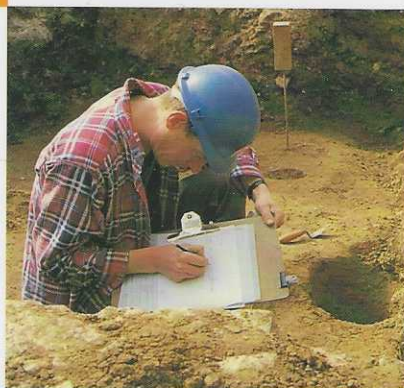




MOLAS
98

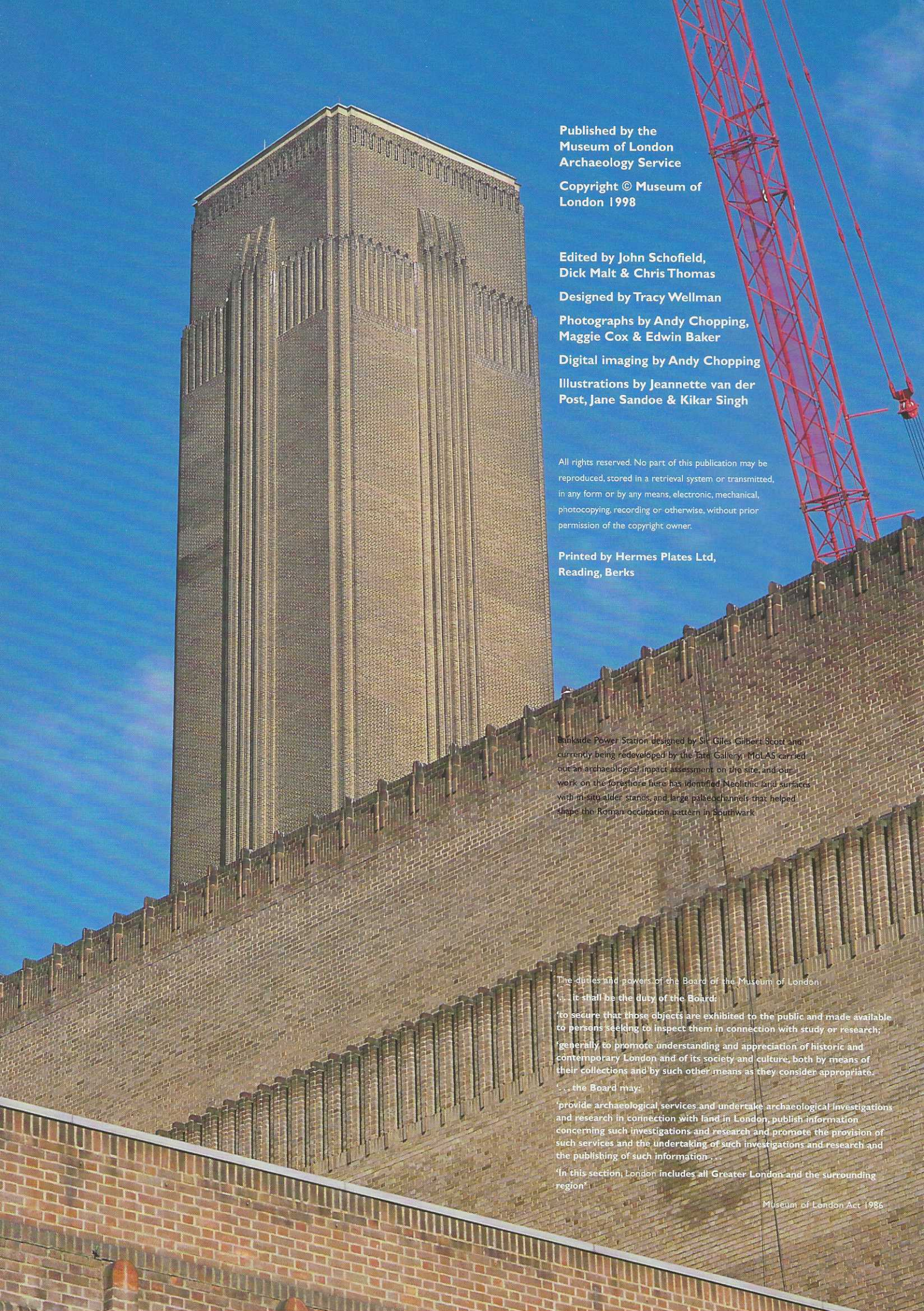


ANNUAL
REVIEW

98

ANNUAL REVIEW FOR 1997

MOLAS 98



Published by the
Museum of London
Archaeology Service

Copyright © Museum of
London 1998

Edited by John Schofield,
Dick Malt & Chris Thomas

Designed by Tracy Wellman

Photographs by Andy Chopping,
Maggie Cox & Edwin Baker

Digital imaging by Andy Chopping

Illustrations by Jeannette van der
Post, Jane Sandoe & Kikar Singh

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of the copyright owner.

Printed by Hermes Plates Ltd,
Reading, Berks

Bankside Power Station designed by Sir Giles Gilbert Scott and currently being redeveloped by the Tate Gallery. MoLAS carried out an archaeological impact assessment on the site, and our work on the foreshore here has identified Neolithic land surfaces with in-situ alder stands, and large palaeochannels that helped shape the Roman occupation pattern in Southwark.

The duties and powers of the Board of the Museum of London:

‘... it shall be the duty of the Board:

‘to secure that those objects are exhibited to the public and made available to persons seeking to inspect them in connection with study or research;
‘generally to promote understanding and appreciation of historic and contemporary London and of its society and culture, both by means of their collections and by such other means as they consider appropriate.

‘... the Board may:

‘provide archaeological services and undertake archaeological investigations and research in connection with land in London, publish information concerning such investigations and research and promote the provision of such services and the undertaking of such investigations and research and the publishing of such information; . . .

‘In this section, London includes all Greater London and the surrounding region’

Museum of London Act 1986

CONTENTS



Foreword: MoLAS in 1997

PAGE 2



Publication and research into London

PAGE 4

The English Heritage publication programme

Environmental research

Finds research

Publication projects with other partners

Guildhall Yard

Regis House

Royal Opera House

St Paul's Cathedral



Archaeological projects in London and elsewhere

PAGE 16

National infrastructure projects

Heathrow and its environs

Channel Tunnel Rail Link

Jubilee Line Extension

Major projects in the archaeology and history of London

Lloyds Register of Shipping

Procession House

Low Hall Manor, Walthamstow

Royal Docks Commission School

Cripplegate Fort area study

Roman forum area study



MoLAS in the planning process: the complete service

PAGE 28

Standing building survey

Smaller excavations and evaluations



Archaeological services and consultancies in Britain and abroad

PAGE 36

The Clark Laboratory

Environmental services and forensic work

Consultancies in Europe and beyond

Contributing to national and international standards and the development of archaeology in Europe

National Roman Fabric Reference Collection

Mortarium Bibliography

The National Survey of Archaeological Archives

MoLAS Roman pottery projects in Europe: the Caesar project

Taking London into Europe: MoLAS at international conferences

European Archaeological Association



Appendices

PAGE 44

1997 projects

1997 clients

1997 staff

Bibliography

How to contact us

FOREWORD

The Museum of London serves London's archaeology in a number of ways. It not only provides the best place for the public to come to find out about London's archaeology, it also provides a specialist resource through its curatorial departments and the London Archaeological Archive. This report celebrates the third aspect of the service the Museum provides — its archaeology service. During 1998 MoLAS has made a major contribution to both the Museum's programme and to London archaeology as a whole. During 1999, its contribution will be further expanded and developed to meet the needs of all who are interested or involved in London's fascinating past.

Simon Thurley

Director, Museum of London

This review of MoLAS work aims to describe the very wide range of archaeological projects carried out in 1997, and to provide just a glimpse of the enormous complexity and excitement of our work.

Since its establishment in 1991, the aim of MoLAS has been to provide a comprehensive regional archaeological service, while investing and experimenting in approach and technique, to improve both the service we provide to our clients, and the standard of the archaeological product.

The work described here is ample illustration of how successfully this aim has been achieved. Not only have momentous discoveries been made through academic research, on projects largely arising through planning processes, but there have also been significant methodological advances, demonstrating how MoLAS has been continually evolving, adapting to circumstances within construction industry and within the Museum's overall strategy for London. We are delighted that many of these developments have — as intended — brought direct commercial and academic benefits to our clients and their archaeological projects.

We believe that the greatest challenge now facing the profession is to sustain well-focused research at a regional level that will continue to ensure that archaeology is relevant to the population as a whole. Our ambitious Greater London publications programme, sponsored by English Heritage, is now well advanced, and the first of a series of integrated, academic monographs has been published: *Excavations at the Priory and Hospital of St Mary Spital, London*. We continue to produce a wide range of publications, including popular summaries, and are also pleased to have extended the results of our work to the public, special interest local groups and our clients through exhibition and display.

I am delighted to have this opportunity to record MoLAS's appreciation to our many clients, and our colleagues in English Heritage, the London Boroughs and the City of London Archaeological Trust, and my appreciation of the hard work and commitment of MoLAS staff and volunteers.

Taryn Nixon

Head of Service, MoLAS



PUBLICATION & RESEARCH INTO LONDON

1997 saw the production of the first in a new monograph series for MoLAS: *Excavations at the Priory and Hospital of St Mary Spital, London*, the first in a long line of books reporting the Museum of London's archaeological excavations and illustrating material recovered from them.

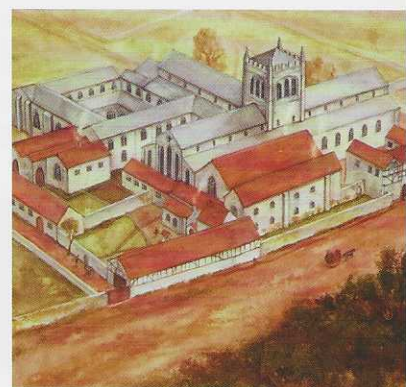
Future volumes will include a number of monastic sites (St Mary Clerkenwell, St John Clerkenwell, Bermondsey Abbey, Merton Priory and Holy Trinity Priory), prehistoric settlements (Three Ways Wharf, Uxbridge), aspects of Roman London (Roman cemeteries, Number 1 Poultry, various excavations in Southwark), medieval London (London Bridge, Winchester Palace and Queenhithe) and excavations on the Jubilee Line (Stratford Langthorne Abbey, Roman Southwark, post-Roman Southwark, post-medieval Southwark, Westminster, Roman Stratford and the palaeoenvironment).

Many of these projects are part of the Greater London publication programme, funded by English Heritage. Excavations at the **Westminster Abbey Dorter and Undercroft** have also been published this year, while the report on excavations at Edward III's Manor at **Platform Wharf** and the **Archive Guide** to sites carried out by the Department of Greater London Archaeology, one of the predecessors of MoLAS, are currently in production.

Analysis of the two religious houses of St Mary and St John Clerkenwell is approaching conclusion. **St Mary Clerkenwell** has proved to be a fascinating site, its church, cloisters and service courtyard being constructed in stone in 1180–1200 after 40 years of timber buildings. The poverty of the house in the 13th–15th centuries appears to be reflected in the piecemeal development which included three tile kilns constructed only 40m from the church door. Documentary research has revealed that in the late 12th century the nunnery may have functioned as a quasi-double house, occupied by perhaps twelve brethren as well as the nuns themselves. The priory of **St John Clerkenwell** (the English headquarters of the Knights of St John) can be shown to have developed from a preceptory (a Hospitaller estate) in the 12th century to a palatial residence sharing more of the characteristics of a bishop's palace than a monastic convent. The church was probably one of the more lavishly painted in London in the late 12th century. Through the 14th century, parts of the outer precinct exploited the nearby meat markets of Smithfield and Cowcross; pits filled with cattle skulls and horncores were found in one slaughter yard.

Analysis is now also being carried out on a number of other projects, many of them using one of the latest pieces of Information Technology: a Geographic Information System (GIS). This allows digitally recorded plans of the archaeological layers and features to be viewed and compared with the finds and environmental data recovered from them; the data are recorded on a relational database called Oracle. Complex enquiries about the distribution of such material can be made which could not have been attempted before on large-scale projects.

Analysis of excavations at the Cluniac abbey at **Bermondsey** (founded in the 1080s) has indicated several areas of interest. One of these concerns the eastern end of the church, the apparent northern half of which was recorded by W F Grimes in 1956. Published representations of the church have indicated a structure with an east end comprising three apsidal chapels and two further flanking chapels to north and south. Recent analysis suggests that the foundation representing the northern apse belongs to a different building phase and that a large trench, some 4m to the south of the north presbytery wall, may have removed the foundation of a north aisle arcade within the chancel. The hitherto accepted width of 10m for the presbytery seems out of proportion to its recorded length. Moreover, an apsidal structure discovered during the 1984–8 excavations 20m south of Grimes's excavations may prove to be part of the eastern arm of the abbey church.



Reconstruction of St Mary Spital in about 1500.
Painting by Kikar Singh



A group of keys discarded in the infirmary at St Mary Spital in the late 13th century



A pair of leather boots from St Mary Spital, discarded in about 1300



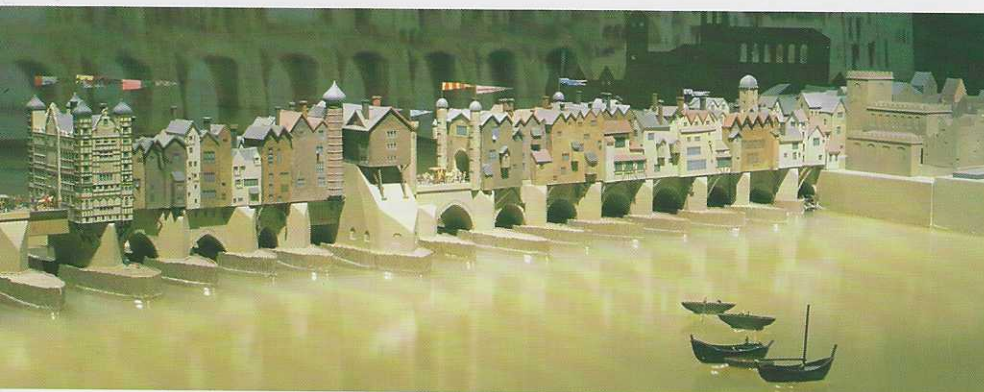
A foundation arch from St Mary Spital's infirmary hall dating to the late 13th century

LONDON BRIDGE

A study of **London Bridge** (both the Roman and medieval versions) has identified the probable position for the main phase of the Roman Bridge slightly downstream of the site of **the medieval bridge**. ▼ It is thought that the Roman bridge had stone piers and a timber superstructure and may have possessed a drawbridge, as much of the Roman harbour lay on the upstream side of the bridge. Analysis of the southern medieval bridge abutment has identified a series of timber bridge abutments and caissons, the

earliest of which dates to c 987–1032.

The timber bridges were apparently nearly always washed away by floods. The stone bridge (c 1176–1209) was more durable, but on two occasions partly collapsed: in 1281–2 five arches fell down, as did two arches at the southern end of the bridge in January 1437, resulting in a massive rebuilding and repair programme that lasted for the next 40 years.



The northern portion of medieval London Bridge in about 1600, a model produced for the 1996 'Living Bridges' exhibition at the Royal Academy

Proposed future publications include the Roman signal station at **Shadwell**, the Saxon settlements at **Battersea**, **Clapham**, and **Hammersmith**, and the middle Saxon settlement at Lundenwic centred around the Covent Garden area. It is also intended to publish work on Bankside and its Elizabethan playhouses, including the **Rose** and **Globe** theatres. Another project for which an assessment report has been completed

concerns the site of **Fastolf Place** and the **Rosary**, the large-scale medieval moated houses built for Sir John Fastolf and King Edward II on the Southwark waterfront, directly opposite the Tower of London. Evidence for three phases of timber revetting of the moat of Fastolf Place were found, which appears to have been reused as the header tank for a tidal mill in the early 16th century. Evidence was also found for the masonry precinct wall and internal buildings of the Rosary, a late medieval masonry building incorporating an ashlar river wall, as well as timber revetments forming inlets from the Thames and drainage channels.



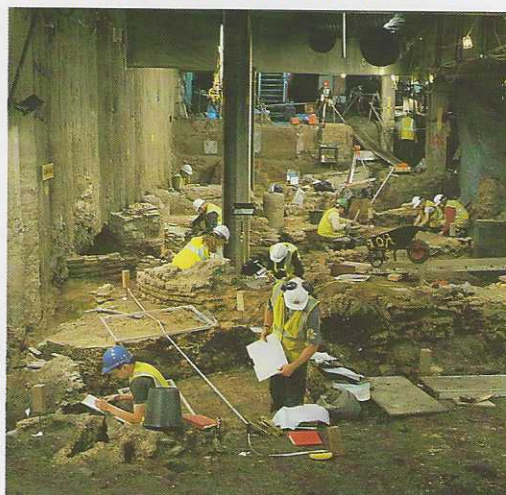
A token found at the site of the Globe Theatre, dated 1625 and with the initials of the maker RVW on the reverse. The token has no other precise parallel in Britain

Some post-excavation projects are being co-sponsored by English Heritage and individual site developers. An assessment of the findings from **Number 1 Poultry** (Altstadtbau Ltd for City Acre Property & Investment Trust and Advanta Management AG) followed the completion in June 1996 of the excavation of this major project near Bank Station. The identification of a site's importance and the potential for further analysis and publication represents an important stage in the modern archaeological process, and in this case has led to a submission for English Heritage funding.

Multidisciplinary analysis of stratigraphic, finds, and environmental data will allow spatial and temporal comparative work on aspects of land use at Number 1 Poultry. For the Roman period a total of five separate insulae and four roads are represented within the site boundaries, and 54 individual buildings and 48 external areas (such as yards) have been identified.

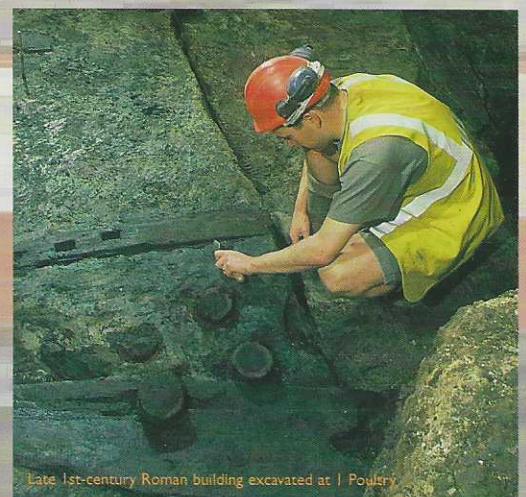
Opposite: The new James Stirling-designed building at 1 Poultry, near Bank Station in the City

One of the largest archaeological excavations carried out in London in recent years took place on the site between 1994–6, at the same time as the new building was built. The MoLAS work was funded by Altstadtbau Ltd on behalf of Lord Palumbo (CAPIT) and Dieter Bock. Extensive evidence of Roman, late Saxon and medieval London was found, and is now the subject of substantial English Heritage funding of analysis and publication work.





There is also detailed evidence relating to late Roman occupation; for instance the combined use of timber and masonry building traditions is of major research importance. Other research topics possible include London's trade and economy and the River Walbrook as an industrial zone and a place of religious significance. Analysis of the late Saxon (c 850 onwards) data has identified four roads, 37 buildings and ten external areas and will allow broad urban themes to be studied for both the late Saxon and medieval settlement. Scattered late Saxon sunken-floored buildings can be seen to have developed into organised frontages of small buildings and workshops lining both Poultry and Bucklersbury by the late 11th century. Extensive evidence was found of trade and industry, particularly metal-working, and a cobbled area bordered by Bucklersbury and Pancras Lane may have formed a market. The small, simple parish church of St Benet Sherehog was established during the 11th century and is deserving of detailed analysis. Evidence of 12th- and 13th-century growth includes large stone buildings such as the property of the Riccardi merchants of Lucca (northern Italy) and parts of the City infrastructure such as the first medieval piped water supply. The survival of later medieval and early modern evidence was poor. An exception was the post-Great Fire burial ground on the site of St Benet Sherehog, which was excavated in full and will allow extensive analysis of an important group of burials from the 17th and 18th centuries.



Late 1st-century Roman building excavated at Poultry



Burial within a stone-lined grave in the north transept at Merton Priory, with the hands clasped around a leather belt

Initial analysis of **Merton Priory** (J Sainsbury plc and English Heritage) has indicated that there was a major rebuilding programme of the infirmary in the mid 13th century, later than previously thought. The documentary research has also revealed that during this period Merton Priory achieved national prominence with frequent visits by Henry III in the 1240s, 1250s and early 1270s and it may be that much of the rebuilding work was instigated by him. Environmental analysis has revealed information about the canons' diet with hazel nuts, plum, cherry, grape, wheat, and charred barley seeds recovered. Also, close to the infirmary, a single sample of over 1000 black mustard seeds was found suggesting the importation of plants probably to be used in medicines.

Coins of Edward III 1327-77 (top) and Henry III 1216-72 (bottom), found at Merton Priory



Research is also being undertaken on the Cistercian abbey of **St Mary Stratford Langthorne** (London Underground Limited and English Heritage), founded in 1135, where five excavations have revealed parts of the abbey church, cloister, infirmary cloister, great drain, and cemetery and a substantial medieval masonry building surrounded by a moat near the abbey gatehouse. The overall size of the eastern arm of the church makes it comparable in scale to that at Fountains Abbey, Yorkshire, founded three years earlier, and its plan bears similarities with Abbey Dore, Herefordshire. The architectural fragments suggest a similar development to Merton. Few can be dated to the period of the abbey's foundation; instead, a large group from the late 12th and early 13th century suggest that the masonry church may have replaced an earlier, timber one. The cemetery may have been divided by a ditch into zones with the lay cemetery on one side and the monks' on the other. Burials were also recovered from within the church, some of which were accompanied by chalices and patens suggesting burials of priests. It will be important to compare the evidence of medieval burial customs and skeletal pathology with the evidence from Merton.

ENVIRONMENTAL RESEARCH

A wide variety of environmental research has been undertaken including analysis of human skeletons, plant remains and animal bones, study of the River Thames in former times, and **dendrochronology** (tree-ring dating). ►

Two large assemblages of human skeletons currently being analysed are from **Merton Priory** and **Stratford Langthorne Abbey**. Initial observations from one third of the skeletons at Merton Priory indicate an adult male bias. Although this may be predictable for a priory site, such a marked bias is surprising in a cemetery also used for lay burials from the parish. Many interesting examples of pathology have been recovered, including a high number of cases of diffuse idiopathic skeletal hyperostosis (DISH) which may be a condition associated with an opulent diet.

Analysis of a sub-sample of 270 burials from Stratford Langthorne Abbey has shown a similar preponderance of male burials to Merton. These figures may alter when the entire sample of 669 burials is analysed in detail. The prevalence of dietary deficiency diseases appears low and this, taken in conjunction with a high incidence of DISH (as at Merton), may indicate a relaxation of the normally strict Cistercian Rule.

Studies of animal bones assemblages from the **Royal Opera House** and **Bull Wharf** are currently in progress. Approximately two tonnes of animal bones were recovered from the Saxon deposits at the Royal Opera House, being found in large concentrations over yard and alley surfaces, and also within pits and wells. The assemblages are dominated by cattle and pig, with a lesser quantity of sheep/goat. Other species were consumed, including red deer, hare, chicken, goose and fish but these formed a minor part of the diet. There is evidence for some industrial activity, for instance hornworking and antler working waste, suggesting a concentration of artisans' workshops in the eastern part of the site.



A selection of 8th-9th-century bone pins, needles and weaving tools from the Royal Opera House site. The ring-headed pin (third from bottom) is the first from Lundenwic and a very rare type in bone

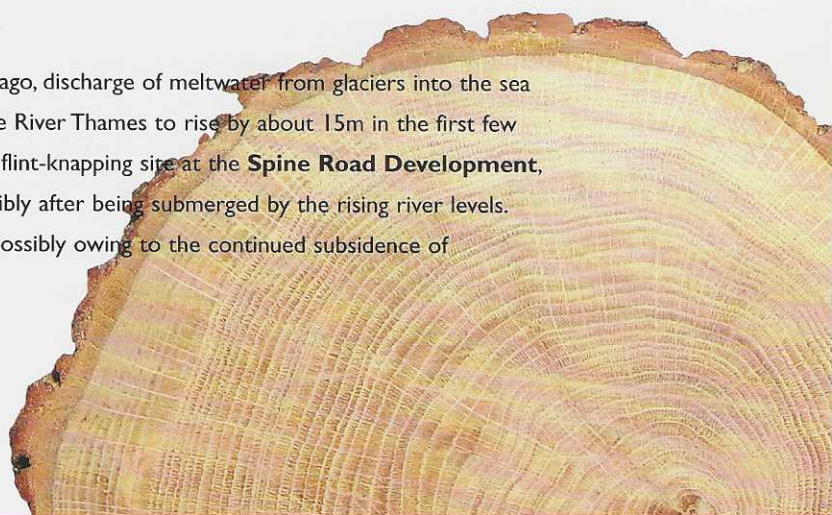


A selection of 8th-century bone spindlewhorls and a possible gaming piece of antler (top) from the Royal Opera House

At Bull Wharf animal bones were found in large quantities within occupation material associated with a series of late Saxon buildings. As with the earlier Saxon material from the Royal Opera House, the bones stress the dietary importance of cattle, in particular, as well as sheep/goat and pig. However there appears to be a trend towards the use of a greater variety of food animals such as wild animals, including 'exotics' like sturgeon and whale. This may be related to the occupants' status or perhaps to a better organised food distribution network. An interesting discovery was a four-horned sheep skull from one of the later buildings. Such animals, typified today by the Jacob breed, were apparently introduced into this country from Scandinavia.

A major theme of MoLAS research has been the River Thames, as an understanding of how the course and size of the river has changed is fundamental to archaeological studies in London. Several projects currently being undertaken are contributing significant data to the research.

Following the end of the last Ice Age, about 10,000 years ago, discharge of meltwater from glaciers into the sea led to a rapid rise in sea-level. This caused the level in the River Thames to rise by about 15m in the first few thousand years of the post-glacial period. The Mesolithic flint-knapping site at the **Spine Road Development**, Bexley (reported on last year) had to be abandoned possibly after being submerged by the rising river levels. During the Neolithic period, the river continued to rise possibly owing to the continued subsidence of Southern Britain, even though the glaciers had retreated.



A number of sites in Southwark, such as **Lafone Street** and **Wolseley Street**, have shown cultivated land submerged by the rising river. This trend continued into the Bronze age with the complex of sites recently excavated and researched in the Beckton/Barking/Dagenham area, showing the process occurred during a period of extensive peat development. A series of trackways in the area were built at this time, possibly as a response to wetter conditions. Between the end of the Bronze Age and the mid 1st century AD the river level had risen by more than 2m, leaving only a small area available for occupation and influencing the siting of the southern bridge abutment and its approach road, built c AD 50.



Two late 4th-century hearths on the site at Summerton Way, Thamesmead

On the north bank, work at **Regis House** has demonstrated that the earliest revetment was built in AD 52, only nine years after the Roman invasion of Britain, the first large-scale port facility being constructed in AD 63–4. Over the next 200 years a succession of waterfront structures was built on both sides of the river which, because they are securely dated by dendrochronology and ceramic evidence, provide the best evidence for changing river levels in the Roman period anywhere in Britain. Evidence suggests that a progressive fall of 1.5m in the river level occurred between the mid 1st and mid 3rd centuries. The north bank waterfronts were replaced and extended in cycles of roughly 30 years over a 1.5km frontage, the final wharves being constructed after AD 210 some 40–50m from the pre-Roman riverbank.

The earliest settlement in Southwark was probably protected by embankments while the river remained at a high level, later structures being built over the former foreshore as the river level fell. These included the Winchester Palace complex, a mid 2nd-century wharf under Guy's Hospital and a timber warehouse of AD 152 found beneath Courage's Brewery. Such a fall must have had a major effect on a busy trading community, involving cycles of several years prior to rebuilding where the river became frustratingly shallow. The tidal head must also have moved a considerable distance downstream of its 1st-century position affecting ships using high water to carry them upriver.

Further work is needed to determine the location of the tidal head at different periods, although the discovery of barnacles on an early 2nd-century revetment at Regis House shows that the river remained saline at least until then.

After the abandonment of the port facility in the mid 3rd century, the falling river level continued to affect London, the recently observed late 3rd-century river wall at Three Quays House near the Tower of London being built at what had been high water only 50 or 60 years before. The site downstream at Summerton Way, Thamesmead, now confirms that a tidal decline continued to the end of the period: this site had been open foreshore until the mid 3rd century when it was embanked, drained and occupied up to the late 4th century.

Subsequently rapidly rising river levels in the early medieval period reduced the settlement area in Southwark to its pre-Roman extent, destroying the southern bridge abutments and the riverside wall on the north bank, and flooding the late Roman settlement at Thamesmead.

A series of dendrochronologically dated timber revetments at Bull Wharf/Thames Court were on the same east-west alignment as the Roman quays, of which there were traces on site. These were constructed progressively further south into the river; the earliest in about 950, the latest in 1181. All the revetments save the last indicate steadily dropping river levels as they decrease in height, although the 1181 revetment is higher by half a metre than the preceding one, suggesting that this may have been the period when river levels began to rise. Previous research on the later medieval waterfront in the City and current research on the Jubilee Line Extension sites at Westminster suggests that the river continued to rise, but now was contained by very substantial waterfront structures. Other work by MoLAS on the river foreshores is reported later in this review.

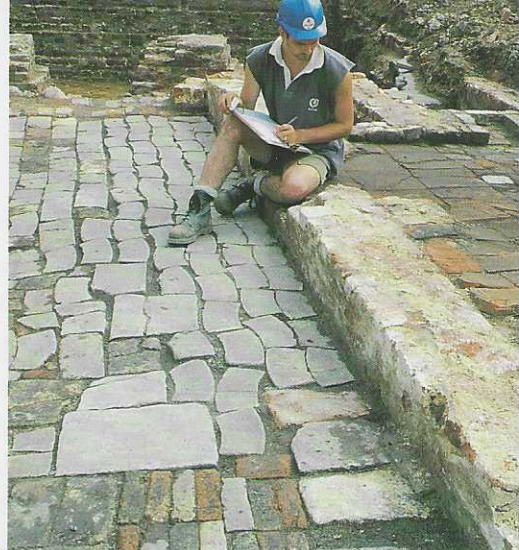
FINDS RESEARCH



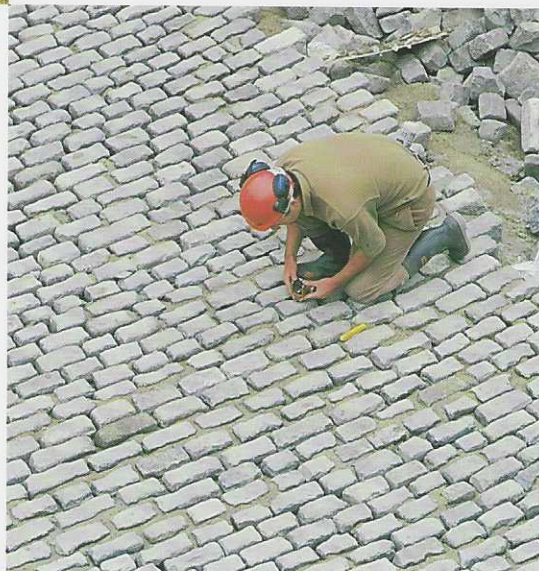
An important role of the finds section is to support archaeology carried out under the planning system, and a number of assemblages have made major contributions to both site-specific and wider finds studies. These include the tin-glaze pottery from **Mortlake High Street** and **Benbow House**, the first time material from these historically recorded kilns has been excavated. Other sites which produced important finds include **Low Hall** where fine groups of ◀ **decorated medieval floor tiles** were recovered, and **Lloyd's Register of Shipping** with its unique group of Persian porcelain. However, the nature of planning-based archaeology does not always allow the in-depth study of artefacts that can make a major contribution to archaeological research. A broad base of project types is therefore sought to maximise the academic contribution the finds team can make to the development of London archaeology. Some of the largest projects are being undertaken as part of the Greater London publication programme where the ability to draw together evidence from a number of sites has made possible several finds based projects, including **London's tin-glaze or delftware post-medieval pottery industry** (which will be supplemented by the work mentioned above), **Tudor metalwork** from the Southwark waterfront, and medieval **'Westminster' style decorated tiles**. All aim to stand as the definitive statement for their subject matter and will be of immense value for future archaeological work in London. The City of London Archaeological Trust also aids research on material excavated from the City of London and again a number of finds based publications are progressing. 1998 will see the publication of *The Medieval Household*, the most recent of the highly successful series of medieval finds volumes published by the Stationery Office, and, with generous sponsorship from the Worshipful Company of Clothworkers' a new project on London's medieval and later cloth finishing industry has been launched.



▲ Mortlake High Street: recording a millstone from the 19th-century brewery, on the Thames waterfront



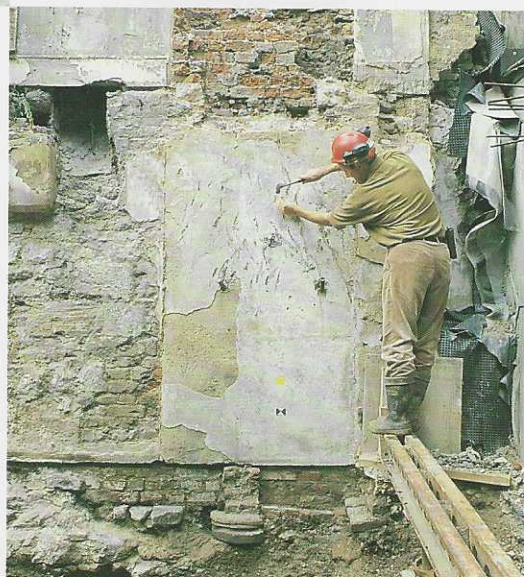
At the site of the Globe Theatre, the outline of the Scheduled Ancient Monument is to be displayed in a new courtyard. MoLAS surveyors set out the exact shape of the buried remains, using a total station, which allowed the contractors to lay contrasting coloured cobbles to pick out the monument walls



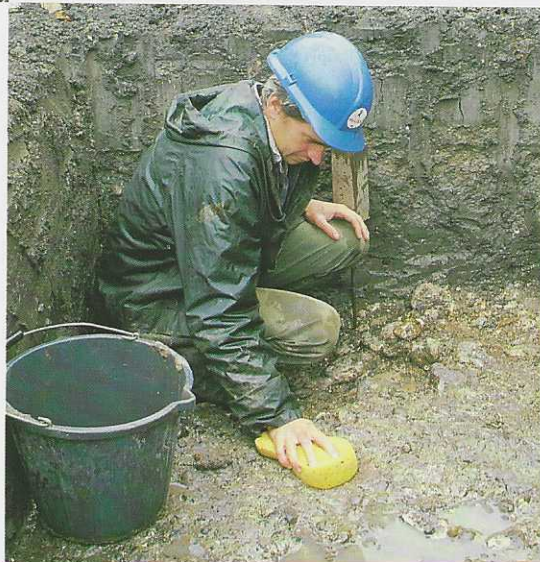
▲ Recording an oast-house of the 19th-century brewery at Mortlake High Street. The floor reuses curved refractory from the 18th-century pottery which preceded the brewery on the site



At 22 Wormwood Street in the City: 3-dimensionally co-ordinated targets are attached to an exposed length of the City wall prior to recording by rectified photography



▲ Recording an 18th-century revetment, part of the shipyard at Pier Head, Isle of Dogs



▲ Part of a Roman road found during an evaluation at Priory Road, Colliers Wood

The excavation of the deposits dumped on the Thames foreshore at **Regis House, King William Street** (Land Securities plc) either immediately before or after the construction of the quay in AD 63 (during the reign of the emperor Nero) produced a fine collection of well preserved metalwork and leather. Much of this material was made up of fragments of armour and other military items. The assemblage is unique in London on account of its date, content and preservation. It included a **fragment of copper alloy lorica squamata armour** (now on display in the Museum of London Roman gallery), and copper alloy buckles and fittings associated with *lorica segmentata* armour, studs and horse pendants. Most of the studs are decorated with inlaid floret designs. The decorated studs and the armour fragments are typical of military equipment of the second half of the 1st century AD. A preliminary study of the leather has identified a number of fragments of army tents, including at least one complete panel. It is thought that these too are also associated with an early military presence in London. Such large pieces of leather were usually reused, so that it is interesting that these relatively complete fragments were discarded.

The presence of so much Roman military equipment, and the presence of an incomplete branded inscription on one of the quay baulks interpreted by Mark Hassall as 'the [numeral] Augustan Cohort of Thracians', confirms that the Roman army was present during the construction of the Neronian quay. The discovery of this volume of Roman military equipment from Regis House raises some important questions. Firstly, three years after Boudica's rebels burnt Londinium to the ground, was the army (as opposed to a civil authority) rebuilding and replacing the town's infrastructure to facilitate the movement of food, raw materials and possibly troops? Secondly, since reanalysis of the excavations shows that the Cripplegate fort was not constructed until the early 2nd century, where had the army been accommodated previously? Perhaps the apparent absence of a contemporary fort implies that the military presence in London in the years after the Boudican rebellion was short-lived; from AD 71–4 the army was conquering northern England and Wales, and Londinium would have been little use as a supply base by this date. Thirdly, as the port remained in use, was it perhaps handed over to the civilian authorities by the military who had built it? Could this acquisition of a newly constructed infrastructure help explain Londinium's rapid economic growth in the late 1st century?

More recent post-excavation projects have been sponsored solely by the developer. This involves the production of a post-excavation assessment at the end of the excavation which embodies recommendations for further work. The *Assessment and Updated Project Design* for the **Guildhall Yard** excavations (Corporation of London) of 1987–96 was completed this year. Designed to accompany an application for funding of post-excavation analysis, research and final publication, the document is nearly 500 pages long, represents the labour of two principal authors and more than a dozen contributing specialists over several months, and is an important work in its own right.

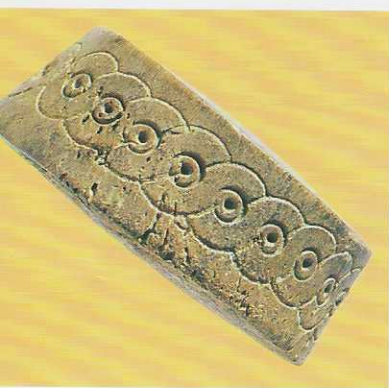
The *Assessment* element provides a summary of provisional analysis of all archaeological excavations within the Scheduled area. The *Updated Project Design* element suggests a number of methodologies for arriving at publication of the results of further analysis. Taken as a whole the document is designed to lead the reader through a logical consideration of the archaeological resources, and then introduce proposals for several monographs to disseminate the results of a wide range of studies.



Reconstruction of scale armour (lorica squamata) based on surviving fragments from Regis House. The small sections of metal sheet were wired together and sewn to a fabric backing



Antler mould for disc brooch based on a contemporary coin (mid to later 8th-century) showing a standing bird with a border of ring-and-dot motifs. The channel for pouring in the metal alloy can be seen at the top.



Spindlewhorl or gaming piece carved from an antler pedicle with incised decoration. Mid to later 8th century.



Fragment from an Ipswich ware pitcher decorated with opposed gridded triangle stamps c 750–800.



An eighth-century coin 'sceatta' from the site at the Royal Opera House showing a bearded head, possibly Wodin.

Analysis is also being carried out on the material recovered from the **Royal Opera House** in Covent Garden (ROH Developments Ltd). There have also been a number of service diversions and other minor interventions around the site, the recording of which has extended our knowledge about the layout of Saxon London, *Lundenwic*, in providing further instances of alleys, roads and buildings. Layout information can be mapped onto other areas of the settlement as part of the English Heritage funded *Lundenwic* project to test theories and models of settlement form, growth and diversification. It will also be used in the formation of future research strategies for the curation of the remaining strata forming this internationally important monument.

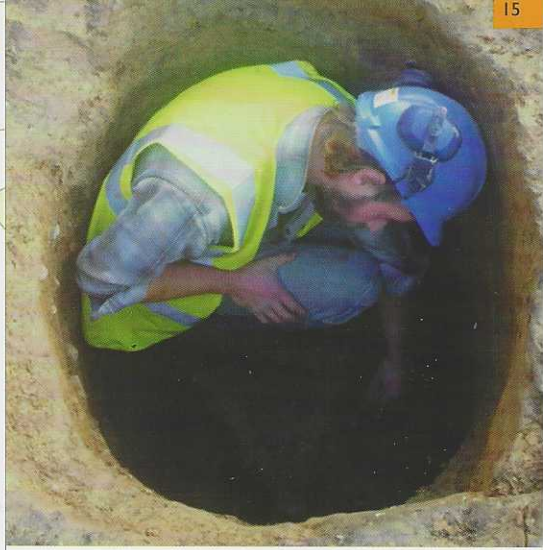
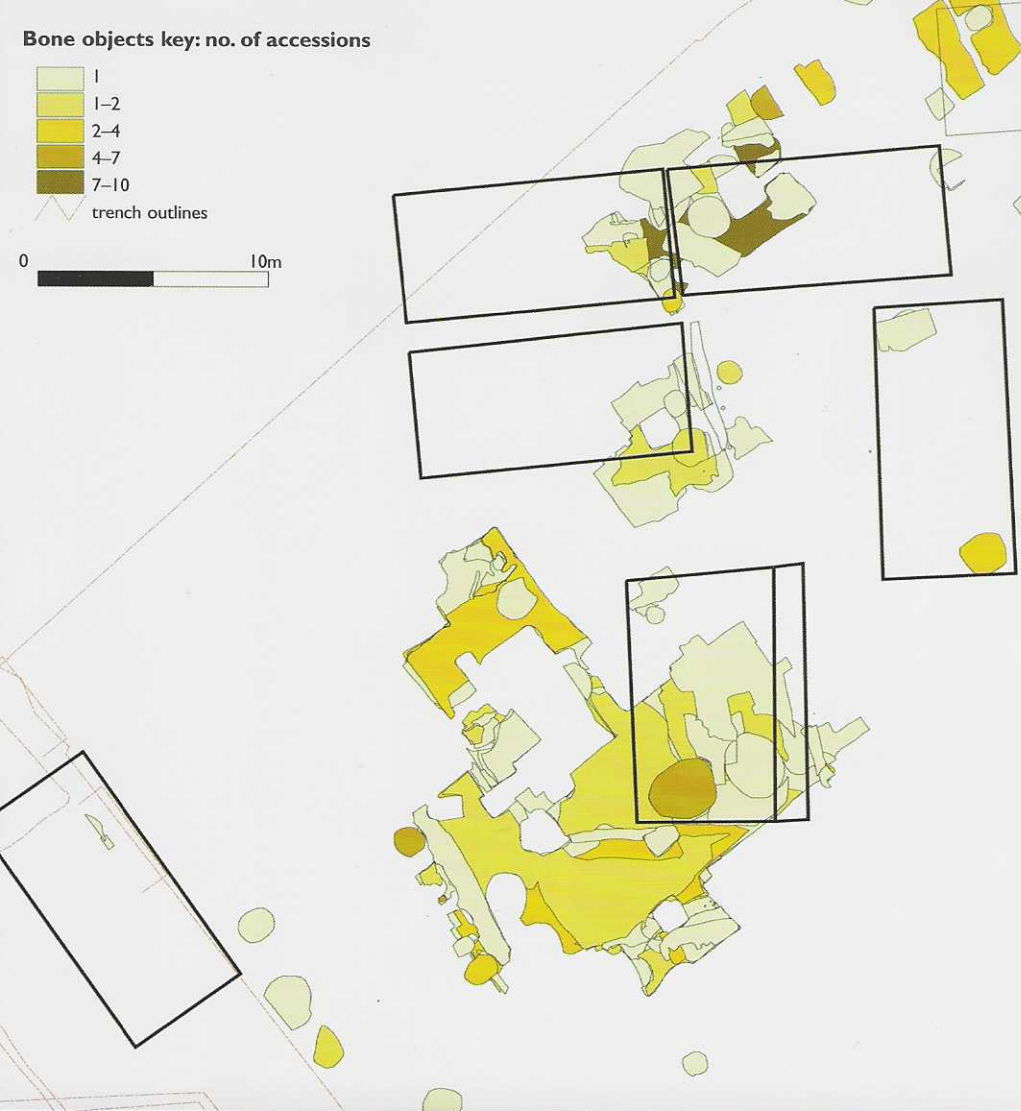
The use of GIS on this project is enabling us to understand better the relationships and distribution patterns of such disparate elements as animal bone and loomweights. Complete assemblages of cultural material associated with particular buildings can be easily identified, quantified and compared with other assemblages to answer the questions which the research design posed about the site.

Analysis has so far identified more than 60 buildings of which more than one third can be dated to the period before the mid 8th century, marked archaeologically by the introduction of a recognised type of pottery called Ipswich ware. During the later 8th century the use of larger looms (identified from the presence of loomweights), indicates the growing importance of textile manufacturing. This is confirmed by one of the earliest recorded contracts in English history, dating to 796, in which Charlemagne agreed to protect English traders but complained about the length of *sagæ* (cloaks or cloths) which were being offered in exchange for 'black stones' (querns?) from the continent.

The large defensive ditch which crossed the site, as reported in *MoLAS* 97, has now been dated to earlier in the 9th century than previously supposed, suggesting that it had already been partially backfilled before the onset of the Viking attacks on London in the middle of that century. It was probably contemporary with the wars between Mercia and Wessex, between 825 and 830, when London changed hands at least twice and then remained on the frontier between the two kingdoms until the Danish conquest.

The analysis stage will be completed early in 1998 with the monograph publication due to be published in the spring of 1999. The project continues to generate a great deal of interest; a large number of lectures and presentations of the results have been given throughout the year and more are planned for 1998.

Bone objects key: no. of accessions



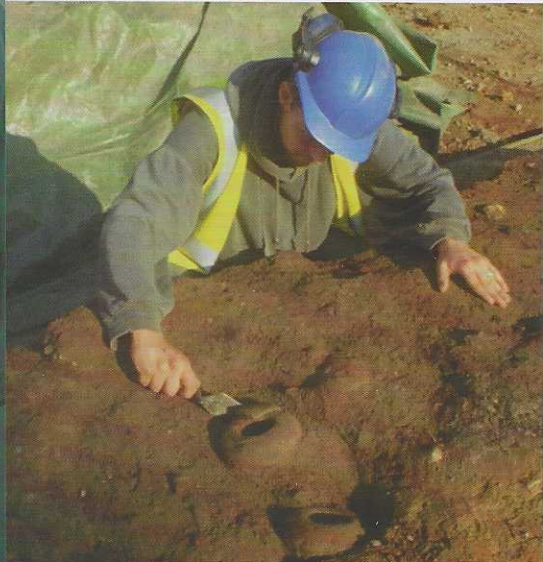
An archaeologist on the Royal Opera House excavation uncovering an iron tripod stand at the bottom of a Saxon well, which also produced a large iron cauldron

Distribution of contexts on the Royal Opera House site containing bone objects, with late 7th-century buildings shown in outline



The iron tripod and cauldron from the Royal Opera House on display at the 'Saxons at the Opera' exhibition in the Museum of London (Richard Stroud)

Loomweights found in a Saxon building at the Royal Opera House



ARCHAEOLOGICAL PROJECTS IN LONDON & ELSEWHERE

MoLAS provides a wide range of independent, professional archaeological services to the property industry and to the academic community both in Britain and abroad.

Although launched in 1991, MoLAS draws on over 25 years of experience in London archaeology through its predecessor organisations. Based in central London, MoLAS is ideally placed to respond quickly, providing a comprehensive range of archaeological services to both the private and public sectors.

NATIONAL INFRASTRUCTURE PROJECTS

Heathrow Airport and its environs

MoLAS has been working for a number of years both within and around **Heathrow Airport**; an area where remains have been found of ancient landscapes from the earliest hunter-gatherer communities to the farmed landscape influenced by the Roman and later city of London. MoLAS has provided consultancy and advice to BAA plc and the Highways Agency, and acted as expert witness on archaeological matters for the Terminal 5 Public Inquiry.

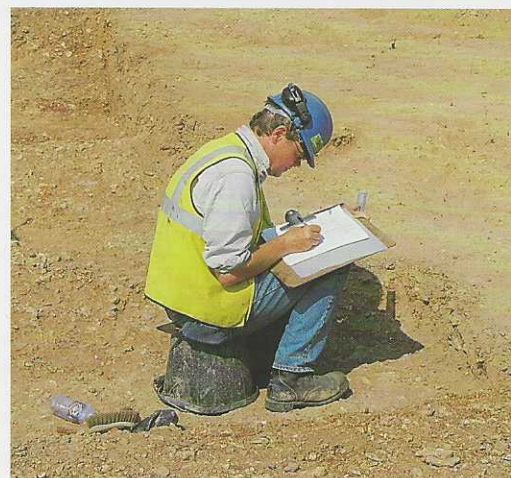
Two projects have been carried out within the airside operational areas of the airport during 1997. A watching brief was conducted over a distance of 3.7km along the line of a new communications system beside the **northern runway**. A number of pits and ditches were observed towards the western and eastern ends of the runway. These locations lay respectively to the north of a Bronze Age, Iron Age, and Roman site excavated at the northern runway extension in 1968, and of the Iron Age enclosed settlement and temple at Caesar's Camp excavated in 1944. Although undated, several of the features found in 1997 are likely to have been associated with the activities recorded on those sites. The work also enabled a record to be made of the soil profile along the length of the airport, which will form a useful tool for predicting the survival of archaeological deposits within the northern half of the airfield.

A second watching brief, of soil stripping at the **Terminal 4 Remote Stands**, has produced some evidence of prehistoric features, probably of Bronze Age date.

An excavation to the north of the airport at **Nobel Drive** (Howmac Ltd) produced a fine specimen of an Earlier Neolithic leaf-shaped

- ▼ arrowhead, whilst the Late Bronze and Middle-Late Iron Age features represented parts of an enclosed agricultural landscape. The entrance through one enclosure had a complex sequence of alterations, which may have been part of a system for control of livestock, probably sheep. Evidence from the Roman period was confined to a single coin, a minim dating to the late 3rd or early 4th century AD. The results of the excavation of this small site not only provide a snapshot of the sequence of archaeological landscapes in this area, but add further details to our knowledge of activity and settlement gained from an extensive excavation carried out to the immediate north-east at Cranford Lane, Harlington, in 1994-5.

Recording a Bronze Age ditch at the Cargo Point Development site



To the south of the airport, in Surrey, an evaluation and intensive watching brief at the Cargo Point Development, **Bedfont Road**, Stanwell (Lynton plc), together with an adjacent evaluation at **Long Lane** (Sandville Properties), have revealed remains of Neolithic, Bronze Age, medieval, and post-medieval date. An Early Neolithic laurel leaf projectile point and two snapped blades were recovered from later features; together with the arrowhead from Nobel Drive, this material is adding to a very limited assemblage of Early Neolithic material from the Heathrow area. This will help to clarify the distribution of activity during the period of transition from mobile bands of hunter-gatherers to a sedentary agricultural lifestyle. The Middle Bronze Age was represented by three phases of field or enclosure boundary ditches. Next came evidence of farming in the 11th to 14th centuries AD: a ditch-lined driveway and wells, as well as post built structures. The remains of 18th-century buildings and roadside ditches were also recorded.

Other archaeological fieldwork at the airport has included evaluations at **Newall Road** (BAA Lynton plc), **Lufthansa Cargo Warehouse**, **Southampton Road** (Lufthansa AG), and **Bath Road** (Kingswood Commercial Properties Ltd), and a field walking survey has been carried out at **Mayfield Farm**, East Bedfont.



MoLAS also works in the countryside: an evaluation trench at the 'West of Tollgate' site in Kent for the Channel Tunnel Rail Link project (CTRL team)

Channel Tunnel Rail Link

The Channel Tunnel Rail Link (CTRL) will connect London mainline railway stations with the Channel Tunnel. From the St Pancras terminus the line will pass through east London, crossing the River Thames at West Thurrock before traversing Kent via the North Downs and Ashford, and linking with the Channel Tunnel near Folkestone. It will require the construction of cuttings, tunnels and embankments, the impact of which on the natural and built environment is outlined in the Union Railways Limited Environmental Statement. As a result of this desk-based survey, MoLAS was commissioned by Union Railways Limited to carry out fieldwork to evaluate nineteen sites between Gravesend and Folkestone. The results of this fieldwork will contribute to the development of the Archaeological Research Strategy for the project and detailed mitigation measures.

The evaluation sites were situated in a fairly straight north-west to south-east corridor and provided the opportunity to define the nature of potential archaeological sites. Four kinds of geological landscape are involved: the Thames Marshes, the North Downs Chalk near Gravesend and Rochester, the Wealden Clays south-east of Maidstone, and the Lower Greensand beds between Ashford and Folkestone.

Early prehistoric inhabitants were present in the Thames Marshes and the North Downs. They have been occasionally traced by their stone tools, worked flint and flakes. Two sites, at Tollgate near Gravesend and at Newlands near Ashford, produced the earliest evidence of prehistoric activity. From the area south-east of Tollgate a large Lower Palaeolithic flint biface was recovered.



Careful examination of the Palaeolithic deposits at Swanscombe

Signs of Bronze Age occupation were discovered on the North Downs, south of Gravesend when 44 evaluation trenches were excavated within 10 hectares of fields. A large 2.6m-wide ditch was excavated and pottery dating to the mid to late Bronze Age and early Iron Age was recovered from the lower fill.

Traces of occupation from late Iron Age to Roman times were found mainly on the North Downs but also around Ashford on the Folkstone Beds. Eight 30m-long trenches were excavated to investigate crop marks located by aerial photography to the north-west of Ashford. Several ditches dated to between the early 1st and mid 3rd centuries may have formed enclosures. The pottery assemblage recovered from the ditches included sherds of vessels imported from Gaul and a partially complete mortarium (Roman mixing bowl) from Colchester. ▲ The mortarium is straight-sided with a grooved bead and dates to the mid 2nd to late 3rd centuries.

Most of the features were ditches marking boundaries of field systems, but occasionally buildings or the location of former settlements could be established. Slightly further to the north-west of Ashford sixteen evaluation trenches were excavated to assess surface concentrations of prehistoric worked flint and crop marks. In the southern part of the site was an unexpected find: the stone foundations of a rectangular building. Although the full extent of the structure was not revealed, an internal earth floor, a hearth and an external cobbled surface were identified. Pottery and roof tiles from these deposits indicated that the structure was of medieval date.

The evaluation phase of fieldwork has now been completed. The results of this work will be analysed and detailed mitigation measures developed. Full scale excavations will be undertaken some of the sites later this year.



Examining the Swanscombe gravels: one of the University of London team at work surveying



The investigations of the sites related to the **Jubilee Line Extension Project** in Westminster, which started in 1992, came to an end in 1997. Analysis and publication work will be carried out in 1998.

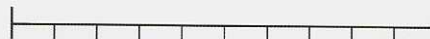
Jubilee Line Extension

The investigations of 1997 comprised five sites. Two were excavated in Cannon Row and both found evidence of prehistoric activity including pits and a ditch. Flint tools were found, some dating to the Mesolithic period and demonstrating occupation in the area over a period of more than 7000 years. The excavation at the junction of Cannon Row with Bridge Street uncovered a river wall dating to about 1200 with a building behind it containing three large stone ovens. Previous excavations within the main station site had already uncovered a river wall and dock of the same period. Cannon Row itself was laid out in the middle of the 14th century when houses for the canons of St Stephen's Chapel within the Palace were built.

The other three investigations were watching briefs, one of which was sited in a new subway built under Bridge Street. This located a large stone river wall, possibly 16th-century in date, at least 2.5m thick. A building to the south of it was also constructed with stone walls in part preserved to heights of over 2.3m.



First century ceramic oil lamp in the shape of a right foot wearing a thonged sandal. The object is very detailed and well modelled and even the hob nails on the sole are shown. The wick hole was in the big toe and the filling hole in the ankle, which is closed with a palmette motif; part of a ring handle survives at the heel (scale 10cm). Analytical studio photography, combined with digital imaging techniques by MoLAS photographers, can rapidly produce accurate composite illustrations of such objects for academic publication and research



MAJOR PROJECTS IN THE ARCHAEOLOGY & HISTORY OF LONDON

The Museum of London's archaeologists have been responsible for investigating one of the largest and most complex sites in Europe, the historic City of London and its region. As a result we have developed techniques of excavation and recording that are recognised as the industry standard in our profession, and are now being adopted worldwide.

Though all our excavation work is governed by the needs of the planning process, each project has archaeological objectives or questions. Some projects answer more questions than others, or throw up significant new information which has to be digested and fitted into our evolving research frameworks. These projects, often excavation sites of medium or large proportions, have regional importance and take forward our study of the last half million years of mankind in the London area.



Lloyd's Register: masonry foundations of a 3rd-century Roman building are revealed in the foreground, punctuated at the same level by square brick foundations of Victorian buildings. This is often the case on City sites



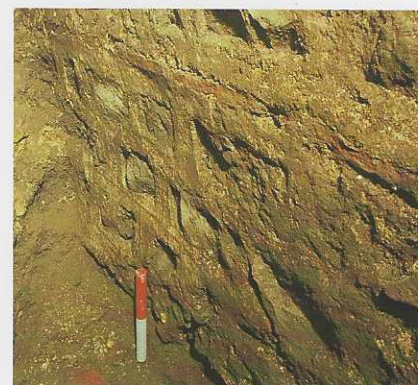
Excavation of a gravel surface in a sunken aisled building on Magpie House, part of the Lloyd's Register site. Part of the collapsed suspended floor can be seen in the foreground, with a brick internal pier behind

Lloyd's Register of Shipping

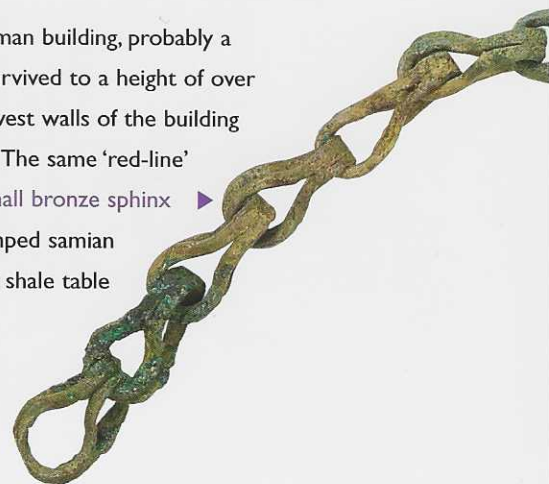
One of the largest new projects undertaken by MoLAS during 1997 was the excavation of the site of **Lloyd's Register of Shipping**, Fenchurch Street. The construction of a new headquarters office for Lloyd's Register presented the opportunity to examine a huge open area of approximately 3000 square metres in this relatively unknown part of the Roman town. The site lies within the Roman defensive wall, some 175m to the south-west of the Aldgate and adjacent to a major Roman street which led to it. The former offices consisted of five separate buildings, with single and double basements, surrounding the small post-medieval churchyard of St Katherine Coleman (the church was demolished in 1926).

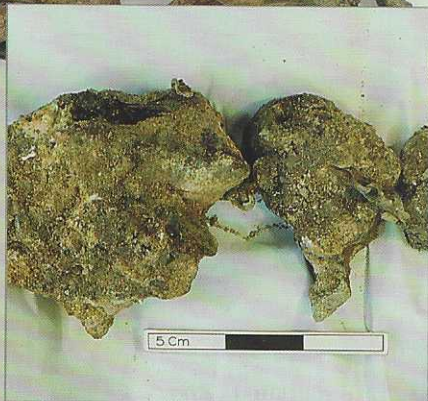
Despite double basements, evidence of large Roman masonry buildings was found, cutting through agricultural soils and earlier clay and timber structures. Most of the masonry had been 'robbed' out in the medieval period, leaving a series of trenches filled with loose rubble. Some of these building foundations had been constructed on dense timber piles. Sections of hypocaust subfloors and fragments of painted wall plaster indicate that the buildings were of quite high quality. A small watercourse appears to have run through the south-western corner of the site, possibly influencing the alignment of properties. Immediately south of the present churchyard, beneath the surviving foundations of the 18th-century church, the Roman material was in better condition, with upstanding masonry walls, drains and *in-situ* wall plaster. Linear trenches representing the floor joists were also recorded.

To the north-west of this complex, the corner of a sunken room was excavated. The walls consisted of ragstone with plaster pointing between the blocks on the internal face. This plaster had been painted with thin red lines. The overall result was a curious combination of rustication and ashlar effect, not seen before in London.



On the western part of the site beyond St Katherine's Row lay a large rectangular Roman building, probably a house, with either a sunken courtyard or a cellar. The northern wall of the building survived to a height of over 1m and the east wall was pierced by a gravel-floored, tile-built porch. The south and west walls of the building were entirely robbed out, but internally five tile-built pier-bases survived in two rows. The same 'red-line' painting technique had been used in this building. Among the demolition material a small bronze sphinx was recovered; other important Roman finds from the site include a collection of stamped samian bowls (some burnt) which may have come from a warehouse in the area, fragments of shale table legs and an iron door hinge.







In situ wall plaster in a sunken room cut into natural brickearth at Lloyd's Register; the scale is 0.5m. The plaster was later retrieved and conserved

Modern basements had removed all medieval and later ground surfaces, but burials from the medieval church of St Katherine, deep medieval pits, foundations of the 18th-century church and post-medieval brick-lined cesspits were found. One of these cesspits produced an impressive collection of artefacts including fragments of two 17th-century Persian porcelain bowls. These are extremely rare and have never before been found in an archaeological context in Britain.

Test pits within the building fronting onto Fenchurch Street also located the foundations of the medieval church which is now partly preserved beneath the present St Katherine Coleman churchyard.



Sectional recording of the large sunken room at Lloyd's Register



Across the Roman and medieval city to the west, excavation at **Procession House** (Heron Property Corporation) on the south side of Ludgate Hill was divided into two

Procession House

areas. The eastern of these lay on the edge of the valley of the now buried River Fleet, and a number of Roman and medieval rubbish pits (the latter possibly associated with

industries) and other cut features survived truncation by Victorian basements. The most notable feature was a large east/west V-shaped Roman ditch, possibly with its famous 'ankle-breaker' profile at the base, which followed the south side of Ludgate Hill, the line of the Roman road. This ditch, apparently backfilled soon after AD 70, may be a hitherto unknown part of the defences to the west of the Roman city, although possibly only temporary. The chalk foundations of an interval tower belonging to the extension of the medieval city wall for the Blackfriars precinct between 1285 and 1300 was also identified and has been preserved *in situ*. The western area of excavation lay well within the channel of the Fleet River in the Roman and earlier medieval periods. A number of later medieval dumped deposits indicated that this area was probably not reclaimed from the river until after the city wall extension was built. Above these deposits were a number of medieval chalk foundations for buildings on the east bank of the Fleet, which were modified and extended in the 16th and early 17th centuries. One 17th-century cellar had a set of timber steps which appeared to have been burnt *in situ*, perhaps in the Great Fire of 1666. The cellar was backfilled and replaced by the rear wall of a series of warehouses built by Sir Christopher Wren in the early 1670s as part of his grand design to canalise the Fleet and reproduce a miniature Venice to the west of the City.

Main picture left Seated sphinx which may have been attached to the lid of a copper alloy vessel (1st/2nd century) by the chain found with it

From far left
The sphinx before conservation

X-ray showing a length of the chain

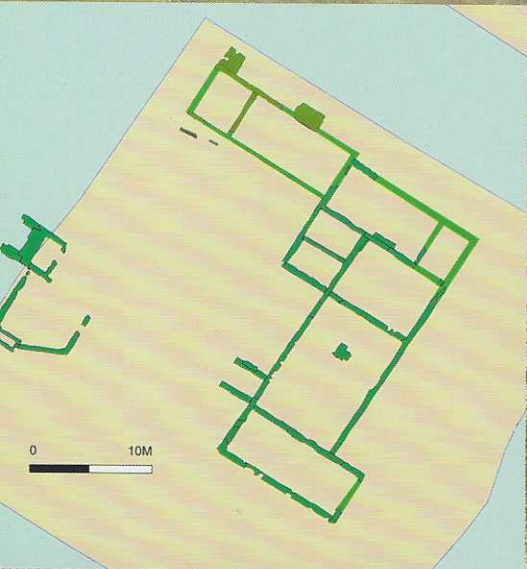
Detail during cleaning



Low Hall Manor, Walthamstow

Away from the historic cores of London in the City and Westminster, it is rare to find a medieval site where the buildings or strata remain intact over significantly large areas. Excavation on the site of **Low Hall Manor, Walthamstow** (Avebury Projects for Circle 33 Housing Trust Ltd, East Thames Housing Group, Family Housing Association, Kush Housing Association, London and Quadrant Housing Trust and Tower Housing Association) produced an impressive structural sequence which spanned the entire history of the moated manor house once owned by Warwick the Kingmaker (who helped depose Henry VI and bring Edward IV to the throne in 1460).

The earliest building had chalk and ragstone foundations, probably for a timber frame. Its rectangular plan comprised a hall and adjoining solar block with an elongated service range at the opposite end. The main entrance had an external porch which aligned directly on the moat bridge some 20m away to the north. This structure included a square abutment constructed of regular courses of limestone ashlar blocks, some levelled with peg tiles.



Above left The final substantially modified form of the later house, which incorporated much of the earlier plan of the 17th- and 18th-century structure

Far left The full plan of the medieval manor complex following the addition of the final narrow side wing along the edge of the moat

Preparing a part of the 2000 square metre site for photography



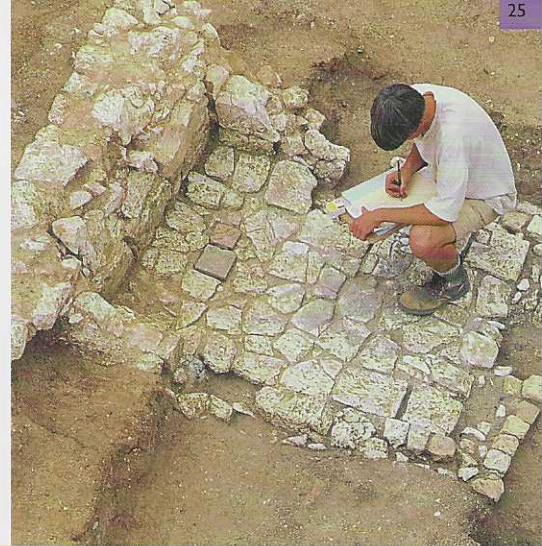
Two 14th-century floor tiles incorporated into the base of the garderobe

Early 15th-century tile oven, probably for baking bread, in the external kitchen range

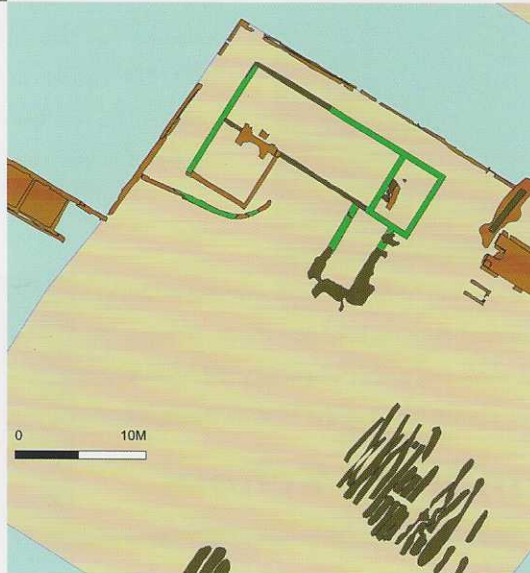




▲ The twisted remains of the VI flying bomb which destroyed the last house at Low Hall in August 1944



► The simple plan of the smaller 18th-century house which had two wings around an inner courtyard



▲ Integral chalk garderobe on the moatside wall of the secondary wing of the medieval manor house

► The main body of the 14th-century manor house, looking from the enlarged square solar towards the great hall, with the principle entrance and an elongated service wing attached to its lower end

In front of the abutment were the remains of the wooden bridge, comprising four well-preserved baseplates jointed together to form a rectangular base frame, probably for a drawbridge. Dendrochronological (tree-ring) dating on three of these timbers produced a consistent felling date of the summer of 1344. Fragmentary traces of a stone gatehouse lay to one side of the bridge abutment, in the form of a moat-side wall with a drain and garderobe which discharged directly into the moat.

The main body of the manor house was subsequently extended to the east before the addition of a second wing to the north which gave the complex an L-shape. Although few traces of the internal floor surfaces survived an indication of the quality of the original structure was provided by a total of 56 late 14th-century decorated floor tiles made in Penn in Buckinghamshire, most of them recovered from the moat. Beyond the service range of the early building were the robbed remains of a stone and timber out-building with a tile oven, the uppermost surface of which gave an archaeomagnetic date of 1410–25 for its final firing; this was probably a separate kitchen, where the largest hearth would have been.





Medieval bridge abutment and the adjoining gatehouse viewed from the moat, with the remains of the manor house in the upper background

During the 17th century the medieval manor house was abandoned and a smaller building was erected on its northern wing, using some of the earlier foundations. This structure was mainly of brick with a timber frame and was extensively remodelled with numerous rebuilds and modifications during the 18th century. At this date a new brick moat bridge was constructed to one side of its medieval predecessor. During this period, especially in the 19th century, the house declined to the status of a farmhouse and this structure was destroyed by a flying bomb in August 1944. The remains of the bomb and its crater were found in the courtyard in front of the house, a graphic close to the 600-year history of the manor house.

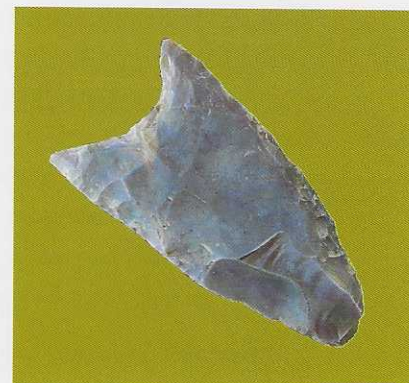
MoLAS excavated the site of the planned new Royal Docks Community School in Prince Regent Lane, Canning Town, for the **London Borough of Newham**. From a Neolithic and Bronze age landsurface over 1300 fragments of flint tools and pieces of pottery dating to between about 3000 and 1500 BC have been recovered, on what was then a small island in the Thames floodplain. A few even older flint tools from the Mesolithic period (8000 to 3500 BC) were found.

Royal Docks Community School

The site is interpreted as a seasonal or temporary camp situated on an island of dry land near a channel or inlet close to the River Thames. The surrounding marshy area and water would have been a valuable resource for hunting wildfowl and animals, fishing, and a source of wood for shelter, fuel and tools. The people who used this camp probably had their more permanent homes on the higher land towards where modern West Ham and East Ham now lie.

Lying within and on this prehistoric land surface were numerous fragments of worked flint and pottery, dating from as early as the Mesolithic period, around 8000 BC, to the Bronze Age, up to about 1500 BC. Most of the material however dated to between about 3000 and 1500 BC, suggesting that the island was used much more intensively in this later period. More than 1300 individual finds of flint and pottery came from the site. Some of the flint fragments found were finished tools including a knife blade, scrapers probably used for skinning animals, and an arrow head. The majority were waste flakes that had fallen on the ground while these tools were being shaped from flint pebbles. ►

The fragments of pottery were probably from pots used for cooking; two food preparation and cooking areas were excavated on the site. Piles of burnt flint indicate areas where the stones had been heated in a fire. They were then placed in a rectangular cooking pit where they brought water to the boil or were used directly to roast meat. Scatters of animal bone were found around these cooking areas.



Stakeholes suggesting a timber platform were excavated alongside a deep and narrow channel that probably ran into one of the river inlets. It seems likely that this was a jetty or landing place giving access to the island by boat. An interesting and unexpected discovery was a virtually complete Bronze Age (or possibly older) yew tree. This was lying where it had fallen over 4000 years ago, in the lower lying peat to the west of the island where the flint and pottery were found.

The precise locations of all the flint and pottery fragments were recorded with a sophisticated electronic surveying Total Station. All the layers and features such as the cooking pits were described and electronically planned and sections through the layers were drawn. Though this important prehistoric site would have been damaged by the new school's foundations, a detailed record of it will now be preserved in the form of the finds themselves, and the computer and paper records.



The main excavation area on this prehistoric 'island' site. The machine on the left is exposing the dark prehistoric soil horizon. The archaeologists on the right have already excavated this and are examining the prehistoric sandy subsoil



A Bronze Age cooking pit filled with burnt flint, half of which has been excavated. Meat would have been roasted in the red-hot flints

Though the work of MoLAS is governed largely by the needs of development, we piece together the evidence from several sites over a period of time. From the Museum's archive of observations it is possible to compare results from several investigations, some going back fifty years, to show how areas or localities within part of the City or its environs developed over the centuries. Here are two examples of these cumulative area studies, both in this case from the City.

Cripplegate Fort area study

Excavations during late 1997 at **90-91** and **100 Wood Street** (Helical Bar (Wood Street) Ltd)

have uncovered further evidence of the Roman Cripplegate Fort as first recorded by Professor W F Grimes in the 1950s. Together with information gathered during excavations in 1996 nearby at Shelley House and Garrard House it has contributed to a more detailed understanding of the Fort.

Professor Grimes' excavations revealed the presence of a hitherto unknown Roman fort, with masonry walls, an internal earth bank, barrack blocks and internal road plan. His small excavation in the area of 100 Wood Street revealed fragmentary remains of the western side of the southern gateway into the fort and traces of the north-south aligned road (*via praetoria*).

The excavations at 100 Wood Street and Shelley House have together revealed masonry walls of up to six buildings, possibly barrack blocks, separated by metalled alleyways, and at least two roads. The north-south aligned road first recorded at Garrard House in 1996 was also recorded to the north at 100 Wood Street. This road would have become the *via praetoria* inside the fort, dividing it in half. The second road identified, in the south-east of the 100 Wood Street site, was the intramural road of the fort, the south wall of the fort running along the southern limit of the site. The masonry fort was constructed after AD 120 superseding earlier timber buildings on the same alignment.

Postholes and beamslots were recorded at Shelley House but only robbed out beamslots at 100 Wood Street. It is hoped that analysis of the results of these excavations may indicate whether these fragmentary remains were part of a timber precursor of the masonry fort, which itself went out of use during the first half of the 3rd century.

The area remained unoccupied until the 10th or 11th century and the many pits of Saxo-Norman (10th to 12th century) date in the Cripplegate area suggest an intense reoccupation. Three similarly dated cellared buildings were recorded at Shelley House and at least two more have been found on 100 Wood Street. The plotting of these buildings together with the many early pits from the Shelley House, Wood Street, Daiwa House, and Garrard House sites will help to define the establishment and layout of the medieval properties, perhaps (as found nearby in Milk Street, dug in the 1970s) from the 10th century. Along with the evidence from Guildhall Yard to the east, these sites are revealing the northern extent of the built-up area of the city in Saxon times. This burst of activity in the early medieval period in the area seems to have ceased in the 13th century, and further developments were few until the Tudor period.



Late 13th-century London type ware baluster jug from Wood Street

Professor Grimes and his supervisor Audrey Williams examine the west gate of the fort in 1956



Roman forum area study



A small view of an enormous building: the foundations of the Roman basilica, one of the largest Roman buildings in Europe, were recorded beneath a former bank hall as it was being refurbished as a pub at 50 Cornhill in the heart of the City

In 1997 three relatively small-scale archaeological projects revealed important new information about the forum-basilica complex. At **8–9 and 20–22 Leadenhall Market** (Saigon Times Restaurant) part of the foundation of the apsidal eastern end of the second basilica was uncovered during groundworks for a new restaurant. This part of the basilica was last seen by Henry Hodge in the 1880s at the time of the construction of the present Leadenhall Market. The one-day watching brief on this site confirmed that remains still survive beneath the Market cellars and also allowed MoLAS to survey this part of the

basilica using accurate, modern techniques. A

similar exercise was undertaken at **50 Cornhill** (Fuller Smith & Turner plc), where excavations for

new manholes uncovered two sections of the wall foundations of the second basilica, together with associated construction levels and floors. A complex evaluation consisting of deep 'key-hole' trenches around the perimeter of the 1960s building at **168 Fenchurch Street** (BPH Developments) has enabled walls of the south range of both the first and second fora to be recorded and located. MoLAS is now building up a database of digital plans of the forum-basilica which will help to locate and interpret the monument more precisely and assist in planning for future developments in the Gracechurch Street area.



Information panels describing the history and archaeological importance of the site were produced by MoLAS for permanent public display

View looking south-east at the newly built residential accommodation *Old Theatre Court*, adjacent to the site of the historical *Globe Theatre*. MoLAS assisted the client, *Hollybrook Ltd.*, by preparing the Scheduled Ancient Monument application, and by assisting with the planning application, all with the assistance of English Heritage and the London Borough of Southwark's Senior Archaeology Officer. MoLAS monitored the groundworks for the new accommodation which re-used foundations for the former bottling plant. The actual remains of the *Globe* remain buried beneath the courtyard and the basement of *Anchor Terrace*. MoLAS, with *Hunting Technical Services Ltd.*, devised the preservation *in situ* scheme and monitored the building work to ensure that the scheme was successfully implemented. The outline of the *Globe* was delineated by MoLAS and is marked on the surface of the modern courtyard.

MOLAS IN THE PLANNING PROCESS: THE COMPLETE SERVICE

In London, as elsewhere, there is a general need for developers and landowners to obtain authoritative and impartial advice on the historic value of a building, a site, or a particular feature within either. The range of services offered by MoLAS includes:

- advice on the archaeological implications of development schemes at the earliest stage, for example as part of an initial feasibility study, when the client may be considering a portfolio of possible sites
- desk-based assessments and on-site evaluations of individual sites
- investigation of sites ahead of development or refurbishment
- assisting with applications concerning Listed Buildings and Scheduled Monuments
- providing expert witnesses in Public Inquiries
- writing authoritative histories of individual sites for private or general publication, eg as part of a company history or a stand-alone document



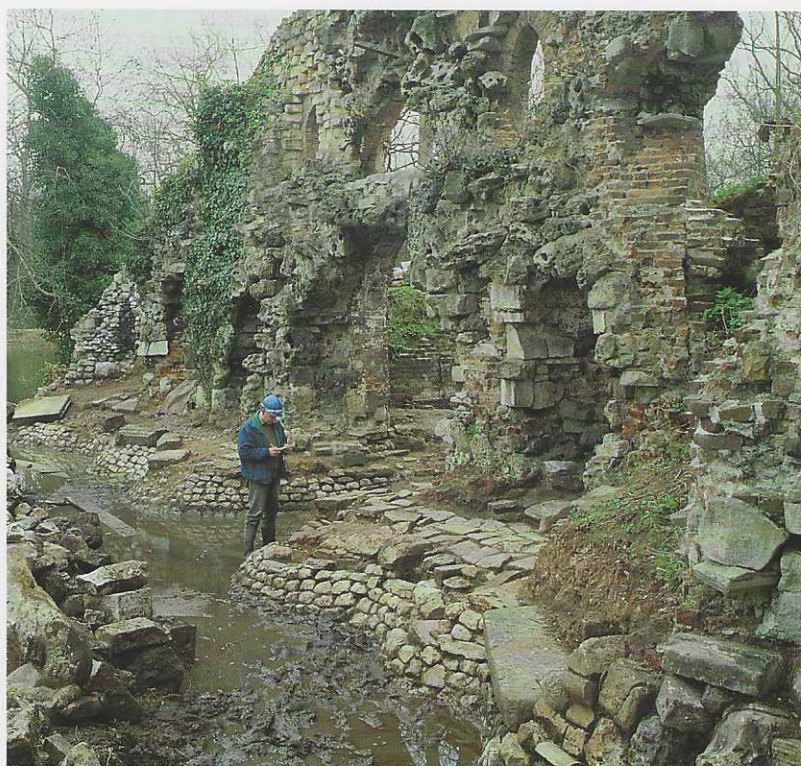
STANDING BUILDING SURVEY

MoLAS has continued its work in the recording of standing buildings in 1997. Since the introduction of *Planning and Policy Guidance 15 (PPG15)* by the Department of Environment in 1994 there has been a greater awareness of the importance of assessing and, if needs be, recording historic buildings. The recording of standing buildings involves a wide variety of techniques including drawn, digitally surveyed, and photographic records, and specialisms including ceramic building materials, wood-working, and moulded stone. All of these techniques have been used by MoLAS this year.

Further recording during refurbishment of **2-3 Middle Temple Lane** (Honourable Society of the Middle Temple) and analysis of the records of the **Middle Temple Gatehouse** and **1-2 Middle Temple Lane**, reported upon in *MoLAS 97*, has been carried out. In particular much of the timber roof structure was recorded, indicating that it was a double-pile roof of common rafter construction, consisting of two parallel pitched roofs with a central valley. Dendrochronology, whilst unable to date the original timbers from the roof, demonstrated that the same trees were used as those in the roof of 1-2 Middle Temple Lane, confirming that the whole roof, at least, was built in 1693.

Analysis of the gatehouse suggests that its basement may not have been replaced when rebuilt in 1683-4, but may represent its late 16th-century predecessor. The French windows on the first floor of the gatehouse overlooking Fleet Street were among the earliest in England, having apparently been introduced at Versailles in the early 1680s. Recording of the timber framing and internal layout of the building has resulted in three-dimensional digital drawings of the building.

Recording also took place at the **Grotto** in Wanstead Park (Corporation of London, Department of Buildings and Services) in the London Borough of Redbridge. The Grotto lies at the south end of a lake known as the Ornamental Water and was originally constructed as a boat-house with elaborately decorated chambers above for the use of the owners of Wanstead House, itself rebuilt in 1720 by Colen Campbell for the first Earl Tylney. A fire caused substantial damage to the Grotto in 1884 and more recent erosion, robbing, and vandalism have caused widespread damage leaving the building very ruinous.



Recently exposed original causeway frontages previously buried under fallen masonry

The survey was undertaken to provide digitally drawn information and rectified photographs, as aids to the planning of the works that will be required in order to repair, conserve and potentially reconstruct the building. Plans and elevations of the building have been produced along with reconstruction plans and elevations (using measured 19th-century drawings) showing how the building may have looked originally.



The north facade, partially restored, facing onto the Ornamental Water; the entrance arch to the boat dock in the centre

The Grotto was primarily constructed from red brick and had an entrance passage on the west side which led into the first-floor chamber. A set of stairs led to the second floor. A tunnel from the entrance passage led down to the water's edge and communicated with the boathouse and its dock below. The facade facing the lake was decorated in a rustic manner with various natural stones and architectural fragments and contained several broad niches which acted as shelters from which the lake could be viewed. Much of this facade survives although partly rebuilt during the 1970s.

- ▲ Three existing windows, although partially rebuilt, afford views across the lake from what was the first-floor chamber.

Excavation work was subsequently carried out to ascertain the extent of survival of the dock structure and interior of the boathouse. During this process decorative fragments from the Grotto and pieces of fallen masonry from the superstructure of the building were retrieved. There are a number of masonry fragments dumped into the Ornamental Water beyond the entrance of the boathouse that require surveying and pieces of the original superstructure of The Grotto could be retrieved.

A standing building survey of two structures on disused land west of Thamesmead at

Gallion's Reach (Thamesmead Town) recorded a proof butts, one of the remaining installations on the site of the Woolwich

Arsenal and used for gunnery testing. It consisted of a three-walled rectangular-shaped concrete building, surrounded by a bank of earth and to the south-east, a linear-shaped open area, representing a firing range. Three stepped internal walls divided the structure into four bays, the backs of which were slightly concave. Some repair work had been carried out on the back walls of each bay, evinced by the presence of concrete patching over areas that had been subjected to shelling. A double gabled roof surmounted the structure, consisting of an iron frame, on which was laid corrugated iron sheets.

The north and south walls of the proof butts, with part of the firing range visible to the left



Within the City of London, during refurbishment works at **77 Carter Lane / 1 Carter Court** (Dencora Homes Limited), excavation revealed foundations and human burials associated with the 13th-century Blackfriars conventual church, while late 17th-century brick vaults were recorded by producing annotated measured drawings and photography.

The house at 77 Carter Lane appears to have been built soon after the Great Fire of 1666, although most of the existing superstructure is much later, probably of about 1900. Most of the cellars which occupy the full width of the property are original. Unusually, they were on two levels. **The upper level dates to the original construction of the house in the late 17th century.** They have brick floors and half-elliptical barrel vaults ranging from 2.7m to 3m high. The lower cellar also had a brick floor but is probably of the 19th century, increasing the storage capacity of the building. The vault consisted of jack-arches constructed of bricks and supported on the outside edges by the cellar walls and along the middle by a cast iron beam. Thus the recording shows how some 19th-century premises in the City were adaptations of buildings put up shortly after 1666.

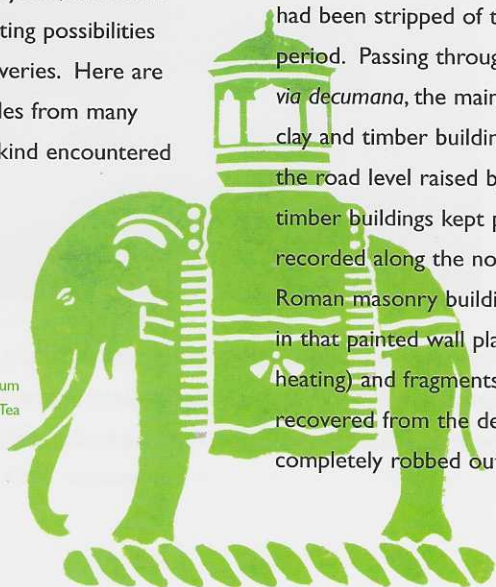


SMALLER EXCAVATIONS & EVALUATIONS

Smaller excavations and evaluations of sites, often by recording engineers' test-pits which seek to probe the extent of foundations or the depth of strata, provide the valuable observations which both fill out the picture of an ancient landscape, in the town or the countryside, and often point to exciting possibilities of new discoveries. Here are some examples from many cases of the kind encountered in 1997.

An evaluation at **Plantation House**, a large site between Fenchurch Street, Mincing Lane and Great Tower Street (British Land City Estates Ltd), was based on six archaeological test pits and the excavation by hand of the upper 1.2m of two boreholes. Modern basements had truncated the horizontal stratigraphy down to the level of early Roman layers. The sequence showed that the site had been stripped of the natural brickearth at the beginning of the Roman period. Passing through its northern part was the eastward extension of the *via decumana*, the main street of Roman London. All the other testpits revealed clay and timber buildings. The *via decumana* was resurfaced at least twice and the road level raised by approximately 0.9m by the 2nd century. The clay and timber buildings kept pace with this rising level; traces of destruction by fire were recorded along the northern part of the site but not in the central areas. A later Roman masonry building was probably of high status, in that painted wall plaster, box flue tiles (from central heating) and fragments of *opus signinum* flooring were recovered from the demolition; but it had been almost completely robbed out during the late Roman period.

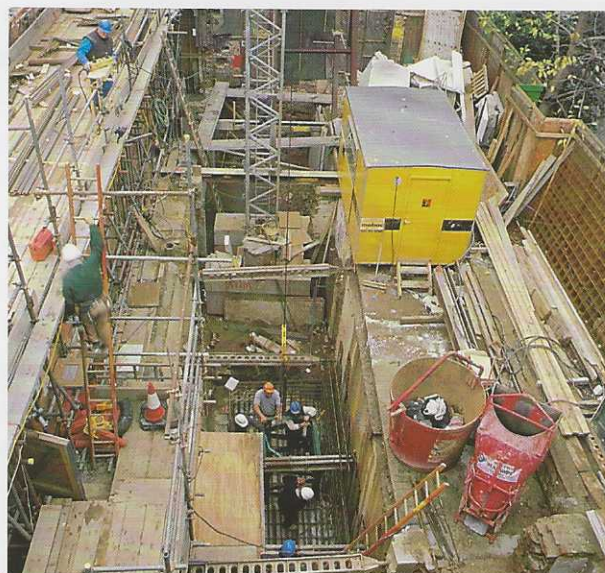
Design in the linoleum on the floor of the Tea Auction Rooms



Part of the entablature over the door of Plantation House, built in the 1930s

Down near the Thames, evaluation at **Broken Wharf House and Sir John Lyon House, Upper Thames Street** (Jones Lang Wootton) has generally confirmed

that the proposed development sits astride a substantial cross-section of intact waterfront archaeology with activity dating from the 12th century or earlier. The foundations of medieval tenements survive over organic reclamation dumps which in turn seal timber structures preserved in excellent condition in the waterlogged environment. These observations will be taken into account by a MoLAS study of the area based on extensive recent excavations at nearby Bull Wharf and Vintry.

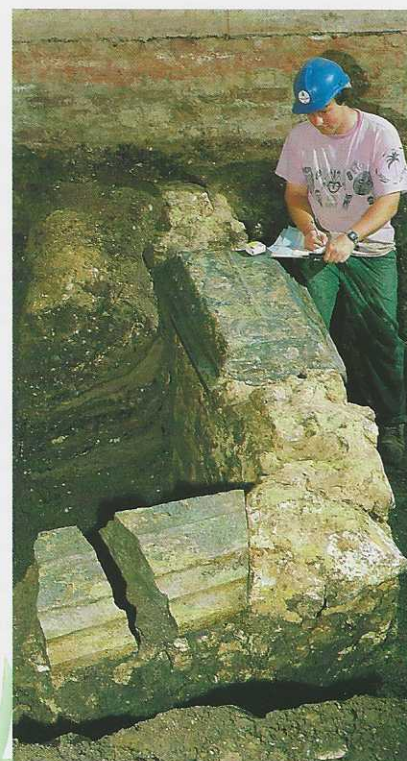


Away from the river, MoLAS were commissioned by Goldcrest Homes plc to undertake a watching brief and excavation at **22–24 Wormwood Street** during the redevelopment of the site for new residential accommodation. The north wall of the basement to this property is a Scheduled Ancient Monument, comprising both the Roman city wall and a section of 17th- and 18th-century walling constructed from reused Roman and medieval masonry. All original ground surfaces had been removed by the existing basements, but deep cut features survived on the site including two Roman wells which appear to predate the construction of the earth bank associated with the city wall. Pottery found in the wells dates to AD 60–150.

North-east of the City, an evaluation followed by excavation took place at **2–6 Link Street, Hackney** (New Islington and Hackney Housing Association). The excavation provided evidence for agriculture in Homerton, a hamlet first recorded in 1343. The earliest features comprised a structure with a chalk foundation and evidence of agricultural activity from the 11th to 12th centuries. A building with chalk and flint foundations was constructed during the 15th century, incorporating the truncated base of an oven. A contemporary sequence of ditches and a timber sluice to the south seemed to be part of a water management scheme connected with Hackney Brook to the south; these features were replaced by a brick-lined reservoir constructed during the mid 16th century. At this period the land came into the ownership of Ralph Sadleir, the owner of Sutton House, a Tudor mansion still standing to the west. After the demolition of the 15th-century building its plot became an external surface to the west of a building known to be standing in the mid 18th century. This was subsequently demolished and built upon in the very early 19th century, after the demolition of buildings adjacent to the site between 1792 and 1800.



Across the river in Southwark, at **London Bridge Street** (London Hotels Ltd), a watching brief and excavation of a lift pit was carried out within the basement of a standing building constructed in 1916 and undergoing refurbishment for conversion into an hotel. Historically, the site was part of St Thomas's Hospital, founded on the site in 1215 and occupied until 1862. The excavation of the lift pit found a linear feature, thought to be a drain, two post holes, and a pit of Roman, possibly 2nd-century, date. Medieval dumping followed with evidence of pitting, and a cellar or cesspit constructed from chalk, ragstone and flint. Parts of **two grave slabs** ► dated from their decoration to 1200–1350 had been ▼ reused in its construction. One was the lower half of an adult's slab and the other a child's. The latter had an inscription on either side of its bevelled edges. Both slabs are believed to come from the early medieval St Thomas' Chapel which lay on the northern side of the site, within the area covered by the present building. The medieval dumping contained pottery spanning the 13th–15th centuries, including a complete jug of the 13th or late 14th century.



At **Priory Road, Colliers Wood, Merton** (J Sainsbury Developments Ltd)

MoLAS evaluated two sites which revealed Stane Street, the main Roman road from London to Chichester, whose route is followed by the present A24 from London Bridge through Clapham, Tooting. Between Colliers Wood and Morden Hall Park the line of the road had disappeared, but archaeological evaluation has now revealed that the road ran straight towards the site of the 12th-century Merton Priory, probably passing just to the north of the north transept, and continued though the middle of the Abbey Mills and on in a straight line to Morden. The road measured around 8m to 9m wide and was constructed from flint, gravel and sand. This type of road construction seems plausible when crossing a low-lying area close to a river (and presumably a ford) as at Merton. The raised banks may have acted as water defences within the marshland environment, and the road itself may actually have formed a causeway through this low-lying area. A roadside ditch contained 1st- to 3rd-century pottery.

Kingston Bridge from the east, showing the proximity of the medieval revetment to the present river. The foreshore and banks of the Thames are together one of the richest archaeological resources in the London area



Medieval timbers well-preserved in waterlogged conditions at Kingston

Also in the south-west, an excavation has been carried out on the south side of the present **Kingston Bridge**, prior to the widening of the bridge (Royal Borough of Kingston upon Thames). This revealed around ten phases of river revetments dating from the 14th to 17th centuries. The revetments were mainly constructed of oak, reusing both boat and building timbers. The waterfronts are likely to have belonged to a medieval property lying just to the north of the Bishop's Hall, which would have extended from the River Thames to Thames Street. During the 16th and 17th centuries the river encroached upon the land, and by this date the revetments were constructed some 3m to the east (inland) of the latest previous medieval revetment. A parallel line of timber posts extended from one of the revetments into the river suggesting a timber jetty.

Turning now to the south-eastern area around London, an excavation was undertaken during 1997 in advance of a riverside residential development at **Summertown Way, Thamesmead** (Wilcon Homes Ltd). The site lay close to the location of discoveries of prehistoric and Roman objects in an area of former marshland which until quite recently formed part of Woolwich Arsenal. The alluvial sediments and peats examined on the site demonstrated the complex changes which have taken place in the Thames estuary since prehistoric times. Radiocarbon samples from the lowest levels on the site showed that relatively dry conditions were followed in the early first millennium BC by a gradual inundation of the site as river levels rose.

By the Roman period this process had begun to reverse once more and by the mid 3rd century AD the site was dry enough to attract occupation. At a date after 250 a network of field ditches was established on the site alongside a number of enigmatic hearths which may have served as corndriers. Despite a flood in or soon after 300, the site remained in occupation until the late 4th century as shown by the establishment of a realigned field system some time after 350. Rising river levels finally inundated the site at the end of the 4th or early 5th century.

Over the last few years MoLAS has also undertaken a number of small-scale investigations in central Greenwich, particularly within the grounds of the **Royal Naval College** and the **National Maritime Museum** to the south. Together with ongoing historical research, these investigations have greatly enhanced our understanding of the history and layout of this important site. Recent work to the east and to the west of the College complex has uncovered features dating to the 12th century, by which time Greenwich was probably a settled village. One of the most important finds was a substantial Tudor building belonging to a courtier at the palace of Placentia built by Henry VII on the site of earlier royal buildings, and enlarged by Henry VIII and Elizabeth I. Nothing of the palace remains above ground and it was only through excavations conducted by the then Department of the Environment in 1970–1 that a plan of the royal complex emerged. A MoLAS watching brief near these excavations identified hitherto unknown walls and floor surfaces and, to the south within the grounds of the National Maritime Museum, investigations have revealed what were almost certainly walls of Henry VIII's tiltyard.



Augering on the Thames foreshore in order to map the buried sediments

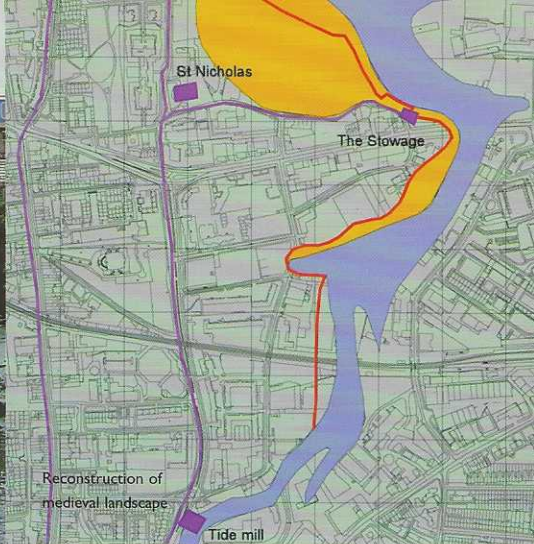
Developments along the Thames foreshore have been a feature of the past few years, and MoLAS has developed fast, accurate and cost-effective field surveying systems perfectly suited to the rigorous timetables imposed by the river's great tidal swings. Discoveries and publications by the Thames Archaeological Survey (TAS), based at the Museum of London, have highlighted awareness of the archaeological richness of the intertidal zone, and MoLAS has been able to dovetail its client-based work into the larger pattern of survey being undertaken by TAS, as shown by the following examples.

BANKSIDE

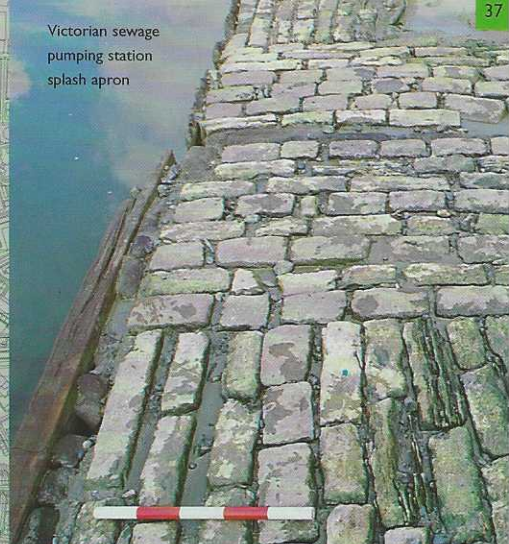
At **Bankside, Southwark** (London Borough of Southwark), some 500m of the foreshore has been precisely mapped in three dimensions in just a few mornings, with detailed pictures built up of the location of prehistoric alluvial deposits, ancient timber structures, scatters of shipwrights nails and other features spanning nearly 5000 years. Corollary information is being collected on the coincidence of predicted and actual tidal levels, and on current rates of deposition and erosion of foreshore deposits. Follow-up testpits have allowed sampling of mollusca and organic material, and revealed up to 1.5m of deposits.



Penmap survey of Creek near Halfpenny Hatch



Reconstruction of medieval landscape

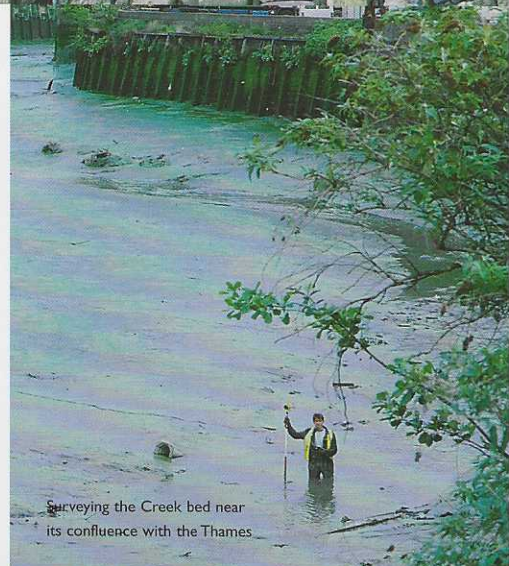


Victorian sewage pumping station splash apron

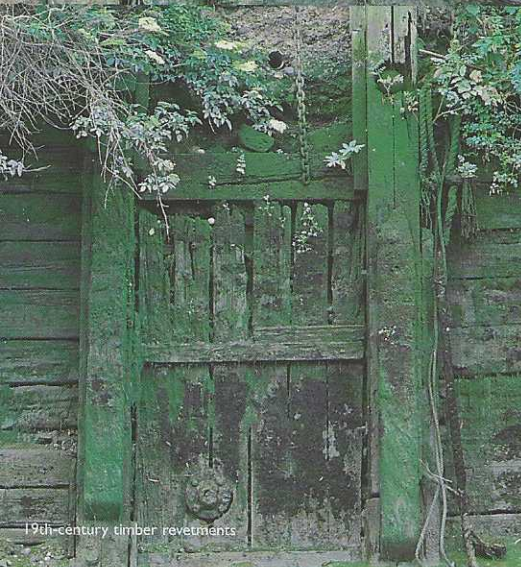


Granite setts in the splash apron

At Deptford Creek, Lewisham (Creekside Project), 540m of the tidal creek was surveyed. Revetments possibly of medieval date and stretches of 19th-century wharf and river wall were photographed, and the whole survey linked with a borehole analysis and desk-based assessment to produce a comprehensive impact analysis. A similar survey, this time incorporating auger bores and metal-detecting, was undertaken at **Blackwall Stairs, Tower Hamlets** (Environment Agency).



Surveying the Creek bed near its confluence with the Thames



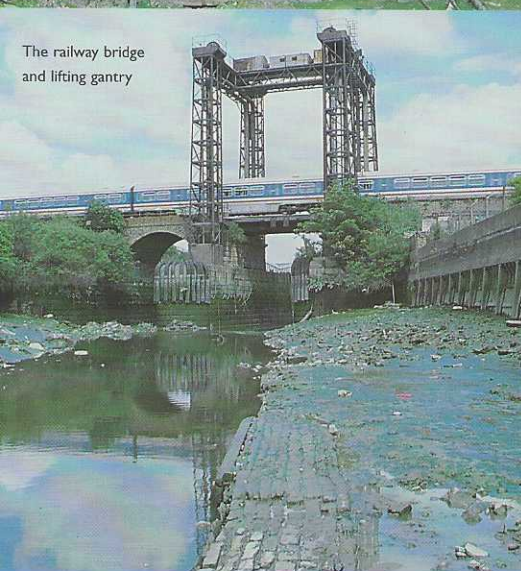
19th-century timber revetments



Creek revetment



Depth gauge on the side of Halfpenny Hatch railway bridge



The railway bridge and lifting gantry



19th-century timber revetments



Rusticated stonework on bridge pier

ARCHAEOLOGICAL SERVICES & CONSULTANCIES IN BRITAIN AND ABROAD

MoLAS will be expanding its range of professional skills in 1998: geoarchaeological services will be available, as well as the geophysical dating and prospecting techniques already supplied by the Clark Laboratory.

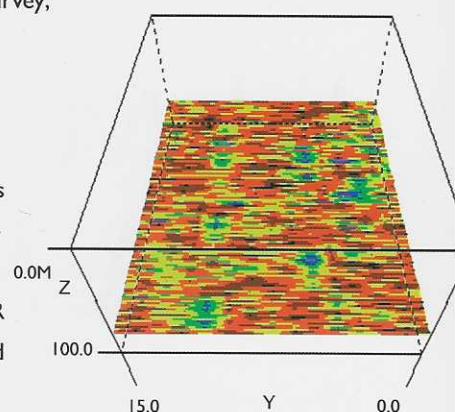
MoLAS has also provided archaeological expertise to television's Time Team, various projects abroad and has been a valuable contributor to international conferences. MoLAS continues to support the secretariat of the European Association of Archaeologists.

THE CLARK LABORATORY

The Clark Laboratory was formed in 1995 in recognition of the lifetime's contribution to archaeological geophysics made by the late Dr A J Clark. In keeping with the spirit of Tony Clark's work, the Laboratory continues to evaluate new scientific survey methods to expand the range of non-destructive prospection techniques available to archaeologists. The Clark Laboratory is currently the only facility in the UK which offers the following range of geophysical techniques for both surveying and dating: archaeomagnetic dating; ground penetrating radar survey with three dimensional modelling and time slicing; magnetic susceptibility survey; logged and scanning magnetometer survey; electromagnetic induction, resistivity and resistivity profiling.

The range of projects undertaken by the Laboratory during the last year demonstrates the variety of survey techniques we currently provide, and the applicability of these techniques in both urban and rural settings as well as for private and institutional clients. The Laboratory has undertaken a GPR (ground-penetrating radar) survey of a Roman villa site at **Abinger**; a multi-phase project to locate the remains of **Hadrian's Bridge, Cumbria** (Carlisle Archaeological Unit); used both GPR and resistivity to survey the grounds of **Hertford Castle**; and used GPR in conjunction with a resistivity and magnetometer survey to detect archaeological remains and service tunnels associated with the largest garden water fountains in the United Kingdom at **Witley Court, Hereford**. We have also discovered a possible Iron Age enclosure during a 17 hectare magnetic susceptibility and magnetometer survey in Hertfordshire and used GPR to evaluate the extent of the concrete flooring slab at the **Royal Albert Hall, London**.

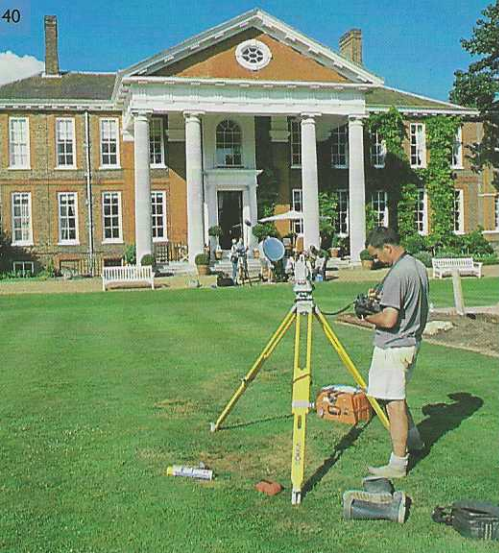
Laboratory staff have provided archaeomagnetic dates for several major archaeological excavations. These include not only MoLAS projects such as Lloyd's Register, City of London and Low Hall, Walthamstow, but also a site at **Walton-le-Dale, Preston**; and the Viking site of **Glyn, Llanbedrgoch, Anglesey**.



Planometric view of anomalous activity caused by archaeology from a recent Clark Laboratory project

ENVIRONMENTAL SERVICES: FORENSIC WORK

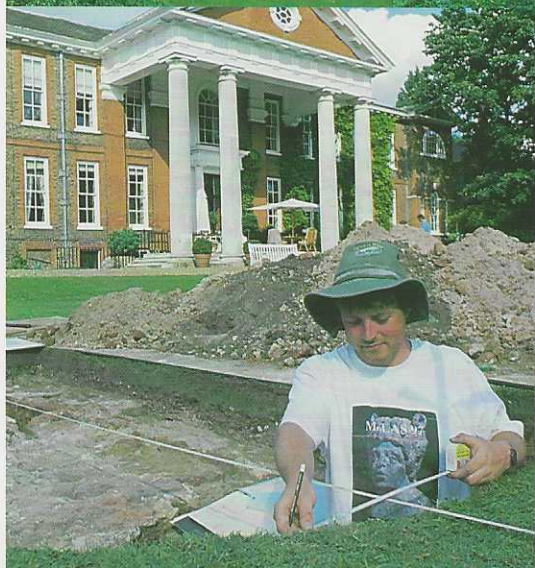
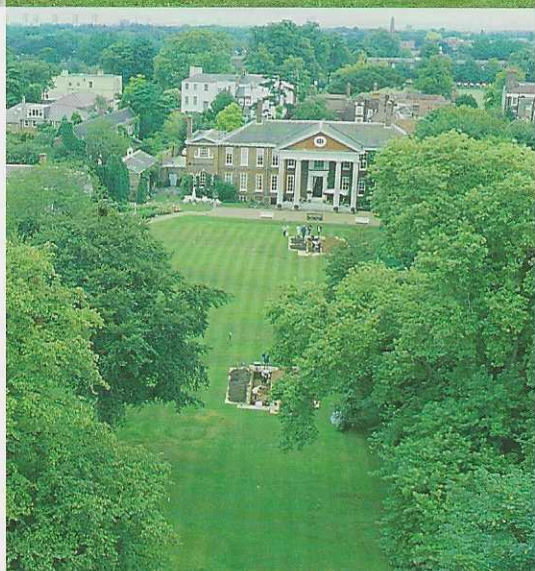
This year has seen an increase in the number of instances where MoLAS has been consulted by various divisions of the Police Force (both City and Metropolitan) to assist with enquiries. This has ranged from identifying bones brought in by the public to visiting sites to age human remains discovered in suspicious circumstances. Forensic Archaeology is a developing discipline, but one for which MoLAS is ideally fitted by virtue of its diverse range of specialists, (human osteologists, documentary historians, stratigraphic specialists) and its rapid response, particularly important in suspicious or criminal circumstances.



MOLAS & TIME TEAM

In August, MoLAS and Channel 4's **Time Team** once again undertook a collaborative investigation (see *MoLAS 95*). This time, the focus was upon the site of the medieval and Tudor royal palace at Richmond, Surrey, occupied by, amongst others, Edward III, Henry VII and Elizabeth I. Above the ground, only the gatehouse and Wardrobe still survive. The object of the investigations was to locate the Privy Lodgings, the royals' private quarters. Four trenches were sunk in the beautiful gardens of Trumpeter's House. These located substantial masonry and Tudor brick walls along with demolition rubble of the Commonwealth period, including highly-crafted architectural fragments from windows and doorways of the palace. The programme was screened in January 1998, and a follow-up publication is planned. ▲

MoLAS also aided Time Team last spring on a Bronze Age and Iron Age trackway in the Somerset Levels. ▼



CONSULTANCIES IN EUROPE & BEYOND



Excavation in progress on Granary Island, Gdansk
(Jane Sidell)

MoLAS is pleased to have started a project which will probably run for three years, with the support of the British Council in Poland, to help colleagues at the Archaeological Museum in **Gdansk, Poland** (the great medieval city of Danzig). This co-operation started in early 1996 with visits by Polish archaeologists to London, and continued in the summer and autumn with visits to Gdansk, where waterfront excavations are in progress, by MoLAS specialists in environmental archaeology, surveying, pottery, timber recording and graphics. A public lecture in Gdansk in October, comparing the archaeology of Gdansk and London, was the occasion for the announcement of further support by the British ambassador. Given the likely increase in construction in Polish cities, it is important for archaeologists in Gdansk to be familiar with the latest in archaeological methods, while we can refine our techniques by testing them in other places, especially abroad. MoLAS therefore encourages enquiries about its systems from urban archaeologists in other countries.

In 1997 there were several other foreign consultancies. MoLAS has long been recognised as being at the forefront in the development of systems to manage archaeological data from complex urban deposits. It is this experience which has led to our involvement with developing information management systems for the Gabinete Arquelogia Urbana in the historic city of **Oporto, Portugal**. The main element of the work is to be the development of a GIS to aid development control in the historic core of the city which has gained World Heritage status. In 1997, MoLAS undertook the first stage of work, which involved three members of staff visiting Oporto to evaluate the needs of the GAU and to outline the main part of the project.

In **Beirut, Lebanon**, there have been intensive international excavations in the downtown area, which is the site of Bronze Age, Phoenician, Hellenistic, Roman, Byzantine and Islamic cities one above the other. In 1993 UNESCO asked for MoLAS support in the form of a co-ordinator for the excavations which were just beginning. Spectacular discoveries have been made, including the medieval castle of Beirut which lies on the Bronze Age fortification forming the oldest part of the city. The monuments thus revealed have to be sensitively incorporated into the future pattern of new streets. In 1996 the urban development corporation, SOLIDERE, asked French architect Michel Macary, who worked on the inclusion of the medieval donjon of Paris in the Louvre refurbishment by I M Pei, to come up with a series of alternative solutions; and MoLAS provided the archaeological dimension to these discussions.



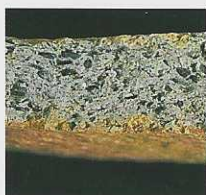
Pathway between Granaries, with the Gdansk
Archaeological Museum in the background
(Jane Sidell)

HONG KONG

MoLAS has gone out to the Far East, when we carried out environmental impact assessment work commissioned by **ERM-Hong Kong Ltd**, thus acting as archaeological consultants for a new passenger railway. The Kowloon-Canton Railway Corporation's 'West Rail' project is another in a series of major railway infrastructure schemes for which MoLAS has provided archaeological input. The archaeological work on West Rail is groundbreaking for several reasons. It marks the first time that archaeology has been included formally in an Environmental Impact Assessment in Hong Kong; the approach devised by ERM-Hong Kong and MoLAS has entailed exhaustive predictive modelling and field testing, to compensate for the lack of archaeological records for the study area. MoLAS is working closely with the Government Antiquities and Monuments Office and local archaeological practitioners in the Territory, and the approach looks set to shape the way that archaeology is carried out in Hong Kong in future.

CONTRIBUTING TO NATIONAL & INTERNATIONAL STANDARDS & THE DEVELOPMENT OF ARCHAEOLOGY IN EUROPE

National Roman Fabric Collection



Patchgrove Grog-tempered
ware



Harrold Shelley ware

1997 has seen the successful completion of this long-term project initiated and funded by English Heritage. A reference collection of approximately 200 clay types representing a number of different source areas, including ones imported into Roman Britain as well as local types with a supra-regional distribution, is now available at the Department of Prehistoric and Romano-British Antiquities, The British Museum. It provides a resource for those working either part or full time in Roman pottery studies and serves to standardise both identification and description of the types present. In addition to this physical collection, the accompanying publication is currently in press as a MoLAS monograph.

Mortarium Bibliography

This project concerns ceramic bowls, frequently spouted, which are internally gritted and used as mortars. These vessels form a specific class of Roman pottery which, because of their distinctive nature, are especially good markers for charting the movement of pottery types and by inference trade in other goods. Historically they have been studied separately from the main bulk of pottery and as a result their literature is disparate and sometimes difficult to access. To rectify this situation, English Heritage has commissioned the compilation of a bibliography which will not only draw together the subject, but also provide a preliminary assessment of the level and range of information on mortaria available for different regions within Britain.

The National Survey of Archaeological Archives

In 1997 MoLAS was commissioned by English Heritage and the Museums and Galleries Commission to undertake a national survey of archaeological archives (the records and finds recovered from excavations).

The survey was born out of a widescale concern that increasing numbers of excavations and resulting quantities of finds and records are stretching the ability of museums to accept and curate such material.

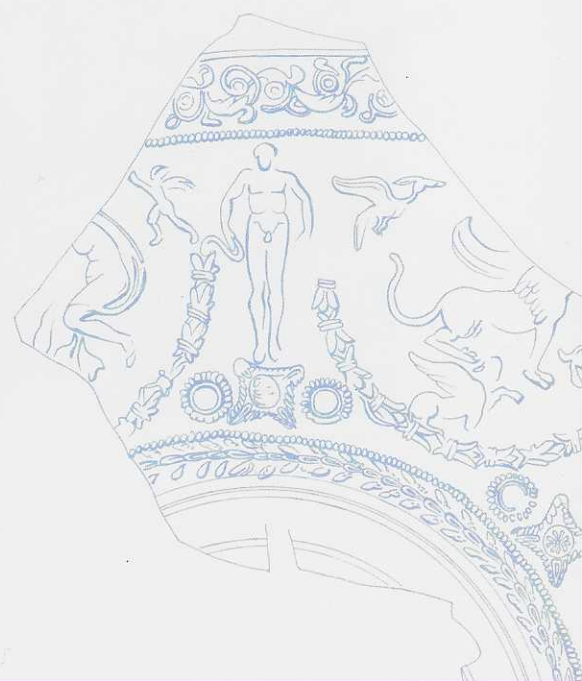
As might have been predicted, an initial relatively simplistic picture of the problem and possible solutions has been replaced by a recognition that there are many different problems and arrangements conspiring to create a situation for which there will be no single solution. At one extreme there are large county and city museum services which often have extremely good 'archive awareness' but are simply struggling with the sheer scale of material which they are expected to curate. At the other are some areas where archive numbers and quantities may be quite small but where museum provision is piece-meal and uncoordinated.

Most museums have run out, or are rapidly running out, of storage space for archaeological material without having clear plans for the future. To make matters worse, large bodies of material are still being held by archaeological units, building up problems for the future. Museum budgets are not growing sufficiently to cope with these increases and in most museums other solutions need to be found.

MoLAS Roman pottery projects in Europe: the Caesar project

Two of the three European Roman pottery projects described in MoLAS 97 have not yet come to fruition, although we have hopes that both the project on a *Database for samian ware from Lezoux* and the *Network of International Reference Collections for Ceramics in Western Europe* will be realised in the course of 1998. By contrast, the third project, known as *Caesar: validation project for the archaeological ceramics at European Atlantic ports*, has made considerable progress, and has led to new insights into the nature of Roman pottery found at sites in northern Spain, western France, and Britain.

The concept of the project is to bring together the work of three archaeological units: MoLAS at London, Arkeolan at San Sebastian and Irun in the Basque country of northern Spain, and the Service Régional de l'Archéologie en Aquitaine, at Bordeaux. The work concentrates on the Roman pottery found at three sites, Regis House in London, Calle Santiago at Irun, and Camille Jullian at Bordeaux. One of the research themes is to test evidence of a possible 'Atlantic pottery region'. By this we mean that in a region which includes the coastal areas of the Basque country, the western coast of France including Aquitania, Brittany, Normandy and the Pas-de-Calais, and Britain (and perhaps also much of Belgium, Holland and Germany), there seems to have been a generally unified set of styles in Roman pottery, especially in the table and kitchen wares, which is different from the styles found contemporaneously in southern Spain, eastern France, Italy and other parts of the Roman Empire.



Taking London into Europe: MoLAS at international conferences

In four days in October 1997 the city of Brugge (Bruges) in Belgium hosted the Second International Conference on Medieval and Later Archaeology. The work of MoLAS was represented by eight lectures, all of which have been published as part of the conference papers (the titles can be found in the MoLAS bibliography towards the end of this review). One of these papers discussed the development of the Saxon harbour and *Lundenwic*, based on the preliminary results of the recent excavations at Queenhithe (as reported in *MoLAS* 97) and the Royal Opera House (as reported in *MoLAS* 96 and here); other papers discussed the 11th-12th century settlement at Guildhall Yard. Preliminary work on the Guildhall material suggests that the area of the Roman amphitheatre arena at this period was occupied not by the Saxons, but by a Scandinavian community with international connections. This new hypothesis raises the possibility that the medieval Guildhall developed out of the need to formalise the various public assemblies and activities which may have taken place in this yard. The structural development of another of the capital's famous monuments, London Bridge, was outlined in another paper. Medieval London Bridge is the subject of a forthcoming monograph produced as part of the English Heritage funded post-excavation and publication programme. The Brugge papers show how the work of MoLAS provides comparative information of interest to our colleagues in Europe, the 10th-11th century buildings found at Guildhall Yard for instance are best compared with such places as Birka (Sweden) and Haithabu (north Germany).

European Association of Archaeologists

Teaching

MoLAS staff teach archaeology to classes throughout London.



Birkbeck College (University of London) Centre for Extra-mural Studies students undergoing instruction and drawing a post-medieval wall at the 1997 training dig held in Southwark by Birkbeck College and MoLAS

The original concept of the European Association of Archaeologists was discussed in 1988 by a group of European archaeologists from Denmark, France and UK at a Theoretical Archaeology Group (TAG) meeting. Many organisations and institutions around Europe have supported the EAA's formation and continuation such as the Maison des Sciences de l'Homme, the Czechoslovak (as it was) Academy of Sciences, the Norwegian Central Board of Antiquities (Riksantikvaren) and the Wenner-Gren Foundation. Since January 1997 MoLAS has supported the EAA by providing office space and facilities for the EAA Secretariat. MoLAS is proud that since taking over the management of the Secretariat, members have seen a marked improvement in service. The Association's membership has increased by 30% in the last nine months. The majority of these members are European, however, membership is expanding to other parts of the world. Currently there are 48 countries that are represented within the Association.

Extensive archaeological excavation and research in north Southwark in the 1990s has enabled us to reconstruct the topography of the original small sandy islands on which first settlement focused, and from which Southwark has developed since prehistory, based around London's first roads and river crossing.

For London Underground Limited's Jubilee Line Extension Project alone 34 excavations were conducted in and around London Bridge Station. Further work for Wineworld London Ltd on Bankside, where a **Roman post and plank revetment** ▼ was discovered, has confirmed that an important area of unexplored higher ground still survives.



The Roman administration and southern docks, and the later elusive Saxon burgh of Southwark may have centred upon this land, next to the ancient bridgehead or river crossing, in an area now occupied by the **Borough Market** ▼ and England's largest parish church, Southwark Cathedral.



FIELDWORK

GREATER LONDON Greater London

Barking & Dagenham

Ibis Hotel, Highbridge Road, West Bank, Barking, IG11 (HHB97)
(Askew P)

Barnet

McDonald's Restaurants Ltd, 154 Stonegrove, Edgware (SGV97)
(Lakin D)

Bexley

Nursing Home Development, Copperfield Road, SE28 (CPF97)
(Stevens S)
Voyager's Quay, Copperfield Road, SE28 (CPP96) (Stevens S)
Erith Deep Water Wharf, Crescent Road, Erith, Kent (EWW97)
(Bates J & Stevens S)
The Norman Park Site, Norman Road, Picardy Manor Way,
Belvedere, Kent (NOM97) (Woodger A)
Hollywood Road (new road), off Slade Green Road, Slade Green,
Erith, Kent (HYW97) (Holder N)
Summerton Way, Thamesmead North, SE28 (SWY97) (Lakin D)
Watermead Park, Wallhouse Road, Slade Green, Crayford, Kent
(WMP97) (Martin B)

Bromley

Glebe House, Church Road, Keston, Kent (GLE96) (Tucker S &
Wheeler L)
Mountseald Estate, Molash Road, St Mary Cray, Kent (MSH97)
(Stevens S)

Camden

Electricity Substation, Warner Street, EC1 (WRS97) (Roycroft N)

City of London

4 Bouverie Street, EC4 (BVS97) (Miles A)
Carter Lane, Ludgate Broadway (junction), EC4 (CLU97)
(Sankey D)
77 Carter Lane, EC4 (CTE96) (Askew P & Smith T)
City Tree Project – Byward Street, EC3 (CYK97) (Stevens S)
Gateway House, 25 Cannon Street, EC4 (CAO96) (Bowsher D)
Cannon Street and Bread Street junction, EC4 (CNB97)
(Lakin D)
1 Carey Lane, 11–12 Foster Lane, EC2 (CAY97) (Blair I)
50 Cornhill, EC3 (CNI97) (Sankey D)
13–21 Eastcheap, EC3 (ESC97) (Roycroft N)
Plantation House, 26–38 Fenchurch Street, 1–16 Mincing Lane,
EC3 (FER97) (Nielsen R & Roycroft N)
168 Fenchurch Street, EC3 (FEH95) (Dunwoodie L)
Lloyd's Register of Shipping, Fenchurch Street, EC3 (FCC95)
(Nielsen R & Bluer D)
7–12 Gracechurch Street, EC3 (GCS97) (Barber B)
2–12 Gresham Street, EC2 (GSM97) (Roycroft N)
Broken Wharf & Sir John Lyon House, High Timber Street, EC4
(HTS97) (Wroe-Brown R)
Atlantic House, 46–50 Holborn Viaduct, EC1 (ATC97)
(Dunwoodie L)
Equitable House, 47–51 King William Street, 16 Fish Street Hill,
EC4 (ETE97) (Sankey D)
20–22 Leadenhall Market, EC3 (LHL97) (Brigham T)
Barber Surgeons' Hall Gardens, London Wall, EC2 (BSG97)
(McCann W)
Winchester House, London Wall, EC2 (WCH95) (Askew P)

Barrington House, 1–6 Love Lane, 59–67 Gresham Street, EC2
(LVL97) (Woodger A)
Procession House, 55 Ludgate Hill, EC4 (LUG97) (Grainger I)
1–3 Ludgate Square, 56–66 Carter Lane, EC4 (LUS97) (Watson B)
1–4 Middle Temple Lane, EC4 (MTE96) (Minkin J)
Moorgate Station, 21 Moorfields, EC2 (MFL97) (Roycroft N)
Sudbury House, Newgate Street, EC4 (SHN97) (Askew P)
Britannia House, 16–17 Old Bailey, EC4 (OBL97) (Steele A)
Paternoster Row, EC4 (PRN97) (Porter G)
St Andrew by the Wardrobe, Queen Victoria Street, EC4 (SAA97)
(Miles A)
40–66 Queen Victoria Street, EC4 (QVA97) (Hil, J)
31–32 St Andrew's Hill, EC4 (SRW97) (Miles A)
36 St Andrew's Hill, EC4 (SNW97) (Tyler K & Porter G)
7–13 St Bride Street, EC4 (SBS97) (Howe L & Askew P)
Brook's Wharf, 48 Upper Thames Street, EC4 (BHD90) (Ayre J)
Suffolk Lane – junction with Upper Thames Street, EC4 (SUK97)
(Pitt K)
Wardrobe Court, 53–57 Carter Lane, 1–5 Addle Hill, EC4
(WDC97) (Tyler K)
13–21 West Smithfield, EC1 (WSI97) (Treveil P & Bluer D)
90–91, 100 Wood Street, St Albans Court, EC2 (WOO97) (Howe L)
22–24 Wormwood Street, EC2 (WOE97) (Sankey D)

Croydon

163 Coombe Road (land at rear), Croydon, Surrey (COB97)
(Stevens S)
Farthing Down, Downs Road, Coulsdon, Surrey (FTD97) (Watson B)
Methodist Church (land adjacent), Limsfield Road, Sanderstead,
Croydon, Surrey (LPR96) (Stevens S)
Atwood Primary School, Limsfield Road, Sanderstead, Croydon,
Surrey (LFD97) (Saxby D)
513, 515 London Road, Croydon, Surrey (LNN97) (Hewett R)
Station Road (former Garage/Workshop site), 60 Godstone Road,
Kenley, Surrey (GOT97) (Hewett R)
64–68 Thornton Road, Thornton Heath, Surrey (THR97) (Cowie R)

Ealing

268 Northfield Avenue (rear), Northfield, W5 (NTA97) (Lakin D)
Elm View, Norwood Green Road, Southall, Middx (NGN97) (Steele A)

Enfield

Brancroft Way, Brimsdown, Enfield (BNW95) (Burch M)
Forty Hall Farm, Forty Hill, Enfield (FOF94) (Howe L)
270 Great Cambridge Road, Enfield (GCE97) (Roberts J)
Railway Goods Yard (former), Kingsway, Southbury, Enfield, (KNY97)
(McKenzie M)

Greenwich

Gallions Reach Urban Village, Central Way, Western Way,
Thamesmead, SE18 (GAC97) (Saxby D & Askew P)
Gallions Reach Urban Village, Phase 2, Central Way, Thamesmead,
SE18 (GAE97) (Stevens S)
DLR Lewisham Extension, Cutty Sark Station, Creek Road,
Greenwich, SE10 (DXL97) (McKenzie M)
Riverwall Works, Greenwich Millenium Festival, Drawdock Road,
Ordnance Cres, Greenwich, SE10 (BWP97) (Bowsher J)
Guildford Grove, SE10 (GUL97) (Bowsher J)
Creedy's Yard, High Bridge Wharf, High Bridge, Greenwich, SE10
(HBW97) (Bowsher J)

Hackney

9 Appold Street and Snowden House, 66–90 Worship Street, EC2 (APP97) (*Sankey D*)
 2–16 Link Street, 12–14 Homerton High Street, E9 (LIK95) (*Tyler K*)
 St Augustine's Tower, Mare Street, E8 (SGS97) (*Burch M*)

Hammersmith & Fulham

5–15 Galena Road, SW6 (GAN96) (*Partridge J*)
 West Court, Fulham Palace, Bishop's Avenue, SW6 (FPC97) (*Bowsher J*)
 All Saints Primary School, Bishops Avenue, Fulham, SW6 (ASP97) (*Partridge J et al*)
 69a Fulham High Street, 423 New King's Road, SW6 (FUH97) (*Partridge J*)
 Wimslow Road, W6 (WLR97) (*Cowie R*)

Haringey

Highgate Woods, bounded by Archway & Muswell Hill Road, N10 (HWO96) (*Holder N*)

Harving

Union Railways, Phase 4, Area 3, 10, Rainham-Purfleet, Essex (URA97) (*Blair I*)
 Angel Way (ex GPO site), Romford, Essex (ANL97) (*Holder N*)
 Gidea Park, The Bowling Green, Main Road, Romford, Essex (MNO97) (*Wiggins M*)

Hillingdon

The Norman Hay Site, Bath Road, Harmondsworth, Middx (NHS97) (*Cowie R*)
 Ruislip Manor House (SAM), near Bury Street, Ruislip, Middx (RMH97) (*Steele A*)
 Windsor Court Development, 30–34 Chapel Street, 28–34 Windsor Street, Uxbridge, Middx (CWU97) (*Knight H*)
 Heathrow Airport Terminal 4 Remote Stands, Grassed Area 16A, Terminal 4, Heathrow Airport, Middx (TFR97) (*Hoad S*)
 St Giles Church Hall, High Road, Ickenham, Uxbridge, Middx (SGL97) (*Wiggins M*)
 Moysons Yard, Moor Lane, Harmondsworth, West Drayton, Middx (MLH97) (*Steele A*)
 The World Business Centre, Newall Road, Heathrow Airport, Middx (NLL97) (*Partridge J*)
 Heathrow Airport N side – Communications Infrastructure, south of Northern Perimeter Road, N of N runway, Hounslow, Middx (HCI97) (*Elsden N & Hoad S*)
 Lufthansa Cargo Warehouse, Southampton Road, Shoreham Road West, Middx (LCW97) (*Hoad S*)
 The Shoenberg Site, Trevor Road, Hayes, Middx (TVO97) (*Stevens S*)

Hounslow

1 Brentford High Street, Brentford, Middx (BFH97) (*Cowie R*)
 St Mary's Convent, The Butts, Brentford, Middx (BTT97) (*Cowie R*)
 The Serco Site, 13 Hayes Road, Southall, Middx (HYR97) (*Lakin D*)
 Former Health Centre, Spring Road, Lower Feltham, Middx (SLF97) (*Knight H*)
 Mayfield Farm, Staines Road, Bedfont, Middx (MFF97) (*Knight H*)

Islington

Preacher's Court, Charterhouse Mews, Charterhouse, EC1 (PCC92) (*Thomas C*)
 85 Colebrook Row, N1 (COK97) (*Miles A*)
 1–7 Dallington St, EC1 (DLL97) (*Miles A*)
 5 Garrett Street, EC1 (GET97) (*Askew P & Howe, L*)
 Collin's Music Hall, 10–12 Islington Green, N1 (ISL97) (*Miles A*)
 Jerusalem Passage, EC1 (JEP97) (*Howe L*)
 387a Liverpool Road, N1 (LIP97) (*Miles A*)
 56–64 Pentonville Road, 1–11 Baron Street, N1 (PNT97) (*Tyler K*)

Kensington & Chelsea

The Royal Hospital, Royal Hospital Road, SW3 (RHR97) (*Jones S*)

Kingston-upon-Thames

South side Kingston Bridge, Kingston, Surrey (KIB97) (*Saxby D*)

Lambeth

Thames Water pipeline, Belvedere Road, SE1 (BVD97) (*Minkin J*)
 Flood Mitigation Phase 3, Thames Foreshore, opp County Hall, South of Hungerford Bridge, SE1 (TFC97) (*Hoad S*)
 The Millenium Wheel site, Jubilee Gardens, Belvedere Road, SE1 (JUL97) (*Spurr G*)

Lewisham

DLR Lewisham Extension, Trenches 10–11, rear of Conington Road, SE13 (DXH97) (*Bowsher J*)
 DLR Lewisham Extension, Trench 9, junction of Elverson Road, Conington Road, SE13 (DXG97) (*Bowsher J*)
 DLR Lewisham Extension, Trench 14, off Lewisham High Street, Tesco car park, SE13 (DXJ97) (*Bowsher J*)

Merton

Tesco Store, Burlington Road, Burlington Road, New Malden, Surrey (BUL97) (*Cowan C*)
 Caesar's Camp, Royal Wimbledon Golf Club, Camp Road, SW19 (CCM97) (*Roycroft N*)
 High Street, Christchurch Road, Priory Road (land bound by), SW19 (CCC97) (*Saxby D*)
 110 Ridgway, SW19 (RGW97) (*Hewett R*)
 42 Tramway Path, Mitcham, Surrey (TRA97) (*Hewett R*)

Newham

East Ham Baths, Nelson Street, E6 (HIS97) (*Holder N*)
 Royal Docks Community School, Prince Regent Lane, E16 (PRG97) (*Holder N*)
 Council Depot (former), Well Street, opp jnc Waddington Street, Stratford, E15 (WTF97) (*Sankey D*)



A range of 19th-century pedestal ointment pots manufactured at Mortlake potteries

Redbridge

Eastwood Road, South Woodford, E18 (EWR97) (*Grainger I*)
The Grotto, Wanstead Park, Warren Road, E11 (GWP97)
(*Westman A*)

Richmond

Trumpeter's House, The Old Palace, The Green, Richmond-upon-Thames, Surrey (TRU97) (*Cowie R*)
Beveree, Twickenham Preparatory School, 43 High Street, Hampton, Middx (HGH97) (*Cowie R*)
Lower Nurseries, Royal Botanic Gardens, Kew Road, Richmond, Surrey (LNK97) (*Simmons T*)
61–69 Mortlake High Street, SW14 (MOT97) (*Holder N & Hoad S*)
Dalemead Residential Care Home, 10–12 Riverdale Gardens, St Margarets, Twickenham, Middx (RDG97) (*Cowie R*)
Harrods Depository (former), Trinity Church Road, SW13 (TRC97) (*Jones S*)

Southwark

80 Camberwell Church Street, Camberwell, SE5 (CBW97) (*Askew P*)
Gloucester Grove Phase 3C, St George's Way, Peckham, SE15 (GLG97) (*Saxby D*)
10–18 London Bridge Street, SE1 (LNB97) (*Askew, P*)
18–26 Nunhead Lane, Peckham, SE15 (NUN97) (*Stevens S*)
Platform Wharf, 23 Paradise Street, SE16 (PDS97) (*Blatherwick S*)
Staffordshire Street, Goldsmith Road, Peckham, SE15 (SFF97) (*Pickard C*)
14–16 Stoney Street, SE1 (SYT97) (*Cowan C*)
1–29 Studholme Street, Peckham, SE15 (SDH97) (*Stevens S*)
Vinegar Yard, 33 Tanner Street, Bermondsey, SE1 (VIY97) (*Heard K*)

Sutton

256–264 Croydon Road, Wallington, Surrey (CYN97) (*Roycroft N*)
Mitcham House, Mitcham Road, Croydon, Surrey (MHM97) (*Stevens S*)
Medical Research Council site, Woodmansterne Road, Carshalton, Surrey (WDS97) (*Stevens S*)

Tower Hamlets

Ashton Street, Isle of Dogs, E14 (ASN97) (*Ayre J*)
55–58 Alie Street, E1 (ALI97) (*Pit K*)
Blackwall Stairs, Blackwall Way, Yabsley Street, E14 (BLK97) (*Wroe-Brown R*)
28–36 Brushfield Street, E1 (BFL97) (*Dunwoodie L*)
Horner Buildings, Brushfield Street, Lamb Street, Spitalfields, E1 (BHF97) (*Thomas C*)
1 Prescott Street, E1 (PCS97) (*Roycroft N*)
St John's Church, Scandrett Street, Green Bank, E1 (SJN97) (*Miles A*)
The Pier Head, South West India Dock Entrance, E14 (SWI97) (*Pitt K*)
Locke's Wharf, West Ferry Road, E14 (LOC97) (*Wroe-Brown R*)

Waltham Forest

74 Church Lane, Walthamstow, E17 (CUW97) (*Tyler K*)
Avenue Estate, Morris Road, Leyton, E15 (AEM97) (*Steele A*)
108–110 Vicarage Road, Leyton, E10 (VRL97) (*Roycroft N*)

Wandsworth

219–221 Balham High Road, SW17 (BHG97) (*Treveil P*)
Enterprise House (land), Cathles Road, SW12 (CAH97) (*Bates J*)
Danebury School (former), Alton Education Centre, Danebury Avenue, Roehampton, SW15 (DNA97) (*Cowie R*)

Westminster

Bridge Street (subway, in road), SW1 (BGS97) (*Thomas C*)
Commons Court, Houses of Parliament, Bridge Street, SW1 (CMO97) (*Roycroft N*)
Commons Court, Houses of Parliament, Bridge Street, SW1 (CMC97) (*Thomas C*)

99–203 Buckingham Palace Road, Ebury Bridge Road, SW1 (BPR97) (*Jones S*)
Cannon Row (ventilation shaft), SW1 (CNW97) (*Thomas C*)
Cannon Row (Staircase 7 in street) Cannon Row, SW1 (CWW97) (*Thomas C*)
93 Ebury Bridge Road, SW1 (EBR95) (*Pickard C*)
Edgware Road, 121–125 Edgware Road, W2 (EDW97) (*Hoad S*)
27 Floral Street, W1 (FLO97) (*Partridge J*)
Horse Shoe Yard, W1 (HOY97) (*Pitt K*)
Children's Hospital, Paddington Green, W2 (PAG97) (*Holder N*)
Marlborough House, Pall Mall, SW1 (MRB92) (*Bowsher D*)
Parliament Street – stairs and subway, SW1 (PMS97) (*Thomas C*)
Perkin's Rents and Great Peter Street (corner), SW1 (PKN97) (*Bowsher J*)
Serpentine Gallery, off Serpentine Walk, Kensington Gardens, W2 (SRG97) (*Wiggins M*)
Egyptian Embassy, South Street, W1 (EGY97) (*Ayre J*)
Somerset House, Strand, WC2 (SST96) (*Chew S & Holder N*)
Courtauld Institute of Art, Strand, WC2 (SRD97) (*Holder N*)
65–72 Strand, WC2 (SRN97) (*Pickard C & Wiggins M*)

BRITAIN Britain

Essex

Union Railways, Phase 4, Area 3, 10, Rainham-Purfleet, Essex (URA97) (*Blair I*)

Kent

Sweyne CP School, Keary Road, Swanscombe, Kent (KT KEA97) (*Mackinder T & Wheeler L*)
Love Lane, Rochester, Kent (KT LOV97) (*Martin B*)
Swanscombe Community School, Southfleet Road, Swanscombe, Kent (KT SSF97) (*MacKinder T*)

Channel Tunnel

Station Road (west of), Ashford, Kent (ARC PFM97) (*Heard K*)
Cuxton Anglo-Saxon Burial, Kent (ARC CXT97) (*Roycroft N*)
Cuxton Anglo-Saxon Burial phases I–III, Kent (ARC CXT97) (*Roycroft N*)
Tollgate (west of), Kent (ARC TGW97) (*Partridge J*)
Northumberland Bottom (west of), Kent (ARC WNB97) (*Treveil P*)
Boarley Farm, Kent (ARC BFM97) (*Roycroft N*)
Cobham Park, Kent (ARC CPK97) (*Treveil P & Watson B*)
Tollgate (southeast of), Kent (ARC TGS97) (*Partridge J*)
Pluckley Road (west of), Kent (ARC PRD97) (*Roycroft N*)
Newlands (east of), Kent (ARC NEV97) (*Roycroft N*)
Yonsea Farm, Kent (ARC YFM97) (*Treveil P*)
Beechbrook Wood (south of), Kent (ARC BVD97) (*Stevens S*)
Boy's Hall Road, Kent (ARC BHR97) (*Treveil P*)

Surrey

Cargo Point Development, Bedfont Road, Stanwell, Surrey (SY CPT97) (*Elsden N & Knight H*)
The Old Cottage, East Road, St George's Hill, Weybridge, Surrey (SY EAT97) (*Cowan C*)
Long Lane, Bedfont Road, Stanwell, Surrey (SY LGE97) (*Knight H*)

ABROAD Abroad

Central Business District, Beirut, Lebanon (*Schofield J*)
City Archaeological Museum, Gdansk, Poland (*Schofield J et al*)
Historic centre of Oporto, Portugal (*Mason S et al*)
West Rail project, Kowloon-Canton Railway, Hong Kong (*Lakin D*)



First-century carnelian intaglio of a helmeted youth based on an original portraying Alexander the Great. From the Lloyd's Register site



Roman unguentarium with a pedestal base, found at Regis House in the City



An X-ray of the unguentarium (above right) showing the copper wire tied around its neck



A rare imported Italian tin-glazed jug from a 16th-century cesspit at Regis House in the City. The jug, which was probably manufactured in Faenza, is hand-decorated with the three hills of Calvary, the cross with the crown of thorns and other symbols of the Passion



Spanish 'cuerda seca' floor tile, decorated with Islamic style motif and manufactured in Seville c 1500



Fragments of kiln furniture were found at Hermitage Pot House, Wapping, including this sagger fragment with pegs to support vessels during firing



Mid 19th-century Pearlware plate decorated with an overglaze representation of a cockroach. Found at Marlborough House



A Lower Palaeolithic pointed flint handaxe from one of the Channel Tunnel Rail Link sites in Kent

CLIENTS

- A** Lewis & Sons
Aarongate Ltd
Abbey Developments Ltd
Acton Housing Association
ADAS
AIG Europe (UK) Ltd
Aldi Stores Ltd
Alfred McAlpine Partnership
Housing Ltd
All Hallows Development
Trust
Antler Homes plc
Anwar Phul, Esq
Appold St L.P.
ARC South Eastern
Archetype Books
Argent Development
Consortium Ltd
Arkeolan
Asset Corporation Ltd
Atelier Works
Atlantis Books
BT Group Property plc
BAA Lynton plc
BAA plc
Bahagia Investments Ltd
Ballast Wiltshire plc
Barclays Property Holdings
Barratt East London
Barratt London Ltd
Barratt Southern Counties
Barratt West London
Bellway Homes (North
London)
Benchmark Services Ltd
Berkeley Homes (Essex) Ltd
Berkeley Homes
(Hampshire) Ltd
Berkeley Homes (Kent) Ltd
Berkeley Homes (Surrey)
Ltd
Berkeley Homes (Thames
Valley) Ltd
Berkshire County Council
David Bieda, Esq
Biffa Waste Services
Birkbeck College Centre
for Extra-Mural Studies,
University of London
Birze Construction Ltd
Blackfriars (PD) Ltd
Blackwells University
Bookshops
Blastland Ltd
Blueprint Estates plc
Bridgewood Construction
Ltd
Bride Hall Group Ltd
British Council
British Gas plc
British Land City Estates Ltd
British Land Corporation
Ltd
British Telecommunications
plc
Broomleigh Housing
Association
Building Design Partnership
Burford WC2 Ltd
Buxton Homes
C M Cadman & Sons
Cabinet Office
Camera Municipal do Porto
27/35 Cannon Street Ltd
Canterbury Archaeological
Trust
Capel Manor Horticultural
and Environmental Centre
Care Haven Ltd
CBA Mid-Anglia Group
CgMs Ltd
Charles Church South East
Ltd
- Chartwell Land Business
Development Ltd
Chelsfield plc
Cheshire Foundation
Housing Association
Chetwood Associates Ltd
Church Commissioners
City & Islington College
City & Provincial Properties
plc
City Acre Property
Investment Trust
City Computers Ltd
City of Carlisle
City of London
Archaeological Trust
City of Stoke on Trent
Cluttons Daniel Smith
Co-operative Insurance
Society Ltd
Collier Contracts Ltd
Collins Music Hall
Commission for Racial
Equality
Conran Holdings Ltd
Corporation of London
Costall Allen Design Ltd
Council for British
Archaeology, Mid Anglia
Group
Countryside In Partnership
Ltd
Courtauld Institute of Art
Croft Homes Ltd
Crown Dilmun 2 Ltd
D J Higgins & Sons Ltd
Dallington Lofts Ltd
Dannatt, Johnson Architects
Dean and Chapter of
St Paul's Cathedral
Dencora Homes Ltd
Design & Build Services Ltd
Development Securities plc
DFS Furniture plc
Drapers' Company
DTZ Debenham Thorp
Duchy of Lancaster
Ealing Family Housing
Association Ltd
East Herts Archaeological
Society
Edward Hill Associates
Electricity
English Heritage
English Partnerships
Environment Agency
Environis Partnership
EPR Architects Ltd
ERM Hong Kong Ltd
Erskine Estates &
Properties plc
European Commission
(Raphael Project)
European Association of
Archaeologists
Exchequer Partnership Ltd
Fat Sams Holdings Ltd
Fenchurch Estates
Fitzroy Robinson
Forest Gate Construction
Co Ltd
Foundation and Exploration
Services Ltd
FSP Architects and Planners
Fuller Smith & Turner plc
Furlong Homes Ltd
Gad Holdings
Galliard Homes Ltd
Gardners Books
Gemini Commercial
Investments Ltd
General Accident Life
Assurance Ltd
- Geoffrey Osborne Civil
Engineering Ltd
Gifford & Partners
Gilbert Collections Trust
Gill Andrews
Goldcrest Homes plc
The Goldsmiths' Company
Dana Goodburn-Brown
Governors of Atwood
Primary School
Governors of Sutton
Hospital
Gracechurch Bellyard Ltd
Grand Design
Great Bear plc
Greenacre Homes SE Ltd
Greenwich House
Properties Ltd
Greycoat plc
Griffin Housing Association
Grimley Ltd
Grosvenor Square Properties
Developments Ltd
Grovesworld Ltd
Haberdashers' Management
Company (Garrard
House)
Hackney Historic Buildings
Trust
Halcrow Fox
Hammerson UK Properties
plc
Hampton Development Ltd
Harper Collins Publishers
Haworth Tomkins Architects
Hearsum Family Ltd
Heather Trust for the Arts
Heathrow Airport Ltd
Heinemann
Helical Bar (Wood Street)
Ltd
Helical Bar Developments
(South-East) Ltd
Helical Bar plc
Heron (Procession House)
Ltd
Heron (Queen Victoria
Street) Ltd
Heron Property
Corporation
Heron Strand Developments
Highways Agency
Historic Royal Palaces
Agency
HMG Holdings Ltd
Hollybrook Ltd
Holmes Antill
Honourable Society of the
Inner Temple
Howmac Ltd
Hufvudstaden (Marlborough)
Ickenham Parochial Church
Council
Image Green Ltd
Imperial College of Science,
Technology and Medicine
In and Around Ltd
Institute of Field
Archaeologists
Institute of Marine Engineers
International Development
Partnership
Investcard Ltd
Islington and Shoreditch
Housing Association Ltd
J Sainsbury Developments
Ltd
Jarrah Properties
John Haynes, Esq
John Laing Construction Ltd
John Smith (Glasgow)
Jones Lang Wootton
Jongens Ltd
- K**elmescott Museum
Kent County Council
Kingswood Commercial
Properties Ltd
Knightsbridge Property
Holdings
Kvaerner, Trollope and Colls
Kyle Stewart Ltd
Lambeth Palace
Lancaster University
Archaeological Unit
Landmark Housing
Association
Lansbury Developments Ltd
Lawson-Price Environmental
Lebanese Company for the
Development and
Reconstruction of Beirut
Central District, S.A.L.
Legal & General Assurance
Society
LIFE
Liz Lake Associates
Lloyd's Register of Shipping
Lloyds Bank PLC
London & Manchester
Assurance Society Ltd
London & Newcastle
Developments Ltd
London & Regional
Properties plc
London Borough of Ealing
London Borough of
Greenwich
London Borough of
Hammersmith & Fulham
London Borough of
Hillingdon
London Borough of
Lewisham
London Borough of
Newham
London Borough of
Southwark
London Borough of
Waltham Forest
London Bridge Hotels Ltd
London Building Company
plc
London Diocesan Board for
Schools
London Diocesan Fund
London Docklands
Development Corporation
London Electricity plc
London Underground Ltd
Look Ahead Housing
Association Ltd
Lotta Properties Ltd
Ludgate House Ltd
Lufthansa Cargo AG
MJ Gleeson Group plc
Malloy & Lynskey
Markborough Properties Ltd
Martins Estates (Clerkenwell)
Ltd
MBE Homes
McAleer & Rushe Ltd
McDonald's Restaurants Ltd
MEPC Projects Ltd
Mercers Company Housing
Association Ltd
Merrill Lynch
Mervit Estates
Metropolitan Police
Michael Shanly Group
Milford Homes Ltd
Millennium Wheel Company
Ltd
Mills Whipp Partnership
Mitchell, MacFarlane &
Partners Ltd
Montagu Evans
- Mount Anvil Construction
Ltd
Mowlem Civil Engineering
Musee Historique Lorrain
Museum of London
Museums and Galleries
Commission
N.M.S. Executive N.T.R.O.
National Maritime Museum
National Museum of Wales
National Trust
Neighbourhood Centres
(UK) plc
New Islington and Hackney
Housing Association
Northcote Housing
Association Ltd
Norwich Union Investment
Management
Old Marylebone Investments
Ltd
Owen Builders
Oxbow Books
Oxford Archaeological Unit
Oxford University Press
Parliamentary Works
Directorate
Parochial Church Council
St Giles Church, Ickenham
Paternoster Associates
Rev John Paul
Peabody Trust
Peckham Partnership
Persimmon Homes (South-
East) Ltd
Pillar Property Investments
plc
Poor Servants of the
Mother of God
Port Greenwich Ltd
Post Office Counters Ltd
Pre-Construct Archaeology
Prudential Portfolio
Managers Ltd
Quintonglen Ltd
Ramheath Properties Ltd
Rater Trading Inc.
Redbourn Group PLC
Redcliffe Housing Society
Ltd
Regalian Homes Ltd
Renoport Ltd
Rescue
Reuters Ltd
Rialto Homes plc
Rich Investments Ltd
Richard Cook Ltd
Richard Main & Co
Richardsons (Nyewood) Ltd
Richmond Exchange Ltd
Roger Black Partnership
ROH Developments Ltd
Romney Marsh Research
Trust
Ropemaker Properties Ltd
Rosemont Associates Ltd
Roxylight Ltd
Royal Albert Hall
Royal and Sun Alliance
Royal Borough of Kingston-
upon-Thames
Royal Botanic Gardens
Royal Hospital Chelsea
Royal London Mutual
Insurance Society
RPS Clouston
Ruddy Construction Ltd
Safeway PLC
Safeway Stores Ltd
Saigon Times
Salmon Developments plc
Sandville Properties Ltd
Scandinaviska Enskilda Banken
- Scottish Provident
Institution
Scottish Widows' Fund and
Life Assurance
Sedgwick Group Properties
Serpentine Gallery Trust
Servite Houses
Skidmore Owings & Merrill
Soho Housing Association
Ltd
Soil Mechanics
Southern Primary Housing
Ltd
Southern Properties Ltd
Southwark and Lambeth
Archaeological Excavation
Committee
Sphere International UK Ltd
Spitalfields Developments Ltd
St Botolph's Project
St George North London
Ltd
Standard Life Assurance
Company
Stanhope plc
Starlight Investments
Stor-A-Car
Sudbury House Ltd
Suffolk Wharf Ltd
Sun Life Properties Ltd
Sunley Estates plc
Surrey Archeological Society
Tarmack Construction Ltd
Tasou Associates
Taylor Woodrow Property
Co Ltd
Teesland Management
Services Ltd
Tesco Stores Ltd
Texaco Ltd
Thames Valley Archaeological
Services
Thames Water Utilities Ltd
Thamesmead Town
Thirlstone Homes Ltd
Thorn High Street Properties
Ltd
Threshold Tennant Trust
Time Team
Twickenham Preparatory
School Trust
Ujima Housing Association
Ltd
Unicon Homes plc
Union Railways Ltd
United House Construction
Ltd
Universities Superannuation
Scheme
Vestry House Museum
W S Atkins Consultants Ltd
Wallis Ltd
Waterman Environmental
Waterstones Booksellers Ltd
Weltonvale Ltd
West End Theatre Managers
Ltd
Westminster City Council
Wey Estates Ltd
Wilson Homes Ltd
William Morrison
Supermarkets PLC
Willmott Dixon Housing Ltd
Wineworld London plc
Worshipful Company of Barbers
Worshipful Company of
Carpenters
Worshipful Company of Cutlers
Worshipful Company of
Mercers
Worshipful Society of
Apothecaries
Brian Yule, Esq

STAFF

Head of Service

Peter Chowne PhD, MBA, FSA, MIFA
Taryn Nixon BA, MIFA
(from December 1997)

OPERATIONS

Head of Operations

Taryn Nixon BA, MIFA

Field Section Manager

Laura Schaaf BA, MA, MIFA, FSA

Assistant Field Section Manager

Simon Blatherwick MA, AIFA

Senior Project Manager

Robin Densem BA, MIFA

Secretaries

Liz Brock BA
Fiona MacDonell RSA
Sophie Upstone BA

Project Managers

Penny Bruce BA
George Dennis BSc, MIFA, CPA
Paul Falcini BA
Al Green BA
Mike Hutchinson BA, MIFA
Sophie Jackson BA, MA
Gillian King BA
Dick Malt BSc
Simon Mason BSc
Geoffrey Potter BA, MA, MIFA
Peter Rowsome BA
Derek Seeley BA, MA
Angus Stephenson BA, MIFA
Andrew Westman BA, MA, PGCE

Field Section

Portia Askew BA
Julian Ayre BA
Bruno Barber BA
Ryszard Bartkowiak
Nick Bateman BA MIFA
Jackie Bates BA
David Beard BA, MA, MIFA
Ian Blair
Dick Bluer BA, PGCE
David Bowsher BA, MA
Julian Bowsher BA, MIFA
Trevor Brigham BA
Raoul Bull BA, MA
Mark Burch
Howard Burkhill BA
Steve Chew BA
Geoff Connal BA
Carrie Cowan BA
Robert Cowie BA, MPhil, MIFA
Simon Cox BA
Andrew Daykin BA
James Drummond Murray BA,
MIFA, Post-Grad Dip, FSA(Scot)
Lesley Dunwoodie BA
Peter Durnford BA
Michael Edwards BA
Nick Elsdon BSc
Steve Every BSc

Alan Gammon
Stuart Gibson BSc
Damian Goodburn BA, AIFA
Ian Grainger BA, AIFA
Valerie Griggs
Friederike Hammer MIFA, Dip, MPhil
Kieron Heard BA
Richard Hewett
Julian Hill BA, MA
Stewart Hoad BA, MIFA
Nick Holder BA, MA, AIFA
Liz Howe BA
Paul Hutchings BA, MA, PIFA
Sarah Jones BA, MA
Heather Knight
David Lakin BA
Duncan Lees BA
David Mackie BA
Tony Mackinder BA
Gordon Malcolm BA, AIFA
Barry Martin BA
Harry Matthews
Malcolm McKenzie BA
Adrian Miles BSc
Pat Miller BA, MIFA
John Minkin BA
Robin Nielsen MA, AIFA
Joe Partridge BA
Chris Pickard BA
Ken Pitt
Kate Pollard BTec
Gina Porter CPA
John Roberts BA
Niall Roycroft BA
David Sankey BA
David Saxby AIFA
Thanuja Simmons
Barney Sloane BA
Alison Steele BA
Simon Stevens BA
Jeremy Taylor
John Taylor BA
Anthony Thomas BA, CFA, MIFA
Chris Thomas HND
Joanne Thomas BA
Lucy Thompson BA, MA
Peter Thompson BA, PGCE
Phil Treveil BA, MA
Chris Tripp BA
Stephen Tucker BA, AIFA
Richard Turnbull BA
Kieron Tyler BA
Hilary Valler HND, BA
Bruce Watson BA, MPhil, AIFA
Andrew West BTec/HND, BA
Mark Wiggins BA
Oona Wills BA
Aidan Woodger
Robin Wroe-Brown BA
Marek Ziebart BSc

Clark Laboratory

Bill McCann BSc, PhD, AIFA
Paul Mackie BA

SPECIALIST SERVICES

Head of Specialist Services

Peter Hinton BA, MIFA

Environmental Manager

Jane Sidell BA, MSc

Finds Manager

Hedley Swain BA, MA, AIFA

Deputy Finds Manager

Penny MacConnoran BA

Photography Manager

Andy Chopping BA

Graphics Manager

Tracy Wellman BA

Academic Editor

John Schofield, BA, PhD, MPhil,
FSA, MIFA

Archive Officer

Cath Maloney BA, MIFA

Historical Researcher

Tony Dyson BA, BLitt, FSA

Secretary

Wendy Garrett

Charlotte Ainsley BSc
Edwin Baker
Susan Banks BA, CPA
David Bentley BA
Ian Betts BA, PhD
Lyn Blackmore BA, FSA
Josephine Brown BA
Jane Corcoran BSc
Jan Conheeny BA, MSc
Maggie Cox BA, MA
Anne Davis BSc, PGE, CFA
Geoff Egan BA, PhD
Sharon Gerber-Parfitt BA
John Giorgi BA, MSc, CFA
Richenda Goffin BA, Post Ex Dip
Dana Goodburn-Brown BA, BSc
Elizabeth Goodman BSc
Lisa Gray-Rees BA, MSc, PGCE
Tony Grey BA, MA
Deborah Hedgecock BA, MA, DMS
Tamsin Hobbs BA
Sally Holt BA
Helen Jones BA
Sophie Julien BSc
Jacqui Keily BA
Graham Kenlin BA
Lynne Keys BA
Tony MacKenna BA
Alison Nailer HND
Jacqueline Pearce BA
Alan Pipe BSc, MSc, MIBiol, FLS
Jeannette van der Post MA
Sue Pringle BA
Louise Rayner BA
Kevin Reilly BSc
Mark Samuel BA
Jane Sandoe BA
Fiona Seeley BA, MA
Kikar Singh HND

Terry Smith BA, MA, MLitt
Kirsten Suenson-Taylor BSc, BA
Paul Simmons BSc
Graham Spurr MSc
Roy Stephenson HND
Robin Symonds BA, DPhil
Roberta Tomber BA, MSc, PhD, FSA
Angela Wardle BA, PhD
Bill White, CChem, FSRG
Hester White BA

Volunteers

Jim Burn
Maura Cahill
Patricia Colquhoun
Jo Graham
Chris Green
Gwen Humphrey
Susannah Maidment
Joan Merritt
Sara Myers
Kathleen Moore
Paul Newbold
Blanche Norris
Hugh Renwick
Maia Vaswani
Gillian Walker
Teri Watson
Rosemary Wheeler

FINANCE & ADMINISTRATION

Head of Finance & Administration

Eric Gager FCA

Roger Chester BSc, MBA, FCMA

Information Management & Technology Manager

John Dolan BA

Health and Safety Officer

Geoff Stone MFE, MIRSM

Personnel Officer

Samantha Reeder Grad IPD

Sheema Ahmed BA
Debbie Brookes
Paul Carroll C&G
Julie Corpuz
Adam Fuller HND
Jeremy MacLean
Sharon McHarg
Peter Rauxloh BA, MSc, PhD
Ash Rennie BSc, MA
Joanne Thomas
Marianne Treble BA
Gary Warr

BIBLIOGRAPHY

- N Bateman, 'The early 11th to mid 12th century graveyard at Guildhall, City of London', in G de Boe and F Verhaeghe (eds), *Death and burial in medieval Europe: papers of the medieval Europe Brugge 1997 conference*, 2 (1997), 115–20
- N Bateman, 'The London amphitheatre: excavations 1987–1996', *Britannia* XXVIII (1997), 51–85
- M Beech and A Pipe, 'The animal bones' in D Kennet, 'Kush: a Sasanian and Islamic-period archaeological period tell in Ras al-Khaimah (U.A.E.)', *Arabian archaeology and epigraphy*, 8 (1997), 284–302
- I Betts, E Black and J Gower, 'A corpus of relief-patterned tiles in Roman Britain', *Journal of Roman Pottery Studies*, 7 (1994)
- D Bird, G Crocker, C Maloney and D Saich, 'Archaeology in Surrey 1992–3', *Surrey Archaeological Collections*, 83 (1996), 187–228
- L Blackmore, 'From beach to burh: new clues to entity and identity in 7th to 9th century London', in G de Boe and F Verhaeghe (eds), *Urbanism in medieval Europe: papers of the medieval Europe Brugge 1997 conference*, 1 (1997), 123–32
- S Blatherwick, 'The archaeological evaluation of the Globe playhouse' in J R Mulryne and M Shewring (eds), *Shakespeare's Globe Rebuilt* (1997), 66–80
- D Bluer, 'The medieval German towns and the Hanseatic League', *Medieval Life*, 7 (1997), 14–18
- D Bowsher, 'An evaluation of the Roman road at Brockley Hill, Middlesex', *Transactions of the London and Middlesex Archaeology Society*, 46 (1995), 45–58
- J Bowsher, *Biblical Sites* (1996)
- M Burch, J Hill, S Jones, D Lees, P Rowsome and P Treveil, 'Number 1 Poultry — the main excavation: Roman sequence', *London Archaeologist*, 8 (1997), 127–36
- S Chew, 'An eighteenth-century pump filter from Somerset House', *Industrial Archaeology News*, 10 (1997), 10
- J Conheaney, 'Human bones' in R P J Jackson and T W Potter, *Excavations at Stonea Cambridgeshire 1980–85*, (1996), 583–7
- R Cowie, 'The priory and manor of Hounslow: excavations at Hounslow Police station, Montague Road, Hounslow', *Transactions of the London and Middlesex Archaeology Society*, 46 (1995), 125–36
- R Cowie and D Eastmond, 'An archaeological survey of the foreshore in the Borough of Richmond Upon Thames: part 1, time and tide', *London Archaeologist*, 8 (1997), 87–94
- R Cowie and D Eastmond, 'An archaeological survey of the foreshore in the Borough of Richmond Upon Thames: part 2, down by the riverside', *London Archaeologist*, 8 (1997), 115–21
- A Davis, 'The plant remains' in P Mills, 'Excavations at the dorter undercroft, Westminster Abbey', *Transactions of the London and Middlesex Archaeology Society*, 46 (1995), 113–20
- G Egan, 'Children's pastimes in past times: finds of medieval toys in the British Isles', in G de Boe and F Verhaeghe (eds), *Material culture in medieval Europe: papers from the medieval Europe 1997 Bruges conference*, 7 (1997), 413–21
- G Egan with H Forsyth, 'Wound wire and silver gilt' in D Gaimster and P Stamper (eds), *The age of transition, the archaeology of English culture 1400–1600*, Society of Medieval Archaeology Monograph 15/Oxbow Monograph 98 1997, 217–38
- J Giorgi, 'Diet in late medieval and early modern London: the archaeobotanical evidence' in D Gaimster and P Stamper (eds), *The age of transition, the archaeology of English culture 1400 to 1600*, Society of Medieval Archaeology Monograph 15/Oxbow Monograph 98 1997, 197–213
- J Giorgi, 'The charred plant remains' in T W Potter and A C King, *Excavations at the Mola di Monte Gelato: a Roman and medieval settlement in south Etruria*, Archaeological Monographs of the British School at Rome No 11 (1997), 407–11

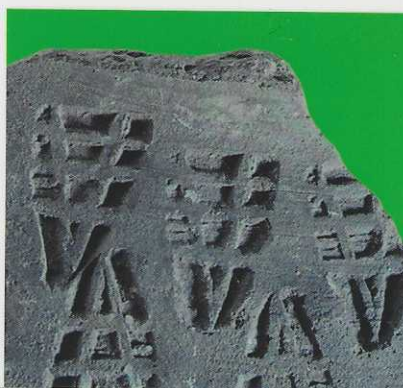
- D Goodburn, 'London's early medieval timber building. Little known traditions of construction', in G de Boe and F Verhaeghe (eds), *Material culture in medieval Europe: papers from the medieval Europe 1997 Bruges conference*, 7 (1997), 249–57
- D Goodburn with a contribution by C Thomas, 'Reused medieval ship planks from Westminster, England, possibly derived from a vessel built in the cog style', *International Journal of Nautical Archaeology*, 26.1 (1997), 26–38
- D Goodburn, 'The production of timber for buildings in England before and after circa 1180 AD', in G de Boe and F Verhaeghe (eds), *Material culture in medieval Europe: papers from the medieval Europe 1997 Bruges conference*, 7 (1997), 155–61
- P Greenwood, C Maloney and T Gostick, 'London fieldwork and publication round-up 1996', *London Archaeologist*, 8 (1997), supplement 2, 31–66
- G Jackson, C Maloney and D Saich, 'Archaeology in Surrey 1994–5', *Surrey Archaeological Collections*, 84 (1997), 219–43
- P Mills, 'Excavations at the dorter undercroft, Westminster Abbey', *Transactions of the London and Middlesex Archaeological Society*, 46 (1995), 69–124 (with contributions by I Betts, L Blackmore, N Crowley, A David, R Goffin, A Pipe, M Samuel and H Swain)
- G Porter, 'An early medieval settlement at Guildhall, City of London', in G de Boe and F Verhaeghe (eds), *Urbanism in medieval Europe: papers of the medieval Europe Brugge 1997 conference*, 1 (1997), 147–52
- G Potter, 'Eagle House, Wimbledon Village, London: The excavation of an early 17th century garden', in G de Boe and F Verhaeghe (eds), *Art and symbolism in medieval Europe: papers of the medieval Europe Brugge 1997 conference*, 5 (1997), 45–56
- J Schofield, 'Archaeology in London' in M Glaser (ed), *Lübecker Kolloquium zur Stadtarchäologie im Hanseraum I: Aufgaben und Perspektiven* (1997), 19–30
- J Schofield, 'Medieval parish churches in the City of London: the archaeological evidence', in K L French, G G Gibbs and B A Kumin (eds), *The parish in English parish life, 1400–1600* (1997), 35–55
- J Schofield, 'Urban housing in England 1400–1600', in D Gaimster and P Stamper (eds), *The age of transition: the archaeology of English culture 1400–1600* (Oxbow Monograph 98) (1997), 127–44
- J Schofield with S Bradley, 'Saxon and medieval City of London', in S Bradley and N Pevsner, *London 1: The City of London* (Buildings of England series), 43–57
- J Schofield and D Malt (eds), *Annual Review for 1996* (1997)
- H Swain, 'Finding our way?', *Institute of Field Archaeologists Yearbook and Directory of Members* (1997), 31–2
- H Swain, 'Archaeological archive transfer in England, theory and practice', *The Museum Archaeologist*, 22 (1997), 122–44
- H Swain, 'The national survey of archaeological archives: an interim statement', *Museum Archaeologists News*, 25 Autumn (1997), 1–3
- H Swain, 'A survey of archaeology in Surrey museums', *Surrey Archaeological Collections*, 84 (1997), 246–9
- R Symonds, 'Early Romano-British fine wares', *Rei Cretariae Romanae Fautorum, Acta* 35 (1997), 225–31
- C Thomas, B Sloane and C Phillpotts, 'Excavations at The Priory and Hospital of St Mary, Spital, London', *MoLAS Monograph 1* (1997)
- R Tomber, 'The pottery', *The Roman imperial porphyry quarries, Gebel Dokân, Egypt: interim report*, (1997), 16–19
- B Watson, 'The City of London churches, their history and future', *IFA Buildings Special Interest Group Newsletter*, 12 (1997), 1–3
- B Watson, 'Old London Bridge in Surrey today', *Surrey Archaeological Society Bulletin*, 315 (1997), 7–9
- B Watson with T Dyson, 'London Bridge is broken down', in G de Boe and F Verhaeghe (eds), *Urbanism in medieval Europe: papers of the medieval Europe Brugge 1997 conference*, 1 (1997), 311–27
- B Watson, R Bartkowiak and T Dyson, 'Old London Bridge in Kent today', *Dartford Historical and Antiquarian Society Newsletter* 34 (1997), 13–17
- A Woodger, 'The archaeological reinvestigation of Bolsa House (76–80 Cheapside) in the City of London', *London Archaeologist*, 8 (1997), 143–6

MOLAS SERVICES and who to contact

archaeogeophysics	Bill McCann
archaeological risk assessment	Taryn Nixon
building appraisal and recording	Sophie Jackson
consultancy	Taryn Nixon
desk-based assessments and field evaluations	Robin Densem
environmental impact assessment	Taryn Nixon
excavation	Robin Densem
finds research	Jane Sidell
forensic analysis	Jane Sidell
geoarchaeology and environmental archaeology	Jane Sidell
preservation in situ	Taryn Nixon
survey, GIS and database management	Peter Rauxloh

architectural photography	Andy Chopping
design and illustration	Tracy Wellman
documentary research	Robin Densem
editing	John Schofield
exhibitions	Tracy Wellman
location and studio photography	Andy Chopping
photo library	Andy Chopping
publications	Tracy Wellman





**Museum of London
Archaeology Service**

Walker House
87 Queen Victoria Street
London EC4V 4AB

telephone 0171 410 2200
facsimile 0171 410 2201
email molas@molas.org.uk
web www.molas.org.uk

**museum of
LONDON**
ARCHAEOLOGY
SERVICE

