the graphics in this paper, as well as for the editorial comments from Gordon Malcolm and Tracy Wellman. Thanks are also due to Jon Cotton, of the Museum of London, and Robert Cowie of MoLAS for their advice.

The site archive, which contains detailed site records and analysis, is lodged with the Museum of London. For those wishing to conduct further research on this site, the archive may be consulted by prior arrangement with the Archive Manager at the London Archaeological Archive and Research Centre (LAARC) at Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED.

BIBLIOGRAPHY

- BARCLAY (1995), A Barclay 'The later prehistoric pottery' in A Barclay, A Boyle, P Bradley & M R Roberts 'Excavations at the former Jewsons Yard, Harefield Road, Uxbridge, Middlesex' *Trans London Middlesex Archaeol Soc* 46, 9–13
- BARRETT (1980), J C Barrett 'The pottery of the later Bronze Age in lowland England' *Proc Prehist Soc* 46, 297–319
- BGS (1998), British Geological Survey *Sheet 270 South London; 1:50,000*
- BLACKMORE (1986), L Blackmore 'Des Res. (close City and Thames): Early and Middle Saxon buildings in the Greater London area' *London Archaeologist* 5 (8), 207–16

- BLACKMORE (1993), L Blackmore 'La céramique du Vème au Xème siècles à Londres et dans la région londonienne' in G. Bliet (ed) *Travaux du Groupe de Recherches et d'Etudes sur la Céramique dans le Nord – Pas-de-Calais; Actes du Colloque d'Outreau 1992 Nord-Ouest Archéologie Hors-serie*, 129–50
- BRADLEY (1995), P Bradley 'The worked flint' in A Barclay, A Boyle, P Bradley & M R Roberts 'Excavations at the former Jewsons Yard, Harefield Road, Uxbridge, Middlesex' *Trans London Middlesex Archaeol Soc* 46, 13–18
- CANHAM (1978a), R Canham 'Excavations at London (Heathrow) Airport 1969' *Trans London Middlesex Archaeol Soc* 29, 1–44
- CANHAM (1978b), R Canham *2000 Years of Brentford*
- COTTON *et al* (1986), J Cotton, J Mills & G Clegg *Archaeology in West Middlesex*
- COTTON (1990), J Cotton 'St John's Camp alias Fern Hill: a forgotten West Middlesex earthwork' *Trans London Middlesex Archaeol Soc* 41, 1–8
- COTTON & WOOD (1996), J Cotton & B Wood 'Recent prehistoric finds from the Thames foreshore and beyond in Greater London' *Trans London Middlesex Archaeol Soc* 47, 1–34
- CUNLIFFE (1991), B W Cunliffe *Iron Age Communities in Britain*
- DAVIS & DE MOULINS (1988), A Davis & D de Moulins 'The plant remains' in R Cowie & R L Whytehead 'Two Middle Saxon occupation sites: excavations at Jubilee Hall and Maiden Lane' *Trans London Middlesex Archaeol Soc* 39, 139–47
- DE MOULINS & DAVIS (1989), D de Moulins & A Davis 'The plant remains' in R L Whytehead & R Cowie 'Excavations at the Peabody site, Chandos Place, and the National Gallery' *Trans London Middlesex Archaeol Soc* 40, 110–12
- GELLING (1979), M Gelling *Early Charters of the Thames Valley*
- GOFFIN (1988), R Goffin 'The Saxon daub' in R Cowie & R L Whytehead 'Two Middle Saxon occupation sites: excavations at Jubilee Hall and Maiden Lane' *Trans London Middlesex Archaeol Soc* 39, 114–19
- GOFFIN (1989), R Goffin 'The daub' in R L Whytehead & R Cowie 'Excavations at the Peabody site, Chandos Place, and the National Gallery' *Trans London Middlesex Archaeol Soc* 40, 110–12
- HANF (1982), M Hanf *The Arable Weeds of Europe*
- HOWELL (1999), I J Howell *East Marshalling Yards, Godfrey Way, Feltham: An Archaeological Evaluation* unpub MoLAS Rep
- HURST (1961), J G Hurst 'The kitchen area of Northolt Manor, Middlesex' *Medieval Archaeol* 5, 211–99
- LAIDLAW & MEPHAM (1996), M Laidlaw & L Mepham 'The pottery' in P Andrews & A Crockett *Three Excavations along the Thames and its Tributaries, 1994 Wessex Archaeology Rep* 10, 26–38
- LAIDLAW & MEPHAM (1999), M Laidlaw & L Mepham, 'Pottery' in D E Farwell, P Andrews & R Brook *Prehistoric, Roman and Early Saxon Settlement at Prospect Park, London Borough of Hillingdon. The Archaeology and Geology of a Site in the Lower Colne Valley: Evaluation, Excavation and Watching Brief 1995–6* Wessex Archaeology for British Airways, 35–43
- LIDDLE (2000), J Liddle 'The animal bones' in I J Howell *Assessment and Updated Research Design for GFY99 Feltham Marshalling Yards* unpub MoLAS Rep
- LONGLEY (1991), D Longley *Runnymede Bridge 1976: Excavations on the Site of a Late Bronze Age Settlement* Surrey Archaeol Soc Res vol 6
- O'CONNELL (1986), M O'CONNELL *Petters Sports Field, Egham: Excavations of a Late Bronze Age / Early Iron Age Site* Surrey Archaeol Soc Res vol 10
- O'CONNELL (1990), M O'Connell 'Excavations during 1979–1985 of a multi-period site at Stanwell, Surrey' *Surrey Archaeol Coll* 80, 1–62
- STUIVER *et al* (1998), M Stuiver, P J Reimer, E Bard, J W Beck, G S Burr, K A Hughen, B Kromer, F G McCormac, J van der Plicht & M Spurk 'INTCAL Radiocarbon Age Calibration' *Radiocarbon* 40 (3), 1041–83
- THOMPSON *et al* (1998), A Thompson, A Westman & T Dyson (eds) *Archaeology in Greater London 1965–90: A Guide to Records of Excavations by the Museum of London* Archaeol Gazetteer ser vol 2
- TIMBY (1996), J Timby 'The pottery' in C Bell 'An archaeological excavation of land adjacent to Snowy Fielder Way, Isleworth, London Borough of Hounslow, Middlesex' *Trans London Middlesex Archaeol Soc* 47, 42–50
- WHEELER (1935), R E M Wheeler *London and the Saxons* London Museum Catalogues 6
- WILLIAMS (1993), D F Williams 'Notes on the petrology' in W F Grimes & J Close-Brooks 'The excavation of Caesar's Camp, Heathrow, Harmondsworth, Middlesex, 1944' *Proc Prehist Soc* 59, 352

AN EXCAVATION AT 5–27 LONG LANE, LONDON BOROUGH OF SOUTHWARK, LONDON SE 1

Alistair Douglas

With contributions from Philip Armitage (animal bones), Nick Branch (pollen-stratigraphic analysis), John Brown (building materials), Joanna Bird (decorated samian), Barry Bishop (lithics), Wendy Carruthers (plant remains), Damian Goodburn (timber technology), Malcolm Lyne (Roman pottery), Ellen Swift (registered finds), and Lisa Yeomans (analysis of the horn cores)

SUMMARY

Excavations at 5–27 Long Lane, London Borough of Southwark unearthed archaeological remains dated to the Bronze Age, Roman, medieval, and post-medieval periods. In prehistory and during the Roman period the site lay on the southern edge of a low-lying sand island, part of a series of eyots that formed the south bank of the Thames. These eyots have in recent years been increasingly recognised as preferred locations for prehistoric activity. A timber platform that may have acted as a landing-stage attests to the importance of access to the island for the local population in the Bronze Age. Environmental samples of the surrounding peat have provided detailed information on the local vegetational history of the site from the Early Bronze Age to the Late Iron Age.

At the time of the Claudian invasion the area of the site seems to have been an inter-tidal marsh. A timber structure, perhaps a landing-stage, was found and dated to the mid-1st century AD. The subsequent fall in river levels meant that by the end of the century the timber structure was redundant and the land had been reclaimed for urban development. A sequence of clay-and-timber buildings spanned the period from the beginning of the 2nd century until the middle of the 3rd century AD. Together with the pottery and animal bone recovered from associated deposits these finds provided a wealth of information on the everyday lifestyle of some of Roman Southwark's ordinary citizens.

After the Roman abandonment of the site 'dark earth' up to 1m thick formed. The site was not developed again until the post-medieval era when, in the 17th century, pressure for housing once again meant that the site was built upon.

INTRODUCTION

Archaeological investigations, in advance of new building, were undertaken by Pre-Construct Archaeology Ltd at 5–27 Long Lane, London Borough of Southwark, SE 1, between November 1999 and January 2000. The archaeological works were at the behest of CgMs on behalf of Metropolis Developments who generously funded the excavation and post-excavation work.

The site (TQ 3260 7978) is located near the junction of Tabard Street and Borough High Street, bounded in the east and west by commercial properties, to the north by St George's Gardens, and to the south by Long Lane. Rectangular in plan, the site covers an area of approximately 800m² (Figs 1, 2).

GEOLOGICAL BACKGROUND AND TOPOGRAPHIC SETTING

The site lies within Greater London, on the south bank of the River Thames, approximately 700m south of the present London Bridge. The drift geology of north Southwark is formed by the Pleistocene gravels and in places by alluvial sand or clay.

At the time of the Roman Conquest in AD 43 a broad 'main channel' existed between the north bank of the Thames, some 100m to the north of the modern waterfront, and a south bank lying close to the present day riverfront

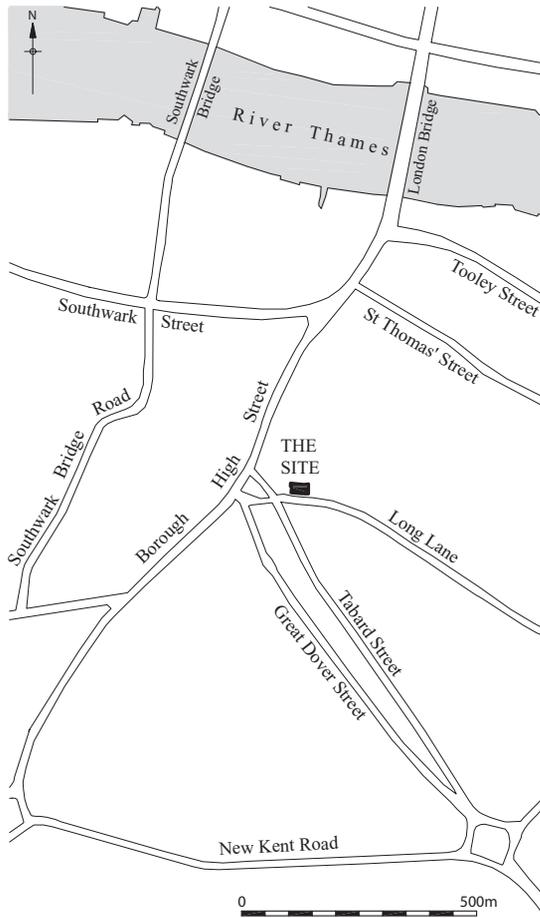


Fig 1. Site location

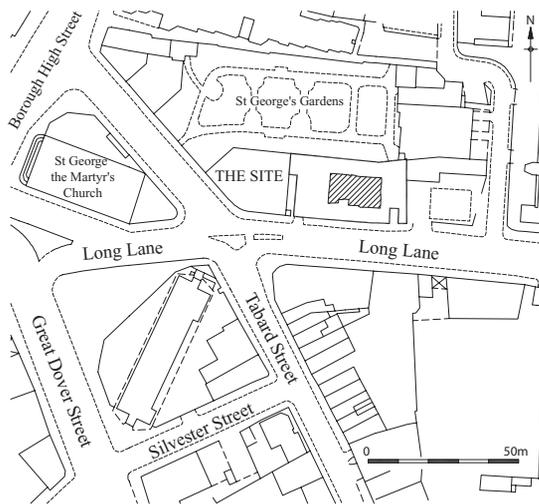


Fig 2. Site location (detail)

of north Southwark. South of the main channel was a series of small sandy islands, or eyots of land, surrounded by tidal mud flats or marsh and intersected by water channels (Fig 3). The tops of the eyots are generally no higher than +1.8m OD (Heard *et al* 1990, 609). The Roman settlement at Southwark was subsequently to develop on two of the larger sand islands. The subject site is located on the southern edge of the southern sand island, close to the line of the Roman road (Road 1) north from the junction of Stane Street and Watling Street to the bridgehead. To the south, the site was separated by further watercourses from the floodplain gravels, which formed a land surface at *c.*+1.7m OD, some 1,000m south of the modern river bank (Sheldon 1978, 19).

The drift geology exposed within the excavation area appeared to demonstrate a low-lying

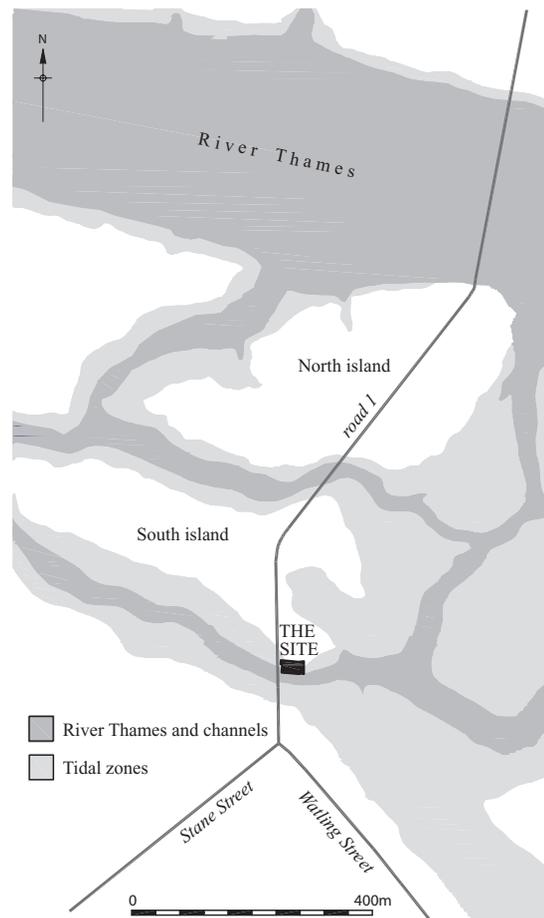


Fig 3. The site in relation to Southwark's north and south islands, Road 1, Watling Street and Stane Street

sand island with a water channel immediately to the south. The highest levels recorded on natural drift deposits on the site were in the north-east part of the excavation, on orange silty clayey sand, at +0.38m OD. Where encountered further south, alluvial sands were recorded sloping from north to south from +0.23m OD to -0.02m OD over a distance of c.5m, representing the slope of the bank to a water channel to the south. Natural river gravels were encountered at -0.29m OD.

THE ARCHAEOLOGICAL EVIDENCE

Period I: Bronze Age

The earliest evidence for human activity on the site comprised a compacted stony surface at +0.13m OD, which appeared to be a deliberate attempt to consolidate the bank of the water channel. A deposit of waterlogged wood overlay the stones. The wood, comprising willow/poplar and alder, may have formed a crude platform (Figs 4, 5). Much of this wood showed no signs of having been worked but, from a small sample,

six worked items were recognised; three of these had small axe-cut stake tips, around 50mm in diameter, two of which had ‘pencil points’ of several narrow (<40mm wide) concave facets cut from roundwood, whilst the third had an abraded wedge point and was made from a radially cleft section. A fourth had an oblique axe cut with a slightly concave facet and an end diameter of 25mm. A small section of decayed pole with a roughly rectangular cross-section and an abraded, radially cleft timber were also part of the assemblage. The cuts to these wooden items were at a shallow angle, moderately smooth but narrow and concave, and on this evidence a Bronze Age date for the platform is considered to be likely (Goodburn 2000; 2003, 101).

Directly below the timber platform one struck flint, a quantity of burnt flint, and a complete adult cattle metacarpus were recovered. The worked flint, although not diagnostic, had been struck from an earlier struck item, which is a phenomenon often noted from Middle to Later Bronze Age assemblages (Young & Humphrey 1999). The animal bone represents an individual of small stature (withers height estimated at



Fig 4. Crude timber platform on the bank of a channel, looking west, scale 2m (the upright post piles later forming part of Period III Phase 1 Roman timber platform)



Fig 5. Extent of the Bronze Age timber platform and ditch as revealed in excavation

0.98m). Such diminutive cattle are comparable in stature to Celtic shorthorn, which first made their appearance in Britain by the Late Bronze Age, although the breed is more characteristic of the British Iron Age (Grigson 1982, 48).

The platform may have assisted fowling and fishing or may have formed part of a landing-stage. The possibility that the eyot may have been inhabited was also suggested by a north-south boundary ditch, 0.68m deep, although only a short length of the feature was investigated.

Alluvially deposited sands and silts 0.23m thick sealed the wooden platform and ditch. These produced two struck flints and some burnt flint and were probably laid down when rising water levels inundated the sand island. One of the flakes was possibly a *tranchet* axe primary-sharpening flake of Late Mesolithic date, or core rejuvenation flake, most consistent with a Neolithic or earlier date and residually deposited. This process has also been observed at Butlers Wharf in north Southwark, where residual flintwork of a Mesolithic tradition was recovered from alluvial deposits containing Bronze Age material (Ridgeway & Meddens 2001). Both pieces had only slight evidence of abrasion suggesting that they had not travelled very far.

Period II: Middle/Late Bronze Age to Late Iron Age

The period of rising water levels or sporadic inundation, which resulted in the deposition of alluvial silts and sands, was followed by a prolonged period of peat formation. The top of the peat in the east of the excavation area was at +0.75m OD, sloping down to the south-west to *c.*+0.45m OD over a distance of 13m. The thickness of the peat mirrored the underlying topography and was thickest where it neared the earlier palaeochannel in the south-west corner of the excavation area, at 0.63m thick, whilst to the east it varied between 0.18m and 0.10m thick. At Hunt's House *c.*300m to the north-west a contemporary marsh surface was recorded at a similar level, at +0.55m OD (Taylor-Wilson 1998).

Column samples were taken through the peat sequence, extending into the underlying sand and gravel deposits (see Fig 5). Radiocarbon dating of these samples indicated a Middle to Late Bronze Age date for the base of the peat sequence, and a Late Iron Age date for the top.¹ Pollen-stratigraphic analysis of the column samples identified two local pollen assemblage zones.

Local Pollen Assemblage Zone 1: herbaceous pollen – willow

This zone occurred between –0.08m and +0.15m OD and was characterised by high percentage values of herbaceous pollen (50–70%). Grasses and sedges dominate the assemblage with a diverse range of other herbaceous pollen types present.² The tree and shrub pollen component is dominated by willow (*Salix* 20%), and includes alder (*Alnus* 18%), oak (*Quercus* 12%), and hazel (*Corylus* 5%). The aquatic pollen and spore assemblage includes reedmace (*Typha latifolia* 15%) and *Pteridium* (25%). Pollen grains of cereals are present throughout the zone.

This zone has been subdivided into three phases, each corresponding to a significant change in the local vegetation cover.

Phase 1: clearance

Following peat initiation, the local vegetation cover consisted of grass/sedge swamp (*Poaceae* and *Cyperaceae*) and open willow carr woodland with alder, oak and birch (*Betula*). The margins of the wetland area were probably colonised by reedmace. On nearby dryland, isolated trees of lime (*Tilia*) and possibly pine (*Pinus*) would have grown, with an understorey of hazel shrubs and, in more open areas, tall herbs and ferns such as meadowsweet (*Filipendula*) and bracken (*Pteridium*). The absence of evidence for dense woodland at the base of the sequence and the generally open character of the vegetation cover indicate possible deforestation of the local area prior to peat formation. The presence of cereal pollen may suggest that areas of woodland were being cleared for cultivation.

Phase 2: cultivation

The decline in arboreal pollen taxa (birch, oak, alder, lime and pine) between –0.08m OD and 0.0m OD corresponds to a phase of cereal cultivation at Long Lane. The diverse assemblage of herbaceous pollen taxa indicates a range of plant habitats, including disturbed ground, cultivated land, and grassland. The decline in woodland may also have led to localised erosion, increased surface water runoff, and changes in wetland hydrology resulting in the expansion of reedmace.

Phase 3: regeneration

Following this phase of cultivation, there is

pollen-stratigraphic evidence for shrubland and woodland regeneration that continues into Zone 2. Between 0.0m OD and +0.16m OD, light-loving trees and shrubs such as ash (*Fraxinus*), beech (*Fagus*), and hazel colonise the area, and there is a corresponding decline in the diversity of herbaceous plant taxa. In wetter areas, willow and alder expand as a response to reduced water levels and more stable conditions on the peat surface.

Local Pollen Assemblage Zone 2: alder – oak – ferns

This zone falls between +0.15m and +0.40m OD, is dominated by alder (30%), oak (21%) and ferns (*Filicopsida* 35%), and includes grass/sedges (*Cyperaceae* 22% and *Poaceae* 21%). The aquatic assemblage is poorly represented (eg reedmace 5%).

During this zone, the vegetation cover at Long Lane was dominated by open mixed deciduous woodland. The open structure is suggested by the presence of ash and ivy (*Hedera*) and the high percentage values of herbaceous pollen taxa, including a range of grass/sedges and other plants commonly found within rough grassland. The presence of *Filicopsida* spores may indicate that ferns colonised a relatively dry peat surface, an interpretation supported by the presence of *Potentilla*-type pollen (*P. erecta* – tormentil) and low values of aquatic pollen types. It is therefore highly likely that alder, oak and birch colonised the stable peat surface. On dryland, the woodland cover would have consisted of isolated trees of beech, maple (*Acer*), and possibly pine with juniper (*Juniperus*).

Discussion of Bronze and Iron Age Periods I and II

Between approximately 1490 and 1120 cal BC there is unequivocal evidence for a sustained period of cultivation that resulted in non-arboreal pollen values exceeding 70% of the total land pollen record. These values are in excess of those noted elsewhere (Tinsley 1981; Branch & Lowe 1994), and suggest widespread deforestation. According to Aaby (1994), in a study of the relationship between modern pollen rain and vegetation cover, values of non-arboreal pollen exceeding 70% indicate farmland and meadowland. This period of cultivation clearly post-dates the main lime (*Tilia*) decline recorded at several sites in the Thames Valley (eg

Bramcote Green, c.2150–1750 cal BC; Thomas *et al* 1996) and suggests, therefore, that prior to peat initiation at Long Lane the landscape in the general vicinity of the site may already have been open in character and subject to a period of prolonged human activity.

Evidence for more extensive woodland clearance in lowland areas during the Late Bronze Age has been inferred from the ratio of arboreal (tree) to herb pollen, with records of herb pollen exceeding 14% equated with widespread deforestation rather than isolated clearance episodes (Tinsley 1981). By comparison with other data from the area (Sidell *et al* 2002; Allen *et al* 2005), there is a perhaps surprisingly strong anthropogenic signal from the Long Lane site. In South-East England, pollen and molluscan evidence indicates that from 1550 BC woodland clearance was extensive on the South Downs, for both pastoralism and cereal cultivation. In the lower Thames Valley, at Bermondsey, Rainham and Barking, the pollen-stratigraphic evidence for woodland clearance from the Middle Bronze Age is overwhelming (Meddens 1996), and indicates widespread agricultural activity associated with the exploitation of marshland, perhaps for pasture, and cereal cultivation on nearby dryland.

It is apparent from the Long Lane pollen diagram (Fig 6) that although the former vegetation cover was fully restored by approximately AD 50, the woodland cover simply returned to its already depleted state prior to 1490 BC. These conditions were highly suitable, however, for the widespread colonisation of beech woodland, perhaps taking advantage of open vegetation structure. This record is supported by pollen evidence from Hampstead Heath, Tilbury and Runnymede, suggesting widespread colonisation of beech woodland in the Thames Valley during the Late Holocene (Greig 1992).

The plant remains from the top of the peat indicate that the site was wet, marshy, and probably mineral-rich or polluted. Spike-rush (*Eleocharis* subg. *Palustres*), floating sweet-grass (*Glyceria fluitans*), water crowfoot (*Ranunculus* subg. *Batrachium*), and stonewort algae (Characeae) can all inhabit shallow, slow-flowing to standing water or marshy land. Celery-leaved crowfoot (*Ranunculus sceleratus*) achenes (seeds) were frequent, and this species is commonly found in shallow murky water or seasonally exposed mud (Haslam *et al* 1975).

Remains from drier, grassy habitats were also frequent, however, indicating that the higher

land in the area supported rough grassland or scrub vegetation, again with some nutrient enrichment. Rough chervil (*Chaerophyllum temulum*), for example, is typical of hedgerow communities, where the soil is dry and nutrient-enriched (Ellenberg 1988). Seeds of this taxon were particularly frequent in the peat deposit. Other hedgerow or scrub species represented were bramble and elder, which were possibly growing nearby and brought in by birds.

The evidence would seem to suggest that by the end of the period of peat formation a boggy but stable surface had formed on the edge of a sand eyot. The peat was not permanently waterlogged but perhaps intermittently inundated, although it was not possible to state whether this was due to the tidal rise and fall of the River Thames.

The site thus appears to be located close to the southern edge of a low-lying sand island, with a channel that would have divided the eyot from the higher and drier ground to the south. Recent excavations at 32 Long Lane (Stabler 2000) and at 34–70 Long Lane (AOC 2001) suggest that the underlying topography represents a channel which, at this point, roughly followed the line of present day Long Lane.

Although there was no direct evidence for prehistoric cultivation at Long Lane, the boundary ditch suggests that the eyot was managed and perhaps used for agriculture. That access from or to the channel was important was evidenced by the consolidation of its north bank, initially by the dumping of gravel pebbles and subsequently by the construction of a matted timber platform. Furthermore, the radiocarbon-dated pollen-stratigraphic record indicates that prior to approximately 1490 BC peat formation commenced during a phase of woodland clearance and cereal cultivation.

The Ordnance Datum levels on this sand island are consistent with those recorded elsewhere in north Southwark, where palaeosols have been encountered at between 0.20m and 0.60m OD; for example at Phoenix Wharf (Bowsher 1991), Hopton Street (Ridgeway 1997), Lafone Street (Bates & Minkin 1999), Wolseley Street (Drummond-Murray *et al* 1994), and Hunt's House (Taylor-Wilson 1998). Ard marks cut into natural sand at Phoenix Wharf, Hopton Street and Lafone Street, and a fragment of a wooden ard share discovered at Three Oak Lane (Proctor & Bishop 2002, 1–27) suggest cultivation during the Bronze Age. The evidence to date thus suggests intermittent, perhaps seasonal,

activity by hunter-gatherers, followed by more permanent occupation of the sand islands by farmers and pastoralists in the Bronze Age.

Period III: Roman

Londinium was founded *c.*AD 50 on the north bank of the Thames, at the furthest point down stream that a fixed bridge could span the river. The main approach road to the southern bridgehead (known in archaeological literature as Road 1) generally follows the line of Borough High Street and divides to the south of (the later) St George's Church, forming an eastern route (Watling Street to Kent) and a western route (Stane Street to Sussex) (see Fig 3). The Roman settlement in Southwark probably originated in the area of the bridgehead (close to the present-day crossing at London Bridge) and subsequently developed along the approach roads (Sheldon 1978, 30–6). At its height, in the late 1st/early 2nd century, the settlement may have fronted the Thames for about 500m and extended to the south some 800m to where the roads to the Kent and Sussex coasts diverged (Heard *et al* 1990, 611). The area to the east and west of the settlement would have been mud flats, whilst higher ground to the south was probably farmed.

The status of *Londinium* in the early Roman period is uncertain but after the Boudiccan Revolt the city was upgraded to a provincial capital (Hassall 2000, 53). Although the precise status of Roman Southwark remains uncertain, the suburb can perhaps best be viewed as an integral part of *Londinium* (Milne 1995, 69).

The Roman activity identified during excavations at Long Lane has been subdivided into seven phases.

Period III Phase 1: timber platform AD 50–80

Located in the central area of the excavation and driven into the peat were 49 *in-situ*, vertically-set oak timbers. Arranged commonly in pairs, occasionally singularly, and in one instance in a group of three, the remains of this structure consisted of numerous truncated pile tips, some more complete piles, and a range of smaller stake tips. The timbers appear to have formed a rectangular structure 9.0m E–W and 5.5m N–S, though it may have extended further to the north, and regular alignments of posts were observed (Fig 7). The tops of the posts typically survived to levels of between +0.60m and +0.70m OD, but there was no indication of the original height of this structure. The recovery of driftwood lying on top of the peat and amongst the timbers

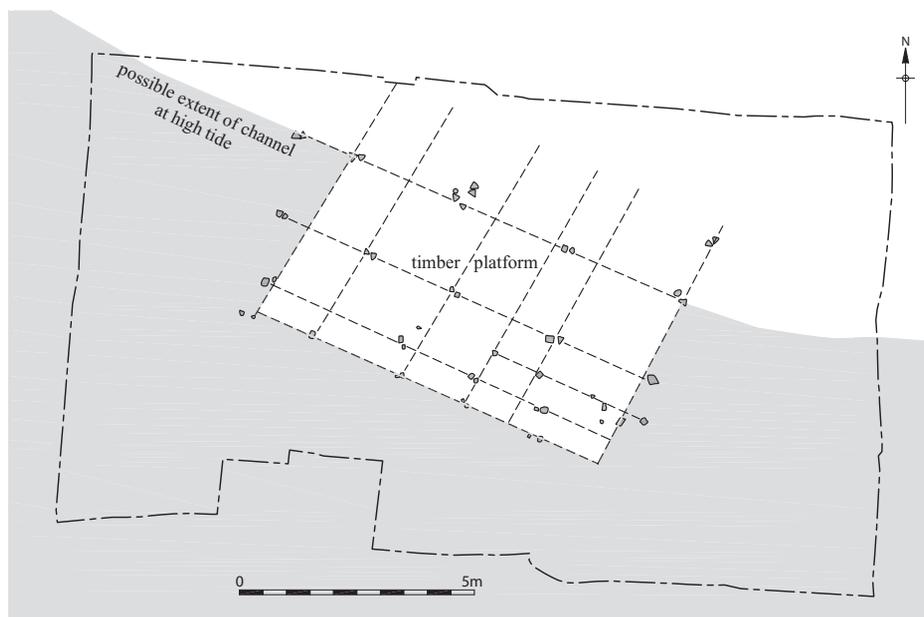


Fig 7. Period III Phase 1, timber platform, showing alignments of timber piles

suggests that the contemporary water level (at least at high tide) may have inundated the peat, and the structure would have been constructed above the water level.

The timbers can be divided into four groups on the basis of how they were made and their size. The largest group (28) were radially cleft with roughly square-section, axe-hewn tips, which on average measured 510mm x 135mm x 110mm. Eleven were smaller stake tips, mainly hewn to roughly square sections from small poles. One pile (440mm x 150mm x 120mm) was hewn, boxed halved, from a split log. The remainder were hewn boxed heartwood from whole logs, which on average measured 465mm x 125mm x 95mm.

A scatter of pottery on the surface of the peat marsh was probably associated with the timber structure and suggests a date of *c.*AD 50–80 for the construction and primary use of the structure; a date supported by dendrochronological dating of the timbers, which suggested a felling date around the mid-1st century AD.³ This would suggest that the structure was built at the beginning of the Roman period, contemporary with the founding of *Londinium* and the laying out of approach roads to the bridgehead around AD 50.

Discussion

The piled timber structure at Long Lane appears to represent a platform constructed on stilts above the marshy margins of a channel, in an area subject to periodic inundation (the main channel was not observed and was presumably further south beyond the limits of the site). The channel may have been navigable at least to shallow-draught vessels and the structure may have been used as a landing-stage or quay. That the back channels of north Southwark were used for river transport is attested by the unearthing of a river barge from Guy's Channel (Marsden 1980, 157) and landing-stages elsewhere in Southwark, notably at 51–53 Southwark Street (Killock 2005), Guy's Hospital (Taylor-Wilson 1998), and Borough High Street (Pickard 2002). An alternative explanation is that this represents the remains of a building raised above the surface of the marsh by means of piled foundations; conceivably such a substantial timber structure, built *c.*AD 50, could have been constructed by the Roman army.

Elements of the watercourse may have been

found during previous excavations at 201–211 Borough High Street *c.*100m to the north-west of the site. Here the north side of a large channel running NW–SE was identified. Road 1 was built on a timber corduroy foundation where it crossed the marsh edge. It was supposed that the road south at this point may have been approaching a bridge (Ferretti & Graham 1978).

Period III Phase 2: land reclamation AD 80–90

Dumped deposits covering the Phase 1 timber structure and peat effectively raised the ground level by a maximum of 0.33m to a height of +0.92m OD. The ceramic evidence suggests that the dumping probably took place in a single act over a brief space of time sometime between AD 80 and 90, and was presumably part of a planned process of land reclamation.

Discussion

The process of reclamation of at least part of the marsh is generally contemporary with the deliberate infilling of channels elsewhere in Roman Southwark. At 175–177 Borough High Street, about 500m south of London Bridge, deliberate infilling of water channels was dated to the late 1st and early 2nd centuries AD (Schaaf 1976). The maximum level of these deposits was *c.*+1.0m OD. The contemporary ground surface on reclaimed land was established at a similar level at other excavations in the area, such as 51–53 Southwark Street (Killock 2005) and the Wolfson Wing at Guy's Hospital (C Pickard pers comm).

Period III Phase 3: Building 1 AD 80/90–120/130

The first evidence for the construction of buildings was a clay-and-timber structure probably built soon after the reclamation of the marsh (Building 1). A brickearth slab at *c.*+1.0m OD, a beam slot, and hearths indicated part of a building that probably extended further east and north, beyond limits of excavation (Fig 8). This building measured at least 9.5m E–W and at least 9m N–S.

The brickearth slab, 0.15m thick, suggested a rectangular building aligned roughly E–W with a south-projecting east wing. A beam slot, 0.35m wide and 0.10m deep, was cut into the slab and divided the building into at least two rooms, a west room (Room 1) at least 2.5m by 4.5m

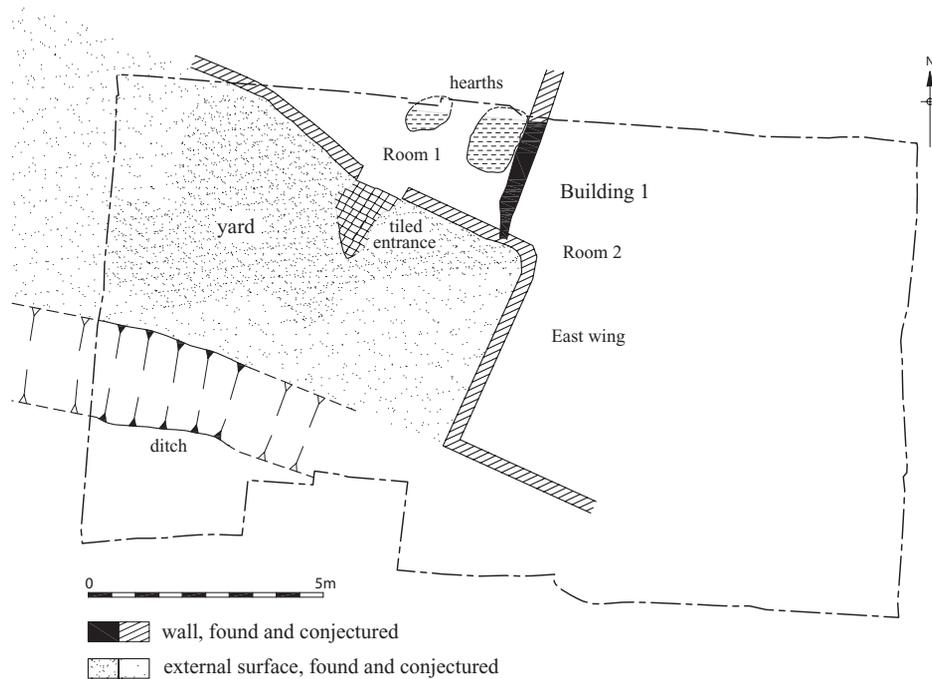


Fig 8. *Period III Phase 3, Building 1*

and an east room (Room 2) at least 4.0m wide. Room 1 was furnished with two hearths; one was evidenced by loose ashy silt, partially edged with stone and compacted brickearth, that measured 1.0m E–W, at least 1.10m N–S, and was 0.10m deep. Further west, a second hearth measured 0.75m E–W, at least 0.30m N–S, and 0.04m deep and was filled with dark grey/black sandy silt with lenses of ash, and fragments of burnt daub and charcoal. No internal features were identified in Room 2.

To the south of Building 1 was a gravel surface, 0.14m thick, which may represent the remnants of a yard, accessed from Road 1 to the west. The northern limits of this surface abutted the brickearth floor of the building and at its east end formed a right angle to the beam slot, extending 3m to the south. Here the margins of the gravel surface probably delineate the internal and external interface of the building. Broken roof tiles laid flat formed a 1m-wide entrance from the yard into the building. Overlying the tile entrance was a trample layer of dark grey/black silty sand and the dating of the pottery recovered from the entrance suggests that the building was occupied during the late 1st into the early 2nd century. This trample layer also

produced an assemblage of glass, consisting of ten vessel sherds, one jug neck sherd, two jug or jar handle sherds, and five body sherds from one large ribbed or pillar-moulded bowl (body diameter 280mm). The ribbed bowl is usually dated to between AD 43 and the end of the 1st century, but some continued in use until the early 2nd century (Price & Cottam 1998, 44).

Further to the south a ditch, up to 2.0m wide and 0.32m deep, aligned parallel to the southern wall of the building, drained to the south and east, perhaps into a channel that may have still existed to the south of the site. The ditch probably functioned as a drain for waste water and surface water runoff.

Discussion

At Long Lane a brickearth slab, 0.15m thick, was laid down prior to building — a form of preparation for clay-and-timber buildings commonly recognised in *Londinium* (Perring *et al* 1991, 69). A beam slot probably represented a shallow construction trench, into which was laid a timber base-plate. Although there was no evidence of timbers within the slot, it probably held a ground beam, which had either rotted

away or been removed in antiquity, into which mortises would have been cut to support timber uprights, or studs, around which a framework of wattles was woven and subsequently packed with brickearth (Milne 1992, 78). In contrast, the external walls of Building 1 presumably rested on beams at ground level — a technique used elsewhere in London and one for which differential surfacing may be the only indication of a wall's position (SLAEC 1978, 31).

At least one of the rooms in Building 1 was furnished with hearths of a simple fire-pit type, presumably for cooking and heating, suggesting that the room functioned as a kitchen. Such basic hearths are extensively recorded elsewhere in *Londinium* and may reflect the poorer quality of buildings, as portable braziers were probably used in more sophisticated houses (Perring *et al* 1991, 97). The beaten earth floor may also indicate the low-status or utilitarian function of the building. The narrow entrance to Building 1 suggests a single-leaved door (the absence of metal fittings, *ie* hinges, is commonly taken as an indication that doors were hinged with wood or leather). Curtains may have been used in internal doorways.

Ceramic building material, recovered residually from levelling dumps, may not be an indication of the roofing system employed in the building and the suggested form of the walls of Building 1 hardly seems strong enough to support a tiled roof. Thatch or wood may have been the preferred roofing material, as in the City, at No. 1 Poultry, where 1st-century clay-and-timber buildings were sometimes thatched but most were roofed with overlapping boards or wooden shingles (Rowson 2000, 34).

The east wing of Building 1 seems to have partly enclosed a gravel yard surface, possibly suggesting that access to the yard did not extend any further east than the building, to which it provided access from Road 1.

Such 'strip-buildings', comprising single-storey timber or brickearth structures, with modest sized rectangular rooms set one behind the other, are commonly found in early Romano-British towns, including late 1st-century *Londinium* and north Southwark. They were often laid out within adjacent long, narrow property plots (Milne 1992, 74) and buildings were generally 4–5m wide and up to 20–30m long. They are often interpreted as shops or workshops fronting onto the street with cheap rented accommodation to the rear. Evidence from *Londinium* indicates that many

clay-and-timber buildings may have lasted only 5–10 years, although some could last at least 30 years; this is supported by ceramic evidence from Long Lane, which suggests a life span of between 10 and 30 years

Excavations at Leadenhall showed that access to rooms was not through the building but via narrow alleyways, which ran from the principal thoroughfare along the side of the building to the backyard (Milne 1995, 52). At Long Lane doorways on the side walls opening onto narrow alleys which ran between the buildings may be significant; Milne (1992, 77) suggests that such buildings were not occupied by a single family requiring access to all rooms, but that each room or block of two rooms may have formed independent residential units.

Period III Phase 4: Buildings 2 and 3 AD 120/130–140/150

Following the demolition or collapse and subsequent levelling of Building 1, two new clay-and-timber buildings (Buildings 2 and 3) were constructed (Fig 9). The yard area was moved to the south covering the earlier ditch, and an alley extended to the east along the length of the excavation area

Building 2 lay largely beyond the limit of excavation; only the south-east corner of the building was observed. It measured at least 2.5m N–S and 1.0m E–W with mud walls surviving to a maximum height of 0.10m. The beaten earth floor of the building was recorded at +1.03m OD.

Building 3 extended further to the east than Building 1, beyond the limits of excavation, and was defined by levelling layers, floor make-up deposits, and the remnants of a beaten earth and mortar floor. Aligned E–W, the building was at least 14m long and 7.0m wide and comprised at least three rooms and a service corridor. Within the building, floor make-up layers reflected the line of an internal N–S wall line. Two stone post pads on which timber uprights may have rested are all that actually remained of this wall, which divided the building into two parts. The western part, Room 1, measured 9.5m E–W by at least 6.0m N–S, with a beaten earth floor at +1.0m OD. An area of scorched brickearth, measuring 1.20m E–W by 1.0m N–S, defined the location of a hearth. The eastern part of the building was sub-divided by brickearth walls. An internal N–S wall, 0.30m wide and surviving to a height

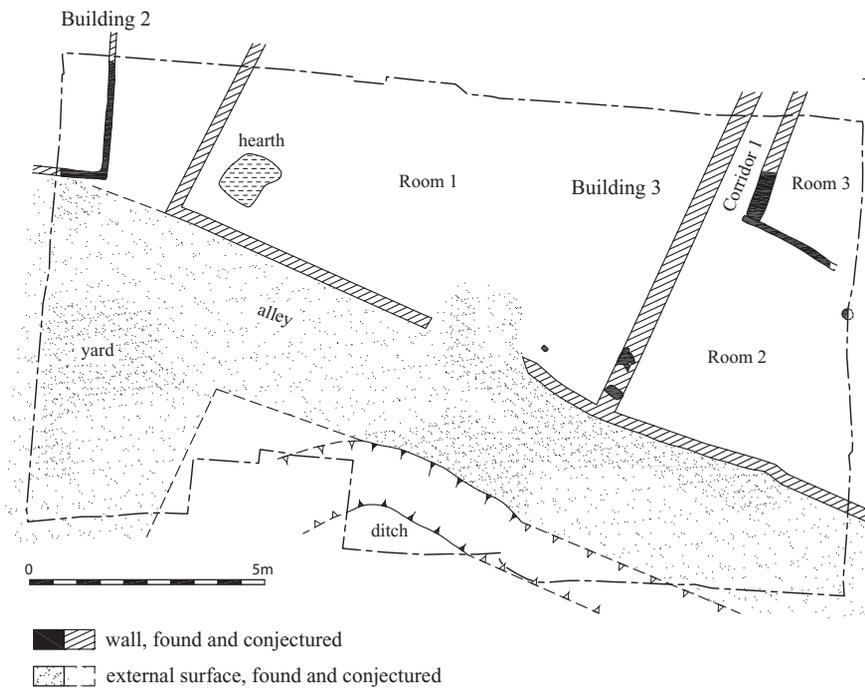


Fig 9. Period III Phase 4, Buildings 2 and 3

of 0.23m, abutted a similar, but thinner, E–W wall, 0.16m wide and 0.18m high. Painted wall plaster had survived on both faces of the E–W wall forming the southern limit of Room 3. Rooms 2 and 3 were apparently connected by a narrow 1m-wide service corridor (Corridor 1), suggested by a gap between the N–S wall and a projection of the wall alignment indicated by the post pads. Both rooms had mortar floors at *c.*+1.15m OD.

A 2.5m-wide side-alley, to the south of Building 3, extended eastwards from a wider yard area, which presumably served both buildings, while the alley itself may have provided access to more rooms or further buildings to the east. The gravel surface spread northwards into an entrance to Building 3, via Room 1. Incorporated into the metallated surface was a large quantity of burnt limestone, probably originally burnt to make lime for plaster or mortar. On the south side of the alley was a shallow drainage ditch, 1.40m wide and 0.20m deep, which had been deliberately infilled with domestic refuse. Ceramic evidence suggests that the ditch had been completely backfilled by the middle of the 2nd century AD.

Discussion

This phase represents a period when Building 1 may have been deliberately dismantled and two new clay-and-timber buildings constructed. Only a small area of the south-east corner of Building 2 was revealed and little, other than noting its presence, can be said about this structure.

More extensive remains of Building 3 were revealed, though still not a complete plan. The building incorporated a range of construction techniques—a phenomenon that has been noted before (Milne 1992, 72). Timber posts indicated by pads of stone, noted elsewhere in early Roman structures (Perring *et al* 1991), suggest that posts were incorporated into the wall structure. Other walls may have been constructed by pouring wet brickearth between timber shuttering, compacting it, and then allowing it to dry. The walls would then be prepared for painting by the application of a coarse white lime mortar with flinty inclusions and small pebbles, covered by finer mortar lacking the inclusions, and finally, a fine white lime mortar provided the surface for painting. The wall plaster showed traces of

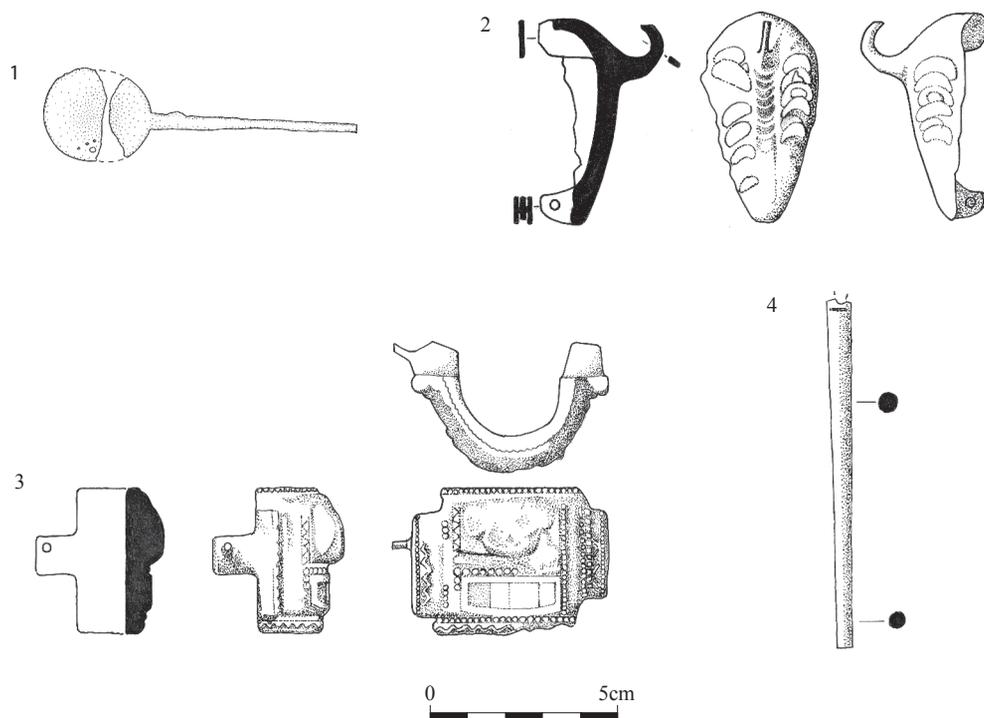


Fig 10. Small finds: 1, copper-alloy spoon; 2, plate brooch; 3, bow brooch; 4, bone needle

pink, which may have represented the lower zone of one dado.

The use of mortar flooring and painted plaster denoted the higher quality of rooms in Building 3 than in Building 1. These may represent 'reception' rooms, which usually lay towards the rear of the property. Room 1 probably functioned as a kitchen/utility area. Two coloured glass mosaic tesserae found in later contexts may also indicate high-status rooms belonging to this property, though these were clearly beyond the areas of investigation.

An indication of the domestic nature of the site was provided by a round-bowled copper-alloy spoon Type 1 (Crummy 1983), which dates stylistically to the second half of the 1st century or the 2nd century AD (Fig 10.1). Two brooches were also recovered: one a copper-alloy and enamel plate brooch, in the form of a sitting duck (Fig 10.2). The hollow body of the brooch was decorated with crescent-shaped enamel panels along each side, with the remaining enamel blue. Some of the enamel and the pin are missing. This type of brooch was probably made in the Rhineland and is usually dated

to the 2nd century AD (Allason-Jones & Milet 1984, 115). A fragment of an early Roman bow brooch dated to the 1st–2nd century AD was also recovered (Fig 10.3).

The extension of the buildings and the alley to the east, beyond the area of excavation, may suggest an eastward expansion of the settlement. The differing alignments of Buildings 2 and 3 are reflected in the curve of the ditch. It may be therefore that the alignment of Building 2 was influenced by Road 1, running c.50m to the west of the site and from where the buildings were probably accessed, whereas the alignments of Buildings 1 and 3 were clearly influenced by other factors, plausibly the channel to the south.

Period III Phase 5: rebuilding of Building 3 AD 140/160–220

New internal floor surfaces and postholes suggest that Building 3 was partly rebuilt, largely on the earlier ground plan, while Building 2 remained unaltered, at least within the area seen during excavation (Fig 11). To the east alterations

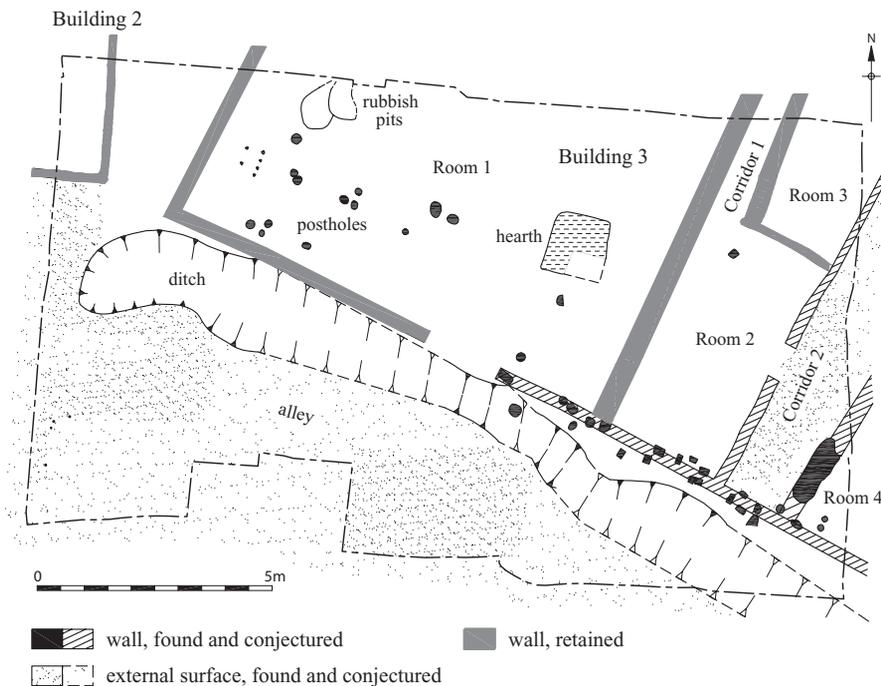


Fig 11. *Period III Phase 5, rebuilding of Building 3*

included a second N–S-running corridor (Corridor 2) reducing the size of Room 2, which could now be accessed from both corridors, and defining a new room (Room 4). The alley, now located further to the south with a new ditch adjacent to the building, was resurfaced.

A row of 24 postholes, varying between 0.10m and 0.32m across and 0.11 to 0.30m deep, filled with similar clayey sandy silt, represents the rebuilding of the southern external wall of the building. Internally, Room 1 was repaired with a new brickearth floor, 0.15m thick, being laid over the earlier hearth and floor surface at +1.14m OD. The eastern edge of this layer respected the postulated earlier internal N–S wall, suggesting that this was retained. A new hearth was constructed on the floor at the eastern end of the room, within a sub-square cut measuring 1.30m N–S, 1.20m E–W, and 0.15m deep. Other floors were also resurfaced: Room 3 with beaten earth to a level of +1.37m OD and Room 2 with sandy silty gravel, laid at +1.24m OD. The creation of Corridor 2 reduced the width of this room to only 2.6m.

At the western end of Room 1, two inter-cutting pits truncated the brickearth floor. The pits,

up to 0.31m deep, were filled with similar sandy silt deposits containing frequent occupational debris. They appeared to have been used for the disposal of domestic waste, but may have originally fulfilled a storage function, and later been used for rubbish disposal. Such a transfer of function may reflect a change in the function of the room towards the conclusion of its period of occupation or may simply indicate abandonment of the building.

Postholes and stakeholes cutting the floor surfaces may be part of internal structural elements of the building, perhaps to support the roof or to partition the space. There was also evidence for internal alterations to the eastern part of the building, where a firmly compacted gravel layer 0.25m thick was laid down. This was probably an internal floor surface, its very straight western edge reflecting the location of a wall. An irregularity in this wall line probably indicates the position of a doorway. It appears that the gravel represents a narrow utilitarian corridor (Corridor 2) running N–S, 1.30m wide and at least 4.10m long. A sequence of trample layers of sandy clayey silts partly overlay the corridor floor.

The alley was also resurfaced and its associated ditch was filled in and covered by the metalling. Between the alley and the buildings a butt-ended ditch, at least 15m long and up to 1.40m wide and 0.45m deep, appears to have been dug defining the southern limit of the building, although this may represent a naturally-formed eaves-drip gully.

Discussion

In the late 2nd century AD the south-eastern external wall of Building 3 appears to have been rebuilt with earth-fast posts around which may have been woven a wattle framework, clad with daub and/or plaster. Such walls could have stood to a height of 2m or more (Milne 1992, 79) and would have been capable of supporting a tiled roof. The large number of *tegula* and *imbrex* fragments recovered in this and subsequent phases presumably indicates a tiled roof. The use of *tegulae* and *imbrices* typically implies a shallow pitch of around 20–25 degrees, with tiles held in place by their own gravity (Rook 1979, 295; Brodrigg 1987, 10).

The presence of a hearth in Room 1 indicates

continuity of function in this area and the rooms in the east may have continued to function as reception areas. The renewal of flooring had resulted in differences in level between adjacent rooms; a similar pattern has been noted in buildings excavated in *Verulamium* (Frere 1972, 15). Nearly all the pottery recovered from Building 3 was residual, suggesting that the building may have been only intermittently occupied; a suggestion perhaps supported by pitting in Room 1.

Period III Phase 6: AD 220–260

Rebuilding of Building 2 was evidenced by the laying down of a new brickearth slab, floor make-up, and floor (Fig 12). A compacted, dirty brickearth deposit, 0.22m thick, formed a level platform on which the clay-and-timber building was constructed. A posthole indicated the probable location of one of the structural timbers. A patch of silty clay and gravel 0.05m thick probably represents floor make-up and overlying this were the remnants of a beaten earth floor, 0.03m thick at +1.19m OD.

In Building 3 the floors were again resurfaced,

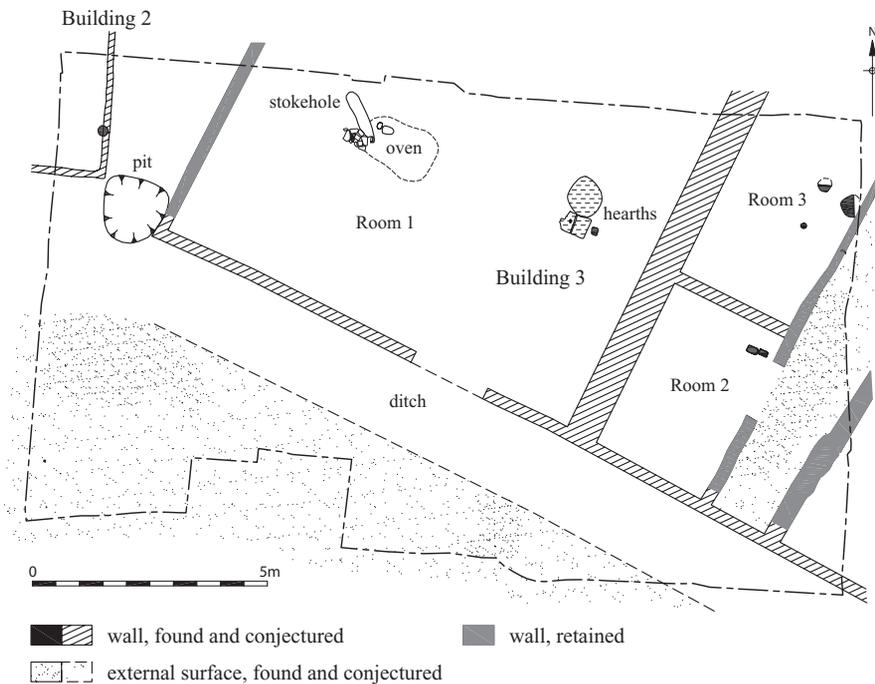


Fig 12. Period III Phase 6, rebuilding of Building 2 and modifications to Building 3



Fig 13. Oven and stokehole in Room 1 of Building 3, looking north, scale 1m

with beaten earth in the west and broken tile used in at least one of the rooms in the east. These floors appear to have extended southwards over the line of the external wall of the Phase 5 build, suggesting the wall was rebuilt, slightly further south than its predecessor. In Room 1 of Building 3 a new brickearth floor $\approx 0.20\text{m}$ thick was laid down, on which was constructed an oven (Fig 13), only the base of which survived, built with broken pieces of roof tile and roughly semi-circular in shape, with the remains of a stokehole to the north. The stokehole was filled with ashy silt and a spread of loose silty sand with frequent fragments of fire debris may have been fire rake-out from the oven. Two postholes may have supported an associated superstructure. Charred cereal grain was recovered from the stokehole, while occasional fish bone and scales, as well as charred cereal fragments and uncharred hemlock (*Conium maculatum*), were identified within the rake-out.

Three successive hearths were built replacing that in the previous phase. The earliest in the sequence was composed of two severely cracked and scorched bricks laid flat and side by side,

covering an area measuring 0.43m N-S and 0.62m E-W. Two postholes appeared to be associated with this hearth. A probable rebuild was indicated by a layer of burnt brickearth measuring 0.80m E-W, 0.70m N-S, and 0.10m thick topped with a spread of broken tile, covering the earlier structure. Immediately north, a third hearth was constructed. This was marked by burnt brickearth with a smooth and crusty surface surviving in the centre.

The east end of the building was substantially modified, initially by dumps of silty sands and clays with concentrations of plaster fragments, laid down to level and consolidate the ground prior to this final phase of construction. Floor make-up deposits indicated that there was now a new internal E-W partitioning wall between Rooms 2 and 3 making Corridor 1 redundant. The floor in Room 2 was constructed of broken tile and tesserae laid flat but in a random fashion. Two postholes, 0.20m by 0.15m and $\approx 0.30\text{m}$ deep, were set into the tile floor, contemporaneous with the floor surface. The floor make-up dumps produced a bone needle (Type 3, Crummy 1983), broken at both ends,

with a round section 4mm in diameter, tapering to a flattened oval-section head with a grooved line below its eye (see Fig 10.4). Corridor 2 remained in use and indeed trample on the tile floor suggests that this was the position for the entrance (postulated in Phase 5) into the corridor.

The alley continued to be maintained and the ditch also probably remained in operation. A roughly square rubbish pit, 1.38m across and 0.23m deep, filled with sandy silt with occasional fragments of tile, oyster shell and charcoal, was found between the two buildings.

Discussion

During the 3rd century Building 2 was rebuilt on its former footprint and Building 3 also continued to be maintained, although with some internal modifications and the apparent reconstruction of its southern wall slightly further to the south of the building's Phase 5 wall.

Building 3 now measured at least 17.5m E–W and was 7.5m wide. In Room 1 a succession of hearths and a possible oven suggest that it continued to function as a kitchen/utility area. The use of tiles and fragments of tiles laid flat to form the base of the oven presumably increased heat retention and provided an even base. These small and impermanent hearths may have been domestic fireplaces but they could also have been used for the heating of small objects as part of an industrial process (Perring *et al* 1991, 98). There was no evidence for industrial waste and the food debris present, including cereals and fish, suggests a domestic function. The oven appears to be a variation of the key-hole shaped type reported from sites elsewhere in *Londinium* (*ibid*), the use of tile being an elaboration of the basic form. To the east lay two rooms which may have continued to function as reception areas, of which Room 2, paved with broken tile, was small, measuring only 3m by 2.5m, and could have been an antechamber (Fig 14).

Approximately 15kg of wall plaster fragments were recovered from the excavation, including several pieces of sufficient size to retain some decorative elements. Pigment colours were typically yellow ochre, reddish brown or reddish pink on white ground. The bulk of the plaster fragments were from this final phase of Roman occupation and from the east end of Building 3, indicating that during this period the building became increasingly refined in its decoration.



Fig 14. Room 2 of Building 3 with broken tile floor and postholes in the foreground defining the southern external wall, looking north, scales 2m

The style and colours used suggest a simple panel type scheme on white ground, a fairly common scheme in Britain during the 1st and 2nd centuries AD (Ling 1985, 22). Border fragments in yellow ochre and reddish brown were most common, suggesting that these pigments were used to define decorative panels. Reddish pink fragments were relatively common, and may represent a lower zone or dado, where this colour was commonly used. One fragment of polychrome plaster showed the use of blue background with green to depict some type of plant motif, however this did not survive in sufficient quantity to reconstruct the entire design (Fig 15).

The colours were painted in *fresco* technique in which pigments were applied directly to a fresh damp plaster (*intonaco*) layer and fixed by a chemical reaction forming a transparent film

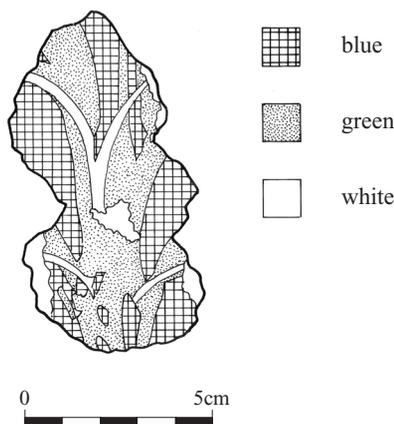


Fig 15. Painted wall plaster

of calcium carbonate over them (Ling 1985). Brushmarks are visible on some of the border fragments, but larger areas of ground colour appear to have been applied more thickly and burnished. One fragment shows pink pigment painted in *fresco* with strongly and evenly spaced grooves, suggesting that it had been applied with a fine comb rather than a brush. The colour scheme is reminiscent of, for example, the 2nd-century wall paintings at Catterick, where remnants of wall painting from the *mansio* showed a pink dado, a main zone of white ground, red frames outlined with inner borders of black, and an interval design of flower and vase in greenish blue, yellow and red. A yellow border delineated the upper zone from the main zone (Davey & Ling 1982, 91–2).

The ditch to the south of Building 3 appears to have been deliberately and rapidly backfilled during the middle of the 3rd century. The relatively large assemblage of domestic pottery recovered may indicate clearance prior to the abandonment of the site in the latter half of the 3rd century. This is further confirmed by the ceramic evidence from the postholes that formed the southern (external) wall of Building 3 suggesting that the wall was dismantled at the same time as the ditch was being backfilled.

Period III Phase 7: late Roman

Towards the end of the 3rd century the Roman buildings at Long Lane appear to have been demolished and the area abandoned. Dumped deposits, some with high concentrations of build-

ing material, covered the remains of the earlier clay-and-timber buildings.

Discussion

Occupation of the area as represented by the succession of clay-and-timber buildings came to an end by AD 260 and was followed by deposition of 'dark earth'. Many sites in the City and Southwark show a similar pattern of 'dark earth' covering earlier Roman structures and it is clear that the accumulation of this material was not a single event and that it took place in different locations at different times (Watson 1998). 'Dark earth', a dark brown silt sand with a variable mix of pottery, stone, ceramic building material, wall plaster, ash, charcoal and cress, is usually taken to be a horticultural soil and an indication of market gardening (SLAEC 1978, 40). But, as Watson points out, palynological studies of 'dark earth' samples from London indicate a wasteland rather than cultivation. Deposits of 'dark earth', sometimes 1.5m thick, continued to form over a long time, in places until the 16th century at least (Sheldon 1978, 17), and the accumulation was constantly biologically reworked (Watson 1998). At Long Lane the 'dark earth' was *c.*1m thick; the archaeological evidence suggested that the site remained undeveloped until the 16th century and in the area of the excavation the ground was still open in the 17th century.

Period IV: medieval and post-medieval

There is no evidence in the archaeological record for features or deposits that can be dated to the Saxon period and indeed evidence for occupation of the site in the medieval period is scant. Features were limited to field boundaries, ditches, hedgerows and fence lines and some pitting, probably of a horticultural nature. The site lies 100m to the east of the Church of St George the Martyr, and William Necton's map of *c.*1530 shows the churchyard enclosed possibly by a hedgerow, with small plots to the east similarly enclosed. Throughout the medieval period and the early post-medieval period the site appears to have been agricultural land. However, from the 16th century onwards the land appears to have been increasingly encroached upon for the disposal of rubbish and for water supply, evidenced by pitting and a barrel-lined well.

Cartographic evidence (Morgan 1682) shows that in the 17th century the Long Lane frontage

of the site was built upon. The archaeological evidence of rubbish pitting, cesspits and a N–S ditch representing a property boundary is consistent with the excavation area being to the rear of these properties.

By the mid-18th century the ground still remained open and continued to be used for the disposal of rubbish. However a horn-core lined pit may be an indication that some industrial activity was also being undertaken nearby. The pit measured 2.40m N–S, 1.92m E–W, and 0.91m deep. The horn-cores, which consolidated the sides of the pit, appear to have been roughly cleaved in half and set with their points towards the edge of the cut and the pit used for rubbish disposal. The horn-cores were probably obtained from a slaughter-yard/butcher's shambles, tanyard or horn-worker's premises in the locality.

Analysis of the horn-cores revealed a preponderance of medium-horned animals and a noticeable absence of long-horned stock, which have featured prominently in other post-medieval horn-core assemblages, and it would seem reasonable to suppose that had cores of long-horned cattle been available to line the pit they would have been selected and used. Arable-farming systems of the southern and south-western counties in the early modern period employed many middle-horn cattle owing to their proven reputation as superior draught animals (see Kerridge 1967, 316–17) and from this it follows that such stock were probably predominant over the other early breed-types (short- and long-horned) in the region around Southwark.

The archaeological evidence suggests that during the late 18th century the site was regenerated and new houses were built which, at least in part, encroached upon what had, since the mid-3rd century, been an open area. The excavations exposed the remains of brick walls, a floor, and a fireplace, which dated to this era. The cartographic evidence supports the archaeology, for Horwood's 1813 map shows that the site was at this date occupied by residential properties with back gardens. These buildings continued to be occupied until the end of the 19th century. Cartographic evidence shows that by 1914 the site was cleared and a distillery built.

DISCUSSION

The topography of north Southwark is crucial

to its urban development in the Roman period and indeed to the siting of *Londinium* itself, for as Milne (1995, 40) states Southwark's island topography dictated where the roads and river crossing and therefore the city itself could be built.

Palaeoecological data suggests that the River Thames, as it flowed through *Londinium*, was tidal in the early Roman period (Milne 1993, 81–4). The Thames regularly reached a height of +1.25m OD and had a tidal amplitude of at least 1.5m (Yule 1988; Brigham 1990). This would mean that, at least at high tide, the timber structure on the edge of the marsh by the presumed channel could have acted as a landing-stage. A substantial fall in the river level of 1.5m occurred between c.AD 50 and AD 250 and it may have fallen as low as a MHW of 0.50m OD by AD 150 (Brigham 1990) which would have rendered the 'landing-stage' inoperable by the end of the 1st century.

The fall in the river level coincided with the rapid expansion of *Londinium* and Southwark during the Flavian period and once-marginal land appears to have been drained, reclaimed and developed. It has been suggested that at its peak in the late 1st/early 2nd century AD the settlement in north Southwark may have covered up to 24 hectares (Merrifield 1983, 134) and the population of *Londinium* at its height may have been as high as 20–30,000 individuals. Clay-and-timber building was a relatively cheap and easy construction technique, using readily available materials, and would have been ideally suited to the purpose of accommodating large numbers of people relatively quickly.

At Long Lane a series of clay-and-timber buildings was revealed that span the period from the late 1st/early 2nd century until the mid-3rd century AD. The site appears to lie on the southern and eastern margin of Roman Southwark, although clay-and-timber buildings have been found to the south of the site, at Arcadia Buildings, adjacent to Watling Street (Dean 1980) and traces of Roman brickearth buildings and metal surfaces have also been discovered to the south at Long Lane Studios (AOC 2001). Although there was no direct evidence for commerce or industry, the lack of evidence for this at Long Lane does not preclude such activity. The concentration of hearths in Building 3 during the final phase of Roman occupation (see Phase 6) may be an indication of industrial activity; bakeries, metal-working

and craft shops were frequently established in rooms and backyards of domestic dwellings (Rowsome 2000, 34).

By the third quarter of the 2nd century *Londinium* suffered a grave decline in its population (Merrifield 1983, 147). That the population of the city following AD 150 was shrinking has been demonstrated by statistical analysis of domestic rubbish, food debris, and available water supply (Marsden & West 1992, 138). Increased insecurity, political instability, and disease have all been suggested as possible reasons for this decline. Southwark was not immune from this dramatic change in fortune. At 201–211 Borough High Street, for example, the earliest buildings of clay-and-timber dated to the mid- to late Flavian period and buildings of this tradition lasted until the mid-2nd century; a similar pattern has been reported elsewhere in Southwark.

The bulk of the pottery from the Roman quayside discovered at 51–53 Southwark Street dated to the period AD 120–160. The pottery was a typical waterfront assemblage, suggesting direct importation of pottery from other parts of the Roman Empire, although in the late 2nd century the importation virtually ceased (Killock 2005). British pottery production centres that supplied London, such as those at Brockley Hill and Highgate, also went into decline and may have ceased manufacture as early as AD 160 (Merrifield 1983, 144). A notable feature of the pottery assemblage at Long Lane is the high proportion of imported samian ware. The evidence at Long Lane after AD 150 is consistent with a collapse in the population, with buildings perhaps not occupied on a regular basis. The repair to a samian bowl (see Fig 21.24) is perhaps an indication that obtaining a replacement had become difficult and that the item was clearly considered of sufficient value to be mended and retained.

The 3rd century saw a revival in fortune for *Londinium* and Southwark but it was followed by late Roman occupation of a very different kind (Merrifield 1983). Buildings in Southwark appear to be fewer but grander, mainly constructed in stone and generally located on the north island. The widespread occurrence of 1st- and 2nd-century clay-and-timber buildings on both islands, the concentration of structures with stone footings to the north, and the finding of burials cut through these suggest a progressive reduction of the settlement towards the bridgehead (Heard *et al* 1990, 618).

Nevertheless at Long Lane the use of clay-and-timber buildings lasted perhaps until the mid-3rd century when their final abandonment presaged a phase of urban wasteland and the dumping of refuse.

Complex Roman pitting and ditches which may have been ritual in character have been unearthed c.150m south-west of the site at Swan Street (Beasley 2007), in an area considered to lie beyond the settlement but within a quarter dedicated to ritual/religious practices. A comparison of the relative proportional frequencies of the main domesticates calculated for Swan Street and Long Lane reveals a marked difference in the overall pig:sheep/goat ratios, with sheep/goats featuring more prominently in the Swan Street assemblages, while pig features more strongly in those from Long Lane. While this could be simply explained in terms of basic differences in local dietary preferences between the inhabitants of the two sites, the relatively high frequency of sheep/goats at Swan Street does not fit well into the known food-ways of later Roman Britain (King 1978; 1984). That the Long Lane evidence does fit the expected dietary pattern underlines the apparent out-of-the-ordinary situation at Swan Street and reinforces the suggestion that the sheep/goats at that site may have had a purpose other than (primarily) as food sources, perhaps being used as sacrificial offerings.

Apart from the possible backyard-reared domestic fowl and sucking pigs, the inhabitants of the Long Lane site appear to have relied heavily on market-bought food supplies, which in the case of red meat was invariably beef, pork and mutton. These same inhabitants would have lived in reasonably close proximity to a diversity of natural and humanly modified rural habitat types (river banks, marshes, boggy woodlands, meadows, fields) supporting plentiful numbers of easily accessible wild fowl. It is somewhat puzzling therefore that such an abundant, ready-to-hand food resource was apparently not exploited. In this respect, the Long Lane inhabitants were not alone, as their neighbours elsewhere in Southwark also seem not to have included wild birds in their diet (as evidenced by the faunal remains from 199 Borough High Street and from Swan Street). This situation is, however, in marked contrast to the consumption of a wide variety of wild birds (comprising woodcock, teal, tufted duck, whimbrel, lapwing, godwit and golden plover) by the town-dwellers of Roman Colchester (see Luff 1982, 131).

The status of the settlement at Long Lane may perhaps be best described as that of the ‘artisan’ class and the general lack of contemporary deposits of glass is considered to reflect the site’s marginal location and the low status of its inhabitants. However there are signs that the inhabitants had aspirations and Building 3 appears to be a step up from a simple strip-building and shows characteristics (painted wall plaster, internal corridors, and the provision of ‘reception rooms’) of multi-roomed town-houses inhabited by wealthier citizens. The ‘reception rooms’ are also an indication that the inhabitants engaged in ‘Roman’ social life. Comparable residential residences might be Buildings K and F unearthed at Newgate Street and Watling Court (Milne 1995, 67) or Building 6 at Leadenhall Court (Milne 1992, 74) — a timber-framed structure with a tiled roof and painted wall plaster, which had at least seven rooms, an internal corridor, and a veranda at the rear (Milne 1992, 73–80, fig 25).

Whilst a Romanised building style was clearly adopted, this does not necessarily imply the ethnic origin of the inhabitants. The population of *Londinium* (in the late 1st century AD) was probably a cosmopolitan mixture from Britain and the Continent, including veterans, officials, traders, artisans, also freedmen, slaves and the urban poor (Rowsome 2000, 32). However at Long Lane, from the outset of Roman occupation, a Romanised urban life-style seems to have been practised. The use of samian tableware and other imported pottery, the reliance on market-bought food, and the consumption of a typically Roman diet seem to reflect a highly Romanised way of life. However we cannot be certain of the extent to which the population adopted a truly Roman routine, and customs may have varied widely reflecting cultural diversity (Rowsome 2000, 37). In *Londinium* and Southwark a common Roman urban culture may blur the distinction of different ethnic groups.

CONCLUSION

The topography of north Southwark with low-lying eyots separated by braided channels is increasingly recognised as a favourable location for prehistoric peoples; the proximity of both wet and dry environments being particularly advantageous first to hunter-gatherers and then to early farmers. Although the artefactual evidence for early prehistoric activity on the site

was slight, comprising only two struck flints, these are nevertheless part of a growing collection of mainly Middle Bronze Age material found in north Southwark.

That the sand islands of Southwark were farmed from the Bronze Age, and possibly even earlier, has been well established by recent discoveries of field ditches and ard marks on a number of sites, although evidence for any associated settlement remains elusive. At Long Lane the discovery of a possible landing-stage and ditch may be an indication of settlement in the close proximity. Here the Bronze Age features were sealed by alluvial deposits, a phenomenon common on the eyots of north Southwark and an indication of rising water levels through the Bronze Age (Sheldon 2000, 128). There was no evidence for Late Iron Age activity on the site and plant remains indicate that at the beginning of the Roman era the local environment was marshland, at least in the immediate vicinity of the subject site. An intriguing but anomalous find from the peaty marsh deposits was a flat strip of gold wire measuring 1mm by 0.3mm.

Despite extensive archaeological investigations on both banks of the Thames, there is no evidence for a tribal centre or *oppidum* in the central London area, but rather isolated farmsteads or small-scale agricultural settlements, probably based on kinship groups, may have been the general pattern. Indeed the evidence seems to suggest that the London region was on the periphery of tribal territories and this may be at least part of the impetus for the siting of the new Roman urban centre of *Londinium* (Millet 1990, 89).

The military origins for Roman Southwark have in the past perhaps been overstated. That there was, in the pre-Flavian period, a military presence in the area is attested by the finds of Claudian coins and military equipment, although the coin dates preclude a military origin for *Londinium* since the legions had long since moved on. The military equipment, although recovered in early contexts, has not been recovered in quantities or concentrations that suggest a legionary base (Milne 1995, 43). Indeed there is no evidence for a pre-Flavian fort within or in the vicinity of north Southwark, nor is there any evidence for any early buildings within the settlement area that can be directly related to military activity (Heard *et al* 1990, 611). *Londinium* was founded only after AD 50, once the road system had been realigned and

after the Roman army had moved forward to Wales and the North, and in what was regarded as a pacified hinterland (Milne 1995, 47).

Nevertheless the Roman army constructed the approach roads and was probably responsible for other engineering schemes including land drainage and revetting the edges of the higher land (Sheldon 2000, 131). That *Londinium*, at the hub of a communications network, provided logistical support for the military seems certain. However, Sheldon (2000) has suggested that timbers found underlying Road 1 on a number of sites, rather than being simply foundations for the road traversing wet unstable ground, may be an earlier 'tactical' version of the strategic route to the bridgehead.

Early Roman timber structures in the London area are still exceptionally rare. At Long Lane the timber 'landing-stage' dated to the mid-1st century AD and such an early Roman date suggests that it was possibly erected by the Roman army, although not necessarily during the invasion phase. This timber structure appears to have been in use for perhaps 30 years and thus a strictly 'tactical' purpose can be discounted. Furthermore the disuse of the structure coincides with a drastic fall in the river level suggesting that it may have been a waterfront facility.

By the beginning of the 2nd century Roman Southwark may have been at the zenith of its expansion, with the site located at the margins of a crowded, busy, urban settlement. Although the excavation was unable to provide a complete ground plan for any of the buildings, detailed information on the types of building techniques used, probable functions and life-span of the buildings was recovered. The pottery and animal bone in particular provided important information on the way of life of the inhabitants. The 150 years of continuous Roman occupation recorded at Long Lane also demonstrated significant changes in circumstances for the population. The crisis of the mid-2nd century seems to have impacted upon the inhabitants of Long Lane with the evidence consistent with a drastically reduced population and an equally dramatic reduction in economic activity and trade. That the site was abandoned in the latter half of the 3rd century and perhaps left as waste land used for the dumping of rubbish and the rummage of swine is also consistent with a gradual reduction of Roman Southwark towards the bridgehead.

Roman Southwark may have ceased to be

occupied by the end of the 4th century (Sheldon 2000, 146) and may not have been reoccupied until late in the 9th or early 10th century when the City itself was once again occupied. Occupation in medieval Southwark concentrated around the bridgehead (presumed to be close to its Roman precursor) and expanded along the riverbank eastwards to Horsleydown and westwards along Bankside (Cowan 2000, 24). To the south, road-side development stretched as far as St George's church. Medieval Southwark grew up for much the same reason as Roman Southwark, located at the junction of the two main routes to the south coast and the Cinque Ports, and the final approach to the only bridge crossing to the City. The area would, of course, become famous for its inns providing hospitality and refreshments to travellers. The site at Long Lane appears to have lain in the fields that surrounded Southwark until the post-medieval era.

ROMAN POTTERY

Malcolm Lyne

The excavation produced 3,797 sherds (101,022g) of Roman pottery from 166 contexts, of which the overwhelming majority is of late 1st- to late 3rd-century date.⁴ Two of the assemblages are large enough for quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975). All dating is relevant to Period III only.

Phase 1

From the surface of the peat-marsh 32 pot sherds were retrieved, most recovered from beneath the timber pile structure. It is thought that much of this material was dropped from the platform. The sherds are of mid- to late 1st-century character and include a post-AD 70 sherd from a South Gaulish samian Dressel 37 bowl and a Dressel 36 platter. The rest of the samian includes a fragment from a Dressel 29 bowl. Other fragments include sherds from a small bead-rim jar in North Kent Shelly ware, a cordoned-jar of Type 1.20 in grey Alice Holt/Surrey ware (Lyne & Jefferies 1979), and a Hoo flagon. This would suggest that the structure was in operation c.AD 50–80.

Phase 2

From the deposits that buried the Phase 1 timber

structure 516 sherds of pottery were retrieved. Coarsewares include a number of bead-rim jars in Alice Holt/Surrey ware, Early Roman Sandy B, North Kent Shelly and Highgate Wood B fabric, and there are fineware Hoo flagon and Ring-and-Dot Beaker fragments. The large amounts of South Gaulish samian include pre-Flavian forms such as Ritterling 8 and 12C and Dressel 24 as well as roughly equal quantities of sherds from Dressel 29 and 37 bowls; platters include both Dressel 18s and 15/17s but there are no obvious examples of the post-AD 90 form Dressel 18/31. Complete and fragmentary stamps of *Masculus* (AD 55–75), *Martialis* (AD 60–80), *Modestus* (AD 50–70), and *Mommo* (AD 60–80) are also present. Amphora sherds include a fragment from a Dressel 20 amphora rim of Martin-Kilcher Group C (1987) of late 1st-century date and a rim fragment from a Flavian Gauloise 4 wine amphora (Baudoux 1996, fig 21.3). Fragmentary c.AD 65–95 dated stamps of *Ripanus* and *Secundus* on Verulamium Region

mortaria are also present. None of the forms or fabrics present in this assemblage need be much later than c.AD 80.

Phase 3

The best dating for Building 1 comes from the entranceway and the occupational debris spread across it. The tiled entrance produced 152 sherds of pottery. The sherds include a rim fragment from a Hartley Group II or Gillam 238 mortarium (c.AD 60–100), a Verulamium Region Whiteware example of Frere Type 363 (c.AD 50–90), and a pulley-neck flagon in cream North French/South-East English 1298 fabric (external rim diameter 70mm, c.AD 60–120, Fig 16.1).

From a trample layer outside the building, 470 sherds of Flavian and early 2nd-century pottery were recovered, indicating that the building was not destroyed until after AD 100. The assemblage is large and fresh and was quantified by Estimated Vessel Equivalents (EVEs) (Table 1).

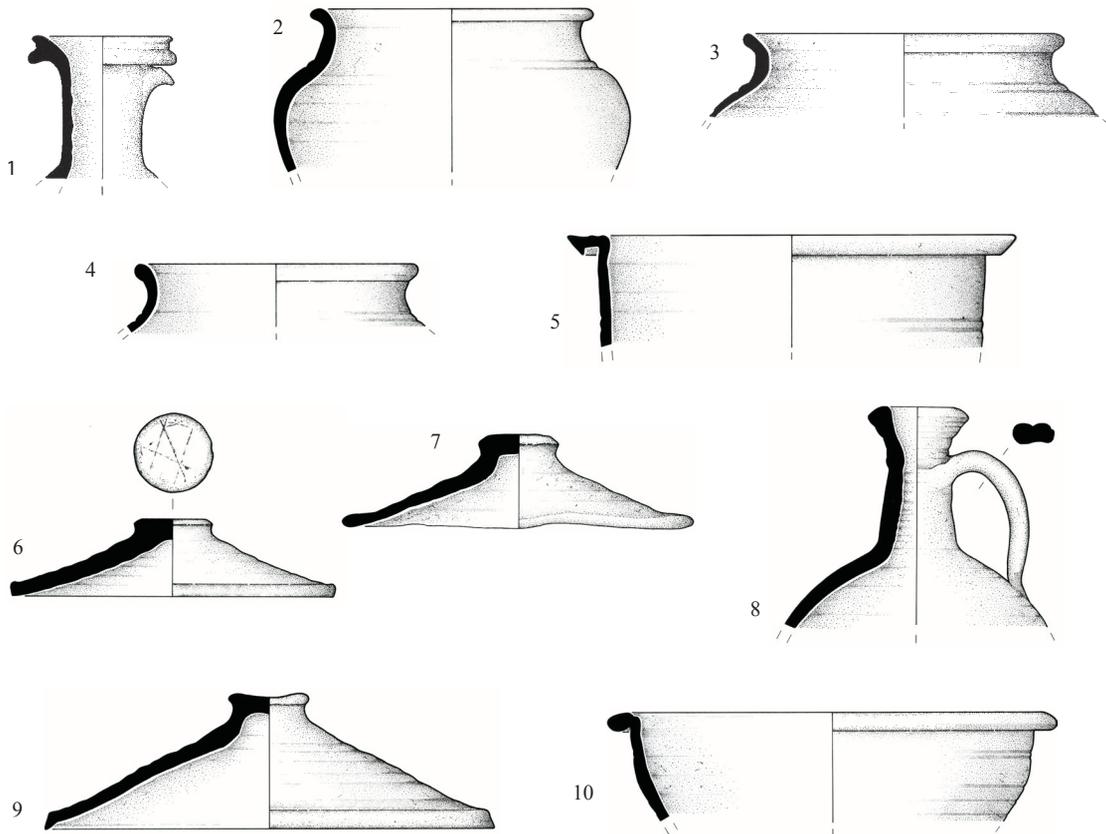


Fig 16. Roman pottery Nos 1–10

Table 1. Pottery from Period III Phase 3 trample layer quantified by Estimated Vessel Equivalents

	Forms						Total	%	
	Jars	Bowls	Dishes	Beakers	Store-jars	Others			
Coarse Wares									
Alice Holt Surrey ware	1.77	0.16	-	-	-	-	-	1.93	12.7
Early Roman Sandy ware A	P	-	-	-	-	Lid	P.	P.	
Early Roman Sandy ware B	0.14	-	-	-	-	Lid		0.41	2.7
Highgate Wood B ware	-	0.90	-	-	-	Lid	0.08	0.17	1.1
Highgate Wood C ware	0.33	0.97	-	0.20	-	Lids	0.49	1.99	13.1
North Kent Shelly ware	-	-	-	-	-	P.		P.	
Un sourced Sandy Grey wares	0.62	-	0.06	-	-	Lids	1.00	1.68	11.1
Verulamium Region Grey ware	-	0.13	-	-	-	Lids	0.62	0.75	5.0
Verulamium Region White ware	-	0.14	-	-	-	Mortaria	0.53		
						Flagons	2.00	2.73	18.0
Total coarse	2.86	1.49	0.06	0.20	-		5.05	9.66	63.7
Fine Wares									
Hoo ware	-	-	-	-	-	Flagon	P.	P.	
Local Mica-dusted wares	-	-	0.08	-	-	Flagon	0.18	0.26	1.7
London ware	-	-	-	-	-	Lid	P.	P.	
Local Oxidized wares	-	-	-	-	-	Lid	P.	P.	
North French/South-east England wares	-	-	-	-	-	-	P.	P.	
La Graufesenque samian ware	-	0.30	3.22	-	-	Dr 27	1.32		
						Dr 33	0.24	5.08	33.6
Les Martres de Veyre samian ware	-	0.07		-	-	Dr 27	0.07	0.14	1.00
Total fine		0.37	3.30				1.81	5.48	36.3
Total all	2.86	1.86	3.36	0.20	-	-	6.86	15.14	
	(18.9%)	(12.3%)	(22.2%)	(1.3%)	-	-	(45.3%)		
						Cups	1.63	10.8%	
						Flagons	2.18	14.4%	
						Lids	2.52	16.6%	
						Mortaria	0.53	3.5%	

The presence of two complete flagon necks in Verulamium Region Whiteware has led to some distortion of the fabric percentages, but the overall impression remains that the bulk of the coarse kitchen wares were being supplied to the site from the Alice Holt/Farnham and Highgate Wood industries in roughly similar amounts and with a greater emphasis on bowls from the latter industry. There are abnormal numbers of lid fragments from a variety of sources: the significance of this is uncertain.

Supply of Verulamium Region products was largely restricted to flagons, mortaria and lids. A complete absence of Verulamium Region jars suggests that these particular lids may have been used on carinated bowls from that source: fragments from two bowls are present in the assemblage. The illustrated pottery includes:

- Fig 16.2. Jar of Lyne and Jefferies Type 1.20 (1979) in grey Alice Holt/Surrey ware fabric. External rim diameter 140mm.
- Fig 16.3. Jar of Lyne and Jefferies Type 1.12 (1979) in similar fabric. External rim diameter 160mm.
- Fig 16.4. Form 2E jar in grey Highgate Wood C fabric. External rim diameter 140mm.
- Fig 16.5. Lid-seated and carinated bowl in cream Verulamium Region White ware fabric fired grey-black externally. External rim diameter 220mm. *c.*AD 100–120 (Davies *et al* 1994, fig 172.1046).
- Fig 16.6. Lid in grey Verulamium Region Grey ware fabric with a graffito on the boss. External rim diameter 180mm.
- Fig 16.7. Badly warped lid in reddish-brown Early Roman Sandy ware B fabric, fired black. External rim diameter 190mm. Nearly half is present. *c.*AD 70–120.

- Fig 16.8. Complete top of flagon of Frere Type 241 (1972) in orange Verulamium Region White ware fabric. External rim diameter 50mm. *c.*AD 85–105.
- Fig 16.9. Lid in brown Verulamium Region Grey fabric, fired patchy grey/brown. External rim diameter 240mm. Nearly half is present.
- Fig 16.10. Much of lid-seated Form 4F bowl in grey Highgate Wood C ware fabric. External rim diameter 220mm. *c.*AD 70–130.
- Fig 17.11. Five sherds, four of them joining, of Dressel 29, South Gaul, probably by M. Crestio. The upper zone consists of festoons containing scrolls, with straight pendants between, and is a similar arrangement to Mees 1995, Taf 48, no. 1. The lower zone consists of figured and saltire panels. The *bestiarius* (Hermet 1934, pl 23, no. 253) fights a lion (Hermet, pl 25, no. 12) regularly used by M. Crestio (Mees, Taf 39, no. 6), and the rough lines in the background are probably there to suggest undergrowth (*cf* Mees, Taf 38, no. 3). Most of the saltire motifs are recorded for M. Crestio: the long grass tuft (Mees, Taf 40, no.4), the large four-bladed leaf (Taf 37, no. 3), and the corded motif (*cf* Taf 36, no. 4); the formal leaf is Hermet, pl 10, no. 46. *c.*AD 70–85.

One of the most outstanding features of this pottery assemblage is the abnormally high percentage of samian pottery, amounting to over one third of all of the material and made up overwhelmingly of products from La Graufesenque, with just a few Martres-de-Veyre fragments. The four South Gaulish stamps are of Pontius (AD 80–100), Rufinus ii (AD 65–90), Mont(anus) and Cres(cens) (AD 70–90), and Patricius (AD 75–100).

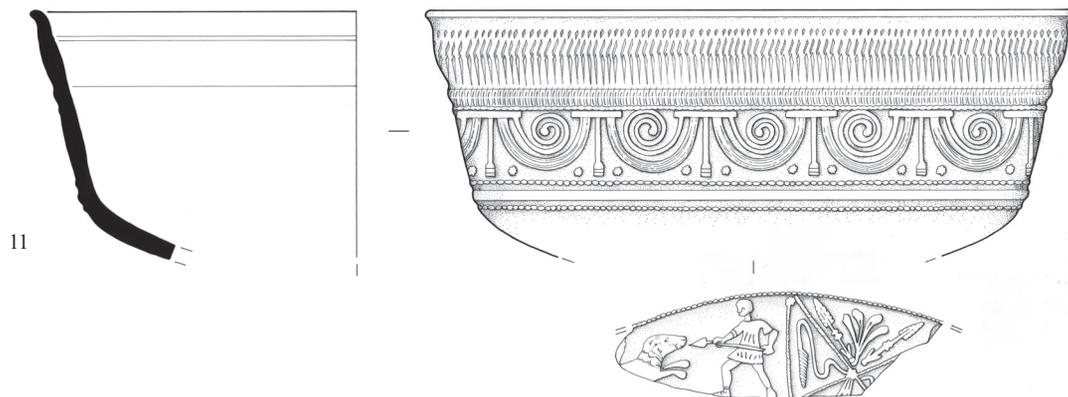


Fig 17. Roman pottery No. 11

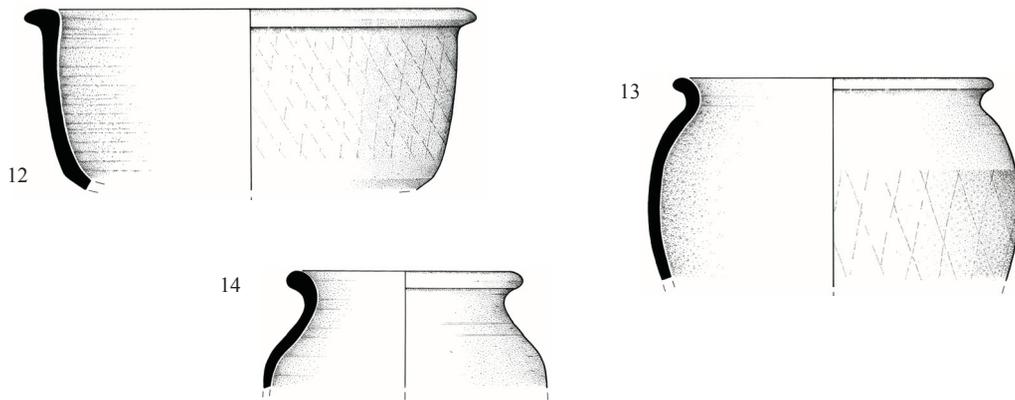


Fig 18. Roman pottery Nos 12-14

Phase 4

Pottery (508 sherds) recovered from the rubbish dumped over the levelled Building 1 was almost entirely residual in nature. The material did, however, include large fresh sherds from vessels which were probably broken at the time that the dumping was taking place, including:

Fig 18.12. Flanged bowl of Gillam Type 57 (1977) in black Dorset Black-burnished ware fabric with acute lattice decoration. External rim diameter 200mm. *c.*AD 120-160.

Fig 18.13. Everted rim cooking-pot in Dorset Black-burnished ware fabric with acute lattice decoration. External rim diameter 140mm. *c.*AD 120-160.

Fig 18.14. Cordoned jar of early 2nd-century type in buff Verulamium Region White ware fabric with black patches. External rim diameter 130mm.

Fig 19.15. Eleven sherds, all joining, formed just over half a Banassac Dressel 37, South Gaul bowl. Four panels, probably repeated three times

altogether: a hound above a lion (*cf.* Hermet 1934, pl 25, no. 8A), a cupid with thyrsus and torch (a smaller version of Hermet, pl 18, no. 29), a stag (Hermet, pl 27, no. 18) above Diana in her *biga* (Hermet, pl 23 no. 230), and a satyr and maenad (Hermet, pl 24, nos 276 and 277). The stag and hound are illustrated by Knorr (1919) among the motifs attributed to Pudens (1919, Taf 67, nos 6 and 7). The rather clumsy trident-tongued ovolo, the heavy basal wreath, and the coarse borders all indicate a date *c.*AD 85-110. A line in the mould below the decoration may be a trace of a signature; the moulding is shallow and blurred, suggesting use of a worn mould, and the footing is worn.

Large fresh joining sherds from a Martres de Veyre Dressel 18/31 platter (*c.*AD 100-130) and a Form 3E beaker in Highgate Wood C ware fabric (*c.*AD 70-160) are also present in the assemblage. The dating of these freshly broken pots indicates that Building 1 was not demolished until sometime between AD 120 and 140.

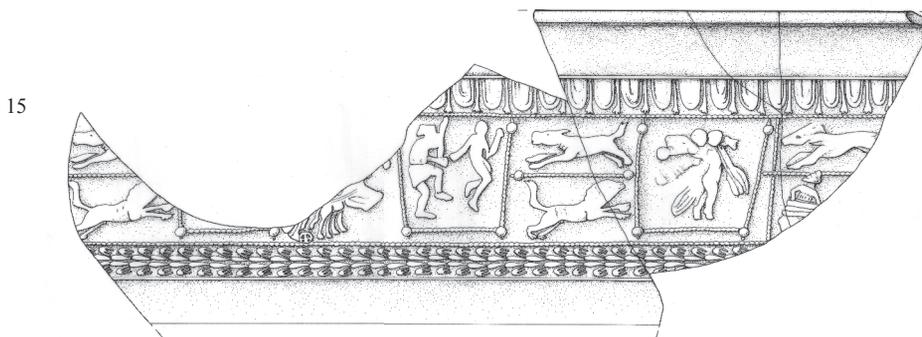


Fig 19. Roman pottery No. 15

The pottery in the metalling of the alleyway (40 sherds) includes further material dated *c.*AD 120–160 but the best occupational assemblages by far are those from the fills of the ditch. The 121 sherds of pottery are too few for quantification by EVEs but are very largely of early 2nd-century date. The pottery from the basal fill includes the following illustrated pieces:

Fig 20.16. Mortarium in cream Verulamium Region White ware fabric with stamp of Castus. External rim diameter 220mm. *c.*AD 110–140.

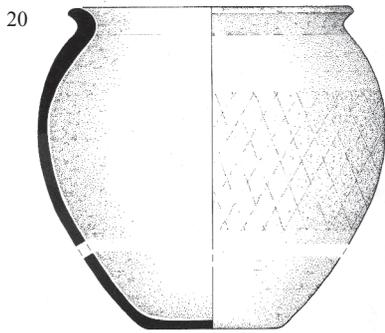
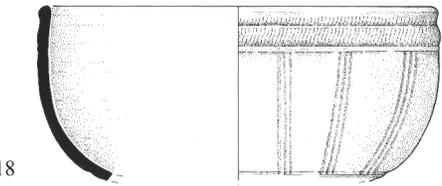
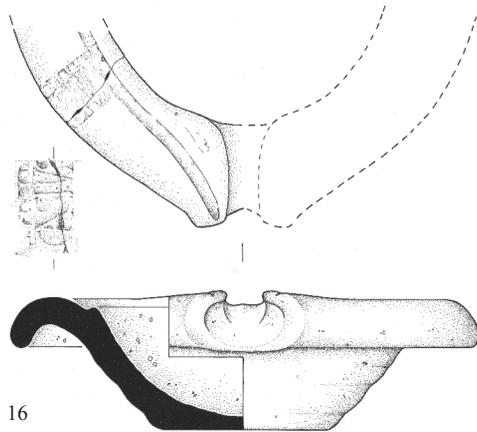


Fig 20.17. Complete lid-seated flagon neck from vessel of Form 1F in grey Local Mica-dusted ware fabric, fired brown with mica dusting. External rim diameter 100mm. *c.*AD 120–160.

Fig 20.18. Imitation Dressel 37 bowl in pale grey London ware fabric with polished black patches and rouletted and scribed decoration. External rim diameter 200mm. *c.*AD 70–120.

Fig 20.19. Poppyhead beaker of Form 3F in grey Highgate Wood C fabric with rectangular dot-barbotine panels. External rim diameter 100mm. The weakly developed rim suggests a date range of *c.*AD 120–140.

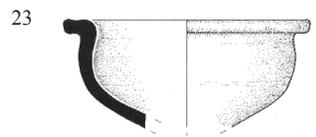
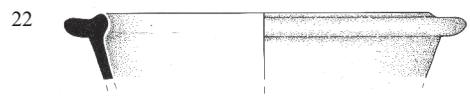
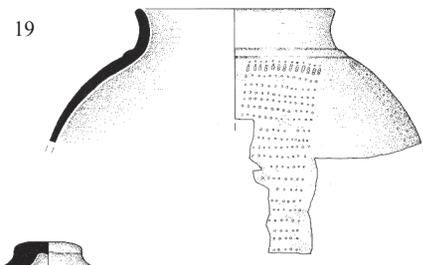
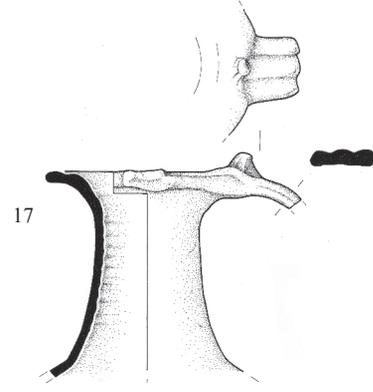


Fig 20. Roman pottery Nos 16–23

The upper fill of the ditch produced large, fresh fragments from the following vessels:

- Fig 20.20. Dorset Black-burnished ware everted-rim cooking-pot of similar form to Fig 18.13, with internal lime-scale. External rim diameter 140mm. *c.*AD 120–160.
- Fig 20.21. Small warped lid in dull red Local Oxidized wares 2599 fabric with occasional limestone eruptions. External rim diameter 160mm. *c.*AD 100–200.
- Fig 20.22. Lid-seated carinated bowl of Frere Type 684 in heavily blackened brown Verulamium Region White ware fabric. External rim diameter 200mm. *c.*AD 135–170.
- Fig 20.23. Another such bowl, of Frere Type 326, in buff-pink Verulamium Region White ware fabric with blackened exterior. External rim diameter 140mm. *c.*AD 85–105.

Other sherds from the ditch include part of a Verulamium Region White tazza of Frere Type 309 (*c.*AD 75–105) and fragments from Martres de Veyre samian Dressel 18/31 platters and Dressel 37 bowls (*c.*AD 100–130). A total absence of Lezoux samian, (wheelmade) Black-burnished wares, and other wares of 2nd-century date suggests a short life of *c.*AD 120/30–140 for this phase.

Phase 5

The 457 sherds of pottery include 184 of residual material from floor and road make-up deposits. A sherd of (wheelmade) Black burnished ware is present for the first time but this material otherwise fails to add any further dating information for the end of Phase 4 or the

commencement of Phase 5. However a repair to the road includes a Thameside greyware jar fragment, which should be later than AD 150.

The pottery from trample layers includes a Central Gaulish Curle 23 platter fragment of *c.*AD 140–200 and a piece from a North Gaulish Pentice beaker. Vessels of the latter type were imported into the South-East in small quantities between AD 70 and 250 or later but the bulk of the British finds are dated *c.*AD 150–250. These pieces, combined with a lack of the early 3rd-century Thameside greyware forms characteristic of *c.*AD 200–270 London assemblages and 3rd-century Dorset Black-burnished ware forms, suggest that the occupation of Building 3 did not continue much after *c.*AD 200.

Also included in the occupation debris were 28 sherds, all joining, of a Dressel 37, Montans, perhaps by Atillus (Fig 21.24). The profile, with an internal pair of grooves and a neat 29-type foot, is characteristic (*cf* Martin 1986, fig 8, no. 13), as is the rather thin matt brownish slip. Approximately three-quarters of the design is present: panels divided by vertical rows of arrowheads. A row of partly impressed grass tufts replaces the ovolo (for similar use of a foliage motif, *cf* Simpson 1968, pl 83, no. 55, probably by Atillus, and Simpson 1976, fig 10, nos 41 and 43). The larger panels contain individual animals below wide chevrons: a lioness (Hermet 1934, pl 25, no. 29), a hound bitch (pl 26, no. 25), and a hare (*cf* pl 26, no. 70). The narrower panels contain a grass tuft and arrowheads below a griffon (a smaller version of Hermet, pl 25, no. 6, with wings as pl 25, no. 7) or a row of

24

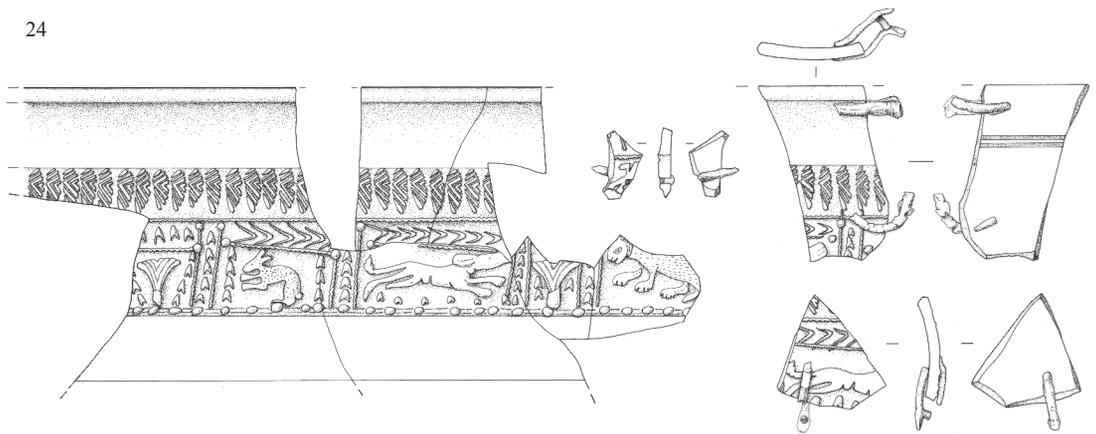


Fig 21. Roman pottery No. 24

arrowheads; there are further arrowheads below the hound and flanking the hare. The grass tuft was used complete and partially by Florus, who also used the hare (Mees 1995, Taf 246, nos 1 and 4). For the small arrowheads, cf Simpson 1976, fig 7, no. 29; similar chevrons were regularly used by a number of Montans potters (eg Simpson 1976, figs 4, no. 14; 7, nos 28 and 32; 8, no. 35). Martin 1986, fig 8, no. 11, has the griffon and chevrons, no. 17 the chevron and basal band of rosettes; both are attributed to Attilus c.AD 110–140; there are three lead-strip repairs, though the footring is not very worn.

Phase 6

The 468 sherds of pottery from this phase include 123 sherds of residual material from levelling-up dumps and constructional deposits. The buildings of this phase, like those of the previous one, produced little if any contemporary pottery. The most significant assemblage by far

comes from the rubbish dumped in the ditch. From the ditch 250 sherds of mainly mid- to late 3rd-century pottery with some residual material were recovered. The assemblage was considered to be just large enough for quantification by EVEs, although the presence of a complete flagon top in North Kent White Slipped ware has led to some distortion of fabric and form percentages (Table 2).

Dorset Black-burnished ware is the most common single fabric (20%), and a lack of developed beaded-and-flanged bowls in that ware, together with the presence of freshly broken (wheelmade) Black-burnished ware ‘pie-dish’ fragments, suggests that the ditch was back-filled between AD 240 and 270. Phase 6 can therefore be dated to c.AD 200–240/70.

The assemblage included the following illustrated pieces:

Fig 22.25. Incipient beaded-and-flanged bowl in Dorset Black-burnished ware fabric with burn-

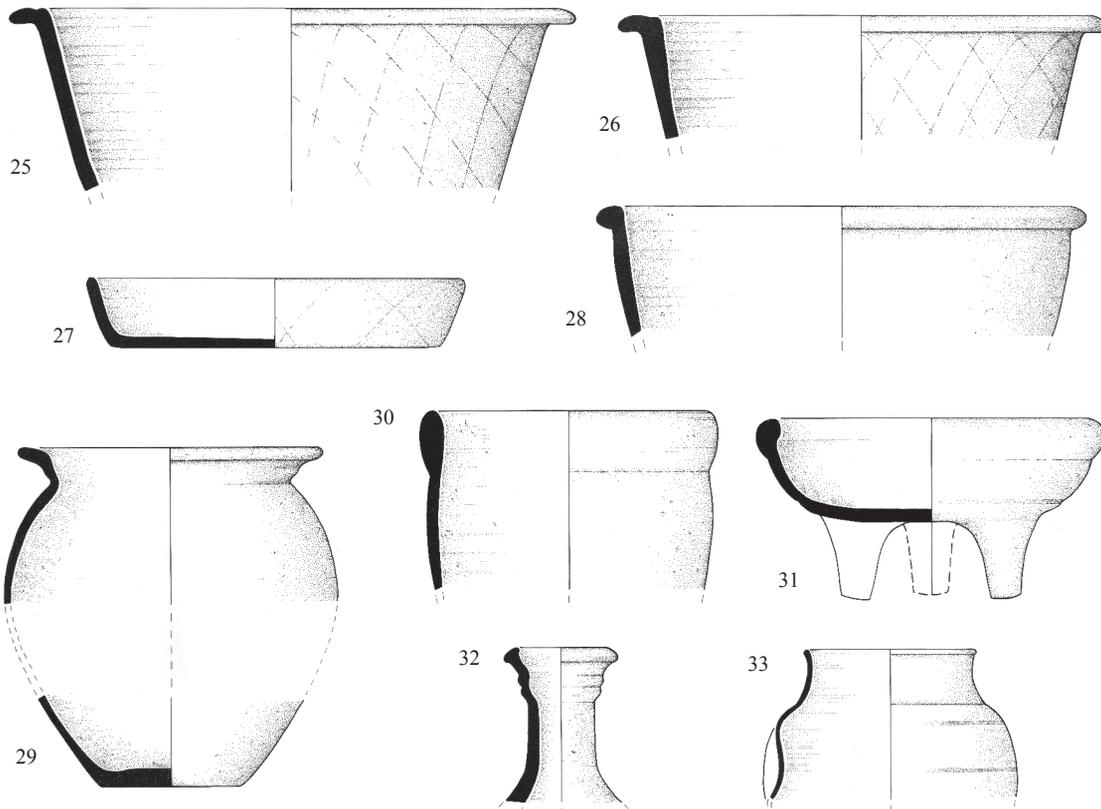


Fig 22. Roman pottery Nos 25–33

ished arcading on its exterior. External rim diameter 240mm. *c.*AD 220–290.

Fig 22.26. Another example in the same fabric with similar decoration. External rim diameter 240mm. *c.*AD 220–290.

Fig 22.27. Straight-sided dish with steep burnished arcading in similar fabric (one of two). External rim diameter 200mm. *c.*AD 200–270.

Fig 22.28. ‘Pie-dish’ of Monaghan Type 5C3.1 (1987) in fine (wheelmade) Black-burnished

Table 2. Pottery Period III Phase 6, ditch fill, quantified by Estimated Vessel Equivalents

	Forms						Total	%	
	Jars	Bowls	Dishes	Beakers	Store-jars	Others			
Coarse Wares									
Alice Holt Surrey ware	0.28	-	-	-	-	-	-	0.28	3.8
Dorset Black-burnished ware	0.31	0.73	0.46	-	-	-	-	1.50	20.4
Black-burnished 2 ware with fine fabric	0.15	0.14	-	-	-	-	-	0.29	3.9
Black-burnished-style ware	0.24	-	-	-	-	-	-	0.24	3.3
Highgate Wood C ware	0.11	0.07	-	0.12	-	-	-	0.30	4.1
Un sourced Sandy Grey wares	-	-	-	-	-	Tripod	0.55	0.55	7.5
Thameside Kent ware	0.87	0.17	-	-	-	-	-	1.04	14.1
Verulamium Region White ware	0.16	-	-	-	-	Ungentarium	-	-	-
						Lid	0.12	0.55	7.5
Total coarse	2.12	1.11	0.46	0.12			0.94	4.75	64.6
Fine Wares									
Cologne ware	-	-	-	0.37				0.37	5.0
Moselkeramik	-	-	-	0.20				0.20	2.7
North Kent White-slipped ware	-	-	-	-		Flagon	1.00	1.00	13.7
Nene Valley colour-coated ware	-	-	-	-		Box	0.17	0.17	2.3
Central Gaulish samian ware	-	-	0.09	-		Mortarium	0.08	0.17	2.3
East Gaulish samian ware	-	-	-	-		Mortarium	0.14	0.14	1.9
Les Martres de Veyre samian ware	-	-	0.55	-				0.55	7.5
Total fine			0.64	0.57			1.39	2.60	35.4
Total all	2.12	1.11	1.10	0.69			2.33	7.35	
	(28.8%)	(15.1%)	(15.0%)	(9.4%)			(31.7%)		

ware fabric with white margins. External rim diameter 200mm. *c.*AD 150–250.

Fig 22.29. Handmade everted-rim cooking-pot with burnished obtuse latticing, in very-fine-sanded black fabric with pink margins. External rim diameter 160mm. The vessel is clearly imitating a contemporary Dorset Black-burnished ware type both in form and fabric. A tendency for the fabric to laminate and the surface to peel off is paralleled in the imitative East Sussex Brown-Burnished ware industry (Lyne 1994, Industry 2A) and the vessel is probably from that source and dated *c.*AD 250–300.

Fig 22.30. Neckless jar with oval-section bead-rim in pink Verulamium Region White ware fabric fired cream-buff with grey patches. External rim diameter 160mm. The form is paralleled at 1–7 St Thomas Street, Southwark (Hammerson & Murray 1978, fig 165.1264). Late 2nd century.

Fig 22.31. Greater part of tripod bowl in very-fine-sanded rough grey fabric with three feet. External rim diameter 140mm. Very similar to examples from the 3rd-century La Boissière-Ecole kilns north-west of Rambouillet in France (Barat *et al* 1994, pl 1.207) and other potteries of similar date in the Île de France around Paris.

Fig 22.32. Complete screw-neck flagon top in North Kent White-slipped ware. External rim diameter 60mm.

Fig 22.33. Moselkeramik beaker of Symonds Group 34 (1992). External rim diameter 100mm. *c.*AD 200–276+.

The ditch also produced fragments from a bulbous Dorset Black-burnished ware cavetto-rim cooking-pot (*c.*AD 200–290), an East Gaulish samian Dressel 45 mortarium (*c.*AD 170–260), a Thameside grey ware jar of Monaghan Type 3H5.3 (*c.*AD 170/190–210/230), and a small Lower Nene Valley Colour-Coat box (*c.*AD 230–300).

From the fills of postholes that formed the south (external) wall of Building 3 a large fragment from a Dorset Black-burnished ware incipient beaded-and-flanged bowl similar to Fig 22.25 (*c.*AD 220–290) and a sherd from a similarly dated, straight-sided dish in the same fabric were recovered. This suggests that the wall was dismantled at the same time as the back-filling of the ditch.

Phase 7

There was no stratified 4th-century pottery from the site but residual pottery recovered from a post-medieval horticultural soil horizon produced a few sherds, which are certainly later

than *c.*AD 270 and probably post-date AD 300. These pieces include fragments from a black-slipped Alice Holt/Farnham industry Type IA.14 liquid storage-jar (*c.*AD 270–350), 4th-century cavetto-rim jar sherds from the same source, and a developed beaded-and-flanged bowl of uncertain origin. It seems probable that these sherds are unrelated to the Roman occupation on the Long Lane site but were present in soil brought on to the site from elsewhere, probably for horticultural purposes.

ANIMAL BONE

Philip Armitage

A total of 1,314 animal bone elements were submitted for analysis. The majority of these bones were hand-collected routinely during excavation. Small quantities of bones were additionally recovered from residues of sieved soil bulk samples, which for Period III Phase 4 produced a useful spectrum of the fish eaten by the inhabitants.⁵

From the peat-marsh surface a single horse radius (LL 325mm) from an individual of withers height 141cm (calculated after the method of Kiesewalter 1888) was retrieved; a tall horse by Roman standards, falling within the size-range documented by various authors (see Prummel 1979, 434 and also Lauwerier & Hessing 1992, 92) for horses from military sites throughout the Roman North-West Provinces. However as discussed by Luff (1982, 136), horses of such stature are also found at 1st- to 4th-century villa and farmstead sites where ranching of cattle and sheep was carried out. Three similarly tall horses were identified among the equid remains from Swan Street, Southwark, retrieved from early 1st- to mid-2nd-century deposits, where it was suggested these represented animals employed in agriculture (Armitage 2000).

Although the deposits from Period III Phases 3–6 yielded relatively modest quantities of food bones (compared with very much larger samples from many other contemporary Roman sites), analysis of these provides some insight into the dietary habits and the foodways of the Southwark inhabitants during the 1st–3rd centuries AD.

Analysis of animal bone identified as discarded food debris reveals a diet dominated by beef, supplemented by mutton/lamb, pork/sucking pig and domestic fowl, goose, duck and fish. It is uncertain whether the duck (represented

by a single ulna) was a mallard taken in nearby marshes or a domestic duck raised locally. The evidence for fish (both estuarine/marine and freshwater) comes from bulk (sieved) samples, which produced pharyngeal teeth of roach (identified using modern comparative specimens and with reference to Libois & Hallet-Libois 1988, 4). This was the only freshwater fish species represented as all the other fish bones are recognised as those of estuarine/marine species, comprising nine caudal vertebrae of plaice and a single quadrate of cod.

The dietary pattern established for the later Roman deposits in which beef and pork clearly predominate, with a concomitant decline, evident as early as the 2nd century, in the relative importance of mutton (Table 3), fits very well into the general profile for the changing foodways of Romanised Britain. By the 3rd/4th century, the high ox-pork military dietary-regimen/preference had apparently been widely adopted by civilians throughout the country (as discussed by King 1978 and 1984). No wild game (deer and boar) or wildfowl were apparently eaten. Again, there is no evidence of extravagance or eating of rare delicacies as would be expected if the refuse had derived from wealthy households.

Table 3. Period III Phases 2–6, Roman animal bone assemblages: relative proportional frequencies of the main domesticates/meat-yielding species by NISP and by bone-weight data (% of the total)

	Cattle	Sheep/goat	Pig
1. Based on NISP			
Phase			
2	55.9%	29.1%	15.0%
3	61.5%	17.3%	21.2%
4	54.8%	16.4%	28.8%
5	58.0%	9.9%	32.1%
6	47.8%	23.9%	28.3%
2. Based on bone-weight			
Phase			
2	75.8%	11.3%	12.9%
3	61.9%	7.7%	30.4%
4	58.1%	9.2%	32.7%
5	68.0%	1.9%	30.1%
6	60.4%	10.2%	29.4%

Table 4. Period III Phases 3–6, domestic fowl. Proportional frequencies of the domestic fowl bones expressed as a percentage of the total number of bones for all the principal meat-yielding species (cattle + sheep/goat + pig + fowl) in comparison with other Roman sites in Southwark and London

Sites	Frequency of fowl bones
Southwark	
Long Lane	
Phase 3	7.0%
Phase 4	10.2%
Phase 5	11.8%
Phase 6	10.7%
Overall	10.3%
Swan Street	1.2%
199 Borough High Street	1.6%
London	
General Post Office site	0.9%
Billingsgate Buildings	1.6%
Bishopsgate	20.0%

Reference sources: Swan Street (Armitage 2000); 199 Borough High Street (Locker 1988); General Post Office site (West 1983); Billingsgate Buildings (Armitage 1980); Bishopsgate (Armitage 1984).

In each of the principal Roman phases (Table 4) there was an unusually high incidence of domestic fowl bones for a Romano-British site. While the overall frequency (10.3%) is nowhere near as high as that recorded for the Bishopsgate assemblage in London (20%) (analysis by Armitage in Tyers 1984), it nevertheless stands out from the 'normal' situation in which chicken at Roman settlements throughout the North-Western Provinces generally represent only 2% (or less) of the total food bones, according to Lauwerier (1993, 79).

Lauwerier further points out that there is a discrepancy between the archaeological evidence showing a low level of consumption at most Roman settlement sites and the historical sources relating to dietary practices/preferences. For instance, in the 1st-century cookery book by the 'well-known gastronome' Apicius the number of recipes based on domestic fowl greatly outnumber those for beef, mutton, or pork. Apicius' book shows that domestic fowl held a high gastronomic status among Roman epicures and was a luxury food item when specially prepared in an elaborate fashion at feasts.

The inclusion of fowl in the foodways of the wealthy in Roman society is significant in regard to the extraordinarily high relative frequency of this particular species represented among the food refuse bones found in a 1st-century AD pit at Bishopsgate, London. Here the animal bone was interpreted as debris from the 'kitchen of a substantial private dwelling' (Tyers 1984, 374).

At Long Lane it would be tempting therefore, in the light of the observations by Lauwerier and the Bishopsgate evidence, to interpret the high incidence of domestic fowl bones as reflecting the high socio-economic status of the households producing the refuse. There is, however, an equally plausible explanation for the higher than 'normal' incidence of domestic fowl, backyard poultry production for home-consumption. Such enterprises also possibly involved the keeping of a few pigs for the table (as suggested by the presence of bones of sucking pigs in the same food debris deposits).

Both the cattle and sheep generally appear to have been of small stature and build, as exemplified in the cattle from the Bronze Age by a complete adult metacarpus (GL 178mm) representing an individual whose height at the withers is calculated at 109cm (method of Fock 1966). In the sheep this was illustrated by a complete adult metatarsus (GL 116.3mm) from an individual with a withers height of 52.8cm (method of Teichert). Fragmentation (in antiquity) in the other cattle and sheep bone elements precludes calculations of stature, but from visual appraisal of these it is believed that all the animals represented were probably of similar small size. Measurements taken of the bones of the domestic fowl also show these to have been of comparatively small size.

As well as those of small, bantam-sized adult birds, the assemblage included the bones of immature individuals. It may be that the presence of the immature individuals reflects the backyard rearing of domestic fowl by the site inhabitants, an interpretation perhaps supported by the apparently inferior 'scraggy'-size of some of the adult birds. An alternative interpretation is that the immature fowl denote that the inhabitants were sufficiently wealthy to buy in (from local markets) pullets as a luxury food item. According to this scenario, it may be that the bantam-sized adults, instead of being of inferior quality, were preferred for their smaller-boned and more succulent carcasses.

In marked contrast to these somewhat dim-

inutive cattle and sheep, and the 'scraggy' domestic fowl, the pigs of Period III Phase 7 appear to have been large and robust, as evidenced by an adult metacarpus IV whose greatest length (GL 82.1mm) falls within the size-range (78–85mm) of modern wild pigs (Noddle 1980, 407). However the bone here probably derives from an extra-large domestic male. Further skeletal evidence of another large male pig (probably also domestic) is provided by a lower canine tooth ('tusk'). As discussed by Noddle (1981, 392) such large domestic pigs were a feature of Romano-British livestock farming and were the product of improved husbandry practices that included the keeping of pigs intensively in sties. It seems anomalous however that such improved domestic pigs are represented in a phase associated with the decline in the Roman settlement in Southwark.

Butchering evidence in the food bones conforms to the standard Roman pattern documented from other contemporary sites throughout Britain. In pig some of the features of this butchery may be illustrated by reference to the following elements: a pig cranium split (chopped) in half along the sagittal plane, indicating extraction of the brain for food, and a piece of spiral-fractured shaft of a pig femur, representing debris from the smashing open of longbones for either marrow extraction or in preparation for boiling/making soup/broth.

ACKNOWLEDGEMENTS

The author and Pre-Construct Archaeology Ltd would like to thank Metropolis Developments for generously funding the archaeological excavation and post-excavation work. The author would like to thank the Project Manager Gary Brown and David Divers and Victoria Ridgeway, post-excavation managers, for all their support and encouragement. Thanks also to Duncan Hawkins of CgMs and Sarah Gibson of Southwark Council for their good efforts in facilitating this excavation.

Thanks are also extended to Tudor Morgan-Owen for the photography, Josephine Brown, Helen Davis, Cate Davis and Michael Miles for the illustrations, Peter Moore for his assessment of the glass, and Ian Tyers for the dendrochronological dating.

Special thanks are extended to Chris Pickard for the evaluation stage of the excavation and his identification of the archaeological potential of the site, and to Harvey Sheldon for his interest and good advice.

Finally a thank you to those that worked often

in adverse conditions on the site: Mark Bagwell, Adam Lord, Al Rae, Jim Leary, Giles Hammond, Tim Bradley, Dan Slater, Chris Mayo, Anne George, Simon Deeves, Ireneo Grosso, Douglas Killock, Steve Williams, Geff Parsons, Mick Parsons, Derek Roberts, and Anna Deeks the surveyor.

NOTES

¹ Results of the radiocarbon dating (calibrated according to Bronk Ramsey 1995; 2001; Stuiver *et al* 1998).

Beta-150623	37–45cm (from top of sampled sequence)
Radiocarbon age	3070 ± 70 BP
Calibrated age 2 sigma	3440–3070 BP
	BC 1490–1120
C13/C12 ratio	-29.3‰
Material dated	Peat

Beta-150622	0–10cm (from top of sampled sequence)
Radiocarbon age	2100 ± 70 BP
Calibrated age 2 sigma	2320–1900 BP
	BC 360–AD 50
C13/C12 ratio	-28.8‰
Material dated	Peat

² Poaceae 23%, Cyperaceae 10% and Apiaceae 22% dominate but the assemblage also includes *Plantago lanceolata*, *Artemisia*, *Filipendula*, *Rumex*, and *Chenopodium* types.

³ Three of the pile tips submitted for dendrochronological spot-dating by the Archaeological Research & Consultancy at the University of Sheffield produced the following dates:

Sample 543	Interpreted felling date AD 40–76
Sample 614	Interpreted felling date AD 17–53
Sample 616	Interpreted felling date AD 20–56

⁴ All of the pottery assemblages were quantified by numbers of sherds and their weights per fabric. Fabrics were classified according to the codes created by Museum of London Archaeological Services (Davies *et al* 1994; Symonds & Tomber 1994), by means of a x8 magnification lens with built-in metric scale for identifying the nature, form, frequency and size of added filler inclusions. Fine fabrics were additionally looked at through a x30 pocket microscope with artificial illumination source.

⁵ Employing standard archaeozoological methodological procedures, 1,004 (76.4% of the total) bones are identified to species and part of skeleton and 310 (23.6%) remain as unidentified fragments. The identified portion comprises 910 (90.6% of the total) mammalian, 81 (8.1%) bird, 12 (1.2%) fish bones with a single (0.1%) amphibian bone. 291 (93.9% of the total) unidentified fragments are recognised as mammalian, 5 (1.6%) bird, and 14 (4.5%) fish.

BIBLIOGRAPHY

- AABY (1994), B Aaby 'NAP percentages as an expression of cleared areas' in B Frenzel (ed) *Evaluation of Land Surfaces Cleared from Forests in the Roman Iron Age and the Time of Migrating Germanic Tribes Based on Regional Pollen Diagrams* European Science Foundation Project, European Climate and Man 7, 13–28
- ALLASON-JONES & MIKET (1984), L Allason-Jones & R Miket *The Catalogue of Small Finds from South Shields Roman Fort*
- ALLEN *et al* (2005), M J Allen, R Scaife, N Cameron & C J Stevens 'Excavations at 211 Long Lane, Southwark Part 1: prehistoric Neckinger-side environment in Southwark and its implication for prehistoric communities' *London Archaeologist* 11, 3
- AOC (2001), *An Archaeological Evaluation at 34–70 Long Lane and 31–47 Tabard Street, London SE1*, unpub report AOC
- ARMITAGE (2000), P L Armitage *Swan Street Animal Bone Assessment* unpub report PCA
- BARAT *et al* (1994), Y Barat, S Raux & B Dufay 'La production de l'atelier céramique du III^e siècle de la Boissière-Ecole (Yvelines)' in M Tuffreau-Libre & A Jacques *La Céramique du Bas-Empire en Gaule Belgique et dans les régions voisines* Revue du Nord, Collection Archéologie 4, 183–96
- BATES & MINKIN (1999), J Bates & J Minkin 'Lafone Street Southwark – prehistoric farming and a medieval bridge' *London Archaeologist* 8, No 12, 325–33
- BAUDOUX (1996), J Baudoux *Les amphores du nord-est de la Gaule (territoire français). Contribution à l'histoire de l'économie provinciale sous l'Empire romain* Documents d'Archéologie Française 52
- BEASLEY 2006, M Beasley 'Roman boundaries, roads and ritual: excavations at the Old Sorting Office Swan Street Southwark' *Trans London Middlesex Archaeol Soc* 57, 23–68
- BOWSHER (1991), J M C Bowsher 'A burnt mound at Phoenix Wharf, southeast London: a preliminary report' in M A Hodder & L H Barfield (eds) *Burnt Mounds and Hot Stone Technology: Papers for the 2nd International Burnt Mound Conference, Sandwell, 12th–14th October 1990*, 11–19
- BRANCH & LOWE (1994), N P Branch & J J Lowe *Bramcote Green Redevelopment Archaeological Project 1992/3: Palynology* Archaeoscape unpub report, Royal Holloway, University of London
- BRIGHAM (1980), T Brigham 'The port of Roman London' in B Watson *Roman London Recent Archaeological Work* Journal Roman Archaeology Supplementary Series 24, 23–34
- BRIGHAM (1990), T Brigham 'The late Roman waterfront in London' *Britannia* 21, 99–183
- BRODRIBB (1987), G Brodrribb *Roman Brick and Tile*

- BRONK RAMSEY (1995), C Bronk Ramsey 'Radiocarbon calibration and analysis of stratigraphy: the OxCal program' *Radiocarbon* 37 (2), 425–30
- BRONK RAMSEY (2001), C Bronk Ramsey 'Development of the radiocarbon program OxCal' *Radiocarbon* 43 (2a), 355–63
- COWAN (2000), C Cowan *Below Southwark; The Archaeological Story*
- CRUMMY (1983), N Crummy *The Roman Small Finds from Excavations in Colchester 1971–9* Colchester Archaeological Report 2
- DAVEY & LING (1982), N Davey & R Ling *Wall Painting in Roman Britain* Britannia Monograph 3
- DAVIES *et al* (1994), B Davies, B Richardson & R Tomber *The Archaeology of Roman London Volume 5: A Dated Corpus of Early Roman Pottery from the City of London* CBA Res Rep 98
- DEAN (1980), M Dean 'Excavations at Arcadia Buildings, Southwark' *London Archaeologist* 3, No. 14, 367–72
- DRUMMOND-MURRAY *et al* (1994), J Drummond-Murray, D Saxby & B Watson 'Recent archaeological work in the Bermondsey district of Surrey' *London Archaeologist* 7, No. 10, 251–7
- ELLENBERG (1988), H Ellenberg *Vegetation Ecology of Central Europe*
- FERRETTI & GRAHAM (1978), E Ferretti & A H Graham '201–211 Borough High Street' in SLAEC *Southwark Excavations 1972–74* London Middlesex Archaeol Soc & Surrey Archaeol Soc Joint Publication No. 1, 53–176
- FOCK (1966), see von den Driesch & Boessneck (1974)
- FRERE (1972), S Frere *Verulamium Excavations Vol 1* Reports of the Committee of the Society of Antiquaries of London 28
- GILLAM (1977), J P Gillam 'Coarse fumed ware in North Britain and beyond' *Glasgow Archaeol Journ* 4, 57–79
- GOODBURN (2000), D Goodburn *Summary Assessment Report on the Worked Wood Found during PCA Excavations at Long Lane, Southwark (LGK99)* unpub report, PCA
- GOODBURN *et al* (2003), R Masefield, N Branch, P Couldrey, D Goodburn & I Tyres 'A Later Bronze Age well complex at Swalecliffe, Kent' *Antiq Journ* 83, 47–122
- GREIG (1992), J Greig 'The deforestation of London' *Review of Palaeobotany and Palynology*, 71–86
- GRIGSON (1982), C Grigson 'Cattle in prehistoric Britain' *The Ark* 9 No. 2, 47–9
- HAMMERSON & MURRAY (1978), M J Hammons & C Murray 'Other Roman pottery' in G Dennis '1–7 St Thomas Street' in *Southwark Excavations 1972–1974* London Middlesex Archaeol Soc & Surrey Archaeol Soc Joint Publication No. 3, 337–78
- HASLAM *et al* (1975), S Haslam, C Sinker & P Wolseley 'British water plants' *Field Studies* 4, 243–351
- HASSALL (2000), M Hassall 'London: the Roman city' in I Haynes, H Sheldon & L Hannigan *London Under Ground the Archaeology of the City*, 52–61
- HEARD *et al* (1990), K Heard, H Sheldon & P Thompson 'Mapping Roman Southwark' *Antiquity* 64, 608–19
- HERMET (1934), F Hermit *La Graufesenque* Condatomago
- KERRIDGE (1967), E Kerridge *The Agricultural Revolution*
- KIESEWALTER (1888), see von den Driesch and Boessneck (1974)
- KILLOCK (2005), D Killock 'Roman river bank use and changing water levels at 51–53 Southwark Street' *Trans London Middlesex Archaeol Soc* 56, 27–44
- KING (1978), A King 'A comparative survey of bone assemblages from Roman sites in Britain' *Institute of Archaeology Bulletin* 15, 207–32
- KING (1984), A King 'Animal bones and the dietary identity of military and civilian groups in Roman Britain, Germany and Gaul' in T F C Blagg & A C King (eds) *Military and Civilian in Roman Britain* BAR Brit Ser 136, 187–217
- KNORR (1919), R Knorr *Töpfer und Fabriken verzierter Terra-Sigillata des ersten Jahrhunderts*
- LAUWERIER (1993), R C G M Lauwerier 'Bird remains in Roman graves' *Archaeofauna* 2, 75–82
- LAUWERIER & HESSING (1992), R C G M Lauwerier & W A M Hessing 'Men, horses and the Miss Blanche effect: Roman horse burials in a cemetery at Kesteren, The Netherlands' *Helinium* 32.1–2, 78–109
- LIBOIS & HALLET-LIBOIS (1988), R M Libois & C Hallet-Libois 'Elements pour l'identification des restes crâniens des poissons dulçaquicoles de Belgique et du Nord de la France, 2' *Fiches D'Ostéologie Animale pour l'Archéologie Série A: Poissons* No. 4, Cypriniformes Centre de Recherches Archéologiques du CNRS
- LING (1985), R Ling *Romano-British Wall Painting*
- LUFF (1982), R M Luff *A Zooarchaeological Study of the Roman North-Western Provinces* BAR Int Ser 137
- LYNE (1994), M A B Lyne *Late Roman Handmade Wares in South-East Britain* unpub PhD thesis, University of Reading
- LYNE & JEFFERIES (1979), M A B Lyne & R S Jefferies *The Alice Holt/Farnham Roman Pottery Industry* CBA Res Rep 30
- MARSDEN (1980), P Marsden *Roman London*
- MARSDEN & WEST (1992), P Marsden & B West 'Population change in Roman London' *Britannia* 23, 133–40
- MARTIN (1986), T Martin 'Montans' in C Bémont & J-P Jacob (eds) *La terre sigillée gallo-romaine. Lieux de production du Haut Empire: implantations, produits, relations* Documents d'Archéologie Française 6, 58–71

- MARTIN-KILCHER (1987), S Martin-Kilcher *Die römischen Amphoren aus Augst und Kaiser-Augst* Forschungen in Augst 7, 1
- MEDDENS (1996), F M Meddens 'Sites from the Thames estuary wetland, England, and their Bronze Age use' *Antiquity* 70, 325–34
- MEES (1995), A W Mees *Modellsignierte Dekorationen auf südgallischer terra Sigillata* Forschungen und Berichte zur Vor- und Frühgeschichte in Baden-Württemberg 54
- MERRIFIELD (1983), R Merrifield *London, City of the Romans*
- MILLET (1990), M Millet *The Romanisation of Britain: an Essay in Archaeological Interpretation*
- MILNE (1992), G Milne *From Roman Basilica to Medieval Market, Archaeology in Action in the City of London*
- MILNE (1993), G Milne *The Port of Roman London*
- MILNE (1995), G Milne *Roman London; Urban Archaeology in the Nation's Capital*
- MONAGHAN (1987), J Monaghan *Upchurch and Thameside Roman Pottery: a Ceramic Typology for Northern Kent, First to Third Centuries AD* BAR Brit Ser 173
- NODDLE (1980), B Noddle 'The animal bones' in P Wade Martin 'Excavations at North Elmham Park 1967–72' *East Anglian Archaeology* 9 (2), 375–412
- NODDLE (1981), B Noddle 'Notes on the history of domestic pigs' *The Ark* 8 (11), 390–5
- ORTON (1975), C J Orton 'Quantitative pottery studies, some progress, problems and prospects' *Science and Archaeology* 16, 30–5
- PERRING *et al* (1991), D Perring, S Roskams & P Allen *Early Development of Roman London West of the Walbrook; The Archaeology of Roman London Vol 2* CBA Res Rep 70
- PICKARD (2002), C Pickard *An Assessment Report of Archaeological Excavations at the New Wolfson Wing, King's College London, London Borough of Southwark* SEI unpub report PCA
- PRICE & COTTAM (1998), J Price & S Cottam, *Romano-British Glass Vessels: A Handbook* Practical Handbook in Archaeology 14
- PROCTOR & BISHOP (2002), J Proctor & B Bishop 'The prehistoric and environmental development on Horselydown, excavations at 1–2 Three Oak Lane' *Surrey Archaeol Coll* 89, 1–26
- PRUMMEL (1979), W Prummel 'The size of Dutch horses and Labouchere's theory on the origin of the Frisian horse' in M Kubasiewicz (ed) *Archaeozoology* 1, 431–8
- RIDGEWAY (1997), V H Ridgeway *An Assessment of Archaeological Excavations at 47–67 Hopton Street, London, Borough of Southwark* unpub report PCA
- RIDGEWAY & MEDDENS (2001), V H Ridgeway & F Meddens 'Changing prehistoric environments on a Southwark island margin from Butlers Wharf' *London Archaeol* 9, No. 10, 283–91
- ROOK (1979), T Rook 'Tiled roofs' in A McWhirr *Roman Brick and Tile* BAR Int Ser 68, 295–301
- ROWSOME (2000), P Rowsome *Heart of the City. Roman, Medieval and Modern London Revealed by Archaeology at 1 Poultry*
- SCHAAF (1976), L Schaaf 'Excavations at 175–177 Borough High Street' *London Archaeologist* 3, No. 1, 3–7
- SHELDON (1978), H Sheldon 'The 1972–74 excavations: their contribution to Southwark's history', in SLAEC *Southwark Excavations 1972–74*, London Middlesex Archaeol Soc & Surrey Archaeol Soc Joint Publication 1, 11–49
- SHELDON (2000), H L Sheldon 'Roman Southwark' in I Haynes, H L Sheldon & L Hannington (eds) *London Under Ground, The Archaeology of the City*, 121–50
- SIDELL *et al* (2002), J Sidell, J Cotton, L Rayner & L Wheeler *The Prehistory and Topography of Southwark and Lambeth*
- SIMPSON (1968), G Simpson 'The decorated samian pottery' in B W Cunliffe *Fifth Report on the Excavations of the Roman Fort at Richborough, Kent* Rep Res Comm Soc Antiq London 23, 148–62
- SIMPSON (1976), G Simpson 'Decorated terra sigillata at Montans (Tarn) from the manuscript of Elie Rossignol at Albi' *Britannia* 7, 244–73
- SLAEC (1978), *Southwark Excavations 1972–74* London Middlesex Archaeol Soc & Surrey Archaeol Soc, Joint Publication 1
- STABLER (2000), K Stabler *An Archaeological Evaluation at 32 Long Lane, London* SEI unpub report AOC
- STUIVER *et al* (1998), M Stuiver, P J Reimer, E Bard, J W Beck, G S Burr, K A Hughen, B Kromer, G McCormac, J van der Plicht & M Spurk 'INTCAL98 radiocarbon age calibration, 24000–0 cal BP' *Radiocarbon* 40 (3), 1041–83
- SYMONDS (1992), R P Symonds *Rhenish Wares: Fine Dark Coloured Pottery from Gaul and Germany* Oxford Univ Comm for Archaeol Monograph 23
- SYMONDS & TOMBER (1994), R P Symonds & R S Tomber 'Late Roman London: an assessment of the ceramic evidence from the City of London' *Trans London Middlesex Archaeol Soc* 42, 59–100
- TAYLOR-WILSON (1998), R H Taylor-Wilson *An Assessment of Archaeological Excavations at Hunt's House, Guy's Hospital, London Borough of Southwark* unpub report PCA
- TEICHERT (not dated), see von den Driesch and Boessneck (1974)
- THOMAS *et al* (1996), C Thomas, J Rackham, A J Barham, N P Branch, J Giorgi, D Goodburn, J Lowe, V Neal, D Smith, I Tyers, K Wilkinson & V Williamson 'Bramcote Green, Bermondsey: a Bronze Age trackway and palaeo-environmental sequence' *Proc Prehist Soc* 61, 221–53
- TINSLEY (1981), H M Tinsley 'The Bronze Age' in I Simmons & M Tooley (eds) *The Environment in British Prehistory*, 210–50

- TYERS (1984), P Tyers 'An assemblage of Roman ceramics from London' *London Archaeol* 4 (14), 367–74
- VON DEN DRIESCH & BOESSNECK (1974), A von den Driesch & J Boessneck 'Kritische Anmerkungen zue Widerristhohenberechnung aus Langenmassen vor-und frühgeschichtlicher Tierknochen' *Saugetierkündliche Mitteilungen* 22, 325–48
- WATSON (1998), B Watson "Dark earth" and urban decline in late Roman London' in B Watson *Roman London Recent Archaeological Work*, Journal of Roman Archaeology Supplementary Series 24, 100–6
- YOUNG & HUMPHREY (1999), R Young & J Humphrey 'Flint use in England after the Bronze Age: time for a re-evaluation?' *Proc Prehist Soc* 65, 231–42
- YULE (1988), B Yule 'Natural topography of North Southwark' in P Hinton (ed) *Excavations in Southwark 1973–76, Lambeth 1973–1979* London Middlesex Arch Soc & Surrey Arch Soc Joint Pub 3, 13–17

LATE ROMAN BURIALS AND EXTRAMURAL MEDIEVAL AND LATER DEVELOPMENT AT PREMIER PLACE, DEVONSHIRE SQUARE, HOUNDSDITCH, LONDON EC2

David Sankey and Brian Connell

With appended specialist reports by Rupert Featherby, Jane Liddle and Lucy Whittingham

SUMMARY

During redevelopment on the site of the former Houndsditch Telephone Exchange, an archaeological watching-brief discovered 36 Roman burials lying beneath the modern basements. Subsequent excavation revealed regular rows of closely spaced graves, without grave goods, but many with crushed chalk in the coffin. This is consistent with a late Roman 'managed cemetery'. Also revealed were medieval and post-medieval pits, wells and cesspits. Medieval cesspits indicate extramural development when this area lay within the garden of Holy Trinity Priory.

INTRODUCTION

Between 21 September and 15 November 1999, the Museum of London Archaeology Service (MoLAS) carried out an archaeological watching-brief at Premier Place, 2½ Devonshire Square, London EC2 (Fig 1), which was being redeveloped as offices by the Sun Life Assurance Society plc. The National Grid Reference for the centre of the site is NGR 53337 18143.

The site had previously been occupied by the Houndsditch Telephone Exchange: the deep basements and underground rail system of this building had completely removed all archaeological remains except on a strip of land at its eastern side. Here, although all historic land

surfaces had also been removed by basements, some cut features, such as pits, wells and graves, were known to survive. In 1986, for example, an excavation at 9–12 Cutler Street (site code CUE86) encountered a single inhumation with crushed chalk and some later post-medieval pits (Heathcote 1988, 383).

During the watching-brief in the eastern part of the site, Roman burials were discovered immediately below the level of the modern basements. As a result, brief archaeological excavations were undertaken in small areas during the demolition and piling programme. The watching-brief and excavation were recorded under Museum of London site code CDV99. A separate photographic record and descriptive survey was made of a 19th-century building (the Drill Hall) on the site.

The research archives for site CDV99 and the Drill Hall are deposited with the Museum of London and may be consulted by prior arrangement at the London Archaeological Archive and Research Centre (LAARC), Mortimer Wheeler House, 46 Eagle Wharf Road, London, N1 7ED. In addition to the specialist reports appended to this article, reports on the clay tobacco pipe, by Kieron Heard (Heard 2001), and the accessioned finds, by Jackie Keily (Keily 2001), can also be found within the site archive.

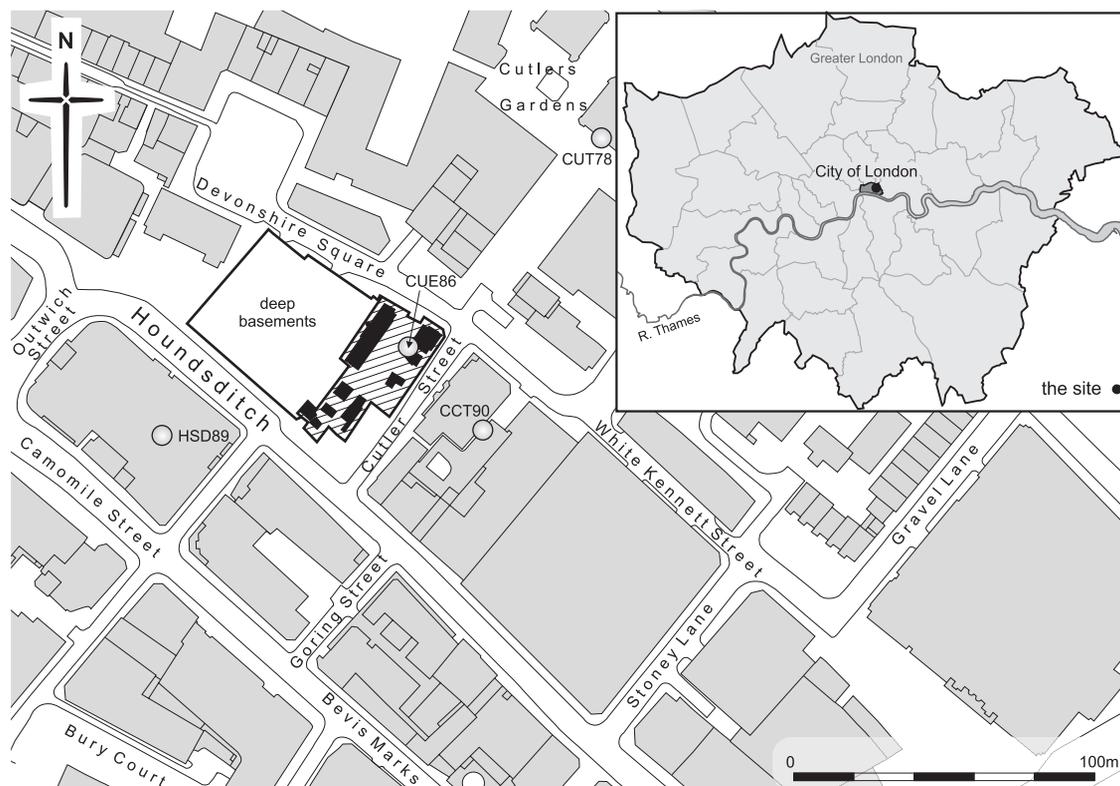


Fig 1. Site location showing area of watching-brief and other nearby sites mentioned in this report (Scale 1:2500)

ROMAN BACKGROUND

The site lies beyond the built up area of the Roman city and is some 65m north of the city wall built in *c.*AD 200 (Fig 2). An earlier formal boundary or *pomerium* had been established some time after AD 120: ditches on Dukes Place (Maloney 1979, 294–5) and monumental foundations at Bishopsgate (Filey 1991, 272) suggest that this boundary may have followed the same alignment as the later defences. Ermine Street, the Roman road to Lincoln, left the city through Bishopsgate and lay about 160m west of the site. The origins of the road are probably contemporary with the foundation of London *c.*AD 50.

Roman law forbade the burial of the dead within the designated limits of a town (Salway 1981, 694) and the cemeteries of Roman London lay beside the major roads leaving the city but outside the city boundaries. The Houndsditch site lies within the northern cemetery, which flanked Ermine Street (Hall 1996, 64–73) and

extended at least as far north as 201 Bishopsgate (site BGA90/BGB98), over 500m from the city wall (Swift 2003, 8 and 21–4). Burials within the northern cemetery have also been recorded at Spitalfields Market (SRP98); the PLA Warehouses, Cutler Street (CUT78) and 20–26 Cutler Street (CCT90); 58–60 Houndsditch (HSD89); and 9–12 Cutler Street (CUT86).

THE ROMAN CEMETERY

Description

The natural brickearth was truncated at *c.*10.8m OD. Cut into it were 35 Roman inhumation graves containing 36 individuals (one grave contained a mother and stillborn child). All were aligned roughly west–east, except for two which were aligned roughly south–north (Fig 3). The west–east burials were arranged side-by-side in orderly rows with little intercutting between the graves. The extant burials defined at least five such rows. There was also a small



Fig 2. The site in relation to the Roman city wall (built c.AD 200), main Roman roads and cemetery areas of Roman London (dots: each dot representing several known burials) (Scale 1:20,000)

number of cut features, slightly larger than the graves but on a similar west–east alignment (Fig 3), one of which was cut by a later burial. These could be graves that were dug but never used or the base of grave cuts where the body had been removed by later truncation. The west–east burials are aligned almost exactly parallel to the city wall to the south of the site. They do not appear to have been aligned on Ermine Street. This suggests that the burials are likely to postdate the construction of the wall in c.AD 200 or at least any earlier boundary such as the mid-2nd-century *pomerium*.

There is no direct dating evidence for the burials at Premier Place — all the Roman pottery from the grave fills is residual. Nevertheless the pottery mainly dates from AD 120–300, and 19 of the burials contain pottery dated to the 2nd century. The lack of cremation burials may be the result of truncation, since cremation burial pits were probably shallower than inhumation graves. However, the lack of cremations may also be an indication of a late Roman date for the use of this part of the northern cemetery. In the eastern cemetery, for example, cremation burials

predominated over inhumations during the early use of the cemetery but became relatively scarce in its later use (Barber & Bowsher 2000, 116). The use of chalk-like material is also indicative of a late date. The practice of encasing corpses in chalk, gypsum, lime or plaster mainly belongs to the 4th century (Philpott 1991, 91). Although some earlier examples have been encountered in the eastern cemetery, the majority derived from the later use of the cemetery (Barber & Bowsher 2000, 104). It is also the case that there were no extant burial goods in any of the burials at Premier Place. This contrasts with other parts of the northern cemetery, such as the Spitalfields area where recent excavations have shown that 20–25% of the burials were accompanied by some item (C Thomas, pers comm). Excavations within the cemetery on the eastern side of Roman London found 24% of graves to contain goods (Barber & Bowsher 2000, 117). The absence of grave goods may also be an indicator of late Roman date.

The only potential relic of a burial ritual was a collection of fish and animal bones found next to the two south–north burials (Fig 3). Cod

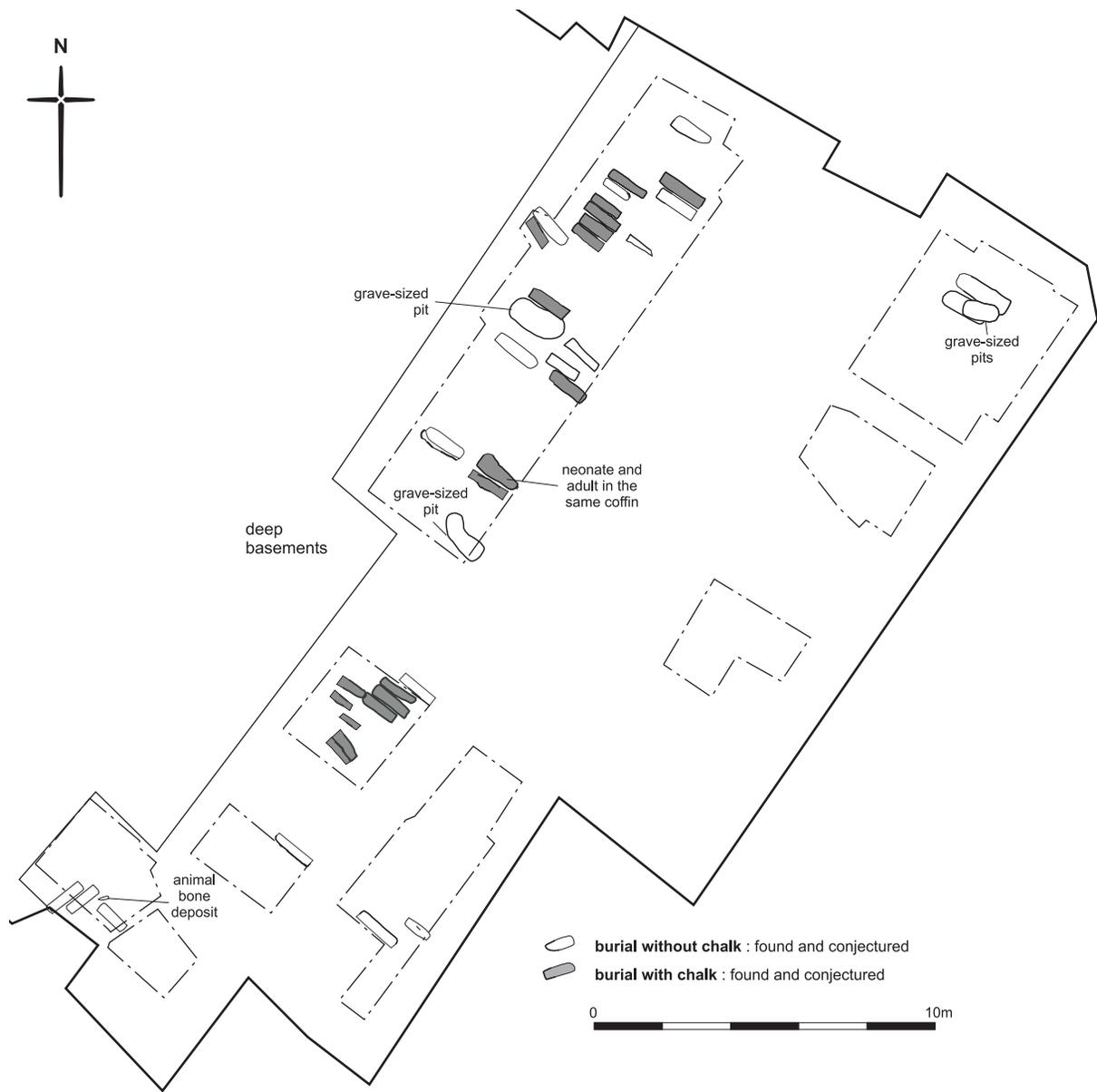


Fig 3. Roman graves and grave-sized pits (1:200)

remains, particularly skull bones, were most common — perhaps the remains of a funeral meal or offering — but a mackerel vertebra and a small quantity of cattle, sheep/goat, pig and chicken remains were also recovered.

The skeletal remains show that the alignment and attitude of the inhumed bodies were remarkably consistent; all were supine and extend-

ed with hands lain either at the top of the leg or in the centre of the pelvis (Figs 5–6). The individuals in the west–east burials were all laid with their heads to the west. In the two south–north burials the inhumed individuals’ heads lay to the south. About 70% of the burials yielded positive evidence for the use of a timber coffin, either from a pattern of nails surrounding the



Fig 4. Row of Roman burials revealed during the excavation at Premier Place, from the north

body and/or the outline of a coffin preserved by crushed chalk surrounding the body (Table 1). The remaining 30% of burials may also have been in coffins, although no evidence survived.

The white powder present within the coffins of 19 of the burials is assumed to be crushed

chalk. Although the powder found at Premier Place was not sampled, analysis of similar deposits found on other sites has invariably demonstrated it to be crushed marine chalk (Barber & Bowsher 2000, 101–2). The crushed chalk occurred as either a thin layer, less than



Fig 5. Recording Roman burials at Premier Place; the burial in the foreground shows the use of a chalk-like substance within the coffin, from the north

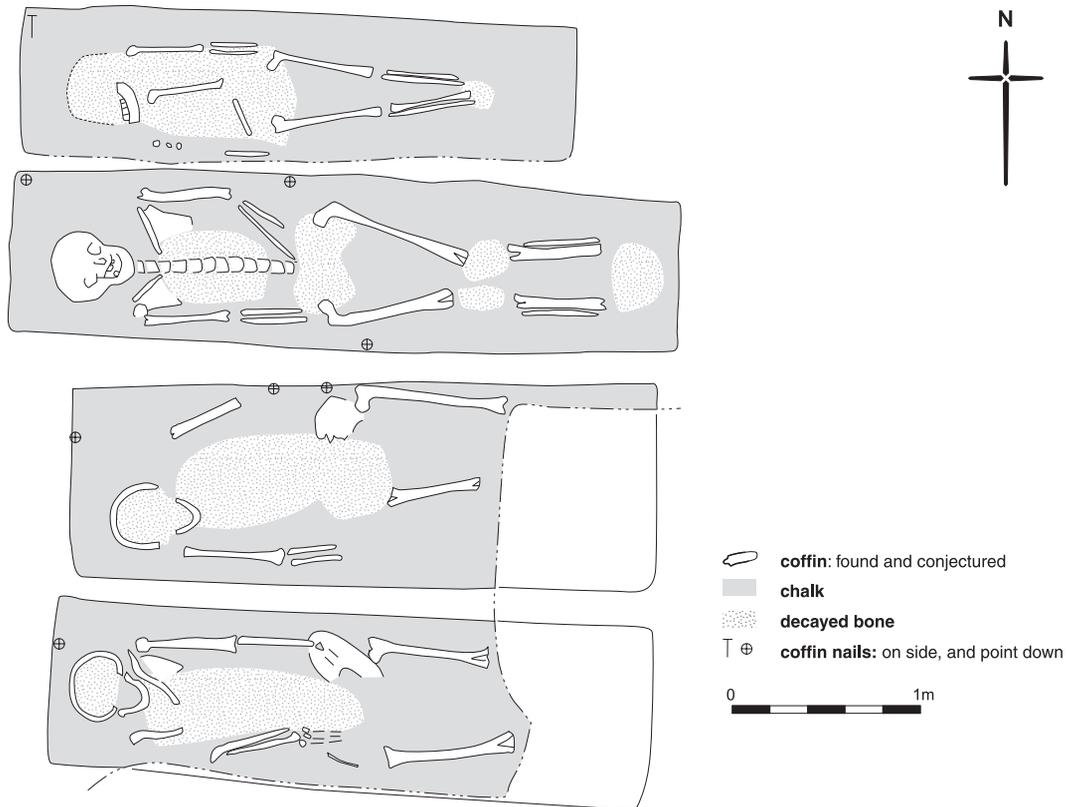


Fig 6. Group of closely spaced Roman burials in wooden coffins with chalk-like substance within the coffin (scale 1:40)

Table 1. Roman burial summary table

Context	Coffin	Chalk	Age	Sex	Stature	Comments
[102]	nails	no	15	?female	not determined	
[108]	no evidence	no	26–45	female	not determined	
[111]	no evidence	no	c.5–10	not determined	not determined	south–north burial
[112]	no evidence	no	16	?male	not determined	
[114]	no evidence	no	adult	not determined	not determined	south–north burial
[122]	no evidence	no	26–45	male	not determined	
[124]	by chalk	yes	45+	female	1.71m	
[127]	by chalk and nails	yes	26–45	?female	1.71m	neonate [131] next to lower right leg within coffin
[129]	by nails	no	45+	male	not determined	
[131]	by chalk and nails	no	36 weeks	not determined	not determined	in coffin with adult [127]
[132]	no evidence	no	adult	not determined	not determined	
[133]	nails	no	45+	female	1.66m	
[146]	by chalk and nails	yes	45+	female	1.59m	
[147]	no evidence	no	45+	female	not determined	
[148]	nails	no	adult	not determined	1.53–57m	
[151]	no evidence	no	adult	female	not determined	
[152]	by chalk	yes	adult	not determined	not determined	
[153]	nails and chalk	yes	26–45	female	not determined	
[154]	no evidence	no	26–45	female	1.48m	
[155]	by chalk, stain and nails	yes	45+	female	not determined	
[156]	nails	no	17–25	?male	not determined	
[159]	nails	no	adult	not determined	not determined	
[160]	chalk and nails	yes	17–25	not determined	not determined	
[161]	by chalk	yes	23–35	female	not determined	
[162]	by chalk	yes	26–45	?female	not determined	
[163]	by chalk	yes	11	?male	not determined	
[166]	by chalk	yes	adult	not determined	1.6m	
[69]	no evidence	no	45+	?male	1.64m	
[70]	by chalk	yes	adult	not determined	not determined	
[81]	by chalk and nails	yes	15	?female	not determined	
[82]	by chalk	yes	adult	not determined	not determined	
[83]	by chalk	yes	26–45	?male	not determined	
[84]	by chalk and nails	yes	3 to 4	not determined	not determined	
[85]	by chalk	yes	45+	male	not determined	
[86]	by chalk	yes	no info	no info	no info	
[87]	by chalk and nails	yes	17–25	female	not determined	
[99]	no evidence	no	26–45	male	not determined	

100mm thick, beneath the body or as a fine sprinkling within the coffin. Whilst 64% of the females were buried with chalk, only 42% of the men were. At Premier Place, both the total proportion of chalk burials and the gender bias within them are unusual. In comparison, the excavated evidence suggests that chalk burials within the eastern cemetery accounted for only

c.12.4% of the total and that no gender bias was present (Barber & Bowsher 2000, 101, 104).

The cemetery population

A full description of the skeletal remains is found in Brian Connell's appended report and the reader is referred there for a more detailed consideration of the figures cited below.

There were 29 adults and 7 sub-adults within the sample of 36 excavated individuals. The sex of 21 of the adults could be determined and 7 males and 14 females were present. The body of what was probably a stillborn child was found interred near the lower legs of one of the adults, probably a female. Similar occurrences of young infants and adults (both male and female) in the same grave have been found within the eastern cemetery (Barber & Bowsher 2000, 100–1). The physique of both sexes was typical for the period — the estimated mean stature was 1.67m for the males and 1.63m for the females, both figures well within the normal range of variation seen in the larger sample from the excavated parts of the eastern cemetery (Conheeny 2000, 280) and the Roman cemetery at Poundbury (Molleson 1993).

It may be noted in passing that visceral surface lesions on ribs within the cemetery population provided further evidence for the presence of tuberculosis in Roman London.

Discussion

The graves are closely set in well ordered rows and the bodies are laid out in a similar fashion, many in wooden coffins (Fig 6). Indeed some of the graves were only *c.*100mm apart and, unless adjacent graves were open at the same time, may have needed markers defining the plots so as to avoid disturbance by later burials. Many of the characteristics of this layout conform to those of a late Roman managed cemetery, a cemetery type which developed in the first decades of the 4th century AD and which was probably specifically urban in its origins. There need be no direct association of this cemetery type with Christianity since it appears ‘around or soon after the time of the Peace of the Church, when Christian influence on burial practice in the community at large was unlikely to be great’ (Philpott 1991, 226–8).

The use of chalk within burials may be as a cheap substitute for gypsum or lime and the chalk burials might therefore be analogous to the ‘plaster burials’ which are widely attested in later Roman Britain (Philpott 1991, 90). Although Green suggests that the origin of ‘plaster burials’ is as a pagan Hellenistic rite in the Eastern Mediterranean which was adopted by Christians as suitable for those who believed in the imminent physical resurrection of the dead (Green 1977, 46–52), there is no reason to strongly associate

‘plaster burials’ with Christianity (Philpott 1991, 93–5). It has also been suggested that the use of chalk may have had a symbolic value; its whiteness may have held meaning, symbolising light (Barber & Bowsher 2000, 320–1).

The fact that all the excavated burials were inhumations, that a high proportion were chalk burials and none contained grave goods is most likely to be explained by their late Roman date. It cannot, however, be discounted that this part of the northern cemetery may also have been used by a specific group connected by occupation, status or faith.

MEDIEVAL AND POST-MEDIEVAL BACKGROUND

There is little evidence for Saxon or early medieval activity in the vicinity of the site. In the 13th century the medieval City ditch (the *Hondes Ditch*) was widened so as to extend from the City wall almost to the line of modern Houndsditch. The present road is derived from a path or track which originally ran along the outer side of the ditch (Hunting 1984, 13–16). From the 13th century, the site lay in an extramural garden belonging to Holy Trinity Priory, Aldgate (mentioned in 1255–56), which comprised 7 acres (2.83 ha) (Schofield & Lea 2005, 18).

By the time of the copperplate map of *c.*1559 the north-east side of Houndsditch was lined by houses with gardens to their rear (Fig 7). Some of the properties came into the possession of the Cutlers’ livery company in the 15th century and some of the leases are preserved (Hunting 1984, 28). These tell us that properties on Woolsack Alley (now Cutler Street) were used as houses, gardens, yards and workshops by numerous trades, including a fishmonger, a joiner, a saddler and tallow chandlers. Some of these properties lie within the area of the present site. Second-hand clothes dealers, known as ‘fripperers’ or ‘phelipers’, were beginning to appear in the Houndsditch area in the 14th century; this trade was later to become the dominant activity in the area (Hunting 1984, 31).

By the time of Faithorne and Newcourt’s map of 1658 the land to the north of Houndsditch was more intensively developed. The site lies on the boundary between the wards of Bishopsgate to the west and Portsoken to the east. The wards were administrative units that evolved in the medieval period and neighbouring wards often developed in different ways. By the 17th century

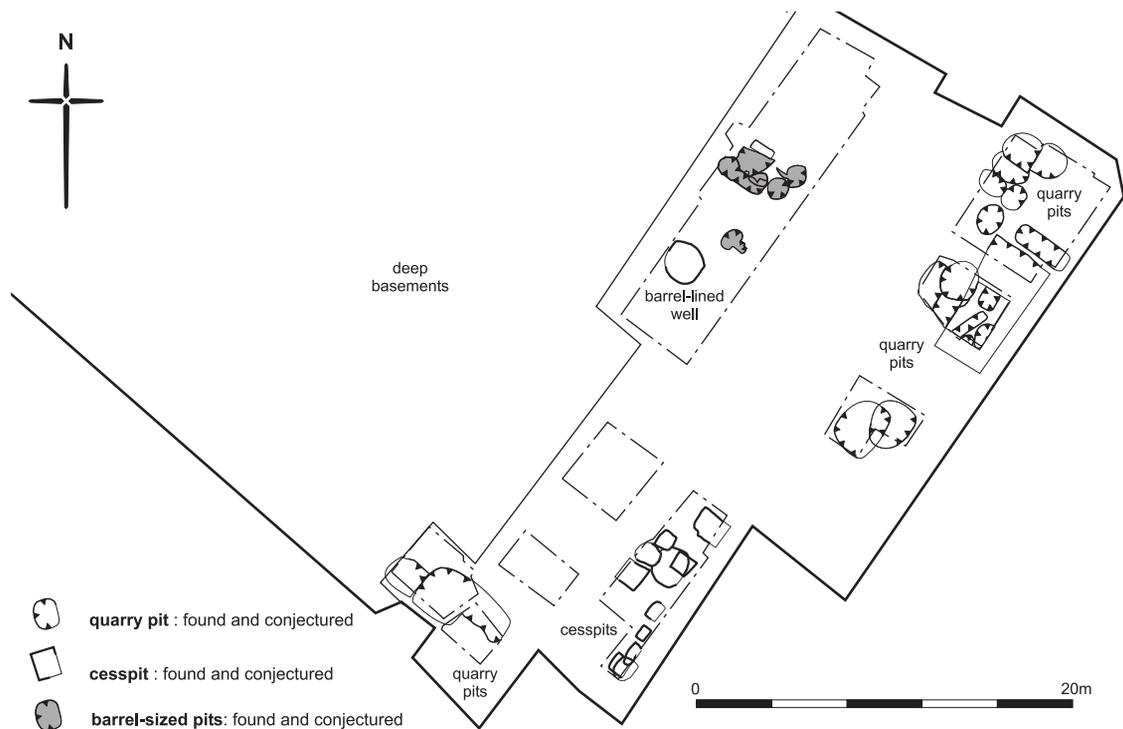


Fig 8. Plan of medieval features (Scale 1:400)

extensions to one side, was excavated towards the north of the site (Fig 8). The pits were backfilled with sterile deposits which appeared to be soil from the surrounding area. The fills certainly did not contain the usual domestic rubbish that one would expect of a refuse pit of these dimensions (*c.*1.5m diameter). It is possible that the pits were originally dug to hold barrels: these were subsequently removed and the cuts backfilled. As these features, which contained no direct dating evidence, cut the earlier Roman burials, they are likely to be of medieval date. The barrels may have been used as water butts or tanks containing a steeping fluid. Both would be consistent with the ownership of the area by Holy Trinity Priory when the area was used for monastic gardens. Water butts may have been used as a reservoir for certain forms of horticulture, while tanks could have held the liquid used to tan leather or parchment.

It may be significant that these pits were found near a large, deep, barrel-lined well (Fig 8). The well was probably constructed in the 12th century, and the pottery assemblage from its fills included

coarse London-type ware (LCOAR), shelly sandy ware (SSW), and an early style London-type ware (LOND EAS) jug dated 1140–1220.

The site's largest deposit of animal bones was recovered from the barrel well and was dominated by goat horncores. It is possible that these cores were dumped together, and if so, they may have come from a single source and therefore could represent waste from a small-scale horn-working shop situated in the area. A number of cattle bones (from the head and limbs) were also recovered from the well. The butchery on the limb bones is indicative of disarticulation, and the skull fragments suggest that these remains may also have derived from butchery waste. Sheep/goat bones showed an emphasis on head and lower limb bones, neither of which contain a lot of meat and would not usually have gone to the consumer. The recovery of these bones usually indicates the deposition of waste from primary butchery, including slaughter and initial carcass preparation (Dobney *et al* 1996, 23). A small quantity of food waste, from domestic fowl and fish such as plaice/flounder and cyprinidae,

was also recovered; a goshawk wing bone may be a chance find.

Cesspits

A row of 12th- or 13th-century cesspits was excavated near to Houndsditch (Fig 8). They were generally rectangular, 1.0–1.5m wide; cesspits of this size would have been appropriate to a domestic, family-sized dwelling. They formed a discrete group and presumably lay within the backyard or garden of a dwelling fronting onto the path outside the *Hondes dich*. The cesspits produced a small pottery assemblage of 41 medieval sherds, with most of the pottery from the fills dated to 1140–1220. The presence of some potentially earlier fabrics, such as coarse London-type ware (LCOAR 1080–1200) and London-type ware (LOND 1080–1350), could suggest that some fills started accumulating as early as 1080; however, it is more likely that these deposits are contemporary with the remainder of the pottery assemblage.

More possible horn working waste came from two cesspits: one contained three cattle horncores with evidence of removal from the skull, while the fills of the second included the rear part of a cattle skull with both horncores attached, although cut through approximately 20mm from the base of the cores. Skinning marks on the skull suggest processing for the tanning industry and could indicate that the horns were removed before the hide was dispatched to the tanner, with part of the skull attached. A large hole in the frontale, with splinters of bone broken into the brain cavity, indicates that the individual was poleaxed. Cattle-size vertebrae with evidence of possible work-related pathology were also recovered, as well as the articulations from two male cattle pelvises.

Other animal waste, including a sheep skull split lengthways, possibly for the removal of the brain or for stewing, and a cod cleithrum, suggests food waste was also present.

Quarry pits

There was a large number of sizeable quarries (Fig 8) on the site, dug for the extraction of both brickearth and gravel, which appear to date mainly from the late 13th or early 14th century — slightly later than the use of the barrel-lined well or cesspits. Some of the quarry backfills contained disarticulated human bone disturbed from earlier Roman burials.



Fig 9. Plan of 16th-century remains (Scale 1:400)

POST-MEDIEVAL OCCUPATION

A small number of 16th-century features was encountered on the site (Fig 9). Two cesspits, squarer and larger than their medieval counterparts, were recorded in the north-east corner of the site, which suggests that houses had by now been built along Cutler Street towards what has become Devonshire Square. One fill produced four small undiagnostic sherds of coarse Surrey-Hampshire border ware (CBW) dating from within the broad range of 1270 to 1500; another fill yielded two sherds, one a Mill Green ware (MG), the other an imported early Siegburg stoneware (SIEG) jug. A quarry to the north-west of the site contained large quantities of rough-hewn, fine-grained limestone, probably the waste produced from reworking of ashlar blocks used to make decorative stonework. A

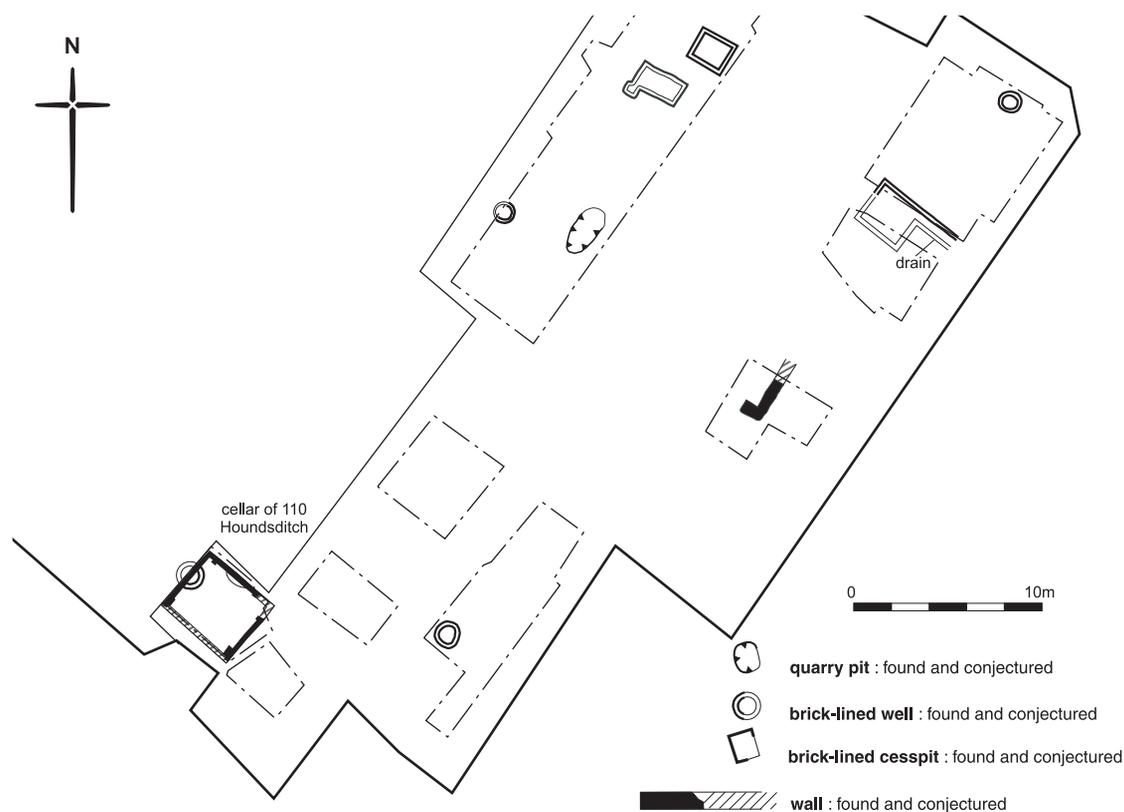


Fig 10. Plan of the 17th- to 19th-century remains (Scale 1:400)

small section of masonry foundation constructed of reused peg tiles was so heavily truncated it was uncertain as to what form of building it was related.

There was also archaeological evidence for the occupation of the site in the 17th and 18th centuries. Apart from a poorly-dated robbed wall alignment, the remains consist mainly of wells and cesspits (Fig 10). These are likely to have been in gardens or yards, although they could have been located in cellars. Contemporary maps indicate that Middlesex Street (Petticoat Lane), linking Bishopsgate with Whitechapel, had been constructed by the mid-17th century and that the area was more densely built up with tenements, alleys, and yards or gardens.

A red brick-built well near the north-east limit of excavation contained an extremely organic fill dated to 1600–30 and the final use of this feature may have been as a cesspit. The fill [16] produced a small post-medieval assemblage of 10 sherds including Surrey-Hampshire border whitewares

(BORDG/Y), Surrey-Hampshire border redware with green glaze (RBORG), Frechen stoneware (FREC), London-area post-medieval redware (PMR), Werra slipware (WERR), Weser slipware (WESE), and Westerwald stoneware (WEST BIC). It also contained small quantities of food waste. Another red brick-lined well lay on the western side of the site, where it cut through the medieval barrel well. No finds were recovered from this feature. A further brick-built well was recorded towards the Houndsditch frontage (Fig 10).

One of the fills of a cesspit on the east side of the site produced a large pottery assemblage of 260 sherds from 77 well-preserved vessels, forming a tightly-dated group dating to 1630–1700. The assemblage contains a large collection of Surrey-Hampshire border whitewares (BORDY/G/B/O), Surrey-Hampshire border redware (RBOR) and tin-glazed earthenware (TGWA/C) and smaller quantities of London-area post-medieval redware (PMR), metropolitan slipware (METS),

combed slipware (STSL), Staffordshire-type black-glazed wares (STBL), and Midlands purple ware (MPUR). Analysis of clay tobacco-pipe bowl forms (Heard 2001) suggests that the cesspit was backfilled in the period 1700–10. However, nearly half of the pipes are of types that were in common use during the period 1660–80, suggesting that the material used to backfill the cesspit had accumulated over quite some time. The 18th-century pipes from this pit include three with makers' marks moulded on the sides of the heel, in the usual fashion. There is a type OS10 (Oswald 1975, 37–41) bowl with the mark *WP*. This mark occurs frequently on sites in the City of London, most notably nearby in the Spitalfields area. The maker is unknown, but was probably working near the site. A similar bowl has the mark *IW* (*crowned*), which does not seem to have been recorded previously in London, although the initials alone occur with some frequency. There is also an example of a type AO25 (Atkinson & Oswald 1969, 171–227) pipe with the *Crowned Sun* mark, which has been found in some numbers in the Spitalfields/Bishopsgate area, suggesting that it was used by a local pipe maker.

Two 19th-century brick-built cesspits lay a little further to the north. The fills were mainly coal-ash and clinker. A square brick cellar (Fig 10) on the Houndsditch frontage is also thought to be of 19th-century date and to be part of 110 Houndsditch. To the east of the cellar, in the south-east corner of the site, a red brick-built well was backfilled with nightsoil and contained a large pottery assemblage, comprising 81 sherds from 24 vessels, dated 1770–1800. These are well preserved vessels in creamware (CREA), Chinese blue and white porcelain (CHPO BW), painted and transfer printed pearlware (PEAR PNTD and TR1), combed slipwares (STSL), and white salt-glazed stonewares (SWSG), London stoneware (LONS DWT), Midlands orange ware (MORAN), Midlands purple ware (MPUR), tin-glazed earthenwares (TGWA, TGW BLUE), and Surrey-Hampshire border whiteware (BORDB). It is noteworthy that brown-glazed Surrey-Hampshire border wares were present at this date. These wares become more common in the later part of the 17th century (Pearce 1992), but are evidently still present in this late 18th-century group.

An interesting, though poorly stratified, find was an 18th-century ivory and iron folding pocket-knife (<17>; Keily 2001). Similar knives

but with differently shaped handles have been found at a number of sites. The contents of an 18th-century well at Bishops Waltham, Hants (Barton 1969, 186, no. 90 and fig 70, no. 90) produced a pocket-knife with tortoiseshell scales and a 17th-century deposit at Ardingly fulling mill and forge (Goodall 1976, 60, no. 7 and fig 9a, no. 7) produced an early example with shaped bone scales.

DISCUSSION OF MEDIEVAL AND LATER REMAINS

The earliest medieval remains from the site date from the mid-12th century, from around the time that the area was acquired by Holy Trinity Priory. The Priors are thought to have obtained permission for a private postern, marked by a door jamb found in the City wall at Dukes Place, 230m to the east (Maloney & Harding 1979, 349). This was closed in 1477 as a result of the strengthening of the City wall under Mayor Jocelyn (Schofield 1994, 11). The postern may have provided for access across the area of the City ditch but any evidence of this was removed when the ditch was recut in 1477.

The horncores in the backfill of the barrel well clearly suggest that small-scale horn working was occurring on site. The series of barrel-shaped pits nearby may have contained tanning tanks and could indicate that parchment was also being made on site. The tanning of leather is also evinced by a cattle skull with characteristic butchery marks found in an adjacent cesspit. In this context, the documentary evidence for the presence of a saddler on the site in the 15th century may be significant. It seems that secondary animal products were being worked in a marginal, extramural area of the City. Although no dwellings of the workforce involved in these trades have been found, the cesspits associated with this settlement were excavated and they date from the foundation of Holy Trinity Priory onwards. The production of parchment was often carried on alongside tanning leather, having many of its processes in common, and required soaking in a caustic solution of calcium. The heads and feet were often left attached to the skin and utilised in other related processes such as the production of neatsfoot oil (Serjeantson 1989, 136–7). Calf, goat/kid and sheep/lamb skin were all used for parchment (Bischoff 1990, 8–10).

Holy Trinity Priory was suppressed at the

Dissolution. The Priory may have become a source of raw materials for building and the fine-grained limestone waste found in a quarry may have been taken from the demolished priory walls. In the 100 years after the Dissolution London's population multiplied by 7 to 8 times (Stone 1972, 72–5, 131) and the former Priory property, with its gardens and dwellings, would have become increasingly subdivided and intensively built up. If the size and shape of the pits is a guide, the status of the area may have risen over this period.

The development of the site through the succeeding centuries saw a gradual infilling of open spaces and a change from what may be termed 'domestic industry', where craft workshops or storage space occurred within domestic residences, to purpose-built industrial or warehouse premises. An example of the latter would be the 'Drill Hall' which stood on the site prior to redevelopment. This building had been used to store and sell second-hand clothes to the rag trade. However, the archaeological remains of the 17th and 18th centuries produced mainly domestic assemblages typical for the City of London.

SPECIALIST REPORTS

HUMAN BONE

Brian Connell

Methods

A total of 36 inhumation burials was recovered from Premier Place (Table 1, Fig 3). Full descriptions of each of the skeletons are available in the relevant research archive (Connell 2001).

Age determination

For the adults in this sample, age determination was based on changes in the pubic symphysis (Brooks & Suchey 1990), and where this area of the pelvis was missing the auricular surface method was used (Meindl *et al* 1985). The amount of wear on the molar teeth was also used (Brothwell 1981). For the sub-adults, age determination was based on tooth eruption (Ubelaker 1989), diaphyseal lengths (Scheuer & Black 2000), permanent molar root formation (Moorrees *et al* 1963), and epiphyseal fusion (Scheuer & Black 2000).

Sex determination

The biological sex of the adult skeletons was based on visual observation of pelvic and cranial characters following Phenice (1969), Ferembach *et al* (1980) and Buikstra and Ubelaker (1994). Sex determination in sub-adult individuals is more problematic because the secondary sexual characteristics are not usually manifest until puberty. An indication of the sex of sub-adults (with surviving dentition) is given by plotting permanent canine tooth dimensions against those of the adults sexed by osteological methods.

Continuous and discontinuous traits

The calculation of stature was based on the formulae devised by Trotter (1970). Metrical data were recorded to standards following Buikstra and Ubelaker (1994) and Brothwell (1981). Non-metric traits were recorded following the definitions of Berry and Berry (1967) and Finnegan (1978).

Pathology

All pathological alteration was described (in the full catalogue) and classifications of any disease processes follow Aufderheide and Rodriguez-Martin (1998) and Ortner and Putschar (1981).

Preservation and completeness

The skeletons were mostly very incomplete and poorly preserved. The preservation was poor for 20 of the 36 skeletons examined (56%). The exterior cortical surfaces were badly eroded and many of the articular ends were missing. Of the 16 burials that had good or moderate preservation (grade 1 or 2), 7 were in coffins with a chalk-like material. Fig 11 shows the percentage completeness of the skeletons and it can be seen that all except two are 50% complete or under. The poor preservation and incompleteness of many of the skeletons has implications for the availability of osteological characters used for age and sex determinations and this meant that less than the full range of methods could be applied.

Human variation

Age and sex

This sample consists of the remains of 29 adults

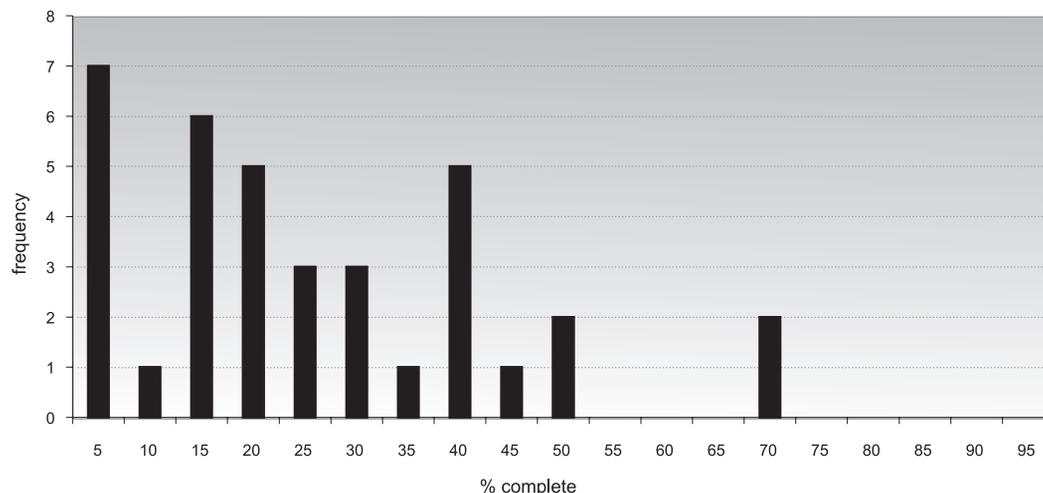


Fig 11. Completeness of the skeletons (count of bones per individual expressed as a percentage of the total normally present)

(81%) and 7 sub-adults (19%). Of the 29 adults, 9 (31%) could not be more accurately aged other than to an 'adult' age category due to the absence of osteological age indicators. The distribution of age at death for the entire group is shown in Fig 12. The adults consist of 7 males and 14 females plus 8 individuals (22%) where the sex could not be reliably determined.

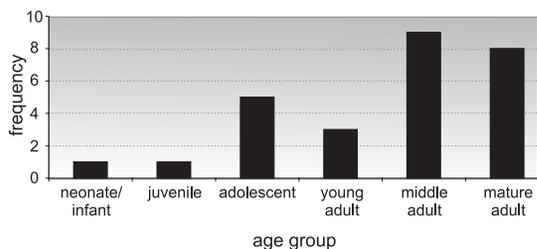


Fig 12. Mortality profile: neonate/infant — up to 12 months; juvenile — up to 5 years; adolescent — up to 16 years; young adult — 17–25 years; middle adult 26–45 years; mature adult — 45+ years (this figure does not include the nine individuals aged as 'adult')

The skeleton of a perinatal individual [131] was found adjacent to the lower legs of an adult [127]. None of the limb bones of the perinate were sufficiently intact to permit an estimation of gestational age; however, the greater wing of the sphenoid bone was measured (26.8mm). This measurement was compared to data from

modern foetuses compiled by Fazekas and Kosa (1978). The sphenoid bone reaches a mean size of 26.4mm ($n=8$) at 36 weeks old, and this suggests that the skeleton [131] was probably a stillbirth.

In order to determine the sex of the juveniles in this sample, measurements of the permanent mandibular canine teeth were assessed as these teeth are known to be sexually dimorphic. Measurements of these teeth in adults who have been sexed by osteological methods can be used as a baseline from which to determine the sex of juveniles (Mays & Cox 2000). Molleson (1993) used this method to identify the sex of the juveniles in the Roman cemetery at Poundbury and found that there was good discrimination between boys and girls. However, this method is population-specific and depends on the degree of sexual dimorphism expressed in the adults. Only four juveniles had surviving dentition ([81], [102], [112] and [163]) and a bivariate plot of canine tooth dimensions for adults and the sub-adults of unknown sex is given in Fig 13. It can be seen that two skeletons ([112] and [163]) can be classified as male. Two adolescents, both aged *c.*15 years old ([81] and [102]), fall into the female scatter.

The presence of both adult and juvenile males and females in the sample as a whole suggests that it is demographically normal, that is, no members of the contributing living population are being excluded on the basis of age or sex.

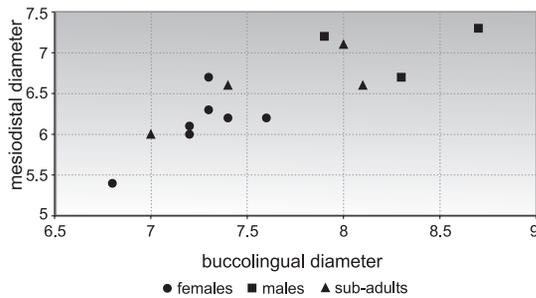


Fig 13. Bivariate plot of mandibular canine tooth dimensions (mm)

The demography of this sample closely parallels that seen in a small sample ($n=20$) from a 3rd- to 4th-century Roman cemetery in London studied by Bentley and Pritchard (1982). They found that of the 20 individuals excavated, 14 (70%) were in one of three clusters of mixed adult and juvenile individuals.

Stature

Only 8 skeletons were sufficiently intact to provide long bone lengths and hence stature estimates. The mean male stature was 1.67m ($n=2$) and this is similar to the mean of 1.66m from Poundbury (Molleson 1993) and 1.69m from London (Conheaney 2000). The mean female stature was 1.63m ($n=5$), although this is dragged down slightly by a small female [154] from Group 25 who had an estimated stature of 1.48m. However, the smallest female encountered in the eastern London cemetery complex was 1.45m (Conheaney 2000, 280). An eighth individual [166] could not be reliably sexed and is not included in these calculations. The stature estimates for both males and females are within the normal range of variation seen in two other large Roman cemetery groups.

Few other cranial or postcranial measurements were possible, and in almost all cases the sample size was very small ($n \leq 6$). The only measurements possible in any number were those relating to the diameters of the proximal femoral and tibial shafts. A summary of platymeric and platycnemic values is given in Table 2.

Non-metric traits

Non-metric traits are caused by variation in the growth centres of bone and by variation in

Table 2. Summary of platymeric and platycnemic indices

	Number	Mean
Platymeria		
male	5	83.7
female	5	82.1
Platycnemia		
female	4	77.3

the shape and position of soft tissues. Multiple genes determine the presence or absence of some of these traits and they are often used in biodistance studies and in investigating the inter-relatedness between individuals in a skeletal population. Frequencies of these traits in this sample are available in the relevant research archive (Connell 2001, tables 3 and 4).

The genetic and environmental factors that govern the expression of these traits are still poorly understood and Tyrrell (2000, 293) has pointed out that the main areas of controversy relating to the use of non-metric traits have still to be resolved. Therefore, it is doubtful that the small sample size and poor preservation, coupled with uncertainties about the meaning of trait expression, would produce any meaningful results. The question of family relationships within these burials is a difficult one to answer; this hypothesis would perhaps be better tested with DNA analysis.

Palaeopathology

A variety of pathological conditions are present in this group. The most common condition is degenerative joint disease; this is commonly seen in both modern and archaeological populations (Rogers & Waldron 1995, 32). A detailed description of the skeletal pathology in each individual is given in a catalogue in the research archive (Connell 2001). Five individuals show evidence of fractured bones suffered earlier in life. Most of the fractures (7/10) occur in the upper limbs. Two males ([83] and [129]) had fractured left clavicles, the former also having a fractured left rib. Colles fractures were present in two adult females ([127] and [146]). In one of these [146] there was also a fractured right first metacarpal and in the other [127] there were fractures in the scapula and lower limb. In this skeleton [127] it is unlikely that the force which caused the Colles fracture would

be transmitted to the blade of the scapula and these probably represent two separate injuries. Colles fractures are often caused by falling on an outstretched hand, and are the commonest injury seen in modern fracture clinics (Dandy 1993, 206). An isolated fracture of the first metacarpal (thumb) had occurred in an adult male [85]. Colles fractures and fractured metacarpals were also frequent in the eastern London Roman cemetery (Conheeny 2000, 285). Trauma in the lower limbs consisted of a single case of a fractured tibia and fibula in an adult female [127], probably caused by severe twisting stresses; in modern populations fractures of the tibia and fibula are a common injury in all age groups (Duckworth 1995, 151). The general pattern of trauma in this group is of fractures that can be attributed to commonly occurring accidents; falls and fractures of the lower limbs and forearm were also the most commonly encountered in the large sample from Poundbury (Molleson 1993, 204).

Two adults ([69] and [124]) and two sub-adults ([112] and [163]) have fine woven bone deposits on the visceral surfaces of one or more ribs. Studies on documented skeletal samples have demonstrated a correlation between the presence of these rib lesions and people who are known to have died from tuberculosis (Roberts *et al* 1994; Kelley & Micozzi 1984), although a direct relationship cannot currently be verified (Roberts *et al* 1998, 57). In this sample, 4 individuals out of 26 (15.4%) with surviving rib elements show these lesions and this compares with frequencies of 4.6% and 19.4% seen in other Roman cemetery groups (Roberts 1989, cited in Roberts *et al* 1998). In addition to woven bone deposits on the ribs, one skeleton [112], from an adolescent male approximately 16 years old, has a lytic lesion in the twelfth thoracic vertebra. This lesion might represent the early destructive changes of vertebral tuberculosis. Tuberculous destruction of vertebrae has been identified in Roman cemeteries dating from the mid-1st century AD (Mays & Steele 1995) and 2nd–4th centuries AD (Stirling & Waldron 1990), so we know that tuberculosis was present in Britain during the Roman period. At least two cases of probable tuberculosis have already been identified in Roman London (Conheeny 2000, 287). The lesions found on the four Premier Place skeletons represent an inflammatory response to a pulmonary infection, with a high probability that the lesions are induced by

pulmonary tuberculosis. Evidence to support the theory that tuberculosis induces these lesions is increasing (Roberts *et al* 1998; Roberts 2000). Therefore, it is reasonable to conclude that in this small group of skeletons there is a chronic pulmonary stressor most likely to be tuberculosis.

Most of the joint disease occurred in the vertebrae, although one mature adult male [85] had osteoarthritic changes in the hands. The distribution of degenerative joint changes (osteophytes, sub-chondral pitting and eburnation) is given in Table 3. A mature adult female [147] has a series of symmetrical interarticular erosive lesions in the carpometacarpal, metacarpophalangeal, and metatarsophalangeal joints. The lesions are lytic and sharply defined with marginal osteophytes. The left talocrural (ankle) joint is also ankylosed, but there are no erosive changes in the sacroiliac joints. The central position of many of the lesions would not suggest rheumatoid arthritis, which tends to affect joint margins (Rogers & Waldron 1995). The absence of sacroiliac involvement is uncharacteristic of seronegative spondylarthropathy, although in this group of diseases there is a much greater tendency for the joints to fuse (Rogers & Waldron 1995, 70). Rogers *et al* (1991) have described a case of erosive lesions in the joints of the carpus and hands and have suggested erosive osteoarthritis as the cause; however, skeleton [147] is only 40% complete and it is difficult to determine the exact distribution of lesions. This in turn makes a firm classification more difficult but the joint changes can be classified as an erosive arthropathy. Erosive arthropathies were also noted in the Roman cemetery at Poundbury (Molleson 1993, 192) and Conheeny (2000, 287) reported a probable case of psoriatic arthritis, although the basis for the diagnosis is not given.

A mature adult female [146] had a series of nodular excrescences of bone on the endocranial aspect of the frontal bone. This represents a condition known as hyperostosis frontalis interna. This is a common finding in post-menopausal females; these alterations result from hormonal changes after the menopause (Ortner & Putschar 1981, 294). Hyperostosis frontalis interna was also observed in the population from Poundbury, where 26 cases were found, 19 of them women; three times as many women as men were affected (Molleson 1993, 194).

Table 3. *Distribution of degenerative changes in major joints*

Joint surface	Right	Frequency	Left	Frequency
temporomandibular: glenoid fossa	0/13		0/14	
temporomandibular: condyloid process	0/9		0/10	
sternoclavicular: medial clavicle	0/4		1/7	14%
acromioclavicular: lateral clavicle	3/3	100%	1/2	50%
sternoclavicular: clavicular fossa: manubrium	0/3		0/3	
acromioclavicular: clavicular facet: acromion	1/3	33%	0/4	
glenohumeral: glenoid cavity	1/11	9%	1/14	7%
glenohumeral: humeral head	0/11		0/11	
humeroulnar: humerus: trochlea	0/11		0/9	
humeroradial: humerus: capitulum	0/10		0/8	
humeroulnar: ulna: trochlear notch	0/13		0/11	
proximal radioulnar: ulna: radial notch	0/11		0/12	
distal radioulnar: ulna	0/6		0/1	
humeroradial: radius head	1/7	14%	0/6	
proximal radioulnar: radius head	0/6		0/7	
distal radioulnar: radius	0/6		0/4	
radiocarpal: radius (for scaphoid)	0/7		0/5	
radiocarpal: radius (for lunate)	0/7		0/5	
radiocarpal: scaphoid	0/6		0/3	
radiocarpal: lunate	0/4		0/1	
coxal: acetabulum: os coxa	1/14	7%	2/17	12%
coxal: femoral head	0/13		0/17	
femoropatellar: anterior femur	1/10	10%	0/8	
femorotibial: femur: medial	2/12	17%	1/9	11%
femorotibial: femur: lateral	1/13	8%	0/10	
femoropatellar: patella	1/6	17%	0/5	
femorotibial: tibia: medial	1/11	9%	0/6	
femorotibial: tibia: lateral	0/10		1/7	14%
proximal tibiofibular: tibia	0/4		0/3	
talocrural: tibia	0/11		1/9	11%
proximal tibiofibular: fibula	0/2		0/2	
talofibular: fibula	0/6		0/3	
talocrural: talus	0/9		0/7	
talofibular: talus	0/7		0/6	

ROMAN POTTERY

Rupert Featherby

The Roman pottery assemblage comprised a total of 134 sherds from 33 contexts; six contexts also produced post-Roman pottery. All 33 contexts are small in size (less than 30

sherds) and the assemblage has been recorded in accordance with the standards of the Museum of London Archaeology Service. The condition of the assemblage is generally poor with just under 50% being abraded, burnt or worn (excluding mortaria). The sherds range in size from small to large, with the majority ranging from small

to medium. Six contexts contain 1st-century AD pottery, but as each context contained only one or two sherds, this should be regarded as a *terminus post quem* rather than a firm date for the activity.

Imported wares account for 27.6% of the assemblage by sherd count, which is fractionally higher than the inland City average, which is 25.8% (Symonds 1998, 345). Samian is the most common imported ware (14.9%), compared to amphora (7.5%). The averages for an inland City assemblage are 13.9% amphora and 9.6% samian (Symonds 1998, 344). The figure for samian is also twice that of samian within the eastern Roman cemetery, 6.7%, but it would appear that this low figure is partially due to the late date of that cemetery (Symonds 2000, 123). However, it must be remembered that the assemblage size is very small. Eight sherds of amphora were found, two of Baetican Dressel 20, four of Gaulish type, one of Cadiz, and one unsourced.

The most common ware type is black-burnished (Table 4), which at 22.4% is over five times higher than the inland City average of 3.5%. Both reduced (17.2%) and oxidised (19.4%) wares are lower than the averages for the City (28.9 and 22.6% respectively). Due to the size of the assemblage, there is a limited range of vessel types (Table 5). Bowls are the most common form at 12.7%; jars are the next most common type at 7.5%.

Table 4. Breakdown of Roman pottery by fabric type

Ware	No. of sherds	% of assemblage
Amphora	7	7.5
Black-burnished ware type	30	22.4
Fine ware (imported)	7	5.2
Fine ware (Romano-British)	11	8.2
Fine ware, reduced	5	3.7
Oxidised wares	26	19.4
Reduced wares	23	17.2
Samian	20	14.9
Tempered	2	1.5

Just under half of the material is imported (either amphora or Southern/Central Gaulish samian). Of these, over half the imports are Central Gaulish samian dating *c.*AD 120–250. Seven sherds of Alice Holt Surrey ware were identified, ten of Verulamium region white ware,

Table 5. Breakdown of Roman pottery by form

Form	No. of sherds	% of assemblage
Amphora	9	6.7
Beaker	6	4.5
Bowl	17	12.7
Bowl/dish	3	2.2
Dish	7	7.2
Jar	9	7.5
Lid	1	0.7
Mortaria	4	3.0
Miscellaneous	76	56.7

and one of North Kent shelly ware, all dated to *c.*AD 50–160. Black-burnished wares (1, 2 and black-burnished styles) account for the majority of the assemblage, dating to *c.*AD 120–400.

Amongst the later Roman pottery, Nene Valley colour-coated wares (including white fabric and white-coloured varieties), dating *c.*AD 150–400, were the most common. One sherd each of Alice Holt Farnham, dating *c.*AD 250–400, and Oxfordshire red colour-coated ware, dating *c.*AD 270–400, were also identified.

MEDIEVAL AND POST-MEDIEVAL POTTERY

Lucy Whittingham

The earliest groups of medieval material, dated 1140–1220, are associated with cesspits and a barrel-lined well (Fig 8). Pottery of a slightly later medieval date (1230/1270–1350) is associated with some of the quarry pits. All of these medieval assemblages show a preference for the consumption of local ceramics, with the majority of the fabrics being London-type ware, the products of the Surrey whiteware industries, south Hertfordshire greywares and shelly sandy wares. The small quantities of Continental imports from France (Saintonge), the Low Countries (Andenne-type), and the Rhineland (Siegburg unglazed stoneware) are not unusual finds within the City.

Assemblages of a similar date and composition have been found in areas of quarrying just beyond the peripheries of the City wall. Similarly dated quarrying sequences have been noted at Pilgrims Street near Newgate (PWB 88; Blackmore 1993), and further to the south at Blackfriars Court just outside Ludgate (LUB98; Jeffries 1999a). Other sites such as Chiswell Street (CSU 98; Blackmore 1998a) and Finsbury

Square (FSQ 98; Blackmore 1998b) are located just outside Moorgate. West Smithfield provided an assemblage that is similar in character and date to the one at Houndsditch (WSI97; Jeffries 1999b).

The post-medieval assemblage supports the cartographic evidence suggesting that development to the rear of the Houndsditch frontage plots began in the earlier post-medieval period. The vast majority of the assemblage was recovered from a cesspit [33] and a brick-built well [90] (Figs 9–10). These groups are both typical domestic assemblages, their composition being typical of assemblages from the two periods represented. The former is a large group dated 1630–1700, which showed a preference for the consumption of local ceramics such as tin-glazed earthenware (produced in Southwark and Lambeth) and locally produced post-medieval redwares (including fine redwares). The function of this group was mostly utilitarian, associated with hygiene, as shown by the presence of a high number of chamber pots, together with vessels that were used in the kitchen for food storage and distribution. Some tablewares and vessels for display are present in tin-glazed

earthenwares such as the fluted dish.

The medium-sized group from well [90] was deposited between 1770 and 1800, and is very different in its composition when compared to that from cesspit [33]. It is comprised primarily of pearlware, creamware and Staffordshire white salt-glazed stoneware. The vessels are much finer and the tablewares form a more significant proportion of the assemblage. These groups reflect both the pattern of food consumption, and the difference between 17th- and late 18th-century domestic ceramic assemblages.

ANIMAL BONE

Jane Liddle

Animal bones were recovered from all phases of activity on the site. As discussed above, the bones from the medieval and post-medieval deposits indicate that horn working, butchery and food waste were all deposited within the wells and cesspits (Table 6). The absence of small mammal bones, even from samples, indicates that the area was not open to scavengers and could suggest that the waste was not left open in the pits and wells for long periods of time.

Table 6. Species representation by fragment count from medieval and post-medieval contexts

Species	Medieval			Post-medieval
	Cesspits	Barrel-lined well	Total	Brick-lined well
Cattle	15	15	30	0
Cattle-size	6	15	21	3
Sheep	1	0	1	0
Goat	0	23	23	0
Sheep/goat	3	8	11	0
Sheep-size	1	27	28	5
Pig	0	2	2	0
Unidentified mammal	0	6	6	0
Chicken	0	1	1	2
Domestic goose	1	1	2	0
Unidentified bird	0	0	0	1
Medium-size hawk	0	1	1	0
Cyprinidae	0	2	2	0
Cod	1	0	1	0
Elasmobranch	0	0	0	1
Gadidae	0	0	0	1
Plaice/flounder	0	1	1	0
Unidentified fish	0	22	22	5
Frog/toad	0	2	2	2
Total	28	126	154	21

Food products

The bones recovered from the medieval cesspit and well groups indicate that waste from food preparation, and possibly post-consumer waste, was discarded. The style of butchery suggests that the carcasses had undergone primary butchery associated with jointing. The meat may then have been removed from the bones, which were then discarded by the butcher. A sheep skull split in two indicates that either the brain was removed for consumption or that the skull was sold in two halves for cooking. This would suggest that it might have resulted from household food waste.

Fusion and tooth wear were visible on long bones and mandibles, and showed that a large number of the domesticate bones were from mature individuals. All cattle from the medieval deposits were over two years of age, and a number were over seven years. This indicates that the bones may have derived from older individuals culled after their useful life for milk production, breeding or traction. Although few bones could be sexed, two cattle pelves from medieval cesspit group 19 were from large, robust males. Within the same pit group, two butchered adjoining cattle lumbar vertebrae showed grooving, eburnation and extension of the articular surfaces. These modifications are normally interpreted as the result of a degenerative disease of the articular cartilage known as osteoarthritis (Baker & Brothwell 1980, 114–17). The disease is normally the result of constant trauma to the joint, accelerating the normal ageing process, and may indicate that the ox was used for traction prior to slaughter for meat.

A small number of sheep/goat bones derived from individuals under one year, indicating remains from animals bred primarily for their meat. One sheep/goat mandible, however, showed wear on the teeth associated with an individual of between six and eight years of age, indicating that some older livestock were also present within the assemblage. If a sheep, this could indicate an individual used for wool production, breeding or milk, and if a goat, it may have been used for breeding or milk. A foetal sheep/goat bone from well group 23 was so small that it must have been associated with a ewe and killed when its mother was slaughtered.

Stature calculations were only available for one cattle and one sheep/goat bone, both

from the medieval barrel-lined well. The cattle radius provided a withers height of 972mm and the sheep/goat metatarsal indicates that the individual stood at 534mm high. These sizes are comparable to Jersey-sized cattle and soay-sized sheep and are similar to other individuals recovered within London from the medieval period, for example at Number One Poultry (Rielly in prep) and New Fresh Wharf (Armitage 1982, 98). Due to the small number of measurable bones, however, no direct comparison can really be made owing to the possibility that the measurable bones were not an average size for the rest of the livestock.

The skulls of cattle recovered were small with a characteristic Jersey ridge on the frontale. This indicates that the cattle were small, unimproved breeds, common throughout the medieval period.

Pig bones were not common; Armitage's study of the contribution of the three main meat-species to the diet, using the weight of their bones (1982, 96), shows that on medieval London sites, pig represented only a very small fraction of the diet. Grant (1988, 157–9) showed that during the medieval period pig numbers reduced in towns, and they were much less important than cattle or sheep. Grant suggests that this was due to the return to pasture of much previously cultivated land, on whose by-products pigs had traditionally been fed during autumn. It is also suggested that an increased profit available from keeping sheep and cattle was a contributing factor. So, it is possible that the small quantities of pig bones recovered show the effects of a reduction of pig husbandry in the country. Although pigs were kept within backyards in the city, their numbers would have been small and could not have contributed substantially to pork production.

The small assemblage of post-medieval bones, from a brick-built well, contained no domesticate bones identifiable to species, suggesting that the well was not used for the systematic dumping of food or butchery waste.

Industrial products

As the assemblage of domesticate bones is not large, the number of horncores, mainly from goat but with a small number from cattle, represents a moderate proportion of the bones recovered. This indicates that the area was used for industrial waste disposal as well as food

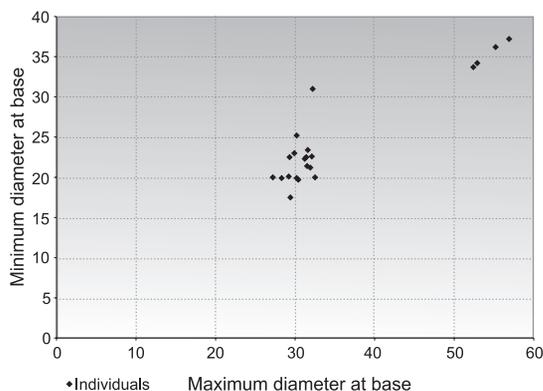


Fig 14. Maximum and minimum diameters of the base of horncores; grouping may indicate sex

waste, suggesting that during the 12th and 13th centuries the area was an industrial zone, possibly for small-scale artisan activity.

A total of 23 goat horncores was recovered from the barrel-lined well. Most of the horncores were compacted bone, which indicates maturity, rather than the more porous bone seen on younger individuals. Fig 14 shows the distribution of sizes, using maximum and minimum diameter at base. The graph indicates two definite groupings, with four individual horncores larger than the main group of a similar size. This most likely indicates a sexual difference, as male goats are larger and stockier than females and have larger horns. It is therefore evident that most of the horncores were from females, with only four male horncores identified. The source of the horn could have been ex-breeding and milk-producing stock that had been sent to slaughter. The moderately small deposits may have derived from artisan horn working using a smaller, cheaper horn than the large-scale horn working industry deposits seen at sites such as Number One Poultry (Rielly in prep), where large male horncores dominated the deposits of goat horncore.

The smaller number of cattle horncores from the cesspits and well indicates that cattle horn may also have been processed for working in the area, but on a smaller scale. A posterior skull with both horncores removed *c.*20mm from the base may have been butchery waste with the horns having already been removed for the hornworker. The skull also showed signs of poleaxing. Armitage has identified styles of butchery associated with horn removal (1982,

102). The technique involves the removal of both horns together with portions of the frontal and parietal bones by administering a sweeping blow to the back of the head. In addition a further blow was often required across the frontal to totally remove the horns and skull portion. This style of butchery was evidently used to remove the horns recovered from Premier Place and gives a clear indication that the deposits would have resulted from discard by the horn worker.

Dobney *et al* (1996, 23) note that horncores, once the horn was removed, were of little economic use, and would normally be dumped locally for convenience. This is yet another indication that small-scale goat and cattle horn working was practised within the immediate vicinity.

Fish and birds

The small assemblages of fish and bird bones in medieval features indicate that there was little food waste from any species deposited. This compares well with the limited evidence of domesticated food waste and suggests that the features were mainly used for the deposition of butchery and industrial waste. The small quantities recovered include plaice/flounder, cod and cyprinidae, indicating that although the food waste was not extensive, both marine and freshwater resources were used. The small numbers of chicken and goose bones also indicate food waste.

A goshawk wing bone was recovered from the barrel-lined well. It is widely assumed that birds of prey were not eaten due to their status; they reputedly had the same worth as a horse or greyhound (Hagen 1995, 144). If the bird did not derive from food waste, there are two other possible reasons for its presence in the well. The first is that it may have been a wild bird and the second that it was a bird used for falconry. The first possibility is more unlikely, as hawk species such as the sparrowhawk and the goshawk are specialist hunters, rather than carrion feeders, and therefore require habitats with enough scrub or tree cover to enable them to ambush their prey (Mulkeen & O'Connor 1997, 442). It is therefore probable that goshawk remains recovered from medieval urban and suburban contexts derived from birds bred and kept solely for falconry. Falconry was mainly a sport of the gentry, although social position determined which bird, within a hierarchy, could be flown

(Grant 1988, 180). Goshawks were within the lower ranks of this hierarchy, tending to belong to yeomen (Eastham 1977). They were slightly above the status of sparrowhawks, which were kept by priests, but below that of merlin, owned by ladies. The peregrine was the highest-ranking falcon and was solely the bird of princes and nobles. The recovery of the bone may suggest that a yeoman, or possibly a senior cleric, discarded his dead hawking bird within the well.

Within a post-medieval brick-built well a small assemblage of fish was recovered, including gadidae and elasmobranch. These are both marine species and indicate possible small-scale exploitation of marine resources. Chicken bones were recovered in very small numbers and provide evidence that domestic fowl were consumed and their waste deposited in the well.

ACKNOWLEDGEMENTS

The author and MoLAS would like to thank Sun Life Assurance Society plc for commissioning and funding the excavation, analysis and publication, and John Freeland of Buro 4 and Bob Wiley of Watermans Engineering for their cooperation during the site investigations. Thanks are also due to Kathryn Stubbs, Senior Planning and Archaeology Officer at the Corporation of London, for her comments and advice.

The author would like to thank the MoLAS excavation team of Ryszard Bartkowiak, Richard Bluer, Lindy Casson, Andy Dakin, Nick Elsdon, Phil Frickers, Malcolm Gould, Richard Hewett, Tony Mackinder, Joseph Severn, Dan Swift and Matt Williams. Their calm, professional attitude in a stressful work environment was much appreciated by the author. Duncan Lees and Kate Pollard carried out the site survey; Maggie Cox provided photographic support. Drawings are by Sophie Lamb, and the text was edited by David Bowsher and Julian Hill. The site was project managed by Robin Nielsen.

BIBLIOGRAPHY

ARMITAGE (1982), P Armitage 'Studies on the remains of domestic livestock from Roman, medieval, and early modern London: objectives and methods' in A R Hall and H K Kenward (eds) *Environmental Archaeology in the Urban Context* CBA Res Rep 43, 94–106

ATKINSON & OSWALD (1969), D R Atkinson & A Oswald 'London clay tobacco pipes' *Journ Brit Archaeol Assoc* 32, 171–227

AUFDERHEIDE & RODRIGUEZ-MARTIN (1998), A C Aufderheide & C Rodriguez-Martin *The Cambridge Encyclopaedia of Human Paleopathology*

BAKER & BROTHWELL (1980), J Baker & D R Brothwell *Animal Diseases in Archaeology*

BARBER & BOWSHER (2000), B Barber & D Bowsher *The Eastern Cemetery of Roman London: Excavations 1983–1990* MoLAS Monograph 4

BARTON (1969), K J Barton 'The contents of an eighteenth-century well at Bishops Waltham, Hants' *Post-Med Archaeol* 3, 166–87

BENTLEY & PRITCHARD (1982), M Bentley & F Pritchard 'The Roman cemetery at St Bartholomew's Hospital' *Trans London Middlesex Archaeol Soc* 33, 137–72

BERRY & BERRY (1967), A C Berry & R J Berry 'Epigenetic variation of the human cranium' *Journ Anatomy* 101, 361–79

BISCHOFF (1990), B Bischoff *Latin Palaeography: Antiquity and the Middle Ages* (trans D Ó Cróinín and D Ganz)

BLACKMORE (1993), L Blackmore 'The post-Roman pottery' in B McCann *Fleet Valley Project interim report* unpub MoL rep

BLACKMORE (1998a), L Blackmore *The Post-Roman Pottery from Northampton Hall, 25–32 Chiswell Street, Moorgate* unpub MoL rep

BLACKMORE (1998b), L Blackmore *The Post-Roman Pottery from Finsbury Square, Moorgate* unpub MoL rep

BROOKS & SUCHEY (1990), ST Brooks & JM Suchey 'Skeletal age determination based on the os pubis: a comparison of the Acsadi-Nemeskeri and Suchey-Brooks methods' *Human Evolution* 5, 227–38

BROTHWELL (1981), D R Brothwell *Digging Up Bones* (3rd edn)

BUIKSTRA & UBELAKER (1994), J Buikstra & D H Ubelaker *Standards for Data Collection from Human Skeletal Remains* Arkansas Archaeological Survey Ser 44

CONHEENEY (2000), J Conheeneey 'Inhumation burials' in Barber & Bowsher 2000, 277–97

CONNELL (2001), B Connell *The Human Bones from Premier Place, London* unpub MoL rep

DANDY (1993), D J Dandy *Essential Orthopaedics and Trauma* (2nd edn)

DOBNEY *et al* (1996), K M Dobney, S D Jaques & B G Irving *Of Butchers and Breeds: Report on Vertebrate Remains from Various Sites in the City of Lincoln* Lincoln Archaeol Stud 5

DUCKWORTH (1995), T Duckworth *Orthopaedics and Fractures* (3rd edn)

EASTHAM (1977), A Eastham 'Birds' in B W Cunliffe *Excavations at Portchester Castle. Vol III: Medieval, the Outer Bailey*, 233–7

FAZEKAZ & KOSA (1978), I Fazekas & F Kosa *Forensic Foetal Osteology*

FEATHERBY (2000), R Featherby *The Roman Pottery, Houndsditch Telephone Exchange Site* unpub MoL rep

- FEREMBACH *et al* (1980), D Ferembach, I Schwidetzky & M Stoukal 'Recommendations for age and sex diagnoses of skeletons' *Journ Human Evolution* 9, 517–49
- FILEY (1991), J Filey 'Excavation round-up 1990, part 1: City of London' *London Archaeol* 6, 272–4
- FINNEGAN (1978), M Finnegan 'Non-metric variation of the infracranial skeleton' *Journ Anatomy* 125, 23–37
- GOODALL (1976), I H Goodall 'Metalwork' in O Bedwin 'The excavation of Ardingly fulling mill and forge, 1975–76' *Post-Med Archaeol* 10, 60–4
- GRANT (1988), A Grant 'Animal resources' in G Astill & A Grant (eds) *The Countryside of Medieval England*, 149–88
- GREEN (1977), C J S Green 'The significance of plaster burials for the recognition of Christian cemeteries' in R Reece (ed) *Burial in the Roman World* CBA Res Rep 22, 46–53
- HAGEN (1995), A Hagen *A Second Handbook of Anglo-Saxon Food and Drink: Production and Distribution*
- HALL (1996), J Hall 'The cemeteries of Roman London: a review' in J Bird, M Hassall & H Sheldon (eds) *Interpreting Roman London: Papers in Memory of Hugh Chapman* Oxbow Monograph 58
- HARBEN (1918), H A Harben *A Dictionary of London*
- HEARD (2001), K Heard *Analytical Report on the Clay Tobacco Pipes from the Former Houndsditch Telephone Exchange, 2½ Devonshire Square, London, EC2* unpub MoL rep
- HEATHCOTE (1988), J Heathcote 'Excavation round-up 1987, part 1: City of London' *London Archaeol* 5, 382–7
- HUNTING (1984), P Hunting *Cutlers Gardens*
- JEFFRIES (1999a), N Jeffries *Post-Roman Pottery Assessment for Black Friar's Court, Ludgate, City of London, EC4* unpub MoL rep
- JEFFRIES (1999b), N Jeffries *Post-Roman Pottery Assessment from Weddel House, 13–21 West Smithfield and 22–29 Hosier Lane (WSI97), City of London, EC1* unpub MoL rep
- JEFFRIES (2000), N Jeffries *Assessment Report on the Post-Roman Pottery from Premier Place/The Former Telephone Exchange, Houndsditch, Devonshire Square* unpub MoL rep
- KEILY (2001), J Keily *Report on the Accessioned Finds from CDV99* unpub MoL rep
- KELLEY & MICOZZI (1984), M A Kelley & M S Micozzi 'Rib lesions and chronic pulmonary tuberculosis' *American Journ Physical Anthropology* 65, 381–6
- LIDDLE (2001), J Liddle *The Animal Bones from Premier Place, 2½ Devonshire Square, Houndsditch, EC2, City of London (CDV99)* unpub MoL rep
- MALONEY (1979), J Maloney 'Excavations at Dukes Place: the Roman defences' *London Archaeol* 3, 292–7
- MALONEY & HARDING (1979), J Maloney & C Harding 'Dukes Place and Houndsditch: the medieval defences' *London Archaeol* 3, 347–54
- MAYS & COX (2000), S Mays & M Cox 'Sex determination in skeletal remains' in M Cox & S Mays (eds) *Human Osteology in Archaeology and Forensic Science*, 117–30
- MAYS & STEELE (1995), S Mays & J Steele *The Romano-British Human Bone from Folly Lane, St. Albans (1991–92 Excavations)* unpub English Heritage Ancient Monuments Lab rep 19/95
- MEINDL *et al* (1985), R S Meindl, C O Lovejoy, R P Mensforth & R A Walker 'A revised method of age determination using the os pubis, with a review and tests of accuracy of other current methods of pubic symphyseal ageing' *American Journ Phys Anthropol* 68, 29–46
- MERRIFIELD (1983), R Merrifield *London City of the Romans*
- MOLLESON (1993), T I Molleson 'The human remains' in D E Farwell & T I Molleson *Excavations at Poundbury 1966–80 Vol II: The Cemeteries* Dorset Natural History and Archaeol Soc Monograph 11, 142–213
- MOORREES *et al* (1963), C F A Moorrees, E A Fanning & E E Hunt 'Age variation of formation stages for ten permanent teeth' *Journ Dental Research* 42(6), 1490–1502
- MULKEEN & O'CONNOR (1997), S Mulkeen & T P O'Connor 'Raptors in towns: towards an ecological model' *Int Journ Osteoarchaeol* 7, 440–9
- ORTNER & PUTSCHAR (1981), D J Ortner & W D J Putschar *Identification of Pathological Conditions in Human Skeletal Remains*
- OSWALD (1975), A Oswald *Clay Pipes for the Archaeologist* BAR Brit Ser 14
- PEARCE (1992), J Pearce *Post-medieval Pottery in London, 1500–1700, Vol 1: Border Wares*
- PHENICE (1969), T W Phenice 'A newly developed visual method of sexing the os pubis' *American Journ Phys Anthropol* 30, 297–302
- PHILPOTT (1991), R Philpott *Burial Practices in Roman Britain* BAR Brit Ser 219
- REILLY (in prep), K Reilly 'The animal bone' in J Hill & P Rowsome *Roman London and the Walbrook Stream Crossing: Excavations at 1 Poultry and Vicinity, City of London* MoLAS Monograph
- ROBERTS (2000), C Roberts 'Infectious disease in biocultural perspective: past, present and future work in Britain' in M Cox & S Mays (eds) *Human Osteology in Archaeology and Forensic Science*, 145–62
- ROBERTS *et al* (1994), C Roberts, D Lucy & K Manchester 'Inflammatory lesions of ribs: an analysis of the Terry Collection' *American Journ Phys Anthropology* 95, 169–82
- ROBERTS *et al* (1998), C A Roberts, A Boylston, L Buckley, A C Chamberlain & E M Murphy 'Rib lesions and tuberculosis: the palaeopathological evidence' *Tubercle and Lung Diseases* 79(1), 55–60

- ROGERS *et al* (1991), J Rogers, T Waldron & I Watt 'Erosive osteoarthritis in a medieval skeleton' *Int Journ Osteoarchaeology* 1, 151–3
- ROGERS & WALDRON (1995), J Rogers & T Waldron *A Field Guide to Joint Disease in Archaeology*
- SALWAY (1981), P Salway *Roman Britain*
- SCHEUER & BLACK (2000), L Scheuer & S Black *Developmental Juvenile Osteology*
- SCHOFIELD (1994), J Schofield *Medieval London Houses*
- SCHOFIELD & LEA (2005), J Schofield & R Lea *Holy Trinity Priory, Aldgate, City of London; an Archaeological Reconstruction and History* MoLAS Mongraph 24
- SERJEANTSON (1989), D Serjeantson 'Animal remains and the tanning trade' in D Serjeantson & T Waldron (eds) *Diet and Craft in Towns* BAR Brit Ser 199, 129–46
- STIRLAND & WALDRON (1990), A Stirland & T Waldron 'The earliest cases of tuberculosis in Britain' *Journ Archaeol Science* 17, 221–30
- STONE (1972), L Stone *The Causes of the English Revolution 1529–1642*
- SWIFT (2003), D Swift *Roman Burials, Medieval Tenements and Suburban Growth: 201 Bishopsgate City of London* MoLAS Stud Ser 10
- SYMONDS (1998), R P Symonds 'The Roman pottery' in B Barber & D Bowsher *Roman and Medieval Townhouses on the London Waterfront: Excavations at Governor's House City of London* MoLAS Monograph 9, 85–92
- SYMONDS (2000), R P Symonds 'The Roman pottery' in Barber & Bowsher 2000
- TROTTER (1970), M Trotter 'Estimation of stature from intact limb bones' in T D Stewart (ed) *Personal Identification in Mass Disasters*, 71–83
- TYRRELL (2000), A Tyrrell 'Skeletal non-metric traits and the assessment of inter- and intra-population diversity: past problems and future potential' M Cox & S Mays (eds) *Human Osteology in Archaeology and Forensic Science*, 289–306
- UBELAKER (1989), D Ubelaker *Human Skeletal Remains, Excavation, Analysis and Interpretation*
- WACHER (1995), J Wacher *The Towns of Roman Britain* (2nd edn)
- WHITTINGHAM (2001), L Whittingham *Post-Roman Pottery: Premier Place, Devonshire Square, London EC2* unpub MoL rep

ROMAN FIELD BOUNDARIES AT SYON LODGE, LONDON ROAD, ISLEWORTH

Siân Anthony and Steve Preston

With contributions by Lucy Cramp, Steve Ford, Jennifer Lowe and Malcolm Lyne

SUMMARY

A small area excavation revealed low-key settlement evidence (ditches and pits), probably related to the nearby Roman road. The earliest ditch may be pre-Roman. The first dated ditches silted up in the first half of the 2nd century. The latest phase on the site is certainly late Roman (3rd- or possibly 4th-century). It is unclear whether there were two distinct phases with a break, or continuous use over a longer period. Very few finds other than pottery (and not much of that) were recovered, suggesting this area was at best peripheral to any occupation. The site was abandoned by the 4th century, and part of it was subsequently covered by a deep brickearth deposit.

INTRODUCTION

A small excavation was conducted by Thames Valley Archaeological Services Ltd between the 10th and 25th November 2004, adjacent to Syon Lodge and to the rear of 191 London Road, Isleworth. Planning permission had been granted to Rushmon Homes Ltd by the London Borough of Hounslow for development of the site for residential purposes, subject to a condition requiring the provision of an archaeological survey prior to the commencement of work.

The site comprised a rectangular plot of land on the south side of London Road, just north of the River Thames near its confluence with the Brent (TQ 1673 7688) (Fig 1), and covered approximately 0.1ha, of which roughly one third (330m²) was excavated. The site was on brickearth overlying gravel, with the modern surface at approximately 6m above Ordnance Datum.

The archive is currently held by Thames

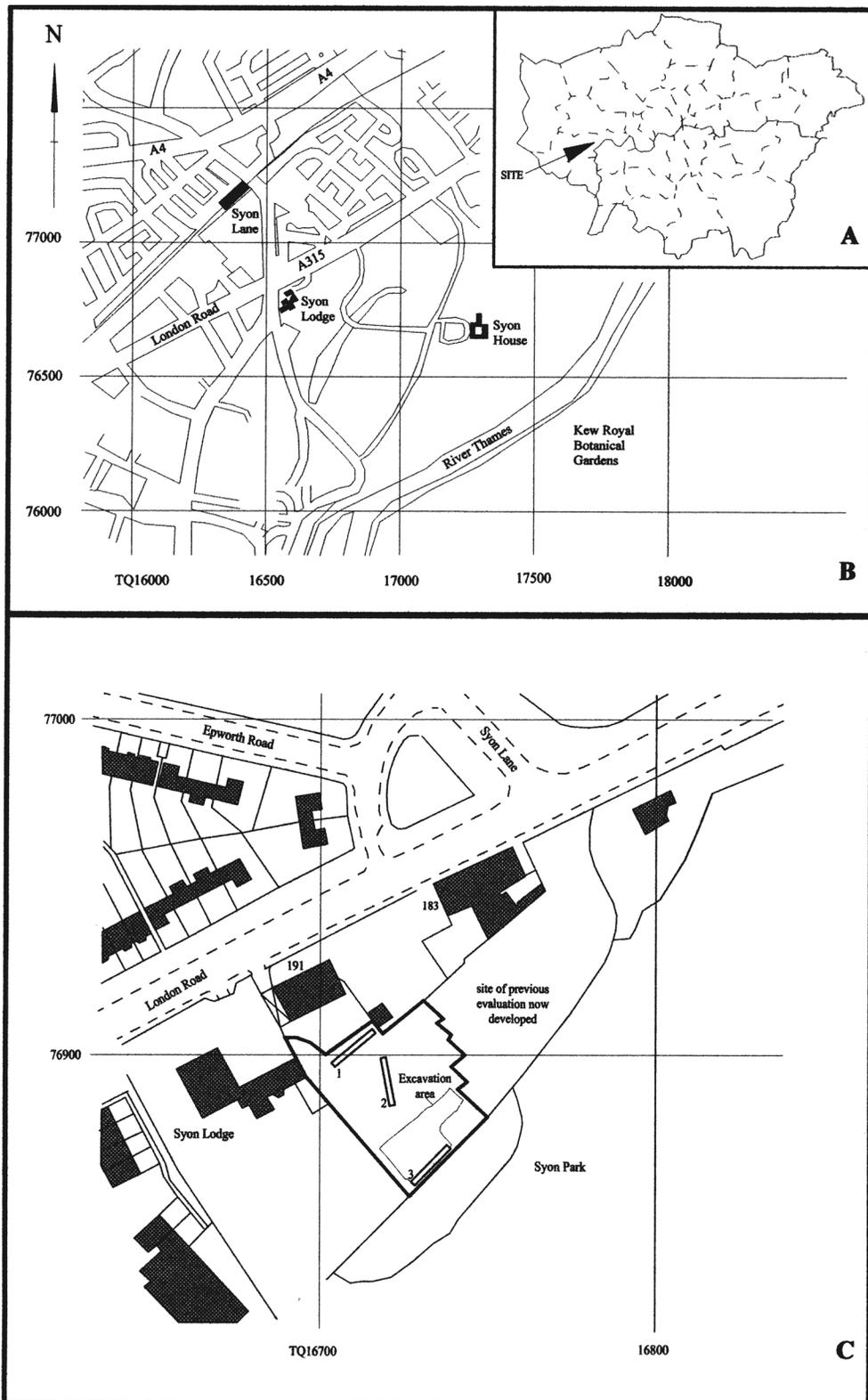
Valley Archaeological Services Ltd but will be deposited with the Museum of London in due course. The site code and museum accession number is SYG04, the TVAS project code is SYG04/54.

ARCHAEOLOGICAL BACKGROUND

A desk-based assessment for the adjacent site to the east (Sadarangani 2001) revealed a number of Sites and Monuments Record entries for the environs of the site, ranging from the Neolithic to the post-medieval period. Entries reflect the high potential for riparian settlement between the River Thames and the River Brent. Indeed, an ancient course of the Thames may have cut off what is now Syon Park as a separate ait (VCH 1962, 85; 87). There were entries for the site itself relating to the nearby excavations in Syon Lodge that identified prehistoric and Roman finds from the site (LA 1976); although no deposits were located, these suggested settlement in the close vicinity.

London Road, to the north of the site, probably marks the line of the Roman road from London (*Londinium*) to Silchester (*Calleva Atrebatum*), Margary's (1973) Route 4.

Excavations in the area have revealed prehistoric and (mainly) Roman occupation, with limited Saxon, medieval and later evidence (eg, most recently, at the nearby Brentford Gasworks, Bishop 2002; cf Canham 1978; Parnum & Cotton 1983). Although Roman finds are plentiful, especially along the roadside, there is nothing to indicate any great wealth or status in this period.



Syon House, with its park, to the south, was the site of a 15th-century abbey of the Order of the Most Holy Saviour (the English Bridgettines) and, since the 16th century, the seat of various Dukes of Somerset, Earls of Northumberland, and later Dukes of Northumberland (*VCH* 1911, 97–100).

Cartographic evidence shows that the site was part of the surrounding field-systems until the 18th century when a small part of the site may have been occupied by the Coach and Horses Inn. The Syon Park estate is shown on the Glover map (1635) and the boundary wall delimiting the site to the south was partially created by the 17th century, with Syon Lodge constructed in 1780. Until the 20th century the site seems to have been orchards and therefore relatively undisturbed until the construction of various small industrial units.

Despite the high potential of the area, evaluation of an adjacent site (Pine & Taylor 2002) located only features or finds of modern or late post-medieval date. Evaluation of the site itself during November 2004 (Ford & Taylor 2004) comprised three trenches, each 1.6m wide and approximately 15m long. These revealed well-preserved gullies and a pit dated probably between the 2nd and 3rd centuries AD. To mitigate likely damage to or destruction of these archaeological deposits during development the excavation was required, in line with PPG16 (1990) and the Borough's policies on archaeology.

EXCAVATION METHODOLOGY

The excavation concentrated on a single area of 330m², in the south-eastern portion of the site where the evaluation had shown three gullies. The area stripped is shown in Fig 2. Topsoil and made ground (up to 1.2m deep) were removed by a 360° mechanical excavator fitted with a toothless bucket to expose the uppermost surface of archaeological deposits. An orange-brown, stony silty clay with some finds (151: redeposited brickearth), at deepest 0.62m, was confined to the eastern end of the site where it overlay almost all of the archaeological features. After cleaning, which failed to reveal features cutting through it, this layer too was removed

by machine. Archaeological deposits (cutting through the natural brickearth layer in the west of the site, and through gravel in the east) were then cleaned and excavated by hand. Discrete features were half-sectioned. Linear features were sample-excavated in slots. All termini and intersections were examined. Bulk soil samples for environmental evidence were taken from ten sealed and securely dated contexts, only two of which yielded tiny amounts of carbonised grain.

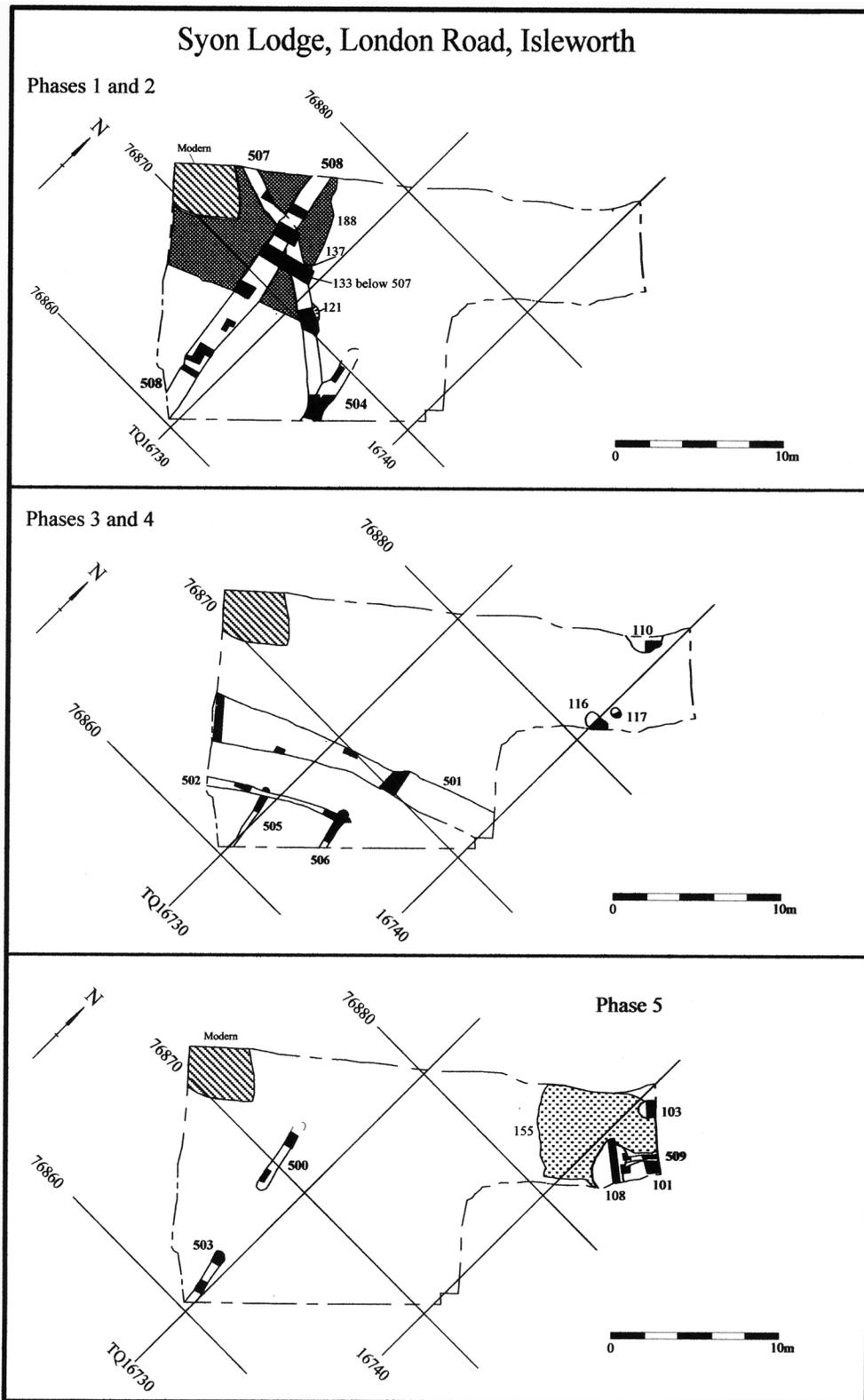
PHASE SUMMARY

The excavation uncovered a series of ditches, pits and a surface. Five phases of activity can be defined on stratigraphic and ceramic grounds, all but Phase 1 dating to the Roman period: no date can be assigned to Phase 1. There was no sign of use of the site beyond the late Roman period. The phasing is derived primarily from stratigraphy for the ditches (Fig 3), and from pottery for the pits and other features. Few features produced enough pottery to give secure dates, but the relative sequence is clear.

Phase 1: ?Prehistoric

Ditch 507 is stratigraphically the earliest ditch on the site, being cut by ditches 504 and 508 (and later features). At its westernmost limit, ditch 507 was overlain by a widespread reddish-grey sandy layer with occasional burnt flint (188), which in turn was cut by all later features in this area. The ditch cut only minor pits 133 and 121. None of the five slots through this ditch produced any dating evidence except three worked flints (from three separate slots) which could be of almost any prehistoric date and cannot in any case provide more than a broad *terminus post quem*. The sinuous line of this ditch and the lack of finds suggest a pre-Roman date, but this is speculative. The fact that the fills were no more markedly leached than those of the Roman ditches might suggest it was not significantly earlier; equally, the development of layer 188 above it might suggest a longer period between Phases 1 and 2. The ditch was generally 1m wide, from 0.1m to 0.5m deep, in a shallow u-shaped profile, with a single fill ranging from

Fig 1 (opposite). Location of site within London (A) and Hounslow (B), and detailed location of evaluation trenches and excavated area (C)



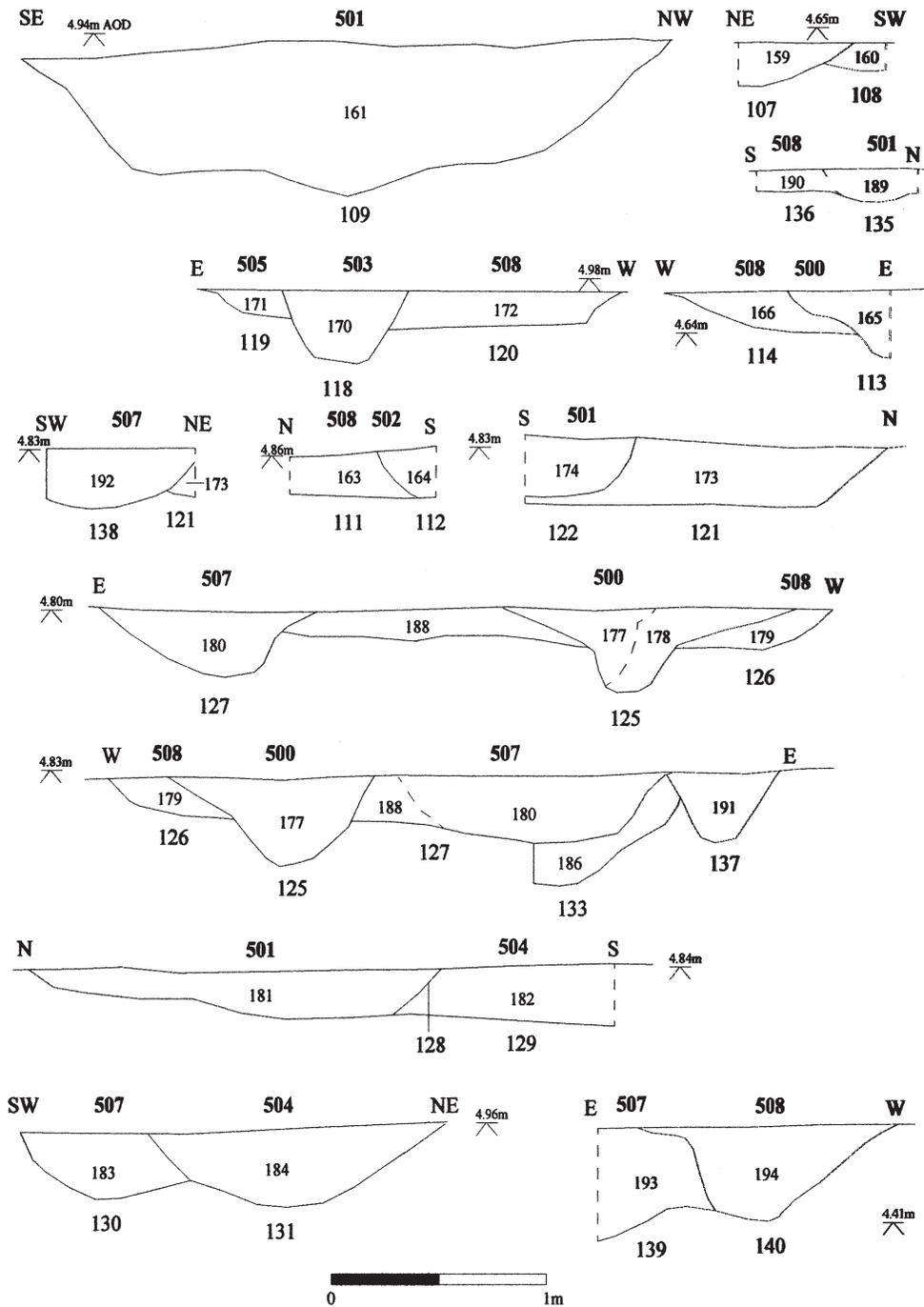


Fig 3. Key sections showing relationships between ditches

Fig 2 (opposite). Phased plans of the site showing excavated slots (shaded)

dark grey silty sand with common small stones to red-brown silty sand.

The origins of the sandy layer 188 are unclear, but it certainly developed between Phases 1 and 2 and was in places 0.3m deep. It contained no finds.

Pits 133 and 121 were cut by ditch 507, but in fact neither of these features was particularly clear. Pit 121 produced a single sherd of Roman sandy greyware which predates AD 270; it is probable this represents contamination, as this area was somewhat confused in excavation, and this sherd has not been used to date ditch 507.

Phase 2: early Roman (2nd century AD)

Ditches 504 and 508 formed the second phase. Ditch 508 was a major feature, generally 1.2m wide and 0.4m to 0.5m deep, and seven slots were excavated through it. These produced just a single large sherd of a grog-tempered storage jar and one of Highgate Wood C ware dating to AD 70–160.

Ditch 504 ran parallel to 508, 7m to the east. It was slightly less substantial and seems never to have extended north of the line later taken by 501, so possibly this line was already a feature in the landscape marked in some other way. Ditch 504 produced just one sherd of pottery. It is possible that 508 was a major boundary and that 504 marked the opposite side of a trackway or driveway.

Phase 3: Roman (late 2nd century AD)

Phase 3 saw ditches 505 and 506 duplicating the basic alignment of Phase 2, but narrowing the gap between the ditches slightly. Ditch 505 produced no finds: stratigraphically it could belong to any of the first three phases. Ditch 506 produced just a single abraded sherd of Alice Holt/Surrey ware, not closely datable within the early Roman period.

Phase 4: Roman (3rd century AD)

Phase 4 is marked by major ditch 501, which was cut right across the grain of the earlier landscape, and ditch 502; the latter seems to have been laid out across the line of the terminals of 503 and 506, which may still have been visible. From ditch 501 came 27 sherds of pottery of mixed date; one sherd in New Forest colour-coated ware and five (all from one slot)

in Oxfordshire red colour-coat suggest a date after the middle of the 3rd century. Ditch 502 produced no dating evidence.

Phase 5: later Roman (3rd or 4th century AD)

Finally, ditches 500 and 503 redefined the line of 508. Ditch 500 produced only four abraded sherds of 2nd-century pottery which must all be residual if ditch 501 is correctly dated to the later 3rd century. Ditch 503 produced 26 sherds, some abraded, all again of 2nd-century currency, and it is possible this could belong to Phase 3, but it has been phased here on the assumption that it forms a pair with ditch 500.

The eastern corner of the site, on an outcrop of gravel, revealed a number of intercutting pits, which in all probability were not discrete features but repeated reuses of a single large dumping area. These dumps cannot be tied into the stratigraphic sequence of the ditches, but can be broadly grouped into the later Roman period (1, 103, 106, 110, 116 all producing 3rd-century or later pottery, other 'pits' having mixed assemblages).

Several of these indistinct features cut a firm compacted layer (155), up to 0.14m deep, of large subangular gravel set in dark grey clayey silt which seems to have been a deliberately laid surface. In some cases it was unclear if this surface had been laid over the dumping/pit features and been eroded, or was cut by them. Layer 155 was partially stripped off by machine. Pits 110, 116 and 117 were certainly below this layer, and their pottery confirms that 155 cannot have been laid before the middle of the 3rd century. The surface itself also produced five sherds of Roman pottery, suggesting a date in the middle or later 3rd century. It seems likely that all of this activity took place in a relatively short burst at roughly the same period.

Ditch 509 cut across the top of the pit cluster and must be Phase 5, although its pottery suggests it should be earlier.

Later features

Other than modern truncation, there were no later features; in particular there was no medieval or post-medieval presence on the site. As a relatively deep brickearth deposit covered much of the archaeology, it may be that rising water levels in the late Roman period made the site uninhabitable and liable to flooding.

THE FINDS

Pottery

Malcolm Lyne

A small assemblage of 153 sherds (1368g) was recovered from 27 contexts, including 25 sherds (81g) from sieving. All the sherds are Roman except a single late post-medieval sherd. A summary of the pottery by fabric is shown in Table 1. The amount of Roman pottery from the site is very small and suggests that the area excavated was peripheral to any occupation.

The fabrics

Pottery fabric codings, with the exception of CVGW, are those formulated by Museum of London Archaeological Services for Roman pottery from the London area (Anon 2000):

Table 1. Pottery summary by fabric

Code	Fabric	Sherds	Wt (g)
AHFA	Alice Holt/Farnham greywares	24	173
AHSU	Alice Holt/Surrey very-fine-sanded greyware	14	84
BAET	Baetican amphora (Dressel 20)	2	59
BB2	North Kent black burnished ware	6	50
CVGW	Colne Valley grey ware	3	31
DORBB1	Dorset Black-Burnished ware	6	15
FINE	Miscellaneous finewares	1	1
FMIC	Fine micaceous grey/black wares	1	5
GROG	Miscellaneous grog-tempered ware	3	109
HOO	Hoo St Werburgh ware	4	6
HWC	Highgate Wood C ware	8	57
LVCC	Lower Nene Valley colour-coat	1	1
MISC	Unidentified	2	3
NFCC	New Forest colour-coat	2	10
NKFW	Thames-side (north Kent) fineware	1	4
OXID	Miscellaneous oxidized wares	14	87
OXRC	Oxfordshire red colour-coat	7	17
POST-M	Miscellaneous post-medieval ware	1	7
SAMLZ	Central Gaulish samian	2	6
SAMMV	Les Martres de Veyre samian	2	61
SAND	Miscellaneous greyware	46	558
VRW	Verulamium region whiteware	3	24

The earliest Phase 1 ditch, 507, was totally lacking in pottery, as was Phase 2 ditch 504. Five of

the six cuts across the other Phase 2 ditch (508) were equally lacking, but one fill yielded a jar rim fragment in Highgate Wood C fabric (c.AD 70–160). This probably dates Phase 2 to the early 2nd century.

The Phase 3 ditches 505 and 506 were entirely lacking in pottery as was the Phase 4 ditch 502: the fills of the other Phase 4 ditch, 501, did, however, yield 27 sherds, of which the latest are five fragments from an uncertain form in Oxfordshire red colour-coat fabric (c.AD 240–400), a fragment from a closed form in New Forest colour-coat fabric (c.AD 260–400), and 15 sherds from 3rd-century jar and dish forms in Thameside greyware. These, coupled with an absence of Alice Holt/Farnham greywares, suggest a 3rd-century date for the Phase 4 ditches.

The Phase 5 ditches 500, 503 and 509 produced 33, 26 and 4 sherds respectively. The material from ditches 500 and 503 dates to before AD 250 and is probably residual: that from ditch 509 is of similar date range and certainly residual, as the feature cut several later pits. Pit 101 produced 4 sherds of 3rd-century Alice Holt/Farnham greyware and pits 103 and 106 yielded a further 7 and 11 late 3rd-century sherds respectively. This suggests that these pits are all Phase 4 features.

None of the pottery can be said to be later than AD 300 with any certainty.

Animal bone

Siân Anthony

Animal bone is represented by only six elements recovered from six contexts and weighing 106g. All are in a poor state of preservation, showing extreme fragmentation, cortical exfoliation, and degradation. This is caused by the acidic geology of the site which consists of sandy brickearth. Some pieces of bone were complete upon discovery but fragmented severely upon excavation. The few details observable are recorded in the archive.

Struck flint

Steve Ford

Just two intact and two broken flakes were recovered. One, from modern made ground, is of dubious antiquity. The three others came from ditch 507 and are likely to be of Neolithic or Bronze Age date.

Burnt flint*Siân Anthony*

A total of 106 pieces of burnt flint were recovered from five features, including Phase 1 ditch 507 and pit 121, and three Roman gullies. Only the concentration of 29 pieces from pit 121 and 50 from gully 504 are of interest, as being possibly prehistoric. There is no information on what activity might have produced this burnt flint; cooking or tree/scrub clearance are equally possible. None of the pieces is worked.

Other finds*Jennifer Lowe*

44 fragments of Roman brick and tile (1423g), mainly tile, were recovered. Three pieces are fragments of *tegula*, and at least one small fragment may have been shaped for re-use as a *tessera*, but no others were more closely identifiable and there were no marked concentrations, eight pieces from surface 155 being the maximum from a single context. Given the robustness of this material, and the prevalence of its re-use, it is not necessarily safe to infer that a substantial Roman building of some pretensions stood nearby, although it is possible.

Soil conditions were not favourable to preservation of most other materials. A total of 22 fragments (272g) of burnt clay, mostly from gullies 500 and 502, provided no distinguishing features. A single amorphous lump of ferrous material (124g) seems to have been natural panning; four lumps of iron slag (86g) are no more than (indeed, much less than) normal 'background noise' for this material in the Roman period.

Environmental remains*Lucy Cramp*

Ten samples of sediment were floated over a 0.25mm mesh and sorted in the laboratory under a low-power microscope for the recovery of preserved plant remains and charcoal. Overall, the recovery of carbonised material was low. Two samples contained a small number of poorly preserved grains, including spelt wheat (*Triticum spelta*), barley (*Hordeum* sp.) and oats (*Avena* sp.). One of these samples also yielded single glumes of *Triticum spelta* and *Triticum spelta* or *dicoccum* (spelt or emmer wheat). The

cereals represented are typical Iron Age or Roman crops and their presence at this low frequency is likely to represent nothing more than background scatter.

CONCLUSIONS

Remains from the Roman period in Hounslow have chiefly consisted of boundary ditches, enclosures, and other occasional low-key, dispersed, settlement activity (MoLAS 2000, especially gazetteer, 167), as here. More substantial settlement remains have only occasionally been encountered. The clustering of this evidence along the line of the London–Silchester road may be an artificial product of the concentration of research, but given the quantity of recent archaeological investigation in Greater London, it begins to look as if it might be a reflection of the real Roman settlement pattern (MoLAS 2000, map 7). Margary suggested (1973, 74) that this main road passed 'through lonely forested country' as an explanation for the lack of branch roads all the way to Silchester. While the Roman countryside might today be thought of as much more densely settled and intensively managed than this, the evidence, in Hounslow at least, does not appear to contradict him. The findings from this site are entirely in keeping with the essentially low-status, rural character observed in much Roman settlement in the area. Excavations at an adjacent site recovered late Roman pottery but no dated features, also suggesting a settlement nearby but not on the site (Sadarangani 2001; LA 1976).

The features here are not particularly closely dated, although a division into earlier and later Roman seems assured. The earliest ditch may be pre-Roman, although there is no solid evidence for this. The first dated ditches silted up probably in the first half of the 2nd century. The latest phase on the site is certainly late Roman (3rd- or possibly 4th-century). It is unclear whether there were two distinct and separate phases of land division or continuous use over a longer period. If the latter, the quantity and nature of finds suggest this area was at best peripheral to any occupation. As the excavation area was around 60m south of the current line of London Road (presumed to equate to the Roman road), the east–west ditches might have marked the rear of plots fronting the road, although a greater density of both finds and features would normally be expected, and it may be that the

road was not specifically the focus here. No evidence of any Saxon element was identified, and no features cut the later Roman ditches.

Unfortunately, no finds to which a specific purpose can be attributed were recovered, other than pottery which indicates normal domestic activity somewhere nearby. Tiny quantities of slag represent only 'background noise' common on almost all Roman sites and need not indicate metalworking on the site. The programme of environmental sampling also produced only a background scatter from which no significant conclusions can be drawn.

The site was comprehensively abandoned by the 4th century. A relatively deep brickearth deposit covered much of the eastern end of the site. The origin of this layer is unclear but it does not appear to have been a natural deposit, such as a flooding episode, and although this is possible, it would be unlikely to have made the site uninhabitable. The generally observed trend of water levels in the Thames shows these rising through the 1st century but falling during most of the rest of the Roman period, before rising again during the Saxon era (Milne *et al* 1983; Brigham 1990). The Roman land surface here was at around 4.8m AOD, and even the greatest estimates for the Roman water level do not normally exceed +1.25m AOD, so that a single flood episode would not account for abandonment. Perhaps the site was abandoned for reasons unconnected with the water level and the brickearth deposit accumulated much more slowly and (potentially) much later.

ACKNOWLEDGEMENTS

The fieldwork was managed by Steve Ford and supervised by Siân Anthony with the assistance of Helen Moore, Leon Fern, Simon Cass, Pamela Jenkins and Natasha Bennett. The work followed a specification approved by Kim Stabler, Archaeology Adviser with the Greater London Archaeology Advisory Service, and was monitored by her. The project was funded by Rushmon Homes Ltd.

BIBLIOGRAPHY

- ANON (2000), Anonymous *Museum of London Specialist Services Pottery Codes*
- BISHOP (2002), B Bishop 'Late prehistoric and Roman Brentford: evolution of an agricultural landscape' *London Archaeologist* 10(1), 7–12
- BRIGHAM (1990), T Brigham 'The late Roman waterfront in London' *Britannia* 21, 99–184
- CANHAM *et al* (1978), R Canham *et al 2000 Years of Brentford*
- FORD & TAYLOR (2004), S Ford & A Taylor *Syon Lodge, London Road, Isleworth, London Borough of Hounslow: An Archaeological Evaluation* Thames Valley Archaeological Services Report 04/54
- LA (1976), *The London Archaeologist* 'London Fieldwork and Publication Roundup' *London Archaeologist Supplement*
- MARGARY (1973), I D Margary *Roman Roads in Britain* (3rd edn)
- MILNE *et al* (1983), G Milne, R W Batterbee, V Straker & B Yule 'The river Thames in the mid-first century AD' *Trans London Middlesex Archaeol Soc* 34, 19–30
- MILLS (1998), A D Mills *Oxford Dictionary of English Place-Names*
- MoLAS (2000), Museum of London Archaeology Service *The Archaeology of Greater London; An Assessment of Archaeological Evidence for Human Presence in the Area Now Covered by Greater London*
- PARNUM & COTTON (1983), A Parnum & J Cotton 'Recent work in Brentford: excavations and observations 1974–82' *London Archaeologist* 4, 318–25
- PINE & TAYLOR (2002), J Pine & A Taylor *181 London Road, Isleworth, London Borough of Hounslow: An Archaeological Evaluation* Thames Valley Archaeological Services Report 02/40
- SADARANGANI (2001), F Sadarangani *An Archaeological Desktop Assessment at 181 London Road, Isleworth, London Borough of Hounslow* Pre-Construct Archaeology Ltd
- VCH (1911), *Victoria History of the Counties of England; Middlesex*, vol ii
- VCH (1962), *Victoria History of the Counties of England; Middlesex*, vol iii
- WILLIAMS & MARTIN (2002), A Williams & G H Martin *Domesday Book, A Complete Translation*

TWO MULTI-PERIOD EXCAVATIONS ALONG THE ROMAN ROAD FROM LONDINIUM TO SILCHESTER AT BRENTFORD

Lorraine Darton

With contributions by Malcolm Lyne, Lynne Keys, Chris Jarrett, Lisa Yeomans and Nick Branch

SUMMARY

Brentford is reputedly a staging-post along a major Roman road leading westwards from Londinium, earning this reputation from finds recovered by 19th-century antiquarians and evidence gathered during archaeological excavations in the town during the 1960s and 70s. However it was not until recently that the opportunity arose to re-examine the evidence for the western part of Brentford near the River Brent, when a triangle of land between Brentford High Street and Brentford Lock (Site 1), and land to the rear of the Park Tavern, London Road (Site 2) were excavated. The two sites were located near the confluence of the River Brent and the River Thames, on either side of the ford crossing the Brent. The westernmost site (Park Tavern) has produced evidence of Roman roadside occupation, indicating that ribbon development extended west of the River Brent in the Roman period. The Brentford Lock site revealed the northern roadside ditch of the Roman road from Londinium to Silchester, with evidence for roadside occupation into the 4th century. There was then an apparent hiatus in the occupation of the Brentford Lock site until the late medieval period when pits and boundary ditches were found to the rear of houses and inns lining the High Street. The land adjoining the River Brent was utilised as a tannery from the 18th to the 19th century.

INTRODUCTION

Pre-Construct Archaeology Ltd was commissioned by Duncan Hawkins of CgMs Ltd to excavate two sites to the west of Brentford town centre (Fig 1). Site 1 was excavated between 8 May 2001

and 3 July 2001 on behalf of St George Developments Ltd, following an evaluation in 1996 when five evaluation trenches, excavated for British Waterways (Southern Region), revealed evidence of prehistoric, Roman, and medieval deposits, post-medieval brick buildings, and 19th-century tanning pits (Proctor & Moore 1996). The site comprised the properties formerly known as 159–188 Brentford High Street, and was bounded by the River Brent to the north and west and Brentford High Street to the south. The site central National Grid Reference is TQ 1742 7735 and the site was given the code BLR 96. Two archaeological evaluations were also undertaken at the British Waterways Brentford Depot to the north of the Lock for Charles Church Development Ltd: on the Island Site between the River Brent and the canal (Deeves 2001), and at the West Bank Site, Commerce Road, Brentford (Darton 2001). Neither evaluation revealed archaeological deposits, and it appears the excavation of the Grand Union Canal had removed any pre-existing archaeological remains. The archaeological evaluation and subsequent excavation of Site 2 (LRB 01) were carried out between 10 and 21 of December 2001 at The Park Tavern, 107 London Road, London, TW8, on behalf of Barratts West London Ltd (Bagwell 2002). Site 2 is centred on National Grid Reference TQ 5171 1771 and is bounded by London Road to the north, which forms the western continuation of Brentford High Street, and lies 350m to the west of Site 1.

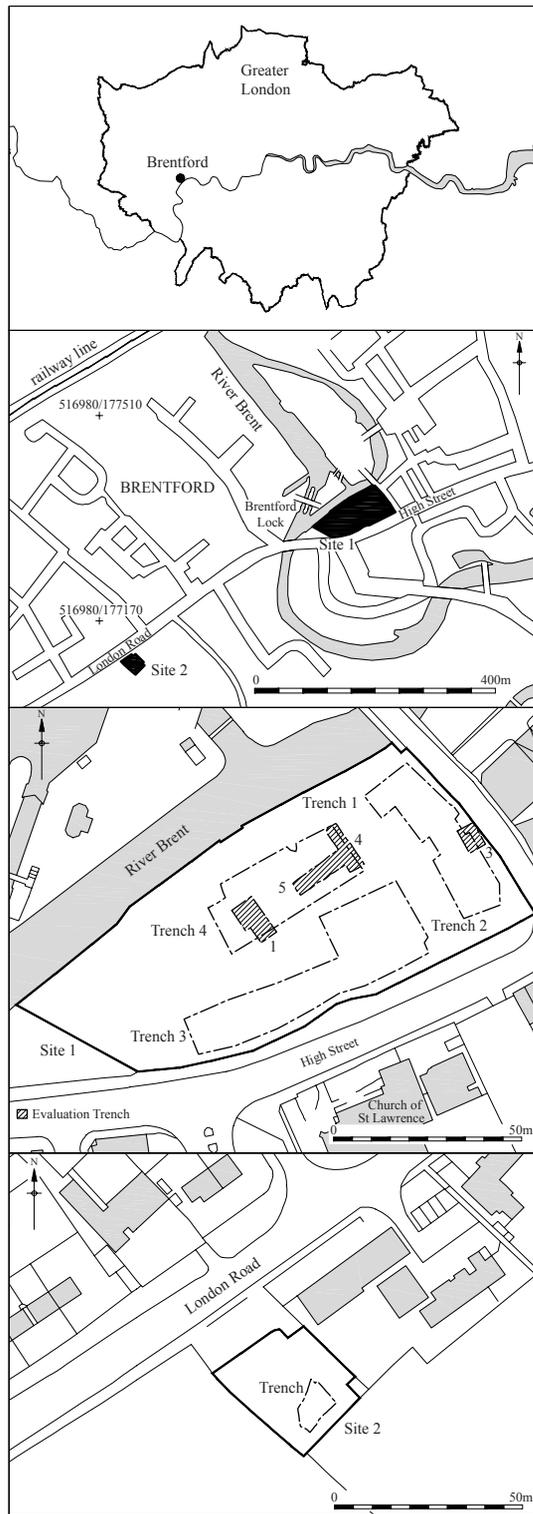


Fig 1. Site and trench locations

NATURAL GEOLOGY AND TOPOGRAPHY

The geology encountered on the sites was River Terrace 1 gravels and sands, which were in turn capped by brickearth. Site 1 lies on the south bank of a meander in the River Brent, near to its confluence with the Thames, and consequently has been prone to flooding and waterlogging in the past. Natural brickearth deposits at Site 1 lay at approximately 5m above Ordnance Datum, at least 1.5m lower than at Site 2, which lies to the west of the River Brent. A gradual slope in the brickearth was noted from the north down towards the High Street in the south at Site 1, and less prevalent was a slope from the middle of the site down towards the River Brent, leaving a ridge of slightly higher ground.

The location of the sites in close proximity to the confluence of a major river and its tributary is of great significance for their later utilisation and occupation. It appears that in the past the River Brent may have approached Brentford High Street more closely than is the case at present and ran beneath a relatively sharp scarp around the north of Lot's Ait before flowing into the Thames (Rackham 1998, 14). Recent studies of the Thames's regime in antiquity have indicated that the mean high water levels in the early Roman period reached above 1.50m OD, falling below 0m OD by the 3rd century, then rising again in the 14th century (Milne 1985). The River Brent was probably prone to flooding during the early Roman and medieval periods.

PREHISTORIC BACKGROUND TO THE SITES

Artefacts recovered from the dredging of the Thames and during the construction of Brentford Docks in the 18th and 19th centuries have highlighted the archaeological potential of the town. A series of excavations directed by Roy Canham between 1966 and 1972, when the High Street was undergoing redevelopment, revealed evidence for prehistoric and later activity. At 2–10 London Road an unstratified Palaeolithic axe was recovered from the modern disturbed ground (Masfield 1997, 17).

Canham excavated three trenches in the south-eastern corner of Site 1 which produced evidence of Neolithic occupation in the form of a possible ditch or gully and a quantity of worked and burnt flints and pottery (Canham

1978, 12). These were dated to the early Neolithic period (*c.*4000 BC). Further evidence for Neolithic activity was revealed 250m to the west of Brentford Lock, at the Park Tavern. Worked flints were recovered from the top of the brickearth, and a residual leaf-shaped arrowhead was found in a Roman ditch. An excavation at 231–232 High Street in 1974–75 produced a considerable quantity of struck flint and pottery of the Mesolithic to Bronze Age. To the east of Brentford town centre, the former Brentford Gasworks was excavated. Activity from the Mesolithic to Iron Age period suggests that the area was cleared of trees and a possible settlement was established (Bishop 2002b).

PHASE 1: PREHISTORIC

Site 1

Prehistoric struck and burnt flints were recovered during the evaluation and excavation of Site 1, particularly in the eastern half of the site. The assemblage is indicative of activity over a long period of time and is mostly unstratified, although an assemblage of early Iron Age flints was recovered from an infilled channel in the south of the site. Earlier materials recovered from the brickearth include blade cores and blades of Mesolithic/early Neolithic date, backed flakes and possible knives of late Neolithic/Early Bronze Age date. Because the brickearth

contained artefacts it was hand dug in 5cm spits to investigate whether it had been redeposited, and to test the possible presence of buried land surfaces or features. Excavation of the brickearth in evaluation Trench 3 revealed a late Neolithic tranchet arrowhead. The brickearth in excavation Trench 2 (5.09m OD) contained occasional sherds of Bronze Age, Iron Age and Roman pottery, and worked and burnt flints, suggesting it was a sub-soil of prehistoric to Roman date. The brickearth had been disturbed by bioturbation and as a result contained cracks in which the cultural materials were found; there was no evidence to suggest prehistoric features, and deposits were overlain by the disturbed brickearth. An assemblage of residual flints was recovered from a shallow Roman pit. This contained seven flint pieces, of which four were retouched, comprising a blunted-back knife, a truncated flake, a notch and a blade-like flake with a splintered edge. The blade-like flake and the blunted-back knife would suggest a date prior to the end of the Early Bronze Age. The high proportion of retouched pieces is unusual and the collection may possibly form part of an individual tool kit.

The brickearth further west, in Trench 3, noticeably sloped down to the south, more markedly in the centre of the trench, towards a large natural channel at the southern edge of the site (highest level 3.52m OD; lowest level 2.25m OD) (Fig 2). The channel appeared

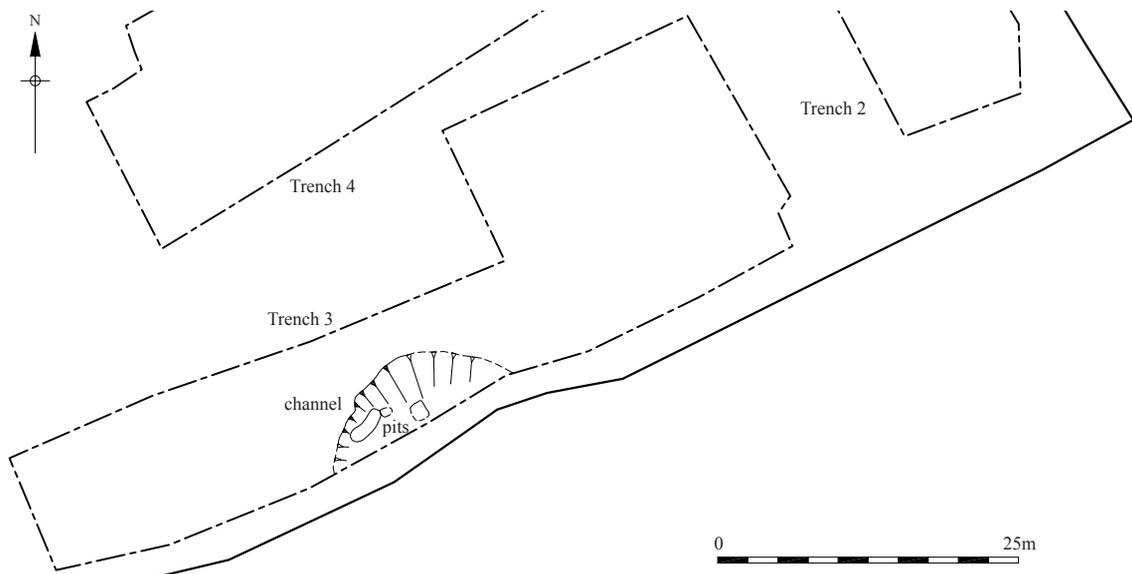


Fig 2. Site 1: Phases 2 and 3

to form the northern meander of a stream or river, curving from south-west to north-east and then north-west to south-east. The edges of the channel were composed of interspersed alluvial layers of silt, sand and gravel up to 1m thick. The earliest deposit in the channel was a silty gravel, which was overlain by a dark grey sand, a yellowish sand, and finally a sandy gravel layer. Canham (1978, 17) may have recorded the same channel south of the road at 141–147 High Street, since he mentions ‘layers of silt and loose, earthy gravel, apparently the infilling of a former channel of the Brent. Resting on and cutting into the infill were traces of Romano-British occupation’.

The more recent excavations have provided an opportunity to reassess Canham’s conclusions of thirty years ago. Canham’s Site 4 consisted of several small trenches at the former properties 184–187 High Street; of these, three narrow north–south trenches were located within excavation Trench 2. A gully was originally identified in the middle trench; it contained a fragment of sandstone with smoothed surfaces within its fill. However, when these trenches were re-evaluated, the sections appeared to show no sign of any linear features, and this ‘gully’ is likely to have been an ephemeral natural feature. The prehistoric material recovered also does not appear to have been *in situ*.

Site 2

The top 50mm of the brickearth contained moderate silty patches and produced several Neolithic and Roman finds, indicating that it had been subject to reworking. The earliest activity at Site 2 is represented by four pieces of struck flint, consisting of three blades and a leaf-shaped arrowhead, all characteristic of Mesolithic/Early Neolithic industries. Two of the blades were deposited into the top of the brickearth, probably by its reworking. The other pieces were residual finds within Roman features, but probably originated from the brickearth. Although no features were found associated with them, these finds indicate probable Neolithic activity in the vicinity.

PHASE 2: EARLY IRON AGE (700–300 BC)

Site 1

The earliest silt and gravel fills of the natural channel were overlain by a succession of silty

layers. These produced 24 struck pieces of flint, mostly comprising crudely produced or miss-hit, thick and squat flakes, flake fragments or unclassifiable core shatter. The primary fill (0.2m thick) of the channel was a grey clayey silt layer with flecks of charcoal. The secondary fill was a redeposited brickearth deposit, probably eroded from the edge of the channel and washed in. Overlying this was a reddish grey clay with worked and burnt flint and pottery inclusions (0.15m thick). A further episode of silting occurred and this deposit (0.3m thick) contained significant quantities of burnt flint, fragments of Iron Age jars, and one iron slag lump. The burnt flint implies either the presence of hearths close by or that refuse from hearths was deposited on the river bank. One core, consisting of a small gravel pebble, was also recovered. The flint assemblages were expediently produced, reflect a decline in flintworking techniques, and are characteristic of flintworking traditions dating to the Middle Bronze Age or later. Thus they may be contemporary with ceramic evidence for early Iron Age activity.

Cutting into this silt deposit were three pits containing Early Iron Age pottery. One was filled with grey silty clay with pottery inclusions. A linear pit was filled with greenish grey silt with pottery and burnt and worked flint. Truncating the eastern edge of the linear pit was a sub-rectangular pit with rounded edges, filled with grey silt and pottery fragments. Of the three Iron Age pits, only two contained struck flint, consisting of four flakes; these were undiagnostic, although comparable to the material from the alluvial deposits, and may be contemporary with the use of the pits. A reddish grey silt (0.6m thick) sealed the fills of these features and formed the upper fill of the natural channel (3.33m OD). This upper silt layer had daub and pottery fragments dating from the Late Iron Age to AD 50.

PHASE 3: LATE IRON AGE (300 BC–AD 50)

Site 1

Sherds of Late Iron Age pottery were found residually in several Roman features and in the top of the brickearth in Trench 2. The base of the roadside ditch yielded sherds of pottery pre-dating AD 50. Several small pits and a patch of *in-situ* burning or a hearth in Trench 2 also contained Late Iron Age pottery.

Following the excavation in 50mm spits of

the brickearth at both sites no *in-situ* artefacts were recovered apart from within the channel and pits cut into its edges at Site 1. Finds from the brickearth were recovered in vertically aligned groups, representing a prehistoric/Roman sub-soil. This well-rooted brickearth has been encountered on a third site in Brentford, at 232–246 High Street to the east, where it also represented part of an early soil profile truncated by later activity.

The redeposition of flints, especially in Roman deposits, is an indicator of the intensive use of the site from the Roman period onwards. The fragments of prehistoric pottery recovered from the brickearth in the eastern half of Site 1 were abraded and residual in nature and were deposited as a result of bioturbation. Nevertheless the density of prehistoric finds in this part of the site indicates a survival of the early sub-soil and activities may have been concentrated on this higher ground throughout the prehistoric period. The density of flintwork at Site 1 is less than it has been at other local sites, perhaps because of the low-lying nature of the area and alluvial processes. The leaf-shaped arrowhead recovered from the brickearth at Site 2 is noteworthy, such types being more commonly recovered from the Upper Thames Valley and dating to the early Neolithic (Bishop 2002b). The small struck flint assemblages indicate Mesolithic/early Neolithic activity on or very near to the sites and reflect the favourable environmental conditions that the area afforded in this period.

The Early Iron Age features found at the edge of a palaeochannel of the Brent at Site 1 were the only *in-situ* prehistoric deposits recorded at either site. The finds and features from the edge of the channel are a conclusive indicator of riverside activities, perhaps representing butchery and food preparation, and of the possible existence of a settlement in Brentford between 700 and 300 BC. The collections of complete prehistoric weapons and other finds from near the mouth of the River Brent, together with residual finds from the land, imply the presence of an important settlement or settlements in the Brentford area. The main occupation site has not yet been identified; it may have been eroded away by the action of both the Rivers Brent and Thames or through later human activity. Although the Brentford Lock site has revealed evidence for an Early Iron Age site in the vicinity, and enabled the mapping of a former course of the River Brent, it is also

clear that the Brentford area was a landscape in which people lived and hunted continuously throughout the prehistoric periods.

EARLY ROMAN ACTIVITY

Soon after the Roman invasion a network of roads was constructed connecting London with the rest of the province. The road from London (*Londinium*) to Silchester (*Calleva Atrebatum*) ran along the north bank of the Thames, crossed the River Brent and continued via Staines (*Pontes*). Brentford was located *c.*10 miles from Staines and *Londinium*, at a natural crossing point on the Brent. Roman roads often linked sites which were a day's march apart, *ie* 10 to 15 miles (O'Connor-Thompson 1998, 29), and Brentford may have developed as a *mutatio*, a relay-station, between two larger settlements. Official travellers using the road west from London could have obtained fresh horses or replacement draught animals at Brentford (Laws 1976, 187). If Brentford did begin as a planned *mutatio*, this would have acted as a catalyst for further growth, though the absence of *opus signinum* flooring and worked building stone suggests a lower status (O'Connor-Thompson 1998, 35).

The present town of Brentford is sited on a Roman settlement, a ribbon development on the line of the important Roman road. The road has been identified at three locations in Brentford — at 231–232 and 233–246 High Street and 2–6 London Road. It was of typical Roman construction — cambered, rammed gravels with lateral ditches. The road was rebuilt and repaired throughout the Roman period. At 246 High Street, the earliest road, dating to the 1st century, consisted of a linear metalled surface orientated north-east–south-west, laid down over a cambered foundation of sterile, redeposited brickearth. The earliest road varied in width between 4 and 6m, and was overlain by a second dumped brickearth layer which supported a more substantial gravel spread approximately 12m wide. The earliest phases of road dated to the Neronian period. A large V-shaped ditch parallel to the southern side of the road cut a Neronian gravel surface. The ditch was backfilled in the Flavian period (Cotton & Parnum 1983, 318).

PHASE 4: AD 43–70

Site 1

An east–west aligned ditch running along the southern boundary of the site with Brentford

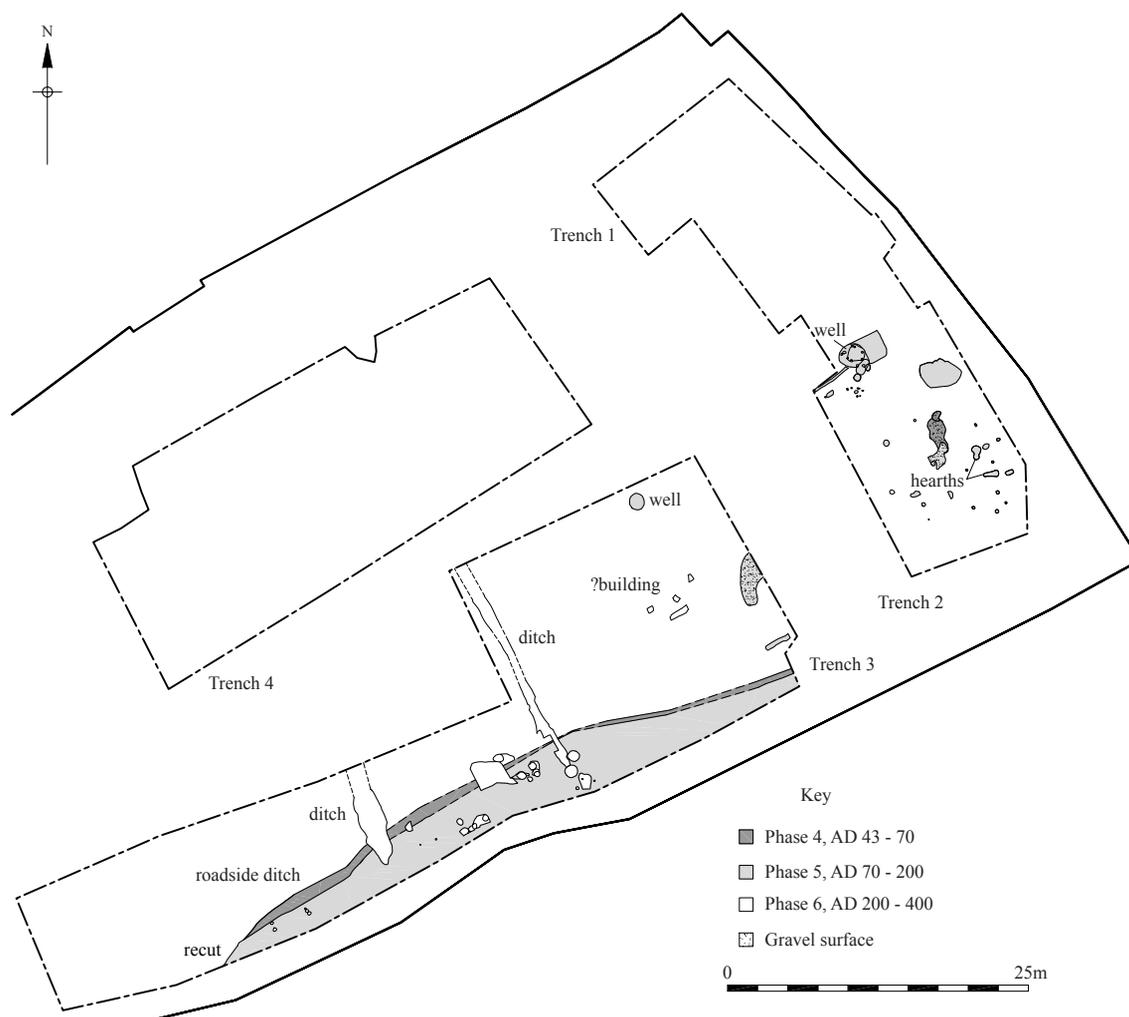


Fig 3. Site 1: Phases 4, 5 and 6

High Street was dug in the mid-1st century (Figs 3 and 4). The ditch is thought to have formed the northernmost roadside ditch of the *Londinium* to Silchester road, which would place this stretch of the Roman road surface directly beneath the modern road. The roadside ditch was up to 2m deep and up to 4m wide; its large size, especially above the former river channel, was probably due to the drainage problems on the site. The roadside ditch stretched 50m east-west along the southern boundary of Site 1, and was excavated in several north-south slots. Changes in the profile of the V-shaped ditch-cut were noticeable in the sondages excavated through it, in terms of the angle of the northern

slope. The easternmost extent of the roadside ditch was the narrowest section; it was at least 1.8m in width and 1m deep, with the southern slope rising up towards the modern road. In the central part it was 4m wide and 2m deep with the edge gradually sloping to the south. The westernmost extent examined was c.2m wide and 1m deep. Clearly there was a marked change in the line and profile towards the centre of the trench. The enlarged size of the ditch in this area can be explained by the location of the channel which had silted up c.400 years before the Romans built their road but would have remained wet. The primary clayey fills of the ditch contained fragments of charcoal and



Fig 4. Roadside ditch at Site 1, facing south-west

yielded pre-Flavian pottery dating to AD 43–70/80, including a significant proportion of Highgate Wood B ware. Imported wares included South Gaulish samian ware, Gallo-Belgic whiteware and Central Gaulish whiteware. The material indicates that the roadside ditch was originally open between AD 45/50 and 70/80. The small amount of slag recovered from this first phase compared with that found in the recuts suggests that the first Roman road was not metalled with slag and that the road builders made use of the gravel that was available. The only other features on the site containing pottery dating to the early Roman period were found at the east of the site in Trench 2: a small rubbish pit of *c.*AD 50–60, which was overlain by a rammed gravel yard surface dating to AD 60–70.

Site 2

The earliest possible Roman feature was a linear

north-east–south-west gully with a concave profile. It produced no finds, but may have drained into a north-west–south-east ditch dated to the early Roman period (Fig 5). This ditch was located in the centre of the site; it had a terminus at its south end and extended northwards beyond the limits of excavation. It would have run perpendicular to the Roman road to the north of the site. These features may represent ditches belonging to field systems situated alongside the road. The pottery assemblage was dominated by Highgate Wood B ware, and also included sherds of South Gaulish samian. It was similar to the pre-Flavian assemblage found at Site 1. The pottery indicates that the ditch was dug *c.*AD 50 and was gradually filled in until *c.*AD 70–90. Therefore this ditch was contemporary with the initial construction of the Roman road.

The land at Site 1 remained open during the early Roman period with a possible development

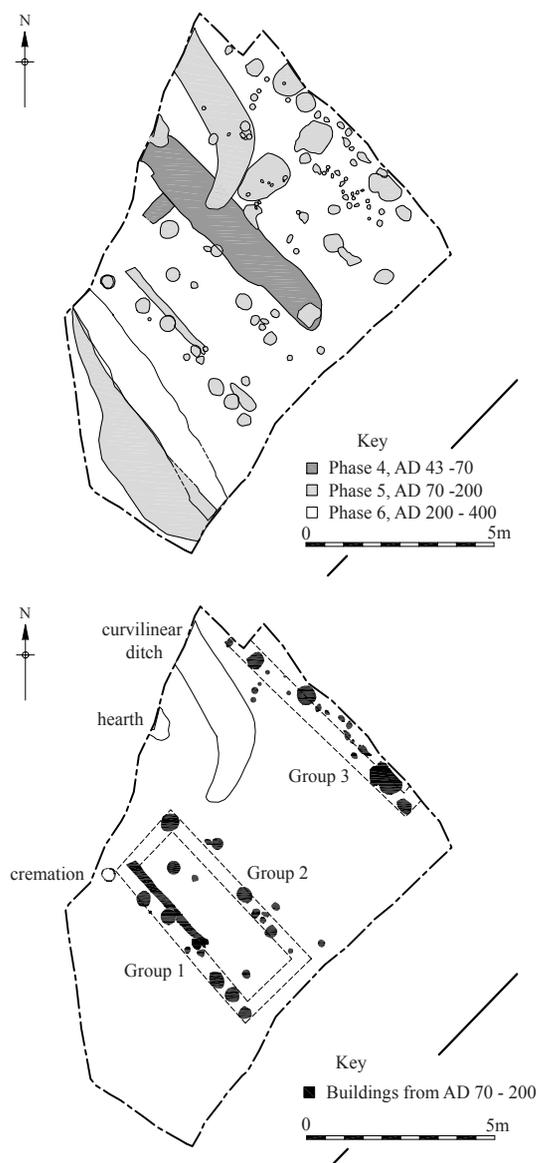


Fig 5. Site 2: Phases 4, 5 and 6

on the east side of the site. Excavations at Northumberland Wharf, on the west bank of the River Brent, 200m east of Site 2, revealed two 1st-century ditches, one of which is similarly aligned north-west-south-east. Unfortunately only a small part of the Northumberland Wharf development was excavated and higher deposits had been disturbed by contractors. Nevertheless these ditches support the existence of an early Roman field system located to the south of the

road and to west of the Brent. The construction of the road between AD 43 and 70 probably caused a re-alignment in the pattern of land division in the area, with the prehistoric layout superseded by a pattern of rectilinear fields and enclosures.

LATE 1st- AND 2nd-CENTURY OCCUPATION

The distribution of the Roman features excavated in Brentford suggests that the settlement extended for up to 800m along both sides of the road. The settlement was established by the late 1st century, and experienced a decline in the late 3rd century, with a possible resurgence in the 4th century. There is little evidence to indicate the nature of the buildings; the only structural evidence recorded is a possible late 1st-century AD foundation trench at 136 High Street, a possible gravel-floored structure of late 1st-century/early 2nd-century date, and beam slots from the mid- to late 2nd century at 233-246 High Street. It would appear that the timber and daub structures have left little trace. Canham (1978, 146) suggests buildings with clay or turf walls or constructed with a sleeper beam set on the existing ground surface, and not in a slot or trench. The Roman road itself has been identified to the east of Site 1, between Half Acre and the County Court on the north side of Brentford High Street, where an early Roman 'metalled' gravel surface, 4-6m wide, was recorded with two lateral roadside ditches. In the late 1st century this section of the road was extensively remodelled, moved slightly to the south and widened to 12m across. Gravel spreads found at 2-10 London Road may be directly connected with the Roman road west of the River Brent and date to the mid-3rd century.

PHASE 5: AD 70-200

Site 1

A remodelling of the road was recognisable at Site 1 (Fig 3), where in the late 1st century the ditch was recut and widened in order to maintain efficient drainage. The northern edge of the recut ditch was located ≈ 0.5 m to the south of the earlier ditch. The base of the recut was only recorded in the easternmost sondages. Both cuts revealed similarly sloping northern edges with a

steeply cut, narrow base. The primary fills of the recut yielded pottery suggesting the feature was re-excavated *c.*AD 60–70. This pottery includes fragments of wheel-turned jars and beakers from the Highgate Wood kilns, the Colne Valley kilns near Staines, and from elsewhere in the Thames Valley. The pottery assemblage from the secondary fills indicates that the second roadside ditch began to silt up during the period AD 70–100; this is contemporary with the pottery from the fill of the southern roadside ditch observed by Parnum and Cotton between 1974 and 1982. A second recut of the roadside ditch was recorded in one of the central sondages; its fills were deposited during the period AD 100–130. This secondary recut was necessary because this waterlogged area had probably silted up quicker than elsewhere along the ditch. A 2nd-century ditch extended north–south from the roadside ditch and ran perpendicular to the Roman road. This ditch was U-shaped in profile and 0.9m deep; the composition of its fill suggests it was frequently waterlogged.

A large quantity of slag, which had probably eroded from the surface of the road, was recovered from the roadside ditch fills and the recutting of the ditch may have been undertaken at the same time as the resurfacing of the road. The inclusion of slag within the surface of the road has not been mentioned in reports of previous excavations of the Roman road in Brentford, which suggests either that its presence within the road surface was not deemed to be significant or that the slag was more densely distributed closer to the ford over the River Brent.

During the late 1st to 3rd centuries the roadside ditch gradually silted up, and was no longer maintained. The pottery assemblage from this period included imported finewares such as fragments of beakers from South and Central Gaul. Many metal objects were recovered from the ditch fills, presumably having been accidentally dropped by travellers and washed into the ditch. The Roman coin assemblage falls into two groups: late 1st-century in the lower fills of the ditch, and 3rd-century from the upper fills. The former includes a fine example of a *dupondius* of Domitian, dated to AD 90–96 (Fig 17.9). The lettering is unworn, suggesting it was not in circulation very long prior to its loss. One of the coins recovered from the upper fills dates from the reign of Tetricus I, AD 270–273. Amongst the other objects discovered were a Roman military

belt mount, two decorative dress pins, a green glass bead, a finger-nail cleaner, an ornately moulded knife handle, and a small mount cast in the form of a goat (Fig 17.8).

The remains of a possible smithy, dating to the 2nd century, were found in the eastern part of the site; two hearths, a well and a pit full of smithing waste were discovered in excavation Trench 2. Nearby were the fragmentary remains of a rammed brickearth and gravel surface, containing fragments of slag, which could have formed a working surface. The two hearths cut into the brickearth were located to the south of the gravel surface. A similar working surface was recorded in evaluation Trench 3. The northern kidney-shaped hearth contained a charcoal fill as well as a smithing hearth bottom, some undiagnostic slag (probably broken smithing hearth bottoms), vitrified hearth lining, cinder, and some nails. The second hearth had an elongated flue and produced a large amount of fired clay, which may have formed part of its lining; it also contained a smithing hearth bottom and debris similar to the other hearth. In addition, the hearth fill contained some flake hammerscale; this type of micro-slag is produced in nail manufacture. Postholes were recorded surrounding the hearths; these may have formed part of a wind-break or similar structure, though they did not demonstrate any discernible ground plan. Smiths needed to work in an environment with some shadow in order to see the fine differences in colour of the heated iron which told them when the iron had reached the required temperature for the object they were producing or working on. The manufacture of such simple objects as nails may only have required a rough shelter of some kind.

The possible 2nd-century smithy was further evidenced by a large rubbish pit backfilled with slag from 16 smithing hearth bottoms and a considerable quantity of undiagnostic slag, some vitrified hearth lining, cinder, mid-2nd-century pottery, and quantities of charcoal. A small pit very close to both hearths contained 7 smithing hearth bottoms and almost 3kg of undiagnostic slag. The rammed gravel surface dating to the late 1st century was repaired and extended in the 2nd century and contained a smithing hearth bottom and a very small amount of slag. The presence of a well, which was surrounded by several postholes and stakeholes on its edges, would have been necessary for the smith to draw

water. The posts and stakes may have formed a structure over the top of the well with a pulley system for collecting the water. An east–west gully ran into the well from the west and could have formed part of a water collection system. A shallow pit cut into the silted up well contained a pottery assemblage dating to AD 160–200+. Therefore, the well and probably the smithy were redundant by the late 2nd century. A curvilinear gully filled with gravel and late 2nd-century pottery was recorded to the south-west of the hearths and could have drained water away from the working area.

In the east of Trench 3, a possible east–west beam slot, a further well, and a rammed gravel surface were located. There were no postholes found associated with the possible beam slot, although it may relate to the well and gravel surface and represent an extension of the activities found in Trench 2.

Site 2

Activity during the period AD 70–200 consisted mainly of groups of postholes and stakeholes

(Figs 5 and 6). These represent at least one building phase that was bounded to the west by a north–west–south–east aligned ditch. This western boundary contained pottery and a copper-alloy brooch dating to AD 70–120. The post and stakeholes were aligned north–west–south–east and, although many of them lacked dating evidence, they formed alignments with datable features and were all sealed by a late 2nd-century Roman gravel deposit. The alignments of post- and stakeholes, together with a beam slot, represent at least one, or possibly several, post-built buildings or phases of building.

Posthole Groups 1 and 2 and a beam slot formed north–west–south–east alignments approximately 3.5m apart, representing a small post-built building. This had dimensions of approximately 5m north–west–south–east by 2.5m north–east–south–west. Five of the post- and stakeholes along the western extent of the building (Group 1) contained freshly broken sherds of pottery, indicating that the building was constructed between AD 100 and 120. A posthole and a stakehole from Group 1 both contained sherds of pottery from the same vessel, confirming that

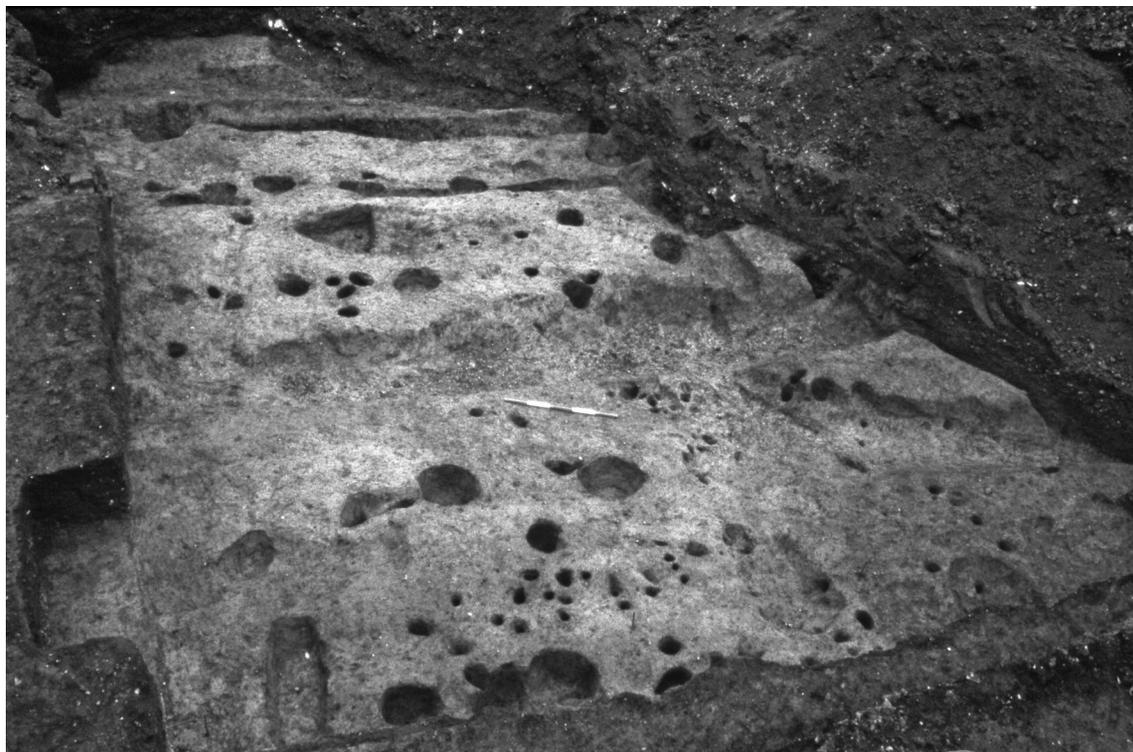


Fig 6. Roman occupation at Site 2, facing south-west

they were contemporary. The base of a late 1st-century vessel, located at the north-west end of the building, contained cremated remains and pyre material. The fill was much disturbed and the upper 60mm contained broken fragments of the vessel. The unidentifiable cremated remains were very small, with the largest fragments only 10–15mm in size, consequently no metric data could be collected from the fragments. Nevertheless the discovery of a likely human cremation urn buried just outside an early 1st-century building is a significant find for Roman Brentford.

A curvilinear ditch was found to terminate at the north-east corner of the building and may have drained water away from its roof. This ditch appears to have been dug between *c.*AD 90 and 110 and remained open until *c.*AD 200, and was therefore contemporary with the construction of the building and indicates the period in which the building went into disuse. The primary fill of this ditch contained a copper-alloy coin from the reign of Trajan, AD 115–117. Several stakeholes with 1st- to 2nd-century sherds were revealed during the excavation of the ditch, but their relationship with the ditch was uncertain. A shallow patch of *in-situ* burning, located to the north of Building 1 and south-east of the curvilinear ditch, was interpreted as a domestic hearth. The hearth appears to be external and may be associated with Building 1 or the possible building to the east.

Posthole Group 3, the easternmost north-west–south-east alignment, may represent a fence line. However, together with other postholes to its west, it may be associated with Groups 1 and 2 to form a larger structure, or it may represent the western side of a structure extending eastwards beyond the limits of the excavation. Four of the 18 post- and stakeholes in Group 3 produced pottery dating to the late 1st and 2nd century. A group of 9 stakeholes to the south of the curvilinear ditch was sealed by a layer of gravel containing mid- to late 1st-century pottery. This gravel layer may have formed part of an early gravel yard surface on the site, similar to the gravel surfaces found at Site 1. A shallow pit was located in the north-east of the trench and contained the sherds of a single 2nd-century amphora. A group of 22 stakeholes formed a north-west–south-east alignment to the west of the Group 3 features, though none produced dating evidence. A further 11 features, including post- and stakeholes and

pits, were discovered on the east side of the trench, although they retained no relation with the discernible structural alignments. All of the late 1st- to 2nd-century features were overlain by a fairly flat, 0.20–0.30m thick, gravel deposit, representing an external surface that covered the entire excavated area. The gravel produced just two abraded pottery sherds dated to *c.*AD 70–200, suggesting the abandonment of the structures after this period. Although of unknown function, it was interpreted as a yard surface since it was compact and possibly tamped, and associated with occupation in the vicinity of the site.

Discussion

Finds recovered from the fills of the roadside ditch at Site 1 have provided evidence for determining the nature of the road at this point and enabled analysis of the local environment and activities (Fig 4). Important Roman roads were often metalled with iron slag brought from elsewhere, and its presence therefore indicates that some repair or resurfacing work took place when the ditches were recut, or that as the edges of the road eroded, quantities of slag fell into the ditch. The density of slag recovered from the ditch may have been higher along this stretch of the road because of the proximity to the Brent river crossing (Fig 7).

Evidence for occupation during the period *c.*AD 70–200 was well represented at Site 2 (Fig 6). The pottery assemblage was fairly large and consisted of many large fresh, unabraded sherds; although ritual activity was represented by the cremation burial, the pottery assemblage is more characteristic of domestic deposition, probably associated with the structures described above. All of the pottery from the features in this phase fell within the period *c.*AD 70–200, suggesting it was well stratified and *in situ*. This conclusion is supported by two copper-alloy brooches, one of which was in exceptional condition, and a coin, also consistent with the pottery dates. The building/s probably represent domestic dwellings located alongside the Roman road, which probably ran to the north of the site. They could represent a farmstead on the fringes of the Roman settlement of Brentford, but it is much more likely that they were a continuation of the ribbon development along the Roman road.

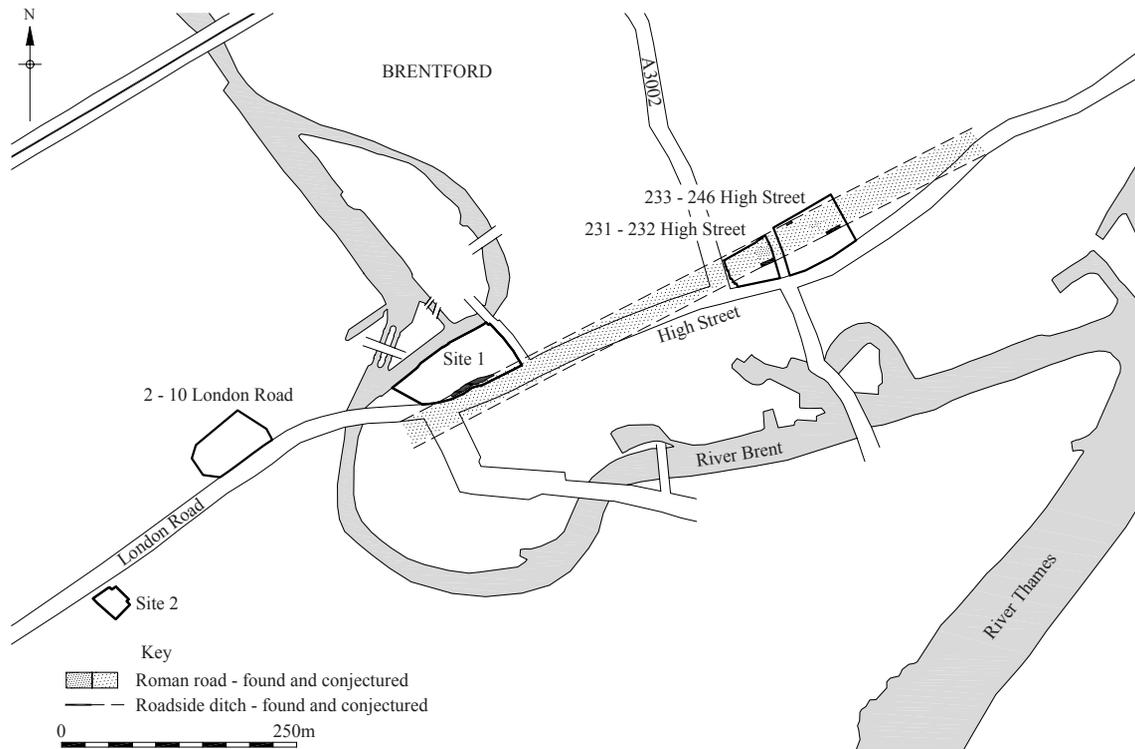


Fig 7. Conjectured line of Roman road through Brentford

LATE ROMAN AND SAXON BRENTFORD

Fragmentary beam slots dating to the 4th century were discovered at 233–246 High Street, and substantial postholes from a 4th-century structure were found at 141–147 High Street. The name Brentford refers to the ford over the River Brent and first appears as Breguntford in AD 705, when King Offa's Council met at the settlement (Weinreb & Hibbert 1983, 86). An early Saxon structure was discovered at 233–246 High Street in the form a sunken-floored building, at least 2.5m in length. Pottery recovered from it dated to c.AD 450–550.

PHASE 6: AD 200–650

Site 1

A possible building, formed by an east–west slot and three postholes, provided evidence for mid to late 4th-century occupation on the site (Fig 3). The freshly broken sherds of pottery (AD 330–420) from the beam slot probably

date the building's demolition, while a single posthole dated to the late 3rd century suggests it was occupied during the early 4th century. Two similar square-shaped postholes were also recorded in close proximity; although the pottery within their fills dated to the late 1st century, the sherds could be residual.

The upper fills of the recut roadside ditch indicate that it gradually silted up throughout the 3rd and 4th centuries, suggesting that no major roadworks were undertaken in the later Roman period, and the ditch was allowed to fill up naturally. However several postholes and stakeholes were recorded, aligned east–west along the slope of the roadside ditch and driven into the fills of the recut ditch. This implies that a revetment or fence was constructed along the north edge of the roadside ditch between the 3rd and 4th centuries, perhaps to slow the silting of the ditch.

A north–south aligned ditch was dug during this phase to the west of the possible building, forming a boundary running perpendicular to the road. The ditch contained pottery dating

AD 270–400, and therefore silted up in the 4th century; it could have formed the western property boundary of the 4th-century building. A series of intercutting pits was found immediately to the west of this ditch, truncating the upper fills of the recut roadside ditch and its southern extent. One of these pits, found on the line of the ditch, contained an assemblage of pottery dating AD 270–330. Several shallow pits were sealed by a gravel layer which probably comprised the eroded road surface and sealed the upper fills of the roadside ditch. One of these shallow pits cutting into the top fill of the roadside ditch contained a sherd of pottery of early Saxon date within an assemblage of abraded, possibly residual, early 3rd-century pottery. The gravel could have been dispersed as a result of ploughing up to the edge of the road in the sub-Roman period. Further west a wide north–south ditch contained a pottery assemblage with a wide date range of AD 250–400. The location of this series of pits outside the boundary ditch suggests that the land to the west of the property was not occupied, and was available for rubbish deposition beyond the boundary. A single 4th-century posthole was recorded in the west of Trench 2 and formed the only Late Roman feature discovered in the eastern part of the site.

Site 2

A north-west–south-east aligned, late 3rd to early 4th-century drainage ditch was located on the south-west side of the trench (Fig 4). The ditch contained one homogeneous fill which produced pottery sherds dated to the period *c.*AD 270–330; these were characteristic of locally produced wares. Although there were no other features dating to this phase, the high concentration of finds from the ditch is indicative of occupation nearby, suggesting it may have formed a property boundary. As in the early Roman period, it could have formed part of a field system or property development running perpendicular to the Roman road. The 18th-century ploughsoil that overlay the late Roman features contained a sherd of an early Saxon jar dated AD 450–650.

The lack of evidence for significant late Roman and early Saxon occupation at the sites appears to reinforce Canham's view that the western end of the town was deserted from AD 400 to 1200. The reduction of traffic along the road in the late Roman period probably led to the decline of the settlement.

'NEW BRENTFORD' AND 'BRENTFORD END'

Few medieval structures have been found in Brentford, probably due to truncation by post-medieval cellars located within the same property boundaries as many of the medieval buildings. The church of St Lawrence, which stands opposite the site, was certainly in existence in the late 12th century when Maurice de Berkeley was recorded as one of its benefactors. Although Brentford is not mentioned in the Domesday Book, it is clear from later evidence that the administrative entity of Brentford had already been established in the pre-Conquest period. Old Brentford lay in the parish of Ealing, in the hundred of Ossulstone, and New Brentford lay in the parish of Hanwell, in the hundred of Elthorne. Brentford End lay in the parish and hundred of Isleworth to the west of the River Brent. The emergence of the three settlements as distinct units can be traced in documents; late 13th-century 'West and East Braynford' became known as Old and New Brentford in the 15th century, and references to Brentford End occur by the early 16th century (Canham 1978, 5). The ford over the River Brent was bridged by at least the 13th century and a market and fair were granted by Edward I in 1306, at New Brentford. At 141–147 High Street a 14th-century robbed out wall and postholes were discovered, and further east at 233–246 High Street two features of the same date were recorded. In the early 15th century a second bridge was built of stone, slightly to the north, a second chapel was built in New Brentford, and two houses for poor travellers were added, known as the hospital of St Mary, St Anne and St Louis (Canham 1978, 5). Brentford was known as a stopping-place for travellers by the early 15th century. There were a number of inns along the High Street, including the Red Lion in New Brentford where Henry VI held a meeting of the Order of the Garter in 1446 (O'Connor-Thompson 1998, 57). The walls of a chalk-built cellar were observed during the excavation of a service trench in the High Street which were interpreted as belonging to the Red Lion Inn.

PHASE 7: LATE 10th–11th CENTURY

Two parallel ditches aligned north-east–south-west at the western end of Trench 3 (Fig 8), probably field boundaries, represent the earliest

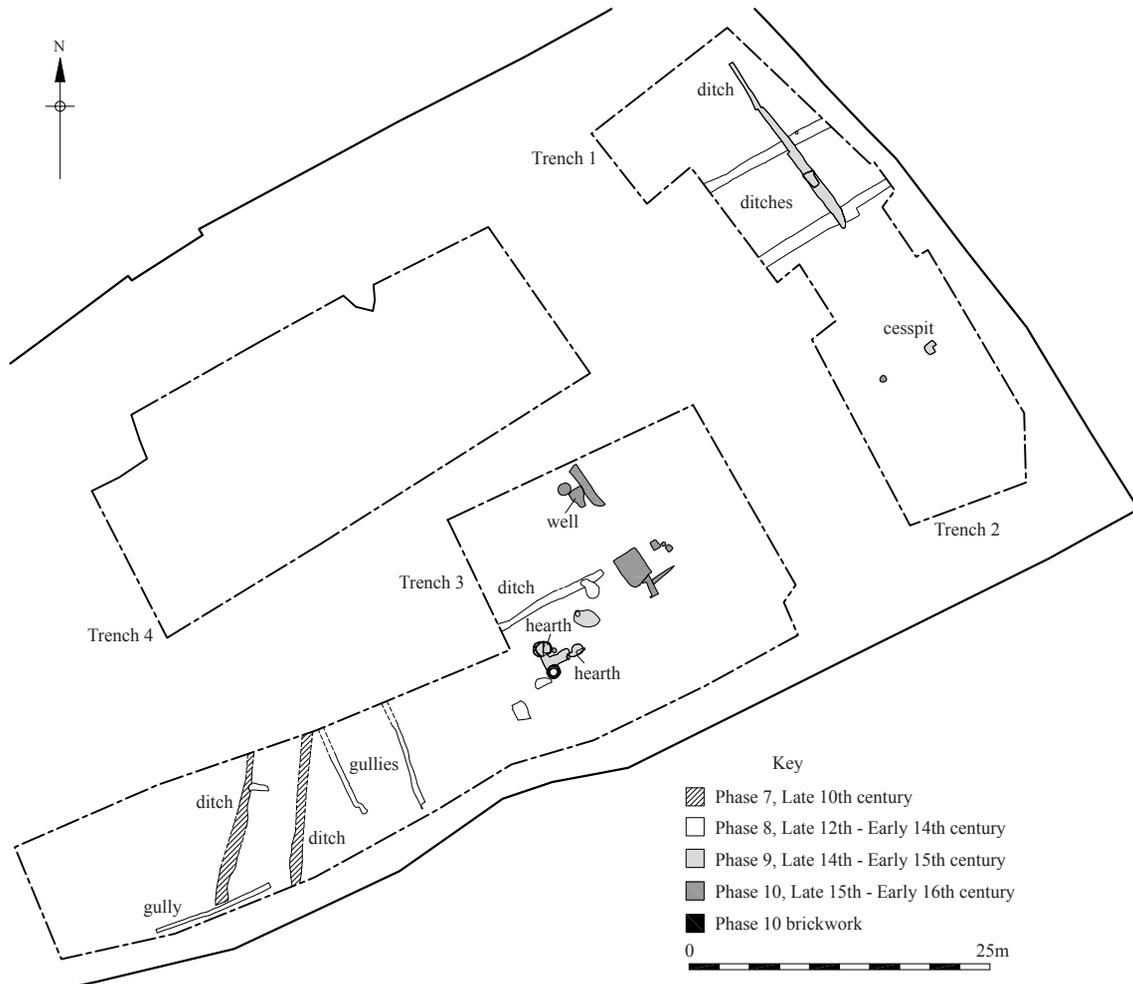


Fig 8. Site 1: Phases 7, 8, 9 and 10

phase of activity on the site post-dating the Roman period. The pottery assemblage from both ditches consisted of early medieval sandy wares, dating from AD 970–1100. The ditches were 0.4m deep and U-shaped in profile.

PHASE 8: LATE 12th– EARLY 14th CENTURY

Towards the centre of Trench 3 an east–west ditch with a rounded eastern terminus contained pottery with a deposition date of 1170–1350. Two rubbish pits found to the south of this ditch dated to 1180–1350; a third pit truncated the eastern end of the ditch. The 13th/14th-century activity on the site is characterised by a change in alignment of the north-east–south-

west ditches to north–south gullies running southwards to the road. The westernmost gully produced the complete profile of a Kingston ware cooking pot with an everted rim, dating from the late 13th/early 14th century. A similar gully, aligned east–west, was found in the west of the trench; this may have been connected with the north–south gullies, draining water off the land towards the River Brent. A linear feature ran into the southern limit of Trench 4, and may have represented the northern terminal of a north–south gully, which silted up in the late 13th/early 14th century. Evaluation Trench 3 contained two medieval rubbish pits, one of which contained material dated to 1100–1300; both were sealed by a layer of redeposited brickearth. Two V-shaped ditches ran east–west

across Trench 1; their fills contained 14th-century pottery and residual Roman pottery. The northernmost of the two had a single posthole cutting into its northern edge.

PHASE 9: LATE 14th–EARLY 15th CENTURY

In Trench 1 a north–south ditch cut through the two east–west ditches; the terminus of the ditch was found at its south end, indicating that it drained into the River Brent to the north. Between the primary and secondary fills was a layer of peg tile, which appeared to have been purposefully laid in order to aid its drainage. The ditch contained medieval pottery sherds (1340–1450) and was probably deliberately backfilled during this period. Truncating the ditch was a sub-circular rubbish pit, backfilled in the late 14th/15th century. Overlying the pit was a spread of gravel also deposited around the same date. The north–south ditch could have formed a property boundary for a riverside development, while the pit and gravel surface indicate that land close to the river’s edge had begun to be exploited. In Trench 2 a small pit and a sub-rectangular cesspit were backfilled in the late 14th/15th centuries. These features were most likely associated with a property fronting onto the High Street.

In Trench 3 two phases of pitched-tile hearths were recorded at the rear of a High Street property boundary. Little of the earliest hearth remained, with only a crescent surviving. This was replaced by a new circular, pitched-tile hearth. To the east of this hearth was a second complete, circular, pitched-tile hearth; the fill beneath this hearth contained a pottery assemblage dating the construction of the hearth to the late 14th/15th century. The tiles forming the hearths were pushed into a soft clay layer; the area between the two hearths was scorched. It is likely that these hearths were contemporary and, if they were in use at the same time, a small-scale industrial or catering function could be inferred. The hearths were probably housed in an outbuilding (of which no archaeological traces survived), located to the rear of a property fronting onto the High Street.

No features or deposits dating to the medieval period were found at Site 2. A single sherd of Kingston ware cooking pot *c.*1230–1400 was recovered from the 18th-century plough soil. Between the abandonment of the site in the late

Roman period and the re-occupation in the late 17th century the land probably remained part of an open field system.

DISCUSSION

From the 12th to 15th centuries the Brentford Lock site appears to have remained relatively open ground, possibly with an agricultural or horticultural use, as inferred from the presence of boundary ditches. The rubbish pits found from the 13th century and later imply that the settlement was expanding westwards towards the River Brent. Two 14th-century gullies ran perpendicular to the High Street, indicating a change in alignment from the earlier ditches, and possibly signifying the beginning of property development along the High Street. The western part of medieval Brentford became known as New Brentford, and the properties recorded during the excavation would have stood opposite the church of St Lawrence. One of these properties is notable because of the number of hearths at its rear and the continuity of the activities that were taking place. Three 15th-century pitched-tile hearths, possibly used for baking, were discovered; cutting into these was an unusual brick structure with a tiled floor dating to the 16th century (see below).

POST-MEDIEVAL EXPANSION

Of great importance to the prosperity of Brentford was the expansion of the City of London in the 16th century. The growing importance of the market at Brentford combined with the presence of the Bath/Exeter road was reflected in the number of inns established in New and Old Brentford. The High Street formed part of the main Bath and Exeter road, and Brentford was the first stopping point for the frequent mail and stagecoaches en route to these destinations. At New Brentford the food from the market, and cloth from packhorses, could easily be transported by road or transferred onto the River Thames to be shipped to London.

There were at least ten inns in New Brentford by 1614 and this had risen to about forty by 1770. The number of inns reflects not only a rise in population, but also a need to cater for the increasing number of travellers. The Moses Glover map of 1635 covers the area around both the subject sites, and depicts buildings lining the High Street, with hedges forming property

boundaries, leading back towards the Brent on the north side of the High Street. An inn called the 'George' is shown almost opposite St Lawrence's Church and may have been located at Site 1. There was a coaching inn at Site 2 from the 17th century known as the Angel Inn; the precise foundation date of this building is unknown. It does not appear on Glover's 1635 map of the Syon Estate but it does appear on John Rocque's Survey map of 1746, suggesting a construction date between 1635 and 1746 (Hawkins 2001, 8).

A second battle of Brentford took place in 1642, during the Civil War, when the victorious Royalists went on towards London only to be turned back at Turnham Green (Weinreb & Hibbert 1983, 86). By the mid-17th century the settlement of Old Brentford had a higher population (259 premises) than New Brentford (132 premises), as exemplified by the 1664

Hearth Tax Returns (Canham 1978, 6). Structures were recorded at 136 High Street in the form of masonry foundations from a 16th-century timber building. The building had been at least partly demolished in the 17th century; a paved yard and an alley were laid over the foundations.

PHASE 10: LATE 15th–EARLY 16th CENTURY

A circular brick structure, with a reused, glazed tile floor and of a 'beehive' shape, was located to the south of the pitched-tile hearths, sunk 0.4m deep into the ground within Property 3D (Fig 9). The internal diameter of the structure was 0.65m at the top, and 0.85m at the base. A large disc of iron, possibly a lid, was found lying on the tiles. This structure was backfilled with a deposit composed mostly of charcoal and ash



Fig 9. Site 1: 'Beehive'-shaped brick structure

with some animal and fish bone. The ceramic assemblage dated the structure's disuse to the late 15th century, and consisted mostly of drinking vessels, including a Tudor Green ware lobed cup. It is not clear what the function of this feature was, but it could not have been used as an oven since there was no flue, and because it was buried, it would have been difficult to clean out. The sunken feature could have been used for storage, perhaps as a yeast store. A pit with a posthole cutting into it was found within the same property boundary.

A series of pits and a north-south ditch (Figs 8 and 10) were dug along the north-

south boundary of the adjacent property to the east (3C). A large square pit located to the rear of the property was backfilled mostly with drinking vessels, including two German Siegburg stoneware drinking jugs from the late 15th century. The pit truncated a north-south ditch, into which a gully ran from the west; a flint hammerstone was recovered from its fill. Four postholes may have formed part of a post-built building located to the east of the ditch. A 1.2m-deep well was located to the north of these features; this went out of use by the late 16th century. The well appeared to truncate a further section of the north-south ditch.

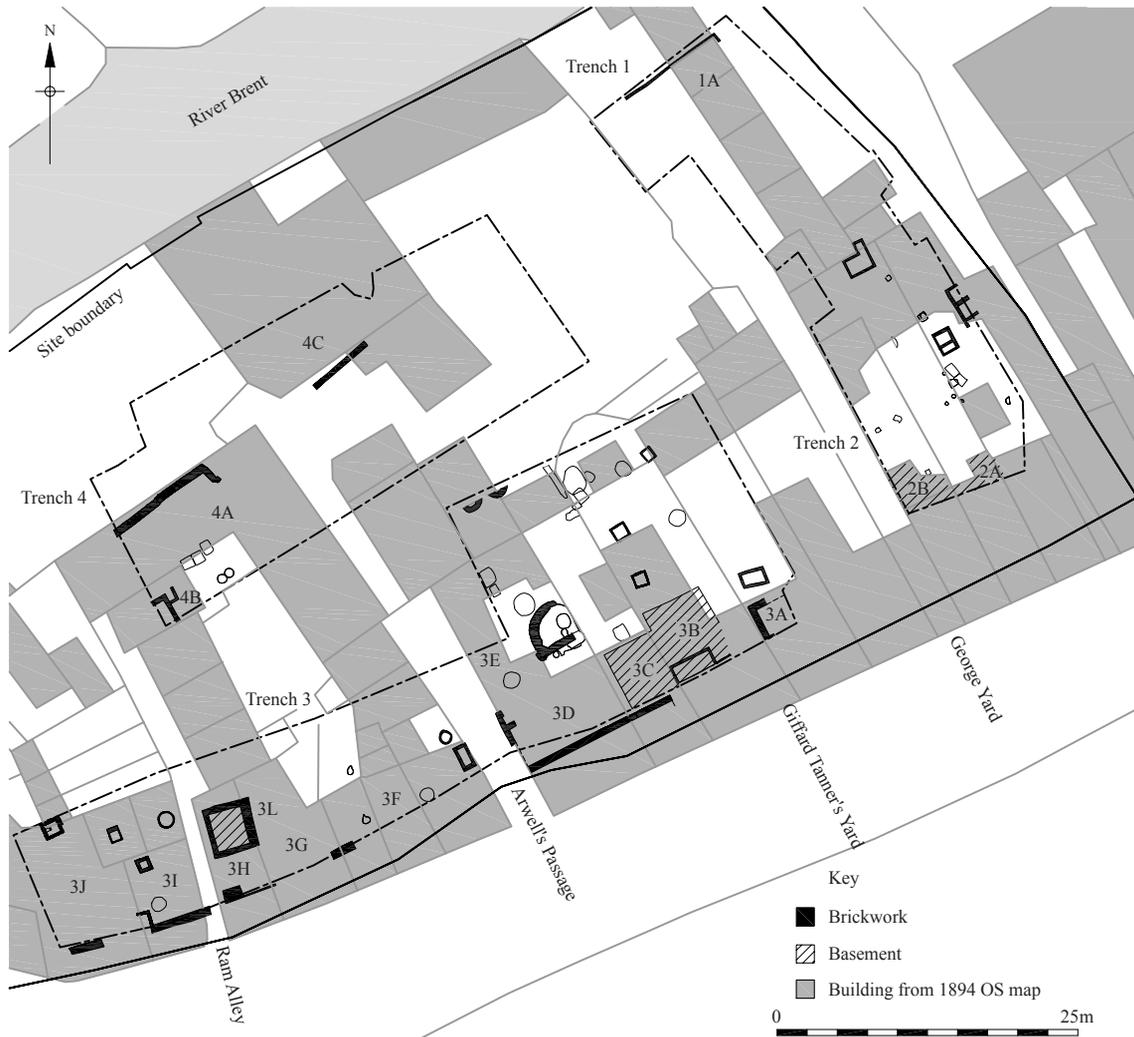


Fig 10. Site 1: Phases 10, 11, 12 and 13 and OS Map 1894

PHASE 11: LATE 16th–EARLY 17th CENTURY

The well in Property 3C was deliberately back-filled with a 0.6m-thick deposit of cattle skulls, followed by 0.6m of roof tiles. The skulls from the base of the well had had their horncores removed, which may link them to the late 16th-century horncore pits found in evaluation Trenches 1 and 5 to the north, signifying the deliberate and organised deposition of waste materials from a probable nearby tannery. A sub-circular pit truncated the top of the backfilled well and the north–south ditch, and was in turn cut by a sub-circular pit and a sub-rectangular rubbish pit, the latter containing further horncores and late 16th-century pottery. Two shallow features found adjacent to the rubbish pit were dated between 1550 and 1700; they were probably formed by rubbish being trodden into the ground when the pit was in use.

Two sub-rectangular, brick-lined cesspits were sited in the back garden of a property (3B) fronting onto the High Street, and a third probable brick-lined cesspit lay in the back garden of Property 3A (Fig 10). The bricks with which these were built dated between the 15th and 17th centuries. The masonry features in the gardens behind Properties 3A and 3B are earlier than the brick structures at the front of these properties. This suggests either that medieval or early post-medieval houses were partially or wholly rebuilt in the late 17th–19th centuries, or that the walls found were later extensions to the original buildings. A brick wall associated with a 16th/17th-century building in Property 3C was recorded along the southern edge of Trench 3, and a sub-circular brick structure of uncertain function, constructed with contemporary bricks, was located to the rear of the adjacent property (3D). Further west another sub-rectangular, brick-lined pit was built in the back garden of the next property (3F). A brick wall forming part of the building in Property 3D was also rebuilt during the 17th century and may represent a double fronted building. This wall truncated the north-western corner of the structure at Property 3C. It is unclear whether the whole of Building 3C was rebuilt at this time or only the north-west corner.

A sub-circular pit or possible well was found in Property 3F and was backfilled in the late 16th century. To the east of this pit, a brick-lined pit was found in the edge of the trench; the bricks

dated between the late 15th and 17th centuries. Further west in Property 3I, another sub-circular pit was dated to the late 16th/early 17th century and contained horncores within its fill.

An east–west river wall was built in the north of Trench 1 (Property 1A) in the 16th or 17th century. The main wall and a north–south return were two bricks thick. The north–south element was laid in Flemish bond; it is possible that at least part of this structure represents a riverside building, rather than a river wall. Interestingly, the north–south walls are located along the late medieval north–south ditch, indicating a continuity of boundaries in this part of the site.

Two further east–west brick walls in Trench 4 formed a continuous stretch of river wall at Properties 4A and 4C; both were constructed in the 17th century. The westernmost was 2½ bricks thick decreasing to 2 bricks thick to the east. The wall had a north–south dog-leg before an east–west return which was apparent at the east end of the wall. These walls could also form the walls of a warehouse building. The bricks were relatively well fired and were dark red in colour; the use of relatively strong bricks would have made the brickwork less vulnerable to water erosion.

Three postholes recorded in Trench 2 probably represent one side of a post-built structure. Several stakeholes were found on the western side of this possible structure, four of which could have formed a fence line.

Evaluation Trench 1 revealed further stakeholes and postholes which could be dated to between the first quarter of the 16th and the mid-17th century. Some large pits were also recorded within the evaluation trench (later excavation Trench 4), one of which contained cattle, sheep and goat horncores, and roof tiles. Three sub-rectangular pits found in evaluation Trench 5 were backfilled almost exclusively with cattle horncores, plus some roof and floor tiles with a probable late 16th-century deposition date. Examination of the horncores revealed homogeneity of size and therefore some deliberate selection of particular sized horncores or cattle. The material appeared to have been deliberately placed within these pits, suggesting that the land close to the River Brent was already enclosed, developed, and managed at this date.

PHASE 12: LATE 17th–18th CENTURY

Across the southern half of the site a fairly

homogeneous layer of gravelly silt was deposited, containing a very wide date range of finds. The formation processes of this layer are not clear but most likely represent a gradual reworking of the gardens to the rear of the properties fronting onto the High Street. The series of intercutting pits found in the north of Trench 3 was further truncated by a sub-circular pit, dating to the mid to late 17th century, and a ditch to the west of the trench two postholes were arranged in a north-south alignment and could represent a fence line extending from the rear of a property; the posts were erected in the late 17th or early 18th century.

In the 18th century, the beehive-shaped brick structure, found to the rear of Property 3D, was overlain by a sub-circular brick structure, which formed a large semi-circle, apparently open at its east end. The walls were one brick thick, and the structure measured 4m north-south by 2.3m east-west. The presence of this oven-type structure directly above three earlier hearths and the buried brick structure indicates a continuity of land use to the rear of this property and strongly suggests the building fronting on to the High Street was a public house, kitchen, or a bakery functioning for a commercial market. Two rubbish pits were dug to the north of this structure and backfilled in the late 17th century.

In the south-western corner of Trench 4 at Property 4B, two circular pits were found with imprints of the staves from timber barrels on their edges. Both were *c.*0.7m in diameter; a fragment of poorly preserved timber was found at the base of the westernmost pit. It appears that the barrels were used to line the pits, which may have formed soakaways or small tanks for the tanners. The pits were backfilled in the 18th century with the selective disposal of particular animal bones. The animal bone assemblage was composed mostly of cattle metacarpals treated in a consistent manner. Repairs were undertaken on the east-west river wall in the north-west of the trench.

A north-south brick wall was aligned on the same axis as the stakeholes in evaluation Trench 1, and an associated pebble surface was also found. A further pit contained probable tanning waste in the form of cattle, sheep and goat horncores, and the backfill of the wall also contained horncores. The presence of goat horncores is significant as goat leather is used for the production of high quality leather

products. In the later 18th century a north-south brick drain was constructed along the length of the trench and a pit was backfilled exclusively with brick, tile and horncores. At the western extreme of the site, evaluation Trench 2 revealed 18th-century ground-raising dumps, and an east-west brick wall, probably representing the rear of a property which fronted onto the High Street. Evaluation Trench 3 contained several 17th-century dump layers and two pits; one was backfilled with residual medieval roof tiles and animal bone, including horncores, the other contained ceramic building materials and cattle horncores. Thus it seems likely that tanning or hornworking was taking place nearby and that a medieval building was demolished or repaired in the area. In evaluation Trench 5 an east-west brick wall was constructed; this is shown as part of the building with an eastern bow façade on the 1873 Indenture Map of the tannery (Fig 11). An apparently watertight, wood-lined pit may have been used for soaking materials prior to or after the tanning process. The pit was backfilled in the 18th century with residual medieval ceramic building material and a concentration of Staffordshire Salt Glazed ware. This pit is also shown on the 1873 Indenture Map, and the pottery assemblage supports the suggestion that the structure to its east was a domestic structure of some status, rather than having an industrial or business function.

By the end of the 18th century, the property boundaries running perpendicular to the High Street were already established and mapped onto a plan of New Brentford Street of *c.*1800 (not illustrated). The brick buildings within these existing property boundaries were mostly rebuilt between the 18th and 19th centuries. Within the two westernmost properties (3I and 3J) of Trench 3 brick buildings were constructed contemporaneously, at some time between the late 17th and 19th centuries. The eastern wall of the building in Property 3I also formed the wall of Ram Alley. A sub-rectangular cesspit was in use in the garden of Property 3I until it was backfilled in the 18th century; its fill contained mid-18th-century clay tobacco pipes and pottery (including a number of teawares), a bone comb, a bone brush handle, and fragments of a bone fan.

Site 2

From the end of the Roman period until the 17th

century, the site was probably situated in open fields as represented by a ploughsoil deposit covering the whole of the trench. The site was occupied by the Angel Inn which is clearly identifiable on John Rocque's map of 1746, though its precise date of origin is not known. It was a coaching inn and thus had stabling facilities at its rear. In the 18th century two rubbish pits were dug and backfilled; one was backfilled with the partially articulated skeleton of a horse, probably waste from the tanning industry or a by-product of the transport activities linked to the coaching inn. A north-west-south-east-oriented brick wall, dated between the late 17th and mid-19th century, continued south-east beyond the limit of excavation. Two postholes were located in the north of the trench on an east-west alignment, possibly representing stabling structures.

DISCUSSION

The post-medieval evidence from Site 1 has shown a consolidation of the late medieval properties fronting the High Street, which is borne out in the documented population increase and the expansion in Brentford. The first tannery is evident on the site from the late 16th century. The importance of post-medieval Brentford as a staging-post along the road to London is implied by the recovery of drinking jugs from the site, which could suggest the presence of inns nearby. The results of archaeobotanical and zooarchaeological analyses at Site 1 (see below) provide information regarding the nature of wood exploitation and the local vegetation in the post-medieval period, and identify the waste products of the tannery.

18th- AND 19th-CENTURY INDUSTRIAL DEVELOPMENT

By the late 18th century industry had become an established feature of Old and New Brentford, prior to the completion of the Grand Junction (later Grand Union) Canal in 1800. The building of the canal and the railway acted as a further catalyst to Brentford's industrial development. The construction of the railway

significantly reduced the number of stagecoach journeys along the High Street from the early 1840s (O'Connor-Thompson 1998, 61). At 233–246 High Street the remains of an 18th-century pipe kiln, which was in use until c.1760, were discovered. A trade directory of 1793 records a flour mill, a malt distillery, brick and tile making, and an extensive pottery. Large industrial units were developed: Booth's Royal Brewery and the Brentford Gas Company to the west of Kew Bridge, and beneath a huge granary stood a bullock hose for the feeding and fattening of bullocks for the London butchers (Canham 1978, 6). By the later post-medieval period the western part of Brentford had become crammed with low class housing, alleys, industries, and wharfs. In the 18th and 19th centuries butchery and tanning industries were present on the River Brent; such processes reputedly made Brentford 'the filthiest place in England'.

PHASE 13: LATE 18th–19th CENTURY

Site 1

In Trenches 1 and 2 three sub-rectangular, brick-lined pits and a single tanning pit were built. The tanning pit probably lay within the property accessed by George Yard. The brick-lined pits lay to the rear of the easternmost property (2A). The cellars of buildings fronting onto the High Street within Properties 2A and 2B were found at the south of Trench 2.

By 1800 the property boundaries were crystallised around Ram Alley, Arwell's Passage, Giffard Tanner's Yard, and George Yard (Fig 10). The measured property boundaries of the c.1800 survey are also in evidence on the c.1800 large-scale survey of the Clitherow estate. A number of buildings along the southern edge of Trench 3 are represented by walls of brick fabric 3032, and in some cases 3046. These are walls or extensions associated with Houses 3A, 3B, 3E (extension of 3D), 3G, 3H, 3I and 3J. The structures complete the sequence of properties fronting the High Street that fall within excavation Trench 3.

The property located at the east end of Trench 3 (3A) lay to the east of Giffard Tanner's Yard. A

north–south brick wall returned east–west and was strengthened with extra bricks to its south, representing the chimney stack of the late 18th- to 19th-century extension of the building in Property 3A. The 1838 tithe map shows the property fronting the High Street as one unit, but the yard behind has been subdivided. By 1865 the property was divided into two buildings with rear extensions adjacent to each other; it retains the same boundaries in 1894. A passage between Buildings 3A and 3B is labelled as ‘Mr. Giffard the Tanner’s yard’ on the *c.*1800 survey. Directly in line with this passage, in Trench 4, an arrangement of tanning pits was found. An east–west brick wall formed part of an 18th–mid-19th-century building at Property 3B. The vaulting on its eastern portion may represent a storage area, probably located below a raised ground floor. The western portion may form the north–south party wall between Buildings 3B and 3C. These brick walls have identical mortar and are therefore likely to have been built at the same time. Two circular 19th-century brick soakaways were constructed in Trench 3; both were over 5m deep from the top of the brickearth and both had corbelled roofs with iron lids. The easternmost was located within Giffard Tanner’s Yard, and was fed by several brick-lined drains which also connected to a late 19th-century north–south-aligned ceramic drain. The second 19th-century, corbelled roofed soakaway was located to the rear of Building 3E and stood alone. Also to the rear of Building 3E (though most likely within the tannery), an 18th/19th-century, brick-lined circular structure was found continuing beyond the northern limit of Trench 3. This structure may have replaced the nearby circular brick structure that was built in the 16th/17th century, as both had similar dimensions, with walls up to 0.5m thick, and could have formed receptacles for tanning materials or processes.

Building 3E represents the rear extension of 3D. An 18th- to early 19th-century brick wall extends further to the north than the rear walls of the adjacent buildings, along the line of Arwell’s Passage. This can be seen clearly on both the 1865 and 1894 OS maps. Buildings 3F, 3G and 3H correspond to the three property boundaries which formed the frontage between Arwell’s Passage and Ram Alley to the west. No brick walls were found representing a building at Property 3F, although the location of a 15th–17th-century brick-lined pit, extending beyond the southern trench edge, indicates the

rear wall of the property was set much closer to the High Street. This building was, by the 19th century, formed of ‘Three houses’ mentioned in the *c.*1800 survey. A possible brick basement at Property 3L, to the rear of 3H, probably dates to the mid-18th to early 19th century; the bricks are thicker and more regular than those of 3H, suggesting a later date. It represents either a rear extension associated with 3H or the first of a range of small buildings or cottages behind the High Street frontage, fronting onto Ram Alley. A building at the end of this range may be 4B, of similar date, represented by a brick corner structure in Trench 4. Its south-western element was built using bricks of fabric 3046; the north-eastern walls incorporated bricks of fabric 3032. The walls form an extension, sandwiched between the cottages and a large building (4A). The fact that the foundations were only one brick thick suggests either a single storey brick building, a timber-framed weatherboarded building (timber framing being commonly used in commercial premises and farm buildings in the 18th and 19th centuries), or a very low status brick dwelling. The building is situated within the large area of light industrial activity containing a tanning yard on the 1865 OS map. Three sub-rectangular pits, backfilled by the early 19th century and possibly associated with the tannery, were sited between the two buildings.

To the west of Ram Alley, up to the western edge of excavation in Trench 3, were two further buildings, 3I and 3J. They may represent a terrace or two semi-detached houses built between the late 17th and early 19th centuries. An opening in the rear wall of 3J was blocked in the late 18th–19th century, showing that it still stood then. Masonry features behind 3I include a circular, brick-lined well or soakaway, which had been backfilled with a mid-19th-century pottery assemblage, and a sub-rectangular brick-lined pit to its south. Two sub-rectangular, brick-lined pits lay within the garden to the rear of 3J. Dating the backfilling of the easternmost pit is difficult because only a residual sherd of Cheam ware was recovered. The westernmost of the two was backfilled with 19th-century pottery and some dress accessories, including a glass button and a brooch. Ironically, given its location within a few metres of the Roman roadside ditch, this soakaway also contained a 19th-century ceramic figurine of a Roman soldier carrying a sword, <102>. In Trench 4 lay the east–west brick wall

of an 18th- to early 19th-century building, of bricks of fabric 3032. This wall appears to form the nucleus of a large warehouse, 4C, accessed via Arwell's Passage and Tanner's Yard.

19th- AND 20th-CENTURY REDEVELOPMENT

The extensive 19th-century tannery at Site 1 is represented by the wood-lined tanning pits found in the western end of Trench 3 (Fig 10). In evaluation Trench 1, further drainage work respected the north-south alignment, while the construction of a new building was imposed on the east-west alignment. These divisions are likely to have been property boundaries which originated in the 16th century. Evaluation Trench 4 was occupied by ten tanning pits from the 19th-century tannery, which were laid out in uniform rows visible on the 1873 Indenture Map (Fig 11). An east-west brick wall bounded the tanning pit area to the north, and a brick surface abutted the wall and sloped down to the north and east. The tanning pits varied in size; they were constructed with timber planks and clay lined for waterproofing. The timbers at the base of the pits had a series of holes cut into them to facilitate drainage, through corner sumps. These planks may have been re-used from the 19th-century revetment structures on the banks of the River Brent to the north (Proctor & Moore 1996, 48). By the 19th century, the building with the bow façade from evaluation Trench 5 had been incorporated into the tannery and converted into an industrial or functional building.

PHASE 14: LATE 19th-EARLY 20th CENTURY

Site 1

The cellars found in the south of Trench 2 were rendered with Portland cement, indicating that these buildings still stood in the late 19th/20th century, until they were backfilled in the early 20th century. North-south aligned, 19th-century ceramic pipes were observed running downwards into the southern edge of Trench 3 and probably drained waste water into a main sewer beneath the High Street. The basements of the buildings fronting onto the High Street were backfilled with late 19th/20th-century domestic rubbish, including mattress springs and glass

soda bottles. During the late 19th or very early 20th century a warehouse was built in the north of Trench 4. Its internal column bases were supported on brick foundations bonded with a lime-based mortar. The bricks in the column bases were of fabrics 3032 and 3035. An internal partition within the warehouse was built in the late 19th/20th century, using bricks of fabric 3034 bonded with a Portland cement based mortar. This was built on the same alignment as the east-west wall from Building 4C. Running approximately north-south was an 18th- to early 19th-century property boundary wall that also incorporated a drain in fabric 3032. This may equate to the north-south boundary of the large L-shaped property shown on the 1865 OS map in the south-western corner of the tanning yard. Thus, by the 19th century Site 1 was densely occupied with houses fronting the High Street, and a substantial tannery was located on the River Brent. Many wood-lined tanning pits were found along the river, containing noxious substances which served to tan the leather. Brick-lined soakaways and cesspits in the back gardens of the houses were backfilled as the High Street properties extended further north, and properties were further subdivided until no gardens remained.

Site 2

Following a significant reduction in its size and status during the late 19th century, and the demolition of its east wing in 1915, the Angel Inn was completely demolished during the inter-War period and replaced with another public house building eventually renamed the Park Tavern in 1968. It was demolished in 2001 prior to the site's present development.

THE FINDS

THE ROMAN POTTERY

Malcolm Lyne

The Brentford Lock site produced 4,041 sherds (51,705gm) of prehistoric and Roman pottery from 167 contexts: a further 608 sherds (17,989gm) of Roman pottery came from the Park Tavern site. One sherd from the post-medieval ploughsoil at the latter site could be early Saxon in date but this is questionable. All of the assemblages were quantified by numbers

of sherds and their weights per fabric. These fabrics were identified using a x8 magnification lens with built-in metric scale for determining the natures, forms, sizes and frequencies of added inclusions: finer fabrics were further examined with a x30 magnification pocket-microscope where necessary. None of the assemblages was large enough for quantification by Estimated Vessel Equivalents (EVEs) based on rim sherds (Orton 1975). Museum of London Archaeological Services codes (Anon 2000) were used for Roman fabrics; a further numbered series with the prefix P was created for the prehistoric material:

- P.1A Handmade soft black fabric with sparse to moderate up-to 2.00mm calcined-flint filler.
- P.1B Similar but with profuse calcined-flint filler.
- P.2 Handmade black fabric with profuse up-to 0.50mm quartz and sparse up-to 2.00mm calcined-flint filler.
- P.3 Handmade fabric with profuse ill-sorted up-to 5.00mm calcined flint and sparse up-to 0.50mm colourless quartz filler.
- P.4 Handmade soft black fabric with sparse up-to 3.00mm chaff vesicles.
- P.5 Handmade soft black fabric with occasional up-to 1.00mm rounded vesicles from ?leached out chalk.
- P.6 Similar but with additional sparse calcined flint.
- P.7 Handmade grog-tempered black fabric with occasional up-to 3.00mm calcined-flint filler.
- P.8 Handmade black fabric with silt-sized to 0.20mm quartz and up-to 2.00mm white and orange grog filler.

Roman pottery codes used in the tables are as follows:

AHSU: Alice Holt/Surrey; AMPH: Miscellaneous amphorae; BAET: Baetican Dressel 20 amphora fabric; BB2: Wheel-turned Black-Burnished from North Kent; BHWS: Brockley Hill White-slipped; DORBB1: Dorset Black-Burnished; ERSA: Early Roman Sandy Fabric A; FIN: Miscellaneous fine; FMIC: Fine micaceous; GROG: Belgic grog-tempered; HOO: Oxidised White-slipped Hoo flagon fabric; HWB: Highgate Wood B fabric; HWBRs: Red-slipped Highgate Wood B fabric; HWC: Highgate Wood C fabric; LOMI: London micaceous; LOXI: Local oxidised; LYON: Lyon; NKSH: North Kent Shell-tempered; OXID: Miscellaneous oxidised; RDBK: Ring and Dot Beaker fabric; SAMLG: La Graufesenque samian; SAMLZ: Lezoux samian; SAMMV: Martres-

de-Veyre samian; SAND: Miscellaneous sandy greywares; VCWS: Verulamium Coarse White-slipped; VRG: Verulamium Region Greyware; VRW: Verulamium Region Whiteware.

The Assemblages from Site 1

Phase 2: Early Iron Age (700–300 BC)

Assemblage 1: From the fills of natural channel [1214].

Only two of five silt deposits produced any pottery; [1191] yielded 13 sherds (51gm) of pottery in under-fired Fabric P.1A: no rim or other diagnostic sherds are present. The uppermost silting of the channel [1211] yielded a further 35 sherds (294gm) of pottery, comprising 18 fragments (126gm) in P.1A and 17 (168gm) in P.4. At least four vessels are represented in this material, including a carinated shoulder fragment from a situlate vessel in P.4 fired irregular buff-grey (Longley 1980, fig 21, 48–50), dated c.900–700 BC (see Fig 12.1 and 12.2)

Assemblage 2: From the fill [1155] of pit [1156], cutting into fills [1019] and [1211] of the natural channel.

The 19 sherds (66gm) of pottery comprise 12 sherds in P.1A, 1 in P.2, and 6 in P.5. The fragments include a finger-impressed jar rim fragment in black P.1A. Date: Early Iron Age.

Phase 4: Pre-Flavian c.AD 43–70/80 (Fig 12.3–12.8)

Assemblage 3: From the fills [911], [979], [939], [971], [1176], [1201], [1206], [1207] and [1181] of cuts through the fills of the original north ditch of the road.

These fills yielded 218 sherds (2,506gm) of pottery, including significant numbers of sherds (113) in the grog-tempered Highgate Wood B fabric. The six sherds of South Gaulish samian include fragments from a Ritterling 12 bowl (c.AD 43–70), a Dr.30 bowl (c.AD 43–110), and Dr.18 and Dr.15/17 platters (c.AD 43–90 and 43–85). Other sherds include a corniced beaker rim in Central Gaulish Whiteware (c.AD 50–130), seven Verulamium Region Whiteware flagon fragments, a sherd from a biconical in North Kent Fine ware (c.AD 43–130), a flagon sherd in oxidised Hoo ware, and three butt-beaker fragments in Gallo-Belgic Whiteware (c.AD 43–

70). This material indicates that the ditch was probably open between *c.*AD 45/50 and 70/80.

*Phase 5: c.*AD 70–200 (Figs 12.9–12.10; 13.11–13.12)

Assemblage 4: From the primary fills [722], [723], [732] and [685] of cuts across the recut roadside ditch at the eastern end of Trench 3.

The 91 sherds (1,848gm) of pottery from these contexts include a significant element of residual pottery derived from the fills of the first roadside ditch, including further fragments from the same bead-rim jars as were present in that feature and the beaker in FMIC fabric. The assemblage is too small for quantification by EVEs but was broken down into numbers of sherds and their weights per fabric after the extraction of two intrusive post-Roman sherds.

Table 1

Fabric	No. of sherds	%	Weight in gm	%
AHSU	6	6.7	85	4.6
BAET	2	2.2	65	3.5
ERSA	1	1.1	22	1.2
FMIC	7	7.9	64	3.5
GROG	10	11.2	186	10.0
HWB	26	29.2	755	41.1
HWC	1	2.2	10	0.5
RDBK	6	6.7	59	3.2
SAMLG	4	4.4	30	1.6
SAND	17	19.1	284	15.5
VRW	9	10.1	276	15.0
Total	89		1836gm	

The most significant single fabric remains Highgate Wood B grog-tempered ware, followed by somewhat lower percentages of unattributed wheel-turned sand-tempered, ‘Belgic’ grog-tempered, and Verulamium Region Whitewares. The small amount of South Gaulish samian includes fragments from a Dr.27 cup (*c.*AD 43–110) and a Dr.36 platter (*c.*AD 70–110). A further 93 sherds (874gm) of pottery came from the primary silting of the same ditch in cut [1102] further to the west ([929] and [978]). This assemblage also has a large percentage of sherds (43%) in Highgate Wood B fabric. Fragments from a Class 2E jar in Highgate Wood C fabric (*c.*AD 70–160) and an indented beaker in mica-dusted MICA 376 fabric (*c.*AD 60–140) are also present. The pottery from these primary ditch silts suggests that the feature was recut *c.*AD 60–70.

Assemblage 5: From the secondary silting within the recut roadside ditch: contexts [601], [602], [603], [677], [731], [884], [928] (Fig 13.13) and [969].

The 68 sherds (903gm) of pottery from these contexts form too small an assemblage for any meaningful quantification. The assemblage still includes significant numbers of sherds in Highgate Wood B fabric, as well as fragments from South Gaulish samian forms Dr.18 (*c.*AD 43–90) and Dr.37 (*c.*AD 70–110), eight pieces from a dot-barbotine decorated beaker of uncertain type in Highgate Wood C fabric (*c.*AD 70–160), and a Class 4A bowl similar to Frere type 339 in Verulamium Region Whiteware (*c.*AD 75–105). This assemblage indicates that the recut ditch silted up during the period *c.*AD 70–100 and is in keeping with the dating of the pottery from the contemporary ditch on the other side of the Roman road, excavated on the International Supermarket site in 1974–82 (Cotton & Parnum 1983).

Assemblage 6: From the fills of the second recut of the roadside ditch: contexts [927], [935], [936] and [968]. (Fig 13.14–13.22)

The 460 sherds (5,309gm) of pottery from these contexts do not include enough rim fragments for reliable quantification by EVEs but were nevertheless broken down into numbers of sherds and their weights per fabric (Table 2). Highgate Wood C fabric is the most significant in the entire assemblage, making up nearly one third of the material; unsourced sandy grey wares and Highgate Wood B sherds come a poor second and third, at 19% and 15% respectively. The Highgate Wood B sherds are probably mostly residual in an assemblage with a significant element of that nature. The samian includes Dr.18 and 18/31 platters (*c.*AD 70–90 and 90–110 respectively), and a Dr.37 bowl and a Dr.27 cup (*c.*AD 43–110) from La Graufesenque. Martres de Veyre samian includes a Dr.18/31 platter (*c.*AD 90–120). The amphora sherds include a Dressel 20 rim fragment from a vessel of Martin-Kilcher form 22 (1983; *c.*AD 70–150) and there is a fragment from a BB2 cooking pot. Fragments from beakers of Class 3B (*c.*AD 70–100) and 3E (*c.*AD 70–160) are also present in this fabric. The assemblage appears to have been deposited during the period *c.*AD 100–130.

Table 2

Fabric	No. of sherds	%	Weight in gm	%
AHSU	45	9.8	528	9.9
BAET	4	0.9	324	6.1
BB2	1	0.2	10	0.2
BHWS	1	0.2	36	0.7
ERSA	3	0.7	22	0.4
GROG	3	0.7	128	2.4
HOO	3	0.7	27	0.5
HWB	68	14.8	1066	20.1
HWBRS	4	0.9	30	0.6
HWC	144	31.3	1130	21.3
LOMI	2	0.4	35	0.7
LOXI	3	0.7	44	0.8
LYON	1	0.2	7	0.1
NKSH	3	0.7	62	1.2
OXID	8	1.7	102	1.9
SAMLG	19	4.1	257	4.8
SAMMV	6	1.3	16	0.3
SAND	88	19.1	752	14.2
VCWS	1	0.2	5	0.1
VRG	4	0.9	93	1.8
VRW	43	9.3	625	11.8
MISC	6	1.3	9	0.2
Total	460		5309gm	

Assemblage 7: From pit fill [780]. (Fig 13.23)

The 116 sherds (1,007gm) of pottery from this pit include significant amounts of residual material and are therefore unsuitable for any form of quantification; they do, however, include two fragments of Central Gaulish samian (c.AD 120–200).

Assemblage 8: From pit fills [802], [808] and [1226]. (Fig 14.24–14.30)

The 100 sherds (1,940gm) of pottery from this feature were quantified by numbers of sherds and their weights per fabric (Table 3). The small size of this assemblage makes it impossible to draw any firm conclusions about patterns of pottery supply. Highgate Wood C is still the most significant fabric by sherd count, although there is a considerably larger number of sherds in unattributed, possibly local, grey-ware fabrics. The Central Gaulish samian includes fragments from a Dr.37 bowl (c.AD 120–200) and a Dr.18/31 platter (c.AD 120–150). The assemblage is dated to c.AD 150–175.

Table 3

Fabric	No. of sherds	%	Weight in gm	%
AHSU	7	7.0	168	8.7
AMPH	1	1.0	64	3.3
BAET	6	6.0	530	27.3
DORBBI	4	4.0	34	1.8
GROG	5	5.0	100	5.2
HWB	1	1.0	10	0.5
HWC	25	25.0	286	14.7
OXID	1	1.0	10	0.5
SAMLG	1	1.0	26	1.3
SAMLZ	5	5.0	38	2.0
SAMMV	2	2.0	22	1.1
SAND	38	38.0	402	20.7
VCWS	3	3.0	22	1.1
VRW	1	1.0	228	11.8
Total	100		1940	

Assemblage 9: From pit fills [800] and [799]. (Fig 14.31–14.32)

The 114 sherds (3,789gm) of pottery from this feature include 26 large, fresh Dressel 20 amphora fragments (2,934gm), as well as pieces from a Central Gaulish samian Dr.31 platter (c.AD 150–200), the lower part of a Hoo flagon, fragments from two Class 2F everted-rim jars (c.AD 120–160) in Highgate Wood C fabric, and a Verulamium Region Whiteware jar rim fragment of late 2nd-century form. The assemblage is dated to c.AD 160–200+.

Phase 6: c.AD 200–400

Assemblage 10: From the gravelly upper fill [931] of the roadside ditch recut.

The 60 sherds (580gm) of pottery from the gravel are very broken up but the fine wares include fragments from a Lower Nene Valley Colour-coat beaker (c.AD 180–400), a North Gaulish pentice beaker in NGWH fabric (c.AD 150–250), and a Colchester Colour-coat beaker (c.AD 130–250). The coarse pottery includes fragments from two Verulamium Region Whiteware jars of c.AD 150–250 dated types, a handle fragment from an amphora in Verulamium Coarse White-slipped ware, sherds from two Class 3F poppyhead beakers (c.AD 130–170), a Class 2F everted-rim jar in Highgate Wood C fabric, and fragments from a BB1 flanged bowl (c.AD 160–200+) and straight-sided dish (c.AD 120–180). An early 3rd-

century date is indicated for this assemblage, although the state of the material suggests that it could all be residual.

Assemblage 11: From pit fill [961]. (Fig 14.33–14.34)

The 17 sherds (271gm) of pottery from this pit include fragments from an Oxfordshire Red Colour-coat platter of Young Type C55 (1977; *c.*AD 240–400) and a Central Gaulish samian Dr.31 platter (*c.*AD 150–200).

Assemblage 12: From the uppermost fill of the roadside ditch [992]. (Fig 14.35)

The 145 sherds (1,786gm) of pottery from this feature have a wide date range and are, therefore, unsuitable for any kind of quantification. The latest material is of *c.*AD 250–400 date and includes fragments from a type 5B-4 developed beaded and flanged bowl in Alice Holt/Farnham ware (*c.*AD 270–330), three sherds from a horizontally-ribbed jar in Portchester D fabric (*c.*AD 330–420), an Oxfordshire Whiteware mortarium of uncertain type (*c.*AD 240–400), and an Oxfordshire Red Colour-coat mortarium of Young type C97 (1977; *c.*AD 240–400).

Assemblage 13: From beamslot fill [785]. (Fig 14.36–37)

The 26 sherds (345gm) from this feature were almost certainly deposited within it at the time of the destruction of the building. Much of the pottery is clearly residual but six large fresh sherds from the illustrated vessel (possibly a local product) are also present and suggest that the building was demolished at the end of the 4th or during the early years of the 5th century.

The Assemblages from Site 2

*Phase 3: c.*AD 43–70+

Assemblage 14: From field-ditch fills [127] and [128].

Most of the 108 sherds (1,968gm) came from the lower fill [128]. The 97 sherd assemblage from this context is not really large enough for any meaningful form of quantification but, like the broadly contemporary Assemblage 3 at Site 1, has a predominance of fragments in Highgate Wood B grog-tempered ware. The five sherds of South Gaulish samian include fragments from

a Dr.15/17 platter (*c.*AD 43–85) and a Dr.27 cup (*c.*AD 55–75). Most of the other sherds are very fresh and include illustrated sherds Figs 14.38, 15.39–15.41. The eleven sherds from the upper ditch fill [127] include fragments from another bead-rim jar in Highgate Wood B fabric and South Gaulish samian forms Dr.18 (*c.*AD 70–90) and Dr.27 (*c.*AD 70–90). The indications are that this ditch was dug *c.*AD 50 and continued to receive rubbish until *c.*AD 70–90.

*Phase 4: c.*AD 70/80–200

Assemblage 15: From ditch fill [244]. (Fig 15.42–15.48, 16.49)

The 106 sherds (5,348gm) of pottery from this feature were quantified by numbers of sherds and their weights per fabric (Table 4).

Table 4

Fabric	No. of sherds	%	Weight in gm	%
AHSU	28	26.4	596	11.1
BAET	1	0.9	858	16.0
FINE	3	2.8	50	0.9
HWB	53	50	3350	62.6
RDBK	P	P	P	P
SAMLG	7	6.6	92	1.7
SAND	8	7.5	246	4.6
VCWS	1	0.9	32	0.6
VRW	5	4.7	124	2.3
Total	106		5348	

The assemblage has grog-tempered Highgate Wood B sherds from jars, storage vessels and bowls, making up half of all the pottery in this *c.*AD 70–100 dated assemblage, with Alice Holt/Surrey greywares accounting for just over another quarter. Nominal amounts of Verulamium Region Whiteware and White-slipped ware sherds from flagons are present, as are fragments from a beaker in Ring-and-Dot Beaker fabric (*c.*AD 50–100). The seven South Gaulish samian sherds include fragments from a Dr.18 platter (*c.*AD 43–90) and a Dr.37 bowl (*c.*AD 70–110).

Assemblage 16: From curvilinear ditch fills [190], [217], [189] and [188]. (Fig 16.50–16.57)

The lowest fill [190] yielded 94 sherds (864gm), including a fragment from a Martres-de-Veyre

samian Dr.37 bowl (c.AD 90–120). The assemblage is too small for quantification but is characterised by a decline in the significance of Highgate Wood B sherds and the appearance of large numbers of jar and beaker fragments in Highgate Wood C fabric (41 sherds) (Fig 16.50). Fragments from the following fabrics were also present: Verulamium Region Whiteware, black, sand- and grog-tempered ware and patchy black/orange BB1 fabric (Fig 16.51–16.54). The next fill [217] yielded a further 47 sherds (760gm) of pottery, largely (42 fragments) of sand- and grog-tempered wares from the Lower Colne Valley kilns at Fulmer and Hedgerley. There are no rim sherds, however, in an assemblage of 2nd-century character. The uppermost ditch fills [188] and [189] produced 64 sherds (3,285gm) of pottery. This small assemblage has large numbers of Lower Colne Valley ware sherds, including illustrated sherds Fig 16.55–16.56. The greater part of a vessel is also present (Fig 16.57).

This ditch appears to have been dug during the period c.AD 90–110 and remained open until c.AD 200; its successive assemblages appear to reveal changes in the pattern of pottery supply to the site. The primary fill (dated c.AD 100–150) is dominated by Highgate Wood C products, with somewhat smaller quantities of Highgate Wood B, Alice Holt/Surrey, Lower Colne Valley, and Verulamium Region Whitewares. The late 2nd century sees the disappearance of Highgate Wood C and Alice Holt/Surrey wares, and the total domination of what are admittedly small pottery assemblages from the upper fills of the ditch by Lower Colne Valley products. It is known that the Alice Holt/ Farnham pottery industry went into sharp decline after AD 120 and that the London Highgate kilns ceased production in c.AD 160/180: it would appear from this evidence that the Colne Valley potters took over the pottery market shares of these two industries at the Isleworth settlement during the mid to late 2nd century.

Assemblage 17: from posthole fills [162], [170], [240] and [242].

Most of the postholes for this rectangular structure lacked pottery, but the fills [240] and [242] yielded three large fresh sherds between them from a 'Pie-dish' (Fig 16.58), confirming that they were contemporary. This vessel and large fresh sherds of jars in grog-tempered Highgate Wood B fabric from [162] and [170] suggest

that the building was constructed between AD 100 and 120.

Phase 6: c.AD 250–400

Assemblage 18: From ditch fill [201].

The 72 sherds (2,386gm) of pottery from this feature are predominantly from Alice Holt/ Farnham grey ware vessels (68%) and include fragments from a Class 10 beehive, an indented beaker, two Class 3B cooking pots, and three Type 5B.4 beaded-and-flanged bowls (c.AD 270–330). The four Oxfordshire Red Colour-coat ware sherds include fragments from a Class C23 beaker (Young 1977; c.AD 270–400+) and a type C97 wall-sided mortarium (c.AD 240–400+). Other wares in this assemblage (dated c.AD 270–330) include illustrated sherds (Fig 16.59–16.61). It has been noted during work on pottery from earlier excavations at Brentford (Canham 1978) that some of the late 3rd to early 4th-century colour-coat beakers and coarse wares appeared to be of local manufacture. The final two illustrated pots belong to this small group of vessels and are both characterised by patchy surface blackening.

The illustrated sherds

(Nos 1–37 BLR 96 (Site 1) sherds; nos 38–61 LRB 01 (Site 2) sherds.)

Fig 12.1. Jar rim sherd in soft, black Fabric P.1A with finger-jabbed decoration on its upper surface. Paralleled at Runnymede Bridge (Longley 1980, fig. 29.228). c.900–700 BC. [1214]

Fig 12.2. Rim sherd from one of two undecorated jars in similar fabric. Plain vessels of this type are common on Post-Deverel-Rimbury Late Bronze Age and Early Iron Age sites in the Middle and Lower Thames valleys and are known from Brooklands Weybridge (Hanworth & Tomalin 1977), Runnymede Bridge (Longley 1980), and elsewhere. c.1000–300 BC. [1214]

Fig 12.3. Bead-rim beaker in pink-brown sand-free, wheel-turned fabric with sparse up-to 3.00mm red ironstone inclusions. Ext. rim diameter 100mm. c.AD 43–60. [971]

Figs 12.4, 12.5 and 12.6. Three bead-rim jars in black Highgate Wood B fabric. Ext. rim diameters 220mm, 220mm, and 160mm respectively. c.AD 40–100. [971]

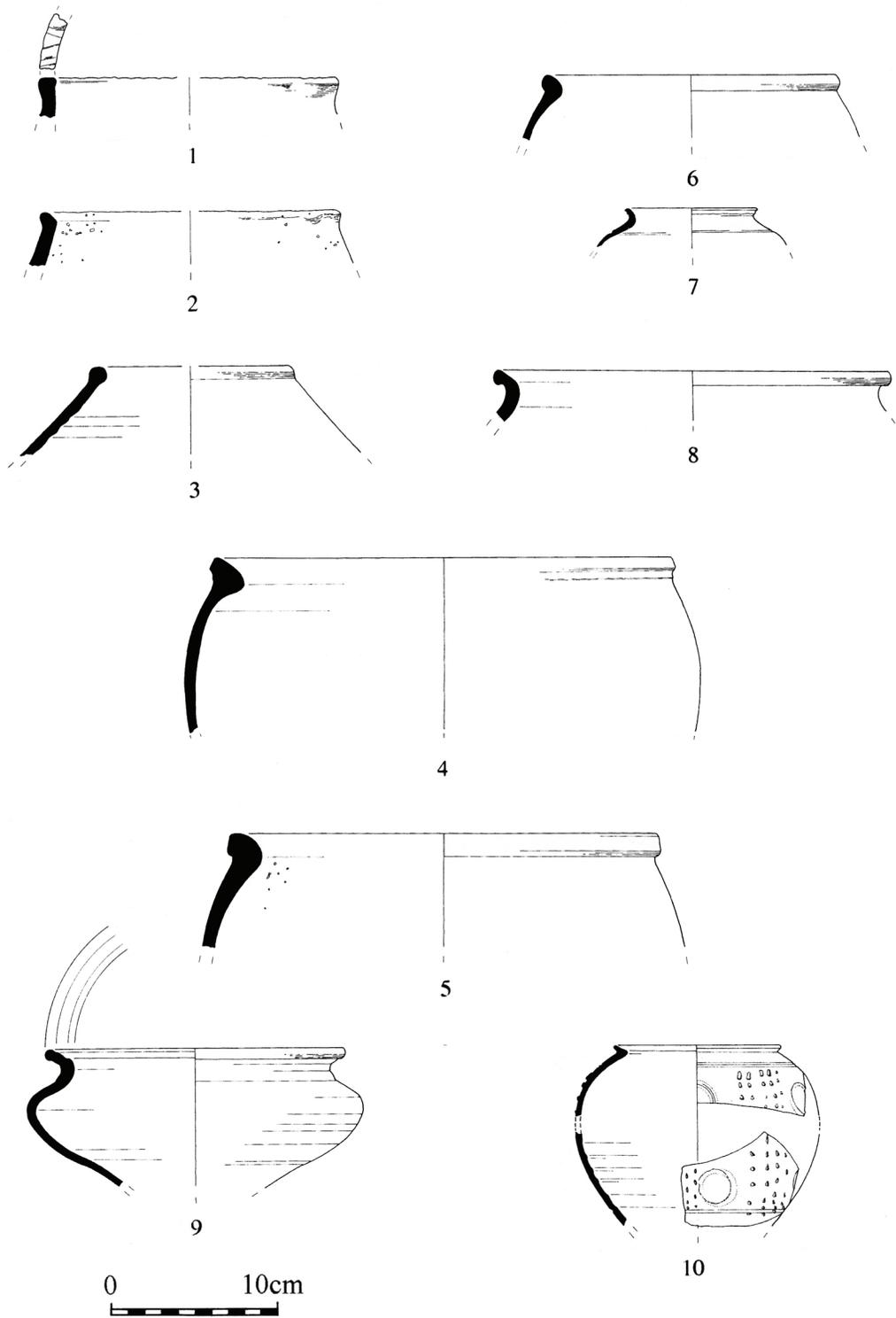


Fig 12. Prehistoric (nos 1–2) and Roman (nos 3–10) pottery

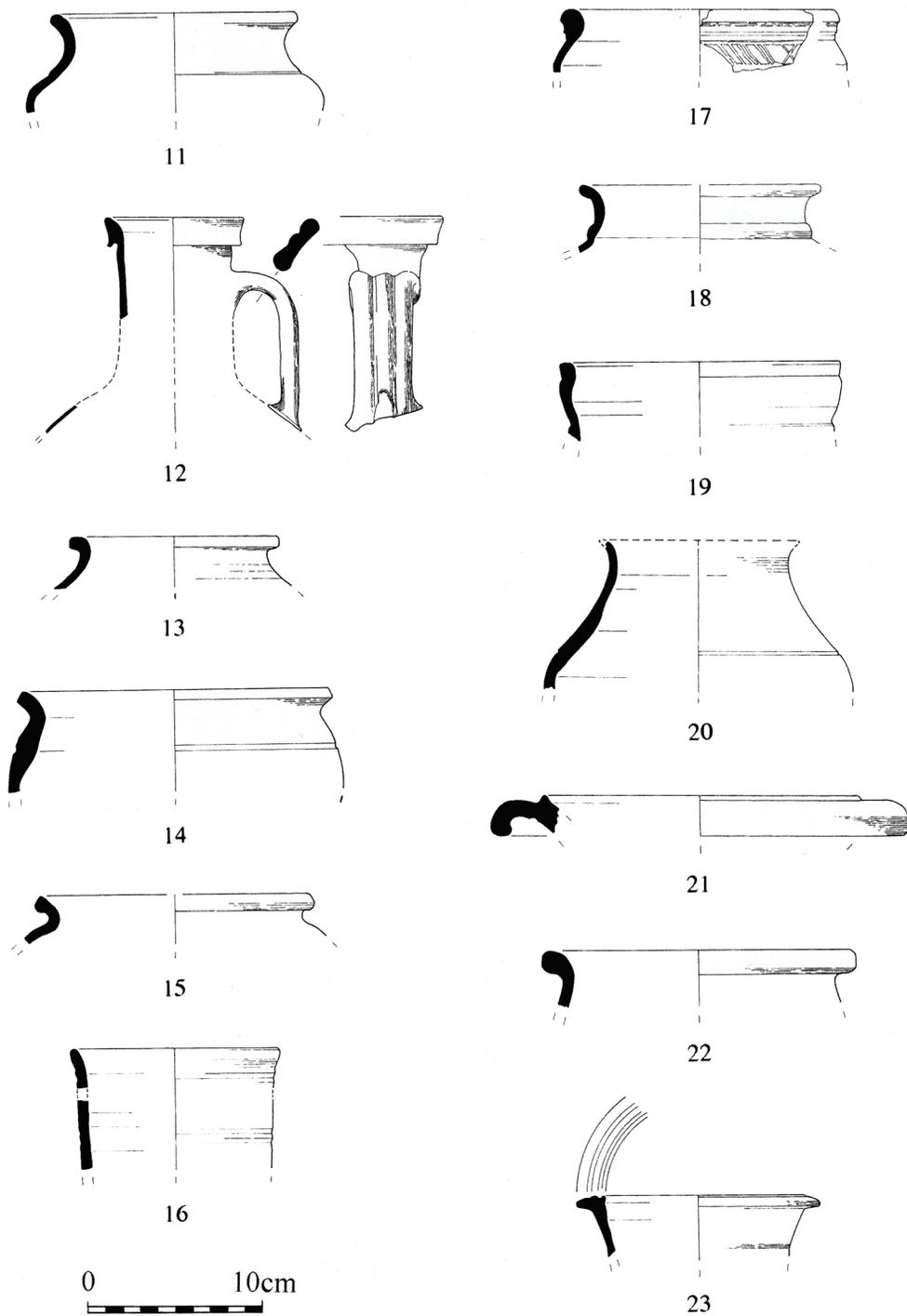


Fig 13. Roman pottery, nos 11-23

- Fig 12.7. Beaker in polished micaceous black FMIC fabric. Ext. rim diameter 80mm. Similar to Davies form 852 (1994). *c.*AD 50–120 [971].
- Fig 12.8. Rim sherd from Class 1 jar in grey Alice Holt/Surrey ware. *c.*AD 50–120. [1181]
- Fig 12.9. Large, fresh sherd from necked bowl with reeded rim in wheel-turned, grey-black fabric with very-fine-sand and black grog filler. Ext. rim diameter 180mm. Parallels for this vessel have proved very elusive and it may be indicative of limited local production. [685]
- Fig 12.10. Rim sherd from ring-and-dot beaker in cream RDBK fabric. Ext. rim diameter 90mm. *c.*AD 50–100. Six fresh sherds from this vessel are present. [685]
- Fig 13.11. Everted-rim cup of Thompson Class E3-2 (1982) in polished black ‘Belgic’ grog-tempered ware. Ext. rim diameter 120mm. This Hertfordshire ‘Belgic’ form was made from *c.* 15 BC to *c.*AD 50 and may be residual. [723] and [732]
- Fig 13.12. Collared flagon of Frere type 112 (1972) in white Verulamium Region Whiteware. Ext. rim diameter 80mm. *c.*AD 60–75. [723]
- Fig 13.13. Honey-jar rim in cream-pink Verulamium Region Whiteware. Ext. rim diameter 120mm. *c.*AD 60–120. [928]
- Fig 13.14. Necked jar in grey lumpy Highgate Wood B fabric. Ext. rim diameter 140mm. *c.*AD 40–100. [927]
- Fig 13.15. Another example in similar fabric. Ext. rim diameter 140mm. *c.*AD 40–100. [927]
- Fig 13.16. Fragment from rim of Dr.30 bowl copy in Highgate Wood Red-slipped ware. Ext. rim diameter 120mm. *c.*AD 70–100. [927]
- Fig 13.17. Bead-rim jar with burnished chevrons on its shoulder in grey Highgate Wood C fabric with black slip over rim. Ext. rim diameter 140mm. *c.*AD 70–120. [936]
- Fig 13.18. Class 2E necked jar in similar fabric. Ext. rim diameter 160mm. Similar to Davies *et al* 1994, Type 1032. *c.*AD 100–120. [936]
- Fig 13.19. Fragment from Dr.30 bowl copy in similar fabric. Ext. rim diameter 180mm. *c.*AD 75–150. [935]
- Fig 13.20. Unusual flask in grey Alice Holt/Surrey ware. [936]
- Fig 13.21. Mortarium of Frere type 761 (1972) in cream Verulamium Region Whiteware. *c.*AD 100–140. [927]
- Fig 13.22. Necked jar of Frere type 295 (1972) in similar fabric fired pale-orange with cream surfaces and rim edge blackening. Ext. rim diameter 180mm. *c.*AD 70–100. [927]
- Fig 13.23. Class 4A bowl of Frere type 929 (1972) in pink Verulamium Region Whiteware fabric. Ext. rim diameter 130mm. *c.*AD 140–180. [780]
- Fig 14.24. Small wheel-turned storage jar with rolled-over rim in hard grog-tempered grey fabric. Ext. rim diameter 240mm. Possibly a Fulmer product (Corder 1939, 157, Type 90). *c.*AD 100–150. [808]
- Fig 14.25. Straight-sided dish of Gillam type 75 (1976) in black BB1 fabric with external burnished acute lattice decoration. *c.*AD 110–160. [808]
- Fig 14.26. ‘Pie dish’ in grey Highgate Wood C fabric with scored diagonal lines on its exterior. Ext. rim diameter 260mm. *c.*AD 120–160. [808]
- Fig 14.27. Class 3E beaker in similar fabric with applied white slip. Ext. rim diameter 90mm. *c.*AD 70–160. [808]
- Fig 14.28. Class 3F beaker rim in similar fabric. Paralleled by Davies *et al* 1994, Type 11 18. *c.*AD 140–160. [808]
- Fig 14.29. Hook-rimmed jar in similar fabric with white slip over the rim. Ext. rim diameter 240mm. Paralleled in *c.*AD 150–200 dated context Z9A at 233–246 High Street, Brentford (Canham 1978, fig 55-15). [808]
- Fig 14.30. Reeded bowl rim in very fine Verulamium Region Whiteware variant fired grey-black with smooth cream-grey to pale-orange surfaces. Ext. rim diameter 160mm. *c.*AD 130–200. [808]
- Fig 14.31. ‘Pie dish’ in white-slipped grey Highgate Wood C fabric. Ext. rim diameter 160mm. One of two. [799]
- Fig 14.32. Large sherd from re-fired BBI flanged bowl of Gillam type 38 (1976). Ext. rim diameter 240mm. *c.*AD 160–200+. [800]
- Fig 14.33. Bead-rim beaker sherd from a vessel of ?Monaghan Class 2C6 (1987) in North Kent Fine ware. Ext. rim diameter 80mm. *c.*AD 190–230. [961]
- Fig 14.34. Developed beaded-and-flanged bowl of Lyne and Jefferies type 5B-4 (1979) in grey Alice Holt/Farnham ware with internal black slip extending over the flange. *c.*AD 270–330, one of two. [961]
- Fig 14.35. Pie dish in Colne Valley grey-black ware. [992]
- Fig 14.36. Rim sherd from narrow-mouthed jar similar to Lower Nene Valley Colour-coat type 273 (Perrin 1999) but in sandy buff-grey fabric with internal brown colour-coat. Ext. rim diameter 160mm. *c.*AD 300–400. [785]

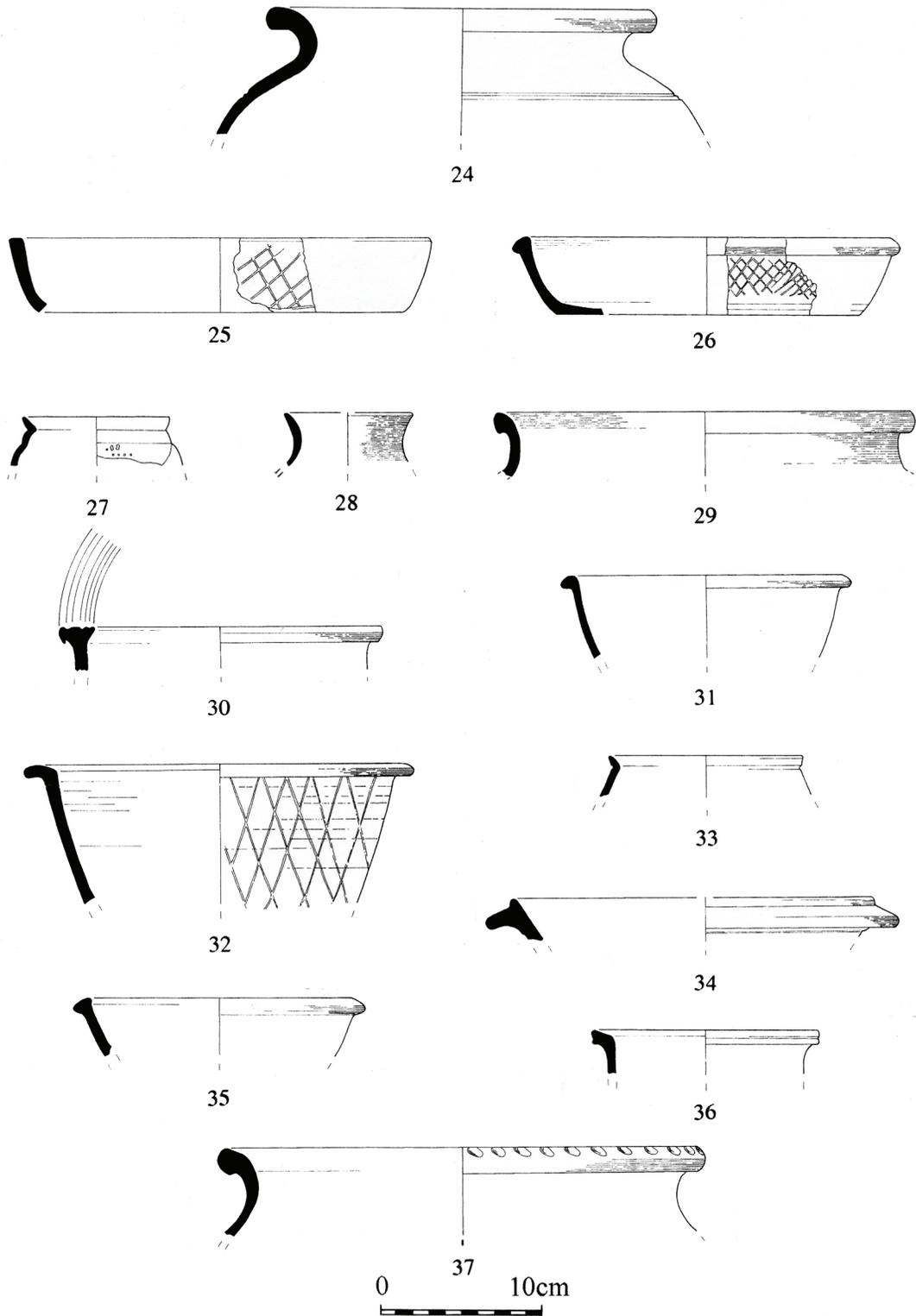


Fig 14. Roman pottery, nos 24-37

- Fig 14.37. Large necked-jar with horizontal body rilling in cream Overwey/Portchester D fabric with stabbed rim decoration. Ext. rim diameter 260mm. Paralleled at the Overwey kilns (Clark 1949, fig 6-10). *c.*AD 330–420. [785]
- Fig 15.38. Bead-rim jar in black Highgate Wood B fabric. Ext. rim diameter 120mm. *c.*AD 40–100. One of two. [127]
- Fig 15.39. Everted rim jar in similar fabric. Ext. rim diameter 140mm. *c.*AD 40–100. Fragments from a simple lid in Highgate Wood B fabric are also present. [128]
- Fig 15.40. Biconical of Monaghan type 2G1.7 (1987) in patchy buff/grey North Kent Fine-ware. Ext. rim diameter 100mm. *c.*AD 70–100. [128]
- Fig 15.41. Large jar of Lyne and Jefferies Class 1 (1979) in grey-black polished Alice Holt/Surreyware with lid-seated rim and burnished latticing on its shoulder. Ext. rim diameter 340mm. *c.*AD 50–120. [128]
- Fig 15.42. Bead-rim jar in patchy brown/black Highgate Wood B fabric. Ext. rim diameter 200mm. *c.*AD 40–100. [244]
- Fig 15.43. Another example with undercut bead in similar fabric fired brown. Ext. rim diameter 150mm. *c.*AD 40–100. Fragments from three other bead-rim jars in similar fabric are also present. [244]
- Fig 15.44. Round-bodied and lid-seated Class 4F bowl in brown-black Highgate Wood B fabric. Ext. rim diameter 240mm. *c.*AD 60–100. One of two. A tripod foot may come from one of these vessels. [244]
- Fig 15.45. Everted rim storage-jar in similar fabric fired patchy black/grey/orange-brown with burnished chevrons on its body. Ext. rim diameter 380mm. [244]
- Fig 15.46. Jar of Lyne and Jefferies Class 1 (1979) in grey AHSU fabric with a carinated shoulder and lid-seated rim. Ext. rim diameter 120mm. *c.*AD 50–120. [244]
- Fig 15.47. Class 5 Atrebatian bowl in similar fabric fired polished black. Ext. rim diameter 200mm. *c.*AD 50–120. [244]
- Fig 16.48. Class 6 Gallo-Belgic platter copy in similar fabric. Ext. rim diameter 180mm. *c.*AD 50–120. [244]
- Fig 16.49. Lid-seated dish in polished black very-fine-sanded fabric. Ext. rim diameter 160mm. [244]
- Fig 16.50. Class 2E jar in grey Highgate Wood C fabric. Ext. rim diameter 100mm. *c.*AD 70–160. [190]
- Fig 16.51. Flagon of Frere type 406 (1972) in cream Verulamium Region Whiteware. Ext. rim diameter 70mm. *c.*AD 100–130. Paralleled in Context Z6A at the 233–246 High Street site in Brentford (Canham 1978, fig 52.31). [190]
- Fig 16.52. Wheel-turned necked jar in pimply black, sand- and grog-tempered ware. Ext. rim diameter 160mm. Paralleled at the Fulmer kiln (Tarrant & Sandford 1973, fig 6-8). *c.*AD 80–130. [190]
- Fig 16.53. Flanged bowl in similar fabric. Similar to an example from Context Z6A at 233–246 High Street, Brentford (Canham 1978, fig 52.27). *c.*AD 70–140. [190]
- Fig 16.54. Flanged bowl of Gillam form 35 (1976) in patchy black/orange BB1 fabric. Ext. rim diameter 200mm. *c.*AD 120–180. [190]
- Fig 16.55. Jar in reddish-brown fabric with fine grog filler fired grey-black, with burnished acute latticing on its body. The flanged rim has been deliberately ground down after firing. Ext. rim diameter 80mm. There are seven fresh sherds from this vessel. [188]
- Fig 16.56. Jar with rolled over rim fired rough, flecky reddish-brown/grey. Ext. rim diameter 160mm. Paralleled in Context Z8 at 233–246 High Street, Brentford (Canham 1978, fig 54.11). *c.*AD 150–200. [188]
- Fig 16.57. Everted-rim jar with shoulder cordon in black HWB fabric. Ext. rim diameter 160mm. *c.*AD 70–100. [189]
- Fig 16.58. 'Pie-dish' of Monaghan Class 5D1 (1987) in black BB2 fabric with chamfered base and burnished external acute-lattice decoration. Ext. rim diameter 150mm. *c.*AD 110/120–180/200. [240/242]
- Fig 16.59. Handmade shell-tempered ware jar fired patchy black/brown. Ext. rim diameter 180mm. *c.*AD 250–300. Four fresh sherds from this vessel are present. One or two handmade vessels in this fabric occur in most 3rd-century assemblages from sites in West Surrey and the London area and are thought to originate in the Abingdon area of Oxfordshire (Lyne 1994, 488–99). [201]
- Fig 16.60. Pentice beaker with body rouletting in very-fine-sanded orange fabric fired pale orange with patchy white slip. [201]
- Fig 16.61. Everted rim jar in very-fine-sanded bricky orange fabric with pimply cream slip. Ext. rim diameter 160mm. [201]

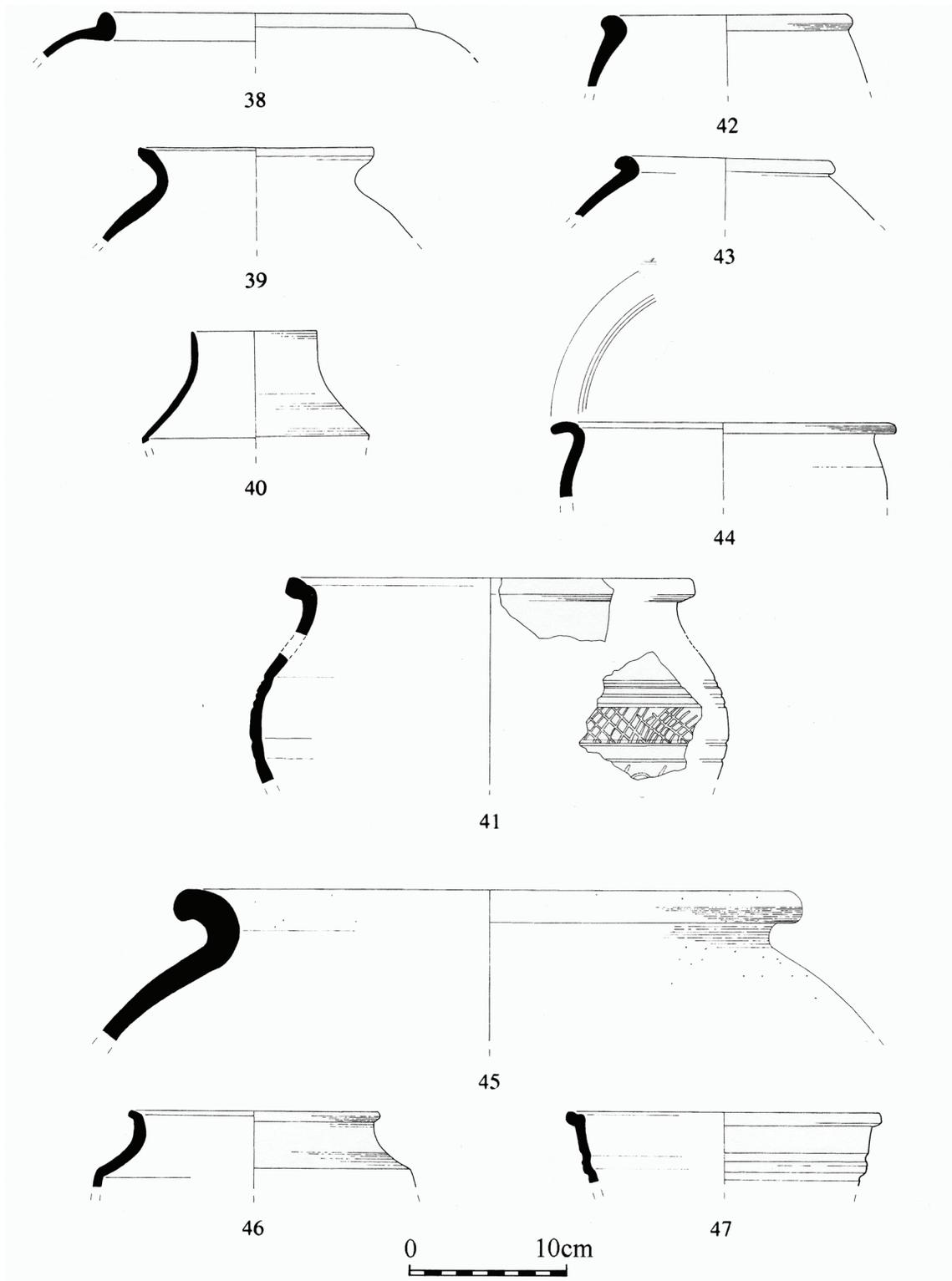


Fig 15. Roman pottery, nos 38-47

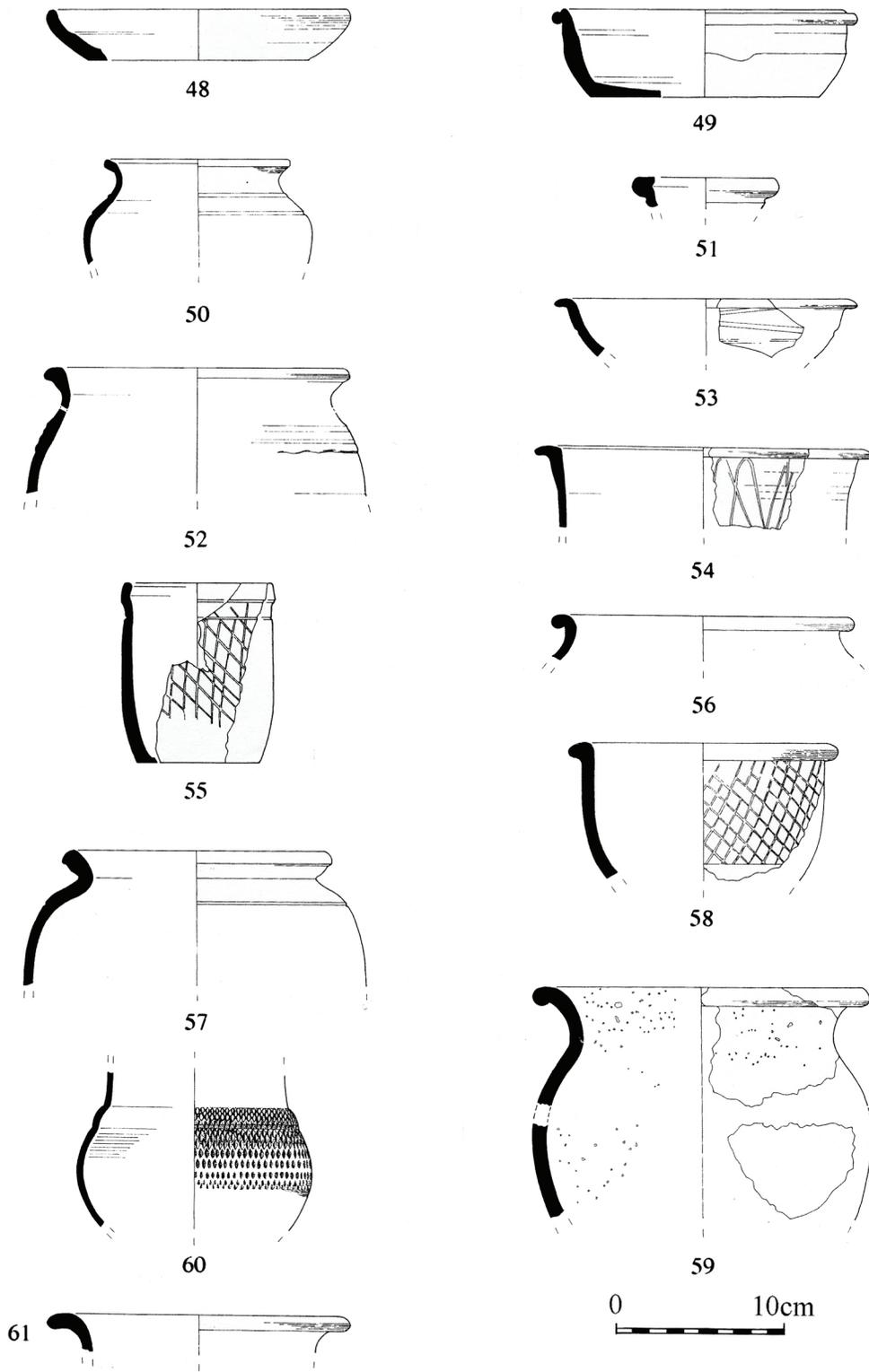


Fig 16. Roman pottery, nos 48-61

The changing pattern of Roman pottery supply to the two sites

The pre-Flavian pottery assemblages include large quantities of handmade, grog-tempered Highgate Wood B ware, mainly in the form of bead-rim jar fragments, which account for between one third and a half of all of the pottery present at both sites during this period. Smaller numbers of coarse grey and wheel-turned Alice Holt/Surrey ware bead-rim and necked-and-cordoned jars came from the Hampshire/Surrey border regions around Farnham. Verulamium Region Whitewares were also supplied to both sites in small quantities, possibly in the form of loaded flagons and mortaria.

The fine wares supplied to both sites are largely made up of South Gaulish samian bowls, cups and platters. Biconicals in North Kent Fine ware and flagons in its oxidised Hoo equivalent from the Medway estuary marshes of North Kent are also present. Gallo-Belgic Whiteware fragments from butt-beakers and flagons indicate trade links with North-Eastern Gaul and there are fragments of Central Gaulish White ware and Lyon ware beakers from Brentford Lock. It is probable that the Continental imports were acquired via the London market rather than by direct trade. The Flavian period (c.AD 70–100) saw little change in the pattern of pottery supply to the two sites, except that the still dominant Highgate Wood B wares were joined by wheel-turned Highgate Wood C ware jars, bowls and beakers. North Kent and Gallo-Belgic fine wares ceased being supplied during this period.

The early 2nd century witnessed the termination of production of Highgate Wood B wares and their total replacement by wheel-turned Highgate Wood C sand-tempered greywares. Small quantities of Alice Holt/Surrey greywares continued to be traded to both sites and were joined by handmade, soot-soaked BB1 cooking pots, bowls and dishes from production sites around Poole Harbour in Dorset after c.AD 110/120: these latter vessels probably arrived with salt from the same area as an adjunct to trade in that commodity. Verulamium Region Whiteware flagons and mortaria continued being supplied: flagon fragments from waterlogged deposits in Southwark have surviving traces of resin lining and it may be that the Brentford examples of these vessels also arrived as packaging for wine or some other liquid commodity. Dressel 20 amphora fragments may indicate the acquisition

of olive oil from southern Spain, but empty vessels of this type were also frequently reused for storage or cut down into vats.

South Gaulish samian was replaced first by Martres-de-Veyre products and then by Central Gaulish samian imports after AD 120. Occasional vessels from London pottery producers include lids in LOXI and mica-dusted wares in LOMI fabric. Small numbers of vessels from the Lower Colne Valley kilns at Hedgerley and Fulmer to the west of Staines made their appearance at Site 2 during this period but do not appear to be present at Site 1 on the east side of the River Brent. That site was supplied with significant quantities of greyware vessels of unknown (but non-Colne Valley) origin during this period; these may possibly be of local manufacture.

This small divergence in the pattern of pottery supply to the two sites became more marked during the late 2nd and early 3rd centuries. Assemblages from both sites datable to c.AD 150–250 are unfortunately rather small, but it is quite clear that the Lower Colne Valley potters took advantage of a decline in the fortunes of the Alice Holt industry and the cessation of production by the Highgate Wood potters between AD 160 and 180 to become by far the biggest supplier to the Isleworth settlement during the late 2nd century. There is no evidence for this happening at the settlement on the other side of the Brent: it seems likely that the river formed an eastern boundary to the marketing of Lower Colne Valley products along the Staines to London road.

The Late Roman assemblages from both sites are small but previous work by this author on large assemblages of this period from Northumberland Wharf (Laws 1976) and 233–246 High Street (Canham 1978, Z1, 2 and 3; Lyne 1994, 677–8) indicates that the Alice Holt/Farnham kilns had become by far the most significant coarse ware supplier during the mid-3rd century, after the collapse of the Lower Colne Valley industry, and remained so until the end of the 4th century. Significant quantities of late 3rd-century BB1 products (10%) are also present, as well as very small quantities of coarse pottery from unknown but probably local sources. The insignificant quantities of fine pottery are largely made up of Oxfordshire and Lower Nene Valley Colour-coat products, with small numbers of beakers and other forms in the local fabric referred to above. The small assemblages of this date from the Brentford Lock and Park Tavern sites

do not add much to this information but they do indicate that pottery supply to the sites on either side of the River Brent was once more very similar in character.

THE POST-ROMAN POTTERY

Chris Jarrett

Site 1 produced 734 sherds of post-Roman pottery: 2 sherds of residual Saxon pottery, 82 sherds of medieval pottery, and 650 sherds of post-medieval pottery, the majority of it dating to between the 15th and 19th centuries. The ceramic sequence is fairly typical with Surrey whitewares, Kingston ware, Cheam ware, and particularly Coarse Border wares dominant in the 15th century; local London redwares were common in the small number of 16th-century dated deposits. The 17th-century deposits typically contained all the types of pottery from the industries located in and around London, but with more emphasis towards the Surrey-Hampshire wares. During the 18th century non-local wares, largely associated with a Staffordshire source, become important on the site (as found elsewhere), so that during the 19th century the pottery on the site is dominated by non-local industrial finewares.

Phase 7

A gravel layer [772] was the only deposit to produce pottery in this phase, as two sherds of Coarse Border ware, one sherd being from a jug that could not be closely dated. Coarse Border ware appears in London between 1270 and 1500, but is rare before c.1350, after which it became the main pottery type there (Blackmore 1999, 46).

Phase 8

The north-south orientated gully [827] produced the complete profile of a Kingston ware (KING) cooking pot with an everted rim. Kingston ware was first produced in that town in the late 12th century, but was traded to London between 1230 and 1400. The Kingston ware jar or cooking pot had no or few noticeable typological changes during its period of production, unlike the other Surrey whiteware industries (Pearce & Vince 1988, 45, 61-2, 75-6). Other features in this phase contained sherds of Coarse Border ware

and Cheam ware (CHEA, dated 1350-1500). An ashy fill [862] associated with the hearth [730] produced a small amount of pottery, mostly as Coarse Border ware that included the base of an internally green-glazed vessel, sherds of a large rounded jug (CBW LGR), and a red-slip-decorated, green-glazed jug (CBW RED), both forms dated 1340-1500. A horncore pit [740] produced in its fill [739], in addition to sherds of Coarse Border ware, fragments of Tudor Green ware (TUDG), dated 1380-1500, and Early Post-medieval redware (PMRE), dated 1480-1500. The pottery present would seem to indicate that the tanning pit had gone out of use at the end of the 15th century.

Phase 9

Truncating the hearth structure was the beehive-shaped masonry structure [701] which had been backfilled with a number of fills containing fragments of a Coarse Border ware saucer-shaped lid (CBW LID) and the bifurcated rim of a jar or cooking pot (CBW BIF); both forms being dated 1380-1500. Drinking vessels were present as a Tudor Green ware lobed cup and Early Border ware drinking jug sherds (EBORD), dated 1480-1550. All these wares would again imply a deposition date at the end of the 15th century. A similar deposition date could be given to the fills of pit [1071], which produced mostly drinking vessels: Coarse Border ware jugs and the rims of two German Siegburg stoneware drinking jugs; this form was also present in Tudor Green ware, as well as the base of a lobed cup. Red earthenwares occurred as a Cheam redware (CHEAR), dated 1480-1550, in the form of a barrel-shaped jug, and the rim of a handled, carinated dish in yellow-glazed Post-medieval slip-coated redware (PMSRY).

Phase 10

Features in this phase produced 16th-century pottery as Early post-medieval redware, Cistercian ware (CSTN), dated 1480-1600, and Raeren stoneware (RAER), dated 1480-1550, while some late 16th-century deposits contained yellow and green-glazed Surrey-Hampshire Border ware (BORDG and BORDY), dated 1550-1700. Other features produced more characteristic pottery associated with the 17th century, such as Post-medieval redware (PMR), dated 1580-1900, Border ware and Red

Border ware (RBOR), including a dish with slip decoration (RBORSL), both dated 1580–1800. Essex wares were present as Post-medieval black-glazed wares and Metropolitan slipware (METS), dated 1630–1700. Tin-glazed wares were very uncommon and consisted of plain white wares (TGW C), dated 1630–1800, or with geometrical designs (TGW D), dated 1630–1680. Non-local wares occurred as Midlands purple ware butter pots, while imported pottery consisted of German Frechen stoneware (FREC), dated 1550–1700, and Dutch slipware (DUTSL), dated 1500–1650. Pottery recovered from features in this phase was usually fragmentary and present in small sherd numbers, but where forms could be distinguished they were usually domestic: bowls, colanders, dishes, jars, jugs, an ointment pot, and tripod pipkins.

Phase 11

Larger groups of pottery with more complete vessels were recovered from features in Phase 11, the wares consisting of mostly typical 18th-century types. At the start of the 18th century the Border ware white earthenwares had mostly ceased to be produced, but Red Border ware was well represented in this phase along with Post-medieval redware. Tin-glazed earthenware was also more prominent as plain blue (TGW BLUE), dated 1630–1800, and style H with dark blue designs on a light blue background (TGW H), dated 1690–1800. Staffordshire white salt-glazed stoneware (SWSG), dated 1720–1780, was a notable component of larger pottery groups as found in the rubbish pit [509], where there were three flanged lids from tea or coffee pots and sherds from a number of bowls. This pit also produced six largely complete plain blue tin-glazed earthenware ointment pots dating to the early 18th century. The rim of a Creamware moulded plate with a basket design and tortoiseshell glaze (CREA TORT), dated 1740–1770, was also present. A soak-away or cesspit [633] produced a number of teawares as fragments of a Staffordshire white salt-glazed stoneware saucer and tea bowl and these forms were also present in Chinese porcelain, either decorated in blue and white (CHPO BW) or with *famille rose* enamelling (CHPO ROSE), dated 1720–1780. This pit also produced, like other deposits in this phase, sherds of Staffordshire-type slipware dishes, but of note in this feature was a medium-sized, straight-sided dish in a

marbled fabric that had been roughly white-slipped and clear-glazed.

Of some interest in the back-fill [21] of construction cut [44] was the rim sherd (with a simple geometrical slip-trailed design) of a ‘flanged-dish’ in Donyatt ware from Somerset. Donyatt ware is increasingly being recognised in the south-west London suburbs, such as Stanwell and Uxbridge, but seems rarely to get into the capital (Pearce 2000; Jarrett 2002). English stonewares, including London stoneware (LONS), were also present in this phase, mostly as sherds of tankards; occasional sherds of Nottingham stoneware (NOTS), dated 1700–1800, were recorded. The rim of a stoneware saggur and a biscuit ware bowl were recovered from a fill of the brick-lined soak-away [642] and these items may have been derived from the Isleworth pottery, which was operating between 1757 and 1831 (Britton 1987, 77). The Isleworth pottery made a wide range of pottery types that included delftware, stoneware, porcelain, and combed-slipwares similar to Staffordshire wares.

Phase 12

Pottery in this phase largely consisted of domestic forms in 19th-century industrial finewares: Creamware (CREA), dated 1740–1880, Pearl ware (PEAR), dated 1770–1850, Refined white-ware (REFW) and Yellow ware (YELL), both dated 1800–1900. The Pearl wares and Refined white earthenwares frequently had 19th-century transfer-printed designs, while other decoration on these wares falls under the description of Factory-made slipware and tends to indicate low socio-economic status. Also present were English hard-paste porcelain (ENPO HP) and 19th-century English stonewares, the latter often present as sherds of blacking bottles. A wide range of features had these pottery types dumped into them, including rubbish pits and the rectangular tanning pits [252] and [491], the former going out of use after 1830 as indicated by the presence of a flow-blue Transfer-printed bowl and plate and a sherd of English stoneware with Bristol-glaze.

Phase 13

The small number of features producing pottery in this phase also produced 19th- or 20th-century industrial finewares as described in Phase 12.

Conclusions

Canham's Site 4 trenches produced only a small number of medieval pottery sherds and a few large sherds of vessels of Tudor or 16th-century date (Canham 1978, 19). It is difficult to ascribe site functions for the late medieval period from the pottery, as the forms found on this site are readily found on other sites of the same date. Although fragments of jugs were largely associated with the hearths in Phase 8, this form had many functions in the medieval period and without tell-tale use signs, such as sooting and other deposits, it was not possible to associate any other activity with the hearth except for kitchen and drink serving. Similarly the Phase 9 beehive-shaped structure produced mostly jugs and other drinking vessels, such as lobed cups and drinking jugs, that would be at home in any other domestic situation of the late 15th and early 16th century. Later phases also showed domestic wares with no specialised vessels associated with specific industries or activities.

THE CLAY TOBACCO PIPES

Chris Jarrett

The clay tobacco pipe bowls were classified according to Atkinson and Oswald (1969) and are coded AO, but the 18th-century pipes have been referenced to Oswald (1975) and are coded OS, while the single Broseley type bowl is coded BR. Site 1 produced a total of 225 clay tobacco pipe fragments, of which 50 were bowls. The pipes were present in Phases 10–12 and those with maker's marks can mostly be related to the local industry.

Phase 10

The earliest tobacco pipes on the site are AO type 9 bowls, dated 1640–1660; these were present as two examples in fill [609] of pit [610] and a bowl and a heel from fill [629] of circular pit [630]. A single AO type 15 bowl, dated 1660–1680, was recovered from fill [794] of pit [795].

18th-century bowls were present in this phase in fill [711] of pit [712] which produced 12 bowls, 11 of which were of OS type 10 bowls, dated 1700–1740. Two of these bowls had a crown in relief on each side of the heel, while two other bowls were initialled A S, for which there are three possible known makers during this period, but none are

local (see Oswald 1975, 145–6). Three other examples of this bowl type had the forename I, but the family name was illegible. Of interest in this pit was a late 17th/early 18th-century type bowl, with a slightly angled bowl and a wide, forward sloping heel. On the underside of the heel was an incuse heart-shaped stamp with the initials TW. The source of this bowl is probably Broseley, Shropshire, and it has similarities with Atkinson's type 3 Broseley bowl series. Thomas Ward, born in 1628 and alive until c.1690, is a known maker for this area with these initials (Oswald 1975, fig 7.3, 50, 192).

Phase 11

Fill [502] of rubbish pit [509] produced three OS type 12 bowls, dated 1730–1780, which were initialled W S. The same initials occurred on an OS type 22 spurred armorial bowl with the Prince of Wales feathers, also dated 1730–1780. There are no local makers of this date with these initials, but they occur elsewhere in Brentford and London, and William Smith, 1781, Holborn was favoured as the maker by Oswald (Oswald 1975, 35, fig 24.25; Le Cheminant 1981, 105). A demolition layer produced two OS type 10 bowls, one of which was initialled I W; this may refer to a number of possible makers during this period, none known locally (see Oswald 1975, 159). There were also four bowls recovered from a layer of demolition rubble [506], all with a crown on each side of the heel.

Phase 12

The tanning pit [198] produced in its fill [162] a single AO type 28 bowl, dated 1820–1840; it was decorated with a large leaf on the back of the bowl and a border of leaves on the front of the bowl and was initialled J H. There are no local makers with these initials at this time.

The brick-lined pit [642] produced in its fill [607] a single OS type 10 bowl (<106>) and a decorated AO type 27 bowl (<107>), dated 1780–1820. The latter was initialled R S, which may possibly refer to Richard Simmonds, 1805, a London listed maker, or possibly R Smith who is recorded at Uxbridge in 1839. The decoration on this bowl has a band of 'drapes and tassels' around the rim above vertical ribs running around the bowl. Another brick-lined soak-away [615] contained in its fill [613] the heel of an AO type 27 bowl also initialled R S.

Fill [649] produced an OS type 12 bowl, dated 1730–1780, initialled H W, probably for Henry Wickham, a Brentford pipe maker known between 1781 and 1784. It is also possible that the initials were reversed and stand for William Heath, who was working in Brentford from c.1723 and died in 1764; one of his kilns has been excavated and published (Laws & Oswald 1981). The second bowl in this deposit was a poorly moulded AO type 28 bowl with Masonic symbols, decorated in relief, with leaves on the front of the bowl and a diamond-shaped symbol containing a shooting sun on the back. The left side of the bowl has a pair of dividers and castle turrets, while the right side has a set-square, the moon and stars. The heel of the bowl is initialled R I, which may refer to several London makers, none of whom are local.

The wooden tanning pit structure [491] produced in its tanning fill [489] an AO type 30 bowl, dated 1850–1910; this was decorated with vertical ribs around the lower two thirds of the bowl and drapes and tassels around the rim. A later fill [487] produced two more AO type 30 bowls, one of which had a fluted body. Sealing the tanning pits, dump [490] produced two spurs of AO type 28, with evidence for leaves on the front and back of the bowl and initialled J H. All the AO type 28 bowls with J H initials on the site come from the same mould and represent either an undocumented local pipe maker, or possibly a London supplier.

Conclusions

Clay tobacco pipes first appear on the site in the mid-17th century; this is in keeping with many other low socio-economic status post-medieval sites as tobacco became more affordable by the general populace. The presence on the site of a probable Broseley type bowl dating to the end of the 17th century can be explained by Brentford's location on a main arterial route from London to the West. This may also be a reason for some of the initialled pipes not being sourced to local makers, such as William Heath. The latter had a kiln operating on Brentford High Street to the east of the site, but his pipes are absent on the site except for one possible bowl if the initials were reversed.

Clay tobacco pipes recovered from the rectangular wood-lined tanning pits would seem to indicate that they had gone out of use in the late 19th century.

THE SMALL FINDS

Lynne Keys

The Roman small finds were analysed with reference to their perceived function and this is reflected in the catalogue arrangement and summary. The function categories are based on Crummy 1983 (with small adaptations where necessary). The medieval and post-medieval small finds are also arranged with reference to function but the categories have been simplified in order to deal with the small number of objects.

Roman

Personal adornment or dress

A total of six brooches or brooch fragments was recovered from BLR96 (Site 1) and two from LRB01 (Site 2), all of copper alloy. The two hairpin fragments are also copper alloy; however, since soil conditions may have affected the survival of bone, and the method of excavation favoured the observation of metal finds (particularly copper alloy), no specific importance should be attached to the absence of bone pins in the assemblage.

Bow brooches

Site 1

- <116> Colchester type with forward facing hook on head; edges of bow serrated with punched marks; beaded foot; solid catch plate. L 41mm; W 23mm. [735] (Fig 17.1)
- <146> Dolphin type; pronounced crest ridge; perforated catch plate. Second half 1st century AD. L 62mm; W 30mm. [927] (Fig 17.2)
- <139> Colchester type; two fragments with upper part of bow missing; solid catch plate. Dated to AD 50–70; a coin from this context has been dated AD 45–65. L 55mm+; W 29mm. [936] (not illus)
- <129> Pin only; non-pointed end still curved over where once attached. L 48mm. [935] (not illus)
- <155> Pin only; non-pointed end still curled where once attached. L 41mm. [929] (not illus)

Site 2

Both copper-alloy, two piece Colchester types with springs present but pins missing. Dated to AD 50–70.

- <2> L 36mm; W 20mm. [192] (Fig 17.3)
- <6> Thin tapering bow; solid catch plate. L 45mm; W 21mm. [244] (Fig 17.4)

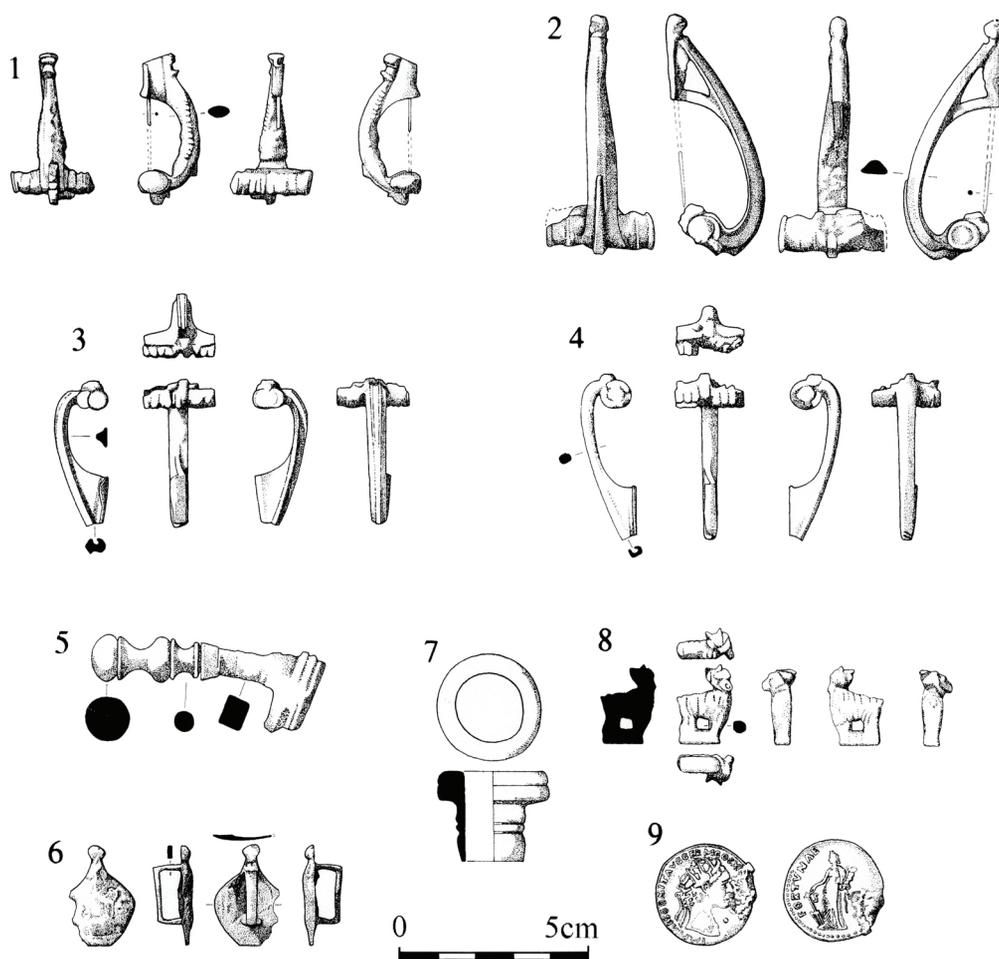


Fig 17. 1. Site 1: <116> Colchester type brooch; 2. Site 1: <144> Dolphin type brooch; 3. Site 2: <2> Colchester type brooch; 4. Site 2: <6> Colchester type brooch; 5. Site 1: <166> Handle; 6. Site 1: <165> Belt mount; 7. Site 1: <127> Trumpet mouthpiece; 8. Site 1: <138> Copper-alloy figurine/ mount in the form of a goat; 9. Site 1: <136> Dupondius of Domitian AD 90—96

Plate Brooches

Site 1

<125> Disc brooch (incomplete); damaged back plate with pin and catch plate. D22mm +. [840] (not illus)

Hairpins

Site 1

<142> Cast pin with reel/bead/reel surmounted by flattened sphere; point missing. Crummy Type 2 but extremely dainty for a hairpin. Type 2 metal pins were introduced early in the 2nd century AD and had perhaps gone out of production by the 3rd century (Crummy 1983, 28). L 62mm. [933] (not illus)

<161> Cast; head missing. L 113mm. [1060] (not illus)

Beads

Site 1

Two were recovered, both glass cylinder beads. This type covered the whole Roman period but became most popular in Britain after the 3rd century AD; small cut segments were common in Late Roman necklaces (Guido 1978, 95). Both examples below were found in Phase 6 (4th-century) contexts.

<118> Dark opaque green with longitudinal striations on surface; polygonal section. L 11mm; D 4.5mm. [757]

- <144> Cut segment of opaque blue-green bead; circular section. L 6mm; D 5mm. [991]

Toilet, surgical or pharmaceutical instruments

Site 1

All are of copper alloy, except for <166> which has some iron still attached.

- <135> Nail-cleaner of beaten metal; straight flat shaft with two decorative longitudinal lines; suspension loop at right angles to the blade; from Phase 6: 4th-century pit fill. L 40mm; W 7mm. [961]
- <166> Handle; cast moulded and very slightly curved; trace of iron insert still present at socketed end. The quality of the object and the deliberate curve imply it was possibly from a specialised knife or medical implement. L 61mm; W 25mm. [603] (Fig 17.5)
- <141> Cast object which may have been a toilet spoon or medical implement. The pointed end is missing, while the thicker end appears to have had a flattened piece pinched off; this may be the result of recycling of the object for its metal (with reference to <153> below, although neither object joins). L 16mm. [992]

Domestic utensils or furniture

Site 1

- <153> Broken cast object which, to judge by its curved end, was probably a plain drop handle. When the fragments are joined, however, the object is asymmetrical and thicker towards its broken end, so it may have been a metalworker's failed product. Interestingly this piece was found in the same context as the toilet spoon or medical instrument <141> above; both may have been intended for recycling. A coin from the same context has been dated to AD 270–273. L 65mm+. [992]

Buildings and services

Nails

Site 1

- <110> [602]; <178> [715]; <190> [1060].

Tools

Iron knife-blade fragments

Site 1

- <117>. 28mm x 17mm. [742]
- <158> 23mm x 15mm. [929]

Site 2

- <11> iron fragment, probably from a blade; tapering towards one end. L 39mm; W 23mm+. [250]

Fasteners and fittings

Site 1

- <121> Broken fragments of copper-alloy strip; x-radiography shows what appears to be a pattern of circles running lengthwise. L 62mm; W 17mm. [753]
- <114> Iron with two perforations; burnt. L 145mm. [682]
- <180> Iron mount; fragment; slightly curved. 45mm x 23mm. [757]

Military equipment

Site 1

- <165> Belt mount; cast; damaged around part of edge; reverse has rectangular attachment loop. L 26mm; W 17mm+. [1060] (Fig 17.6)
- <127> Trumpet mouthpiece. Cast and very well preserved; this object was recovered from a 4th-century pit. L 26mm+; D 27mm. [907] (Fig 17.7)

Objects associated with religious beliefs and practices

Site 1

- <138> Copper-alloy figurine/mount in the form of a goat. Although heavily stylised, its small backward swept horns and body hair are realistically shown. Under the base of the figure is a tiny rectangular attachment loop. The goat is one of the cult emblems of the god Mercury, frequently accompanying him in representations, but may additionally have had an independent fertility symbolism (Green 1978, 26). L 15mm; H 19mm. [936] (Fig 17.8)

Waste associated with metal working

Site 1

Virtually all the metal working waste was recovered from fills in the road ditch, probably brought in with the quantities of iron slag which would appear to have been used as metallurgy. However refer also to <141> medical implement and <153> handle (above), both from pit fill [992].

<160> Copper alloy casting sprue. L 16mm. [929]

- <143> Copper alloy casting waste. L 35mm. [952]
- <159> and <160> Copper alloy waste distorted by heat. L 15mm & 28mm. [929]
- <130> Distorted lead strip waste. L 42mm. [937]

Coins

Site 1

- <172> Copper-alloy *as/dupondius*, 1st to early 2nd century, extremely corroded. [800]
- <131> Copper-alloy *as*, Nerva AD 97, as *RIC* II 83. [883]
- <136> Copper-alloy *dupondius*, Domitian AD 90–96, *RIC* 392. [924] (Fig 17.9)
- <133> Copper-alloy Claudian copy, AD 45–65, Grade II. [936]
- <140> Copper-alloy, mid-3rd century, extremely worn and corroded. [984]
- <152> Copper-alloy *antoninianus*, Tetricus I, AD 270–273, minted in Cologne/Trier. [992]
- <150> Copper-alloy, mid-3rd century, very worn. [1004]
- <123> Copper-alloy unidentifiable, extremely corroded. [824]
- <154> Copper-alloy unidentifiable, extremely worn and corroded, fragmentary. [992]

Site 2

- <3> Copper-alloy *sestertius*, AD 115–117. Reverse celebrates Trajan's victory over Armenia and Mesopotamia. Trajan, *RIC* 642. (190)

Post-Roman

Dress and objects associated with dress and grooming

Buttons and fasteners

- <193> Two copper-alloy buttons of different sizes; solid attachment loop on reverse; larger flat, smaller slightly convex; probably coat buttons. Both relatively modern in appearance (19th–20th century). D 26mm; 17mm. [5]
- <174> Copper-alloy globular button; hollow; broken loop attachment. D 12mm. [842]
- <197> Copper-alloy round button; now broken in half and in fragments; originally composite? D 23mm. [513]
- <100> Glass button; dark blue; round with cut faceting around edge. D 23mm. [639]
- <198> Copper-alloy wire loop fastener. Used in the medieval and early post-medieval periods as either a dress fastener or chain link. From Phase 7 (12th–early 14th century). D 11mm. [838]

Brooch

- <103> Copper-alloy oval brooch; decoration of a bird (dove?) in flight. Found in a 19th-century cesspit cut. 37mm x 30mm. [639]

Fan

- <101> Bone fragments of fan ribs; probably 18th century. L 131mm (largest). [632]

Brush

- <186> Bone handle; perforated for suspension. L 89mm. [632]

Comb

- <185> Bone; fragment of double-sided type; one side 12 teeth per 10mm; other 22 per 10mm. L 46mm. [632]

Domestic activity

Knives, cutlery and kitchen utensils

- <175> Ivory knife handle, with only part of iron blade remaining; whittle tang. L 90mm; W 17mm. [609]
- <124> Wooden cutlery handle; turned. L 74mm. [824]
- <176> Possible copper-alloy vessel fragment. L 32mm; W 17mm. [unstratified]

Stone hones

(The petrological identifications are by John Brown)

- <196> Fragment of Norwegian ragstone. L 123mm. [517]
- <195> Coarse grain, sedimentary sandstone. L 32mm. [119]
- <194> Hammer stone, flint; broken at one end. L 104mm. [110]

Ceramic figurine/doll

- <102> In Roman dress and carrying a sword; head is missing and it once had separate limbs, which would have swivelled; Parian ware, 19th century. L 39mm. [639]

Horse furniture and equipment

- <170> Copper-alloy stud or mount; damaged; slightly convex with central perforation; incomplete; this may be a bridle boss and could be residual Roman; context date: late 15th–early 16th century. D 27+mm. [1106]
- <115> Iron buckle; crude D-shaped frame; flat in section. Probably a harness buckle. 55mm x 78mm. [682]
- <112> Iron rowel spur; incomplete; traces of the end of the rowel box are only visible on the x-radiograph. L 88mm+; W 75mm. [669]

- <134> Badly damaged iron spur; corroded, with pieces lost owing to lamination, and badly twisted; spur end missing; possible single ring terminal visible on x-radiograph. L 80mm+. [877]
- <201> Iron horseshoe; half; square holes; probably post-medieval. L 132mm. [487]
- <206> Iron horseshoe; half, in fragments; post-medieval. L 121mm. [76]
- <188> Iron horseshoe; fragmentary. L 84mm. [828]

Metalworking waste

- <176> Copper-alloy sheet waste fragment; L 30mm. [unstratified]
- <199> Lead strip. L 85mm. [59]
- <204> Lead strip. L 69mm. [34]

Coin

- <122> Copper-alloy jetton; damaged and corroded. This type of jetton was manufactured in some quantity in France and the Low Countries in the late medieval/early post-medieval period to supply an English market. This example is probably 15th century. [unstratified]

Miscellaneous

- <104> Glass syringe; plunger still present; 19th century. L 101mm. [639]
- <113> Iron ferrule; D-shaped; one end damaged. L 63mm; W 16mm. [682]
- <109> Iron wall hook; incomplete; one end pointed. L 134mm; W 26mm. [606]
- <203> Iron ring. D 60mm. [527]
- <111> Flat lead disc which appears to have been deliberately cut in half; possibly to be used as a balance weight. Recovered from late 16th/17th-century context. Wt 28g; D 39mm (original); thickness 3mm. [669]

THE IRON SLAG

Lynne Keys

Methodology and discussion of terms

Just over 39kg of material identified as iron slag was recovered from the excavations. All the slag presented was examined by eye and categorised on the basis of morphology alone. Each category of slag in each context was individually weighed, but the smithing hearth bottoms were weighed

individually and measured to obtain their dimensions.

Activities involving iron can take two forms:

(1) The manufacture of iron from ore and fuel in a *smelting* furnace. The resulting products are slag (waste) and a spongy mass called an unconsolidated bloom which consists of iron with a considerable amount of slag still trapped inside.

(2a) *Primary smithing* (hot working by a smith using a hammer) of the bloom on a stringhearth, usually near the smelting furnace, to remove excess slag. The slag from this process will include micro-slags, particularly tiny smithing spheres.

(2b) *Secondary smithing* (hot working) of an iron shape by a smith to turn it into a utilitarian object. This will also generate micro-slags: hammerscale flakes from ordinary hot working of a piece of iron, or tiny spheres from high temperature welding to join two pieces of iron.

The slag assemblage represents secondary iron smithing. Some slags could have been generated by either smelting or smithing, but only one tiny fragment of diagnostic smelting slag was recovered and that from a Late Roman pit. Some of the slag may once have formed parts of smithing hearth bottoms but since it is broken up and we cannot be sure, it had to be assigned to the 'undiagnostic' category. Other non-ironworking debris present (*eg* fired clay, vitrified hearth lining, cinder, and fuel ash slags) could have been the result of various kinds of high temperature activities (including domestic fires) and cannot be taken on its own to indicate ironworking was taking place. However, when found with iron slag or in an area where activities involving production or working of iron were taking place, it is reasonable to suggest that this too may have been produced by the process.

Slags diagnostic of iron smithing take two main forms: bulk slags and micro-slags. Of the bulk slags, the smithing hearth bottom is the one least likely to be confused with slags produced by smelting. Its characteristic plano-convex shape was formed as a result of high temperature reactions between the iron, iron-scale and either silica from a clay furnace lining or the silica flux used by the smith. The predominantly iron silicate material produced by this reaction dripped down into the hearth base during smithing forming smithing slag, which,

if not cleared out, developed into the smithing hearth bottom. When removed from the hearth these were usually taken outside and deposited in the nearest pit or ditch. The proximity of cut features or dumps with quantities of smithing hearth bottoms to a building is often a good indication that the structure may have been a smithy.

The slag

Phase 1; Trench 2

A smithing hearth bottom was recovered from a 5cm spit of brickearth [1198]. No great significance should be attached to this unless the brickearth is thought to be pre-Iron Age.

Early Iron Age

Phase 3; Trench 3

The majority of the slag (1,017g) from this period was recovered from the fills [934], [1019], [1211] of the waterlogged channel. A small amount of undiagnostic slag came from pit fill [1155].

Roman

This is the most significant period with regard to iron slag. Unlike the earlier and later periods, a number of activities were taking place on the site involving slag, each revealing a different aspect of site development, particularly in Phase 5.

Phase 4; Trench 3

The slag from this phase was found solely in the fill of the original cut of the road ditch. The amount of slag is, however, extremely small (45g) and stands in marked contrast to the slag deposited in the next phase from the recutting of the road ditch. The implication is that either any smith nearby did not dump slag into the ditch at this time or that the road (which one might expect to erode into the ditch) did not contain slag in its make-up (or at least not a significant amount). Such unusual depositional behaviour on the part of the local smith or smiths can be ruled out, smiths being notorious opportunists who deposit their slags in any open features or convenient space nearest the place where they are working. The likely explanation is that the absence of slag reflects the fact that the first Roman road was *not* metallised with slag. This explanation is supported by the areas of deposition and amounts of slag in the next phase.

Phase 5; Trench 2

The presence of iron slag in this trench represents smithing activity being carried out using two hearths [908] and [909] excavated in this area. [908] contained a charcoal fill as well as a smithing hearth bottom, some undiagnostic slag (probably broken smithing hearth bottoms), vitrified hearth lining, cinder, and some nails. [909] produced a large amount of fired clay which may have formed part of its lining, but it also contained a smithing hearth bottom and debris similar to that from [908], including a nail. In addition, the hearth fill contained some flake hammerscale. This is a micro-slag produced by the ordinary hot working of a piece of iron by a smith. The manufacture of nails would produce this micro-slag.

No outline of a building could be discerned from the postholes and stakeholes in the area around the hearths, but it should be noted when discussing the absence of evidence for a structure that one of Canham's trenches ran immediately across the area beside the two hearths and will have truncated any evidence which may have remained there. It is very probable the activity *did* take place in some structure, as discussed above.

Pit [779], c.8m away from the hearths, contained 16 smithing hearth bottoms and a considerable quantity of undiagnostic slag, some vitrified hearth lining, and cinder. Pit [1074], very close to both hearths, contained 7 smithing hearth bottoms and almost 3kg of undiagnostic slag. The gravel levelling a little further away was found to contain a smithing hearth bottom and a very small amount of slag.

Several features in the north-west of Trench 2, over 12m away from the hearths, also produced slag, but not in large amounts. It may be that smithing activity was taking place there too but the evidence is not substantial and the slag may indeed represent debris generated by the smithing carried out in [908] and [909].

Phase 5; Trench 3

A total of over 15kg of slag was recovered from Trench 3 in this phase, most of it from the fills of the recut roadside ditch. The slag does not appear to have been deposited as a result of nearby smithing activity; rather its presence has implications for the Roman road at this point and possibly for the organisation of the road builders in collecting large amounts of slag for re-use. 34 smithing hearth bottoms were present

in a total amount of 10.5kg of slag. The slag was not generated by the smithing activity evident in Trench 2, as smiths do not carry their slag that far to discard it, unless there was a requirement that they do so for some purpose. Further, it is unlikely, having brought it so far, that they would actually dispose of it into the ditch. It seems more likely that slag was brought from the immediate neighbourhood or from much further afield to be deposited on the Roman road. The presence of the slag implies that the recut was probably undertaken at the same time as the road was resurfaced or improved. Large quantities of iron slag (only a small proportion of which would have found its way into the ditch, and an even smaller sample of which was recovered from the slots dug through the ditch) were used to resurface the road. The slag was probably mixed with other materials to produce a hard, weather resistant surface. Over time, however, the edges of the road would erode and some of the surface constituents would fall into the ditch, hence the presence of the slag. The fills of the secondary recut produced some 3.6kg of slag containing nine smithing hearth bottoms. The amount is not as large as the previous recut which may imply the road repairers were not resurfacing the road but only using the slag to fill in potholes where necessary.

Late Roman

Phase 6; Trenches 2 and 3

Only 491g of slag and possibly related debris were recovered from this phase. Only two fragments came from Trench 2, one a piece of tap slag. Tap slag is a dense, low porosity slag with a ropey flowed structure produced during the smelting process. It is formed as the liquid slag is allowed to flow out continuously or intermittently through a hole in the side of the furnace along a specially made channel into a hollow in the ground. The slag in Trench 3 was found in various cuts with no large depositions in any feature. The road ditch fill has none.

THE ENVIRONMENTAL EVIDENCE

Nick Branch

The lithostratigraphic analysis of column samples taken through the sedimentary sequence in the Roman roadside ditch indicates predominantly fine-grained sediment deposition. These sedi-

ments most probably represent natural erosion from the edges of the archaeological feature and deposition in its base. Although it is possible that the charcoal represents *in-situ* burning, it most likely indicates dumping of waste materials.

The lithostratigraphic descriptions of the column samples are as follows.

Column sample 4 (2.33–2.83m OD)

- 2.33–2.47 Grey (2.5Y 5/1); Clay (As4); diffuse boundary
2.47–2.83 Dark yellowish brown (10YR 3/6); Clay with gravel (As4 Gg+)

Column sample 3 (2.70–3.20m OD)

- 2.70–3.20 Dark yellowish brown (10YR 3/6); Clay with charcoal (As4)

Column sample 2 (3.17–3.67m OD)

- 3.17–3.38 Grey (10YR 5/1) and yellowish brown (10YR 5/8); Clay (As4); sharp boundary
3.38–3.61 Yellowish brown (10YR 5/6) and dark grey (10YR 4/1); Clay with gravel (As4 Gg+) and charcoal; sharp boundary
3.61–3.67 Dark yellowish brown (10YR 3/6); Clay with charcoal (As4)

Column sample 1 (3.59–4.09m OD)

- 3.59–4.09 Grey (10YR 5/1) and yellowish brown (10YR 5/8); Clay with sand (As4 Ga+)

Environmental bulk samples taken from the Roman roadside ditch were poor in charred plant material. The recut Roman roadside ditch contained emmer (*Triticum dicoccum*) grains, with one spelt (*T.spelta*) and two barley (*Hordeum sativum*) grains. Five internodes of emmer wheat were also present. The primary fill of the roadside ditch was similar, containing a couple of barley grains, and twelve other grains of which only four could be identified as wheat indet (*Triticum sp.*). The assemblage also contained a few internodes belonging to emmer and spelt wheats. The wild seeds indicate arable fields and grassland (Poaceae spp. and small legumes, Fabaceae spp.), the latter particularly from the primary fill. A total of seven taxa were identified from charcoal found in the three

Table 5. Taxon identifications: 1st–2nd-century (AD 70–200) Roman deposits

Context/Sample No.	Corylus/Alnus	Fraxinus excelsior	Maloideae	Prunus sp.	Quercus sp.	Ulmus sp.	Indeterminate	Total
936 (23) Fill of roadside ditch	-	-	1	3	32	-	1	37
1061 (31) Fill of roadside ditch	3	3	1	-	17	2	4	30
1177 (34) Charred remains within hearth	1	-	-	-	87	3	9	100
Total	4	3	2	3	136	5	14	167

Roman contexts (Table 5). The figures listed in the table enumerate the number of fragments identified for each taxon.

The charcoal rich fill of the Phase 9 beehive-shaped structure provided a rich and relatively well preserved charred plant macrofossil assemblage with a large number of wheat grains. The majority could only be identified as emmer/bread wheat (*Triticum dicoccum/ aestivum*), as not enough of the distinguishing features remained, but a number of possible bread wheat grains were identified (*Triticum* cf. *aestivum*). There were also a few barley grains in the assemblage, but no chaff. The ratio between cereals and wild seeds is about 2:1, the latter predominantly composed of grasses. There were also a number of species that inhabit wasteland and cultivated land, such as *Chenopodium album* and *Rumex crispus*. Damp ground is also represented through species such as *Polygonum hydropiper* and *Galium* cf. *odoratum*. The most unusual aspect of the sample was the presence of charred flower heads, buds and other plant parts. Unfortunately it was not possible to identify these. The post-medieval sample suggests bread wheat was a significant component of the diet, with hulled barley and possibly oat also contributing. The small weed seeds indicate either cultivated fields or grassland in the vicinity. It is possible that the post-medieval crops were grown locally with the structure surrounded by arable fields. The lack of chaff alone is not enough to say the crops were 'clean' (prime grain), as it does not preserve well, particularly if subject to repeated burning. The charcoal from the beehive-

shaped structure predominantly consisted of fragments of coppiced oak, *Quercus*, which was most likely used to fuel the ovens/hearths at the same property. It is likely that some form of silviculture was practised in the post-medieval period, perhaps as part of a woodland management regime, and that aspects of this are seemingly reflected in the wood anatomy of some of the fragments examined. Charcoal from the post-medieval structure was generally better preserved than that recovered from the Roman ditch and many fragments were notable for their relatively large dimensions. The comparatively low degree of fragmentation and the condition of the fragments generally reflects the short time since deposition/burial. This implies that the structure was backfilled with the rake-out of the ovens on the property.

THE ANIMAL BONE

Lisa Yeomans

A total of 347 animal bones, mainly from the roadside ditch and its subsequent recut, was recovered from features dating to the Roman period. Fragmentation had affected the quantity of bone that could be identified to species level (120 fragments). The bone from these phases is typical of domestic refuse, with cattle, pig, and caprines all represented (Table 6). Additionally, horse bones were well represented; this may be related to the Roman practice of burying these animals outside settlements (Grant 1975; Chapman 1984).

Table 6. Number of identified bones from Roman phases

Species	Phase 4	Phase 5	Phase 6
Cattle (<i>Bos taurus</i>)	1	34 (39.1%)	14
Horse (<i>Equus caballus</i>)		15 (17.2%)	5
Pig (<i>Sus scrofa</i>)		3 (3.4%)	2
Sheep/Goat (<i>Ovis aries</i> / <i>Capra hircus</i>)	2	33 (37.9%)	7
Sheep (<i>Ovis aries</i>)	1	2 (2.3%)	1

A substantial quantity of animal bone, obviously leftover material from local industrial activities, had been generated during Phase 10. Distinguishing between bone waste created by butchery, tanning and horn working can be problematic (Armitage 1984; Serjeantson 1989). However, numerous tanning pits and historical evidence indicating that tanners were present in Brentford during the following centuries enables the faunal assemblage to be interpreted as the result of leather production. The character of the animal bone is consistent with this conclusion. The quantity of animal bone, despite numbering in excess of 1,000 fragments, would have been only a fraction of the debris generated by the industry over the period of production. (In many parts of the country there was local legislation stating that tanneries were required to regularly clear premises of such refuse.) It is worth noting that almost 90% of the bone identifiable to species originated from cattle, suggesting that the main focus of the tanning industry was associated with the preparation of cattle hides. These would have been transported from butchers with the lower limbs and skulls still attached; this was a traditional practice up until the mid-18th century (Thomas 1981). The lower limbs are of little value to the butchers but may have provided useful appendages for the manipulation and stretching of hides (Heard 2000). Lower limb bones and skull fragments formed nearly the entire assemblage from Brentford Lock. The absence of the ulnar, radial and intermediate carpals, as well as the astragalus, calcaneus and navicular-cuboid, compared to high occurrence of the carpals and tarsals distal to these bones, implies that the butchery process was uniform. The lower limbs and hide had been separated from the major meat-providing portion of the carcass between the group of carpals in the forelimb and tarsals in the hind limb. Relatively

few phalanges were present and it may be suggested that these were sold on attached to the hooves to a neatsfoot oil producer (Thomas 1983). This interpretation should be viewed with caution, since many of the pits contained specific anatomical elements, as if the bones were sorted prior to discard. Therefore, it is possible that pits containing phalanges may have been located outside the excavated areas. Since the process of leather manufacture is time consuming, the most economical use of labour requires that quantities of hides are at different stages in the tanning sequence, ensuring a constant supply of the finished product. As such, larger scale operations following a set pattern of treatment would have been more effective at reducing costs. The separation of the bones and their deposition in separate pits may have been specifically designed to enable the various parts of the skeleton to be traded on after a significant quantity had been accumulated. This type of waste is known to have been used in the construction of drains and floors. These transactions may not have been fulfilled during the last cycle of leather manufacture just before the tannery ceased production. One horncore displayed cuts marks around the base, otherwise there were no signs of removal of the actual horn from the inner core, indicating that the cattle horns were passed on to horn workers intact, leaving the recipient to prepare the raw material.

Providing an accurate age-profile of the animals slaughtered is difficult, since the mandibles were removed prior to transport from the butchers to the tannery. Data from the fusion of long bones only provides a mortality profile up to the age when cattle become skeletally mature. The few phalanges present and the fusion of the distal metapodials indicate that all of the animals represented were over one and a half years of age; a few (16%) were slaughtered before the age of two years, whilst 53% lived past the age of three years (based on the fusion ages provided by Silver 1969). Absence of bone from very young animals would imply that calfskins were not processed at the tannery; this is consistent with historical evidence suggesting that tanning the hides of juvenile animals was a relatively uncommon practice (Clarkson 1960). Although wear stages of maxillary teeth are not generally used in age estimation, the degree of wear exhibited by these teeth also implies that many of the animals were killed as adults that were in

their prime. Similarly the horncores of the cattle were consistently classified as originating from either young adult or adult animals (Armitage 1982). This would have been relatively standard for the tanning industry, since the hides would have come directly from the butchers. It would have been necessary for the tanneries to utilise the by-products of the meat trade because demand for the finished product was so high.

The animal bone from the fill of one of the barrel-lined pits was of particular interest in that it mainly consisted of cattle metacarpals treated in a consistent manner. These bones had been broken in half perpendicular to their long axis by chops directed at the anterior and/or posterior surfaces of the shaft. The resulting breakage was uniform with the proximal and distal portions being approximately equal in size. A single hole had also been drilled down through the medial side of the proximal articulation; this pattern was repeated on 16 different bones and the size of these perforations was relatively standardised, measuring between 12.8 and 15.2 mm in diameter. The purpose of this modification is unclear. Although marrow is a substance that could be used in tanning, it is only the metacarpals that display the breakage pattern. The metatarsals, which also contain marrow, were found complete. Furthermore the breakage pattern would not have readily facilitated access to the fat stored in the diaphysis. It seems unlikely that the holes were drilled for the hanging of the carcass during bleeding as the animals are usually hung from their hind limbs (Sharpshouse 1983); a hole through the proximal articulation of forelimb bones would not be suitably placed for this task. An alternative possibility is that the holes formed a socket in which tools could be held. However, as the distal portion of the metacarpal was discarded at the same time as the proximal half, it suggests that the upper regions of the bone were not kept as a tool handle. Perhaps the holes were related to stretching of the hides in some manner; occasionally perforated cattle bones (both metatarsals and metacarpals) have been found at sites associated with the tanning industry in Southwark: 156–170 Bermondsey Street, BRB 02; Tower Bridge Road, TWG 00; and Tabard Square, LLS 02. One metacarpal from 156–170 Bermondsey Street had been modified into a pinners bone; a possible interpretation could be that the hole in the proximal articulation formed a means of clamping these to a workbench during use. At

present the most probable conclusion for these drilled holes is that they relate to the tanning process in some, as yet undetermined, manner. The fact that examples of this practice are known from a Bermondsey Street site in Southwark, an area also known for the importance of its tanning industry, suggests that the practice was once widely distributed.

Aside from the bones of cattle, caprine (mainly sheep, although goat was also present) was identified in the assemblage; these formed less than 10% of the material. From the recovery of these bones in the same contexts as the other tannery waste, along with the body-part representation, it can be concluded that the hides of sheep were also processed at the site. There is minimal ageing data, but the older animals appear to be well represented; perhaps the tannery obtained hides from a wool herd or animals butchered for mutton. In the immediate vicinity of a concentration of tanning pits, a pit containing horse bones may be evidence of the production of leather from horse skins; the remains of at least two animals were represented in this sample. Traditionally there was a difference between the tanner and whittawyer; historical records document that the tanneries were not to process the skins of sheep, goat, horse, deer or dogs. The archaeological evidence from this site, and others, clearly demonstrates that this rule was frequently ignored (Shaw 1987).

In conclusion, cattle hides were the main focus of the industry at the Brentford Lock tannery. This is in contrast to the archaeological evidence for the tanneries in Bermondsey during the post-medieval period, where a number of zooarchaeological studies have shown that the classes of animal associated with the whittawyer's trade were more common (Armitage 2000; Elsdon 2002; Heard 2000). Specialisation in the skins of different animals in regions of London associated with leather production partly supports Clarkson (1960, 250), who argued that the tanners were 'located outside the City', although the difference was by no means as clear-cut as the historical evidence would suggest. Access to resources, availability of land, location of related trades and traditional practices may all have influenced the placement of the various aspects of the leather producing economy of post-medieval London. The production of leather at Brentford Lock appears to have been a large-scale process geared towards providing quantities of

leather mainly derived from cattle hides; the site was probably also involved in trading bone waste from this process to other industries.

CONCLUSIONS

These excavations have provided a window into the nature and development of Brentford throughout the prehistoric, Roman, medieval, and post-medieval periods within its context as a staging-post on a major river and road route to London. Evidence of Iron Age occupation has been located to the east and west of Brentford: at the former Brentford Gas Works site (Bishop 2002a) and at Brentford Lock, although the nucleus of the Iron Age settlement at Brentford remains undiscovered.

The status of the Roman settlement at Brentford is difficult to interpret, and the subject has been frequently debated with regard to other similar sites. Hanley suggests similar small-sized settlements fulfilled a vital role within the Roman countryside, the population of Roman Britain being about 4 to 6 million (2000, 5). The roadside settlement at Aldfoldean, W Sussex, was constructed along the *Londinium to Noviomagus Regnensium* (Chichester) road known as Stane Street, where the road bridges the River Arun, in the late 1st century. The settlement extended for 600m south of the River Arun and included a *mansio* complex which was later enclosed by a bank and ditch in the late 2nd century. The settlement at Aldfoldean is a useful parallel to Brentford because it has escaped medieval ploughing and post-medieval development, thus the morphology of the settlement has been established. Outside the enclosed area up to ten buildings were identified within 10m of Stane Street. One of these measured 8.8m wide by 10m long and was sited parallel to the road; narrower buildings were sited perpendicular to the road. There is no consistent plot width, though the reduction in Roman material within the ploughsoil suggests properties may be 40m wide (Millet & Graham 1986, 153). Attempts have been made to categorise small Roman towns, although the terminology of such settlements is often fraught with difficulties. Burnham (1993, 103) has suggested an alternative threefold scheme to Rivet's categorisation (1975): Upper, Middle and Lower Order Settlements. Roman Brentford could be categorised as a Lower Order Settlement since no defences, specialised functions or public buildings have yet been found; however

the absence of such features perhaps reflects the poor preservation of the settlement. The new discovery of occupation to the west of the River Brent indicates Roman Brentford was larger than previously thought. It is even possible that some of the higher status buildings associated with *mansio* complexes may be situated here. Similar sites remain poorly understood, though they are crucial to our wider comprehension of the Roman infrastructure. The newly discovered extent of Brentford beyond the River Brent implies that it fulfilled several functions, including agriculture, craft and industry, and a marketplace, although the absence of evidence for public buildings implies it was not used for administration. This large roadside settlement would have provided a range of specialist services to road users while utilising its position near to the road and waterways to facilitate the distribution of industrial and agricultural products.

The continued use of the line of the Roman road as an important route, and the proximity of the Thames and the Brent, ensured the expansion and success of Brentford through the medieval and post-medieval periods, and demonstrates the importance of this location on the Roman, medieval and post-medieval transport network. This continued into the 18th and 19th centuries, when after the construction of the Grand Union Canal, Brentford became almost a victim of its own success and ever more industrialised and overpopulated.

ACKNOWLEDGEMENTS

Pre-Construct Archaeology Ltd would like to thank St George Developments Ltd and Barratts West London Ltd for funding the Brentford Lock and the Park Tavern projects respectively, and Duncan Hawkins of CgMs Ltd for commissioning the work. The author would like to thank Peter Moore, the project manager, and Frank Meddens, the post-excavation manager, for all their advice and assistance. Gratitude is also expressed to Rob Whytehead and Kim Stabler of English Heritage for monitoring the sites. Thanks to the excavation staff of both sites and especially to Mark Bagwell, the supervisor of the Park Tavern site. Finally, thanks go to all the finds specialists for their individual contributions and to Barry Bishop (lithics) and John Brown and Ken Sabel (building material); to Michael Miles for the finds illustrations, Hayley Baxter for the CAD illustration, and to Giles Hammond for surveying.

BIBLIOGRAPHY

- ANON (2000), Anon *Museum of London Specialist Services Fabric Codes for Roman Pottery*
- ARMITAGE (1982), P L Armitage 'A system for ageing and sexing the horn cores of cattle from British post-medieval archaeological sites (17th to early 18th century) with special reference to unimproved British Longhorn' in B Wilson, C Grigson & S Payne (eds) *Ageing and Sexing of Animal Bones from Archaeological Sites* BAR British Series 109, 37–54
- ARMITAGE (1984), P L Armitage 'The faunal remains' in A Thompson, F Grew & J Schofield 'Excavations at Aldgate, 1974' *Post-Medieval Archaeology* 18, 131–43
- ARMITAGE (2000), P L Armitage *Report on the Results of the Analysis of the Sheep Metapodial Bones from the Knuckle Bone Floor, Context 97 (Phase VIII)* unpub manuscript
- ATKINSON & OSWALD (1969), D Atkinson & A Oswald 'London clay tobacco pipes' *Journ British Archaeol Assoc* 3rd ser, 32, 171–227
- BAGSHAWE (1979), R Bagshawe Roman Roads
- BAGWELL (2002), M Bagwell *Assessment of an Archaeological Excavation at Park Tavern, 107 London Road, London, TW8* Pre-Construct Archaeology Ltd unpub report
- BISHOP (2002a), B Bishop 'Late prehistoric and Roman Brentford: evolution of an agricultural landscape' *London Archaeologist* vol 10, no. 1, 7–12
- BISHOP (2002b), B Bishop *Excavations at Brentford Lock, Brentford High Street, London Borough of Hounslow Lithic Assessment* Pre-Construct Archaeology Ltd unpub report
- BLACKMORE (1999), L Blackmore 'Aspects of trade and exchange evidenced by recent work on Saxon and medieval pottery from London' *Trans London Middlesex Archaeol Soc* 50, 38–54
- BLUMENSCHINE & MADRIGAL (1993), R J Blumenschine & T G Madrigal 'Variability in long bone marrow yields of East African ungulates and its zooarchaeological implications' *Journ Archaeol Science* 20, 55–87
- BRITTON (1987), F Britton *London Delftware*
- BURNHAM (1993), B Burnham 'The small towns of Roman Britain – the last fifty years' in S Greep (ed) *Roman Towns: The Wheeler Inheritance, a Review of 50 Years' Research* CBA Res Rep 93
- BURNHAM & WACHER (1990), B Burnham & J Wacher *The Small Towns of Roman Britain*
- CANHAM (1978), R Canham *2000 Years of Brentford*
- CHAPMAN (1984), J Chapman 'The animal bone' in K R Crouch & S A Shanks *Excavations in Staines 1975–6: The Friends Burial Ground Site* London Middlesex Archaeol Soc, Surrey Archaeol Soc Joint Pub 2
- CLARK (1949), A J Clark 'Fourth century pottery kilns at Overwey, Tilford' *Surrey Archaeol Collect* 51, 29–56
- CLARKSON (1960), L A Clarkson 'The organization of the English leather industry in the late sixteenth and seventeenth centuries' *The Economic History Review* 13, 245–56
- CODRINGTON (1928), T Codrington *Roman Roads in Britain*
- CORDER (1939), P Corder 'The Roman pottery made at Fulmer' *Records of Bucks* 14, 153–63
- COTTON & PARNUM (1983), J Cotton & A Parnum 'Recent work in Brentford: excavations and observations 1974–1982' *London Archaeologist* vol 4, no. 12, 318–25
- CRUMMY (1983), N Crummy *Colchester Archaeological Report 2: The Roman Small Finds from Excavations in Colchester 1971–9*
- DARTON (2001), L Darton *An Archaeological Evaluation at Brentford Lock, West Bank Site (Shingle End), Commerce Road, Brentford, London Borough of Hounslow* Pre-Construct Archaeology Ltd unpub report
- DAVIES *et al* (1994), B Davies, B Richardson & R Tomber *The Archaeology of Roman London Volume 5. A Dated Corpus of Early Roman Pottery from the City of London* CBA Res Rep 98
- DAVIES (2002), H Davies *Roads in Roman Britain*
- DEEVES (2001), S Deeves *An Archaeological Evaluation of Land at The Island Site, Brentford Lock, Brentford, London Borough of Hounslow* Pre-Construct Archaeology Ltd unpub report
- ELSDEN (2002), N J Elsdén 'Excavations at 36–40 Tanner Street and 159–161 Tower Bridge Road, Bermondsey' *London Archaeologist* vol 9, no. 10, 275–82
- FRERE (1972), S S Frere *Verulamium Excavations Vol 1*, Rep Res Comm Soc Antiq London 28
- GILLAM (1976), J P Gillam 'Coarse fumed ware in North Britain and beyond' *Glasgow Arch Journ* 4, 57–80
- GRANT (1975), A Grant 'The animal bones' in B Cunliffe *Excavations at Portchester Castle: Volume 1 Roman*, 378–408
- GREEN (1978), M J Green *Small Cult-Objects from the Military Areas of Roman Britain* BAR British Series 52
- GUIDO (1978), M Guido *The Glass Beads of the Prehistoric and Roman Periods in Britain and Ireland*
- HANLEY (2000), J Hanley *Villages in Roman Britain*
- HANWORTH & TOMALIN (1977), R Hanworth & D J Tomalin *Brooklands, Weybridge: The Excavation of an Iron Age and Medieval Site 1964–5 and 1970–71* Surrey Archaeol Soc Res Rep 4
- HAWKINS (2001), D Hawkins *An Archaeological Desk Based Assessment, The Park Tavern, 107 London Road, Isleworth* CgMs unpub report
- HEARD (2000), K Heard 'A post-medieval tawyer's yard in Bermondsey' *London Archaeologist* vol 9, no. 5, 137–43
- JARRETT (2002), C Jarrett 'Pottery assessment' in J Leary *Assessment of an Archaeological Excavation at 15 High Street, Stanwell, Borough of Spelthorne, Surrey* Pre-Construct Archaeology Ltd unpub report

- LAWS (1976), A Laws 'Excavations at Northumberland Wharf, Brentford' *Trans London Middlesex Archaeol Soc* 27, 179–205
- LAWS & OSWALD (1981), A Laws & A Oswald 'The kiln of William Heath, eighteenth century Brentford pipemaker' in P Davey *The Archaeology of the Clay Tobacco Pipe, VI, Pipes and Kilns in the London Region* BAR British series 97, 15–66
- LE CHEMINANT (1981), R Le Cheminant 'Armorial from Paul's Wharf' in P J Davey (ed) *The Archaeology of the Clay Tobacco Pipe VI, Pipes and Kilns in the London Region* BAR British Series 97, 102–26
- LONGLEY (1980), D Longley *Runnymede Bridge 1976: Excavations on the Site of a Late Bronze Age Settlement* Surrey Archaeol Soc Res Rep 6
- LUKE & WELLS (2000), M Luke & J Wells 'New evidence for the origins, development and internal morphology of the Roman roadside settlement at Alfoldean' *Sussex Archaeol Coll* 138, 75–101
- LYNE (1994), M A B Lyne *Late Roman Handmade Wares in South-East Britain* unpub PhD thesis University of Reading
- LYNE & JEFFERIES (1979), M A B Lyne & R S Jefferies *The Alice Holt/Farnham Roman Pottery Industry* CBA Res Rep 30
- MARGARY (1967), I Margary *Roman Roads in Britain*
- MARTIN-KILCHER (1983), S Martin-Kilcher 'Les amphores romaines à huile de Betique (Dressel 20 et 23) d'August (Colonia Augusta Rauricorum) et Kaiseraugst (Castrum Rauracense). Un rapport préliminaire' in J M Blasquez & J Remesal (eds) *Prod y Com del Aceite en la Antigüedad. II Congreso*, 337–47
- MASEFIELD (1997), R Masefield *2–10 London Road, Brentford: An Archaeological Watching Brief* RPS Clouston unpub report
- MEDDENS (1996), F Meddens 'Clay tobacco pipe' in J Proctor with P Moore *An Archaeological Evaluation at British Waterways Brentford Lock Redevelopment, Area A, 159–188 Brentford High Street, Middlesex, TW8 8JZ, London Borough of Hounslow* Pre-Construct Archaeology Ltd unpub report
- MERRIMAN (1990), N Merriman *Prehistoric London*
- MILLET & GRAHAM (1986), M Millet & D Graham *Excavations on the Romano-British Small Town at Neatham, Hampshire 1969–1979*
- MILNE (1985), G Milne *The Port of Roman London*
- MONAGHAN (1987), J Monaghan *Upchurch and Thameside Roman Pottery. A Ceramic Typology for Northern Kent, First to Third Centuries A.D.* BAR British Series 173
- O'CONNOR (1984), T P O'Connor *Selected Groups of Bones from Sheldergate and Walmgate* The Archaeology of York 15/1
- O'CONNOR-THOMPSON (1998), S O'Connor-Thompson *An Archaeological and Historical Desktop Assessment of the Town Centre Site, High Street, Brentford* Norton Thompson Associates Report for First International unpub
- ORTON (1975), C J Orton 'Quantitative pottery studies, some progress, problems and prospects' *Science and Archaeology* 16, 30–5
- OSWALD (1975), A Oswald *Clay Pipes for the Archaeologist* BAR British series 14
- PEARCE (2000), J E Pearce 'A late 18th-century inn clearance assemblage from Uxbridge, Middlesex' *Post-Medieval Archaeology* 34, 144–86
- PEARCE & VINCE (1988), J Pearce & A Vince *A Dated Type-series of London Medieval Pottery Part 4: Surrey Whitewares* London Middlesex Archaeol Soc Special Paper 10
- PERRIN (1999), J R Perrin *Roman Pottery from Excavations at and near to the Roman Small Town of Durobrivae, Water Newton, Cambridgeshire, 1956–58* Journ Roman Pottery Studies 8
- PROCTOR & MOORE (1996), J Proctor & P Moore *An Archaeological Evaluation at British Waterways Brentford Lock Redevelopment, Area A, 159–188 Brentford High Street, Middlesex TW8, London Borough of Hounslow* Pre-Construct Archaeology Ltd unpub report
- RACKHAM (1998), J Rackham 'Preliminary topographic study' in O'Connor-Thompson (1998), 12–17
- RIVET (1975), A L F Rivet 'The rural economy of Roman Britain' *Aufstieg und Niedergang der Römischen Welt* II.3, 328–63
- SERJEANSTON (1989), D Serjeantson 'Animal remains and the tanning trade' in D Serjeantson & T Waldron (eds) *Diet and Crafts in Towns: The Evidence of Animal Remains from the Roman to the Post-Medieval Periods* BAR British Series 199, 129–46
- SHARPHOUSE (1983), J H Sharphouse *Leather Technician's Handbook*
- SHAW (1987), M Shaw 'Early post-medieval tanning in Northampton, England' *Archaeology* 40, 43–7
- SILVER (1969), A Silver 'The ageing of domestic animals' in D R Brothwell & E S Higgs (eds) *Science in Archaeology*, 283–302
- TARRANT & SANDFORD (1973), N Tarrant & A Sandford 'A Romano-British kiln at Fulmer' *Records of Bucks* 19 Pt 2, 174–88
- THOMAS (1981), R S Thomas 'Leather manufacture in the post-medieval period with special reference to Northamptonshire' *Post-Medieval Archaeology* 15, 161–75
- THOMAS (1983), S Thomas 'Leathermaking in the Middle Ages' in S Thomas, L Clarkson & R Thomson *Leather Manufacture through the Ages. Proceedings of the 27th East Midlands Industrial Archaeology Conference*, 1–10
- THOMPSON (1982), I Thompson *Grog-tempered 'Belgic' Pottery of South-Eastern England* BAR British Series 108
- WHEELER (1929), M Wheeler 'Old Brentford' *Antiquity* 3, 20–32
- WEINREB & HIBBERT (1983), B Weinreb & C Hibbert *The London Encyclopaedia*
- YOUNG (1977), C J Young *Oxfordshire Roman Pottery* BAR British Series 43

MEDIEVAL AND POST-MEDIEVAL ACTIVITY AT VICTORS WAY, BARNET

Catherine Edwards

With contributions from Jacqui Pearce (pottery), Kevin Reilly (animal bone), Ian Betts (building material), Kate Roberts (plant remains), Tony Grey (clay tobacco pipe) and Nicola Powell (metalwork, glass, stone and coins)

SUMMARY

Archaeological investigation in 2005 at the rear of the Mitre Inn, Victors Way revealed activity from the medieval to the post-medieval and modern periods. During the medieval period, the site area was dominated by boundary ditches. There followed a period of apparent disuse until activity resumed in the 16th century. Post-medieval and modern exploitation of the site varied between phases of domestic pitting and organised soil deposition and the creation of associated pathways. These phases of activity may reflect changes in the developing town of Barnet.

INTRODUCTION

The investigation at Victors Way, to the rear of the Mitre Inn, 58 High Street, Barnet, was conducted in advance of the redevelopment of the site by Mitchell Price. The site is located approximately 100m east of the crest of Barnet Hill in High Barnet, centred on NGR TQ 24690 96477 (Fig 1). An initial evaluation was carried out by the HADAS between 1989 and 1990 (site code: BM89). This consisted of a single test pit measuring 12m by 2m which revealed a number of post-medieval structural footings, possible floors and dump layers. The dump layers contained a varied amount of ceramics, including residual tile and pottery of Roman and medieval date (Thompson *et al* 1998). A further evaluation was carried out in November 2003 by Wessex Archaeology (site code: VWY04), which indicated the presence of medieval and post-medieval remains (GLSMR 2007). An open-area excavation of the development site was conducted by AOC Archaeology Group in

September and October 2005 using the site code VWA 05.

GEOLOGY AND TOPOGRAPHY

The underlying geology consists of Pleistocene Stanmore Terrace Gravels overlying deposits of London Clay (British Geological Survey 1994). The site lies on a ridge of ground at approximately 126m OD. The topography of the local area slopes to the south and east to form a valley. The site is relatively flat at ground level; however the underlying natural topography slopes to the east from 124.67m OD to 123.64m OD. The Ordnance Datum levels of the gravel across the site also reflect the downward slope in the natural terrain towards the valley of a previously existing Thames tributary, probably the River Brent.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Medieval

Little is known of the medieval archaeology of Barnet. The nave in the church of St Mary the Virgin, East Barnet, is thought to date to the Anglo-Saxon/Norman period *c.*1140 (RCHME 1910, 86). A second church, dedicated to St John the Baptist, was situated further west in what is now Chipping Barnet. At this time Barnet and the surrounding area was held by the Abbey of St Albans (Gear 1987, 7). In 1199 King John granted the Abbot a Market Charter, which in turn encouraged trade. The origins of the place-

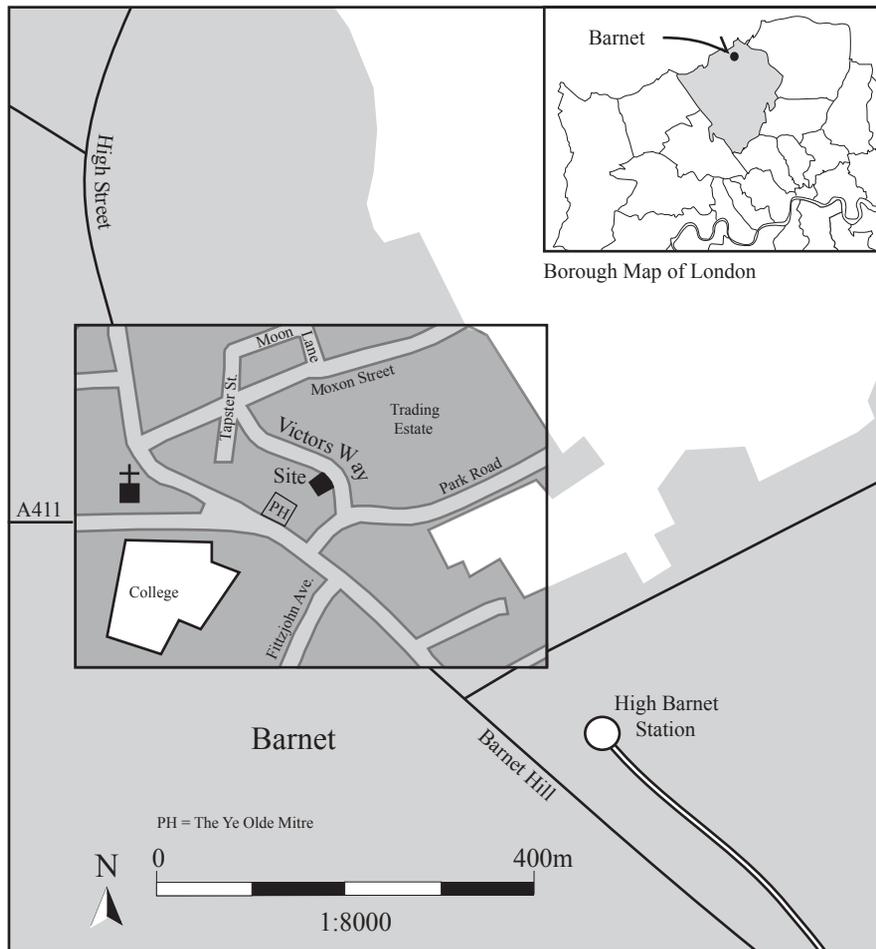


Fig 1. Site location

name Chipping Barnet may reflect this activity, with 'Chipping' derived from the Old English '*cieping*' meaning market (Gover 1938, 71).

The scarcity of excavated archaeological evidence for occupation during the early medieval period suggests that the local agricultural community was widely dispersed. Excavations at Tapster Street (site code: TAP95), approximately 100m to the north-west of the site, revealed a rubbish pit dated to the mid-12th century, along with quarry pits that were dated to the 14th century (GLSMR 2007). The use of mainly timber based structures in the local Hertfordshire style would account for the lack of structural remains (Walker 1987, 9).

Restoration work at 70 High Street uncovered a section of wattle and daub associated with the older origins of the building (GLSMR 2007).

The only other medieval structural remains in the area were found during excavations at 19–25 High Street, which recorded a mortared flint and tile wall thought to be the base of a timber structure (GLSMR 2007; site code: BHS90). Other medieval finds from excavations along the High Street include a steelyard weight, fragments of jugs and undefined vessels in redware and south Hertfordshire greyware fabrics, and a 14th-century shoe (GLSMR 2007).

Post-medieval

The growth of Barnet in the post-medieval period can be attributed to two factors: the market and the annual fair (established during the 16th century), and the presence of the Great North Road. The market became prominent during

the later medieval and post-medieval periods, mainly due to the cattle and horse trade. The cattle market alone would attract farmers and drovers from as far off as Scotland and Wales. The best butchers from London would travel to Barnet to purchase cattle, where they would be held locally until they were needed (London Borough of Barnet 2007). At this time the market also supplied meat to Smithfield Market (Walker 1987, 10).

The Great North Road ran from London, via Barnet, and continued north through to Scotland. This medieval route became further established during the post-medieval period and it was noted that ‘over a hundred and fifty mail and stage coaches, besides post-chaises, private carriages, wagons,... passed daily through the town’ (Victoria County History 1908, 329). The increase in visitors to Barnet led to the establishment of numerous inns and coaching houses, with Barnet labelled the ‘Town of Inns’ (Weinreb & Hibbert 1983, 386). The Mitre Inn is thought to have been part of a large complex, originating in the medieval period and later incorporating Tudor houses known as La Rose and La Crown to become ‘The Rose and Crown and Mitre’ (Jolliffe & Jones 1995, 14–15). It is unclear exactly when the inn was constructed but it was in existence as a wine tavern by 1633 and is possibly the oldest remaining coaching inn building. In 1660 General Monck stayed at the Mitre on his way to London to restore Charles II after the Commonwealth. The Mitre was described as ‘new built’ in April 1785 with ‘stabling for upwards of one hundred horses’, and ‘roomy conveniences for carriages’ in 1790 (London Borough of Barnet 2007).

THE ARCHAEOLOGICAL SEQUENCE

Medieval 1170–1350

There was no evidence for any activity predating the medieval period. The medieval remains were confined to the central part of the site (Fig 2) and consisted of a small layer of redeposited gravel (not illustrated), which was cut by an undated, large circular posthole, and two contemporaneous linear ditches — Ditches 1 and 2. Ditch 1 ran north–south whilst Ditch 2 ran east–west perpendicular to Ditch 1 (Fig 2). The ditches are likely to have been boundary or enclosure ditches, marking the ownership of land or serving as an internal division within

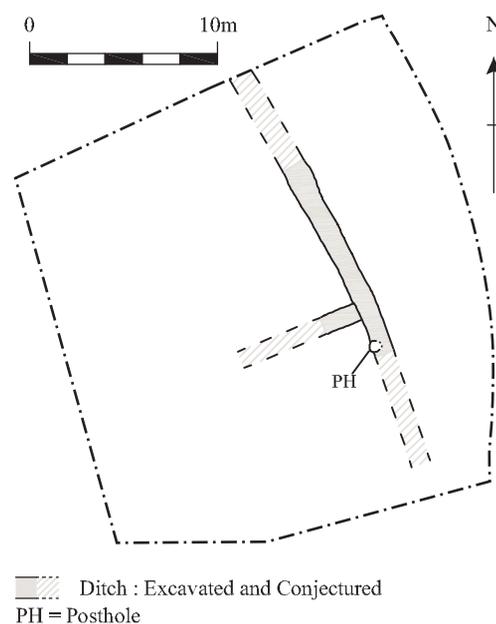


Fig 2. Medieval ditches

a larger plot. No activity either relating to the market or suggesting the presence of structures nearby was found.

The ditches were dated to 1170–1350 from the 26 pottery sherds recovered from the accumulative fill in Ditch 1. The assemblage was mainly composed of cooking pots, jars and jugs. South Hertfordshire-type greywares were the most common medieval pottery and are representative of local pottery manufacture across south Hertfordshire and north Middlesex (Blackmore & Pearce, in prep). This fabric, along with coarse London-type ware and its gritty variant, marks the introduction of wheel-thrown technology and glazing in pottery production, whereas previously the locally made wares would have been hand-built. Interesting examples of south Hertfordshire-type greyware include a rare socketed dish or frying pan from Ditch 2. The fragment included a short tubular handle attached over a hole cut just below the rim (Fig 3, a). The rim of the handle is lightly thumbled all around, an unusual feature for such a plain utilitarian form. Ditch 2 also produced jug sherds, one of which had deep double-thumbings running down its length (Fig 3, b). This feature is typical of south Hertfordshire-type greywares and is found throughout the area of production, as well as in London, which

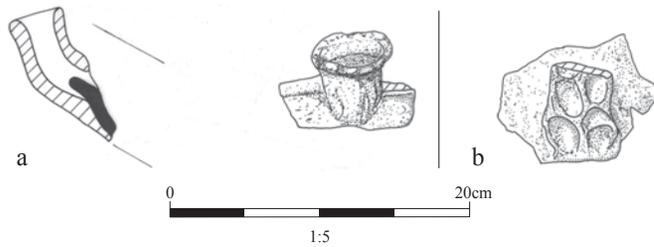


Fig 3. Medieval ceramics

provided a major market for the industry during the 13th and early 14th centuries. The presence of ceramics on the site may be the result of sporadic deposition disturbed by trampling or agricultural activities, corresponding to the use of the site as open ground. A single fragment of fired clay (not illustrated) was recovered from Ditch 1. The fragment may contain a wattle impression, in which case the fragment is accidentally-fired daub. Environmental residues from the ditches revealed remains of charred wood and waterlogged roots; however no seeds or grains were noted in the samples.

Post-medieval

Between the 13th and 16th centuries there was a hiatus in activity on the site. Reoccupation of the site began with occasional postholes and small-scale pitting, probably for the extraction of clay, sand or gravel, and a later garden or reoccupation soil. The main feature relating to

the 16th-century activity was a square-shaped flint structure [158] thought to be a basement or cellar. This structure, located in the north-west corner of the site, represents the only building recorded on site (Figs 4–5). The basement/cellar was backfilled with several dump layers, and individual pits, which included cess and general domestic refuse. Only nine sherds of pottery were recovered from the backfill, including examples of a locally made jug and bowl as well as an imported Cistercian ware cup and a Cologne-Frechen stoneware jug. Environmental sampling of the backfill produced small quantities of charred cereal grains, which included examples of free-threshing wheat (*Triticum aestivum/compactum/turgidum*), hulled barley (*Hordeum vulgare sl*) and possible oat (*Avena* spp). These are likely to have been deposited on site as cereal waste rather than as a result of on-site processing. Examples of fruit remains, including seeds of fig (*Ficus carica*), blackberry/raspberry (*Rubus fruticosus/idaeus*) and elder (*Sambucus nigra*),

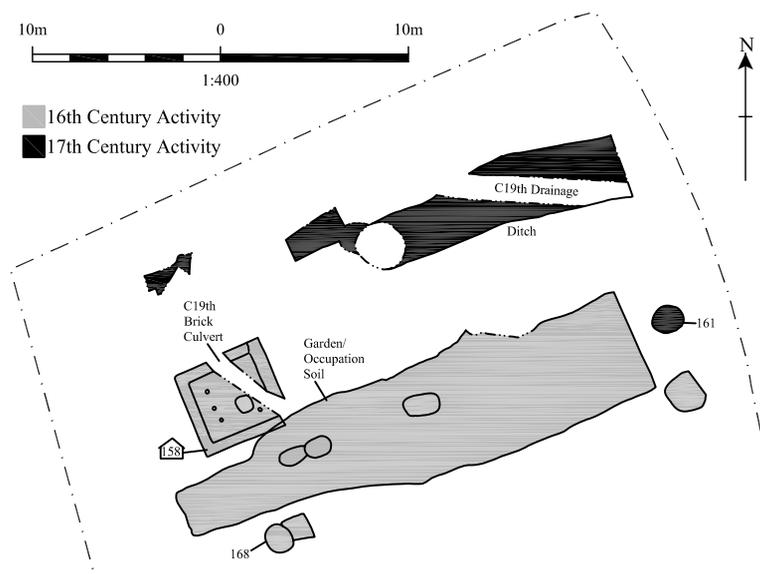


Fig 4. 16th- and 17th-century activity

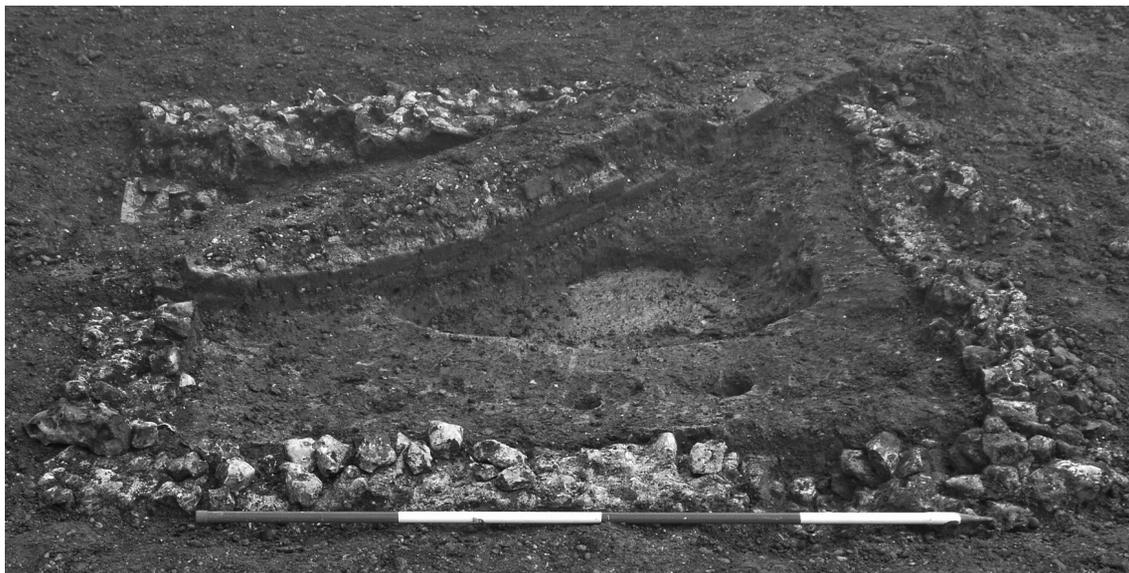


Fig 5. Structure [158]

were also recorded in the backfill deposits. The presence of these seeds, along with sedge seeds (*Carex* spp), indicates the deposition of cess. The small amount of chicken bone recovered from the backfill may represent a single meal. During this period poultry was regarded as ‘poor man’s food’ (Reilly 2007).

The limited pottery assemblage was dominated by red earthenwares. The forms are typical of the 16th century; however the fabric differs from that of the London-area, early post-medieval redware, which is found throughout central London in this period. As such it is termed ‘post-medieval Hertfordshire-type redware’. The main forms identified at Victors Way are bowls, dishes, jugs and cauldrons or pipkins. Examples of both flared and rounded bowls are represented on site. Fragments from a rounded bowl with a broad flanged rim, lightly pinched all round, were recovered from an 18th-century dated pit (Fig 6, A). Two flared bowls or dishes from the same pit have rims with a wide external flange (Fig 6, B & D), while an example from a pit dated 1480–1600 has an externally thickened and bevelled rim with a more triangular profile (Fig 6, C). Part of a deep flared bowl, recovered from a pit within structure [158], has a broad flanged rim with a slightly thickened, rounded edge (Fig 6, E).

Sherds from three jugs recovered from pit [100] include part of a thickened, externally

bevelled (triangular) rim above a straight-sided neck (Fig 6, F), and part of an unglazed strap handle with shallow central groove (Fig 6, G). Also recovered from pit [100] was a fragment of a jar or pipkin. The surviving rim is everted and thickened with an externally bevelled edge and internal lid seating (Fig 6, H). The sherd has a rounded profile, glazed inside and out, with two shallow grooves running around the maximum girth. 16th-century London-area redwares were also found in chronologically mixed contexts dated by later material to the 17th or 18th centuries, especially pit [100]. These included sherds from a cauldron in London-area, early post-medieval redware, glazed inside and out, with a rilled upper body, and an everted, thickened rim (Fig 6, I). Part of a carinated dish in London-area, post-medieval slipped redware with clear glaze is of similar date (Fig 6, J). The everted rim has a broad, bevelled top and a deep, undercut collar, and the vessel is coated inside the base with white slip, up to the mid-point in the profile, with a clear glaze over the entire interior.

The site changed very little during the 17th century. The focus of activity was limited to the north of the site with two pits and the addition of a 0.63m-deep east–west aligned ditch. The ditch is possibly too deep for a simple enclosure ditch; however there was no organic evidence or natural accumulative material present to suggest drainage. It contained fragments of pottery,

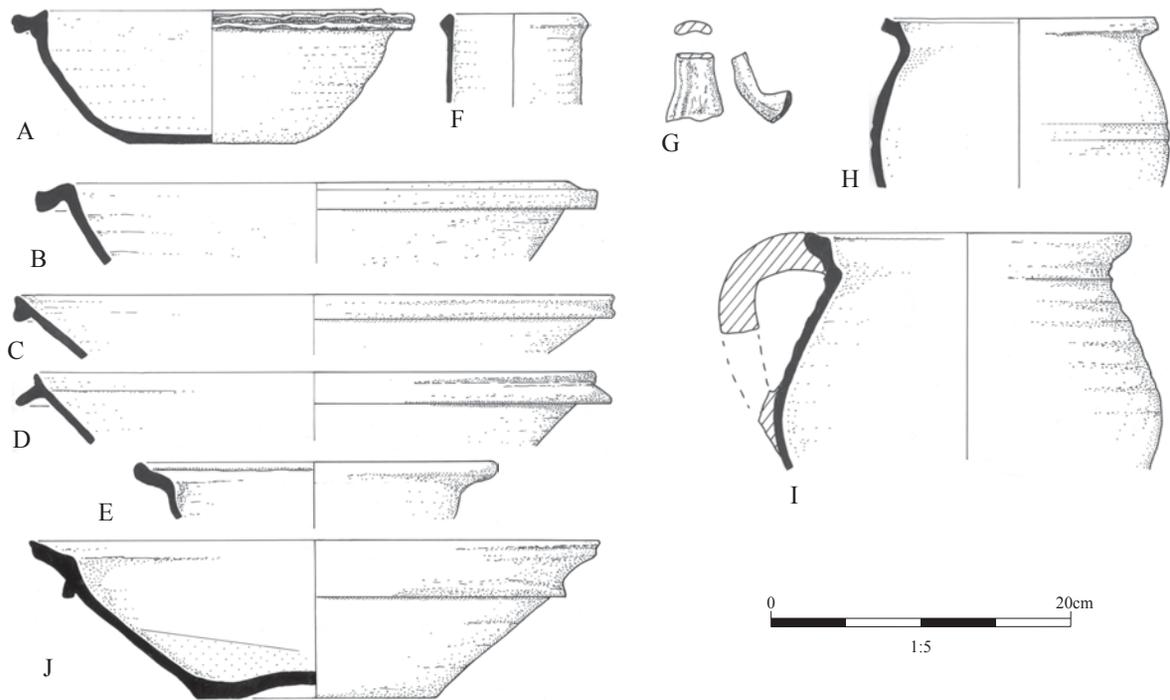


Fig 6. Post-medieval ceramics

including sherds of post-medieval redware, tin glazed ware and imported Chinese porcelain. There is no activity on site relating to structure [158], established in the 16th century. This may suggest that the building was already out of use by the end of the 16th century. Two fragments of a cat jug (not illustrated) recovered from pit [161] signify a higher status of wealth on site. This is a rare piece which would have been regarded as a luxury display item. It is possible that the jug/figurine was originally on display in the Mitre.

Throughout the 18th century there was further small-scale pitting across the site (Fig 7), which was followed in the 19th century by two phases of cultivation soils and the establishment of a pathway (Fig 8). The pathway, which was constructed out of compacted gravel and sand, snaked across the site, forming smaller plots which may have been individually owned or one large plot with smaller internal divisions. The cultivation soil contained fragments of bottle glass, iron nails, pantile, brick and wall plaster, along with post-medieval redware, pearlware, post-medieval black-glazed ware and London sourced stoneware. A small assemblage of animal

bone was also recovered, which was identified as sheep/goat- and cow-sized bones. The remains suggest the presence of the meatier parts of the animal.

There was a distinct change in activity during the mid to late 19th century. The path and associated soils were truncated by intensive pitting, dump layers and postholes (Fig 7). The pits appear to have been used solely for the deposition of domestic waste as no industrial waste was recorded. Occasional fragments of peg tiles, pantile, and brick were recovered, along with fragments of animal bone, clay tobacco pipe, iron, lead, and window and bottle glass. Pottery sherds included examples of Surrey-Hampshire border redware, post-medieval redware, creamware, stoneware, yellow ware, earthenware and English porcelain. Environmental residues from a posthole identified very occasional water-logged seeds from blackberry/raspberry (*Rubus fruticosus/idaeus*) and elder (*Sambucus nigra*), suggesting cess was deposited either within the posthole backfill or in close proximity to the posthole.

The pitting activity ceased during the late 19th century when a drainage system was

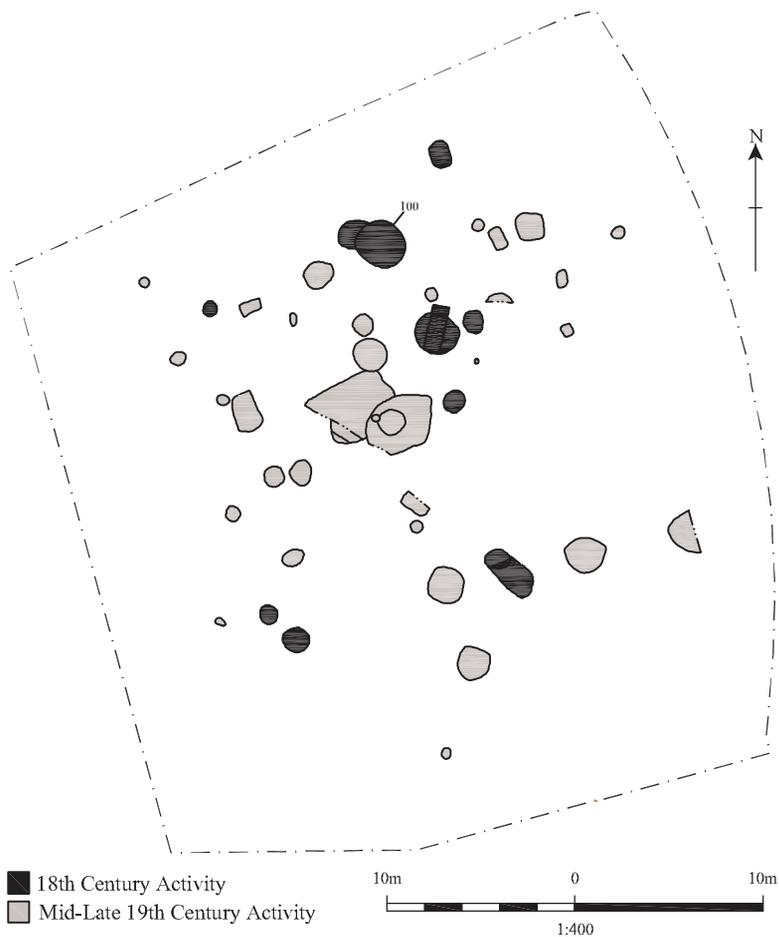


Fig 7. Two phases of pitting activity: 18th century and mid to late 19th century

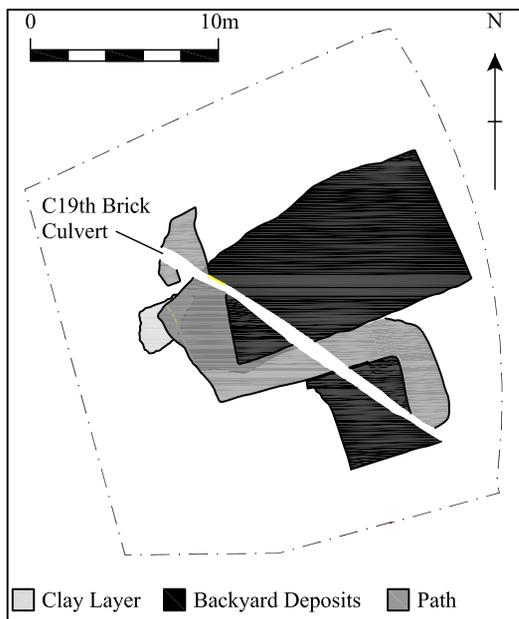


Fig 8. Backyard deposits: mid-19th-century activity

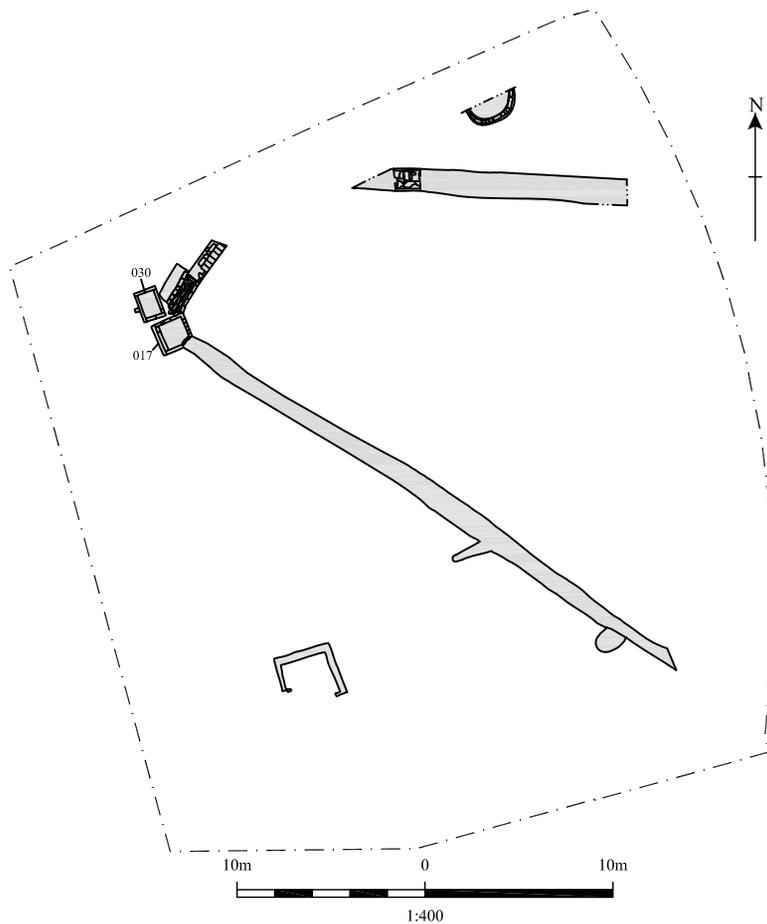


Fig 9. 19th-century drainage

established (Fig 9). The system consisted of a linear culvert, a truncated box-drain, a linear ditch, and one circular and two rectangular-shaped soakaways. The bricks dated to 1850–1950 and are likely to have been produced locally. One brick recovered from the circular soakaway was identified as being produced at the Barnet Gate Brick Works, which is shown on the Ordnance Survey map of 1896. The backfill of the rectangular soakaways contained domestic waste including a large assemblage of pottery. Soakaway [030] contained 43 sherds of pottery dating to 1807–1850. Soakaway [017] contained environmental data, including free-threshing wheat (*Triticum aestivum/compactum/turgidum*) and hulled barley (*Hordeum vulgare sl*), seeds of stinging nettle (*Urtica dioica*) and sedge (*Carex* spp), along with a mineralised fragment of grape pip (*Vitis vinifera*) and waterlogged seeds of fig (*Ficus carica*), raspberry (*Rubus cf idaeus*), blackberry/raspberry (*Rubus fruticosus/idaeus*)

and elder (*Sambucus nigra*). The presence of fruit remains and sedge seeds suggests disposal of human waste. The occurrence of fig and grape remains, which were less common outside of London (Giorgi 1997, 203), is a mark of relative status. The drains and the soakaways are likely to relate to the Mitre, an establishment which would have been able to obtain sought-after luxuries for guests.

20th-century activity on site was restricted to three pits, a ceramic pipe, a modern foundation trench, and a large sub-circular well/water tank/soakaway. The latter was constructed of red brick with a concrete capping roof.

CONCLUSIONS

Medieval

There is little archaeological evidence in Barnet that relates to the early origins of the town. The

local population would have been predominately agriculturally based and is likely to have been widely dispersed. The archaeological evidence found at Victors Way expands our knowledge of medieval Barnet as it demonstrates evidence for land management and individual ownership/plot division during the 12th to 14th centuries. The ditches recorded on site and the lack of any building material suggest that the area was still undeveloped and was used as agricultural or pasture land. The only finds recovered from the medieval period were the single fragment of daub and the small assemblage of animal bone, and sherds of domestic pottery. The pottery suggests a trend towards south Hertfordshire and north Middlesex potteries and that these local potteries would have provided the bulk of the household requirements.

Post-medieval

There is a distinct lack of evidence on site for the period between the 12th and 16th centuries. This suggests that the local area, used as open pasture, remained unaltered or abandoned until the 16th century when activity returns to the site. Occupation of the site in the 16th century may reflect the expansion and growth of Barnet, relating to the establishment of the Annual Fair and the development of Tudor housing and inns. The deposition of garden or reoccupation soil suggests a change in the use of the site from occasional domestic refuse pitting, to a planned and laid out soil in the form of a solitary plot. The positioning of the plot (*ie* east-west) suggests a direct relationship with the High Street. The exact function of structure [158] remains unclear. There was no evidence of any steps constructed in flint or timber within the structure, though this does not discount its use as a basement or cellar. The artefactual remains dating to this period suggest that the local population was purchasing local wares, with less demand for London wares and imported pottery. All fragments are from standard domestic households with no suggestion of high status. Environmental residues and animal bone remains on site demonstrate the deposition of food waste and cess and the food waste is suggestive of a typical diet of meat and fruit. The inclusion of chicken within the remains and the lack of exotic fruit or delicacies recovered would seem to indicate a poorer household.

Development of the site in the 17th century

was limited. Only three features were dated to this period and it is worth noting that none of these features impacted on the land management or pitting of the previous century. This may suggest that there was no access to that particular part of the site for activity or that the 17th-century activity was a continuation of the same land management scheme. There appears to be a slight shift in the status of the artefacts deposited on site during the 17th century. The pottery sherds are still predominately local; however there are more examples of London based wares, which may indicate a decline in the local potteries or the desire for the more popular fabrics predominately used in London. The occurrence of more London based goods and higher status products, such as the cat jug, is unsurprising considering the popularity of Barnet's market, an ideal location for the promotion of ceramic goods.

The varied activity on site during the 18th to 19th centuries suggests a constantly changing environment, possibly echoing the changes and demands of the town. The relatively short-lived use of the path and garden/yard soils suggests that (during the mid-19th century) the site was organised and functional. Its proximity to the Mitre suggests that they are related and may represent a period of the Mitre's expansion. The area may have been the location of stables, as it is known that the Mitre housed coaches and had enough stable room for 100 horses (London Borough of Barnet 2007). Perhaps the path represents this phase in the Mitre's history. The change in land use back to general pitting by the late 19th century suggests that the function or purpose for the pathway no longer existed; this would have allowed the return of refuse deposition at an increased rate. If the land had been used for temporary stabling and coach housing associated with the Mitre, the return of refuse pitting might suggest that the demand for such facilities declined. The establishment of larger and more centralised markets in London shifted the focus of the cattle trade away from Barnet, and with it the human and bovine traffic. This would have had a dramatic impact on Barnet. It was not until the arrival of the railway in 1850 that Barnet became established as a dormitory town for commuters.

The ceramics recovered from the site are common to other sites excavated in and around Greater London and reflect trends and popular designs of the 18th to 19th centuries. The

assemblage recovered represents inexpensive wares that were at the lower end of the market, suggesting that the population depositing their waste on site were from the lower classes. This is echoed by the lack of imports on site as well as the absence of elaborately decorated or unusual vessels which may indicate wealth. This contrasts with the environmental data, where the occurrence of 'exotic' fruits, including fig and grape, from this period suggests a relatively high status population. It is possible that the soakaways and culverts relate to the Mitre and that it is in this establishment that the 'exotic' fruits were consumed. This may account for the differences in wealth, as the refuse pitting could have been from the local population whilst the inn could have catered for travellers of a higher status.

There is noticeably less activity on site during the modern period. This is possibly due to the reduction in size of the Mitre as it became a public house rather than a coaching house. This reduced activity can also be attributed to the establishment of side streets leading off from the High Street, standardised development and occupation of the High Street, and the later addition of a car park over the entire area.

ACKNOWLEDGEMENTS

The author and AOC Archaeology Group would like to thank Mitchell Price for commissioning and generously funding the excavation analysis and publication. Special thanks are due to Kim Stabler, archaeological advisor to the London Borough of Barnet, for her advice and support during the fieldwork and the post-excavation analysis. The site was supervised by the author. The author would like to thank the excavation team: Tom Collie, Dan Eddisford, Ken Bazley, Chris Clarke, Anna Nunz, Shane Maher, John Brown, Helen Robertson and Dave Harris. Thanks are also due to the Museum of London specialists for their contributions: Jacqui Pearce, Kevin Reilly, Ian Betts, Kate Roberts, Tony Grey and Nicola Powell. The site was surveyed, and site drawings produced, by Jonathan Moller. Finds illustration was by Les Capon. The site and post-excavation work were managed by Ron Humphrey and Melissa Melikian.

BIBLIOGRAPHY

- BLACKMORE & PEARCE (in prep), L Blackmore & J Pearce *Medieval Coarsewares of the London Area. A Dated Type-series of London Medieval Pottery Part 5: Shelly-sandy Ware and the Greyware Industries* MoLAS monograph
- BRITISH GEOLOGICAL SURVEY (1994), *Sheet 256 North London*
- GEAR (1987), G Gear 'In the beginning' in W Gelder (ed) *Historic Barnet* Barnet and District Local History Society, 7–9
- GIORGI (1997), J Giorgi 'Diet in late medieval and early modern London: the archaeobotanical evidence' in D Gaimster & P Stamper (eds) *The Age of Transition. The Archaeology of English Culture 1400–1600* Oxbow monograph 98, 197–213
- GLSMR (2007), Greater London Sites and Monuments Record 2007
- GOVER (1938), J E B Gover *et al The Place Names of Hertfordshire* English Place Names Society Vol 15
- JOLLIFFE & JONES (1995), G Jolliffe & A Jones *Hertfordshire Inns and Public Houses: an Historical Gazetteer*
- LONDON BOROUGH OF BARNET (2007), Online Archives [online] available from: <http://www.barnet.gov.uk>
- REILLY (2007), K Reilly 'Report on the animal bones from Victors Way, High Barnet' in AOC Archaeology Group *Victors Way High Barnet, London Borough of Barnet. An Archive Report for an Archaeological Excavation*
- RCHME (1910), Royal Commission on the Historical Monuments of England *An Inventory of the Monuments of Hertfordshire*
- THOMPSON *et al* (1998), A Thompson, A Westman & T Dyson (eds) *Archaeology in Greater London 1965–90: a Guide to Records of Excavations by the Museum of London*
- VICTORIA COUNTY HISTORY (1908), VCH A *History of the County of Hertford: Volume 2*, 329–37
- WALKER (1987), R Walker 'Chipping Barnet through the centuries: traveller's town' in W Gelder (ed) *Historic Barnet* Barnet and District Local History Society, 9–13
- WEINREB & HIBBERT (1983), B Weinreb & C Hibbert *The London Encyclopaedia*
- WISE (1987), B Wise 'Barnet inns and alehouses' in W Gelder (ed) *Historic Barnet* Barnet and District Local History Society, 22–30

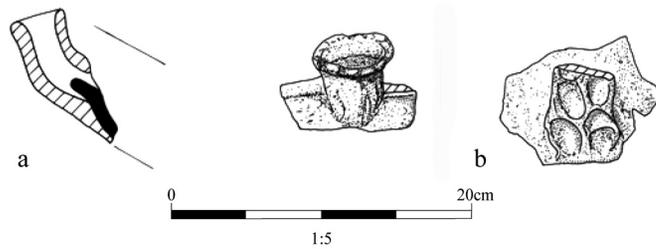


Fig 3. Medieval ceramics

provided a major market for the industry during the 13th and early 14th centuries. The presence of ceramics on the site may be the result of sporadic deposition disturbed by trampling or agricultural activities, corresponding to the use of the site as open ground. A single fragment of fired clay (not illustrated) was recovered from Ditch 1. The fragment may contain a wattle impression, in which case the fragment is accidentally-fired daub. Environmental residues from the ditches revealed remains of charred wood and waterlogged roots; however no seeds or grains were noted in the samples.

Post-medieval

Between the 13th and 16th centuries there was a hiatus in activity on the site. Reoccupation of the site began with occasional postholes and small-scale pitting, probably for the extraction of clay, sand or gravel, and a later garden or reoccupation soil. The main feature relating to

the 16th-century activity was a square-shaped flint structure [158] thought to be a basement or cellar. This structure, located in the north-west corner of the site, represents the only building recorded on site (Figs 4–5). The basement/cellar was backfilled with several dump layers, and individual pits, which included cess and general domestic refuse. Only nine sherds of pottery were recovered from the backfill, including examples of a locally made jug and bowl as well as an imported Cistercian ware cup and a Cologne-Frechen stoneware jug. Environmental sampling of the backfill produced small quantities of charred cereal grains, which included examples of free-threshing wheat (*Triticum aestivum/compactum/turgidum*), hulled barley (*Hordeum vulgare sl*) and possible oat (*cf Avena spp*). These are likely to have been deposited on site as cereal waste rather than as a result of on-site processing. Examples of fruit remains, including seeds of fig (*Ficus carica*), blackberry/raspberry (*Rubus fruticosus/idaeus*) and elder (*Sambucus nigra*),

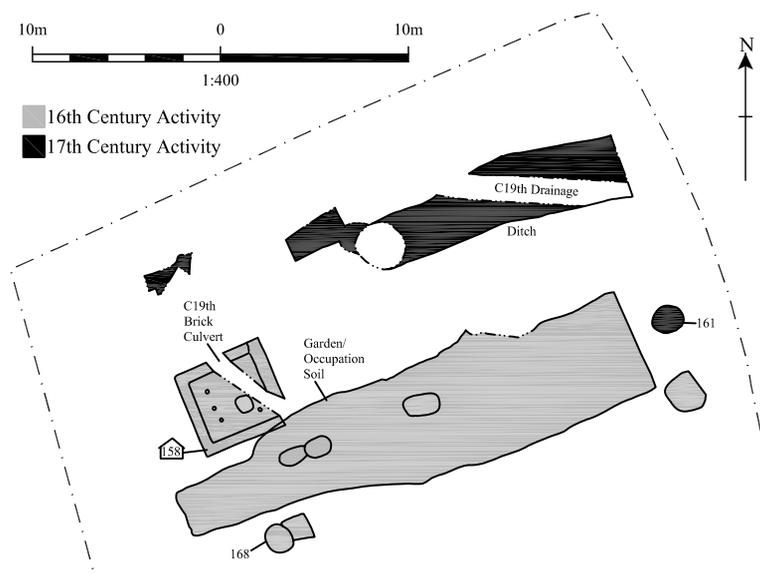


Fig 4. 16th- and 17th-century activity

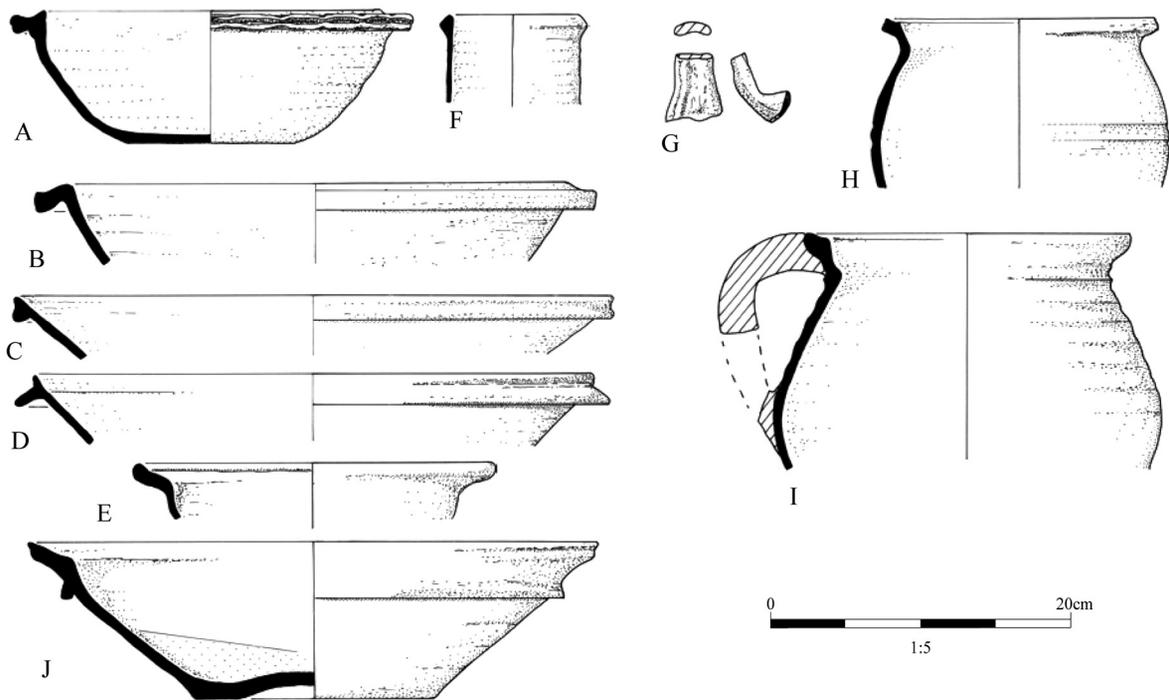


Fig 6. Post-medieval ceramics

including sherds of post-medieval redware, tin glazed ware and imported Chinese porcelain. There is no activity on site relating to structure [158], established in the 16th century. This may suggest that the building was already out of use by the end of the 16th century. Two fragments of a cat jug (not illustrated) recovered from pit [161] signify a higher status of wealth on site. This is a rare piece which would have been regarded as a luxury display item. It is possible that the jug/figurine was originally on display in the Mitre.

Throughout the 18th century there was further small-scale pitting across the site (Fig 7), which was followed in the 19th century by two phases of cultivation soils and the establishment of a pathway (Fig 8). The pathway, which was constructed out of compacted gravel and sand, snaked across the site, forming smaller plots which may have been individually owned or one large plot with smaller internal divisions. The cultivation soil contained fragments of bottle glass, iron nails, pantile, brick and wall plaster, along with post-medieval redware, pearlware, post-medieval black-glazed ware and London sourced stoneware. A small assemblage of animal

bone was also recovered, which was identified as sheep/goat- and cow-sized bones. The remains suggest the presence of the meatier parts of the animal.

There was a distinct change in activity during the mid to late 19th century. The path and associated soils were truncated by intensive pitting, dump layers and postholes (Fig 7). The pits appear to have been used solely for the deposition of domestic waste as no industrial waste was recorded. Occasional fragments of peg tiles, pantile, and brick were recovered, along with fragments of animal bone, clay tobacco pipe, iron, lead, and window and bottle glass. Pottery sherds included examples of Surrey-Hampshire border redware, post-medieval redware, creamware, stoneware, yellow ware, earthenware and English porcelain. Environmental residues from a posthole identified very occasional water-logged seeds from blackberry/raspberry (*Rubus fruticosus/idaeus*) and elder (*Sambucus nigra*), suggesting cess was deposited either within the posthole backfill or in close proximity to the posthole.

The pitting activity ceased during the late 19th century when a drainage system was

MOSELLE PLACE: FROM A HIGH STATUS MEDIEVAL FARMHOUSE TO A GEORGIAN HOUSE

Melissa Melikian

With contributions by Tony Howe and Terence Paul Smith

SUMMARY

Following an evaluation in December 1998, an archaeological excavation was undertaken in April 1999 at Moselle Place, Tottenham, by AOC Archaeology Group, in advance of a housing development. The archaeological investigations revealed the remains of a manor house known as Crook's Farm, which was found to have begun life as a small-scale farmhouse, constructed in the late 15th or early 16th century. Crook's Farm was first recorded on the Dorset Survey Map of c.1619 as belonging to Sir Edward Barkham who became Lord Mayor of London in 1622. The early house was probably timber-framed with chalk-rubble foundations, and ragstone and brick ground walls. Considerable alterations were made to the house during the 17th century, including the addition of a substantial new wing to the south, which contained a cellar and three hearths/fireplaces. Of particular interest was the recovery of a large quantity of moulded plaster, discarded in the remains of the cellar. This material, originating from a decorated fretted ceiling, dates to the late 16th to early 17th century and comes from a decorative scheme of surprisingly high quality, suggesting that the house was of considerably high status. Following the demolition of the house, in the mid to late 18th century, a Georgian mansion house was constructed, known as White Hall. The mansion house was a Palladian style villa with associated landscaped gardens and a large ornamental pond. By 1864 the pond had been infilled and most of the grounds were covered by terraced housing fronting Moselle Street. A portion of the site was still used as gardens and open space. The property was still standing, although much altered, in 1913, but the mansion house was demolished at some point between 1935 and 1961.

INTRODUCTION

Moselle Place (Fig 1) is within the London Borough of Haringey (National Grid Reference TQ 3384 9134). The site is a rectangular plot of land, directly bordered by William Street to the west, Moselle Place to the south, Tottenham High Road to the east, and residential flats which front White Hart Lane to the north. The site is located immediately west of the River Lea Valley, upon Kempton Park Gravels (drift geology) overlying London Clay (solid geology).

Planning consent was granted by the London Borough of Haringey for the development of the site for residential purposes, subject to a number of conditions. To fulfil the archaeological condition, in accordance with Planning and Policy Guidance (PPG) 16 (DoE 1990), a programme of investigation was implemented to assess the survival of the archaeological remains. Following recommendations by English Heritage, an archaeological evaluation of the site was undertaken in December 1998 (AOC Archaeology Group 1999a). The evaluation identified foundations for several walls on a variety of alignments and constructed in differing manners, which appeared to belong to separate buildings. Due to the nature of the remains encountered, it was considered appropriate that measures be taken to mitigate the impact of the development on the archaeological remains. A Written Scheme of Investigation (AOC Archaeology Group 1999b), for preservation by record of those parts of the site that would be removed by the development, was designed in

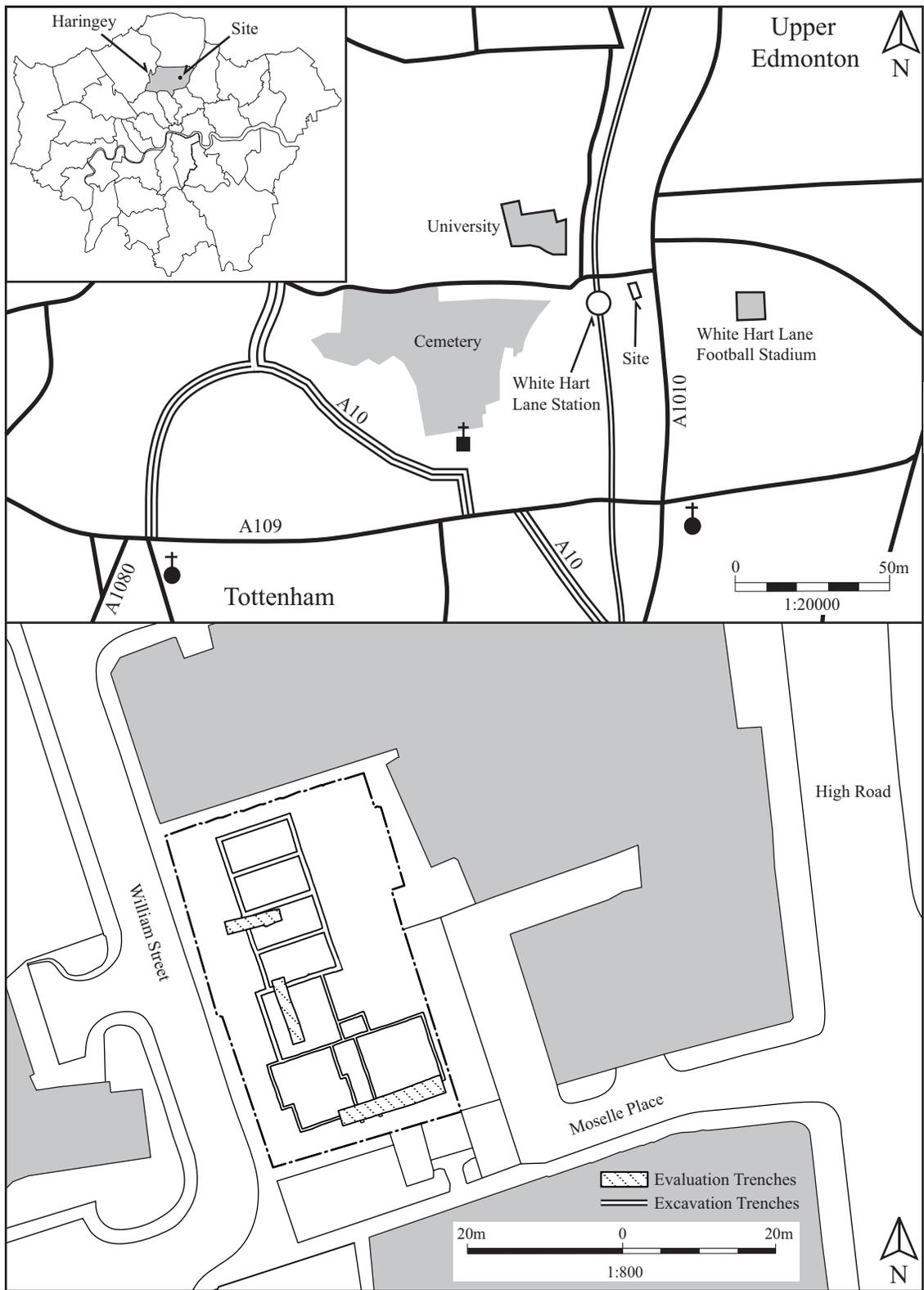


Fig 1. Site location

accordance with the Guidance Brief issued by English Heritage and with the agreement of the applicant. The design of strip foundations for the proposed development was such that only 10% of the total area of the site was under threat of removal. Accordingly, excavation was to be limited to the areas of the foundations, to minimise the disturbance to the archaeological remains (Fig 1).

The archaeological fieldwork has been archived at the Museum of London under site code MSP98. What follows is a synthesised report integrating the specialist appendices. The full archive can be viewed by prior arrangement at the London Archaeological Archive Research Centre (LAARC).

HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Little is known about the early origins of Tottenham. Prior to the Norman invasion, Tottenham was in the administrative division of the Hundred of Edmonton. The place-name of Tottenham suggests it has Saxon origins. It is described in the Domesday Book in 1086 as *Totta's Ham* (VCH 1976, 313), which could translate as 'the homestead of Tote' or 'Tote's people'. It is thought that the Saxon settlement bordered the Roman road, Ermine Street, which runs from London to Lincoln, skirting the Lea Marshes along the line of the present day Tottenham High Road, which is situated immediately to the east of the site (Murray 1993, 7). The Domesday Book states that the Lord of the Manor of Tottenham at this time was *Waltheof*, the Earl of Northumberland (Murray 1993, 10). Tottenham consisted of *c.*872 acres of common land and pasture and heavily wooded areas. Much of the area surrounding Tottenham would not have been suitable for cultivation, but the rich marshes close to the River Lea would have been suitable for farming (Murray 1993, 7).

Medieval settlement developed along the High Road, the area of Tottenham Hale and a number of Greens, *eg* Wood Green, Page Green and Duckett's Green (VCH 1976, 313). Documentary records indicate that there was a manor house in Tottenham in 1254, probably on the site of the present day Bruce Castle. Tottenham was divided into seven lordships at this time (Weinreb & Hibbert 1983, 893). Later two more manor houses were built: Tottenham Park along White Hart Lane and

Mountpleasant House near Philip Lane (Protz 1998, 5). The area flourished as people passed through on the London to Lincoln road. The site lies towards the southern extent of the Tudor ribbon development along the High Road, running south from Lower Edmonton. By 1600 Tottenham had gained a reputation as a prosperous area (Weinreb & Hibbert 1983, 893) and the forest had been cleared to such a degree that the only surviving wooded area was that of Wood Green (Weinreb & Hibbert 1983, 893). The Dorset Survey map — named so because the Earl of Dorset surveyed the area when he acquired the manor of Tottenham — of *c.*1619 (Fig 2) shows housing fronting the High Road. By the 18th century Tottenham had become a fashionable village, while local farms grew crops to supply London markets.

The earliest cartographic evidence for the site is the Dorset Survey map, which indicates that by the early 17th century the site was within the area occupied by Crook's Farm, belonging to Edward Barkham (Fig 2). The grounds extended from White House Lane southwards along the west



Fig 2. Dorset Survey Map of *c.*1619 (note orientation)

side of the High Road, and were bounded on the east by the River Moselle (VCH 1976, 332). The River Moselle derives from five tributaries running off Highgate and Muswell Hill. It joins the River Lea in South Tottenham near the Markfield Recreation Ground (Pinching & Dell 2005, 61). In 1619 Edward Barkham held the largest freehold estate in the area; he was an alderman of London and held 174 acres in addition to 65 acres of copyhold land (VCH 1976, 332). It is not known whether he actually resided at the property. In 1621–22 he became Lord Mayor of London and was knighted by James I in 1622.

Crook's or Croke's Farm is thought to have been named after John Croke, an alderman who held land in Tottenham at the end of the 15th century. At some point prior to 1619, Lionel Dalby, son of William Dalby, sold the property, with other land, to Edward Barkham (VCH 1976, 332). The award for the 1619 survey states Crook's Farm consisted of:

One Message Tenement or mansion house called Crooks Farme situate at the southeast corner of ye Vicarage lane together with ye Barnes Stables Orchard Garden and backside to ye same belonging containing in all One Close of pasture or meadow ground adjoining to ye said Message on ye north parte and to the streete or high way leading from Ware towards London on the east parte ...

In 1634 the land passed to Edward Barkham's younger son Robert Barkham of Wainfleet, St Mary, Lincs. The land was then acquired by his eldest brother, Sir Edward Barkham, and in 1664 the property was assessed as containing 21 hearths — the second highest quota in the Edmonton Hundred (VCH 1976, 315, 332). Edward had been made a baronet in 1623. The property continued to be passed down through the Barkham family until 1728, when the main property was acquired by Ephraim Beauchamp. His son Thomas married Anne Proctor and took the name Beauchamp-Proctor on becoming a baronet in 1744. It is thought that the house was rebuilt around this time and was certainly known as White Hall for some time prior to 1790 when the estate was sold.

A Mr Abrahams from Houndsditch bought the mansion. He converted part of the grounds into a tanning yard and built several barns, store houses, sheds, and additional buildings

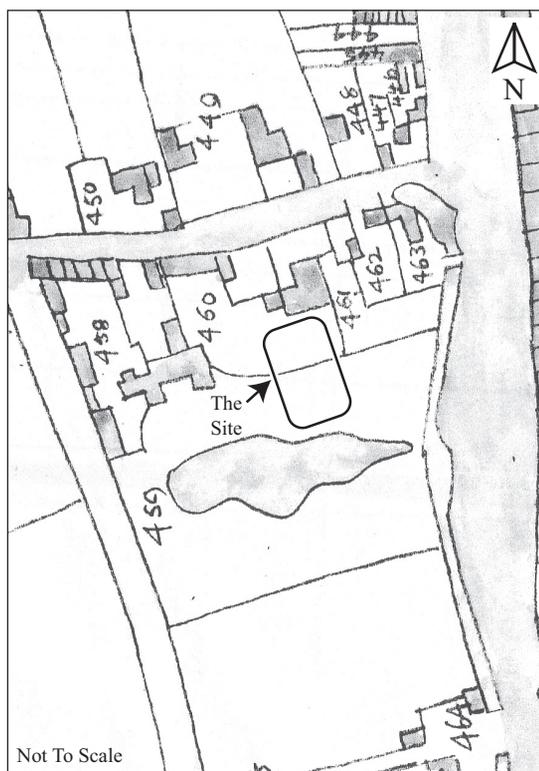


Fig 3. *The Parish Map of 1798*

(Robinson 1840, 124). He became insolvent and it appears some of the buildings were pulled down, the materials sold, and the land sold on (Robinson 1840, 124). The land was bought by Mr Andrews. The Parish Map of 1798 (Fig 3) shows the site at this time. The award for the survey states that the land was owned by Mr Andrews and consists of 'House, Yards, and Offices (458), Garden (459) and Four Acres (460)'. White Hall is shown as being 'C' shaped with an additional wing to the west. An additional building appears to be abutting the property at the rear and the entrance from White Hart Lane is situated to the north. White Hall then passed to Henry Hunt in 1820, then to William May Simmonds, and in 1827 to Charles Soames. Robinson's book on Tottenham was published in 1840 when the land was owned by Soames. The house (Fig 4) is described as brick-built, covered with cement, fronting grounds with a large lake supplied by piped water (Robinson 1840, 125). The illustration shows a three-storey Palladian style villa with a central pediment. The entrance for White Hall was formerly on White

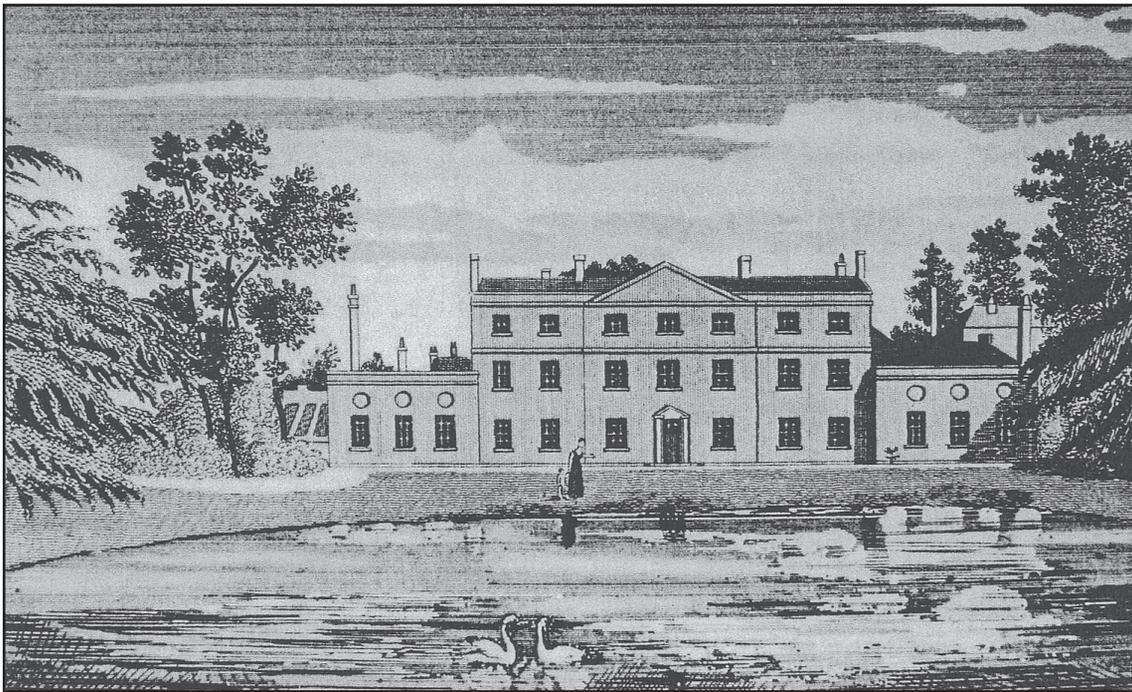


Fig 4. White Hall 1840 (facing north) (Robinson 1840)

Hart Lane, but Soames erected a bridge over the River Moselle on the west side of the High Road, divided a barn into two neat lodges, and made this the entrance (Robinson 1840, 125). The Tithe Map of 1844 (Fig 5) also states that Charles Soames was the landowner and occupier. The land consisted of 'Pleasure Ground Paddock, Buildings, Garden (1001), the Lake (1002), two lodges, plantation and garden (1003) and a Serpentine Walk (1004)'. By this time the footprint of the building was much altered; the west wing appears to have been demolished and the east wing extended.

The house gave its name to Whitehall Street by the 1860s. By 1864 the lake had been infilled and most of the grounds were covered by terraced housing fronting Moselle Street. A portion of the site was still used as gardens and open space. Although much altered, the property was still standing in 1913 (Fisk 1913, 98). The land use remained unchanged in 1935. An eye-witness watched the remaining part of White Hall being demolished in 1961 (W Martin pers comm). Some time in the second half of

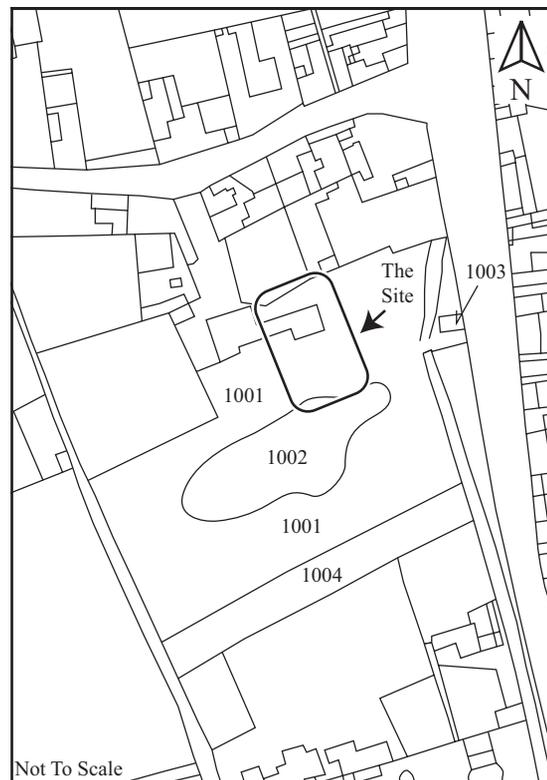


Fig 5. Based on the Tithe Map of 1844

the 20th century the site was developed as an electricity sub-station, and garages were built.

THE ARCHAEOLOGICAL EVIDENCE

The excavation of strip foundations posed a number of problems for the recovery and interpretation of archaeological data. The principal issue was that stratigraphic correlation across the site was extremely difficult to implement. Local stratigraphic control could be maintained within a particular trench, but correlation between deposits and structures in geographically separate trenches was rendered very difficult because of the relative complexity of the stratigraphy, coupled with the piecemeal nature of the excavated areas.

Period 1: The Natural Deposits

Open Area 1

The underlying natural deposit consisted of an orangey-brown clay/gravel mix. The layer was not homogeneous and some patches predominantly composed of clay were encountered, particularly towards the southern area of the site. The deposit was encountered across the site, generally sloping from north, at 11.71m OD, to south, 10.62m OD. The mixed nature of this material suggested that it would not have been suitable for quarrying for use either in the production of bricks or pottery or for use as gravel aggregate in building construction.

Overlying the gravel across much of the site was a deposit of firm grey silty clay. Undulations in the gravel resulted in this layer being over 0.50m thick in some areas, although, generally, the deposit formed a layer approximately 0.30m deep. This clay was itself overlain in some areas by a deposit of mottled grey/orange brickearth subsoil, although this material was not encountered with the same frequency. Both these deposits were largely absent from the south-eastern area of the site, due to later horizontal truncation (Period 5).

Period 2: c.1150–c.1500

Open Area 2

Medieval ploughsoil

These layers consisted of a dark brown, firm silty clay deposit, which was probably the long-compacted remains of an agricultural plough-

soil. This layer was generally found to be 0.15m deep, although it varied across the site from 0.10–0.33m deep. Pottery fragments were retrieved from many of the areas where this material was identified and provided a general date range for the deposit of c.1150–1500. The majority of the fragments were small and heavily abraded, probably indicating that they were deposited during manuring or night soiling episodes.

Period 3: c.1500–c.1760 (Fig 6)

Building 1

The first building on the site was Crook's Farm. Although an exact date for the construction of the first farmhouse is uncertain, analysis of the ceramic building material (CBM) has provided a generalised date range from the late 15th to early 16th century.

Initial construction

This first building was constructed on fairly robust chalk rubble and mortar foundations, many of which incorporated the CBM fragments used for dating purposes. The building is likely to have been timber-framed with the timber elements built upon ragstone and brick ground walls. The building appears to be on a north-south alignment, respecting the road alignments to the north and east. The foundation trenches were excavated from the level of the ploughsoil (Period 2), or upon a pre-construction levelling layer. These levelling deposits were derived from redeposited natural clays or the local ploughsoil and were dated by CBM to the late 15th to early 16th century. In some excavated sections the areas between the chalk foundations contained no evidence of the ploughsoil of Period 2 and it is presumed that this material was deliberately removed during the construction process, possibly to provide a more consolidated building surface. Early construction debris deposits, dated by pottery to 1480–1650, are thought to be associated with the first phase of construction.

It is difficult to ascertain the exact size and orientation of the building, due to the nature of the investigation, but it is clear that a number of rooms existed within the confines of the building. Even given the limited area of the building exposed, it is possible to define distinct areas of internal and external space. A consolidated, 30–120mm thick, metallised gravel surface was recorded in those areas external to the building, both to the front and rear of the property, and

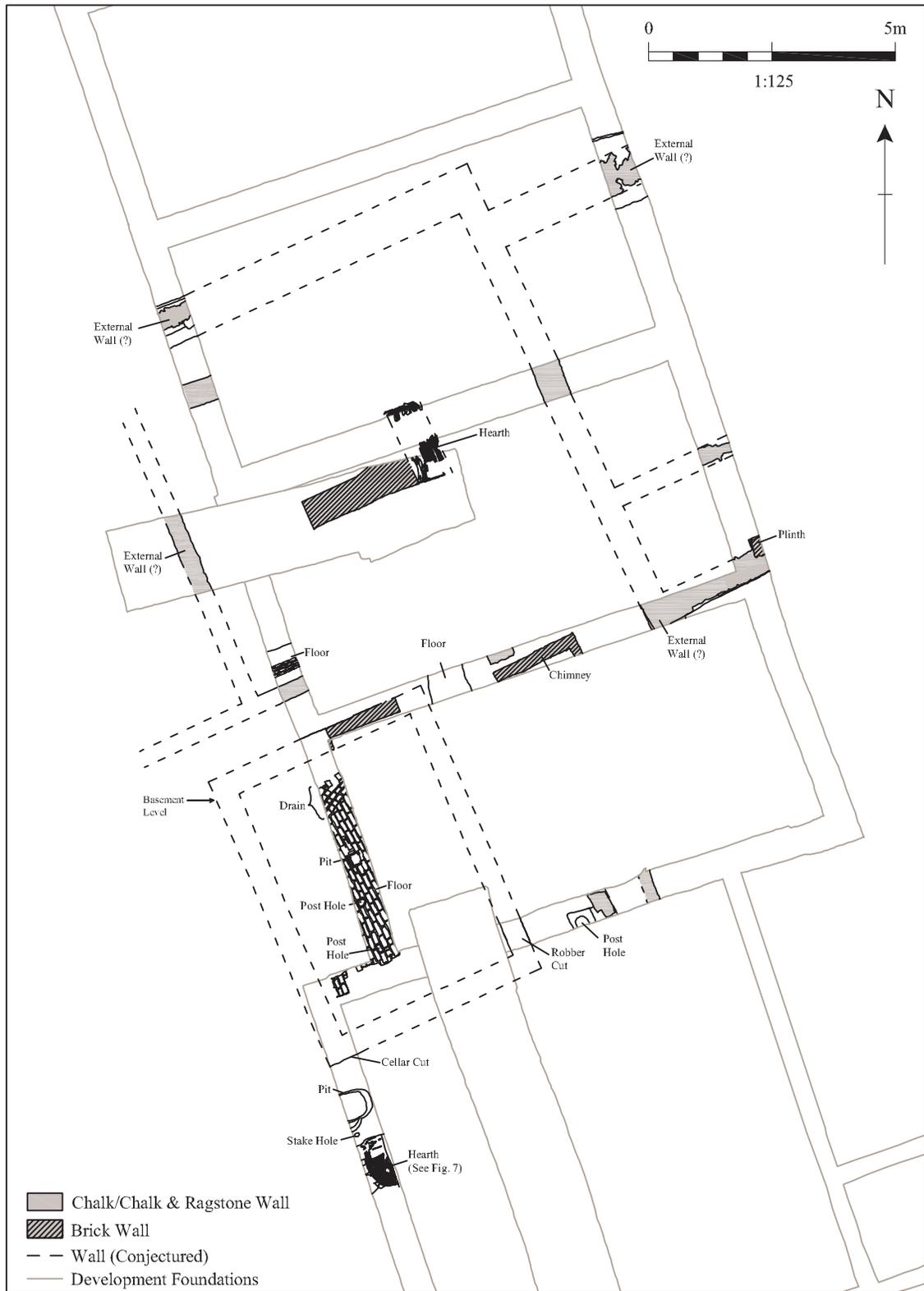


Fig 6. Period 3

in some instances butted up to the foundations themselves. Although only seen in section, this layer extended at least 6.6m to the north of what is presumed to be the front wall of the property, where it continued into the northern section. The layer became thinner closer to the building, which could be an indication of wear. No dating evidence was recovered from this layer; however, its stratigraphic position indicates that this material is related to the earliest phase of the building.

Remodelling

In the early part of the 17th century, a substantial southern wing was added to the existing farmhouse. The 1619 map (Fig 2) depicts the farm as two tile-roofed buildings, the southern one with at least two stories, which is indicative of a higher status property. The addition of the southern wing evidently made Crook's Farm an altogether grander residence and this improvement probably coincided with an upturn in the fortunes of the Barkham family when Sir Edward became Lord Mayor of London.

The archaeological sequence identified in this phase consisted of the levelling and demolition of earlier walls, followed by the construction of the new building. The foundations appear to be constructed of chalk with underlying brick and tile hardcore. Other structures associated with this phase of remodelling include a stretcher-bonded brick chimney stack, an east–west internal brick wall, two pitched-tile hearths (Fig 7), a possible fireplace, and a cellar. The construction cut for the cellar was vertically-sided and covered an area of at least 6.77m north–south by 4.6m east–west (31.14m²). The cellar walls were constructed of red brick laid in English bond with lime mortar. Two consecutive brick cellar floors were laid upon a mortar bedding. A north-east to south-west running brick drain was incorporated within the first floor. The brickwork from this floor dates to the late 16th to 17th century. The area was then built up and levelled with a layer of clay and a dump of CBM. Overlying this was a lens of dark silty clay followed by a layer of bedding sand. These layers were sealed by the second brick floor, which was also dated to the late 16th to 17th century. The floor encompassed a gully which protruded into the drainage channel below. The brick floor was cut by several postholes that probably held posts which provided support for the cellar ceiling. It is unclear why two floors were constructed in the



Fig 7. Pitched-tile hearth (depicted in south of Fig 6), facing north. Scale 0.5m

cellar; it may be that there was poor drainage or that the first floor subsided.

Several internal floors were identified that appear to relate to the remodelling of the building and the construction of the southern wing. Respecting the cut for the cellar was a clay dump overlying a rubble and clay bedding surface within a 0.15m deep cut. Unfortunately there was no dating evidence for these deposits. Respecting foundations to the east and the chimney was a 100mm-thick gravel layer overlying a 200mm-thick 'occupation' layer; the latter consisted of black silty clay with occasional CBM flecks and charcoal. Again there was no dating evidence for these deposits. Another undated, possible floor surface, consisting of black friable charcoal and silt, may have been associated with the northern hearth. Flooring of this type appears quite rudimentary for such a high status property but it is feasible that these deposits would have been covered with floorboards. In one area of the site a floor was constructed of late 15th- to early 16th-century bricks oriented east–west and

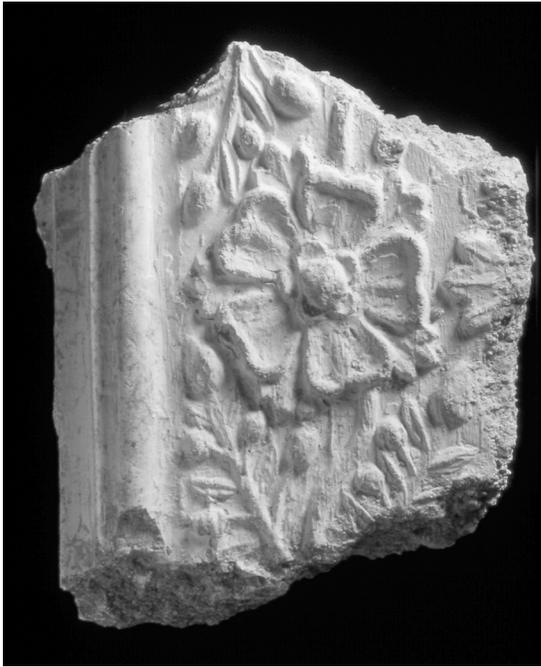


Fig 8. Late 16th/early 17th-century moulded plaster run depicting heraldic rose (P87) (Scale 1:2)

laid upon a chalk foundation. On either side of this floor there was evidence of robbed-out walls, which suggests that this may have been a passage. Evidence of a robbed-out floor respected an internal and external foundation in the northern part of the site.

A large quantity of moulded plaster was discovered in the backfill of a later (Period 4) robber cut within the large cellar (Fig 6). This originates from a relatively high status, decorated, fretted plaster ceiling and coving dating to the late 16th or early 17th century. It is likely that the plasterwork relates to this phase of structural alteration when the southern wing was added. The standard moulding consists of a bead moulding bordering the flat face of a run, with a square quirk and a cavetto moulding on the outer side. The flat faces are decorated with various floral motifs (bugle-like flowers, grapes, heraldic roses), mostly of a running design (Fig 8). Coving decorations consisted of flower bosses and human heads (Fig 9). Fretted ceilings were popular in the late Elizabethan and Jacobean periods. For a much richer effect the salient components, ribs, bosses, or pendants, might be painted and/or gilded. It is thought



Fig 9. Late 16th/early 17th-century moulded plaster bosses (P58, P59, P61 & P62) (Scale 1:4)

that this was the case at Moselle Place as two pieces show paint: a flat section painted brown and pink with a tendril pattern in black (Fig 10) and a piece of cyma recta painted pink (cyma recta is an S-shaped moulding where the upper section is concave and the lower section convex). There was no evidence of gilding on the plasterwork.

Open Area 3

Pitting and postholes

Several pits relating to this period were recorded (not illus). A steep-sided pit with a U-shaped base appears to have been related to the northern hearth. The only find recovered from the fill was a 15th-century copper-alloy token. The token originated from the Low Countries and was inscribed with 'Vive Le Roi'. This may have had a religious significance or could simply be a trade token. In the evaluation phase, a pit, located in Trench 2, measuring 0.64m+ north-south by 1.4m+ east-west by 0.2m deep, contained frequent CBM, dated to 1180–1500,

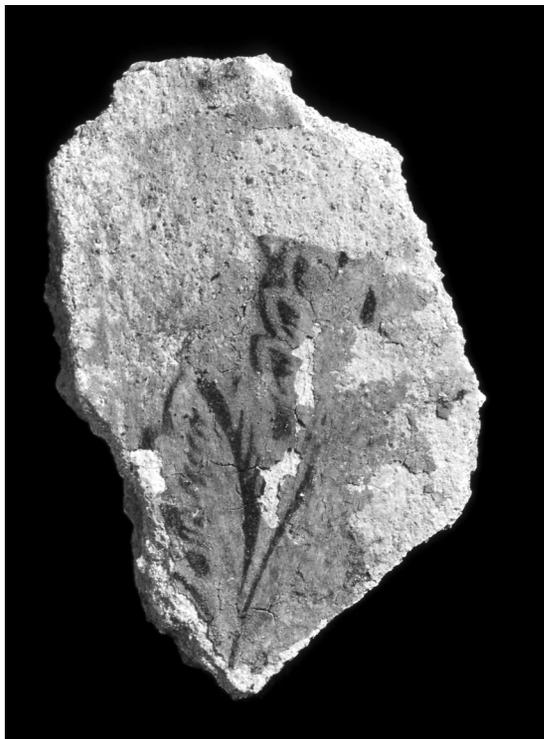


Fig 10. Late 16th/early 17th-century painted plaster (Scale 1:2)

and some mortar. Three other pits of unknown function were undated but were stratigraphically likely to be associated with Period 3. An isolated posthole cut the natural deposits; it measured c.0.46m in diameter and 0.23m deep and had a vertical postpipe. It contained pottery dated to 1480–1650. An isolated stakehole [13/026], measuring c.0.17m in diameter and 0.17m deep, cut the ploughsoil. It was undated but was stratigraphically associated with this period.

Period 4: c.1760–1900 (Fig 11)

Building 2

This period is represented by the systematic demolition of Crook's Farm, robbing of the materials, and the construction of a Georgian mansion house, known as White Hall (Fig 4). The mansion was situated to the north of the site and had a number of associated outbuildings and landscaped gardens with an ornamental pond/lake. The demolition of the original property occurred at some point between 1744 and 1790.

Demolition of Crook's Farm

It seems clear that the demolition episode was not merely an exercise in destruction and levelling, but a well-organised, disciplined removal of the re-useable materials. The demolition backfill of the cellar itself was highly indicative of controlled robbing, being composed almost exclusively of smashed plaster and mortar fragments, ranging in size from the large pieces retained and described below, to something nearer dust — apparent evidence of a concerted effort to clean the brick being recovered from the building of any bonding material. Several 'robber' trenches were identified across the site. These were dated to this period either by their stratigraphic position or through pottery or CBM in the backfill. Demolition layers were identified throughout the site. The nature of these deposits varied across the site; some had noticeable chalk content within their soil matrices, probably originating from the demolition of the earlier chalk foundations of Building 1.

Construction of White Hall

Prior to the construction of the mansion house, a sequence of ground levelling occurred through dumping and 'make-up' layers. There was a lack of pottery recovered from these deposits but the CBM dates to 1500–1800. The

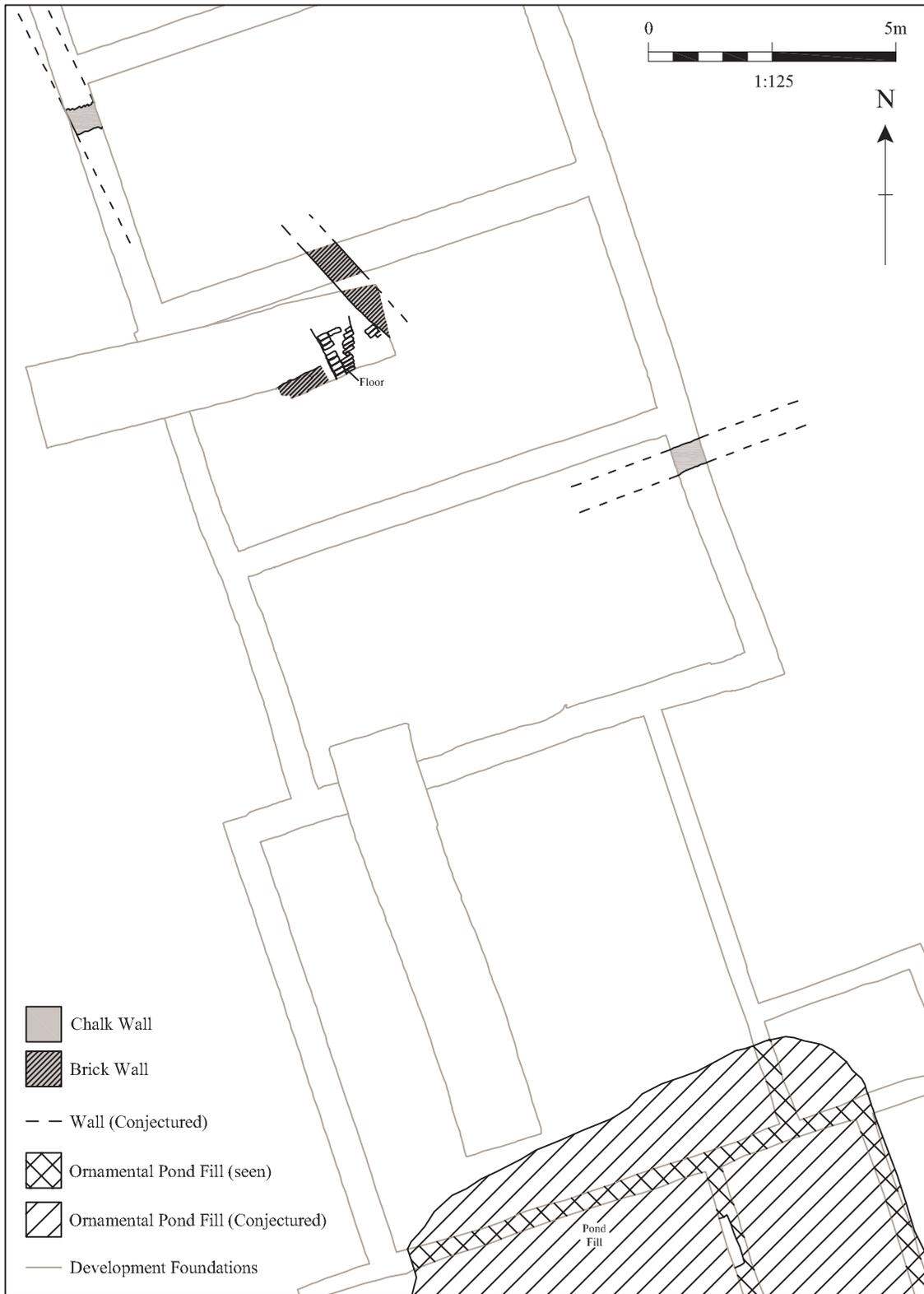


Fig 11. Period 4

structures dating to this period are generally located in the northern portion of the site, which correlates with the cartographic evidence (Fig 5). The building appears to be on a slightly different alignment to Building 1 and is oriented north–west to south–east. Building 2 was constructed of brick and mortar; some of the walls were constructed of reused brick, probably originating from Crook’s Farm. There was evidence for controlled robbing on site, as discussed above, and it is probable that these materials would have been used. One external wall was constructed of brick which was a mixture of types dating to the late 16th–17th century and the 17th and 18th century. A late 18th-century brick floor and two brick soak-aways (not illus) were associated with Building 2.

There was only limited archaeological evidence for the remodelling of Building 2 shown in cartographic sources. The Parish Map of 1798 (Fig 3) shows a different building footprint (located to the west of the approximated site location) to that shown in 1844 (Fig 5). One wall, constructed of brick dating to the late 17th–18th century, contained a George III coin, dating to 1806, in the fill of the construction cut. There were also two sections of wall which were associated with this period of remodelling. The walls contained brick of an earlier date suggesting that the brick had been re-used from the Crook’s Farm building.

Garden and lake

Garden soil from the Georgian mansion house was found in two areas of the site. In both instances the layer immediately overlay the external gravel surface of Period 3. The 0.2–0.35m-thick deposit consisted of a silty clay loam with a high gravel content and CBM dating to 1500–1800. A large pond or lake was identified to the south of the site. The historical maps (Figs 3 and 5) show a large irregular feature to the south of White Hall and the award associated with the 1844 map describes this as a lake. The lake can also be seen in the illustration of 1840 (Fig 4). The overall dimensions of the lake were recorded as 12.7+m by 12.4+m by 2.15+m deep. The sides were at an angle of 45° and the base was slightly concave. The primary organic fill was a black sticky organic clay containing pottery dating to 1500–1800 and a 16th-century drinking glass. Above this were layers of natural silting that contained a relatively large amount of broken, unabraded pottery dating to 1560–

1750. It seems likely that this material represents localised rubbish disposal. The lake is shown on cartographic sources from 1798 to 1844. It had been infilled by 1864.

Open Area 4

Pitting

Four refuse pits are thought to be associated with the occupation of Building 2 (not illus). The largest pit, located at the south of the site, was seen in section only and measured 4.2m in diameter by 1m deep. The pit was filled with successive deposits containing burnt daub, fragments of glass bottles, pottery, CBM, a copper-alloy pin, and finds typical of food refuse (animal bone and cockle, mussel and oyster shells). The CBM and pottery dated to 1580–1900. This is a broad range, but three fragments of glass bottles dating to the late 18th to early 19th century and the percentage of later CBM suggest this pit was in use in Period 4. Also located to the south of the site was a pit containing animal bone, clay pipe, CBM, and pottery dating to 1754–1900, and a pit containing CBM, pottery, animal bone, a corroded piece of iron, and a copper-alloy ornamental fastening. Of particular note was a pantile dating to the 17th–18th century which may be indicative of the type of roofing at Crook’s Farm or White Hall. In the evaluation phase a large rectangular pit was recorded. The fill consisted of mixed deposits containing frequent CBM, occasional pottery, slate, and glass. The CBM was dated to the 16th–18th century. Several small pits of unknown function, with no dating evidence, were assigned to this period.

Open Area 5

Garden plots associated with 19th-century housing

Between 1844 and 1864 (Fig 12), Moselle Street (the east portion later became Moselle Place) was created to the south of the site and a short terrace of six houses was constructed, the gardens of which encompassed approximately half of the present site. These properties had cellars which removed most of the deposits at the south of the site. Towards the northern area of the site, a number of garden soil deposits and pits were identified which have been assigned to this period (not illus). This area appears to have been used for dumping, indicating ‘backyard activity’, with evidence noted for possible hearth clearances, rubbish pitting, and general dumping.

Catalogue No.	Description
55	Small fragment with floral design
56	Part of floral design — apparently grape cluster
57	Part of floral design; lath impression 27mm wide
58	Human head with hat within concave section with scored frame; conjoins P59; <i>cf</i> P61 and P62
59	Human head with hat within concave section with scored frame; conjoins P58; <i>cf</i> P61 and P62
60	Elaborate floral design with leaves and chain of small elements; curved
61	Part of head similar to P62; <i>cf</i> P58/59
62	Human head with hair within concave section with scored frame; <i>cf</i> P58/59
63	Thick curved member — part of boss; scored decoration; <i>cf</i> P65
64	Cavetto with egg-and-dart
64	Small ovolo, quirk and cavetto moulding; lath impressions, one 31mm wide
65	Thick curved member — part of boss; scored decoration; metal fixing rod 7mm diam; <i>cf</i> P63
68	Standard moulding with rosette (overlapping petals) on flat
69	Cyma recta with ?honeysuckle below; pink paint
70	Bead moulding (probably part of standard moulding) and part of floral design
71	Standard moulding; lath impression >40mm
72	Small ovolo, quirk and cavetto moulding
73	Cavetto and egg-and-dart in quirk
74	Standard moulding with floral design on flat
75	Part of floral design; lath impressions
76	Standard moulding, slightly curved, with floral design on flat: small four-petalled flower with stalk and leaves
77	Floral design with leaves, similar to P60; lath impressions 23 and 26mm wide
78	Standard moulding with floral moulding similar to P86 on flat; lath impressions
79	Large floral boss; poor condition; >80mm depth; lath impressions
80	Cyma recta with fillet and cavetto; armature and lath impressions
81	Standard moulding, curved + adjoining straight run
82	Standard moulding with floral moulding on flat
83	Part of floral design with small bosses; lath impressions
84	Standard moulding with floral design on flat: five-petalled heraldic rose with tendrils and buds; lath impressions, one 25mm wide
85	Sunken ovolo moulding
86	2 pieces: (i) part of floral moulding; (ii) flat piece
87	Part of heraldic rose
88	Standard moulding; lath impressions
89	Standard moulding with part of floral moulding on flat
90	Heraldic rose surrounded by overlapping discs — further petals? Conjoins P91
91	Heraldic rose surrounded by overlapping discs — further petals? Conjoins P90
92	Elaborate moulding with pods, similar to P60; also tiny tendrils; lath impressions 23 and 32mm wide
93	Small fragment, apparently with grape cluster
94	Part of ?floral design
95	Standard moulding; lath impression
96	Fragment of floral design with tendrils
97	Fragment of floral design with tendrils
98	Fragment with bead moulding — probably from standard moulding
100	Fragment of floral design with tendrils

Mouldings and ornament

The fragments include several of unrecognisable form but the numbered pieces and some others are mostly recognisable. Most come from runs which would have decorated a fretted ceiling. A *standard moulding* — that is, one which is common to numerous pieces — was recognised and this term has been used, where appropriate, in the database. It consists of a bead moulding bordering the flat face of the run with, on its outer side — that is, on the edge of the run — a square quirk and a cavetto moulding. The flat faces are decorated with various floral motifs, mostly of a running design (Fig 8). These include bugle-like flowers, what appear to be bunches of grapes, heraldic roses — one surrounded by overlapping discs, possibly representing further petals — smaller flowers, and a pod-like element. Often leaves, and in one case buds, are also depicted, as, occasionally, are much finer tendrils. Most of the runs appear to be straight but some show a slight curvature, indicating that both straight and curved runs were employed in the design of the fretted ceiling. This was normal in such ceilings. Other pieces, all fragmentary (P29, P51, P69, P80, and 6 unnumbered fragments), show a cyma recta moulding, in one case with an adjoining fillet and cavetto: it is likely that all the cyma recta pieces were similar. These larger mouldings may have formed part of a coving at the junction of walls and ceiling rather than the edges of fret runs. This may be the case too with three pieces (P35, P64, P73) which have egg-and-dart ornament within a cavetto.

One piece (P79) is a large floral boss, unfortunately in poor condition. A few other pieces are definitely or probably from similar bosses. Two rather crudely formed curved pieces with scored decoration (P53 and P65) may be from bosses of a different form. The bosses would have hung as pendants from the ceiling, either at the intersections of runs or at the centres of the panels defined by them. Also present are some human heads (Fig 9). Pieces P58 and P59 conjoin to form a single (incomplete) piece. The head is modelled in the round and is approximately oval in shape. The eyes are quite wide, the nose has been lost and only a little of the mouth remains. The head is wearing a hat, with, apparently, a side-lock of hair protruding from it on each side. The head is contained within a concave surface which has part of

a frame scored into the plaster. Piece P62 is basically similar but in slightly better condition. The head has hair and no hat; a strange wing-like element protrudes from behind the side-lock on the figure's left (the corresponding right-hand side is missing). There is a ruff or collar around the neck. Again the head is within a concave curve and has a frame partly moulded and partly scored. Piece P61 is a fragment of the lower part of one side of a similar head. The heads are not large, the faces measuring some 75mm long by 70mm broad. It is possible that the heads, against the concave surfaces, decorated a coving at the junction of walls and ceiling, but it is perhaps more probable that they come from an elaborate plaster chimneypiece, like several surviving examples, for instance at Loseley, Surrey (*c.*1565) and at Boston Manor, Brentford, Middx (*c.*1623) (Beard 1975a, pls 5 & 14).

Date

Fretted ceilings using plaster runs like those from Moselle Place were popular, for those who could afford them, in late Elizabethan and Jacobean times. In the early 18th century, Richard Neve observed that 'plaister'd Ceilings are much used in England, beyond all other Countreys' (Newton Abbot 1969, 101). They did indeed become an English speciality, originating in wooden-ribbed ceilings with square, rectangular, and polygonal panels. Once plaster was adopted, ribs could more easily be made sinuous, and circles, ovals, and other curves were added to the rectilinear forms. Sir Henry Wotton (1568–1639) considered 'the graceful fretting of roofs [= ceilings]' to be the chief of the plastic arts (Rowse 1972, 162). It certainly increased the status of plasterers, whose work hitherto had typically been of a more banausic (unrefined) character — daubing walls, the insides of chimney flues, garderobe chutes, and the like. London examples of such ceilings exist at Canonbury House, Islington (1570–1600), 17 Fleet Street (*c.*1611), and elsewhere (Schofield 1995, 119). Other notable instances include Broughton Castle, Oxon (1599), Stockton House, Wilts (*c.*1600), the Combination Room at St John's College, Cambridge (*c.*1600), Bramshill House, Hants (1605–12), Knole, Kent (*c.*1607), and Bolsover Castle, Derbys (1620s). A date in the late 16th or early 17th century is therefore likely for the Moselle Place pieces. A similar date

applies to the heads, whether they were used as part of such a ceiling or in a chimneypiece.

Working and fixing the plaster

Simple ribbing could be formed by running a template along a block of wet plaster (Beard 1975b, 9–22; Ford 1992, 282; Musson 2000, 6–7). More complex forms would have to be moulded or even formed freehand, but often the simpler forms too were moulded. This was done using wooden moulds coated with nut oil to prevent the plaster from adhering to them. The different methods of shaping could be carried out *in situ* or, more conveniently, at a moulder's bench. In the latter case, the finished pieces were inserted into their correct positions, and temporarily propped in place, whilst the plain plaster of the ceiling was still wet.

The plaster would for the most part be applied to laths nailed to the ceiling beams. Several of the pieces show the impressions of laths in their rear faces. Many are incomplete but others show lath widths ranging from 23mm to 32mm with a median of 27mm, although one incomplete example appears to have been greater than 40mm. Larger pieces might be built up on a timber armature, providing more strength than solid blocks of plaster. Four pieces (P35, P80, and two unnumbered pieces) show the impressions of such timbers: they show ovolo, cyma recta, or egg-and-dart mouldings. The fragment of pendant boss P65 has a metal rod some 7mm in diameter embedded in it: this would have enabled a secure — and safe — fixing of the boss to a ceiling beam.

Paint

The Moselle Place plaster is off-white and is fairly coarse with a number of small stones in it. Plaster can have a dull look and was often limewashed to give a creamy appearance. For a much richer effect, the salient components — ribs, bosses, or pendants — might be painted and/or gilded. The 'Great Gallery' at Lord Burleigh's now lost Theobalds in Hertfordshire, for example, rebuilt in the 1570s, had 'a frett seeling with Divers pendants Roses and flowerdeleuces [fleurs-de-lys], painted and gilded' (Summerson 1959, 124). Examples have been found during excavations by MoLAS at Somerset House, probably the work of the Master Plasterer, James Lee (or Leigh, *f*1611–15) (Mackinder & Smith in prep). Such

ceilings would have had a coruscating effect, especially by flickering candlelight, giving point to Hamlet's metaphor for the sky: 'this majestic roof fretted with golden fire'. Only two pieces from Moselle Place, however, show paint: piece P69 has pink paint on its cyma recta and possible honeysuckle moulding, whilst piece P38 is a flat section painted brown and pink with a tendril pattern in black (Fig 10); the brown/pink was probably originally a brighter red. There is no evidence of gilding.

DISCUSSION

The first activity recorded on site was medieval ploughing. The evidence for this was a ploughsoil that contained a collection of small and heavily abraded pottery (dated c.1150–1400). At some point in the late 15th to early 16th century, Crook's Farm, a timber-framed farmhouse with ragstone and brick ground walls and chalk-rubble foundations, was constructed. It is proposed that remodelling of the building occurred in the early 17th century when the property was owned by Sir Edward Barkham, an alderman who later became Lord Mayor of London. By the 17th century it was established practice for both courtiers and merchants to acquire or build houses within easy reach of London (VCH 1976, 314). In 1664 there were at least 15 large houses assessed in the area with more than 10 hearths (VCH 1976, 315). These include The Black House, later 'Rydley', located in the High Road almost opposite Crook's Farm (VCH 1976, 314–15). This property had the highest number of hearths (22) for the area and was owned by Sir Hugh Smithson, whose descendants became the Dukes of Northumberland. The house was the summer retreat of Sir John Coke, the Secretary of State, who stayed regularly at the house between 1625 and 1640 (VCH 1976, 315). Other large properties were the old manor house of Bruce Castle, now Bruce Castle Museum; the Mattisons on the far side of Tottenham Wood, owned by Sir Julius Caesar; and the high-status farmhouses of Duckets, Asplin and Willoughbies (VCH 1976, 314–15).

Crook's Farm became a property of high status during this period. Documentary evidence of 1664 states that it contained some 21 hearths, the second highest in Edmonton Hundred at the time; three hearths/fireplaces were identified within the limited excavation area. The large amount of highly decorative moulded plasterwork, found within a later demolition

deposit, derives from a fretted ceiling and coving and is attributed to this phase of construction.

The remodelling and addition of the southern wing at Crook's Farm occurred during a period in England sometimes (perhaps misleadingly) known as the 'Great Rebuilding'. Originally defined by Hoskins (1953) as occurring between 1570 and 1640, the 'Great Rebuilding' was characterised by the rebuilding or remodelling of many middle and high status homes in response to changing living requirements as well as improvements in building technology and increased availability of specialised building materials (particularly brick). In many parts of England timber houses were frequently replaced with stone or brick walled houses. Not all higher status medieval properties were replaced; many were adapted and extended to meet new demands. The main development of this period was the flooring over of open halls, the insertion of new chimneys and staircases, and the addition of service wings and ancillary buildings. This appears to be the case at Crook's Farm; Sir Edward Barkham may have required a property which would have expressed his social standing (even if he did not actually live in the property himself).

Gentry life was no longer centred around the communal hall and its adjacent rooms but took place in a series of smaller private rooms and chambers. The rooms used by the family would have been well-appointed with small fireplaces and plasterwork ceilings, evidence of which was found on site. Fittings such as panelling, cloth hangings and furniture have not survived but can be inferred from other houses and numerous contemporary inventories. As in so many houses, rather than demolishing the existing building, it was remodelled to meet the new requirements. There is the possibility, however, that the new range may have been a service wing and did not necessarily provide accommodation for the gentle folk.

By 1790 Crook's Farm had been demolished and a Georgian mansion house, known as White Hall, constructed in its place. The demolition of the earlier property (and its later additions) appears to have been undertaken in a systematic and controlled way, as evidenced by the nature of the demolition deposits within dumps and robber trenches. There is evidence for the reuse of building materials both stratigraphically and from the specialist analyses. Documentary evidence suggests that the house was constructed between

1744 and 1790. The illustration (Fig 4) of White Hall in 1840 shows a Palladian influenced villa; Palladianism was strongest in England between 1715 and 1755, which fits well with the suggested date range for the construction of the house. The excavation also located a large ornamental water feature, which is depicted on cartographic sources from 1798 to 1844. It was infilled by 1864 and most of the grounds were covered by terraced housing fronting Moselle Street. A portion of the site was still used as gardens and open space. The house was demolished between 1935 and 1961. In recent times the southern portion of the site was used as a concrete and tarmac playground, with the northern area having two sets of pre-fabricated garages placed on it, together with an area of hard-standing.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge the assistance of everyone involved in the project. Paul Fitz, Kim Stabler, Karl Hulka, Sam Potter, Mark Vader and Les Capon were the fieldwork team on site. The project was supervised by Tony Howe. The finds were analysed by the following specialists: Lucy Whittingham, Naomi Crowley, Cecily Cropper, Tim Stevens and Terence Paul Smith. Jonathan Moller produced the illustrations. This article was edited by Ron Humphrey. The project was monitored, on behalf of the Local Planning Authority by Rob Whytehead, of the Greater London Archaeology Advisory Service, English Heritage. The archaeological work on this project was funded by the Newlon Housing Group.

BIBLIOGRAPHY

- AOC ARCHAEOLOGY GROUP (1998), AOC Archaeology Group *Moselle Place/William Street, 761–767 High Road, N17, (Archaeological Evaluation) Written Scheme of Investigation*
- AOC ARCHAEOLOGY GROUP (1999a), AOC Archaeology Group *An Archaeological Evaluation at Moselle Place/William Street, Tottenham, London Borough of Haringey*
- AOC ARCHAEOLOGY GROUP (1999b), AOC Archaeology Group *Moselle Place/William Street, Tottenham, London Borough of Haringey, (Archaeological Recording Action) Written Scheme of Investigation*
- BEARD (1975a), G Beard *Decorative and Applied Arts*
- BEARD (1975b), G Beard *Decorative Plasterwork in Great Britain*
- DOE (1990), Department of the Environment *Planning Policy Guidance 16: Archaeology and Planning*

- FISK (1913), F Fisk *The History of Tottenham*
- FORD (1992), B Ford *The Cambridge Cultural History of Britain, 4, Seventeenth-Century Britain*
- HOSKINS (1953), W G Hoskins 'The rebuilding of rural England 1570–1640' *Past and Present* 4, 44–59
- MACKINDER & SMITH (in prep), T Mackinder & T P Smith *Renaissance Stone Mouldings and Decorative Plaster from Old Somerset House*
- MURRAY (1993), I Murray *A Brief History of Haringey Before Our Time*
- MUSSON (2000), J Musson *Plasterwork: 100 Period Details from the Archives of Country Life*
- NEWTON ABBOT (1969), Newton Abbot re-issued facsimile of R Neve *The City and Country Purchaser and Builders Dictionary* (2nd edn, London, 1726)
- PINCHING & DELL (2005), A Pinching & D Dell *Haringey's Hidden Streams Revealed*
- ROBINSON (1840), W Robinson *The History and Antiquities of the Parish of Tottenham* Vol 1
- ROWSE (1972), A L Rowse *The Elizabethan Renaissance: the Cultural Achievement*
- PROTZ (1998), C Protz *Tottenham, Hornsey & Woodgreen*
- SCHOFIELD (1995), J Schofield *Medieval London Houses*
- SUMMERSON (1959), J Summerson 'The building of Theobalds, 1564–1585' *Archaeologia* 97, 124
- VCH (1976), *Victoria County History of Middlesex* Vol V
- WEINREB & HIBBERT (1983), B Weinreb & C Hibbert *The London Encyclopaedia*

JACK CADE AT LONDON STONE

John Clark

SUMMARY

In view of recent press and public interest in the once famous London Stone, now no more than a small block of limestone behind a grille in the wall of an office building near Cannon Street station in the City of London, this paper summarises the scantily-documented history of the Stone from the first record of it in about 1100. Speculation about its origin and purpose began at least as early as the 16th century, and, without proposing any new hypothesis, we revisit some of those early conjectures and their modern counterparts. As witness that London Stone once symbolised London itself, and that possession of it was thought to grant power over the City, most writers have cited the action of Jack Cade, leader of the rebels against Henry VI's corrupt government in 1450, in striking it with his sword and claiming to be 'Lord of London'. However, near-contemporary accounts of the few days during which the rebels effectively controlled London are confused and inconsistent. There is no clear evidence as to how Cade intended his action to be understood, nor how either his followers or the people of London interpreted it. The incident cannot be used to prove that London Stone had a special significance or ceremonial function in medieval London.

INTRODUCTION

In July 1450 the Kentish rebel leader Jack Cade struck his sword on London Stone in Candlewick Street (now Cannon Street) in the City of London, and claimed to be 'Lord of London'. The purpose of this paper is to consider the near-contemporary accounts of that incident, and attempt to interpret its significance for the history of one of London's most obscure monuments. Before doing so we shall need to clarify some of that dubious and much romanticised history.

London Stone is not a novel concern for the London and Middlesex Archaeological Society, for in 1869 a special committee of the Society was

formed to discuss the welfare of the Stone with the Rector and Churchwardens of St Swithun's church, then its guardians. And in the following year John Edward Price (at that time the Society's Director of Evening Meetings) included in a monograph (published by the Society) on the Roman mosaic pavement recently discovered in Bucklersbury, a discussion of the course of the adjacent Walbrook, together with information on 'that famous monument of ancient London, "London Stone"' (Price 1870, 55–65). He drew, he tells us, on 'materials [...] collected by my esteemed friend Mr. W. H. Overall, F.S.A. [the Guildhall Librarian]' (*ibid.*, 55), and this work is a valuable contribution to the subject.

First referred to by name at the beginning of the 12th century, as we shall see, London Stone is represented today by no more than a small rectangular block of oolitic limestone, about 21 inches wide, 17 inches high, and 12 inches front to back.¹ It is set behind an iron grille within a decorative stone casing built into the outside wall of a building (No. 111) on the north side of Cannon Street (formerly Candlewick Street) in the City of London, nearly opposite Cannon Street station (Fig 1). A bronze plaque on the sloping top of the casing, dating from 1962, proclaims:

LONDON STONE

This is a fragment of the original piece of limestone once securely fixed in the ground now fronting Cannon Street Station.

Removed in 1742 to the north side of the street, in 1798 it was built into the south wall of the Church of St. Swithun London Stone which stood here until demolished in 1962.

Its origin and purpose are unknown but in 1188 there was a reference to Henry, son of Eylwin de Lundenstane, subsequently Lord Mayor of London.

The Stone is also viewable inside the building



Fig 1. London Stone in 2006, in the frontage of the then Sportec shop (Photo: John Clark)

(once the Bank of China, latterly the Oversea-Chinese Banking Corporation, most recently, until its closure in April 2007, a sportswear shop), where it is protected by a glass case. The site is soon to be redeveloped, leading to press and public interest in London Stone and its fate — for example in the online *BBC News Magazine* (Coughlan 2006).

Yet — as journalists never fail to point out — few of the thousands of commuters who pass it every working day have any knowledge of (or interest in) London Stone, or the mythology that has grown up around it and its supposed significance.

LONDON STONE: EARLY HISTORY

Those same journalists, as well as many popular writers, such as Peter Ackroyd (2000, 18), are in general agreement that in the past London Stone had a 'special significance' for London and Londoners. This view is well summed up in the opening words of the current entry on 'London Stone' in the online encyclopedia Wikipedia:

The **London Stone** is an ancient stone, that is said to be the place from which the Romans

measured all distances in Britannia. Whether or not this is true, the London Stone was for many hundreds of years recognised as the symbolic authority and heart of the City of London. It was the place that deals were forged, and oaths were sworn. It was also the point from which official proclamations were made. Jack Cade, popular leader of those who rebelled against Henry VI in 1450, observed the tradition by striking his sword against it as a symbol of sovereignty after his forces entered London; on striking the stone, he then felt emboldened to declare himself lord of the city. (Wikipedia contributors 2008)

Most of this is untrue — or since it is so difficult to prove a negative, it is perhaps fairer to say that there is no evidence to support most of this farrago of myth. Fairer still, perhaps, to say that the present author has failed to find such evidence during the course of considerable research, and can in most cases identify who first made each claim and on what shaky grounds they did so!² I can find no confirmation that the Stone was ever recognised as the symbolic heart and authority of the City; or that it was a place where deals were forged, oaths sworn, or official

proclamations made; or that there was ever a *tradition* that involved striking a sword on it to confirm authority over London.

In so far as we can be certain of anything, there is one core historical fact. Jack Cade, leader of a rebellion in 1450, *did* strike his sword on the Stone and *did* claim to be Lord of London. But this seems to have been an isolated and apparently unprecedented act. Much has been made of it, but it is never discussed properly in context — and its significance may be rather less than recent enthusiastic writers on London Stone have believed. Before returning to Jack Cade, however, we should review the bare facts of the Stone's recorded history.

The small block of stone in its alcove is singularly unimpressive and attracts little attention today. Yet London Stone was clearly once much more imposing. In 1598 John Stow described it as 'a great stone' (Stow 1908, 1: 224); it was 'pitched upright', he tells us, 'fixed in the ground very deep, fastened with bars of iron, and otherwise so strongly set, that if carts do run against it through negligence, the wheels be broken, and the stone itself unshaken'. It stood on the south side of the then Candlewick Street, 'near unto the channel' according to Stow. It was within the parish of St Swithin (the church called 'St Swithin at London Stone' in 1557 (Harben 1918, 565)) and in Walbrook ward.

Stow was the first writer to attempt to elucidate the Stone's history (Stow 1908, 1: 224–5). The earliest reference to it that he could find was, he says, 'in the end of a fair written Gospel book given to Christ's church in Canterbury [Canterbury Cathedral], by Ethelstane, King of the West Saxons'. There he found 'noted of lands or rents in London belonging to the said church, whereof one parcel is described to lie near unto London stone'. This citation is usually quoted uncritically, and usually with an implication that the reference must date to the reign of King Æthelstan, West Saxon king of England (924–39), although Stow does not claim as much. One could respond that a list of church properties might well be bound into the back of a volume of very different date. Binding such a record into a volume containing the scriptures might be thought to give it added authority and security.

In fact, there can be little doubt that the list of Canterbury Cathedral properties in London that Stow saw was the same that was later published by B W Kissan (1940) and dated by

him between 1098 and 1108, or a lost copy of a very similar list. Kissan's list appears to be the earliest such list extant (Keene & Harding 1985, 71).³ Among the properties listed is one given to Canterbury by 'Eadwaker æt lundene stane' (Kissan 1940, 58). Presumably, Stow interpreted the local cognomen of the man who lived 'at London Stone' as the 'address' of the property he gave to Canterbury.

The most famous Londoner to have dwelt like Eadwaker 'at London Stone' is without doubt the first mayor, Henry Fitz Ailwin, although the designation 'of London Stone' belongs first to his father. The earliest London chronicle, included in the City volume known as *Liber de Antiquis Legibus* (the *Book of Ancient Laws*) and probably compiled by the alderman Arnald Fitz Thedmar between 1258 and 1272 (Gransden 1974, 509–12), says that in the first year of the reign of Richard I (1189) 'factus est Henricus filius Eylwini de Londene-stane Maior Londoniarum', 'Henry, son of Eylwin of London Stone, was made mayor of London' (Stapleton 1846, 1). The date that he became mayor may be disputed, but it is usually assumed that his father 'Eylwin' or 'Ailwin' was Æthelwine son of Leofstan, in whose house the husting court had met before 1130 (Keene 2004; Page 1923, 250).

Ailwin's house 'at London Stone' in fact lay well to the north of London Stone itself, on the north side of the churchyard of St Swithin's and abutting on St Swithin's Lane on the east (Kingsford 1920, 44–8), the property marked as 'Prior of Tortington's Inn' and 'Drapers' Hall' on the *Historic Towns Atlas* map of London in about 1520 (Lobel 1989).

Other medieval references to London Stone are few, and none — apart possibly from the incident in 1450 that is the chief subject of this paper — suggest any particular reverence for it. In the early 15th century it was noticed in passing by the hero of the oft-reprinted poem 'London Lickpenny' on his disconsolate way through the City (Dean 1996, 224); in about 1522 its marriage to the Bosse of Billingsgate was announced in a poem printed by Wynkyn de Worde (Anon 1860, 26–7); in 1598 it appeared on stage in William Haughton's comedy *Englishmen for my Money* (Haughton 1616, sig G1 verso; Stock 2004, 95); in 1608 it was one of the 'sights [...] most strange' shown to 'an honest Country foole' on a visit to London (Rowlands 1608, sig D3 recto).

London Stone, clearly an important land-



Fig 2. London Stone, opposite the door of St Swithin's church, on the 'Copperplate' map of c.1559 (Museum of London)

mark, was marked and named on the so-called 'Copperplate' map of the late 1550s, the earliest printed map of London, of which just three engraved printing plates survive. It is one of the few features other than streets and major buildings to be thought worth naming. On one of the two plates in the collection of the Museum of London, it is shown in side view as a rectangular block⁴ (Fig 2). It is not drawn to scale, and it is impossible to estimate its actual size, although it looks wider than it is high. It is positioned in the roadway opposite the main door of St Swithin's church. This door is shown set in the church tower, at the south-west corner of the church. However, John Schofield has pointed out that this depiction of the church seems to conflict with archaeological evidence that suggests that the medieval tower stood in the north-west of the building (Schofield 1994, 131), and we certainly cannot trust this map as necessarily an accurate representation of the location of the stone — or indeed of its appearance.

A derivative from the Copperplate map, the so-called 'Agas' map, printed from eight woodblocks at a date between 1561 and 1571, also names London Stone and marks its location by a small square in the same position as the block on the Copperplate map (Prockter & Taylor 1979, 24). The stone is neither named nor marked on the smaller scale map by Braun and Hogenberg, derived from the same original (Goss 1991, 68–9).

The next map to mark its site clearly is John Leake's manuscript map showing the extent of the Great Fire, completed in March 1667 (British Library Add Ms 5415.1.E; reproduced in Reddaway 1940, foldout opp p 54). This shows London Stone, marked by a dot in the roadway of Cannon Street, close to its south side, opposite the western end of the site of the destroyed St Swithin's church (shown as a blank area) — thus perhaps slightly to the west of the location we might infer from the Copperplate map. More recent southward widening of Cannon Street would place this original location closer to the

middle of the present roadway, and it is marked in this position on Ralph Merrifield's map of Roman sites in London (Merrifield 1965, 271–2 and map, no. 268).

Thus any hopes that the original location might be identified or a remaining stump of the stone be found by excavation are dashed by the realisation that the ground underlying the full width of the modern street was quarried away, to a depth of more than 30 feet, during the building of the Metropolitan District Railway (now the District Line) and its Cannon Street underground station by the 'cut-and-cover' method, when the line was extended from Mansion House to Tower Hill in 1884 (Lee 1988, 18–19).⁵

MOVING THE STONE

The Stone may have suffered damage during the Great Fire (which had destroyed St Swithin's church and neighbouring buildings on both sides of the street), for in 1671, when it was the venue for the ceremonious destruction by officers of the Worshipful Company of Spectacle Makers of a batch of spectacles that had been confiscated from a local shop as 'all very badd in the glasse and frames not fitt to be put on sale' (Law 1977, 11), it was referred to as 'the remaining parte of London Stone' — perhaps suggesting that within living memory it had been larger.

In the 18th century, writers mostly copied John Stow in their accounts of London Stone, while giving more space to speculations about its original function, to which we shall return. However, John Strype, in his edition of Stow's *Survey* (Stow 1720, book 2: 193–4), does add a contemporary description:

This Stone before the Fire of *London*, was much worn away, and as it were but a Stump remaining. But is now for the Preservation of it cased over with a new Stone handsomely wrought, cut hollow underneath so as the old Stone may be seen, the new one being over it, to shelter and defend the old venerable one. (*ibid.*, 200)

London Stone with its new protective canopy is depicted in the foreground of an etching of St Swithin's church by Jacob Smith (*fl.* 1733) in Guildhall Library (Fig 3). It stands opposite the south-west corner of the church, the stone casing shown with a domed top, and with a circular cut-out in the side through which the Stone itself can be glimpsed.



Fig 3. St Swithin's church, rebuilt after the Great Fire, depicted by Jacob Smith in about 1730. London Stone stands in the road in the foreground, protected by the little stone canopy described by John Strype (Guildhall Library, City of London)

By the middle of the 18th century London Stone was clearly considered an obstruction to traffic. It was moved and placed by the kerbstone against the wall of St Swithin's church on the north side of the street. The initiative was taken by the Vestry of St Swithin's, within whose parish the stone stood, and a Vestry minute of 13 May 1742 records: 'That the Stone, commonly called London Stone, be placed against the Church, according to the churchwardens' discretion' (Price 1870, 63; White 1898, 185). The operation cost the parish just 12 shillings, and what exactly was moved is unclear. Perhaps the lower part of the stone was left in the ground. If so, no remnant of the stone left *in situ* has ever been recognised, and if not already removed, it must have finally been destroyed during the building of the Metropolitan District Railway in 1884, as we have seen. The part of the Stone that was moved is said to have still been (in 1785) 'nearly four feet high, two feet broad and one foot thick



Fig 4. London Stone without its protective casing, probably at the time of its removal in 1798; anonymous drawing (Guildhall Library, City of London)

with a broken ornament on the top' (Leftwich 1934, 4). I have not traced the source from which Leftwich derived these measurements, but the overall proportions are confirmed by a drawing of about this date in Guildhall Library (Fig 4). The Stone was clearly cut down to its present sad size either in 1798 or during the subsequent move.

The Stone was placed against the church wall just to the east of the church's south-west door. It is shown in this position in an engraving published by J T Smith in 1791 (Smith 1791, [plate 1]), later reproduced by J E Price (1870, 61) (Fig 5). The domed casing with a circular cut-out is surely that which had protected the Stone in its earlier position in the roadway.

Once more 'doomed to destruction as a nuisance' in 1798, London Stone was 'saved by the praiseworthy intervention of Mr. Thomas Maiden, a printer in Sherborne Lane, who prevailed on one of the parish officers to have it placed against the Church-wall, on the spot which it now occupies' (Brayley 1829, 1: 21). The Vestry minutes for 13 June 1798 duly instruct 'that the porter's block and seats be taken away, and a new block be erected in the blank doorway, under the direction of the surveyor, with the old material, of the length and width of

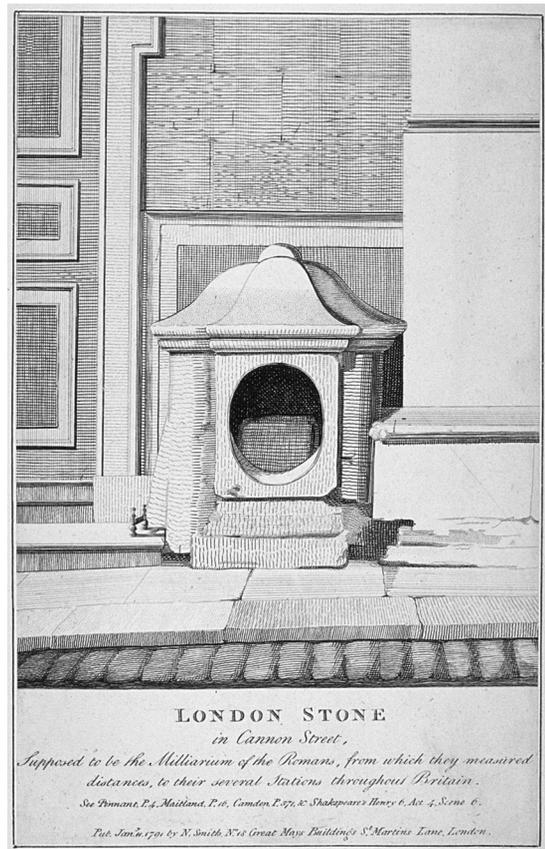


Fig 5. London Stone in front of St Swithin's church, in its first location, after 1742, just to the right of the west door; from J T Smith *Antiquities of London and its Environs* 1791 (Guildhall Library, City of London)

the blank doorway; and the stone, called *London Stone* to be fixed at the west end of the same, on a plinth' (Price 1870, 61; White 1898, 185). It is in this position that it is shown in early 19th-century illustrations, standing on a shelf within the arch formed by the blocked doorway (Fig 6). The same domed canopy with a circular cut-out continues to shelter it.

Brayley's comment that in 1798 the Stone was placed 'on the spot which it now occupies' was, by the time his book was published in 1829, no longer true — for it had been moved again. Thomas Allen, in 1828, says that the Stone was then 'below the central window [contained in] a hollow pedestal' (Allen 1827–8, 3: 765). Illustrations from this time onwards show it in what was to be its location for more than a hundred years, set back into an alcove in the *centre* of the church's south wall, raised on a

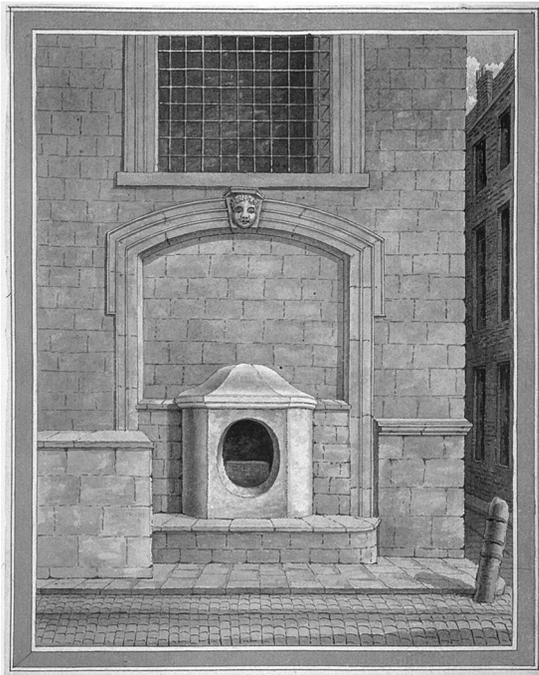


Fig 6. London Stone set in front of the blocked east doorway of St Swithin's church, after 1798 and before its removal to the middle of the church wall; anonymous watercolour, c.1801 (Guildhall Library, City of London)

three-sided plinth (Fig 7). It was still protected by a canopy of the same form as previously, presumably the original casing reshaped to fit in front of the alcove cut back into the thickness of the church wall.⁶

In the course of J E Price's account of the history of London Stone, he also reported that in 1869 the Council of the London and Middlesex Archaeological Society had discussed the better preservation of the stone with the Rector and Churchwardens of St Swithin's (Price 1870, 64–5). The Society's own 'Proceedings' for 10 May 1869 confirm that a 'London Stone committee' had been appointed by the Society's Council to undertake this consultation (Anon 1870, 585). The improvements recommended and put into effect involved the addition of a protective iron



Fig 7. London Stone in its final position in the middle of the south wall of St Swithin's church; anonymous engraving, 1820s (Guildhall Library, City of London)



Fig 8. London Stone in 1937, with the protective grille and the plaque above it in Latin and English installed at the instigation of the London and Middlesex Archaeological Society in 1869 (Photo: Hulton Archive/Getty Images)

grille (Fig 8) and the erection on the church wall above the Stone of a descriptive plaque, with an inscription in Latin and English (Harrison 1891). The English text read as follows:

LONDON STONE

Commonly believed to be a Roman work long placed about xxxv feet hence towards

the South West and afterwards built into the wall of this Church was for more careful protection and transmission to future ages better secured by the Churchwardens in the year of our Lord MDCCCLXIX. (*ibid*)⁷

The Society's efforts, however, do not seem to have promoted greater public awareness of

or interest in London Stone. By the late 19th century, it was said to be ‘seldom noticed, even by the most inquisitive of country cousins’ (Anon 1888, 241). The same anonymous contributor to *Chambers’s Journal* continues: ‘During the greater part of the year, a fruit-stall largely obscures it from public view. Hanks of twine are twisted round the iron grating, and on the Stone itself rest piles of paper bags.’

Wren’s church was bombed and burnt out in the Second World War. It was decided that it was ‘too severely damaged to be capable of satisfactory restoration’, and that the site should be sold for development (Bishop of London’s Commission 1946, 12). The shell of the building, with London Stone still behind its grille in the south wall, was left standing for many years. When the surviving ruins of the church were finally demolished to make way for a new building in 1961–2, London Stone itself, the rectangular lump of limestone that we are now familiar with, was temporarily placed in the care of Guildhall Museum (Fig 9). During this period a sample of the stone was taken. It was identified as Lincolnshire Limestone both by F G Dimes and later by F W Anderson of the Institute of Geological Studies — the latter adding ‘your specimen, making allowances for its weathered condition, resembles Clipsham Stone more clearly than it resembles the others’ (Merrifield 1965, 123; and correspondence in Museum of

London, Guildhall Museum file T10). However, re-examination of the same sample, now in the Natural History Museum (Earth Sciences), by Kevin Hayward (pers comm) has indicated that rather than Lincolnshire it may be Bath Stone — the stone most used for monuments and sculptures in early Roman London, and in use also in the late Saxon period (probably by the reworking of stone salvaged from the Roman city).

In October 1962, following the completion of the new building on the site to house the Bank of China, the stone was placed without ceremony in the specially constructed gridded and glazed alcove that it occupies today (Fig 1). The present plaque, as we have seen above, records merely ‘Its origin and purpose are unknown but in 1188 [correctly 1189] there was a reference to Henry, son of Eylwin de Lundenstane, subsequently Lord Mayor of London’.

SPECULATIONS

The reluctance of the anonymous composer of the text of the present plaque to speculate on the origin and significance of the Stone is understandable. But such speculation began at latest in the reign of Elizabeth I, and continues today. *None* of these conjectures has been proven, some can be disproved, and others are at best improbable!



Fig 9. The last remnant of London Stone. The block of oolite removed from its resting place in the wall of the ruined church of St Swithin in 1961 (Photo: Museum of London)

It was William Camden, in 1586, who first proposed that London Stone had been ‘a *Milliarie*, or *Milemarke*, such as was in the mercat place [the Forum] of Rome: From which was taken the dimension of all journeys every way’ (Camden 1610, 423). That the stone was the Roman *milliarium*, in the form of a monolithic milestone, and that it marked the point from which distances throughout the province of Roman Britain were measured, was to become, as it were, the default opinion among 17th- and 18th-century antiquarians, like William Stukeley (1724, 112), and has not lost its popularity today. Christopher Wren, however, considered it had been not a simple monolith but a substantial building: ‘by reason of the large foundation, it was rather some more considerable monument in the *Forum* [imitating] the *Milliarium Aureum* at Constantinople’ (Wren 1750, 265–6).⁸ John Strype, on the other hand, was the first to suggest it might have been ‘an Object, or Monument, of Heathen Worship’, since, he says, it was well known ‘[...] that the *Britains* erected Stones for religious Worship, and that the *Druids* had Pillars of Stone in Veneration’ (Stow 1720, book 2: 194).

One or two 19th-century writers considered that at one time the Stone must have been regarded as a talisman for the City, and that ‘like the *Palladium* of Troy, the fate and safety of the City was argued to be dependent on its preservation’ (Brayley 1829, 1: 17). This concept was later reinforced by the appearance of what was claimed to be a traditional saying:

So long as the Stone of Brutus is safe,
So long will London flourish.

This reputedly medieval saying not only identifies London Stone as London’s *palladium*, the object that symbolises and embodies the well-being of the City, but links it explicitly with the belief that London was founded, as New Troy, by Brutus, descendant of the Trojan exile Aeneas and first king of Britain.⁹

Sadly, the saying (cited, for example, in Peter Ackroyd’s *London: The Biography* (2000, 18) and in almost every recent description of London Stone) can be traced no earlier than 1862, when it was quoted in a contribution to *Notes and Queries* (Mor Merriion 1862). Indeed, it is almost certain that the saying was invented by the author of that note, one ‘Mor Merriion’. This, a misprint by the printer of *Notes and Queries*, was properly ‘Môr Meirion’ or ‘Morgan of Merioneth’, the bardic name adopted by the Revd Richard Williams

Morgan (c.1815–89), Welsh patriot and writer, co-organiser of the great Llangollen eisteddfod of 1858, and later the first Bishop of the revived Ancient British Church (Clark 2007).¹⁰

At the end of the 19th century, the folklorist, London historian and Clerk to the fledgling London County Council George Laurence Gomme argued that London Stone was London’s fetish stone: ‘In early days, when a village was first established, a stone was set up. To this stone the head man of the village made an offering once a year’ (Gomme 1890, 218–19).

‘Alternative’ archaeologists in the early 20th century identified London Stone as an ancient British ‘index stone’ pointing to a great Druidic stone circle on the site of St Paul’s Cathedral, like Stonehenge’s Heel Stone (Gordon 1914, 11), or as a mark stone on a ley line (Watkins 1925, 87–8).

Among more orthodox archaeologists, Ralph Merrifield concluded ‘it is [...] feasible that it was a roadside monument of some kind, set up in the Roman period’ (Merrifield 1965, 124), but later drew attention to its apparent alignment with the centre of a major Roman building lying on the south side of Cannon Street, which he tentatively identified as the Roman governor’s palace (1969, 78–81; 97) — a view taken also by Peter Marsden, who considered that London Stone was possibly ‘part of the monumental entrance to the Roman palace’ (Marsden 1975, 63–4). More recent writers on Roman London seem not to have committed themselves, although London Stone’s present site *was* marked, without discussion, on the Ordnance Survey map of Roman London (Ordnance Survey 1983).

But recent writers of both the ‘geomantic’ (or ‘earth mysteries’) and so-called ‘psycho-geographical’ schools have insisted on London Stone’s essential place in the ‘sacred geometry’ of London, however variously they interpret the significance of that geometry. Perhaps the most developed of geomantic theories to incorporate London Stone is Christopher Street’s ‘Earthstar’, a gigantic pentagram drawn across Greater London from Barnet to Croydon (Street 2000, 70, illus 28), its lines defined by churches, prominent hills and similar features, and confirmed by dreams, visions and ‘on-site mediumship’. Meanwhile, Iain Sinclair, included with Peter Ackroyd in any list of London’s psycho-geographical writers, suspects a deliberate policy of disrupting London’s inherent sacred alignments. In *Lights Out for*

the Territory (1997, 102) he notes ‘The London Stone, with its mantic cargo, is now kept behind bars, beneath the pavement; a trophy for the Overseas Chinese Banking Corporation Limited in Cannon Street. Grievously misaligned’. He adds ‘A policy of deliberate misalignment (the Temple of Mithras, London Stone, the surviving effigies from Ludgate) has violated the integrity of the City’s sacred geometry’ (*ibid*, 116).

This is not the place for a new conjecture. One may only comment that the fact that the stone is of a type of limestone used in London in the Roman period, and stood on the southern edge of a Roman street (Merrifield 1965, 122–3), possibly in a significant relationship to a grand building of the 2nd century that has been identified by some as ‘the governor’s palace’ (Merrifield 1969, 78–81; 97; Marsden 1975), would seem to support a hypothesis of Romano-British origin and an original function within the context of the Roman city. However, Roman stonework was reused in the later Saxon period, for example in the construction of churches (Schofield 1994, 43).¹¹ London Stone could have been moved and re-erected by the post-Roman citizens of London, or simply have taken on a novel significance to them. And its unique name, first recorded at the end of the 11th century, certainly hints at a special significance to the people of late Saxon London.

As we have already noted, popular writers on London have gone to great lengths to identify London Stone as a monument of symbolic authority over London, where oaths were sworn and official proclamations made (Wikipedia contributors 2008). And all quote as a prime example of this an incident on Friday 3 July 1450, when Jack Cade led his rebel followers from Southwark across London Bridge into the City of London.

THE REBELLION OF 1450

After years of heavy taxation to fund the war with France, complaints at the corruption and mismanagement of Henry VI’s government reached a peak in 1450, in mass petitions to the King, naming those thought to be most corrupt, who included the Duke of Suffolk and the Royal Treasurer, Lord Saye. There was an armed uprising in Kent, supported in Essex and the other home counties. In a rerun of events in 1381, the Kentish rebels gathered at Blackheath in early June. But this was no Peasants’

Revolt. The rebels included yeoman farmers, prosperous villagers and townsfolk, and even some of the lesser gentry. The fighting men were the well-equipped and trained troops of the county militia. Their leader was John Cade, known as ‘the Captain of Kent’, a man of obscure origins. Cade took the name ‘John Mortimer’, connoting kinship with Richard Mortimer, Duke of York, currently out of favour at court and not seen to be implicated in the corrupt government.

Henry VI, adjourning parliament at Leicester, hastened back to London and marched on Blackheath with an armed force. Cade’s followers, perhaps unwilling to meet their king in open warfare, dispersed; but after rebels had defeated royal troops in a skirmish near Sevenoaks, the main rebel force reassembled with even greater support at Blackheath on 29 June, joined by men from Surrey and Sussex. At about this same time rebels from Essex headed to Mile End. Meanwhile the king and most of his court and officials had left London for Kenilworth, leaving the defence of the City in the hands of the mayor and a small royal garrison at the Tower.

On 1 or 2 July Cade led the rebels from Blackheath into Southwark, where he made his headquarters at the White Hart inn. On the late afternoon of Friday 3 July Cade and his followers crossed London Bridge into the City. There may have been some resistance at the Bridge, but Cade’s men cut the ropes of the drawbridge so that it could not be raised against them, and, according to one account, Cade was handed the keys of the City. Many Londoners, including wealthy and influential ones, clearly supported the rebels’ campaign against the corruptions of royal government. Cade made proclamations against looting and violence, and at first his followers seem to have obeyed. The rebels returned to Southwark for the night.

The next day, Saturday 4 July, things turned more ugly, and accounts of what followed are confused and inconsistent. The king, apparently swayed by popular feeling, had already ordered a commission to meet at London’s Guildhall to try some of the most hated of the royal ministers and officials, among them the Treasurer, Lord Saye. The rebels demanded he be handed over to them for justice. He was led to the Standard in Cheapside and beheaded. His head and those of other victims were mounted on spears, paraded through the streets, and finally set up over the gate on London Bridge; his naked body was

dragged behind Cade's horse around the City and across the Bridge into Southwark.

Perhaps fuelled by this act of rough justice, there was an outbreak of looting and killing. Even Cade seems to have taken part in the looting.

Late on Sunday 5 July, the City authorities decided to make a stand. London Bridge must be held to prevent further incursions from the rebel base in Southwark. A mixed force of Londoners and king's men from the Tower faced the rebels on the Bridge. A fierce battle lasted through the night. There were many casualties on both sides, and houses on the Bridge were set on fire, but by the morning of 6 July the Londoners held the Bridge and were able to barricade the gate against the rebels.

A truce was called. Later that day a deputation led by the Archbishop of Canterbury met Cade in Southwark, received the rebels' petitions and offered free pardons. The rebels soon dispersed, satisfied. As far as London was concerned, the rebellion was over — until the body of John Cade, who was declared a traitor on 10 July

and captured and killed a few days later, was returned to London. The corpse was beheaded and quartered at Newgate, and the head placed on London Bridge.¹²

The three days of turmoil were long remembered in London. London chroniclers give accounts, often incoherent and inconsistent, presumably reflecting the recollections of eyewitnesses. And several mention one particular incident — that with which we began this paper: 'He rode thorough dyvers stretes of the cytie, and as he came by London stone, he strake it with his sworde, and sayd, "Nowe is Mortymer lorde of this cytie"' (Fabyan 1811, 624).

JACK CADE AT LONDON STONE: SHAKESPEARE

The incident at London Stone is most familiar today in the dramatic reinterpretation by William Shakespeare in *Henry VI Part 2* – Act IV scene vi (Shakespeare 1999, 317–18) (Fig 10). Perhaps written in collaboration with others, the play



Fig 10. Jack Cade seated on London Stone. Illustration by Sir John Gilbert for Henry VI Part 2 (in Howard Staunton (ed) The Works of William Shakespeare vol 8 (1881))

was first performed in 1591 or 1592, and first printed in 1594 under the title *The First Part of the Contention Betwixt the Two Famous Houses of Yorke and Lancaster*.

We quote the London Stone scene here in full, as it was printed in 1619 in the ‘Third Quarto’ edition. This was the first printed edition to attribute the play to Shakespeare. The scene is slightly shorter than in the First Folio edition of 1623, the text of which is followed by most modern editions.

Enter Iacke Cade, and the rest, and strikys
his sword vpon London stone
Cade. Now is Mortemer Lord of this City,
And now sitting vpon London stone, We
command,
That the first yeare of ovr reigne,
The pissing Cundit run nothing but red wine.
And now henceforward, it shall bee treason
For any that calles me any otherwise then
Lord Mortemer.

Enter a souldier.

Soul. Iacke Cade, Iacke Cade.
Cade. Zounds knocke him downe.
They kil him
Dicke. My Lord,
Ther’s an Army gathered together into
Smithfield.

Cade. Come then, let’s go fight with them,
But first go on and set London-bridge a fire,
And if you can, burn downe the Tower too.
Come, let’s away. *Exit omnes*

(Shakespeare 1619, sig G1 verso–G2 recto)

The scene is a drastic piece of compression of events.¹³ As we shall see, Cade, who had taken the name of John Mortimer (implying kinship with Richard, Duke of York (Harvey 2004)),¹⁴ did indeed strike London Stone with his sword, and claim to be Lord of London; he did on his first arrival in the City make regal-sounding proclamations (‘in the Kinges name & in his name’ according to one chronicler) — not at London Stone, but rather at St Magnus church and at Leadenhall, and not to order the conduits to flow with wine but to restrain his followers from plundering the city.¹⁵ Moreover it was rumoured that he had old companions killed because they might reveal his real name and lowly origins. Thus Shakespeare’s probable source, Edward Hall (Halle 1548, fol clx recto), describes Cade in Southwark ordering the killing of various men ‘of his olde acquaintance, lest they shoulde blase & declare his base byrthe,

and lowsy lynage, disparagyng him from his usurped surname of Mortymer’. But the ‘throne’ and ‘seat of judgement’ role that London Stone plays in this scene appears to be Shakespeare’s own contribution to the story (Fig 10).

His immediate inspiration for the scene was apparently a very brief passage in Edward Hall’s account of the Wars of the Roses (printed in 1548 under the title *The Union of the Two Noble and Illustrate Famelies of Lancaster and York*, although Hall had completed it a few years earlier, in about 1532 (Gransden 1982, 470–1)): ‘he entred into Londo’, and cut the ropes of the draw bridge, stryking his sworde on london stone, sayyng: now is Mortymer lorde of this citie, and rode in euery street lyke a lordly Capitayn’ (Halle 1548, fol clx verso–clx recto). A very similar passage occurs in Raphael Holinshed’s *Chronicles*, published in 1577, with an extended edition in 1587, and the source of much of Shakespeare’s historical knowledge: ‘[Cade] entered into London, cut the ropes of the draw bridge, & strooke his sword on London stone; saieng: “Now is Mortimer lord of this citie!”’ (Holinshed 1587, 3: 634). The similarity of the play’s title in the First Quarto edition, *The First Part of the Contention Betwixt the Two Famous Houses of Yorke and Lancaster*, to that of Hall’s book *The Union of the Two Noble and Illustrate Famelies of Lancaster and York* may suggest it was Hall rather than Holinshed who was the primary inspiration in this case. And indeed, Kenneth Muir (1977, 29) concluded that the play was based almost wholly on Hall’s work.

The Quarto edition of the play follows its source or sources in making Cade strike the stone with his sword, although in the First Folio of 1623 (a fuller and apparently a more authoritative text) and in modern editions he does so with a staff. Why the playwright (if he did), or perhaps an editor, made this change to the historical narrative is not clear.¹⁶

The relationship between the Quarto (by reputation a ‘bad quarto’) and Folio editions of this play has been much discussed. Wells and Taylor, in the *Oxford Textual Companion to Shakespeare* (1987, 175–8), conclude that the three Quarto editions probably derive from a ‘memorial reconstruction’ of actual performances of the play by one or more of those involved, and the Folio from ‘foul papers’ (manuscript drafts) with later amendments. Thus it is likely that in actual performance the actor playing Cade struck the stone with his sword, as readers of the chronicles might expect (*ibid.*, 177 and 189).

JACK CADE AT LONDON STONE: THE CHRONICLE ACCOUNTS

It is evident from fuller chronicle accounts that the incident described by Holinshed and Hall did indeed occur, although its context – let alone its significance — is less certain. Thus, in a version of the chronicle known as the *Brut* that extends to 1461 and written, almost certainly by a London-based chronicler, soon after that date (Gransden 1982, 222–3), we read:

And the third day of Iuyl he come & entred into London with al his peple, & did make A cry ther in the Kinges name & in his name, that no man shold robb ne take no mannes gode bot if he payd for it; and come ryding through the Cite in gret pride, & smote his swerde vpon London stone in Canwykstrete. (Brie 1908, 518)

There is a very similar account in an anonymous London chronicle that ends in 1509 (British Library Ms Cotton Vitellius A xvi), published by Kingsford in 1905:

[...] and in his entre at the Brigge he hewe the Ropys of the drawe brigge asunder; and whan he came to Saynt Magnus he made a proclamacion vpon payne of deth, that no man of his Ost shuld Robbe ne depoile no man w^t in the Cite. And in like wise at ledynhall and so thurgh the Cite w^t grete pride. And at London Stone he strak vpon it like a Conquerour. (Kingsford 1905, 160).

The same words are found in the so-called *Great Chronicle of London* (Thomas & Thornley 1938, 183–4).

But the fullest account of the event appears in *The New Chronicles of England and France*, a history which extended up to the year 1485, with a later continuation to 1509. These *New Chronicles* were printed by Richard Pynson in 1516 and later attributed to Robert Fabyan, London alderman and sheriff (*d* 1513). Whether or not that attribution is correct (McLaren 2002, 264–5; 2004), it is clear that the authors of this and of a number of other anonymous chronicles were London-based, and if not eyewitnesses themselves of the events of 1450, were clearly drawing on the recollections of some who *were* eyewitnesses — and the inconsistencies and differences in emphasis are just what one might expect of witness statements, or rather of witnesses' much later recollections of what happened.

And the same afternoone, aboute .v. of ye clok, the capitayne with his people entred by the brydge; and whan he came vpon the drawe brydge, he hewe the ropys that drewe the bridge, in sonder with his sworde, and so passed into the cytie, and made in sondry places therof proclamacions in the kynges name, that no man, payne of dethe, sholde robbe or take any thyng parforce without payinge therefore. By reason wherof he wanne many heretes of the comons of the cytie; but all was done to begyle wt the people, as after shall euydently appere. He rode thorough dyvers stretes of the cytie, and as he came by London stone, he strake it with his sworde, and sayd, 'Nowe is Mortymer lorde of this cytie'. (Fabyan 1811, 624)

Since the *New Chronicles* are the earliest account to mention the cry of 'Now is Mortimer lord of this city', they were presumably, in their printed form, the source from which Hall and Holinshed both made summaries.

Most of these accounts, of course, were written long after the events by people who were not eyewitnesses. For example, Robert Fabyan, if indeed he was one of our authors, was probably not yet born at the time of Cade's rebellion (he became apprenticed, as a draper, only in about 1470 (McLaren 2004)). But they may well, with their different wording and emphasis, reflect independent oral traditions of an episode that struck Londoners of the time as worthy of note.

Another account written within a few years of the events also places Cade at London Stone, but in a notably different context. John Benet was vicar of Harlington, in Bedfordshire, from 1443 until 1471, and compiled a chronicle in Latin extending to the year 1462 (Gransden 1982, 250, 254–7). Benet (or possibly an unknown original author whose work he used) seems to have had personal knowledge of or sources of information in both Oxford and London (*ibid*, 255). He mentions no incident at London Stone when Cade first entered London; instead he tells us that following the execution by beheading of Lord Saye at the Standard in Cheapside on Saturday 4 July — the day *after* Cade's first arrival — Cade set the dead man's head, with those of two other victims, on spears, and tied Saye's body behind his horse:

[...] he dragged him naked from the Standard out of Newgate and so through the Old Bailey and through Ludgate, into

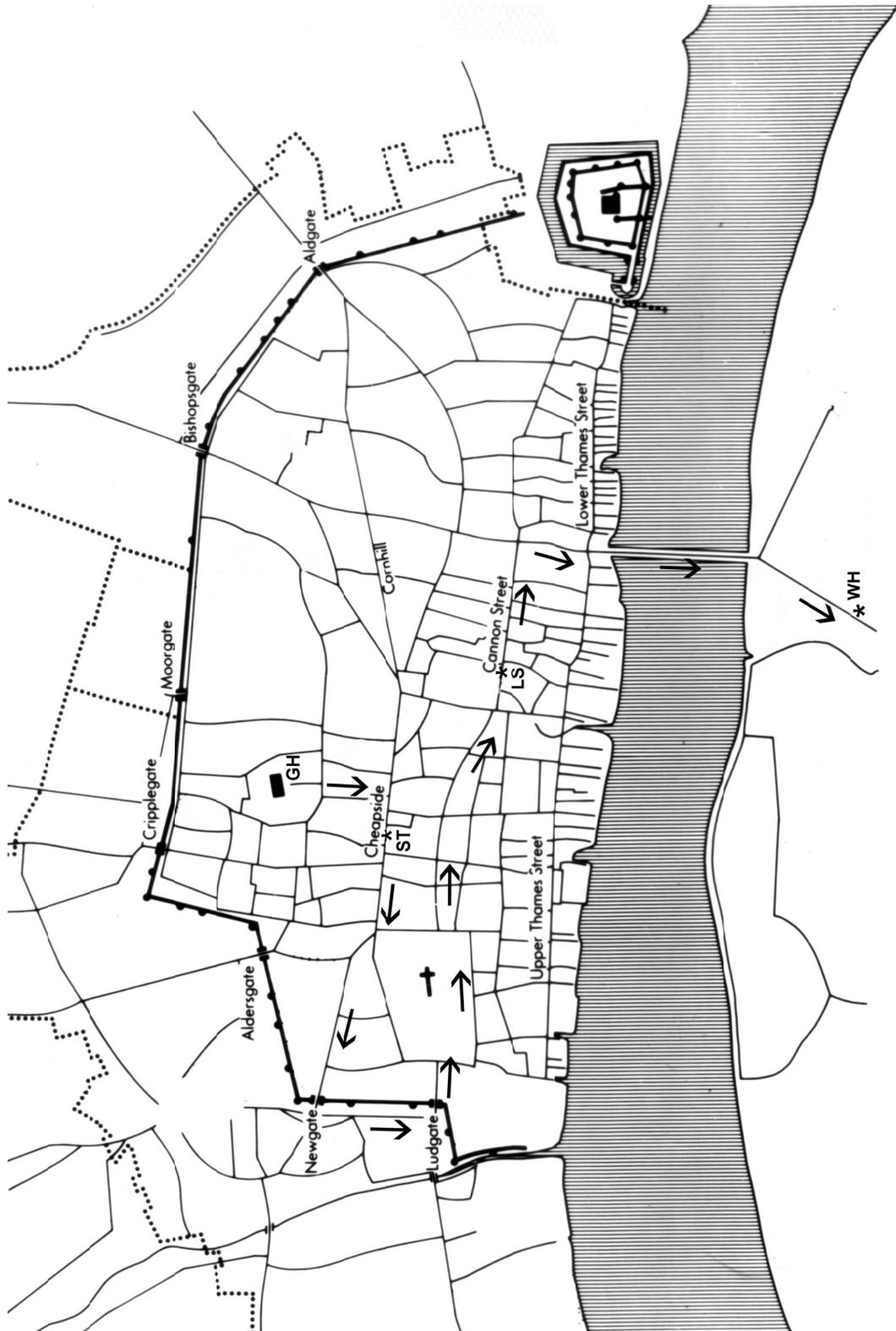


Fig 11. Saturday 4 July 1450. Lord Saye is taken from the Guildhall (GH) to the Standard (ST) in Cheapside, where he is beheaded. Cade drags Saye's body behind his horse, westwards out of Newgate, back through Ludgate, past St Paul's and London Stone (LS), and across London Bridge into Southwark, where Cade had set up headquarters at the White Hart (WH).

Watling Street and so through Candlewick Street as far as the Bridge, and there he went around a great stone striking it with his sword, and there he set the three heads on a tower, and dragged the body as far as the hospital of St Thomas in Southwark. (Benet 1972, 201; my translation)

The ‘great stone’ by the Bridge is obviously London Stone, not far from the head of London Bridge. The topographical detail of this account suggests it is based on an eyewitness report — the route can readily be identified on a map of medieval London (Fig 11). No other account goes into such local detail, although several others describe the rebels carrying around the heads of Saye and others on spears, and setting them up on the gate tower of London Bridge.

Benet or his informant may have misremembered the sequence of events — unless we are to suppose that Cade repeated his actions on London Stone on the second day. The very fact that the context of the incident could be remembered in two different ways suggests that Cade’s action struck onlookers as memorable in its own right — significant or perhaps puzzling — regardless of its context.¹⁷

Yet not all contemporaries seem to have thought of the London Stone episode as important. Whether or not the chronicle attributed to William Gregory, long serving alderman of Cordwainer ward and mayor in 1451–2, was in fact written by him, personal touches and comments suggest that it is a first-hand account by a local author with very strong opinions about the significance of the events of July 1450 (Gransden 1982, 230–1):

And a-pon the morowe, that was the Fryday, a gayn evyn, they smote a sondyr the ropys of the draught brygge and faught sore a manly, and many a man was mortheryde and kylde in the conflycte, I wot not what name hyt for the multytude of ryffe raffe. And thenne they enteryde in to the cytte of London as men that hadde ben halfe be-syde hyr wytte; and in that furyyns thye wente, as they sayde, for the comyn wele of the realme of Ingelonde, evyn strayght unto a marchaunte ys place i-namyd Phylippe Malpas of London. (Gairdner 1876, 191)

So this account stresses otherwise unrecorded fighting at the time the drawbridge ropes were cut, omits Cade’s proclamations against looting

and the London Stone episode, and takes us straight to a subsequent event, the sacking of the house of the alderman Philip Malpas in Lime Street — which other commentators tell us did not take place until the following day, *after* the killing of Lord Saye in Cheapside (Halle 1548, fol clx recto; Fabyan 1811, 624). Other chronicle accounts of Cade’s attack on London, while mentioning one or more incidents (the cutting of the drawbridge ropes, the proclamation at St Magnus church, the attack on Philip Malpas’s house), also omit the scene at London Stone (for example, Flenley 1911, 132–3 and 155; Gairdner 1880, 67–8; Nichols 1852, 19).

BUT WHAT DID IT SIGNIFY?

Thus not all our sources record the London Stone episode; none attempt to explain it. Yet those who include it treat it as a matter of some consequence — and the variations in their accounts suggest that the story had been passed down independently by a number of routes, presumably from original eyewitness reports. The episode occurs while Cade is riding through London ‘in great pride’; he makes proclamations ‘in the king’s name’ at St Magnus church and Leadenhall; he rides through the streets ‘like a lordly captain’; he strikes London Stone with his sword ‘like a conqueror’; according to Benet, he even circles the stone while striking it; and he cries ‘Now is Mortimer lord of this city’.

All this suggests an event regarded by Cade himself as of ceremonial importance, and recognised as such by onlookers. It is not surprising that modern writers have regarded it as proof that in the 15th century Londoners and others considered that London Stone had a special meaning — that by asserting authority over the stone, Cade claimed possession of the City.

Yet what was the real significance of the incident? What was Cade’s intent? Was he aware of an existing belief that possession of London Stone symbolised possession of London (as many modern authors have assumed)?

There seems to be nothing to indicate that there was ever such a belief in medieval times, and those who treat the Cade episode as proof of its existence are surely employing a circular argument. Too often they seem to be influenced by Shakespeare’s interpretation of the event, in which Cade not only strikes the stone, but commandeers it as a throne from which to issue his first edicts as ruler, and then to deliver

judgement on the first man to offend against them. Thus Grant Allen (1891, 383) writes, 'To sit upon [London Stone] was to enthrone himself on the collective city', and Adrian Gilbert (2003, 60), '[Shakespeare] knew all about the London Stone and the idea about its being the omphalos or navel-stone of England. As such it functions as Cade's throne, the seat of his authority. Such allusions would not have been wasted on a Tudor audience'. Eric Simons's account of the event is imaginative: 'Jumping off his horse, he walked to the Stone, took his sword from his swordbearer, struck the Stone with great force, seated himself upon it, and in the presence of the Lord Mayor, Sir Thomas Charlton, and a seething, jostling assembly of citizens, uttered the potent words: "*Now is Mortimer lord of this city.*"' (Simons 1963, 82).

This is great theatre. It is also fiction.

William Shakespeare was a dramatist, not a historian. But perhaps the episode was theatre from the start — a piece of dramatic improvisation by the rebel leader.

With his claim of the name of Mortimer, and thus an implied royal descent through kinship with Richard Duke of York (Harvey 2004), Cade reveals himself as well aware of what we would today call his 'image'. Edward Hall described him as of 'pregnaunt wit' (Halle 1548, fol clix recto) and 'sober in comunicacion, wyse in disputyng, arrogant in hart, and styfe in his opinion' (*ibid* fol clix verso). The chronicles concur that his progress through London was in the nature of a triumphal procession — in some chronicles the details are spelt out. He is described as riding in a blue velvet gown with sable trimmings, with gilded spurs and helmet, holding a naked sword in his hand, and 'a swerde broghte befor hym pretendyng the state of a lorde, and yet wasse he nozt but a lurdeyne [rascal]' (Marx 2003, 69).

Cade knew what was expected of a procession, whether he was imitating a royal progress, or, as Mary-Rose McLaren (2002, 68) suggests, parodying one. And recently Alexander Kaufman (2007) has contended that, rather than royalty, Cade was inspired by and imitating London's annual Midsummer Watch, when mayor and aldermen led a thousand or more armed men in uniform, accompanied by 'pageants', musicians and morris dancers, in a torchlight procession through the City, on the eves of St John the Baptist (24 June) and of SS Peter and Paul (29 June). And certainly John Stow's description of

the mayor on such an occasion — 'the Mayor himselfe well mounted on horseback, the sword bearer before him in fayre Armour well mounted' (Stow 1908, 1: 102–3)— is reminiscent of the earlier description of Cade riding with 'a swerde broghte befor hym pretendyng the state of a lorde' (above).

However, Kaufman's claim (2007, 161) that 'the procession route that Cade took through London mimics and parodies the civic route that the London officials followed during the fifteenth-century Midsummer Watch' seems to be belied by Kaufman's own quotation of John Stow's description of the route taken by the Watch (*ibid*, 148).¹⁸ Instead, Cade's peregrinations around the City seem rather to reflect a knowledge of royal practice. His original entry by way of London Bridge, stopping at St Magnus church and at Leadenhall (Kingsford 1905, 160), mirrors a number of royal entries (for example, that of Margaret of Anjou in 1445 (Withington 1918–20, 1: 148)). Later he followed the customary royal route through Cheapside to St Paul's (Flenley 1911, 133); we may compare Henry V's progress described in Withington (1918–20, 1: 134–5) and others. However, the route along which, according to John Benet (1972, 201), he dragged the dead body of Lord Saye (see above) was a novel one — not all Cade's actions were simple imitations of customary practice.

But whether in the context of royal or of civic ceremony, what could be a more triumphant action than this? 'They call this London Stone? Then at a single stroke I can make myself Lord of London.' Sadly, none of our sources enlightens us; we do not know Cade's thinking, nor how his followers or the Londoners who witnessed the event interpreted it. And some contemporaries seem not to have regarded it as worth recording at all.

There may be a clue in Shakespeare's dramatic treatment, 140 years later — for it seems that Shakespeare did not expect his audience to take the episode seriously. And we have to assume there was no prior knowledge among Shakespeare's audience of a custom of striking London Stone with a sword to claim the mastery of London, for otherwise Shakespeare or the editor of the Folio edition could not so readily have changed the incident to involve Cade's staff rather than his sword.

In fact, the whole scene is played for laughs. The ironic comment by one of the rebels (in the

fuller First Folio text) on the fate of the soldier who had dared to call the rebel leader 'Jack Cade' instead of Lord Mortimer, 'If this fellow be wise, he'll never call you Jack Cade more; I think he hath a very fair warning' — the 'fair warning' was his murder; or Cade's desire that the Pissing Conduit (that most inadequate of all London's conduits) should run with wine for a year; or even his parting instruction to his followers 'if you can' to burn down the Tower of London, surely the most fireproof building in the whole city. Kenneth Muir (1977, 30) comments that Shakespeare depicts Cade as a 'sinister buffoon'.

CONCLUSION

Shakespeare's account of the London Stone episode cannot be read as history; nor can we trust his interpretation of Cade's motives. Sadly the sketchy accounts provided by our only near-contemporary sources give us even less basis for interpretation. Certainly we should not assume that Cade was carrying out a 'traditional' practice by striking London Stone. In the absence of corroborative evidence, we cannot use his apparently unprecedented act as proof of a pre-existing custom, or of a pre-existing reverence for London Stone as a symbol of authority.

Of all the events in the long history of London Stone, its treatment by Jack Cade remains the most mysterious — apart from its origin, on which Jack Cade throws no light!

NOTES

¹ Marsden (1975, 63) gives metric dimensions (0.53m by 0.42m by 0.305m). However, from the measurement '0.305m', which will be recognised as the usual metric conversion of 'one foot', it is obvious that these are artificial conversions from measurements in feet and inches, probably taken when the stone was in the Guildhall Museum in the 1960s. They give a spurious appearance of precision to the nearest 5mm. The measurements have been 'reconverted' here to the nearest inch, which given the roughness of the stone is probably sufficiently accurate — the stone is currently inaccessible for measurement.

² The tedious process of elimination that reduced each claim to its tenuous grasp on historical reality may warrant eventual publication.

³ This list of properties is today bound in a volume once in Sir Robert Cotton's library, now in the British Library: Ms Cotton Faustina B vi (British Museum 1802, 606–7). But although from its content this

volume clearly has a Canterbury provenance, it is no 'gospel book' — it does not incorporate the four gospels of the New Testament. Did Stow simply misremember in which particular book he had found the list of Canterbury properties, or did he perhaps see this manuscript when it was bound in a different volume? (It has clearly been trimmed for rebinding at some point, probably since Stow's time (Kissan 1940, 59).)

⁴ Although the details are evident on the original engraved plate, they do not show up well on reproductions of the map such as that in Saunders & Schofield (2001, pl II).

⁵ This fact was pointed out by Kathryn Stubbs of the City of London Planning Department in correspondence. The railway tunnel and underground station are clearly marked on large scale Ordnance Survey maps, and the extent of the excavations, to a marked depth of 33 feet below the surface of Cannon Street, is shown on a pair of contemporary cross-sections of the works in progress, now in the collection of London's Transport Museum (illustrated in Taylor 2001, 54).

⁶ J E Price assumed that it was the move of 1798 that brought the Stone to this location — 'At the repair of the church in 1798 it was placed in its present position in the centre of the south side of the church' (Price 1870, 63) — in spite of the fact that he cites the vestry minutes of June and August 1798 that confirmed the decision to place it in front of the blank doorway to the east (*ibid*, 61–2).

⁷ The text printed by Harrison differs a little from that which, according to Price, the Council of the London and Middlesex Archaeological Society had originally recommended (Price 1870, 64–5). In particular, the proposed text, published by Price, made no comment on the origin or age of the stone; the opening words, 'Commonly believed to be a Roman work', seem to have been an addition to the plaque.

⁸ Wren and his contemporaries assumed that London's Roman forum stood just east of the Walbrook in this area, where it is shown, for example, on William Stukeley's speculative map of Roman London (Stukeley 1724, pl 57; Clark 2008 forthcoming).

⁹ This story was first promulgated by Geoffrey of Monmouth in the 12th century, and subsequently had a long and influential existence (Clark 1981).

¹⁰ I hope to publish elsewhere the full argument to show that this popular saying is a 19th-century confection, and that it can be convincingly attributed to Richard Williams Morgan, who firmly believed in the historical reality of Brutus of Troy (Morgan 1857, iv–v; 26; 31–2). Meanwhile my brief note in the newsletter of the Folklore Society (Clark 2007) must suffice.

¹¹ The well-known early 11th-century grave slab with Ringerike decoration and a runic inscription, found in St Paul's Church Yard in 1852 and now in the Museum of London, is made of Bath (Coombe Down) limestone (Tweddle *et al* 1995, 226–8). This sculpture may represent the refacing and carving anew of a slab from some Roman monument or structure.

¹² This brief summary is derived largely from Griffiths' narrative (1981, 610–17; see also Harvey 1991; 2004). It makes no claim to be definitive or necessarily accurate in detail. Contemporary chroniclers differ in their accounts of the sequence of events as well as the absolute chronology. For example, the *New Chronicles* attributed to Robert Fabyan claim that Cade first entered London not on Friday 3 July but on Thursday 2 July (Fabyan 1811, 624).

¹³ Although the 'army gathered together into Smithfield' belongs in the context not of Cade's rebellion of 1450 but of the Peasants' Revolt of 1381!

¹⁴ Moreover Richard of York (1411–60) could claim descent through his mother Anne Mortimer from Edward III.

¹⁵ The 'Pissing Conduit' by the Stocks Market (Stow 1908, 1: 183) was presumably so called because it provided only a thin and intermittent stream of water. That the conduits should run with wine seems to have been an established feature, first recorded in 1399, of the pageants surrounding the formal reception of royal visitors to London (Withington 1918–20, 1: 132 and n 2), and Shakespeare's audience would have recognised Cade's demand (like his references to 'our reign' and to 'treason') as a presumptuous claim to royal privilege.

¹⁶ Ronald Knowles, in his edition of the play, suggests that 'staff carries great visual irony' given its function elsewhere in the play as a symbol of power or of a pilgrim's piety (Shakespeare 1999, 317 note).

¹⁷ In her authoritative account of Cade's rebellion, I M W Harvey does not mention — let alone attempt to explain — the London Stone episode (Harvey 1991, 90–8). Contrariwise, it provided the title *Lord of London* for Eric Simons's more popular book on Cade, and the excuse for a long disquisition on the presumed traditional 'magical qualities' of the stone (Simons 1963, 81–3).

¹⁸ '... a marching watch, that passed through the principal streets thereof, to wit, from the little Conduit by Paules gate, through west Cheape, by ye Stocks, through Cornhill, by Leaden hall to Aldgate, then backe downe Fenchurch streete, by Grasse church, aboute Grasse church Conduite, and vp Grasse church streete into Cornhill, and through it into west Cheape againe' (Stow 1908, 1: 102).

BIBLIOGRAPHY

- ACKROYD (2000), P Ackroyd *London: The Biography*
- ALLEN (1827–8), T Allen *The History and Antiquities of London, Westminster, Southwark and Parts Adjacent*
- ALLEN (1891), G Allen 'The heart of London' *Longman's Magazine* 17 (Feb 1891), 378–86
- ANON (1860), *A Treatyse of a Galaunt, with the Maryage of the Fayre Pusell the Bosse of Byllyngesgate unto London Stone* (ed J O Halliwell)
- ANON (1870), 'Proceedings at evening meetings' *Trans London Middlesex Archaeol Soc* 3, 56–85
- ANON (1888), 'London Stone' *Chambers's Journal* 5th series, 225 (21 April 1888), 241–2
- BENET (1972), J Benet 'John Benet's Chronicle for the years 1400 to 1462' (ed G L Harriss & M A Harriss) *Camden Miscellany* 24, 151–233
- BISHOP OF LONDON'S COMMISSION (1946), *The City Churches: Final Report of the Bishop of London's Commission*
- BRAYLEY (1829), E W Brayley *Londiniana: or, Reminiscences of the British Metropolis...*
- BRIE (1908), F W D Brie (ed) *The Brut: or Chronicles of England, Part II* Early English Text Society original series 136
- BRITISH MUSEUM (1802), British Museum A *Catalogue of the Manuscripts in the Cottonian Library, Deposited in the British Museum*
- CAMDEN (1610), W Camden *Britain, or a Chorographical Description of the Most Flourishing Kingdomes, England, Scotland, and Ireland, and the Ilands Adjoyning, Out of the Depth of Antiquitie* (trans P Holland)
- CLARK (1981), J Clark 'Trinovantum — the evolution of a legend' *J Medieval Hist* 7, 135–51
- CLARK (2007), J Clark 'London Stone: the Welsh connection' *FLS News* 57 (Feb 2007), 3–4
- CLARK (2008), J Clark "'Fanciful ichnography": William Stukeley's maps of Roman(?) London' in J Clark, J Cotton, J Hall, R Sherris & H Swain (eds) *Londinium and Beyond: Essays on Roman London and its Hinterland for Harvey Sheldon* CBA Res Rep 156 (forthcoming 2008)
- COUGHLAN (2006), S Coughlan 'London's heart of stone' *BBC News Magazine* (22 May 2006) online <<http://news.bbc.co.uk/1/hi/magazine/4997470.stm>> accessed 5 March 2007
- DEAN (1996), J M Dean (ed) *Medieval English Political Writings*
- FABYAN (1811), R Fabyan *The New Chronicles of England and France ... Reprinted from Pynson's Edition of 1516...* (ed H Ellis)
- FLENLEY (1911), R Flenley (ed) *Six Town Chronicles of England*
- GAIRDNER (1876), J Gairdner (ed) *The Historical Collections of a Citizen of London in the Fifteenth Century: Containing I. J Page's Poem on the Siege of Rouen, II. Lydgate's Verses on the Kings of England, III. William Gregory's Chronicle of London* Camden Society new series 17

- GAIRDNER (1880), J Gairdner (ed) *Three Fifteenth-century Chronicles, with Historical Memoranda by J. Stowe...* Camden Society new series 28
- GILBERT (2003), A Gilbert *The New Jerusalem*
- GOMME (1890), G L Gomme *The Village Community: With Special Reference to the Origin and Form of its Survivals in Britain...*
- GORDON (1914), E O Gordon *Prehistoric London: Its Mounds and Circles*
- GOSS (1991), J Goss Braun & Hogenberg's *The City Maps of Europe: A Selection of 16th Century Town Plans & Views*
- GRANSDEN (1974), A Gransden *Historical Writing in England c. 550 to c. 1307*
- GRANSDEN (1982), A Gransden *Historical Writing in England 2: c. 1307 to the Early Sixteenth Century*
- GRIFFITHS (1981), R A Griffiths *The Reign of King Henry VI: The Exercise of Royal Authority, 1422–61*
- HALLE (1548), E Halle [Hall] *The Union of the Two Noble and Illustrate Famelies of Lancastre & York*
- HARBEN (1918), H A Harben *A Dictionary of London: Being Notes Topographical and Historical Relating to the Streets and Principal Buildings in the City of London*
- HARRISON (1891), D Harrison 'St Swithin: London Stone' *Notes and Queries* 7th series, vol 12, 106
- HARVEY (1991), I M W Harvey *Jack Cade's Rebellion of 1450*
- HARVEY (2004), I M W Harvey 'Cade, John (d. 1450)' in H C G Matthew and B Harrison (eds) *Oxford Dictionary of National Biography*, on line <<http://www.oxforddnb.com/view/article/4292>> accessed 7 February 2008
- HAUGHTON (1616), W Haughton *English-men for my Money: or, A Pleasant Comedy, called, A Woman will have her Will*
- HOLINSHED (1587), R Holinshed *The first and second volumes of Chronicles, now newlie augmented and continued... to the year 1586... and The third volume of Chronicles, beginning at duke William the Norman, commonlie called the Conqueror... Now newlie recognised, augmented, and continued... to the year 1586...* (3 vols in 2)
- KAUFMAN (2007), A L Kaufman 'Jack Cade's rebellion of 1450 and the London Midsummer Watch' *Nottingham Medieval Studies* 51, 143–66
- KEENE (2004), D Keene 'Henry fitz Ailwin (d. 1212)' in H C G Matthew and B Harrison (eds) *Oxford Dictionary of National Biography*, online edn, ed L Goldman (Jan 2008) <<http://www.oxforddnb.com/view/article/9526>> accessed 5 February 2008
- KEENE & HARDING (1985), D Keene & V Harding *A Survey of Documentary Sources for Property Holding in London before the Great Fire*
- KINGSFORD (1905), C L Kingsford (ed) *Chronicles of London*
- KINGSFORD (1920), C L Kingsford 'Historical notes on mediaeval London houses' *London Topographical Record* 12, 1–66
- KISSAN (1940), B W Kissan 'An early list of London properties' *Trans London Middlesex Archaeol Soc* new series 8, 57–69
- LAW (1977), F W Law *The Worshipful Company of Spectacle Makers: A History*
- LEE (1988), C E Lee *The Metropolitan District Railway* (2nd printing)
- LEFTWICH (1934), B R Leftwich *A Short History and Guide to St. Swithin, London Stone*
- LOBEL (1989), M D Lobel (ed) *The British Atlas of Historic Towns, III: The City of London: From Prehistoric Times to c.1520* (topographical mapping ed W H Johns)
- McLAREN (2002), M-R McLaren *The London Chronicles of the Fifteenth Century: A Revolution in English Writing*
- McLAREN (2004), M-R McLaren 'Fabyan, Robert (d 1513)' in H C G Matthew and B Harrison (eds) *Oxford Dictionary of National Biography*, on line <<http://www.oxforddnb.com/view/article/9054>> accessed 10 January 2007
- MARSDEN (1975), P Marsden 'The excavation of a Roman palace site in London, 1961–1972' *Trans London Middlesex Archaeol Soc* 26, 1–102
- MARX (2003), W Marx (ed) *An English Chronicle 1377–1461: A New Edition...*
- MERRIFIELD (1965), R Merrifield *The Roman City of London*
- MERRIFIELD (1969), R Merrifield *Roman London*
- MOR MERRION (1862), Mor Merrion [Richard Williams Morgan] 'Stonehenge' *Notes and Queries* 3rd series, vol 1, 13
- MORGAN (1857), R W Morgan *The British Kymry, or Britons of Cambria: Outlines of their History and Institutions from the Earliest to the Present Times*
- MUIR (1977), K Muir *The Sources of Shakespeare's Plays*
- NICHOLS (1852), J G Nichols (ed) *Chronicle of the Grey Friars of London* Camden Society old series 53
- ORDNANCE SURVEY (1983), Ordnance Survey *Londinium: A Descriptive Map and Guide to Roman London* (2nd edn)
- PAGE (1923), W Page *London: Its Origin and Early Development*
- PRICE (1870), J E Price *A Description of the Roman Tessellated Pavement Found in Bucklersbury; with Observations on Analogous Discoveries*
- PROCKTER & TAYLOR (1979), A Prockter & R Taylor *The A to Z of Elizabethan London*
- REDDAWAY (1940), T F Reddaway *The Rebuilding of London after the Great Fire*
- ROWLANDS (1608), S Rowlands *Humors Looking Glasse*
- SAUNDERS & SCHOFIELD (2001), A Saunders & J Schofield *Tudor London: A Map and a View* London Topographical Society publication 159
- SCHOFIELD (1994), J Schofield 'Saxon and mediaeval parish churches in the City of London: a review' *Trans London Middlesex Archaeol Soc* 45, 23–145

- SHAKESPEARE (1619), W Shakespeare *The Whole Contention betweene the two Famous Houses, Lancaster and Yorke. With the Tragicall ends of the good Duke Humfrey, Richard Duke of Yorke, and King Henrie the sixt ...*
- SHAKESPEARE (1999), W Shakespeare *King Henry VI Part 2* (ed R Knowles)
- SIMONS (1963), E N Simons *Lord of London*
- SINCLAIR (1997), I Sinclair *Lights out for the Territory*
- SMITH (1791), J T Smith *Antiquities of London and its Environs*
- STAPLETON (1846), T Stapleton (ed) *De Antiquis Legibus Liber: Chronica Maiorum et Vicecomitum Londoniarum*
- STOCK (2004), A Stock 'Stow's Survey and the London playwrights' in I Gadd & A Gillespie (eds) *John Stow (1525–1605) and the Making of the English Past*, 89–98
- STOW (1720), J Stow *A Survey of the Cities of London and Westminster... Brought Down from the Year 1633... to the Present Time* (ed J Strype)
- STOW (1908), J Stow *A Survey of London... Reprinted from the text of 1603* (ed C L Kingsford)
- STREET (2000), C E Street *Earthstars: The Visionary Landscape. Part One: London, City of Revelation*
- STUKELEY (1724), W Stukeley *Itinerarium Curiosum: or, an Account of the Antiquities and Remarkable Curiosities in Nature or Art... Centuria I*
- TAYLOR (2001), S Taylor *The Moving Metropolis: A History of London's Transport since 1800*
- THOMAS & THORNLEY (1938), A H Thomas & I D Thornley (eds) *The Great Chronicle of London*
- TWEDDLE *et al* (1995), D Tweddle, M Biddle & B Kjølbbye-Biddle *Corpus of Anglo-Saxon Stone Sculpture, 4: South-East England*
- WATKINS (1925), A Watkins *The Old Straight Track: Its Mounds, Beacons, Moats, Sites, and Mark Stones*
- WELLS & TAYLOR (1987), S Wells & G Taylor *et al William Shakespeare: A Textual Companion*
- WHITE (1898), J G White 'The ancient records and antiquities of the parishes of St. Swithin, London Stone, and St. Mary Bothaw' *Trans London Middlesex Archaeol Soc* new series 1:2, 183–209
- WIKIPEDIA CONTRIBUTORS (2008), Wikipedia contributors 'London Stone' Wikipedia. The Free Encyclopedia (2 February 2008) online <http://en.wikipedia.org/w/index.php?title=London_Stone&oldid=188660265> accessed 9 February 2008
- WITHINGTON (1918–20), R Withington *English Pageantry: An Historical Outline*
- WREN (1750), C Wren (ed) *Parentalia: Or, Memoirs of the Family of the Wrens...* (repr 1965 (facsimile))

ON A BRASS FORMERLY IN THE CHURCH OF SAINT DUNSTAN-IN-THE- WEST: ADDENDA

Philip Whittemore

In an earlier article, published in *LAMAS Transactions*,¹ details were given concerning a now lost fragment of brass found in St Dunstan-in-the-West in 1832, showing a crown of thorns surrounding the letters 'Ihū' in black letter. Since the publication of that note, additional information about the discovery of the brass has been found in the notes and papers of Philip Hammersley Leathes, FSA,² now in the King's College Archives.³

Between 1829 and 1832, in order to allow for the widening of Fleet Street, the church was demolished, and rebuilt on a different alignment. It was while the base of the tower was being demolished that the fragment of brass was discovered, probably in late summer or early autumn 1832. In his notes Leathes records the discovery of the brass, and this is worth quoting verbatim:

The stone on which the monogram was inlaid with cement & riveted was found by the workmen on removing the foundation of the south-west corner of the old Tower of the Parish Church of St. Dunstan, is of Petworth⁴ marble which is occasionally found in very old Buildings was about two feet square, & from three to four inches in thickness, but mutilated and broken in several pieces by the workmen in forcing off the plate for the purpose of purloining before it was noticed by the foreman, & it appears the stone itself was considered of some value as each of them secured a piece, it was about eighteen inches below the general level in the centre of the foundation so situate that no part was visible externally, it is therefore presumed

it could not have been placed there for the purpose of a monumental inscription to the memory of any departed individual from the appearance of the pieces of the stone that are preserved, & the information obtained from the workmen there is a strong probability that there was another plate attached which was removed and taken away by one of the men.

It does not appear that any more of the same kind of stone was observed, as the foundation [was?] several feet above the level was composed of flint & chalk, combined with rubble shells &c. the foundation was generally in good condition & required considerable labor [*sic*] to remove any part of it.

At a meeting of the Society of Antiquaries, held at Somerset House on Thursday, 22 November 1832, Leathes gave an account of the discovery to members of the Society, which was duly recorded in their Minute Book.⁵ In March the following year he presented to the Society 'a few Impressions from the Brass Plate'.⁶ It would appear that only one impression now survives in the collection of brass rubbings at Burlington House, in Red Portfolio C-K. At no point in the brief history of the brass is any mention made regarding ownership of the brass. In all likelihood it was probably in Leathes' possession. He certainly had no trouble procuring copies for the Society of Antiquaries. As the brass was found amongst stone work in the tower wall, it is evident that this was a slab that was re-used during a rebuilding of the tower. Whether the slab came from inside the church, or whether

it was brought from elsewhere cannot now be determined. Once Leathes had exhibited the brass it disappears from view, and it is with regret that in the intervening 175 years the fragment has not been found.

ACKNOWLEDGEMENTS

I am grateful to the King's College Archives, King's College London, for permission to publish Leathes' original note on the brass.

NOTES

¹ *Trans London Middlesex Archaeol Soc* 52 (2001), 167–8.

² For a brief obituary notice see *Gent Mag* NS IX.i (1838), 442.

³ Leathes 2/6.

⁴ Purbeck marble would have been the more usual stone for a tomb slab in the 1460s.

⁵ SAL Minute Book XXXVI 4 March 1830 to June 1835, 243–4.

⁶ *ibid*, 284.

PAPERS READ AT THE LAMAS LOCAL HISTORY CONFERENCE HELD AT THE MUSEUM OF LONDON IN NOVEMBER 2007: ‘THEY CAME TO LONDON: 1000 YEARS OF MIGRATION’

SOME IMAGES OF THE LONDON JEWRY, c.1070–1290

Joe Hillaby

William of Malmesbury records that William the Conqueror transferred Jews from Rouen to London. The first firm evidence of London Jews comes in *The Disputation of a Jew and a Christian* of Gilbert Crispin, 4th abbot of Westminster (c.1085–1117/18). The Jew, who had attended the Talmudic academy at Mainz, stated his position firmly: Christ was a great prophet but he could not accept His divinity. The tone throughout was friendly and warm. Crispin explains that the Jew’s visit had been on ‘business’, probably a loan for the abbey’s building programme. Further loans included £400 in 1130, and £667 c.1230. A sculptured capital provides a portrait of William II and Crispin, holding a charter confirming the abbey’s liberties, privileges, and status as coronation church (Fig 1); the capital is lost, but drawings were published in 1834.

The *Leges Edwardi Confessoris* c.1120–30 state that ‘Jews and all they have’ are the King’s. None may subject himself to any magnate. Henry I restricted Jewish residence to London, but Stephen permitted the establishment of provincial communities. London’s primacy was challenged only by Aaron of Lincoln, d1186, and Aaron of York, ruined by 1255. The first reference to Jewish settlement, a *vicus iudeorum*, is in a St Paul’s survey, c.1127, which refers to a plot *versus*, next to, St Olave’s in Colechurch

Lane, Old Jewry after 1290. By the mid-13th century Jews lived across some nine parishes. The Jewry was no ghetto; Jews and Christians lived side by side. London’s Jewry formed a coherent self-governing community, with its own institutions, including internal control of taxation, whether for royal or communal use, as later did the provincial Jewries.



Wm. Capon, del.

N. Whittock, sc.

Fig 1. William II, seated, presents the charter to Crispin, on left with crosier

Any large room could serve as a synagogue, *scola*. The cemetery, *bet chayim*, house of life, was the first communal institution to be established, following classical tradition, outside town walls. Until 1177 Jewish burials were restricted to the London cemetery, *Leyrestowe*, outside Cripplegate; some 2½ acres, it was bounded by Aldersgate, Red Cross Street, and Jewin Street. Grimes, who excavated 1949–61, found no trace of tombstones, but fragments were discovered in Ludgate (1586), four more in Aldersgate (1617), and a sixth in London Wall (1753). Subsequently lost, their fragmentary Hebrew inscriptions were copied (Fig 2).



Fig 2. Tombstone fragment from Aldersgate of 'Abraham the Good ... died in 1211'

Evidence suggests that at Cripplegate, and elsewhere, there was a *bet tohorah*, for the ritual purification with running water of corpses prior to burial, and of those in contact with them, for he that 'touches the dead body of any man shall be unclean' (Numbers 19:11–13); the Mishnah adds, 'whether by touch, carrying or overshadowing'.

A grant of 1212–13 to Chicksands Priory records the site of London's great synagogue, behind houses fronting the north-east corner of Colechurch Lane and Lothbury. England's earliest synagogues were associated with the wealthy and powerful. There can be no doubt that the *magna scola* was built by Rabbi Josce, leader of London's medieval Jewry, whose family property in the *rue aux juifs*, Rouen, was sold only in 1103. In the 13th century houses of the wealthy and powerful, such as Aaron of York, clustered around its successor. In 1272 Queen Eleanor mischievously sold a site adjacent to the *magna scola* to the Friars of the Sack, who then complained that the 'continuous wailing, ululation and loud lamentations' disturbed their devotions. Henry III expelled the Jews, and granted their property to the Friars. What,

one wonders, did they make of the sounding of the *shofar*, the ram's horn proclaiming God as King of the Universe? In 1305 the Friars' chapel was acquired by Robert fitz Walter, and in 1411 sold to the Grocers' Company, who acquired the remainder of the fitz Walter property in 1433.

The 1130 Pipe Roll shows why Henry I and Henry II were concerned to maintain sole control of the Jewry. Firstly, Jewish credit facilities enabled the Crown to rack up its cash demands on the higher nobility, through fines, reliefs *etc*. The roll identifies the clientele of the London Jewry:

1. Ranulf II de Gernons, 4th earl of Chester, who owed Henry more than £2,000;
2. Richard fitz Gilbert, 3rd earl of Clare and Ranulf's brother-in-law, whose Welsh marcher lordship involved him in expensive castle-building at Aberystwyth and Ceredigion;
3. Osbert of Leicester, who owed Henry 1,000 marks (£666 13s 4d) for 'relaxation of *malvoentia regis* (the royal ire)'.

Secondly, it indicates the wealth, and thus the taxable potential, of London's Jewry. It records:

1. £2,000 fine 'for the sick man they killed';
2. £1,166 13s 4d outstanding from earlier rolls.

The total of £3,166 13s 4d represents 14% of the total royal income that year.

The Roll also records substantial money transfers, loan repayments, from the Crown to Rabbi Josce and Manasser.

Henry's reign came to be regarded by Jews as an era 'when their fathers had been happy and respected'. At Richard I's coronation in 1189, Jews clustering around the west door of Westminster Abbey were assaulted by the mob. The riots spread to the Jewry. Besieged from three o'clock in the afternoon to sunset, its houses were set on fire. Violence spread to East Anglia and York, where many Jews took their own lives and those of their wives and children.

Royal records and tallage rolls tell us more about members of the Jewry than any other segments of English 13th-century society, except the highest echelons of the nobility and clergy. Responsibility for monitoring Jewish bonds lay with the Barons of the Exchequer of the Jews in Westminster Hall, where, in 1235, their chamber was enlarged with 'solar, cellar and chimney', similar to the Exchequer Court on the other side.

In 1210 King John ordered the general imprisonment of wealthy Jews, to enforce payment of his £40,000 tallage. Many fled. In 1215 baronial forces captured London. Jewish houses became stone quarries for rebuilding the city's defences. Stow describes the Jews as 'prowling the city like dogs'. By 1221 Henry III's Council of Regency, appreciating the economic importance of the Jewry, re-established the London and 17 self-governing provincial communities, protected by the royal sheriffs and castellans. Later Henry's heavy taxation led to the Jewries' impoverishment, and the disappearance of the so-called plutocrats, such as Aaron of York. Elias l'Eveske, the archpresbyter, pleaded in 1254 for permission for the Jewry to quit the realm, even accusing Henry of 'purposing to destroy us ... exacting from us things we cannot give though he put out our eyes and cut our throats when he had first pulled off our skins'.

In 1232, Matthew Paris tells us, Henry III 'founded a handsome church to the honour of God and the Virgin, at his own expense', 'fit for an assembly of monks', as a house, *Domus*, for Jewish converts. Paris illustrates the chapel (Fig 3). Henry's fine chancel arch was incorporated in the 1890s into the south-east end of the Public Record Office building. The rest was demolished, but detailed records were kept. In 1307 Osgodby, Keeper of the Rolls, was appointed Master of the *Domus*. All but one of his successors also combined the posts. By 1338 Converslane had

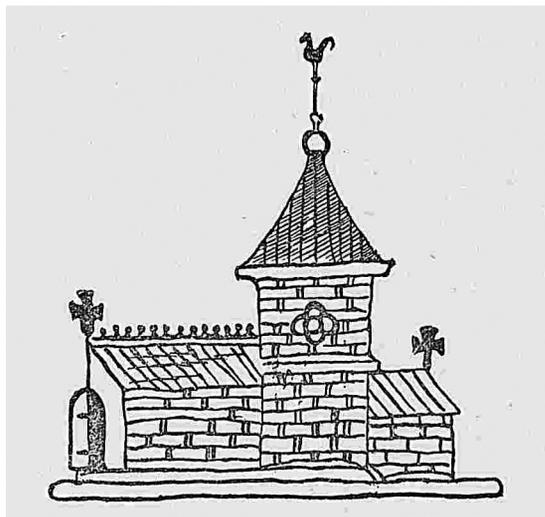


Fig 3. *Domus Conversorum*. Matthew Paris's drawing (BL MS Royal 14c, f121)

become *Chancelerslane*. In 1724 Colin Campbell demolished the original *Domus*, built a new house for the Keeper of the Rolls, and repaired the chapel at a cost of £6,000.

Two *mikva'ot*, ritual baths, primarily for monthly use by the womenfolk, have been found in London, one by Sermon at 81–7 Gresham Street (1986), the other by Watson at 1–6 Milk Street (2001). In 1290 Edward expelled the English Jewry. Tower records show that 1,461 Jews embarked from London. Poorer Jews paid 2d rather than 4d in customs dues.

BIBLIOGRAPHY

- BLAIR *et al* (2002), I Blair, J Hillaby, I Howell, R Sermon & B Watson 'Two medieval Jewish ritual baths — *mikva'ot* — found at Gresham Street and Milk Street in London' *Trans London Middlesex Archaeol Soc* 52, 127–37
- HILLABY (1991–2), J Hillaby 'London: the 13th-century Jewry revisited' *Jewish Historical Studies* 32, 89–158
- HILLABY (1993), J Hillaby 'Beth Miqdash Me'at: the synagogues of medieval England' *Jnl Ecclesiastical Hist* 44(ii), 182–98
- HILLABY (1993–4), J Hillaby 'The London Jewry: William I to John' *Jewish Historical Studies* 33, 1–44
- HILLABY & SERMON (2004), J Hillaby & R Sermon 'Jacob's Well, Bristol: Mikveh or Bet Tohorah?' *Trans Bristol & Gloucs Archaeol Soc* 122, 127–52
- HONEYBOURNE (1961), M Honeybourne 'The pre-expulsion cemetery of the Jews in London' *Jewish Historical Studies* 20, 127–37
- VCH (1909), *VCH London I*, 'Domus Conversorum', 551–4

THE LONDON HANSE: A MERCANTILE ENCLAVE IN THE HEART OF MEDIEVAL LONDON

Lyn Blackmore and Bruce Watson

Introduction

The site commonly known as the Steelyard, in Upper Thames Street (TQ 3258 8075), now buried under Cannon Street Station, played a key part in the development of London's trade. Located at the heart of the waterfront, on the east bank of the Walbrook, it was the base of German merchants from at least the mid-12th century, later becoming the westernmost base

of the German Hanse in the mercantile alliance of some 200 cities and towns commonly known as the Hanseatic League (Bluer 1997a; Gaimster 2005). The site was partially excavated by the then Department of Urban Archaeology in 1987–89 (UTA87, directed by Angus Stevenson and supervised by Richard Bluer and Frank Meddens) when the approach to Cannon Street Station was redeveloped by Speyhawk Plc (Spence & Grew 1990, 22–3). For various reasons post-excavation work was never completed and we are greatly indebted to the City of London Archaeological Trust for generous financial support which has made it possible to revive this important project.

The lecture given at the LAMAS Local History Conference traced the history of the site from the 11th to the 19th century, setting it within its local context and outlining the development of trade between England and Germany in the Middle and Late Saxon periods. This includes finds recovered during excavations in the 1990s on the site of the Alfredian marketplace at Queenhithe, which have direct parallels in North Germany/Southern Denmark and the Rhineland, and show that merchants from these areas were trading in the City (Ayre & Wroe-Brown 1996; Wroe-Brown 1999).

In the 10th and 11th centuries wooden quays and buildings were gradually constructed between the Roman city wall and the Thames. By AD 1000 Queenhithe dominated the upriver traffic, while a new market established at Billingsgate catered for downriver trade. Between these, the Dowgate inlet at the mouth of the Walbrook became the focus of the wine trade. The western bank was held by the merchants of Rouen by the mid-11th century, while the eastern bank was the centre of the German wine trade by 1100, and possibly earlier (Keene 1989a, 16–19; Lloyd 1991, 13). By the 12th century the port of London was one of the most active in the country, used by merchants from, or with connections in, Denmark and Norway, Normandy, Antwerp, Tiel, Bremen, Cologne, Mainz, Regensburg and Lotharingia (Brooke with Keir 1975, 265–70; Keene 1989a, 16, 18). This activity is borne out by archaeological finds, especially pottery (Vince 1985, 39–43, 86; Blackmore 1999, 42–4, 49–50).

The German Guildhall

There is some confusion in the literature as to

the dates of different references to the Germans, but the first mention of the Cologne merchants and the German wine trade is in a writ of Henry II (1154–89), which orders the sheriffs and bailiffs of London to let them sell their wine on the same terms as the French. Between 1157 and 1179 they acquired further privileges and protection and a property, referred to as '*domo sua Londonensi*', which by 1194 was known as their guildhall (Keene 1989a, 18; Keene 1989b, 47; Hunting 1990, 17; Lloyd 1991, 15).

It is currently unclear whether the Cologne merchants converted an existing building or constructed a new guildhall, but the property was situated between the Thames and Roper Street, or Thames Street to the north, and between the Dowgate inlet and the church of All Hallows (this church became known as the seaman's church and was used by the Germans as well as the English). As shown in Fig 4, the area consisted of a series of narrow rectangular properties, separated by four alleys extending southwards from Thames Street to the waterfront (Keene 1989a, 19–20).

The 1987–89 excavations revealed the foundations of the late 12th-century guildhall, showing that it was a substantial masonry rectangular building, oriented north–south (Keene 1989a, 20–2; Bluer 1997b; Schofield 1995, 23). It was at least 19m long (possibly up to 30m long) and 10.3m wide with a ground floor that was probably used for the storage of commodities. It was over six bays long and divided into two unequal aisles by stone columns on square plinths; some walls survived up to 1.4m in height above floor level. The hall itself was at first floor level and the presence of latrines is indicated by an external stone-lined cesspit attached to the western wall. The guildhall was the largest stone building of its kind in London, and the largest in 12th-century England to be used for mercantile purposes (Keene 1989a, 25; Gaimster 2005, 419).

Possibly the earliest named member of the guildhall is Arnold, son of Thedmar, an alderman of the City of London and, from 1251–1260, alderman of the German merchants. Born in London, 1201, he inherited property adjacent to the guildhall, including a large house (Keene 1989a, 23; 1989b, 48; Hunting 1990, 17–18), that was possibly occupied by Gerard Merbode, alderman of the guildhall in 1282 (Lloyd 1991, 44).

By c.1260 the guildhall also accommodated the merchants of Hamburg and Lübeck and was

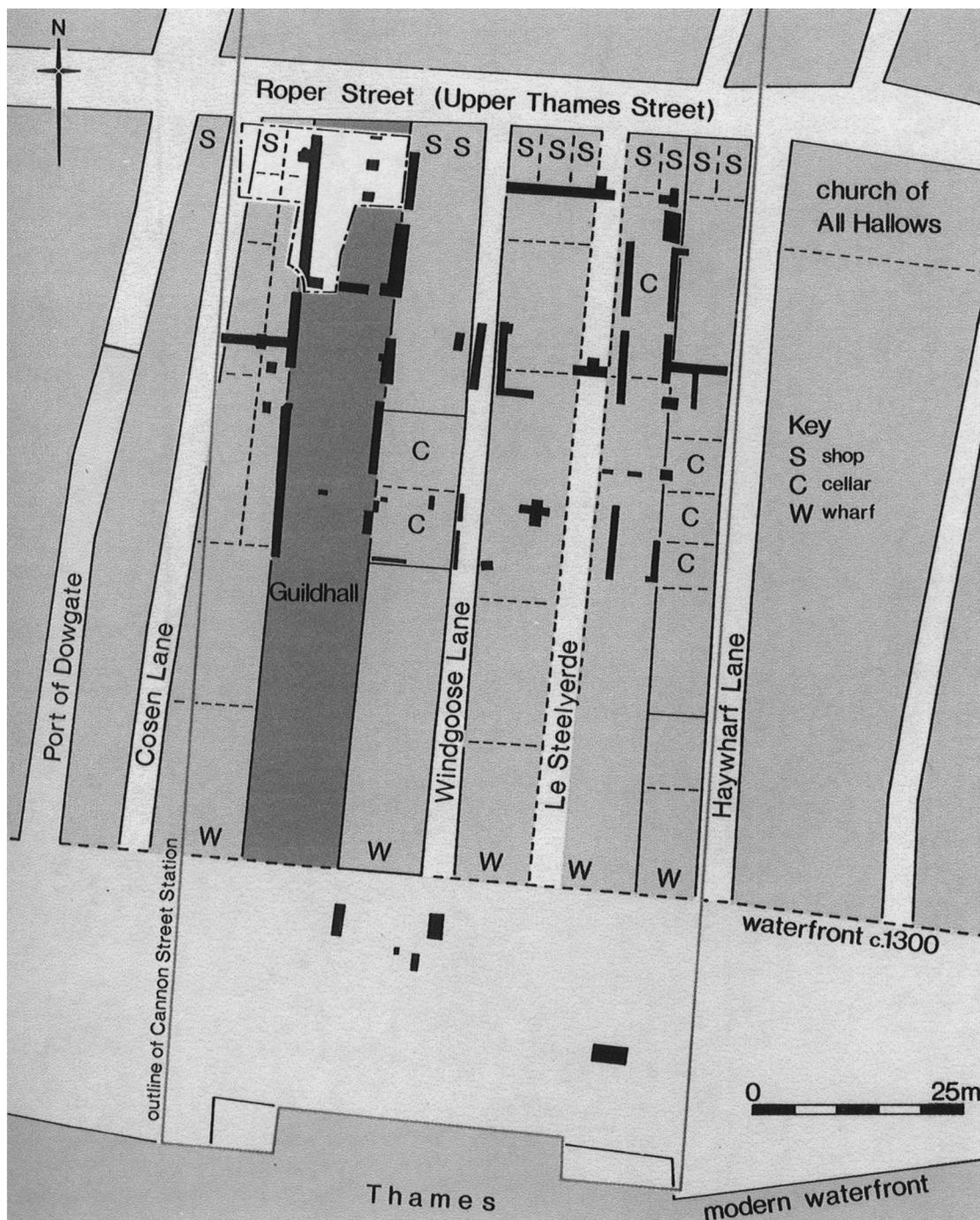


Fig 4. Plan of the Steelyard site based on archaeological remains and documentary evidence (from Spence and Grew 1990, after Keene 1989a)

referred to as the *Aula Teutonicorum* (possibly from 1224); it was also known as the *Dennishemanneshalle* (from 1275) and the *Esterlingeshalle* (from 1340) (Honeybourne 1965, 69–70; Keene 1989a, 23; 1989b, 47–8; Lloyd 1991, 19–21). During this time the area changed from one mainly occupied by rope merchants to a more mixed community of English merchants in wool, textile and wine with an increasing number of Germans, Flemings and men from Brabant (Keene 1989c, 150–1; Lloyd 1991; Bluer 1997a).

By 1320 the German merchants had apparently expanded onto rented land, and the area between Cosen Lane and Windgoose Lane, extending southwards to the Thames, was known as the *Stalhof* (Norman 1909, 390; Honeybourne 1965, 74; Keene 1989c, 151); additional buildings were constructed for the storage and sale of wine and also as living accommodation. The Hanse community comprised young, single men from a growing number of towns and rules were imposed in order to maintain discipline and exclusivity and to protect the position of the merchants and their income; from 1366 these became increasingly strict (Jenks 1989).

During the 14th century the Hanse dominated cloth trade became increasingly important and the number of cloth merchants and ancillary craftsmen such as dyers, clothcutters and metalworkers increased as the number of sailors decreased (Keene 1989c, 151–2). By 1384 John of Northampton, a leading cloth merchant, owned land to the north and south of Thames Street, including the house formerly occupied by Arnold son of Thedmar and a lane or courtyard known as Le Steelyerde (the first documented use of the name: Honeybourne 1965, 71–4). The quay was named Stielwharf and the gate leading to Thames Street was Stielwharfgate (Keene 1989a, 24). The English name Steelyard is believed to be a corruption of this word, which is probably derived from the Lower German verb '*stalen*' meaning to certify the origin and quality of cloth by means of applying a lead seal to it (Bluer 1997b, 22; Keene 1989c, 151–2).

The post-medieval period

The Treaty of Utrecht in 1474/5 reinforced the privileges of the Hanse merchants and they formally acquired the properties east of the guildhall up to Haywharf Lane, which included the Steelyard (at the expense of the Cologne merchants: Keene 1989c, 152; Lloyd

1991, 281–2; Bluer 1997b, 22). This became a legally defined precinct that extended south to a masonry riverwall (probably of 16th-century date), investigation of which revealed some 160 reused and moulded stones, including fragments of Gothic tracery believed to be derived from earlier buildings on the site. The guildhall was rebuilt and a watch tower added to its southern end (Schofield 1995, 69, figs 23–24). From 1483 until 1598 the guildhall complex was one of the four principal counting-houses of the Hanse merchants (the others were in Bruges, Bergen and Novgorod). The arms of the *Kontor*, a double-headed eagle, can be seen on a 15th-century stoneware beaker found on the site in the 19th century (Gaimster 1997, 173, col pl 7). The luxury enjoyed by the German community is demonstrated by two murals painted by Holbein in the 1530s, showing the triumph of riches and the triumph of poverty (Hunting 1990, 16–17), and items of silverware. The two surviving pieces comprise a plate made c.1535 to a design by Holbein, showing the arms of the Steelyard, and a ewer made c.1562 in a London workshop (the knop on the lid of the ewer bears reference to the cloth trade that was so important for the Hanse merchants); both were in the Steelyard until 1609, when they were shipped to Bremen (Bracker 1989, 110–11). Residents around this time include Georg Gisz from Gdansk, painted by Holbein in 1532 (Schofield 1995, 132, fig 152). John Stow (c.1600) described the Steelyard as a large stone building within a precinct entered by three gates at the Thames Street end, and noted that the German merchants traded in 'wheat, rye, as well as other grain, as well cables, ropes and masts, pitch, tar, flax, hemp, linen cloth, wainscot, steel and other profitable merchandises' (Stow 1971, 233).

The history of the site from c.1550 onwards is detailed by Norman (Norman 1909, 389–426; for the economic and political situation of the Hanse to c.1611, Lloyd 1991). The German merchants were an exclusive community with special rights granted by the Crown. Their trading privileges and dominance of the Baltic trade were resented by English merchants, and this led to the withdrawal of privileges by Edward VI, and the expulsion of the Hanse merchants by Elizabeth I in 1598, when the Steelyard became Crown property (Lenz 1973). In 1606 the German merchants were allowed to return to their London base on condition

that they allowed English merchants to trade freely in Hanse towns. From this time onwards, however, the commercial importance of the Steelyard declined and by the mid-17th century, most of the premises had been converted into 65 apartments that were mainly occupied by English tenants (Lenz 1973; Keene 1989c, 152–6).

The Steelyard was destroyed by the Great Fire of 1666, but was rebuilt to the same plan by the 'house' master Jacob Jacobson (died 1680). To this end a splendid crest depicting the Hanse emblem of the London *kontor* (now displayed within the Museum of London) was carved by Caius Gabriel Cipper of Holstein to be erected over the gate on the Thames Street façade (Norman 1909, 405–6; Forsyth 1989). The Jacobson family ran the Steelyard until 1745 and the Steelyard remained in German hands until 1853, when it was sold by the towns of Bremen, Hamburg and Lübeck to the Victoria Dock Company for warehousing. In 1863 the premises were acquired by the South Eastern Railway Company, who during 1865–66 constructed Cannon Street Station on the site. This redevelopment involved the demolition of all the standing buildings on the site, destroyed a large amount of archaeological material, and stimulated antiquarian interest in the history of the site that we hope to explore in future stages of the project.

BIBLIOGRAPHY

- AYRE & WROE-BROWN (1996), J Ayre & R Wroe-Brown with R Malt 'Aethelred's Hythe to Queenhithe: the origin of a London dock' *Medieval Life* 5, 14–25
- BLACKMORE (1999), L Blackmore 'Aspects of trade and exchange evidenced by recent work on Saxon and medieval pottery from London' in 'Medieval London: recent archaeological work and research' *Trans London Middlesex Archaeol Soc* 50, 38–54
- BLUER (1997a), D Bluer 'The medieval German towns and the Hanseatic League' *Medieval Life* 7, 14–18
- BLUER (1997b), D Bluer 'The headquarters of the Hanse in the City of London' *Medieval Life* 8, 18–23
- BRACKER (1989), J Bracker *Die Hanse, Lebenswirklichkeit und Mythos*
- BROOKE with KEIR (1975), C N L Brooke with G Keir *London 800–1216: the Shaping of a City*
- FORSYTH (1989), H Forsyth 'Schild mit Doppeladler' in Bracker 1989, 103
- GAIMSTER (1997), D Gaimster *German Stoneware 1200–1900: Archaeology and Cultural History*
- GAIMSTER (2005), D Gaimster 'A parallel history: the archaeology of Hanseatic urban culture in the Baltic c 1200–1600' *World Archaeology* 37, No. 3, 408–23
- HONEYBOURNE (1965), M B Honeybourne 'The reconstructed map of London under Richard II' *London Topographical Record* XXII, 69–70
- HUNTING (1990), P Hunting *Archaeology and Development* (Speyhawk and MoL), 14–21
- JENKS (1989), S Jenks 'Leben im Stalhof' in Bracker 1989, 157–9
- KEENE (1989a), D Keene 'New discoveries at the Hanseatic Steelyard in London' *Hansische Geschichtsblätter* 107, 15–25
- KEENE (1989b), D Keene 'Ein Haus in London: von der Guildhall zum Stalhof' in Bracker 1989, 46–9
- KEENE (1989c), D Keene 'Die deutsche Guildhall und ihre Umgebung' in Bracker 1989, 149–56
- LENZ (1973), W Lenz 'Ein Grundriss des Londoner Stalhofes aus elisabethanischer Zeit' in *Hanse in Europa, Brücke zwischen den Märkten 12–17 Jahrhundert*, 115–18
- LLOYD (1991), T H Lloyd *England and the German Hanse 1157–1611, a Study of their Trade and Diplomacy*
- NORMAN (1909), P Norman 'Notes on the later history of the Steelyard' *Archaeologia* 61, 389–426
- SCHOFIELD (1995), J Schofield *Medieval London Houses*
- SPENCE & GREW (1990), C Spence & F Grew (eds) *The Annual Review 1989* Museum of London, DUA
- STOW (1971), J Stow *Survey of London* Vol 1 (ed Kingsford)
- VINCE (1985), A Vince 'The Saxon and medieval pottery of London: a review' *Medieval Archaeology* 29, 25–93
- WROE-BROWN (1999), R Wroe-Brown 'The Saxon origins of Queenhithe' *Trans London Middlesex Archaeol Soc* 50, 12–16

LITTLE ITALY IN VICTORIAN LONDON: CLASS OR COMMUNITY?

David R Green

Italians have a lengthy history of settlement in London but in the 19th century larger numbers began to settle in the city and formed an identifiable community. In the early years of the 19th century several important political exiles made London their home. Italian exiles included Guiseppe Mazzini (1837–1847), Antonio Panizzi,

who designed the Reading Room of the British Museum, and Gabriele Pasquale Giuseppe Rossetti, father of Dante Gabrielle Rosetti, and himself a poet and scholar, who settled in London in 1824. These exiles were followed by thousands of other, poorer, rural migrants and urban artisans from northern and central Italy, and they in turn were followed later in the century by much larger numbers of immigrants from the south.

Throughout the century, London was home to more than half the total number of Italians in England and Wales. In 1861 there were just under 5,000 Italians in the country, but by 1901 this had increased to more than 20,000. Holborn was the centre of this community, with up to half the total living in London located there, notably in a handful of streets around Leather Lane. It was there that the first Italian church, St Peter's, was built in 1863 to serve the entire Italian community in the UK. A report in the *Lancet* in 1879 described a visit to Fleet Court, the centre of Little Italy, and noted that 'Not a word of English is spoken there from years end to years end'.

As the numbers of Italians increased, so did the number of ethnic organisations and businesses catering to their needs. As well as St Peter's church, other institutions emerged, including a free school and a working men's club set up by Mazzini. Worried about Mazzini's influence, the Italian consulate set up a rival organisation, the Italian Benevolent Society, in 1861 which, amongst other things, aimed to send poor migrants '... back to their own country in cases of illness or want of employment'. Numerous lodging houses provided accommodation, often based on regional ties that were transferred from the home country to London. In 1871, of the 63 organ grinders who came from Bardi, 61 lived in just three houses in Summers Street and Little Saffron Hill. A similar pattern also existed for Neapolitan migrants, all of whom lived adjacent to each other in neighbouring streets or houses.

The need to live close to each other hinted at ties of mutual dependence that arose largely as a result of poverty and local loyalty. The majority of migrants were poor and lived a precarious existence playing barrel organs and hurdy gurdies on the streets, making and hawking plaster figures, or selling ice cream. The most visible and audible of these groups were the organ grinders. In some cases, children

were hired out to *padroni*, sometimes from the same villages as the parents, who provided food and lodging and who also employed the boys to play music on the streets. Over time, as Italian men began to marry local women or bring wives over, the pattern of employment changed and families became more important. The start of compulsory primary education in 1870 also helped reduce the number of children employed as street musicians. Middle-class dislike of street music was also evident in the so-called 'battle of the barrels' which took place in the 1860s and which resulted in an act of parliament in 1864 that limited the freedom of individuals to play music on the streets of the city. Michael Bass, the MP who promoted the act, came from the famous brewing family, and it was this connection that gave the battle its nickname. *Punch* famously depicted events in several cartoons published at the time.

The organ grinders, though the most numerous of the Italian migrants, were by no means the only ones to settle in London. More skilled migrants, from places such as Como and Lombardy, also migrated and they specialised in scientific instrument making, frame making, and gilding. The famous lens-making firm of Negretti and Zambra, for example, was started by two of these migrants who came to live in Holborn in this period. This group was in subtle ways different and distinct from their poorer Italian neighbours. They tended to live in larger houses in different streets, notably Hatton Garden, rather than the back streets and alleys closer to Leather Lane. They often held the leases to these properties, and had workshops on the premises. When it came to marrying, the men more often chose non-Italian brides and when their children were born, non-Italians were chosen as godparents. Poorer Italians, by contrast, relied more on fellow migrants to act as godparents.

Viewed from the outside, the Italians who came to settle in Holborn in the 19th century seemed to form a single, homogeneous group. However, there were important and subtle social distinctions between different groups, reflected in their choice of where to live and with whom, of marriage partners, and of friends and relatives chosen to act as surrogate parents to their children. In this sense, at least, there was more than just one 'Little Italy' in 19th-century London.

THE RISE AND FALL OF THE GERMAN COMMUNITY IN LONDON, c.1815–1914

Panikos Panayi

By the beginning of the 19th century a significant and well established German community had emerged in London, building upon a previous history stretching back hundreds of years (Panayi 1996). However, hostility had begun to rise towards it as the First World War approached. The conflict itself meant an ethnic cleansing of the German community of Britain.

The 19th-century community emerged from distinct networks. In the first place Hanoverians moved to the capital, a process originating in the accession of George I to the British throne. Political migration to London was motivated by the existence of centres of revolutionary activity. Distinct occupational groups also moved to London, including foreign correspondence clerks. Waiters, meanwhile, migrated to the capital in an attempt to improve their English. Bakers moved to work as apprentices for other Germans from the 1880s. They would then set up for themselves, importing further workers, although World War I brought this cycle to a halt (Panayi 1995, 35–87).

The size of the German community in London rose from 16,082 in 1861 to 27,290 in 1911 (Panayi 1995, 92). They focused upon specific areas. The working class East End community concentrated upon St George's in the East, although numbers gradually declined as a result of railway building and the settlement of East European Jews in the area. Germans also lived in the West End between Goodge Street, Euston Road and Tottenham Court Road, which again housed a predominantly working class community from the late Victorian years. In South-West London, around Sydenham, a middle class German settlement developed, while significant numbers of Germans lived in other parts of the capital, including Islington (Panayi 1995, 93–101).

Germans found themselves employed in a range of occupations from the underclass to the highest echelons of the London social scale. Within the German underclass, we can find the destitute, who included those who had moved to the capital but failed to secure employment. Old Germans with a small pension or with nothing also fell into the underclass, as did a few prostitutes. Working class occupations which

attracted Germans included sugar baking, which was important in the development of the East End German community. This activity involved the refining of raw sugar from the West Indies but declined in importance due to the movement of large factories into Silvertown and the increased use of sugar beet from Europe. Germans also worked in fur production, tailoring, and shoemaking. By 1911 Germans also made up 10% of waiters in the capital. Germans further found employment in lower middle class occupations. They included self-employed butchers, barbers and bakers, often initially working as apprentices to other Germans already resident in London. Street musicians, a feature of Victorian street life, entered Britain during the summer and often marched through the country. But many British orchestras counted significant numbers of German players. These fit into more solidly middle class employment. The latter includes male teachers working mostly in boys' schools. The Association of German Governesses in England helped find employment for women from Germany who became popular because of their ability to teach music and languages. More successful businessmen include the Rothschild and Schroeder banking houses (Panayi 1995, 110–44).

The London German community underwent a process of acculturation and assimilation, but also maintained its ethnicity. The marriage registers of the German Lutheran church in St George's in the East demonstrate that 24.4% of unions between 1883 and 1896 included a non-German partner (Panayi 1995, 109–10). However, a whole variety of organisations came into existence on a micro-level for the purpose of perpetuating ethnicity. The churches played a central role. By 1905 there were fifteen places where Germans worshipped. The churches did not simply carry out Sunday religious services but also offered a whole variety of social welfare activities, including schooling in German. Although the vast majority of these churches were Protestant, there was also one Roman Catholic establishment in the form of St Bonifatius (Panayi 1995, 148–59, 166–8).

Philanthropy acted as a way in which the more established Germans attempted to care for their poorer neighbours with the help of the German churches. The most important charities included the German Society of Benevolence and the Society of Friends of Foreigners in Distress. The German Hospital in Dalston



Fig 5. German beer hall (after Count E Armfelt 'German London')

opened in 1845 and catered for both German and English in- and out-patients. In addition to the schools connected to the churches, aimed mostly at the poor, at least one private German school came into existence in the form of the German-English Boys' School in Brixton. In 1861 a German YMCA also opened in London (Panayi 1995, 171–9).

Numerous cultural and political bodies emerged, divided along class lines. Pubs and clubs came into existence for working class Germans on a local scale. These did not have the London-wide appeal of the German Atheneum established in 1869 and the German Turnverein from 1861, aimed at the cream of London German society (Armfelt 1903). Politics also proved important, especially for refugees who had migrated following repression in the middle of the 19th century, particularly after the failed revolutions of 1848. Thus we have a series of groups from the 1830s, perhaps most famously the German Workers' Educational Association (Ashton 1986; Lattek 2005). However, by the outbreak of the First World War nationalistic

and essentially anti-British groupings had also established branches in London, including the German Colonial Society, the Navy League, and the Royal and Imperial Hassia (Armfelt 1903).

By 1914 a vital German community had become established in the capital. It divided into numerous subgroups according to location, class, and political persuasion. These different micro-populations ultimately had little to do with each other despite some efforts by the German élite to keep them together. However, it is clear that by 1914 vibrant German communities had become a feature of the life of the capital.

Unlike the numerous other migrant communities, which have settled in London during the course of the 19th and 20th centuries, the history of the Germans has an almost unique history as it did not follow the normal path of integration, acculturation and assimilation, but, instead, faced what can only be described as ethnic cleansing during World War I. Indications of what would happen began to become apparent as German military and naval power rose from the 1870s. A sort of anti-German movement

emerged, most famously manifesting itself in the development of spy-fever. A few outbreaks of anti-German violence also broke out during the Boer War when Germans were perceived to have supported the Boers (Panayi 1995, 228–51).

When the Great War started the London community faced a period of Germanophobic frenzy in which Germany and its perceived representatives in Britain became victims. This racist feeling had official and popular manifestations. The government introduced a series of measures against the German community including the Aliens Restriction Act, which seriously curtailed their rights, requiring them to register with the police, forbidding them from moving outside a five-mile radius, and preventing them from changing their names (Panayi 1991, 45–69). The government also passed legislation to deal with German property, most notably the Trading with the Enemy Acts, which confiscated every German owned property by 1918, from the branches of the Deutsche and Dresdner Banks in the City of London to the small shops owned by Germans — all of which counted towards German reparations payments under the Treaty of Versailles (Panayi 1991, 132–49). Wholesale internment of adult German males, focused upon the Isle of Man, also meant the establishment of a handful of camps in London including Olympia, Stratford, Islington, and Hackney Wick. The major London camp consisted of Alexandra Palace, mostly used for housing London Germans with families. It held a peak of 3,000 prisoners but about 17,000 men had passed through its doors during the course of the conflict. Women and children faced repatriation during the War, joined by men at its cessation (Panayi 1991, 70–131).

Official Germanophobia received support from a virulent public opinion backed up by both the national and the London press, which constantly carried stories of the threat of German spies. Witch-hunts of Germans in high places occurred, together with anti-German strikes aimed at purging Britain of German employees, as seen, for instance, by the wholesale sacking of German hotel and restaurant employees at the start of the War, whipped up by the Loyal British Waiters' Society (Panayi 1991, 153–222). The most violent manifestation of Germanophobia in World War I and the one which did most, along with internment and repatriation, to cleanse London of Germans, consisted of rioting. This peaked in May 1915, following the sinking of the

Lusitania, when virtually every German shop in London came under attack. The worst affected areas included the East End. On 12 May the *Daily Mail* described London as 'one vast riot area'. Nearly 2,000 properties were attacked and 866 people were arrested (Panayi 1989).

The history of Germans in London is therefore unique. Certainly some of the 19th-century institutions, notably the churches, survived the Great War. However, the events of World War I destroyed the vibrant communities which had evolved before 1914 and which would never be the same again.

BIBLIOGRAPHY

- ARMFELT (1903), Count E Armfelt 'German London' in George R Sims (ed) *Living London*, Vol 3
ASHTON (1986), R Ashton *Little Germany: Exile and Asylum in Victorian England*
LATTEK (2005), C Lattek *Revolutionary Refugees: German Socialism in Britain, 1840–1860*
PANAYI (1989), P Panayi 'Anti-German riots in London during the First World War' *German History* 7, 184–203
PANAYI (1991), P Panayi *The Enemy in Our Midst: Germans in Britain During the First World War*
PANAYI (1995), P Panayi *German Immigrants in Nineteenth Century Britain*
PANAYI (1996), P Panayi (ed) *Germans in Britain since 1500*

OLD PATTERNS, FRESH FACES: RECENT MIGRANTS TO LONDON IN THE 20th AND 21st CENTURIES

Anne J Kershen

The millennium of invasions that began with the arrival of the Romans in AD 43 ended with the arrival of William the Conqueror in 1066. Those that subsequently settled in London — with a few exceptions — can be categorised as what we today identify as 'economic migrants'. The emergence of London as a bustling commercial centre in the medieval period heralded the arrival of Jews from Normandy, merchants of the Hanseatic League, bankers from Lombardy, weavers from the Low Countries, tile makers from Delft, and beer brewers from Germany. In spite of restrictions being imposed on trades that could be undertaken by strangers, the steady arrival of incomers continued throughout the Middle Ages. The creation of the Church of England by

Henry VIII and the birth of Protestantism and Calvinism in Europe added another dimension to London's attraction. From the late 16th century onwards London became a refuge for religious dissidents, the breadth of 'tolerance' being completed in 1656 with the readmission of the Jews by Oliver Cromwell. With the exception of the period during the wars with France, immigration continued at a steady pace and at an acceptable volume. However the latter part of the 19th century saw a dramatic change and by 1901, the beginning of the century which marks the focus of this paper, opposition to the unrestricted entry of aliens, most particularly pauper aliens, was being voiced by politicians and the general public alike. In 1905 the Aliens Act was passed, the first act in peacetime to restrict entry to Britain. In the century that followed, immigration and immigrants, particularly in London, became issues of social and political debate and, at times, the cause of violence.

London a promised land

Throughout the 20th century, and on into the 21st, migrants flowed into London; it is therefore pertinent to ask why? The most obvious reason and one that, as noted above, has remained the same for more than a thousand years, is the image of London as a city of economic opportunity. Though not always the promised land, Britain's capital city has been perceived by outsiders as a place where both the skilled and unskilled might find employment — a route to economic and social mobility. To many London has also appeared as a tolerant city, a place of refuge for those seeking sanctuary from political, religious, and sexual persecution. In the 20th century, following the establishment of the Welfare State in 1948, the availability of social benefit and support for outsiders as well as the indigenous population provided yet another reason for migrants to head for London. Finally, there is the linguistic attraction; the universality of the English language is a determining factor in many a migrant's rationalisation of places of settlement. As the global language of the internet, even if not spoken by the migrant, it is one which is familiar and perceived as a major force in communication.

Immigrant entry and settlement in London in the period under examination can be apportioned both temporally and geographically. Between 1900 and 1948 the majority of immig-

rants to the metropolis originated from Eastern and Central Europe, only a small minority emanating from Asia and Africa. Between 1948 and 1989 the flow of migrants into the capital came mainly from the Caribbean Islands of Jamaica and Bermuda and the Indian subcontinent. From the late 1980s numbers of New Commonwealth immigrants dwindled, their place taken by migrants from the former Soviet Union and other Eastern European countries. At the same time smaller numbers of immigrants were arriving from the Middle East, Africa, Australasia, and North and South America. In the age of globalisation, immigration into London has indeed become global.

1900–1948

At the beginning of the 20th century the presence of Eastern European Jews in the capital was significant, the most visible concentration being in the East End — in the Spitalfields district, overflowing into Stepney and Whitechapel. Though the 1905 Aliens Act reduced the flow, migration from the Russian Empire did not come to a halt until just before the outbreak of the First World War. It was not only the Jewish immigrant community that was making its mark on the landscape of London. By 1911, the German community totalled almost 27,000, their economic activities ranging from sugar spinning to clerical work. The Italian community, centred largely around Clerkenwell, were engaged in the food and catering trades, whilst Chinese and Indian seamen added to the cosmopolitan character of the city, the latter transferring their roles from seamen to laundry owners. The First World War, the post-war tightening of immigration control, and the economic depression of the 1920s were disincentives to immigrant entry. In the interwar years, those that did gain access to London were, in the main, the more fortunate refugees from Nazism.

1948–1989

Between 1948 and 1989 the migrant landscape of London was fashioned by entrants from the New Commonwealth countries. The arrival of the *Empire Windrush* on its return from Jamaica in June 1948 heralded the beginning of a new inflow of migrants, men and women seeking economic opportunity in the capital of their mother country. They were driven by the lack

of employment prospects in the Caribbean and attracted by the recruitment policies of London Transport and the newly created National Health Service. By the late 1950s immigration from the Caribbean had begun to slow, but it was rapidly replaced by a new wave of migrants from south-east Asia. The predominantly male influx heralded from India and West and East Pakistan (the latter to gain independence as Bangladesh in 1971). The intention of those migrants, as indeed it was of those from the Caribbean, was to stay for a short while, perhaps three to five years and then to return to their home countries as 'rich men of high status'. It was a myth of return that very few transformed into a reality. By the mid-1970s increasingly restrictive immigration legislation had virtually put an end to primary male entry. New migrant arrivals were classified as secondary, either the children of earlier arrivals or women reuniting with their husbands or coming as new brides.

The 1990s onwards

The break up of the Soviet Union, the collapse of Yugoslavia, and political and ethnic upheavals in Africa and the Middle East heralded a new wave of immigration into London. As a result the migrant community of London has become even more culturally and linguistically diverse — a report published at the beginning of 2000 reported that more than 300 languages were spoken in the capital's schools.

As London nears the end of the first decade of the 21st century, a survey of the spatial and economic clustering of the immigrant communities provides further evidence of the capital's place in the hierarchy of migrant destinations. The largest settlement of Bangladeshis outside Bangladesh is to be found in the London Borough of Tower Hamlets, with smaller communities in the boroughs of Camden, Newham and Redbridge. Ealing and Redbridge are noticeable for the clustering of Gujarati- and Hindu-speaking Indians, whilst migrants from the Punjab have settled in Hounslow and Ealing, North Africans in Westminster,

and Latin Americans in Elephant and Castle, Holloway and Stamford Hill. The earliest post-World War II arrivals from the Caribbean are now dispersed across the capital, though there is still a significant community in and around Brixton. Irish communities, too, are now to be found across London and, in addition, there are small clusters of migrants from the Middle East in central London, ultra-orthodox Jews in Stamford Hill, and Turkish and Greek Cypriots in the Green Lane district of north London. The largest influx of migrants in the years following the millennium has been from the A8 — accession-countries (Poland, Hungary, Czech Republic, Latvia, Estonia, Lithuania, Slovakia and Slovenia). In contrast to earlier immigrants these recent migrants are dispersed across the capital, as indeed they are across the country.

In addition to spatial clustering, migrants have a tendency to economic clustering. Eastern Europeans have found work as builders, plumbers, electricians, bus, coach and lorry drivers; a minority are employed as chefs, dentists, and bank workers. Care work, cleaning in both the private and public sector, and the more menial tasks in the hotel and catering industry have drawn workers from Latin America and Africa, whilst at the other end of the scale of skills, finance, teaching and medicine provide employment for immigrants from North America and Western Europe. Immigrants from Australasia, many on short-term work permits and visas, cover the spectrum of economic activity working as teachers, doctors and construction workers.

Conclusion

It is obvious that throughout its history London has been a magnet for immigrants and refugees. A promised land that perhaps does not always live up to its promise but which continues to act as a beacon for those who believe that it offers freedom of speech, religion, and politics and the opportunity to become rich and possibly achieve 'high status'.

REVIEWS

Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations Vol 1, Perry Oaks. By Framework Archaeology (John Lewis and 19 others). Framework Archaeology Monograph 1, 2006. Pp xi + 250, 122 figs, 26 pls, 29 tables, CD-ROM supplement. ISBN 978 0 9554519 0 4. Price: £15.00 hb.

One criticism widely levelled at post-processual archaeologies is the lack of a methodology linking observable relics of the past with interpretative discourse in the present. This report, and the field investigations and post-excavation researches that it draws on, represents the first fruits of an attempt to develop and apply a post-processual methodology. Accordingly, almost every aspect of the project from inception to publication trail-blazes new pathways into familiar territory.

At heart it is a mitigation programme carried out ahead of initial construction works for the controversial Terminal 5 at Heathrow Airport (a second volume relating to later works will follow). The site lies within an archaeologically rich landscape, so it is no surprise that pre-determination assessments and field evaluations by MoLAS in the early 1990s showed that even under the sewerage-sludge disposal works established in the 1930s there was still important archaeology to be investigated. The British Airports Authority engaged Gill Andrews and John Barrett to design the mitigation works, and it is the architecture of their Project Design that gives form to the execution and reporting of the excavations. The work itself was undertaken by Framework Archaeology, a partnership between Oxford Archaeology and Wessex Archaeology. The theoretical underpinnings made explicit during the excavation involve the idea of 'inhabitation', defined here as 'the creation of human realities with reference to certain material conditions ... the ways people brought social conditions into existence through their performance of different practices' (p 15).

More particularly, excavated materials are seen as components of the material conditions of history, excavation is primarily the investigation of history, and the excavators themselves have a responsibility for the production of a coherent and empirically validated site narrative. Ambitious, but what was actually found? Does this kind of narrative work? And how is it presented?

Turning first to the report itself, an introductory chapter sets out the archaeological, theoretical, and operational background; the site narrative occupies four chapters forming the core of the report and supporting material is supplied on an accompanying CD-ROM. The printed text is well designed, attractively presented with abundant colour images, and bound in landscape format. It is easy to use but the copious signposting in the text to guide the reader forward sometimes gets a little irritating (simple bullet points at the head of each chapter would be more useful). The CD contains 14 fairly conventional specialist reports with supporting tables and illustrations that can be viewed or printed using standard software available on most computers. These worked well, although some of the prehistoric pottery illustrations that especially interested this reviewer appeared in a format that did not fit the screen at all well. Also on the CD is a bespoke program to view and analyse the project database. The program and database automatically installed itself with few keystrokes in about five minutes. Open the program and there is a plan of the recorded archaeology, facilities to create queries, and tools to zoom in, zoom out, measure distances between things of interest, and so on. To help users through the maze of possibilities, the opening pages of chs 2–4 in the printed report suggest useful queries that expand what is presented in the text. The cynic might point out that computer systems are changing so rapidly that the CD will be pretty useless within a decade or so, and they would probably be right. Luckily, however, the material

will also be available on-line via the Archaeology Data Service which is committed to the long-term maintenance of datasets in accessible formats.

What was found is impressive, albeit fairly typical of many parts of the Thames Valley. Against a background of continuous land-use across this 26ha slice of the Colne Valley, the project revealed five archaeologically recognizable phases of intensive activity: a pit cluster of the 7th millennium BC; part of a more extensive ceremonial complex involving two cursuses and a horseshoe enclosure of the late 4th millennium BC; a co-axial field-system and four dispersed occupation areas of the mid-2nd millennium BC; a nucleated settlement of the later 1st millennium BC which continued through into early Roman times; and a ladder-pattern field-system with associated occupation dating to the 3rd century AD. These episodes are explored in chronological order as chs 2–4 unfold. General site plans show the position and extent of the main features for each, selected section drawings and detailed plans show key relationships and the footprint of particular features, and key finds are illustrated alongside. Cross-referenced extracts from the specialist reports are incorporated into the text, typeset in a contrasting colour, and there is a scatter of computer-generated reconstruction drawings. Chronology is a primary concern throughout and there are useful summaries of local pottery sequences (*eg* p 96) and discussions of radiocarbon dates. A fairly tight real-time sequence based on calendar years is achieved, and could have carried the narrative very well on its own. Instead, subdivisions of the tired old Three-Age System appear alongside the new chronology, and when dealing with periods such as the Late Bronze Age/Early Iron Age this feels rather clunky.

Throughout the text, descriptions of the recorded archaeology are juxtaposed with interpretations and adventures into the past that explore questions raised by the data. Take Horseshoe Enclosure 1 as an example. The recorded feature is described, plans and sections show the detail, a photograph illustrates its character, tables list its vital statistics, and there is a discussion of dating and chronology. A section dealing with the use of the enclosure draws on extracts from the specialist reports, and plots show the distribution of animal bones and five other classes of find. Reconstructing the monument and re-inhabiting it suggests that

eleven people could have stood inside it and that the axis embedded in its architecture focused views towards the summer solstice sunrise and the midwinter solstice sunset. The section concludes by expanding the narrative to suggest that ‘at sunset at the mid winter solstice the community would gather outside the HE1 enclosure, possibly having observed their leaders processing along the C1 Cursus to this point. The leaders would take part in ceremonies inside the enclosure which included observing the sun setting in the south-west. The community and their leaders may have continued ceremonies and feasting through the night until dawn when they all processed along the C2 Cursus to the rectangular enclosure at its northern terminal’ (p 80).

For some readers this sort of interpretation may be one step too far, but it is what the public seems to want and what our museums and television documentaries increasingly provide. Better perhaps that these fragments of history are conjured up by archaeologists working with the material itself rather than researchers in the media whose acquaintance with archaeology is at best transitory. Limited space here precludes consideration of the many other studies in this report, all of which turn recorded data into stories about the past. It is not the sort of history that historians peddle, and perhaps the authors are wrong even to call it history, since it is clearly in fact ‘archaeology’ and something we should collectively be proud of. For those who dislike the narratives presented by the authors, the empirical data meticulously collected on site and elaborated through the post-excavation programme is all here in the report ready and waiting to be reworked as alternative accounts. But more importantly, the narratives created here should lead to the formulation of better and more incisive Project Designs next time similar sorts of archaeology become available for study. In this way pictures can be improved and bigger patterns in the fabric of this new kind of archaeo-history can be worked out. In her Foreword Gill Andrews notes that the Terminal 5 project is still ‘work in progress’ and for this reason we await the second volume with interest to see how thinking has progressed and the narrative changed. In the meantime, the traditional mould for archaeological reporting has been broken, and it is time to follow in the footsteps of these pioneers and experiment further with alternative approaches.

Timothy Darvill

Reclaiming the Marsh: Archaeological Excavations at Moor House, City of London 1998–2004. By Jonathan Butler. Pre-Construct Archaeology Monograph 6, 2006. Pp xii + 179, 114 figs, 35 tables. ISBN 0 9542938 5 1. Price: £22.50 pb.

This, the sixth volume in the PCA monograph series, is their most substantial and attractively produced publication to date. The excavation (site code MRL98) near Moorgate was located just to the north of the Roman and medieval City defences. Despite it lying within the shadow of the City wall, this was a landscape dominated by stream channels and drainage problems, in an area which remained unashamedly open space until the 17th century.

The book begins with a well-illustrated introduction describing the natural topography of the area and reviewing nearby archaeological findings to put the new work in context. A few residual prehistoric artefacts were found at the site but the main archaeological sequence has been organised into six Roman and three post-Roman phases. The findings are clearly and logically organised, with description of the Roman sequence (Phases 2–7) followed by related specialist reports and discussion. The medieval and post-medieval findings (Phases 8–10) are similarly linked to specialist work and themes. A conclusions chapter and brief appendices follow.

In the 1st and 2nd centuries AD the site was crossed by a series of canalised stream channels flowing south-east to the main channel of the Walbrook stream. Sand and gravel quarrying had taken place across the site and the surviving archaeological evidence forms a complex picture of truncated cut features. Later 2nd-century evidence includes gravel surfaces, quarries, drainage ditches, and stakeholes and postholes associated with fence lines and rudimentary buildings. An east–west ditch c.20m north of the line of the Roman city wall provides evidence for a 2nd-century town boundary. Construction of the Roman defensive wall at the end of the 2nd century had an immediate impact, as drainage patterns changed and access to the area from the south was blocked. A layer of grey silt containing 2nd-century pottery suggests that the area became a waterlogged marshland, with later Roman activity limited to sporadic attempts to establish new drainage ditches and fences.

A particularly interesting aspect of the Roman findings is the recovery of over 100 fragments of human bone, most from long bones and

skulls, generally concentrated in or near stream channels. Although residual in both Roman and post-Roman phases, carbon dating indicates that the human remains are Roman. A detailed discussion of the material considers whether it derives from inhumation burials in the nearby northern cemetery, washed out by Walbrook flooding, or if it might indicate ritual activity such as excarnation. The arguments are well developed and supported by clear phase plans and interpretative plans of the vicinity. A multi-phase mapping of the human remains in relation to stream channels (fig 29) is particularly informative.

The post-Roman period was dominated by the continued development of the Moorfields marsh. The earliest extant evidence of reoccupation was associated with 12th- and 13th-century leather making, represented by tanning or tawing pits and assemblages of roe deer antlers and cattle horncores. A network of drainage ditches, dated to the 13th and 14th centuries, may have been designed to regulate water flow and create a watermeadow. Post-medieval evidence included pits and wells associated with documented properties; the archaeological evidence is enhanced by its comparison with historic maps.

Overall, *Reclaiming the Marsh* is an excellent and useful addition to London's outstanding roll call of archaeological publication. There are caveats but most are minor. Some of the site and finds photography is poor and some of the historic maps and finds drawings are faint or out of focus. This is a shame but should not detract from the fact that most of the illustrations are good, the phase plans are excellent, and Jake Lunt's recreation of skaters on Moorfields should be an instant favourite for its evocation of London's past. The specialist contributions are perhaps overly long and detailed (at least from the point-of-view of a 'strat' man) and might have benefited from more integration and synthesis. Many of the tables could have reasonably been categorised as material 'available for consultation in the site archive' but their presence here does no harm and may save the keen researcher a bus fare or two.

The excavations at Moor House took place intermittently between 1998 and 2004, making a 2006 publication date notably speedy, especially when one considers the logistical demands involved in organising a programme of analysis involving over 30 contributors. Redevelopment of the site has seen the replacement of an

undistinguished 1960s tower-block with an elegant new building, curving like a billowing sail at the north-west corner of Moorgate. The work has also resulted in a well-designed and important new archaeological publication about a relatively poorly understood part of the City of London. The partnership between developer and archaeologist therefore deserves our congratulations on at least two counts.

Peter Rowsome

Development on Roman London's Western Hill: Excavations at Paternoster Square, City of London. By Sadie Watson with Kieron Heard. Museum of London Archaeology Service Monograph 32, 2007. Pp cvi + 132, 115 figs, 20 tables. ISBN 978 1 901992 66 3. Price: £13.95 pb.

This MoLAS monograph provides a full account of a series of investigations immediately north of St Paul's cathedral redeveloped in 1999–2001. The area has suffered from fairly extensive destruction but the report draws together important and coherent new information about the development of this key area of the Roman city, including a substantial length of the southern frontage of the main Roman road beneath Newgate Street.

The style of this volume follows that of others in the series, with a summary description for the sequence and structures which also contains relevant information about the finds. There follows a fuller discussion of key themes, and then a series of specialist reports which detail selected aspects of the material recovered. In general this approach works well, allowing sufficiently detailed information to be presented to allow the reader to understand the archaeology, but without losing sight of the overall development of the cityscape. What we lose is more detailed evidence, although this is available for consultation at LAARC. Different readers may feel that they miss different things — but for me further aspects of the variation between the finds assemblages from contemporary buildings could have been more fully explored (by contrast why do we need the full list of samian stamps on pp 86–7?). Overall, however, I think the balance is well struck and MoLAS are to be congratulated on the quality of the work.

The sites explored do not provide many surprises in terms of the overall sequence but the general discussion draws the threads together

well, striking a good balance in interpretation against the background of previous knowledge and pulling out the aspects that deserve our attention. I was particularly struck by the evidence for the natural topography of the site (*cf* now *London Archaeologist* vol 11, no. 10, 255–9), the discussions of early and late Roman burials, and the consideration of the early development of the Roman settlement. Here a judicious balance is struck in dealing with the interpretation of Roman military influence in the light of a series of finds, including an important auxiliary's name-tag (pp 70–1). In this context we should note that auxiliary units were widely present in early Roman Britain, so there is no need to associate them with Legion XX. Indeed, given other evidence, I would doubt the suggestion (derived from Peter Salway) that soldiers were used to construct towns and roads in the South-East. Rather I would emphasise the importance of civil authority at London. In this context, I felt the authors had missed an important aspect of the evidence offered by this site. Here, as for instance at No. 1 Poultry, the evidence for rebuilding after the Boudiccan destruction is informative, for along the Newgate Street frontage properties are carefully rebuilt on the same sites after the fire. Far from indicating a coherent and publically-funded replanning (p 72, following Dominic Perring), the evidence here — and especially the different histories of adjacent plots — surely implies detailed local knowledge and civic initiative on the part of the inhabitants.

Other aspects of the site are equally important and intriguing. The evidence for probable tile making and, uniquely, brass smelting indicates the economic vibrancy of early Roman London, reinforcing the image provided by the recent Southwark publications. Equally however, excellent evidence is provided for agriculture and animal husbandry in the vicinity in the later Roman period. Here the contrast between the quarter reported upon here and the more substantial elite property that is believed to lie to the south (p 58) is interesting. One is tempted to speculate about the growth of private estate centres within the later Roman city.

It will be clear from the above that there is much to think about in this book. It is an important and well-produced publication which provides a wealth of new information about a key area of the City.

Martin Millett

Winchester Palace. Excavations at the Southwark Residence of the Bishops of Winchester. By Derek Seeley, Christopher Phillpotts and Mark Samuel. Museum of London Archaeology Service Monograph 31, 2006. Pp xiv + 157, 81 figs, 42 tables. ISBN 978 1 901992 65 6. Price: £15.95 pb.

Like previous volumes, this addition to the excellent MoLAS monograph series attempts to place specific excavations (of 1983 and 1990, along with some 20 other interventions) within a broader understanding of a discrete urban parcel, in this case the medieval palace of the Bishops of Winchester, around Clink Street, just to the west of Southwark Cathedral. The important Romano-British and early medieval results from this site were published in 2005, and this volume deals with the period from the 10th century. In line with recent MoLAS practice, pottery and other specialist reports are published within the main text, where their contribution to the broader archaeological sequence is exploited. This is also true of contributions on palaeobotany and palaeozoology, although (unlike the artefacts) these assemblages are also given more space in appendices at the end of the volume.

Analysis of the various excavations falls into four main parts. The informative piled footings of a late 11th- or early 12th-century suburban mansion, belonging to one 'Orgar the Rich', were followed by the even more impressive 12th-century stone mansion built by the influential bishop, Henry de Blois. The surviving gable wall and its abutments from the principal range of the enormous later medieval palace were built on a new site to the north of de Blois' pile. This famous wall has long proved controversial, and it appears that controversy remains: this report both builds upon, and takes issue with, an earlier by Richard Lea (unpublished). The volume ends with an account of the development of the palace site following dismemberment during the Interregnum. Useful though it is, this painstaking charting of the area's more recent history is entirely dependent on documentary sources (and the work of Martha Carlin), and any potential for exploring the industrial archaeology of the district in parallel (dyeing, iron founding, brewing) was not exploited. Consequently we lack any description of the great Victorian warehouses that dominated this area latterly.

In concentrating on the palace site, however, we must not neglect the waterfront, where an important series of discoveries has been made. We now have an impressively clear and closely-dated sequence, from a shelving beach to an upright quayside (built, in timber, at the end of the 12th century, subsequently braced, reinforced and finally rebuilt in stone in the late 16th century).

The very thorough, convincing account of the palace's development is based on the excavation of only a small percentage of its site, but even so, trenches were fortunately (and skilfully) located. Henry de Blois' impressive first-floor hall and chapel range, set over under-crofts, represents an important find in its own right, though only the chapel survived the construction of the enormous new hall range to the north in the 1220s, to which the surviving gable with its circular traceried window belongs. But interpretation of both buried remains and sequence and dating of the standing fragment of the new range has become very complex. This complexity is partly because there was limited excavation to the west of the great hall, where Hollar's views of the 1640s show a large, two-storied extension. But it is also a result of Samuel's refining, rather than dismissing, Lea's original interpretation. Third parties might find following the developing discussion somewhat difficult, as no detailed recording of the gable wall itself is presented here. The complex east elevation, which apparently contains critical distinctions in the masonry (fig 72), is offered in a single interpretation- (rather than record-) drawing, where, incidentally, the toning is miscaptioned. There is no drawing at all of the wall's equally critical west face; even rudimentary sketches of Samuel's crucial observations on the buttressing here would have been helpful. Architectural parallels and discussion for these great buildings are not extensive, indeed in places they are little more than annotated lists.

But the debate over the precise phasing of the standing fragment may be a storm in a teacup. The famous window (one of the London antiquarian's favourites, as is made abundantly clear by the extensive selection of drawings presented here: several, especially those by J C Buckler, recently discovered) clearly represents one phase of alteration in the early 13th-century hall, undertaken at the end of that century. Just as valuable is the more detailed, yet less perplexing, account of the hall range under

Bishop Gardiner in the mid-16th century. He added a gallery to the south, and not only is this structure more fully understood, but we can analyse the access arrangements it permitted and suggest how the architect of England's Counter Reformation might have used it. At this later period also, the reconstruction of the complex service range to the west, including the great kitchen, is described with greater clarity. This is the most impressive part of the architectural account, made possible, of course, by surviving verbal descriptions and illustrations and so not dependent solely on the archaeological remains.

This is a worthwhile volume, then; nicely produced and at a very good price, it is an important contribution to our understanding of the development of palatial architecture and demonstrates that London houses of the country's greatest magnates were as impressive as any they owned.

David Stocker

The Augustinian Priory of St Mary Merton, Surrey: Excavations 1976–90. By Pat Miller and David Saxby. Museum of London Archaeology Service Monograph 34, 2007. Pp xviii + 296, 223 figs, 71 tables. ISBN 978 1 901992 70 0. Price: £27.95 pb.

The priory of Augustinian canons at Merton in Surrey was one of the richest religious houses in medieval England. In 1535 its income was close to £1000. The priory church itself had been built across the Roman road 'Stane Street', and in its turn its remains were cut through by both a road and a railway line. The railway, however, has itself now come to an end, and in the later 1980s — seemingly, before a Sainsbury's supermarket, a hotel and other buildings were constructed — a major archaeological excavation was conducted by the Museum of London's Department of Greater London Archaeology. This was focused on the priory church, the cemetery areas around it, and the infirmary. Sadly, much of the main cloister site was cleared by machine and not excavated: even the outlines of this are unknown.

It cannot have been an easy site to work on, having suffered from much disturbance. Many of the bones found in the cemetery areas had been fragmented, rendering calculations of height impossible. The documentary evidence is substantial for the early years of the priory, the

1110s to 1130s, but distinctly patchy thereafter. This book aims to provide an integrated account of the findings of the excavation, putting these in the context of the priory's documentary history. It achieves its goals with a large measure of success, and in certain areas can be said to have triumphed against the odds. If it is not always the easiest of books to comprehend, that is a reflection of its function: it is primarily a record of what has been excavated, and it accordingly provides both catalogue details (as for the pieces of sculpture, footings of buildings and miscellaneous finds) and, separately, discussion and interpretation. Such an approach inevitably works better with archaeological than with historical evidence: the first part of the book is in fact both a history of the structures on the site and an account of what the excavation revealed. This is of particular interest for the mismatch that it shows between the documentary evidence (the statement to the effect that the priory church was built between c.1117 and 1132, with a cloister that was complete in 1136) and the archaeological (the stone church's fabric is assigned a construction period from either the mid-12th century or c.1170 until the early 13th century, depending on whether *in-* or *ex-situ* evidence is used). Religious houses liked to stress the achievements of their earliest years, and might gloss over the fact that early structures were of timber.

The second phase of the book provides a more interpretative approach, and is about the community that lived in the priory, and especially in its infirmary: it is suggested that many laymen were treated or at least accommodated in the infirmary hall (an eight-bay aisled structure, which in the later 14th century had its side-aisles divided into single rooms for either about 14 or about 28 inmates). A gold finger-ring with an inscription meaning 'I do not wish to love anyone but you' is what might be called anecdotal evidence for the presence of outsiders in this hall.

Modern methods of bone analysis have enabled much to be made of the skeletal remains that were found in the cemetery areas: some were of women and children, and about 13% of the total had suffered a fracture, which in most cases had healed (even though a sizeable proportion of the rejoined bones was misaligned: 36 misaligned, against 51 well-aligned). Evidence for the diet at the priory is equally well analysed, drawing on the different sources (pollen, organic waste,

etc) from different locations within the site: the varieties of fish are striking, although matched elsewhere in England.

If I have any criticism of this volume, it is a sense of regret that the team of investigators did not look more beyond their own immediate activities. The history of previous excavations is scarcely considered, and previous finds and interpretations are more-or-less ignored. The documentation generated in the 1920s by the archaeologist, Col H F Bidder, and the historian, the Revd H F Westlake, seems to survive, for a plan of Bidder's is reproduced as fig 2; but it is not discussed or exploited. The reader accordingly cannot tell how far this book's interpretations are an advance on those of the past. There are revealing gaps in the bibliography: no mention, for instance, of the publication of the stone head that was discovered in 1797 (*Archaeologia* 14, 282), or of M Tyson's discussion of the Merton annals (*Surrey Archaeological Collections* 36 (1925), 24–57), or even of Westlake's 'Notes on the Site of Merton Priory Church' (*Antiquaries Journal* 2 (1922), 112–13).

Nigel Ramsay

St Mary-le-Bow: a History. Edited by Michael Byrne and G R Bush. Wharncliffe Books, 2007. Pp xxviii + 340, 56 figs. ISBN 1 845630 53 X. Price: £30.00 hb.

Very few churches can claim to have a Roman thoroughfare for a foundation, a Norman crypt still in use, walls and tower designed by England's greatest architect, an interior — created by bombing — refashioned by 20th-century approaches to the liturgy without becoming bleak, and a set of furnishings of remarkable unity. Add to these the material factors — the central position of this church in the City, its dynamic role in the Reformation, its steadfast maintenance of an active ministry throughout the 18th and 19th centuries — and St Mary-le-Bow is clearly a proper subject for a substantial book. So what have we got?

This volume, edited by the churchwarden, Michael Byrne, and the Rector, the Revd G R Bush, contains a Foreword by the Archbishop of Canterbury, and consists of 15 chapters by 17 contributors, in two cases working in pairs. After introductory chapters by Diarmaid MacCullough and Michael Byrne which emphasise the connection between the church and the See of Canterbury, we come to the architectural history

with the relevant section from the *Historical Gazetteer of London before the Great Fire* by Derek Keene and Vanessa Harding printed from the original microfiche, a careful archaeological assessment of the crypt by John Schofield, who has recently re-examined it, and a study by David Watkin of Wren's post-Fire rebuilding. This section ends with an alternative account by Francis Altieri of post-Wren restorations of the church and tower, and of the sympathetic rebuilding by Laurence King after the bombing of 1941.

The third section addresses an assortment of topics. Danaï Tankfield recounts the active part played by the clergy of St Mary-le-Bow and the eight surrounding parishes in the Reformation. Three men — John Rogers, Laurence Saunders and John Bradfield, all of whom had held cures or preached in St Mary-le-Bow or All Hallows Bread Street — were martyred under Mary. This chapter is particularly strong in its careful examination of parishioners' wills, thereby providing much fresh information. Donald Logan discusses the pre-Fire Court of Arches, while Jennifer Farooq, writing on Reforming Societies, and Johannes Wienand, describing the Robert Boyle lectures which are still delivered, provide some of the most original material in the book, demonstrating that the church of the 18th and 19th centuries was not as intellectually stultified and moribund as it is often made out to be. Dorothea Sartain describes the happy relationship between Trinity Church in New York and St Mary-le-Bow and the noble support given by the former to the latter after wartime destruction. Today, the two churches find themselves surrounded by overwhelming commercialism but are resolute in seeking ways both to relate to new potential congregations while also providing an alternative refuge from the financial world.

The fourth section deals with the eight parishes, vanished in all but name, which are now linked to St Mary-le-Bow, Michael Byrne again contributing; with the famous peal of Bow Bells (William T Cook and Mark Regan) and with the excellent silver collection (Timothy Schroder). The Rector provides the valedictory chapter, making clear that this mother church still has a relevant place in its extended parish; architectural wonder it most certainly is, but it is also wonderful in responding to today's needs, whether through the music provided, or the stimulating dialogues delivered from

the twin pulpits on Tuesdays, or in the intimate services conducted in the crypt chapel, or in the vegetarian restaurant in another area of the crypt. Can better nourishment, whether spiritual or digestible, be found anywhere else in the City?

Are there criticisms of this book? Yes. The intricate index confused this reader. A clear, distinct ground plan of church and crypt is needed with compass points firmly marked, and also a diagram showing the boundaries of all relevant parishes. Words are no substitute for a map. Perhaps these could be inserted if a paperback edition is considered, with a bibliography of the main references cited in the helpfully placed footnotes which, to this reader's delight, are given at the foot of the relevant page.

Ann Saunders

Beyond Pilgrim Souvenirs and Secular Badges: Essays in Honour of Brian Spencer. Edited by Sarah Blick. Oxbow Books, 2007. Pp xvi + 200, 119 illus. ISBN 978 1 84217 253 3. Price: £40.00 hb.

Brian Spencer died in April 2003, 15 years after his retirement as Senior Keeper of Medieval Antiquities at the Museum of London. It had been a productive retirement, seeing more than a dozen publications, including *Pilgrim Souvenirs and Secular Badges: Medieval Finds from Excavations in London*, which lends its title to this new book. Brian Spencer was a scholar — the old-fashioned word is used appropriately and unashamedly by the contributors to this volume, and one feels the corollary 'and a gentleman' is implicit in the references to the generosity with which he shared his knowledge. He was one of those rare scholars who has identified a new area of study and inspired a new generation to investigate it. H J E van Beuningen, in his essay in this volume, reminds us that it was at a conference in Rotterdam in 1966 that Brian first gave a paper on 'Medieval Pilgrim Badges'. These, together with the related popular secular badges, became a lifelong study, as the list of his publications compiled by Geoff Egan for this book shows.

This volume is a tribute to Brian Spencer by some of his many friends and academic colleagues and correspondents. The content is wide-ranging, both contributors and subjects international. Richard Spencer provides a personal memoir of his father. The late Brian Lee and H J E van Beuningen both reflect

on how Brian Spencer influenced their own interest in pilgrim badges and how these studies have developed — Brian Lee describing the relationship built up with the Thames mudlarks, whose London discoveries became central to the study of medieval badges.

The ten further papers are more traditional academic essays that demonstrate how the study of these artefacts can throw light on many aspects of medieval life, from politics and religion to art and folklore. The saints and shrines discussed include St James of Compostela (his depiction on seals described by John Cherry), St William of York (Katja Boertjes), the Charterhouse of Champmol, near Dijon (Jos Koldweij), St Magi of Catalunya, his image now available widely in digital form (Graham Jones), and Thomas of Lancaster, a 'political' saint (James Robinson). Mark Hall considers the significance of a cross-shaped reliquary from the River Tay and our knowledge of medieval pilgrim routes through Scotland. Sarah Blick, the editor of the volume, presents a study in what might be called the micro-iconography of a single badge — the impressively large badge of the Virgin and Child in the Museum of London that Brian Spencer assigned to the cult of Our Lady of the Undercroft, Canterbury, and in particular the figures of Edward the Confessor and St Thomas Becket that flank it. For these were the favoured saints of King Richard II, one of the most generous donors to the chapel of Our Lady in the crypt below the high altar in Canterbury Cathedral.

Other contributors take us beyond the realm of pilgrimages and shrines. Peter Murray Jones considers how medieval medical belief is reflected not only in a trust in intercessor saints and their relics — like St Thomas Becket 'optimus egrorum medicus' — but in the use of 'magical' inscriptions on (or in) objects worn as protective amulets. Malcolm Watkins discusses the possible deeper significance of the imagery on the early medieval tablesmen (game pieces) from Gloucester.

As a finale to his paper on badges in the British Museum related to Thomas of Lancaster and to the far from saintly Isabella, wife of Edward II, which served as political propaganda rather than badges of religion, James Robinson illustrates an extraordinary, apparently unique, badge which he thinks was unknown to Brian Spencer. A crowned queen stands in a small boat; in each hand she holds a large phallus —

one at least is itself crowned. Does the badge, he asks, represent the adulterous Queen Isabella? That there are still delightful uncertainties in our interpretation of such medieval popular art is further emphasised by Malcolm Jones's paper, which perhaps of all of them Brain Spencer would have enjoyed most, even to the word-play in its title 'The Cat in the Badge'. A number of 15th-century badges show a cat with a mouse in its jaws — in every case the cat has *two* tails. Why does it have two tails? After a thoroughly entertaining tour through medieval and early modern depictions of 'proverbial' cats, Jones concludes that 'frustrating though it may be to the iconographer, we may have to confess our bewilderment'.

Each paper in this volume, in its own way, is a valuable addition to the study that Brian Spencer pioneered. The book itself reflects well on the contributors, the editor Sarah Blick, and the scholar to whom it is dedicated. It is, sadly, expensive.

John Clark

Essex. By James Bettley and Nikolaus Pevsner. Yale University Press, Buildings of England Series, 2007. Pp xx + 939, 123 colour pls, figs and maps. ISBN 978 0 300 11614 4. Price: £29.95 hb.

The first edition of Pevsner's *Essex*, published in 1954, contained 440 pages, and cost five shillings, the equivalent of 25 pence today. The volume was modestly revised in 1965, since when we have had to wait another 42 years for a much needed new edition. Now, the format is larger and the number of pages has more than doubled: it is one of the biggest volumes in the whole British series.

I recall being riveted to the floor between the book-stacks when I first discovered this little volume in Southend-on-Sea Public Library in c.1960; I saved up the money, bought a copy, and started to cycle around Essex, looking at the buildings Pevsner described. The principal church was nearly always the dominant entry, but for most parishes there were also a few lines about the manor house and perhaps one or two other substantial buildings. Only a few of the larger towns were graced with a 'perambulation'. Very few of the hundreds of timber-framed farmhouses and cottages of the 15th to 17th centuries, or the thousands of smaller Georgian and Victorian brick buildings, even received

a mention. Yet every year (in the 1950s and 60s) they were being bulldozed and burnt in their hundreds. The borough councils were indescribable philistines — especially Colchester, Chelmsford and Southend-on-Sea — and were proud of the speed with which they demolished (and encouraged others to demolish) whole streets of historic buildings, as well as individual gems in the surrounding countryside. These historic but, for Essex, commonplace buildings were not 'architecture' in Pevsner's terms and they were overlooked. It was the very omission of most of the rich heritage of vernacular buildings that motivated a handful of individuals to start recording these venerable structures, literally as the bulldozers brought them down.

Despite their best endeavours, developers and planners failed to eradicate a large percentage of the county's architectural heritage before the tide turned against them, and there are still more than 14,000 Listed Buildings remaining in the county (the seventh highest total in England). In his foreword, Pevsner himself admitted that he struggled to cope with the plethora of smaller historic buildings: 'there are limits to one's receptivity to the charms ... of village churches and farmhouses.' In the case of the latter, he resorted to garnering plums from the entries in the four RCHM volumes (published 1916–23), but they, of course, were required by their terms of reference to ignore everything after 1714. Compiling a new, fully representative (but certainly not all-inclusive) account of the buildings of Essex was obviously going to be a Herculean task, and one to which Dr James Bettley has devoted five years. The resultant volume is monumental in both size and content.

The introduction to the county has been expanded from 37 pages in the 1954 edition, to 84 pages, and is composed of a series of essays dealing with periods and subjects, ranging from topography and geology to warfare and defence; and from churches and chapels to castles and farmhouses. These accounts are mostly by Bettley, but there are excellent introductions to prehistoric Essex by Nigel Brown, Roman Essex by James Kemble, and timber-framed buildings by David Andrews. Volumes in this series are not burdened with academic apparatus, but a review of the relevant literature is given, as well as a useful list of county surveyors and architects. There is also the usual technical glossary and detailed indexes. In 1954 Pevsner lamented the paucity of literature on Essex, concluding,

'not much research work and even less work of historical ordering seems to go on'. But there have been tidal waves of research and publication emanating from the county over the last thirty years, and it seems that Bettley has read everything, since he has woven into his descriptions current scholarly appraisals, tree-ring dates, and a host of other details which were unavailable to Pevsner.

The parish-by-parish gazetteer has been enormously expanded, and contains something of interest to everyone. Original Pevsnerian text is still discernible, but much new material has been added, building dates have been refined or newly established, and innumerable names of patrons, architects and craftsmen have appeared for the first time in the entries.

The plates, all in colour, are of superb quality, although it is noticeable that many are straightforward replacements for the old monochrome views used in the first edition. Unfortunately, vernacular architecture is still sparsely represented, and several structures which surely deserved to be included are not: *eg* the timber church at Greensted and the door at Hadstock, both of which are 11th-century and uniquely important survivals. One wonders why a fresh selection of subjects to be photographed was not made.

Minor criticism apart, *Essex* is a seminal work, and local historians and academics will long be immensely indebted to Dr Bettley for his painstaking research and lucid presentation. This volume should stand up to scrutiny for another 42 years.

Warwick Rodwell

The Religious Houses of London and Middlesex. Edited by Caroline M Barron and Matthew Davies. Centre for Metropolitan History, University of London, and Victoria County History, 2007. Pp xxi + 324, 8 figs, 2 maps. ISBN 978 1 905165 12 4. Price: £20.00 hb.

London was blessed with the highest concentration of medieval monasteries, friaries, colleges and hospitals anywhere in England. National and international orders were drawn by the twin foci of economic and temporal power represented by the City and Westminster; hospitals flourished in response to the needs of the largest concentration of people in the land, and colleges were founded through the piety of (sometimes fabulously) wealthy kings, bishops, merchants and nobles.

This welcome and very useful volume gathers together the information published in the Victoria County Histories for all these religious houses of the two counties in one easily accessible place. The original works are of some maturity: the City of London volume was originally published nearly a century ago in 1909, and the County of Middlesex in 1969. To enhance the value of the new collection to researchers and general readers, fresh introductory sections have been added to each of the entries, identifying where significant research subsequent to the original publication has been published.

Following an introduction, the book is divided into two sections, reflecting the division of the original VCH volumes. The first deals with the London houses (including Westminster and three houses from Southwark, but not those houses adjacent to the City in Clerkenwell), and the second Middlesex. A total of 65 entries are included. Two maps, one for the urban core and one for the county of Middlesex, identify the location of each of the houses, and a short illustration section includes antiquarian views of six of the houses.

In addition to the new bibliographic summary for the entries, a revised chronological list of the heads of each house has been added where appropriate. The main elements of the text are exact reproductions of the original material in the 1909 and 1969 volumes. The volume is very well produced on high-quality paper and with a hard cover. In terms of a review, then, the issue is less about the content, since that has been established for decades, and more about the utility and appeal of the collection.

Firstly, it will be useful. The combination of the houses arrayed in one manageable volume with the introductory sign-posting to further research (of which there is a gratifying amount identified) will certainly cut down on the effort required to gather more complete information about these fascinating medieval establishments. It would have been even more useful with an index, since common threads of religious and political history certainly weave their way across the specific developments of the different houses. However, this omission is partly offset by an excellent introductory chapter setting out the context of the book (by Matthew Davies) and taking a fresh and most interesting view of the religious houses as a group (by Caroline Barron). This latter piece alone provides ample inspiration for future research.

The book is made even more useful for those with access to the Internet through the existence of the digital versions of the two original VCH volumes (www.british-history.ac.uk). This latter resource deserves a huge plug in its own right and is rapidly becoming an indispensable research companion to the published literature on London's history. Access to the searchable volumes on this site more than makes up for the lack of a paper index.

The volume does remain just a little self-limited. Its stated aim was 'uniting the accounts for London and Middlesex', but it is not immediately clear why just Middlesex was chosen. One assumes that the aim was to draw together the key information for the religious houses around the urban core; but if so, houses in the near hinterland in Surrey and Essex, such as St Saviour Bermondsey, almost opposite the Tower of London, and perhaps the Cistercian house at Stratford, only a little way east of the nunnery at Bow, remain curious omissions.

The opportunity to make a little more of the archaeology of some of the sites has also been missed. I do not suggest for a minute that the text should have been thoroughly revised to take account both of new historical research and of archaeological work, although such a project would handsomely repay the effort required; but the inclusion of some plans or reconstructions of the houses, or photographs of finds from them would, I feel, have widened the appeal at relatively little extra cost or increase in the volume's size.

These quibbles aside, the price tag puts this book in the reach of just about everyone, and it will provide an excellent research aid for years to come.

Barney Sloane

Tokens of the British Isles 1575–1750, Part VII: City of London. Sylloge of Coins of the British Isles 59, The Norweb Collection, Cleveland Ohio, USA. By R H Thompson and M J Dickinson. Spink & Son, London, 2007. Pp xcvi + 385, many photographs. ISBN 10 902040 80 5. Price: £35.00 hb.

This, the seventh and penultimate volume of the *Sylloge of Coins of the British Isles* cataloguing and commenting on the remarkable collection (now dispersed) of 17th-century private-issue tokens put together by the American Norweb family, deals with those issued in the City of London,

the largest and most diverse concentration. The precise extent of the City for this purpose is closely defined, as in much else here drawing on but not constrained by the labours of previous researchers. The two authors have brought their different experiences together to produce a valuable, highly detailed work of reference: Robert Thompson (survivor of a lightning strike through his computer, which fried his modem according to the preface — presumably during the compilation of the present work) comes from a specialised numismatic library background, and Michael Dickinson brings a familiarity with the collecting world and himself compiled an update of Williamson's standard work on the tokens (G C Williamson *Trade Tokens Issued in the 17th Century* (1967, reprint in 3 vols of original 1888–91)) more than twenty years ago (M Dickinson *Seventeenth Century Tokens of the British Isles and their Values* (1986)).

The very extensive series of tokens considered, originally issued and used between 1648 and 1672, has been the focus of many collectors and commentators, almost from the period when they were current, and the subject of detailed publications from the 18th century onwards. A brief account of this aspect of numismatic history is given. The central role of early coffee houses in developing the use of the series of tokens that are the subject of this volume is recognised with a brief account of their intertwined history. The core of the catalogue comprises the individual entries and 61 crowded plates, but this section is curiously unpaginated (?340 pages). 1,443 types are catalogued, with photographs of both sides. More than 230 of these types are new in the sense of not being featured in Williamson's work. There are also exhaustive indices of types (*ie* a classification of figurative designs, which has its own index), place of issue (by the addresses given on the tokens), trades and other descriptions, issuers by name, and letters in obverse and reverse types (initials of issuers), as well as a location map of the City area.

Although the Norweb Collection was inevitably not comprehensive of the huge range of City of London tokens of the specified dates (as the concordance, p xxiii onwards, makes clear), it was the one which in living memory came closest to that ideal, including many of the finest known examples of specific issues. Those familiar with the relatively limited range of tokens available to the collector in recent years and the difficulty in acquiring clear examples in

any chosen field (though detectorists' finds have significantly supplemented the known stock and indeed produced some previously unrecorded issues) will marvel that the extensive series in this collection are of sufficient legibility that they are all adequately illustrated in this volume by photographs at 1:1.

Among a number of rarities, the uniface two-pence token made of leather (no. 5762) is a remarkable survival. The trades represented by the issuers are immensely varied. An 'anti-pestilential powder seller', butcher, chocolate retailer, gold-wire drawer, ink and perfume makers, tavern keeper, sheriff's officer and waterman among many other professions indicate the rich tapestry of London trades that appear on this unofficial small change. The sole common ground seems to have been a need or urge on the part of the practitioners included here to issue their own tokens. Considerable efforts have been expended in trying to identify individual issuers from initials and other meagre hints given on some of the tokens which are less than explicit, with significant success. The sheer amount of detailed information given in this volume is awesome. A glance at any line in the catalogue part gives some indication of the background data that has been drawn on to distil the entries.

This is a catalogue of part of one collection, but a remarkable collection, and the volume is a notable achievement of scholarship.

Geoff Egan

Wartime St Pancras: a London Borough Defends Itself. By Charles Allen Newbery, transcribed and annotated by Robin Woolven. Camden History Society, 2006. Pp 88, 27 illus. ISBN 0 904491 64 1. Price: £7.50 pb.

A Woman in Wartime London: the Diary of Kathleen Tipper, 1941-1945. Edited by Patricia and Robert Malcolmson. London Record Society, 2006. Pp 202, 11 illus. ISBN 0 90095241 5. Price: £20.00 hb.

Wartime St Pancras, the winner of the 2007 LAMAS Local History Publications Award, is an extremely engaging account of life on the Home Front during the Second World War. The book is both an official account of civil defence provision in St Pancras; and a delightful collection of Dad's Army-style vignettes: a record of local volunteers applying great seriousness of

purpose to often comic wartime situations. It's all very British.

Although published in 2006, the heart of the book is a typescript account of St Pancras's Civil Defence compiled in 1945 by Councillor Charles Allen Newbery. Newbery, a trimming manufacturer by profession, became the Chair of the ARP committee in 1937, subsequently adding Chief Warden and Salvage Officer to his portfolio of wartime responsibilities. He was evidently the main man in St Pancras's civil defence operations and his overview forms Part 1 of the book. Part 2 consists of 16 'service reports' written by the various officers in charge. These services ranged from the familiar Air Raid Precaution (ARP) service, to the lesser-known support services, covering salvage, decontamination and the long list of miscellaneous activities undertaken by the Women's Voluntary Services (WVS), including 'supplying 5 people under the care of Provision of Industry for the Physically Handicapped with wool for knitting'. All these services were largely staffed by volunteers: the food conservation and decontamination service, for example, included 'men and women of the food trades, many of them past middle age', who had 'spontaneously offered their services, determined to do their share in safeguarding the food supplies of the nation'.

The accounts are printed as found, but with extensive and helpful footnotes by Robin Woolven, who has also provided an introduction setting the borough in its wartime context and introducing some of the characters. There are a number of useful overview tables and lists, such as bombing statistics for the borough; a map of ARP facilities; and some wonderful photographs. Many show training exercises, and have an appealing surreal quality: as for example the food contamination squad solemnly hosing down potentially dangerous tins of food on Hampstead Heath.

Much of the book's charm lies in the detail of the individual reports. The WVS organised private knitters, who between them completed 48,709 garments, and at the time of writing in 1945 were still going strong: 'now they are knitting hard for men in Burma and the Far East.' The main difficulty faced by the salvage wardens, in charge of returning property to rightful owners, was that 'so many people have so many things so much alike'. They dutifully examined all cutlery with magnifying glasses

to find hallmarks and maker's names. The WVS members tasked with billeting refugees around the borough encountered their greatest challenges with 'The Breton fishing folk who looked so well with their wholesome tanned faces ... One family had sailed over in an open boat with grandparents, great grandparents, uncles, aunts and children, and all their worldly goods tied up in bedspreads and tablecloths'. The challenge was that 'none of the party wanted to be detached from their relatives'.

Altogether the book is a treasure trove for local historians. There are statistics and names in abundance: many people get a mention in dispatches ('Mrs Agnew was always well to the fore on any job of work for the WVS ...'). Camden History Society is to be congratulated on publishing this reminder that London defended itself with a great collective effort of make-do-and-mend resourcefulness, comedic bureaucracy, and generosity of spirit.

The diary of Kathleen Tipper is one of 480 wartime diaries in the Mass-Observation Archive at the University of Sussex. The editors note in their introduction that only a handful of these 480 have been published, so the appearance of another in print has to be welcome. The editors have form in the field, having already prepared for publication (in 2005) the Mass-Observation diary of Olivia Cockett, another woman in wartime London.

As with all diaries, the book stands or falls on its subject, in this case Kathleen Tipper. Born in 1919, Kathleen came from the respectable working classes of south-east London. Her parents had met when working at the Woolwich Arsenal during the First World War and from 1927 the family lived on Woolwich Council's showpiece Page Estate. Kathleen went to Eltham Hill Technical School for girls and on the outbreak of war, aged 20, had secured her first job, as a junior clerk with Alfred Booth & Co, a shipping firm with offices in the Strand. 'Life was entirely family/church/school orientated' she recalled, looking back from 2005. 'We were not much exposed to the seedier side of life'.

It was voluntary work for the YMCA that brought new experiences to Kathleen. Looming very large in her diary entries are the YMCA canteens where she helped out. Her regular stint was at the canteen in Lee Green which served RAF personnel at the nearby Kidbrooke depot. She also became a driver on the mobile canteen vans. 'Sunday May 3 1942: An eventful

day. I drove a van all day on my own. I was a little nervous at first but soon lost that feeling. I had a terrific headache when I finished.'

At the end of May 1942 Kathleen was asked to help out at the New Zealand Club in Charing Cross Road '... tonight I went along for the first time. It is terrifically hard work, serving hundreds of suppers to service men of every different nationality in the Allied Forces, and quite a change from the YM' (30 May 1942). The New Zealand Club seems to have been by far the most exciting part of Kathleen's wartime voluntary work. She served there every Monday night, relishing the buzz and glamour of its international and often 'merry' service men. 'We were crowded with soldiers at the Club this evening, several wearing newly-presented MCs and MMs. Many of them are going home soon and when somewhat merry are very indiscreet about their sailing times.' (6 November 1944).

As with most diarists, the entries are heavily sprinkled with views and opinions: in her case, about other people, the news, radio programmes and films. 'Most of the enjoyment of a film or play, I find, comes afterwards, when you are able to discuss and criticize it with friends who have also seen it and whose views you respect even if you disagree with them', she wrote on 28 October 1941, having been to see *49th Parallel*. She 'enjoyed it', although one of her friends 'was bored stiff'. Sometimes her thoughts are girlish, and sometimes a trifle priggish, as she herself remarked to the editors in 2005 (and quoted by them in a footnote to a comment from March 1942 about 'merry' WAAF girls lacking in morals): 'what a shock to read something one had written 60 years ago. I didn't recognise the ghastly, judgemental writing in these pages.'

The editors claim Kathleen Tipper as something of an everywoman for London. In her diaries 'we find a full canvas of wartime life — a world of paid work and volunteer work ... hers were experiences that were often shared (at least in part) with others — or that surely would have been shared with others — and that other Londoners *might* have written about, though of course with different emphases and accents'. This is probably claiming a little too much universality for her, but what her diaries do give us is a vivid portrait of a personable young woman, doing her growing-up against the extraordinary backdrop of London in wartime.

Cathy Ross

A Hundred Year History of St George's Church, Hornsey, now St Mary's with St George, the Parish Church of Hornsey. By Thyrsa Meacock. Hornsey Historical Society, 2007. Pp 80, 44 figs, 1 map. ISBN 0 905794 389. Price: £5.00 pb.

Thyrsa Meacock was baptised and married at St George's, Hornsey, her late husband served as churchwarden from 1975–82, and she is now a churchwarden emeritus. Her great love of the church and parish illuminates this book, written to commemorate the centenary of the building of the first St George's church. The second and present church, designed by Randall Morris, dates from 1959, the original having finally succumbed to the effects of severe bomb damage during the Second World War.

The author has a discursive style, which while making it slightly difficult for the reader to sort out the chronology, nevertheless adds fascinating glimpses into the concerns and foibles of past clergy and parishioners. One wonders what underlying tensions led the vicar in 1925 to urge everyone to get out in the country together for a picnic. 'If we could now and then get off on a rollicking jaunt and lark about and play the fool (as we ought) we would like each other ever so much more.'

The book is well produced with photographs of other Hornsey places of interest, as well as the church and parish activities.

Eileen Bowlt

Dunsford Manor 1851–1898: a Late-Victorian Manor in Wandsworth. By Rita Ensing. Wandsworth Historical Society Paper 14, 2006. Pp 50, A4 typescript, 6 illus. ISBN 0905121 16 3. Price: £3.00 pb.

Rita Ensing has studied manorial history from the Middle Ages onwards. This latest work was highly commended in the LAMAS 2007 Publications Awards. The author describes the work of a local manor in the last half of the 19th century. The lordship changed ownership in 1851 after a nearly 200-year descent through the Brodrick family. The new lord, James Clark, enjoyed his estate for only five years before his death. Arthur Trehern Norton purchased the estate in 1891, the estate being held in the intervening period by Clark's trustees during the lifetime interest of his widow.

The business of the manor was limited solely to the conveyance of copyhold tenancies, manorial

law being clearly explained in ch 3. From 1815 onwards a series of reforms was enacted, mainly designed to abolish copyhold tenure: finally achieved in 1925. The Copyhold Act 1841 allowed business, for centuries conducted in the manor court before the assembled tenants, to be conducted individually, 'out of court'. The author uses examples from the records to illustrate different kinds of property transaction. These give an insight into the lives of the people of Wandsworth. This book has much to interest the local historian working on his own parish who wants to understand the workings of his local manor. It is also an introduction to an under-used resource for the family historian.

Graham Javes

Finchley Harriers: the Story of an Athletic Club. By Alan Chidley and Cliff Wadsworth. Published for Hillingdon Athletic Club by CAW Books, 2007. Pp 24. Price: not stated, pb.

This is a well-researched booklet on the history of the Finchley Harriers, which existed as an athletic club from 1877 to 1966. The authors have taken a chronological approach, and divided the book into sections according to either geographical change of location for the club or important sporting events. Individual star members such as Charles Bennett, Frank Randall and Roger Bannister are all given individual mention. There are informative quotes from the *Willesden Chronicle*, *Wembley News* and other sources, and six useful appendices give fuller information about events recorded in the main history. The booklet has black and white illustrations, but regrettably these are mainly of poor quality and therefore do not enhance the work as well as the reader would expect. However, overall, an interesting read for the sporting and local history enthusiast.

Diane Tough

Camden History Review 30. Edited by David A Hayes. Camden History Society, 2006. Pp 36. ISBN 0 904491 66 8. Price: £5.95 pb.

This annual Review was a submission for the 2007 Local History Publications Award, and came close to winning — as usual, Camden has produced a very professional-looking product.

The first article is perhaps the most tantalising — it gives a horrifying account of life in the St Pancras Workhouse in the late 18th century, as

recorded by an inmate, Robert Blincoe. Along with fellow inmates he was virtually sold to the owners of a northern mill to work in their factory. The author of the article has based it on his own biography of Blincoe, which has recently been published. The concentration on the St Pancras portion of the story means that it leaves one wanting to know 'what happened next'.

Other articles cover the artist Frederick Tatham, who lived in the area, and was a close friend of William Blake; the life-story, so far, of Kentish Town Baths; an account of two early steam pioneers and their works at Regent's Park; the organisation of the Metropolitan Boroughs in the Second World War; the early history of the Saville Theatre in Shaftesbury Avenue; and another biographical account of a local personality, this time David Laing. Revd Laing was chaplain at the Middlesex Hospital between 1835 and 1847, and then vicar at Holy Trinity, Kentish Town. The author of this piece gives an excellent example of the use of archive material, such as Hospital Committee minutes, to create a fascinating narrative.

The A4 book is well-illustrated, with excellent black and white pictures, efficiently captioned. The use of four columns of text, newspaper-style, is not perhaps to everybody's taste, but is probably the best layout for the size of page. Overall the Review gives several side-lights on the history of the area, and the connections of some of its citizens with a wider community.

Ann Hignell

Lost Theatres of Haringey. By Marlene McAndrew. Hornsey Historical Society, 2007. Pp 65, 33 figs, 4 maps. ISBN 978 0 905794 39 6. Price: £7.50 pb.

In a light and easy to read style, Marlene McAndrew presents us with a wealth of detail about the theatres of the area that is now the London Borough of Haringey. Six in all, they range from the Highgate Theatre, founded in the late 18th century, to the Wood Green Empire, which opened in 1912. Few of them have survived the competition of first film and then television, but all have an interesting history.

At the turn of the 18th century Highgate was the only concentrated settlement in the area, one large enough to supply an audience for

regular professional theatrical performances, but as suburbanisation spread northwards, other theatres were established to cater to the requirements of the new citizens for 'refined' entertainment. This was not necessarily maintained, and several resorted to music hall — and then cinema use — as more profitable than straight drama.

Ms McAndrew relates the sorry last years of several of the once very successful and architecturally impressive establishments, but is pleased to record that the Grade II listed Tottenham Palace is still standing, if as a religious centre, as is its predecessor, the Forster Hall. The theatre in Alexandra Palace, which despite many vicissitudes has preserved a unique set of Victorian stage machinery, is saved, but awaits full restoration.

The booklet has several good photographs and local, 19th-century maps, but no modern map to give visitors to the area an idea of the location of the properties — or their remaining shell. On a technical note, the text suffers from odd spaces, the result of over-justification, but still manages to run some words together.

Hornsey Historical Society are to be congratulated on providing a publication which gives a good idea of theatrical developments over the first half of the 20th century, as well as a local history with many entertaining anecdotes.

Ann Hignell

Surrey History Vol VII No. 3. Edited by Andrew Cornwall. Published by Phillimore & Co Ltd for Surrey Local History Committee, 2007. Pp 192, 35 figs, 3 tables, 1 map. ISSN 0309 9342. Price: £3.95 pb.

It is always interesting to see how the other half lives, and often instructive too. As a member of the LAMAS Local History Committee, I was glad to be given this booklet to review, as our two Societies have much in common. Born at much the same time, the mid-19th century, our sister society shares much the same remit and organisation as ourselves, but there are differences. Like us, Surrey has an annual Local History Conference (only they call it a Symposium), but also manages a half-day in the spring and a summer visit as well. Unlike us they publish their Local History material as a separate Journal, of which this is the latest edition.

The A5 booklet has five essays on local topics, covering Surrey and the motor, a manorial

boundary survey, Guildford Town Association, trade tokens, and one of Lord Rosebery's horse-racing stables near Epsom. All are of interest to someone, if the political manoeuvrings in Guildford are perhaps for a limited audience.

The volume closes with an account of accessions to the Surrey History Centre in 2005, when they received 235 various records from organisations and individuals. Summaries are given of a selection of these, including material relating to the establishment of the first English mosque in Woking in 1889, and the still book for a herbal distillery processing the output of the lavender fields of Mitcham — did you know that? Apparently local crops of peppermint, lavender and camomile were processed for their oils until the 1950s. Despite its sober lay-out and few, poor illustrations, this publication provides much of both local and wider interest, with well-written texts.

Ann Hignell

Civic Pride in Hornsey: The Town Hall and its Surrounding Buildings. By Bridget Cherry. Hornsey Historical Society, 2006 (1st edn 1995). Pp 28, 18 illus. Price: £6.00 pb.

Noel Park: a Social and Architectural History. By Caroline Welch. Haringey Council, 2006. Pp 58, 33 illus. Price: £4.50 (plus £1.00 postage from Bruce Castle Museum) pb.

The former LCC Borough of Hornsey only acquired a Town Hall in 1935, and it was almost immediately recognised as an excellent example of municipal architecture. The chosen site was a narrow triangular one, and was to hold not only a town hall but separate gas and electricity showrooms — 'three centres of power and energy — Gas, Electricity and Local Government'. The New Zealand-born architect Reginald Uren produced a bold design of straight lines, austere brick surfaces, tall windows, plain except for the canopied one above the main entrance, and sculpture in low relief. The interior is distinguished by its use of chrome and bronze, marble, etched glass, and finely worked features. The showrooms, though different, were also designed by Uren and shared similar characteristics. The sculptor was Arthur Ayres.

As you would expect from this author, the description of the building and its fittings, its architectural merits and its place in the architecture of the time is excellent. And all

you would like to know about the genesis of the building and the history of its site is included. It is well illustrated, as a book on architecture should be.

The informative booklet *Noel Park* tells of Noel Park in Haringey (lying between Wood Green High Road, Lordship Lane and Westbury Avenue), the ambitious third housing estate of the Artizans, Labourers and General Dwellings Company, following their successes at Shaftesbury Park, Battersea and Queen's Park, Paddington. The Artizans Company (established 1867) was one of the philanthropic societies which built houses for letting to the working classes, by which was meant workers with stable employment and a dependable wage, who might be expected to pay rent steadily. Such houses were to be of good quality, which, it was considered, would promote self-improvement, morality and family life.

Noel Park was begun in 1881 and laid out in grid form. Fifteen streets with 2000 dwellings — houses, not tenement blocks — were planned, and mostly completed before 1914. Lettings were slow until, in 1885, the Company managed to persuade the railway companies to extend cheap workman's tickets to the nearby station. The houses were set out in unified, though not uniform, terraces, sometimes with a turreted corner house. Five grades of house were built, distinguishable by the number of rooms, dimensions and decoration. Nevertheless there was a fair degree of standardisation which permitted economies of scale. Every house had running water downstairs, and a toilet with 'healthy' outside access; the first-class houses had upstairs toilets, and a few had mains gas and electricity. Space was provided for a church and church halls, and many recreational and welfare societies soon followed; in 1889 the London School Board opened a school; shops were built on the estate and nearby; the Wood Green Empire opened in 1912. The estate architect was Rowland Plumbe. It was sold to Haringey Council in 1966, and designated a Conservation Area in 1982. The occupiers are now a mix of classes and racial origin.

Patricia A Clarke

The Life and Times of the Brunswick Bloomsbury. By Claire Melhuish. Camden History Society, 2006. Pp 104, illus. ISBN 0 904 491. Price: £7.50 pb.

It's amazing what a coat of white paint and a bit of TLC will do for a building. The story of

the Brunswick is one of high expectations and woeful neglect. It is doubtful if it would be built to-day as it would involve the destruction of a Georgian Square and replacement by what would be called a 'brutal' new build. But the houses were derelict and the architect did their best to create something worthwhile. However years of neglect and cost cutting, *eg* not painting, left it in a sorry state. The recent refurbishment has left it in a pristine condition and the square is full in the summer. This book tells the whole story and is worth while reading; partly to see what should not be done and then to find out how to get out of it.

David Marcus

Also received

Justice in Middlesex: a Brief History of the Uxbridge Magistrates' Court. By Eileen M Bowlt. Waterside Press, 2007. Pp 96, many illus. ISBN 978 1904 380 399. Price: £8.00 (plus £3.00 p&p from Waterside Press, Domum Road, Winchester SO23 9NN), pb.

Justice ancient and modern, especially in Uxbridge; the life and times of part of Middlesex by our Chairman of Council. Good local history, going back to the 17th century.

INDEX

LF Pitts

Page numbers in italic denote illustrations

- Aaron of Lincoln 193
Aaron of York 193
abbey, Syon Park 81
Abrahams, Mr 154
Aethelstan, King 171
Aethelwine, son of Leofstan 171
'Agas' map 172
Ailwin 171
aldermen 154, 196
Aldersgate 194
Aldfoldean, W Sussex 138
Aliens Restriction Act 203
Allen, Thomas 174
alley, Roman 29, 31
Andrews, Mr 154
Angel Inn, Brentford 104, 109
animal bone 11, 17, 34, 45–7, 56, 62, 63, 72–5, 85, 106, 109, 135–8, 146
Annual Fair, Barnet 149
Anthony, Siân, & Steve Preston
 'Roman field boundaries at Syon Lodge, London Road, Isleworth' 79–87
AOC Archaeology Group 141, 151–68
Apicius, Roman cookery book 46
Armitage, Philip, reports on animal bone from Long Lane, Southwark 45–7
Arnold, son of Thedmar 196
arrowheads, flint 91, 92, 93
arthritis 69

Barkham, Edward 153, 154, 158
Barkham, Robert 154
barley 10
Barnet 141–50
barrels, lining pits 107
Barron, C M, & M Davies (eds) *The Religious Houses of London and Middlesex* (reviewed by Barney Sloane) 216–17
beads 129
Beauchamp, Ephraim 154
Beauchamp-Proctor, Thomas 154
belt-mount, Roman military 97, 130
Benet, John 182

Bettley, J, & N Pevsner *Essex* (reviewed by Warwick Rodwell) 215–16
Billingsgate 196
bird bone 46–7, 62, 74, 145
Bishopsgate ward 60–1
Blackheath 179
Blackmore, Lyn, & Bruce Watson
 'The London Hanse: a mercantile enclave in the heart of London' 195–9
Blick, S (ed) *Beyond Pilgrim Souvenirs and Secular Badges: Essays in Honour of Brian Spencer* (reviewed by John Clark) 214–15
bone objects 30–1, 131
Bowlit, Eileen, *Justice in Middlesex: a Brief History of the Uxbridge Magistrates' Court* 223; reviews T Meacock *A Hundred Year History of St George's Church, Hornsey, now St Mary's with St George, the Parish Church of Hornsey* 220
Branch, Nick, reports on environmental evidence from Brentford 134–5
'brass formerly in the church of Saint Dunstan-in-the-West: addenda, On a' (Philip Whitemore) 191–2
bread wheat 10
Breguntford 100
Brent, river 79, 89, 90, 93, 95, 97, 101
'Brentford, Two multi-period excavations along the Roman road from *Londinium* to Silchester at' (Lorraine Darton) 89–140
brick:
 post-medieval 106, 110, 111, 148, 158, 162
 Roman 86
Bronze Age timber platform 17, 35
brooches 27, 27, 98, 128–9, 129, 131
'Buckle Street/Leman Street, Excavations at' (Charlotte Thompson) 1–3

burial, cremation 99
'Burials and extramural medieval and later development at Premier Place, Devonshire Square, Houndsditch, London EC2, Late Roman' (David Sankey & Brian Connell) 53–77
Bush, G R *see* Byrne, M
butchery evidence 47, 62, 73
Butler, J *Reclaiming the Marsh: Archaeological Excavations at Moor House, City of London 1998–2004* (reviewed by Peter Rowsome) 209–10
buttons 131
Byrne, M, & G R Bush (eds) *St Mary-le-Bow: a History* (reviewed by Ann Saunders) 213–14

Cade, Jack 169–89
Camden, William 178
Candlewick Street 171
Canham, Roy 90
Cannon Street 169, 172
Canon Street Station 195
cattle market, Barnet 143
cattle, Bronze Age 17–18
cellars:
 post-medieval 144, 145, 158
 19th-century 65
cemetery:
 Jewish 194
 Roman 53–77, 56, 57, 58
cereal remains 86, 134–5, 144, 148
cesspits:
 medieval 63, 103
 post-medieval 63, 64, 106
 19th-century 65
chalk burials 57–9, 60
Cherry, B *Civic Pride in Hornsey: The Town Hall and its Surrounding Buildings* (reviewed by Patricia A Clarke) 222
Chicksands Priory 194
Chidley, A, & C Wadsworth *Finchley Harriers: the Story of an Athletic Club* (reviewed by Diane Tough) 220
Christianity 60

- City Ditch 60
 City Wall, postern 65
 Civil War 104
 Clark, John 'Jack Cade at London Stone' 169–89; reviews S Blick (ed) *Beyond Pilgrim Souvenirs and Secular Badges: Essays in Honour of Brian Spencer* 214–15
 Clarke, Patricia A, reviews B Cherry *Civic Pride in Hornsey: The Town Hall and its Surrounding Buildings* 222; reviews C Welch *Noel Park: a Social and Architectural History* 222
 clay objects 65
 Clitherow estate, Brentford 109
 cloth trade 198
 Clothes Exchange 61
 Clothes Market 61
 coaching inns 143
 coffins 56–7
 coins:
 George III 162
 Roman 97, 99, 131
 Coke, Sir John 166
 comb 131
 Connell, Brian, reports on human bone from Premier Place 66–71; see Sankey, David
 copper-alloy objects 27, 98, 128–9, 130, 131, 160
 Copperplate Map (1559) 60, 61, 172, 172
 corn drier 6, 7, 8, 9–10, 10
 Cornwall, A (ed) *Surrey History Vol VII No. 3* (reviewed by Ann Hignell) 221–2
 Cramp, Lucy, reports on environmental finds from Syon Lodge 86
 Crane, river 5, 6, 11
 cremation urn 99
 Cripplegate 194
 Crispin, Gilbert, abbot of Westminster 193
 Croke, John 154
 Croke's Farm, Tottenham 151–68, 153, 156, 158, 166
 Cutlers' livery company 60

 Dalby, Lionel 154
 Dalby, William 154
 'dark earth' 32
 Darton, Lorraine 'Two multi-period excavations along the Roman road from *Londinium* to Silchester at Brentford' 89–140
 Darvill, Timothy, reviews J Lewis *et al Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations Vol 1, Perry Oaks* 207–8
 daub 11–12
 Davies, M see Barron, C M
 dendrochronology 48
 Dickinson, M J see Thompson, R H
 diet, Roman in Southwark 34, 45–6; in medieval London 73
 Dissolution 66
 distillery 33
 ditches
 medieval 102–3, 143
 post-medieval 105, 145
 prehistoric 81
 Roman 24, 26, 29, 31, 84, 86, 92, 93–5, 95, 96–7, 99, 100, 101
 Domesday Book 153
Domus Conversorum 195
 Dorset Survey Map (1619) 153, 153
 Douglas, Alistair 'An excavation at 5–27 Long Lane, London Borough of Southwark SE1' 15–51
 Dowgate 196
 drains:
 post-medieval 148
 18th-century 107
 'Drill Hall' 66

 Eadwaker 171
 East India Company 61
 Edward I 101
 Edward VI 198
 Edwards, Catherine 'Medieval and post-medieval activity at Victors Way, Barnet' 141–50
 Egan, Geoff, reviews R H Thompson & M J Dickinson *Tokens of the British Isles 1575–1750, Part VII: City of London. Sylloge of Coins of the British Isles 59, The Norweb Collection, Cleveland Ohio, USA* 217–18
 Elias l'Eveske 195
 Elizabeth I 198
 enamel brooch 27
Englishmen for my Money 171
 Ensing, R *Dunsford Manor 1851–1898: a Late-Victorian Manor in Wandsworth* (reviewed by Graham Javes) 220
 environmental sample (seeds) 9
 Ermine Street 54, 153
 'excavation at 5–27 Long Lane, London Borough of Southwark SE1, An' (Alistair Douglas) 15–51
 'Excavations adjacent to the River Crane on the site of the former Railway Marshalling Yards, Feltham' (Isca Howell) 5–14
 'Excavations at Buckle Street/Leman Street' (Charlotte Thompson) 1–3

 Fabyan, Robert 182
 Faithorne & Newcourt map 60
 falconry 74–5
 fan 131
 Featherby, Rupert, reports on Roman pottery from Premier Place 70–1
 'Feltham, Excavations adjacent to the River Crane on the site of the former Railway Marshalling Yards' (Isca Howell) 5–14
 'field boundaries at Syon Lodge, London Road, Isleworth, Roman' (Siân Anthony & Steve Preston) 79–87
 field system:
 medieval 32, 101–2
 Roman 95, 96
 fig seeds 148
 figurine, Roman soldier 131
 fireplace:
 post-medieval 158
 18th-century 33
 First World War 201–3
 fish bone 30, 31, 46, 55–6, 62, 74–5
 Fitz Ailwin, Henry 171
 flint hammerstone 105
 flints 8, 17, 18, 81, 85–6, 90–2
 Ford, Steve, reports on flints from Syon Lodge 85
 fretted ceilings 165
 'frippersers' 60
 fruit remains 144

 General Monck 143
 'George' Inn, Brentford 104
 'Georgian house, Moselle Place: from a high status medieval farmhouse to a' (Melissa Melikian) 151–68
 German atheneum 202
 German beer hall 202
 'German community in London, c.1815–1914, The rise and fall of the' (Panikos Panayi) 201–3
 German Lutheran church 201
 German merchants 195–9
 German Turnverein 202
 Giffard Tanner's Yard 110
 glass beads 129
 glass button 131
 glass vessels 24
 goat figurine 97, 130, 129
 gold wire 35
 Gomme, Laurence 178
 goshawk 74–5
 grain, charred 30, 31
 Grand Union Canal 89, 109
 grape pips 148
 Great Fire 173, 199
 Great North Road 143
 Green, David R 'Little Italy in Victorian London: class or community?' 199–200
 Gregory, William 184
 guildhall, German 196

 hairpins 129
 Hall, Edward 181, 182, 185
 'Hanse: a mercantile enclave in the heart of London, The London' (Lyn Blackmore & Bruce Watson) 195–9

- Hatton Garden 200
 Houghton, William 171
 Hayes, D A (ed) *Camden History Review* 30 (reviewed by Ann Hignell) 220–1
 Heard, K *see* Watson, S
 hearths:
 medieval 103
 post-medieval 158, 158
 Roman 24, 25, 29, 30, 31, 33, 97, 99
 Saxon 10
 Heath, William 128
 hemlock 30
 Henry I 193
 Henry II 196
 Henry III 194, 195
 Henry VI 101, 179
Henry VI Part 2 180–1
 Hignell, Ann, reviews A Cornwall (ed) *Surrey History Vol VII No. 3* 221–2; reviews D A Hayes (ed) *Camden History Review* 30 220–1; reviews M McAndrew *Lost Theatres of Haringey* 221
 Hillaby, Joe ‘Some images of the London Jewry, c.1070–1290’ 193–5
 Holbein 198
 Holborn 200
 Holinshed, Raphael 181, 182
 Holy Trinity Priory, Aldgate 53, 60, 62, 65
Hondes Dich 60, 63
 hones 131
 horn cores 62, 63, 73–4, 106, 107; (lining pit) 33
 horn working 65, 107
 horse bones 45
 horseshoes 132
 Horwood’s 1813 map 33
 Houndsditch 53–77
 Hounslow Camp 9
 Howell, Isca ‘Excavations adjacent to the River Crane on the site of the former Railway Marshalling Yards, Feltham’ 5–14
 human bone, Roman 66–71
 Hunt, Henry 154
 immigration 193–205
 Indenture Map 1873 107, 108
 inns, Brentford 103
 iron objects 65, 130, 131–2
 Isleworth 79–87
 Italian Benevolent Society 200
 Italian immigrants 199–200
 ivory objects 65
 ‘Jack Cade at London Stone’ (John Clark) 169–89
 Jacobson, Jacob 199
 Jarrett, Chris, reports on pottery from Brentford 125–7; reports on tobacco pipes from Brentford 127–8
 Javes, Graham, reviews R Ensing *Dunsford Manor 1851–1898: a Late-Victorian Manor in Wandsworth* 20
 jetton 132
 Jewish tomb inscription 194
 ‘Jewry, c.1070–1290, Some images of the London’ (Joe Hillaby) 193–5
 John of Northampton 198
 John, King 195
 Kershen, Anne J ‘Old patterns, fresh faces: recent migrants to London in the 20th and 21st centuries’ 203–5
 Keys, Lynne, reports on small finds at Brentford 128–32; reports on iron slag from Brentford 132–4
 knife, flint 91
 knife handle 97, 130
 lake 155, 162
 LAMAS Local History Conference November 2007 ‘They came to London: 1000 years of migration’ 193–205
 LAMAS *Transactions* 191
 land reclamation, Roman 23, 33
 landing stage:
 prehistoric 18
 Roman 23, 33, 36
 Late Bronze Age–Early Iron Age pottery 6–8, 8
 ‘Late Roman burials and extramural medieval and later development at Premier Place, Devonshire Square, Houndsditch, London EC2’ (David Sankey & Brian Connell) 53–77
 lath-and-daub 12
 Lea, river 154
 Leake, John, map (1667) 172
 Leather Lane 200
 Leathes, Philip Hammersley 191
 Lewis, J, *et al Landscape Evolution in the Middle Thames Valley: Heathrow Terminal 5 Excavations Vol 1, Perry Oaks* (reviewed by Timothy Darvill) 207–8
 Liddle, Jane, reports on animal bone from Premier Place 72–5
 ‘Little Italy in Victorian London: class or community?’ (David R Green) 199–200
Londinium 22, 25, 33, 35, 93
 London and Middlesex Archaeological Society 169, 175–6
 London Archaeological Archive and Research Centre 53, 153
 London Bridge 179, 180
 ‘London Hanse: a mercantile enclave in the heart of London, The’ (Lyn Blackmore & Bruce Watson) 195–9
 ‘London Jewry, c.1070–1290, Some images of the’ (Joe Hillaby) 193–5
 ‘London Lickpenney’ 171
 ‘London Stone, Jack Cade at’ (John Clark) 169–89
 ‘Long Lane, London Borough of Southwark SE1, An excavation at 5–27’ (Alistair Douglas) 15–51
 Lord Mayor 154, 158, 171
 Lot’s Ait 90
 Lowe, Jennifer, reports on finds from Syon Lodge 86
Lundenwic 11, 12, 13
 Lyne, Malcolm, reports on pottery from Brentford 111–25; reports on pottery from Long Lane, Southwark 36–45; reports on pottery from Syon Lodge 85
 Maiden, Thomas 174
 maker’s marks, on tobacco pipes 65
 Malcolmson, P & R (eds) *A Woman in Wartime London: the Diary of Kathleen Tipper, 1941–1945* (reviewed by Cathy Ross) 218–19
 Malpas, Philip 184
 Marcus, David, reviews C Melhuish *The Life and Times of the Brunswick Bloomsbury* 222
 Market Charter 141
 Maurice de Berkeley 101
 Mazzini, Giuseppe 199–200
 McAndrew, M *Lost Theatres of Haringey* (reviewed by Ann Hignell) 221
 Meacock, T *A Hundred Year History of St George’s Church, Hornsey, now St Mary’s with St George, the Parish Church of Hornsey* (reviewed by Eileen Bowl) 220
 ‘Medieval and post-medieval activity at Victors Way, Barnet’ (Catherine Edwards) 141–50
 ‘medieval farmhouse to a Georgian house, Moselle Place: from a high status’ (Melissa Melikian) 151–68
 Melhuish, C *The Life and Times of the Brunswick Bloomsbury* (reviewed by David Marcus) 222–3
 Melikian, Melissa ‘Moselle Place: from a high status medieval farmhouse to a Georgian house’ 151–68
 Merbode, Gerard 196
 Merrifield, Ralph 173
 Metropolitan District Railway 173
 Midsummer Watch 185
 ‘migrants to London in the 20th and 21st centuries, Old patterns, fresh faces: recent’ (Anne J Kershen) 203–5

- migration 193–205
mikva'ot 195
 Miller, P, & D Saxby *The Augustinian Priory of St Mary Merton, Surrey: Excavations 1976–90* (reviewed by Nigel Ramsay) 212–13
 Millett, Martin, reviews S Watson with K Heard *Development on Roman London's Western Hill: Excavations at Paternoster Square, City of London* 210
milliarium 178
 Mitre Inn, Barnet 141, 143, 146, 149
 MoLAS 1, 5, 53
 Mor Merion (Morgan of Merioneth) 178
 Morgan, Revd Richard Williams 178
 Morgan's map (1682) 61
 Mortimer, John (Jack Cade) 181, 185
 'Moselle Place: from a high status medieval farmhouse to a Georgian house' (Melissa Melikian) 151–68
 Moselle, river 154, 155
 Moses Glover map 103
mutatio 93
- nail-cleaner 97, 130
 nails 130; nail manufacture 97
 Necton, William, map 32
 needle 30–1, 27
 Negretti & Zambra 200
 Neolithic pottery 1–3
New Chronicles 182
 Newbery, C A *Wartime St Pancras: a London Borough Defends Itself* (reviewed by Cathy Ross) 218–19
- occupation, Neolithic 90–1
 Offa, King 100
 'Old patterns, fresh faces: recent migrants to London in the 20th and 21st centuries' (Anne J Kersten) 203–5
 organ grinders 200
 osteoarthritis 73
 oven:
 post-medieval 107
 Roman 30, 30, 31
 oyster shell 31
- palaeochannel 92
 palaeopathology 68–9
 Palladian style 154
palladium 178
 Panayi, Panikos 'The rise and fall of the German community in London, c. 1815–1914' 201–3
 parchment manufacture 65
 Paris, Matthew 195
 Parish Map of 1798 154, 162
 peat sequence 18
 peg tiles 64
- perinatal skeleton 67
 Peterborough Ware 1–3, 2
 Pevsner, N *see* Bettley, J
 'phelipers' 60
 Phillipotts, C *see* Seeley, D
 pinners bone 137
 pits:
 Iron Age 92
 medieval 33, 102, 103; (barrel-lined) 61–3
 post-medieval 146, 160, 162
 Roman 28, 95, 97
 Saxon 11
 18th-century 145
 plasterwork, moulded 159–60, 159, 163–6
 ploughsoil, medieval 156
 pocket-knife 65
 pollen analysis 19, 20, 21
pomerium 54
 Portsoken ward 60–1
 postholes:
 post-medieval 144, 146, 160
 Roman 27, 28, 29, 30, 97–8, 98, 99, 100
 Saxon 9
 pottery:
 Iron Age 6–8, 8, 92, 112, 117
 Late Bronze Age 6–8, 8
 medieval 62, 63, 71–2, 102, 125, 143, 144
 post-medieval 63, 64, 71–2, 105, 125–7, 144, 145, 146, 146
 prehistoric 1–3, 2, 91
 Roman 34, 36–45, 37, 39, 40, 41, 42, 43, 55, 70–1, 84, 85, 95, 97, 99, 111–25, 117, 118, 120, 121, 122
 Saxon 10, 11, 101, 125
 Pre-Construct Archaeology 15, 89
 prehistoric cultivation 19–21
 'Premier Place, Devonshire Square, Houndsditch, London EC2, Late Roman burials and extramural medieval and later development at' (David Sankey & Brian Connell) 53–77
 Preston, Steve *see* Anthony, Siân
 Price, J E 174, 175
 Price, John Edward 169
 Proctor, Anne
- quarry pits, medieval 63
 quays 196
 Queenhithe 196
- Rabbi Josce 194
 radiocarbon dating 9, 18, 48
 railway construction 109
 Ramsay, Nigel, reviews P Miller & D Saxby *The Augustinian Priory of St Mary Merton, Surrey: Excavations 1976–90* 212–13
 Rebellion of 1450 179–80
 Red Lion, Brentford 101
 Richard I 171, 194
- river-wall 106
 roads, Roman 16, 22, 23, 36, 79, 86, 89, 93, 96, 99, 101
 Rocque's map (1746) 61
 Rodwell, Warwick, reviews J Bettley & N Pevsner *Essex* 215–16
 'Roman field boundaries at Syon Lodge, London Road, Isleworth' (Siân Anthony & Steve Preston) 79–87
 Roman settlement 13, 16, 22
 Ross, Cathy, reviews C A Newbery, *Wartime St Pancras: a London Borough Defends Itself* 218–19; reviews P & R Malcolmson (eds) *A Woman in Wartime London: the Diary of Kathleen Tipper, 1941–1945* 218–19
 Rowsome, Peter, reviews J Butler *Reclaiming the Marsh: Archaeological Excavations at Moor House, City of London 1998–2004* 209–10
 rye 10
- saddler 65
 'Saint Dunstan-in-the-West: addenda, On a brass formerly in the church of' (Philip Whittemore) 191–2
 Samuel, M, *see* Seeley, D
 Sankey, David, & Brian Connell 'Late Roman burials and extramural medieval and later development at Premier Place, Devonshire Square, Houndsditch, London EC2' 53–77
 Saunders, Ann, reviews M Byrne & G R Bush (eds) *St Mary-le-Bow: a History* 213–14
 Saxby, D, *see* Miller, P
 Saxon pottery 11
 Saxon settlement 9–13
 Saye, Lord 179, 182–4
 second-hand clothes trade 61
 seeds 145, 148
 Seeley, D, C Phillipotts & M Samuel *Winchester Palace. Excavations at the Southwark Residence of the Bishops of Winchester* (reviewed by David Stocker) 211–12
 settlement:
 Iron Age 93
 medieval 153
 Roman 93, 95
 Shakespeare, William 180–1, 184, 185, 186
 Silchester 79, 86, 89, 93
 Simmonds, William May 154
 Sinclair, Ian 178
 slag, iron 95, 97, 132–4
 Sloane, Barney, reviews C M Barron & M Davies (eds) *The Religious Houses of London and Middlesex* 216–17

- Smith, J T 174
 Smith, Jacob 173
 Smith, Terence Paul, reports on
 moulded plaster from Moselle
 Place 163–6
 smithing 132–4
 smithing hearth bottoms 97
 Smithson, Sir Hugh 166
 smithy, Roman 97
 soakaways, post-medieval 148, 162
 Soames, Charles 154, 155
 ‘Southwark SE1, An excavation
 at 5–27 Long Lane, London
 Borough of’ (Alistair Douglas)
 15–51
 Spitalfields 65
 spoon 27, 27
 spur 131
 St Albans Abbey 141
 St George the Martyr 32
 St George’s in the East 201
 St John the Baptist, Barnet 141
 St Magnus church 181, 184
 St Mary the Virgin, Barnet 141
 St Olave’s church 193
 St Peter’s, Italian church 200
 St Within’s church 169, 171, 172,
 173, 175, 177
 Staines 93
Stalhof 198
 Stane Street 16, 22
 Steelyard 195–9
 Stocker, David, reviews D Seeley,
 C Phillpotts & M Samuel
 *Winchester Palace. Excavations
 at the Southwark Residence of the
 Bishops of Winchester* 211–12
 Stow, John 171, 185
 Street, Christopher ‘Earthstar’ 178
 structures, brick:
 post-medieval 64, 104–5, 104,
 106, 107, 110
 18th-century 33
 structures, timber:
 Roman 23–32, 24, 26, 28, 29, 31,
 33, 96, 98, 100
 Saxon 10, 100
 Strype, John 173, 178
 Stukeley, William 178
 sugar baking 201
 synagogue 194
 ‘Syon Lodge, London Road, Isle-
 worth, Roman field boundaries
 at’ (Sián Anthony & Steve
 Preston) 79–87
 syringe 132
 tannery 107, 109, 110, 111, 136
 tanning 63, 65
 tesserae 27, 30
 Thames, river 33, 79, 90
 Thames Valley Archaeological
 Services 79
 Thompson, Charlotte ‘Excavations
 at Buckle Street/ Leman Street’
 1–3
 Thompson, R H, & M J Dickinson
*Tokens of the British Isles 1575–
 1750, Part VII: City of London.
 Sylloge of Coins of the British
 Isles 59, The Norweb Collection,
 Cleveland Ohio, USA* (reviewed
 by Geoff Egan) 217–18
 tile hearth 103
 tile, ceramic:
 medieval 103, 107
 post-medieval 146, 162
 Roman 10, 29, 30, 86
 timber piles 23
 timber platform:
 Bronze Age 17–18, 17, 35
 Roman 22–3, 22, 36
 Tithe Map of 1844 155
 tobacco pipes 65, 107, 127–8, 146
 token, from Low Countries 160
Totta’s Ham 153
 Tottenham 151–68
 Tough, Diane, reviews A Chidley &
 C Wadsworth *Finchley Harriers:
 the Story of an Athletic Club* 220
 trade 195–9
 Treaty of Utrecht 198
 trumpet mouthpiece 130
 tuberculosis, Roman 69
 ‘Two multi-period excavations
 along the Roman road from
 Londinium to Silchester at
 Brentford’ (Lorraine Darton)
 89–140
 ‘Victorian London: class or
 community? Little Italy in’
 (David R Green) 199–200
 ‘Victors Way, Barnet, Medieval
 and post-medieval activity at’
 (Catherine Edwards) 141–50
vicus iudeorum 193
 Wadsworth, C *see* Chidley, A
 wall plaster, painted, Roman 26, 27,
 31–2, 32
 warehouses, 17th-century 106; 18th-
 century 61
 Watling Street 16, 22
 Watson, Bruce *see* Blackmore, Lyn
 Watson, S, with K Heard *Development
 on Roman London’s Western Hill:
 Excavations at Paternoster Square,
 City of London* (reviewed by
 Martin Millett) 210
 wattle-and-daub construction 12
 Welch, C *Noel Park: a Social and
 Architectural History* (reviewed
 by Patricia A Clarke) 222
 wells:
 medieval 32, 62
 post-medieval 64, 105, 106
 Roman 97, 98
 19th-century 65
 Westminster Abbey 193
 wheat 10
 White Hall, Tottenham 154, 155,
 160
 White Hart, Southwark 179
 Whittemore, Philip ‘On a brass
 formerly in the church of Saint
 Dunstan-in-the-West: addenda’
 191–2
 Whittingham, Lucy, reports on med-
 ieval and post-medieval pottery
 from Premier Place 71–2
 Wikipedia 170
 William II 193
 wine trade 196
 Wotton, Sir Henry 165
 Wren, Christopher 178
 Wynkyn de Worde 171
 yeast store 105
 Yeomans, Lisa, reports on animal
 bone from Brentford 135–8

