

MOLAS 2002

annual review for 2001

MUSEUM OF LONDON

Archaeology Service

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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 ...’

Museum of London Act 1986

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foreword

MoLAS has had another fine year, making a major contribution to the development process in London, to British archaeology and to the Museum of London's mission to inspire a passion for the capital city. Despite warnings of a global slow down and fears for the property market, the volume of archaeological work undertaken by the Museum was higher than anytime in the last five years. On Gresham Street alone, in the centre of the financial city, there were two enormous sites, each of substantial archaeological importance. Blossom's Inn, which MoLAS excavated as a joint venture with AOC Archaeology, resulted in some of the most remarkable Roman discoveries made in London in the last decade. The discovery of a part of Londinium's water supply system will be the subject of a major Channel 4 documentary in 2002.

I will be leaving the Museum of London in 2002 to take up the position of Chief Executive at English Heritage and I want to take the opportunity to thank and to congratulate the Museum's archaeological team, particularly Taryn Nixon, Director of Archaeological Services, but also of course all the expert and dedicated staff that make MoLAS London's premier archaeological unit.

Simon Thurley

Director, Museum of London



View of work in progress on the masonry foundations of a Roman townhouse found beneath Mumford Court at Blossom's Inn

introduction

For the last few years MoLAS has been working towards two key aims: to provide good value archaeological services to its property developer clients and, through the quality and immediacy of our work, to demonstrate the educational, social and even economic potential of London's archaeology. This has required a very focused approach blending commercial and public interests: servicing the demands of property professionals in a world of fast-paced construction programmes while designing archaeological projects that also return something of value to the public, to the archives and to the bookshelves.

In 2001 these two aims came together more than ever before. It was a year of remarkable discoveries, especially in London, where important aspects of the city's development must now be reconsidered in the light of new evidence. It was also a year when clients increasingly sought benefits from their archaeological commissions beyond the usual boundaries of site work and planning conditions.

Among the highlights of 2001 is the discovery at **Blossom's Inn, 20–30 Gresham Street, EC2** (Land Securities PLC), of early Roman wells – which are revolutionising our understanding of Londinium's public water supply – and of an extremely rare, 13th-century Jewish ritual bath, or *mikveh*, at the same site. The excavation also uncovered a life-sized forearm from a 1st-century AD cast bronze statue which was immediately put on display at the Museum of London, along with parts of the waterwheel mechanism recovered from the Roman wells. Land Securities also generously sponsored 'The dig', an interactive exhibition at the Museum where children could excavate a simulated archaeological sequence.

Nearby, at **10 Gresham Street, EC2** (the Standard Life Assurance Company), the discovery of a cluster of Romano-British circular buildings on the edge of the 1st-century Roman town may ultimately prove to be the find of the year. A well-preserved 2nd-century AD building with a fine mosaic was the subject of television and press reports.

Perhaps equally important is the excavation of an early Saxon settlement at **Hammersmith Embankment, Winslow Road, W6** (Hammersmith Embankment Ltd). Another noteworthy project continues at the site of a major housing and commercial development at **Hatfield Aerodrome, Hertfordshire** (Bovis Homes Ltd (Central Region), Arlington Development Management Ltd, Baynham Meikle Partnership Ltd, Carillion Building Ltd and Warings Construction Group Ltd), where prehistoric, medieval and later features were recorded across a very large area.

Excavation work continued at Spitalfields in 2001. Spitalfields Development Group published an impressive book about this remarkable development project and the efforts being made to retain a human scale within it. The community and education benefits that archaeology has brought to the project must stand out as one of the biggest achievements in London archaeology over the last few years.

The highlights of 2001 include other tangible results, the most obvious being the publication of five major books and over 20 shorter papers and articles. Of equal value are the archaeological archives resulting from excavation and analysis work, a rich source for the development of future research. These archives are now being deposited in the Museum's newly opened London Archaeological



Sir Stuart Lipton, Chairman of CABI, the Commission for Architecture and the Built Environment, with Taryn Nixon at the MoLAS reception in June 2001. Sir Stuart's speech on archaeology and development recalled his own involvement in the pioneering days of developer funding, and highlighted the success today of archaeological priorities being integrated with development and good design

Archive and Research Centre (the LAARC). The preparation of archives and their deposition is a priority at MoLAS, and another example of the public benefit of commercially funded work on London archaeology.

In June 2001 we moved into our new, purpose-built premises at 46 Eagle Wharf Road, a permanent home overlooking the Regent's Canal. Mortimer Wheeler House also holds the LAARC, which opened its doors to the public in February 2002, and the finds and environmental experts of Specialist Services.

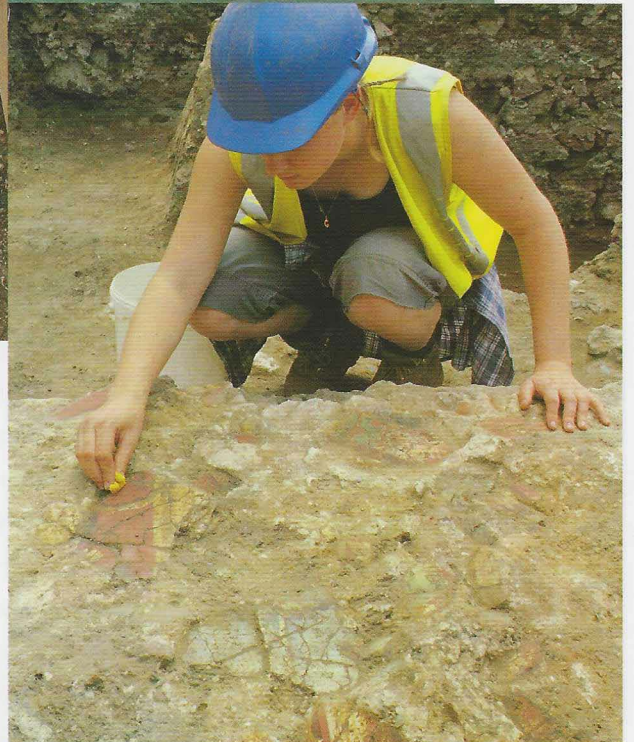
In **MoLAS 2002** we have chosen to review our work from a different perspective than in the past, categorising archaeological projects according to the type of property development involved. As property professionals and archaeologists well know, most archaeological excavation today takes place as a consequence of new development. The number of archaeological projects related to Central London office development remained high in 2001, a result of the continued buoyancy of the commercial property market at the start of the new millennium, despite warnings of a downturn. The year also saw an increase in the number of significant projects stemming from housing, infrastructure and retail schemes. The number of standing building surveys also grew and, as new construction work slowed late in the year, there was an increase in the number of desk-based archaeological and environmental assessments.

Archaeology today is a complex, interdisciplinary subject, weaving a narrative from a sometimes fragmentary and disparate record. The Museum of London's archaeological services employ specialists in over 25 different fields, and many of MoLAS's projects require an

input from each of them. Our clients often ask us how we put together the records and archives we create, what their interpretation involves and how this reveals the stories contained within them. We have taken the opportunity, therefore, to include more information in **MoLAS 2002** on the specialisms and capabilities within the organisation, describing how they help to deliver successful results on site and through post-excavation research.

Working mainly in south-eastern England, especially in Greater London, Berkshire, Essex, Gloucestershire, Hertfordshire, Kent and West Sussex, MoLAS employed 186 people during the year, working closely with a team of 35 at Specialist Services and many other contributors from universities and other organisations. At times during the year there were over 100 archaeologists working on site. It is very difficult to think of a single MoLAS project that has not been a collaborative, team effort. The hard work and commitment of the team in MoLAS has meant that we have had another successful year, and enormous thanks are due to them, as well as to our clients, colleagues and supporters.

Taryn Nixon
Director of Archaeological Services



CLOCKWISE FROM TOP LEFT Palaeolithic handaxe from the Hatfield Aerodrome site / One of the Roman burials from the extramural cemetery along Bishopsgate, being excavated at Spitalfields / The A2/M2 Medway Valley borehole survey used a sub-contracted drilling team, shown here taking geoarchaeological core samples on the Common Marsh / Archaeologist Catherine Edwards uncovering collapsed and discarded Roman painted wall plaster at Blossom's Inn / A beautifully preserved post-medieval ivory comb from Blossom's Inn / Recording the remains of the wrought iron bucket chain found at the base of the 2nd-century 'eastern' well at Blossom's Inn



evaluation and assessment

Accurate archaeological evaluation is of central importance to planning authorities and clients involved in development proposals, helping them to identify appropriate arrangements for archaeological work, preservation or mitigation. The sites described here are just a few of the many MoLAS evaluations completed in 2001. They represent a variety of sites requiring the use of different investigative techniques, including geoarchaeological evaluation of borehole cores, traditional testpitting, resistivity surveys, walk-over monitoring and standing building survey.

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Geoarchaeological investigation is proving to be increasingly useful in MoLAS evaluation work, and has been successfully deployed at several recent projects along the Thames. At **1-31 Palm Avenue, Sidcup** (Bovis Homes South East Ltd), core samples from augering and boreholes identified Pleistocene deposits from an early floodplain of the River Cray, preserved as a terrace on the valley side when the river downcut towards the end of the last Ice Age. Sediments of soil, hillwash and lake mud were preserved within the Pleistocene deposits. Radiocarbon dating of peat showed that it accumulated between about 7500 BC and 300 BC, when the site was relatively dry. Burnt flints in the peat resulted from deliberate burning of the woodland in the Mesolithic period to promote the growth of hazel, which pollen analysis shows dominated at the time. Elm, lime and oak woodland developed across the site later, but this landscape was gradually buried by silt as a result of seasonal flooding. Local agricultural activity intensified during the Roman period, leading to increased erosion and sediment deposition which raised the valley floor to the level of the site on the valley side, bringing it back into the 'floodplain' of the Cray.

At **Project Alice, Erith** (CgMs Ltd for Dixons), geoarchaeological evaluation uncovered evidence of Late Mesolithic tidal mudflats which accumulated between about 4500 BC and 3500 BC, when the site would have been difficult to cross except by boat at high tide. The raised flats were exploited by groups of foragers, and during the Neolithic period the area was covered by dense woodland of oak, yew and alder. Peat deposits at the site contain fallen trees similar to those exposed on the present Erith foreshore at low tide. By the Bronze Age the woodland had become more open, with large expanses of sedge fen, and crossed by timber trackways.

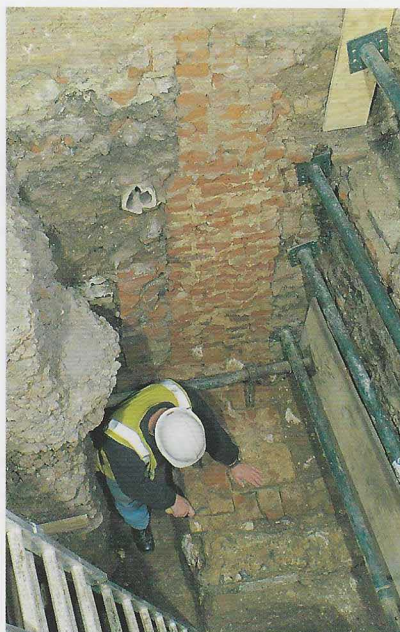
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Evaluation work at **100 Cannon Street, EC4** (the Property Merchant Group Ltd), included the western half of an important Scheduled Ancient Monument, a group of masonry buildings that some have interpreted as the Roman 'Governor's palace'. Testpits, trenches and a borehole were used to examine the uppermost archaeological layers, which were generally left *in situ*. Roman strata did not include the sort of substantial masonry structures that might be associated with the 'Governor's palace'. Most of the Roman sequence had been destroyed by later Roman and medieval pits, but there was no sign of Roman masonry, casting further doubt on the original interpretation.

Evaluation trenches and boreholes at **21 Lime Street, EC3** (Churchill Securities Ltd), revealed a sequence of Roman strata over 3m deep on the site of the eastern wing of the Roman forum. The core sampling clearly indicated the presence of gravel surfaces predating Boudica's revolt in AD 60, when the early town was destroyed. Floors were associated with rebuilding after the revolt. Later deposits included construction debris from the second forum, built in the early



Senior Archaeologist Kevin Appleton and
Archaeologist Simon Stevens recording engineers'
trial pits in St Botolph's Hall at 35 Spital Square



35 Spital Square
 FAR LEFT View of St Botolph's Hall, where MoLAS archaeologists excavated six trial pits required during investigation of its structural stability
 LEFT Investigating the brick foundations of the Earl of Bolingbroke's 17th-century mansion, uncovered during the investigations

2nd century, and structural remains of the eastern wing of the forum itself. The results of the evaluation provided the client and the City of London Planning Department with crucial data, informing decisions on how to redevelop an important site whilst incorporating appropriate amounts of archaeological excavation and preservation *in situ*.

RICHMOND Geophysical and standing building surveys in the gardens of **Asgill House, Old Palace Yard, TW9**, and nearby properties (Richmond Archaeological Society) were used to refine a recently published plan of Richmond Palace. A resistivity survey agreed with the conjectured alignments of the western and northern arms of the palace moat beneath the gardens of Asgill House and Trumpeters Inn. The survey also identified two linear features, possibly walls, at right angles to the southern side of the northern moat. The work also showed that the surviving length of the southern wall of the Great Orchard was shorter than shown on the recent plan.

SOUTHWARK Sometimes evaluation work is done for reasons entirely different from the needs of developers. At **Gatehouse Square, SE1**, and four other sites in Southwark MoLAS carried out an auger survey for Stone Eye Productions, collecting information for a television production which will be based on the excavation of private gardens. The evaluation found evidence of well-preserved archaeological deposits dating from the prehistoric to Victorian periods, suggesting that the prospects for an interesting television series are good.

TOWER HAMLETS At **35 Spital Square, E1** (Hammerson UK Properties PLC), evaluation within St Botolph's Hall and the Curate's House was necessary both to establish the extent of any archaeological remains and to record the nature and depth of existing foundations. The investigation found high levels of archaeological preservation, with the modern foundations resting on the 18th-century land surface. Although the Curate's House had been basemented, Roman deposits, including a burial, and medieval cut features survived. A post-Roman homogenous soil was associated with medieval cultivation. The site is within the precinct of the medieval hospital of St Mary Spital, and the eastern wall of the southern infirmary was located, along with two medieval tenements. After the Dissolution the site passed to Steven Vaughan and was known as Spittle House, rebuilt in the 17th century as Bolingbroke House, the London residence of the earls of Bolingbroke. Walls, floors and a cesspit for a garderobe survived. Domestic refuse thrown into the cesspit included tin-glazed drug jars, Chinese porcelain, wine glasses, 'onion' bottles, and a large collection of clay pipes, dating to the close of the 17th century. The house was rebuilt again around 1700 and the present hall was built in 1895.

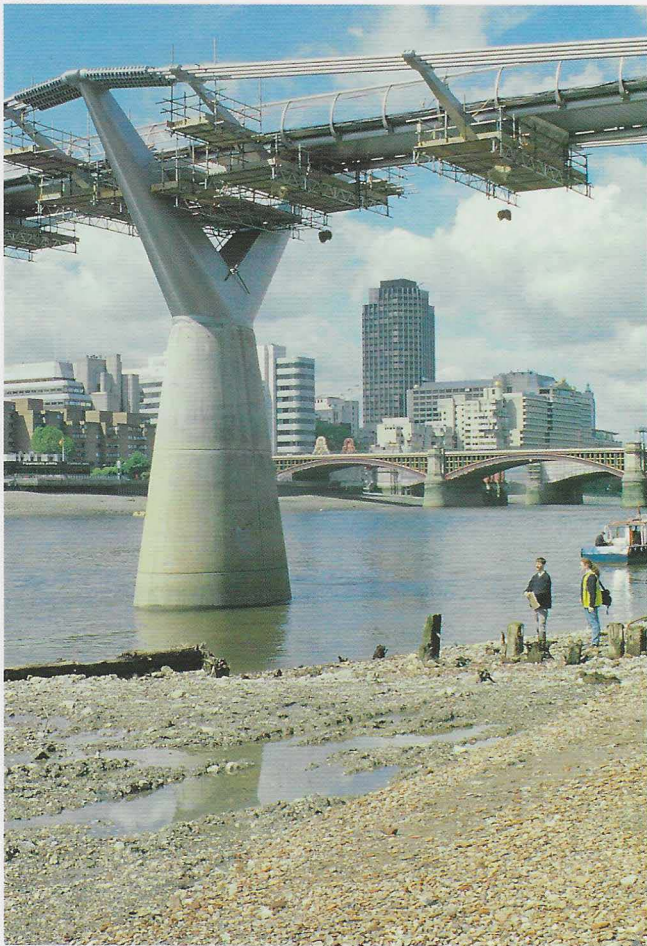
To the south and east, evaluation work on the site of the Sedgwick Centre phase 2 at **27-29 Whitechapel High Street, E1** (Tishman Speyer Properties UK Ltd), found structural remains from the early post-medieval street frontage just outside Aldgate.

Of course, evaluations that establish the absence of suspected archaeological remains are just as important in providing accurate information for redevelopment as those which encounter deposits.

At **14-20 Alie Street, E1** (City North Group PLC), evaluation of a

car park site found no evidence of the Roman cemetery known to lie to the west. Only a few post-medieval archaeological features were present, and included quarry pits cut into pastureland.

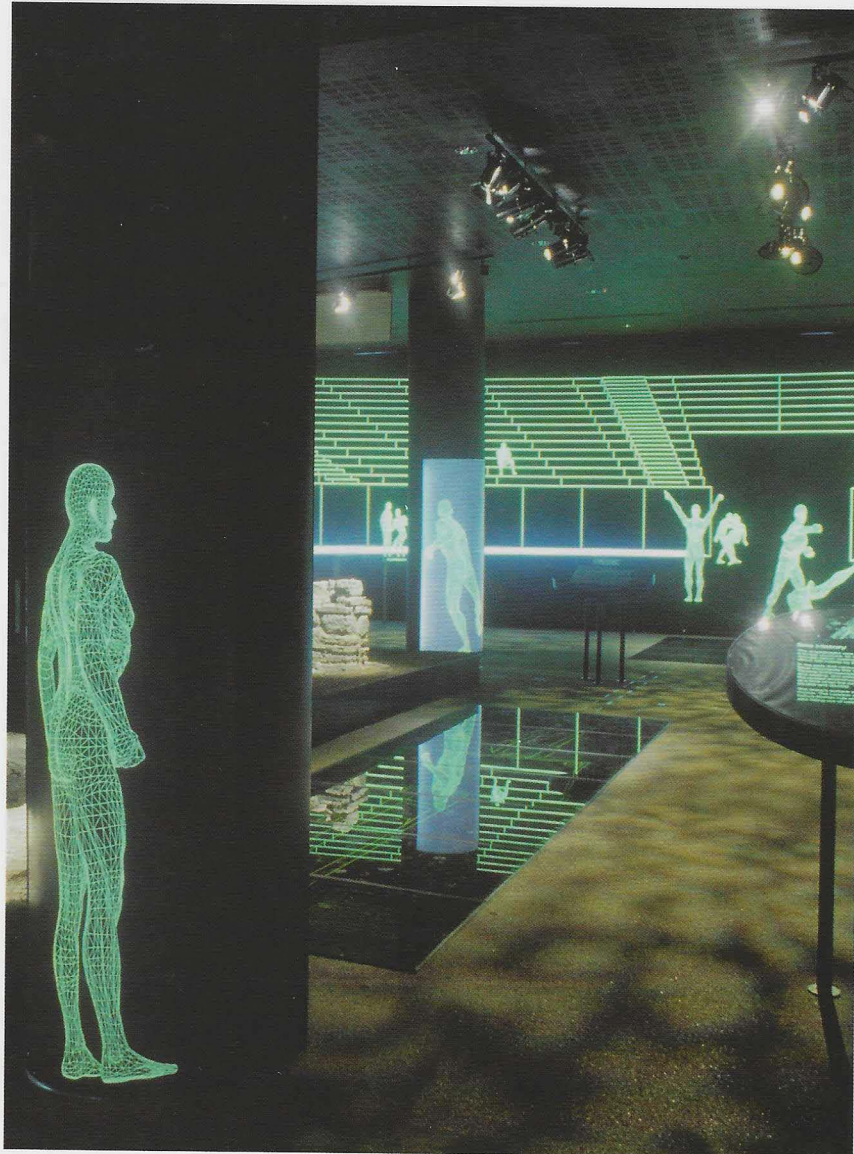
The **London Millennium Bridge foreshore survey** (London Borough of Southwark) monitored the impact of the construction of London's first new bridge in over a century. Surveys took place on both banks of the Thames, upstream and downstream of the new crossing, and included collection of contour data and monthly walk-over monitoring. Earlier survey of the southern bank has resulted in spectacular discoveries, including Neolithic alluvial deposits with evidence of an alder stand, Iron-Age erosion channels, and post-medieval barge-beds and revetments. The City bank survey located structures relating to the intense use of the foreshore during the past two centuries. Assessment shows that the bridge construction work, particularly the establishment of temporary stone 'anti-scour' mats and the demolition of the Bankside Power Station landing stage, is causing changes to erosion and deposition patterns along the foreshore.



London Millennium Bridge foreshore survey

ABOVE TOP View south from St Paul's across the newly completed Millennium Bridge, with Tate Modern in the background

ABOVE Recording post-medieval timber barge-beds at low tide on the northern side of the Thames



consultancy and management

dealing with archaeology: consultancy advice and the design and management of projects

Today, property industry professionals are asked to reconcile the need for new development with requirements to protect and record remains of the past. Experienced developers meet this challenge by incorporating archaeology into their early risk assessment procedures.

MoLAS Consulting is a separate arm of the Museum of London Archaeology Service, established in response to demand from the property world and providing authoritative advice to developers and their teams throughout the design, planning and construction process. Areas of expertise include buried archaeological remains as well as historic buildings, with the emphasis on smoothing the integration of archaeology with development. The consultancy covers several issues, as follows.

Due diligence: with archaeology now treated as one of a range of environmental issues affecting development projects, MoLAS Consulting contributes to feasibility studies, providing assessment of likely issues and costs. Confidential advice can be given before a site is acquired.

Framework agreements: MoLAS Consulting has several 'call-out contracts' with major organisations. These agreements give clients rapid access to strategic advice, whether for an entire property portfolio or individual site.

Risk appraisals: advice is aimed at identifying and managing risk effectively. Risk appraisal reports, tailored to meet the particular needs of the client, specify the issues facing a particular scheme with reference to national planning policy, local and unitary development plan policy and statute. Risk appraisals are frank, confidential reports prepared solely for the client, distinct from 'desk-based archaeological assessments' prepared for submission in support of planning applications.

Adding value: increasingly, developers are recognising the potential to use their archaeological sponsorship to derive real social and economic returns. MoLAS Consulting highlights the complementary value of the historic environment at the start of a project, so that opportunities to enhance a proposal can be realised. This is no longer simply a matter of short-term publicity, and involves consideration of the positive sense of place that the office workers, residents and neighbours of a development can feel.

Heritage management: consultancy advice is provided to clients in the heritage sector. Recent work has included site inspections at World Heritage Sites, both in the UK and overseas, the preparation of Management Plans and Conservation Plans, and the development of archaeological resource management tools and procedures.

Expert representation: MoLAS Consulting can supply expert knowledge to the developer throughout the design, planning and construction process. Experience has shown that integration with the professional team is a major factor in the accurate identification and control of direct and indirect costs. MoLAS Consulting also provides expert testimony at Public Inquiries.

Navigating the planning framework: finding a smooth route through the planning system, with its Planning Policy Guidance and Environmental Statement requirements, depends upon access to the right information at the right time. MoLAS Consulting aims to provide its clients with certainty in a field which revolves around discovery.

housing

London is now Europe's fastest growing major city. Both it and the south-east expect to see continued strong population growth and increasing housing needs over the next ten years. The office of the Mayor predicts that London's population will increase by up to 700,000 by 2016 (equivalent to the entire population of Frankfurt or Leeds), surpassing the eight million mark and approaching the previous population peak of 1939. Similar rates of population growth have been projected for the counties surrounding London. This overall growth, combined with smaller household size, means that there is a very strong demand for new and affordable housing as well as for the renewal of much of the existing housing stock.

The challenge is huge, requiring the careful balancing of economic and social needs against the environmental impact of development and the increased demands it will place on the region's infrastructure. Increasingly, developers are asked to ensure that their schemes reconcile the need to protect the historic environment with the need to renew for the future. MoLAS is increasingly involved in not only providing services to clients in the housing sector but in finding ways for developers to use the historic environment to the benefit of future residents and local communities. The examples below reflect the variety of projects now taking place, which include low-rise and high-rise, small and large infill schemes on underutilised brownfield land, and very large town developments on greenfield sites.

The western elevation of an 18th-century alcoved cellar of Harpsfield Hall at the Hatfield Aerodrome site

A very large development for Bovis Homes Ltd Central Region at **Hatfield Aerodrome** is just one part of the redevelopment of the former British Aerospace airfield. The Arlington/Baynham Mickle Partnership masterplan for an area on the western edge of Hatfield includes 1000 new homes, as well as a school, university accommodation and sports fields, offices, warehousing and large-scale infrastructure. Within the area of the residential development archaeological coverage has revealed extensive evidence of prehistoric and later occupation, including a very fine Palaeolithic handaxe.

Late Bronze Age activity included five parallel ditches. Two Bronze Age pits contained 'placed deposits' of stacked vessels. A separate area of the residential development provided good evidence of medieval occupation, much of it found during excavation of Harpsfield Hall Farm; pits and postholes dating to c 1170–1350 may represent the earliest phase of construction of the hall. Several phases relating to the post-medieval hall and its outbuildings were also recorded and show how it was modified and expanded between the 16th and 20th centuries. Two cellared rooms were particularly well built, with brick- and flint-faced walls and internal alcoves.





View of excavations on the site of Doulton's late 19th-century pottery works at Salamanca Street. Two pottery kilns can be seen at centre right, with a third in the bottom left of the picture



ABOVE LEFT Outbuildings at 40 Queen Street, Hitchin, where a standing building survey recorded the history of the 19th-century buildings and complemented excavation work

ABOVE Archaeologists Bridget Mackernan, Jody Morris and Neville Constantine recording late Saxon sunken buildings and 18th-century wells at 16 Fairfield Road, Beckenham

RIGHT As well as evidence for the royal 'Hobby stables', the excavation at Anchor Iron Wharf recovered high-status imported goods



At **40 Queen Street, Hitchin** (Lovell Partnerships Ltd), the earliest features were a series of burials thought to date from the early Saxon period and overlain by ploughmarks and garden soils. Plant bowls, steps and paths relate to the post-medieval use of the area as first a market garden and then a private garden. A standing building survey ran concurrently with the excavation, showing that two of the buildings dated to 1832, when the property was owned by a builders' merchant.

BROMLEY MoLAS excavations at **16 Fairfield Road, Beckenham, BR3** (G E Capital Corporation (Estates) Ltd), revealed previously unknown Saxo-Norman occupation, represented by three possible loom pits and a quarry pit. Pottery from the features was dated to c AD 900–1150. Three unusual ceramic discs, probably a variant type of loomweight, were recovered from the quarry. The site was abandoned early in the medieval period and not reoccupied until the late 17th century, when it was included in the gardens of houses fronting the High Street.

GREENWICH Evaluation work at **Anchor Iron Wharf, SE10**, for Berkeley Homes (City & East London) Ltd, identified a series of 16th- to 18th-century deposits and structures, the earliest associated with the 'Hobby stables' of 1532–3. Elsewhere in Greenwich, a watching brief at **Ruston Road, Woolwich, SE18** (Countryside Properties PLC), located the foundations of important Royal Dockyard buildings from the 19th century, including the engine house and lathe shop, the iron foundry, boiler makers, punching and pattern shop, and the shop for marine engines.

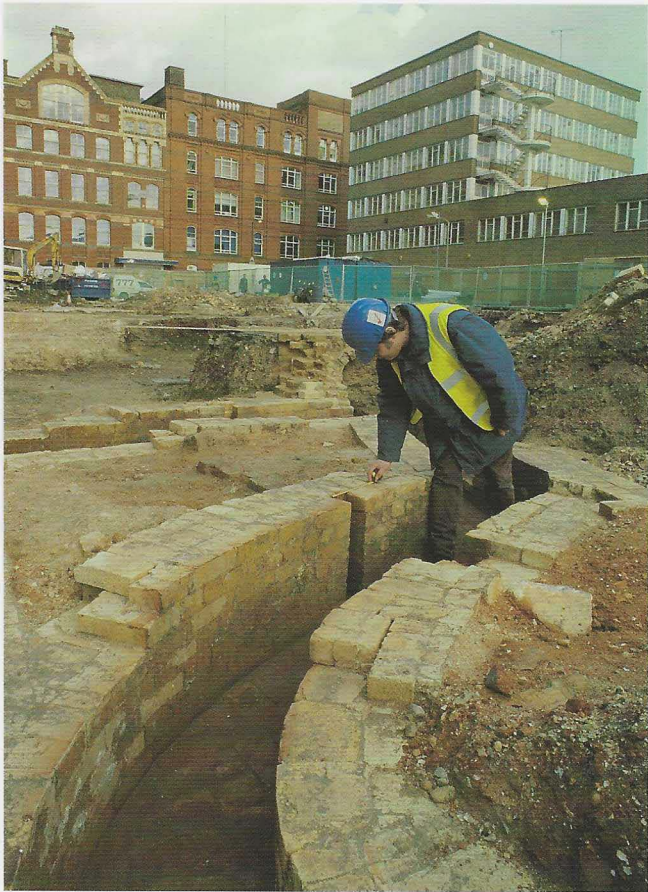
HACKNEY Work at **7–27 Drysdale Street, N1**, for City Loft Developments Ltd, established that the original land surface had been removed by 17th-century rubbish pits and large-scale quarrying for gravel and brickearth. Two parallel ditches were all that survived of the 16th-century landscape and may have been field boundaries in what was once a rural area. MoLAS work at **14–15 Hoxton Square, N1** (St George North London Ltd), revealed a similar sequence of 17th-century quarrying and landfill. A 17th- or 18th-century well and rubbish pits contained Chinese porcelain, tin-glazed wares, bottle glass and tobacco pipes.



Archaeologist Emily Burton examines part of the boiling house at the 18th- to 20th-century soap works at Ferry Lane in Brentford

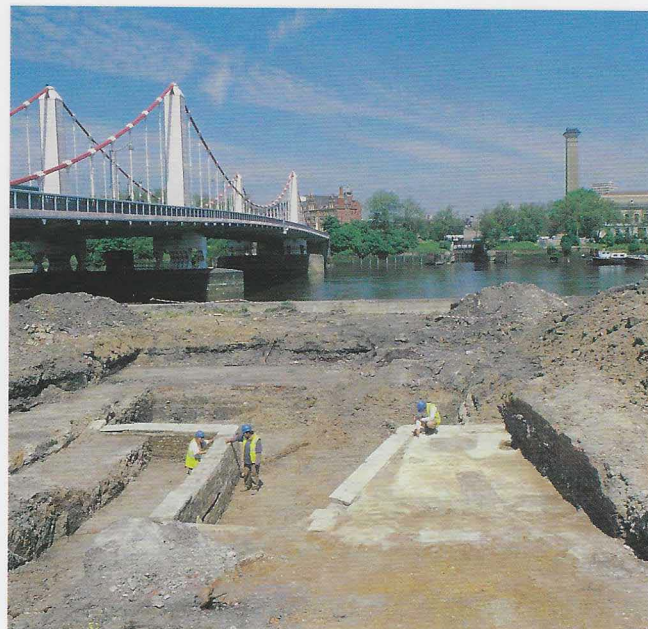
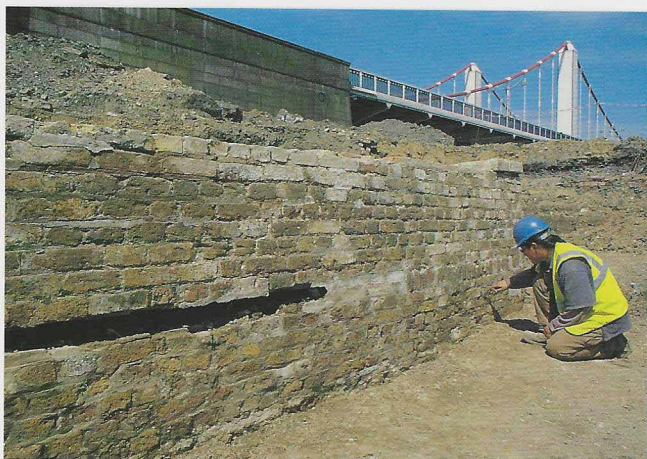
Excavations at **Ferry Lane, Brentford, TW8** (Rialto Homes PLC), continued from 2000. Brick foundations of the demolished 18th- to 20th-century soap works included at least three phases of building. A 1907 fire insurance map shows most of the factory layout and identifies the function of individual buildings. Continuing MoLAS excavations at **Magnolia Park, TW3**, for Wimpey Homes PLC, uncovered further evidence of the early 19th-century Isleworth pottery, first shown on the Warren survey of 1850. A large quarry pit filled in prior to 1865 contained pottery wasters, seconds and kiln furniture, showing that the pottery was making slipware bowls and redware flower pots. The closure of the pottery was followed by the construction of Thompson Terrace.

The completion of work at the churchyard of **2-4 Old Church Street, SW3** (F L Estates (Old Church Street) Ltd), at the end of 2000 revealed evidence for the use of the site before the establishment of the medieval parish church of All Saints and its cemetery (the latter reported on in *MoLAS 2001*). The earliest features were prehistoric pits, one containing a Mesolithic burin. A small number of Roman pits and ditches, and scattered finds of Roman tile and pottery, indicate the presence of a rural settlement in the area, and two parallel slots may represent a rectilinear timber building. Medieval activity was represented by residual pottery dated to c 1050-1150, a ditch and 24 pits containing 13th- and 14th-century pottery.



Salamanca Street
ABOVE TOP Senior Archaeologist Kieron Tyler recording one of the flues in the base of a pottery kiln. The red staining in the base of the flue is from metal oxide used in the pottery glazes. Doulton's former headquarters building can be seen in the background
ABOVE The base of one of Doulton's 19th-century pottery kilns, whose products included stoneware bottles

Excavations at **Salamanca Street, SE1**, for Berkeley Homes (City & East London) Ltd, began late in 2001. Ploughsoil was overlain by cesspits, postholes and quarry pits, all infilled in the late 18th century. Doulton's pot manufactory occupied the site from c 1890 to 1923, and five pottery kilns were recorded. All the kilns had circular bases and were of the downdraft type, with an exit flue



Chelsea Bridge Wharf

ABOVE LEFT Archaeologist Jen Lam recording the 18th-century river wall

ABOVE View of the 18th-century brick river wall, showing how it included an inlet, probably for the docking of a ferry which crossed the Thames at this point. Chelsea Bridge is on the left

leading out towards a chimney. The flues were backfilled with whole pots (mainly stoneware bottles), kiln shelves, kiln furniture, refractory bricks and other debris. The kiln shelves bore splashes of glaze and circular shadows left after the removal of the fired products. Flues and a chimney at the south of the site were identified as a colour preparation area. First-hand evidence for the manufacturing process at Doulton's Lambeth works is unique: no similar stoneware manufactory has been excavated in the UK.

S O U T H W A R K

At **1-2 Bowling Green Place, SE1** (Bellway Homes Ltd), geotechnical pits and boreholes showed that the area lay within a tidal river channel for much of its history. By the post-medieval period development had restricted the flow of water and the creek survived only as a ditch. During the 16th and 17th centuries animal bones, plant materials, leather, pottery and other rubbish was thrown into the ditch. In the 18th century a mixture of nightsoil and sooty debris from domestic and industrial fires was deliberately spread across the area to reclaim it for cultivation.

W A N D S W O R T H

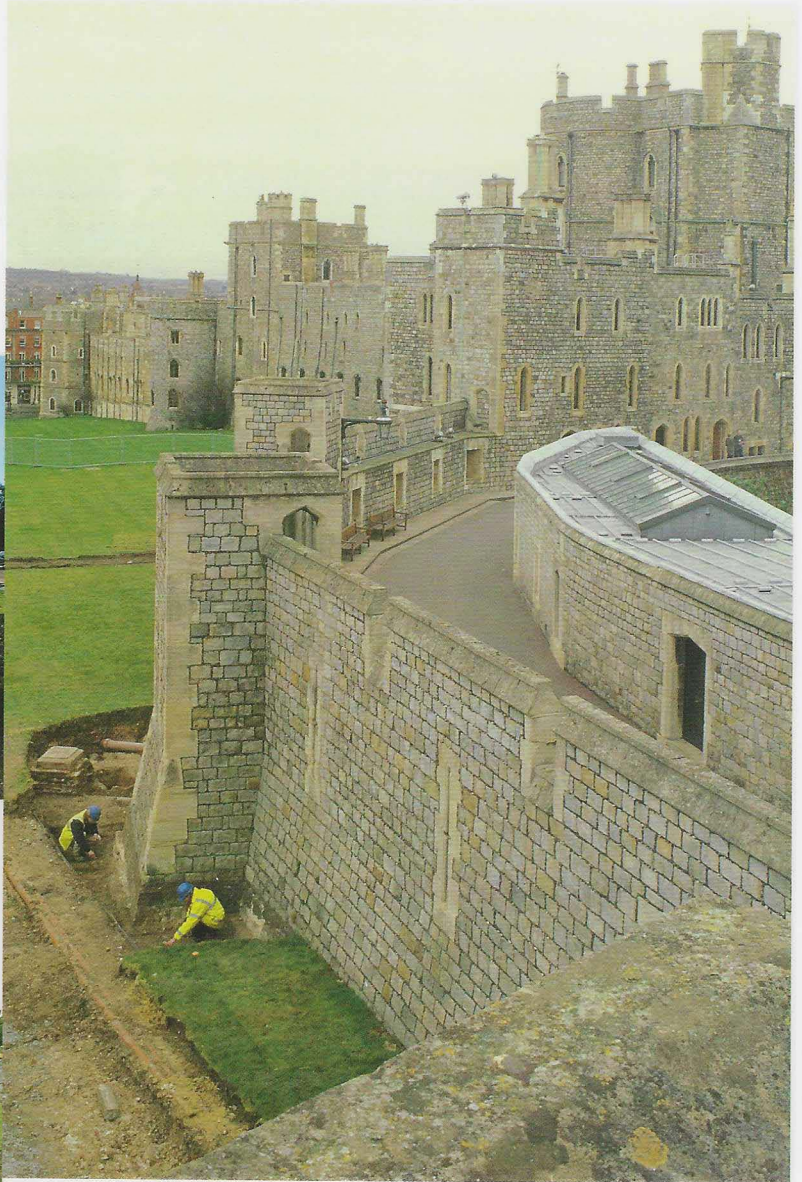
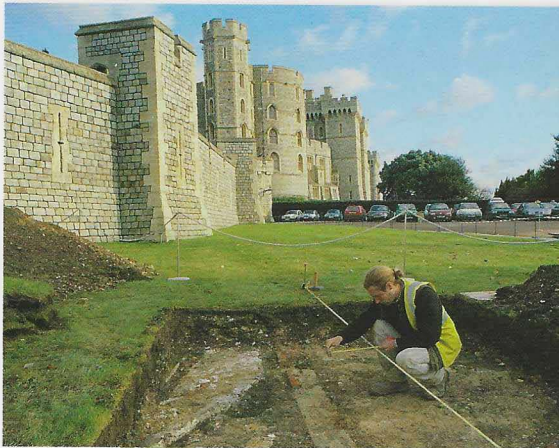
MoLAS excavations at **Chelsea Bridge Wharf, SW8**, for Berkeley Homes PLC, revealed two stretches of an 18th-century brick river wall separated by wooden steps. Post-and-plank revetments lay to the east of the river wall, as did the brick walls of the Red House tavern, a famous riverside inn demolished in 1850. Soil horizons and debris dating to the mid 19th century were related to the horticultural use of Battersea Fields and the establishment of railway yards.

K E N T

An excavation at **Boys Hall Road, Ashford** (Croudace Homes Ltd), found evidence of prehistoric activity, including several boundary or drainage ditches, postholes, pits and a worked flint scatter. The site was then abandoned and remained unoccupied until the medieval period. Field ditches and a timber-framed building containing several phases of hearths can be dated to the 12th and 13th centuries.

B E R K S H I R E

Houses come in all shapes and sizes, as do their gardens, and in November and December 2001 MoLAS carried out work at a particularly prestigious home address, **Windsor Castle** (Royal Household Property Section). Evaluation trenches in Castle Hill Garden in advance of the creation of the new Jubilee Gardens found 12th-century timber-framed buildings near the present curtain wall. Early medieval features beneath the lawn included the outer edge of the castle ditch. Sections of the middle ward curtain wall were also uncovered, and post-medieval buildings were found along the former Datchet Road. The foundations of an 18th-century building may be part of the 'Queen's lodge'. A good assemblage of medieval pottery came from the site, as well as finds relating to prehistoric and Roman occupation.



Windsor Castle

CLOCKWISE FROM TOP LEFT Archaeologist Neville Constantine recording the brick foundations of the 'Queen's lodge', dated 1720–1823; chalk remains of the 13th-century curtain wall of Windsor Castle can just be seen immediately to the left of the brickwork / General view of the excavations, with the Saxon tower and the lodgings of the military knights visible in the background / Archaeologist Catherine Drew records an 18th-century mortar spread outside the curtain wall



desk-based assessment and field evaluation

desk-based assessment and field evaluation

Twenty-eight years of archaeological experience have gone into the creation of MoLAS's unique predictive database, which allows rapid provision of site specific advice to clients and Local Planning Authorities through **desk-based archaeological assessments**. Assessment is normally the first formal step in the process of archaeological risk management for the planning process. It can be required by Local Planning Authorities implementing government policy as expressed in the Planning Policy Guidance notes on archaeology and historic buildings.

MoLAS assessments contain essential information on a site's historic and archaeological background, a summary of archaeological survival and consideration of the impact of the proposed development. MoLAS has produced over 500 desk-based assessments for sites throughout Britain.

MoLAS produces or contributes to Environmental Statements for those projects defined as requiring **environmental impact assessment** (EIA) under European Community Directives. In 2001 MoLAS's EIA work involved major infrastructure schemes for roads, railways and flood relief.

Where significant archaeological remains might be affected by development, Local Authorities may ask for desk-based assessment to be augmented by **evaluation** work in the field. Evaluation enables Local Authorities to determine planning permission but sometimes may not be possible before planning consent is granted, and in these cases MoLAS can arrange an evaluation programme to meet the requirements of a staged planning condition. MoLAS carries out around 100 field evaluations each year, using a variety of field evaluation techniques, according to site type and conditions as follows.

Auger and borehole surveys recover evidence of past landscapes, especially on estuarine, floodplain and marshy land where conventional archaeological excavation may not be as effective. Geoarchaeological techniques can establish the location and nature of buried sediments, providing evidence for climate and ecological change, and allowing the more widespread prediction of archaeological survival. The techniques are particularly useful where archaeology is deeply buried, wet or peaty, or contaminated. Augering can reduce the number of manually excavated evaluation trenches needed, and has considerably less archaeological impact than conventional excavation. The MoLAS geoarchaeology team works closely with environmental archaeologists in Specialist Services.

Contour and geophysical surveys can be used independently or in combination to prospect for and identify archaeological features over large areas.

Testpits and trial trenches are designed to establish the nature and extent of archaeological remains on a given site. The process is a predictive tool, with the configuration of trenches intended to yield maximum information from minimum intervention. MoLAS is often able to carry out trial work in parallel with the client's own geotechnical investigations, reducing overall costs, particularly on urban sites.

infrastructure, utilities and public services

As the economy and population of London and the south-east continues to grow the region's infrastructure will need to expand, and much of the work will have a significant archaeological impact. The projected work includes improvement to public and private transport of all kinds, provision of regional and local utilities, and investment in schools, hospitals and other public services. Growth will also result in increased gravel extraction, landfill and environmental work such as flood alleviation and coastal defences. Archaeological requirements on linear large-scale landscape projects bring their own very particular challenges, and MoLAS is playing a growing role in providing advice and archaeological coverage for infrastructure work on a wide range of projects.

HACKNEY, ISLINGTON AND TOWER HAMLETS
In 2001 MoLAS was commissioned by the Strategic Rail Authority to carry out an archaeological impact assessment for the proposed route of the **East London Line Northern Extension**, which runs for 4km through the western areas of the boroughs of Hackney and Tower Hamlets to the eastern side of Islington. The scheme utilises a former rail corridor, from Dalston Kingsland along the disused Broad Street Viaduct through Haggerston and Hoxton, to the site of the old Bishopsgate Goods Yard, and requires minimal demolition and land-take. Construction of a new viaduct across Holywell Lane and Shoreditch High Street, and new stations at Bishopsgate Goods Yard, Haggerston and Hoxton, will have an archaeological impact and a programme of archaeological field evaluation combined with landscape and geophysical survey is quantifying this. Important archaeological sites along the route include the 12th-century Holywell Priory and properties along Shoreditch High Street such as the Earl of Rutland's house, the Swan Inn tenement and the Bell Inn. A standing building survey at **196 Shoreditch High Street, EC2**

(Strategic Rail Authority and London Underground Ltd), represents part of a precautionary survey of buildings along the proposed route. The brick building was probably constructed early in the 18th century and is listed Grade 2.

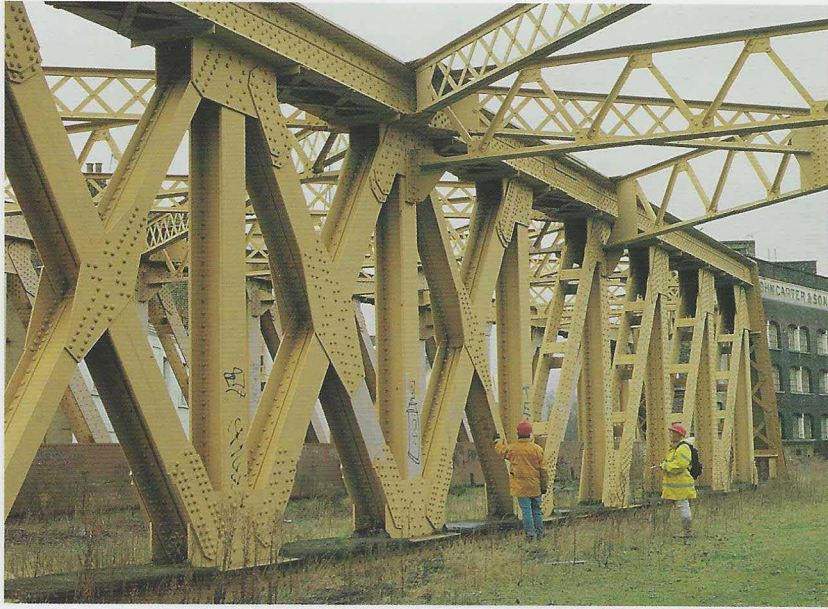
CR OYDON
Evaluation work at the **Thomas More School, Purley, CR8** (Thomas More School), uncovered cut features, including part of a penannular ditch 10–11m in diameter and a central burial pit. No dating evidence was recovered, and it is possible that the activity was part of either a Bronze Age barrow – a hoard of Bronze Age metalwork has been found in the vicinity – or an Anglo-Saxon burial structure; the site lies just to the east of a large Anglo-Saxon cemetery. Although unusually big, the ditch could represent the remains of an Anglo-Saxon burial tumulus.

GREENWICH
The installation of cable trenches in the vicinity of the **National Maritime Museum, SE10** (National Maritime Museum), uncovered surfaces dating from the Tudor period and walls associated with the rebuilding of the Greenwich tiltyard in 1635. Nineteenth-century remains included traces of the easternmost gate lodge and mooring chains from the training ship *Fame*.

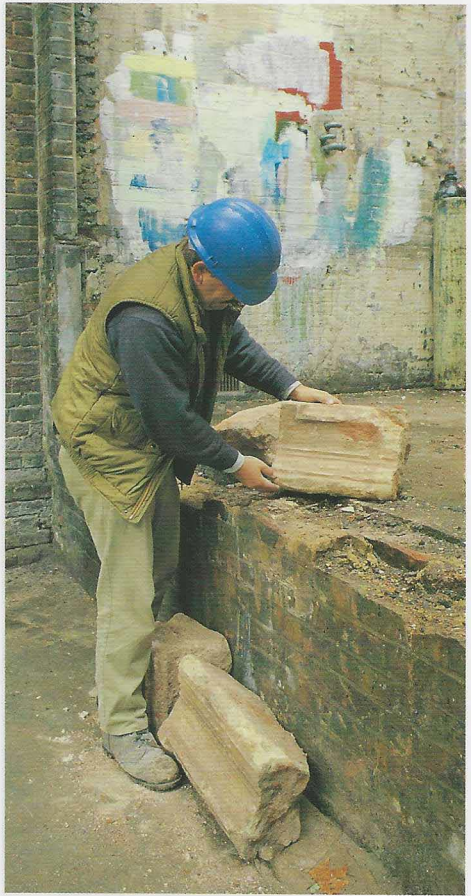
NOZING
The latest phase of work at **Home Farm, Harmondsworth (SITA)**, in advance of gravel extraction revealed a prehistoric trackway and an associated field system, including enclosures, boundary and drainage ditches, and livestock pens. Temporary shelters, cooking pits, and a waterhole or quarry pit were also recorded, and two cremations were found. A Roman enclosure and ditches and features from the Saxon, medieval and post-medieval periods indicate that the area was used for agriculture until recently.



View across the Medway between the new Channel Tunnel Rail Link bridge and construction of the A2/M2 crossing, as construction work progresses



Senior Archaeologists Andrew Westman and Portia Askew examining the Kingsland Road bridge on the disused Broad Street Viaduct, the proposed route for the East London Line Northern Extension



RIGHT Senior Archaeologist Tony Mackinder examines some of the moulded Caen stones, many from windows, recovered from deposits beneath King's College and relating to the demolition of Somerset House in 1775

LEWISHAM

At **Creekside, SE8**, a three-dimensional topographic survey of the revetment on the western side of Deptford Creek was undertaken for the Environment Agency, part of an ongoing series of surveys along the Thames and its tributaries.

SOUTHWARK

The installation of fibre optic cable services between **Bankside and New Cross** (24seven) involved MoLAS in the monitoring of cable trenches up to 2.2m deep, initially in stages between More London and Tower Bridge, SE1. The majority of deposits encountered dated to the 18th and 19th centuries, though some late medieval land reclamation was also recorded. MoLAS has signed a service level agreement with 24seven to provide archaeological advice and coverage of cable works throughout Greater London, contributing to more efficient working and less disruption to traffic and helping 24seven to meet their environmental obligations.

WESTMINSTER

Evaluation work at **King's College, WC2** (King's College London), in advance of the development of a major new archive facility, revealed late Saxon to medieval occupation. A layer of debris included moulded stones and decorated plasterwork from the demolition in 1775 of Somerset House, a Renaissance-style palace built in the mid 16th century. The southern part of the site was probably a garden during the 16th century, and evidence of lead water piping and a later brick drain were recorded.

At **St Mary's Hospital Paddington, W2** (St Mary's Hospital Paddington NHS Trust), MoLAS assessed 17 standing buildings, some listed Grade 2, as part of a scheme for the comprehensive redevelopment of the site as the Paddington Basin Health Campus. The oldest buildings were brick warehouses built in the mid 19th century next to the canal basin of 1801. The original hospital building opened in 1851 as a charity hospital for the poor, designed by Thomas Hopper on the model of a country house. A medical school built in 1854 included an anatomy museum and lecture theatre. To the west a large building constructed in 1875–7 by the Great Western Railway contained a parcels depot and multi-storey stables for 600 horses, converted to hospital use in the 1960s. A hospital building constructed in 1893–1904 housed the temporary laboratory where Alexander Fleming discovered penicillin in 1928. The site is also bisected by the world's first stretch of urban underground railway, dating from 1863.



St Mary's Hospital, Paddington

CLOCKWISE FROM TOP LEFT The elaborate and flamboyant street frontage of the Clarence Memorial Wing, purpose-built between 1893 and 1904, contrasts markedly with the white-tiled and utilitarian rear of the building / Detail showing the entrance to the Mint Wing, which was adapted for British Railway offices in the 1950s / View looking north along Praed Street / The Mint Wing was built in 1875-7 by the Great Western Railway Company as a parcels depot and multi-storey stable for 600 horses / A plaque on Imperial College Medical School, built between 1931 and 1933, commemorates the discovery of the first antibiotic, which took place at the Clarence Memorial Wing of St Mary's Hospital in 1928

Acting Project Manager
Stewart Hoad excavating
the truncated remains
of a 2nd-century Roman
burial found during
digging of service
trenches at RAF Fairford



Hatfield Aerodrome
ABOVE Conservators from Specialist
Services lifted the Middle Bronze
Age bucket urns found at the LM
Solutions site
LEFT Detail showing the *in situ*
Middle Bronze Age bucket urns.
No cremations were present and
only the bases of the urns survive

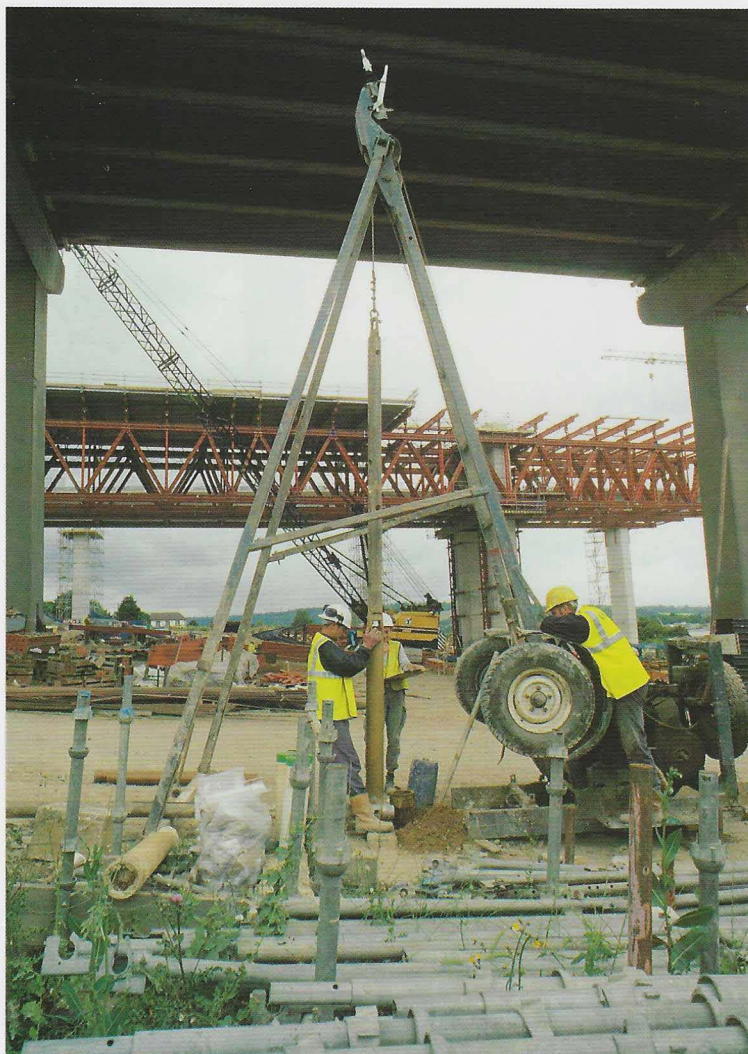
GLoucestershire Continuing excavations at **RAF Fairford** (Alfred McAlpine Construction Ltd), with the assistance of the Cotswold Archaeological Trust, uncovered scattered prehistoric features, including pits and gullies of Iron Age date. Two Roman inhumation burials lay in an area defined by an enclosure ditch, perhaps a small cemetery. Other findings included evidence of medieval ridge and furrow, boundary ditches and a substantial stone-lined field drain. Three stone-lined wells are also thought to be of medieval date and suggest nearby settlement.

HERTFORDSHIRE Work at the **Hatfield Aerodrome** site (Bovis Homes Ltd (Central Region), Arlington Development Management Ltd, Baynham Meikle Partnership Ltd, Carillion Building Ltd and Warings Construction Group Ltd), included not only housing but development of infrastructure and commercial property. A major distribution warehouse for LM Solutions had an impact on an archaeologically sensitive area. Surviving ancient ground surfaces included two Bronze Age bucket urns, interpreted as placed deposits and suggesting nearby settlement. A series of field systems or boundary ditches were also recorded. Work on general site infrastructure, on a warehouse for TK Maxx and on Project Time – new offices for One to One Telecommunications – uncovered more evidence of field systems. Work continues and includes construction of a strategic bus route, the southern balancing lake, and the expansion of the University of Hertfordshire campus.

KENT In 2001 MoLAS continued to work on aspects of the **A2/M2 widening scheme** (Costain Skanska Mowlem Joint Venture for the Highways Agency Ltd), including the Cobham to Junction 2 water main diversion for Southern Water PLC. Monitoring of the work between Colewood Reservoir and Knights Place revealed a buried prehistoric ploughsoil with evidence for plough or 'ard' marks and a relict stream. A series of stakeholes on the same surface may represent fences associated with arable farming in the Bronze Age. Evidence for medieval woodland management was represented by two firepits for the production of charcoal.

Other work included the Medway Valley borehole survey along the northern and southern sides of the River Medway near the new crossing. Here, below the marshes alongside the river, evidence for very early Neolithic forest clearance and cultivation was found, in the form of pollen, charred grain and eroded soils which had been washed onto the valley floor, where they had been buried and preserved by more than 6m of river mud.

ISTANBUL, TURKEY Looking much further afield, MoLAS was appointed in May 2001 by ICOMOS to carry out a monitoring mission to **Istanbul** and provide advice on the archaeological impact of construction of a new underground railway (metro) on what is a World Heritage Site. The line from Yenikapi north to Taksim includes a new viaduct crossing the strait of the Golden Horn and linking the historic peninsula – familiar to visitors to Hagia Sophia, the Topkapi palace and the covered bazaar – with the northern bank near the walls of the Venetian settlement at Galata.



A2/M2 widening scheme

CLOCKWISE FROM TOP LEFT The drilling rig is dwarfed by the new Medway crossing, as a MoLAS geoarchaeologist records gravels from an ancient river terrace not previously mapped by the British Geological Survey / Monolith tin sampling for high-resolution sedimentary analysis / The Medway at low tide, looking upstream towards the old A2/M2 bridge, with piers for the new road bridge and the CTRL bridge both visible in the background





geoarchaeology

geoarchaeology

Geoarchaeology sets out to understand and interpret both man-made and natural sediments, and relies heavily on the design and execution of augering, or borehole surveys where exposed sections are not available. Palaeoenvironmental and sedimentological specialists form part of the project team, ensuring that ancient sediments from almost any urban or rural situation can be tackled. MoLAS geoarchaeological projects often take place during archaeological evaluation or excavation, but can also be carried out entirely independently of other fieldwork.

During MoLAS excavations geoarchaeological techniques are used to supplement normal stratigraphic work, examining and clarifying depositional sequences and aiding environmental sampling strategies. Research aims addressed by geoarchaeological techniques on MoLAS sites have included the interpretation of 'dark earth' (a Roman and later soil horizon associated with post-abandonment processes and found at many sites in central London) and mapping past migrations of the Thames tidal head.

In 2001 MoLAS's geoarchaeological service has provided clients with direct benefits in several areas as follows.

Cost-effective evaluation has been achieved through the use of augering programmes on sites where a very high water table meant that conventional trenches would have required expensive shoring, pumping and water disposal. Augering has been used at other sites successfully to collect detailed information on the profile and extent of large, buried features where the impact of development would be limited and without the need for extensive invasive work.

Combined and flexible programmes of geotechnical and geoarchaeological work have taken place at several sites, with augering work done at the same time as contractors' borehole investigations and engineers' testpit surveys of existing foundations.

In-house skills mean that MoLAS has the experience required to provide advice and interpretation, sometimes in partnership with external specialists, on soil and sediment sequences and ecological assemblages from a wide range of Quaternary environments.

MoLAS Geoarchaeologist Jane Corcoran
draws a profile of deposits during coring
work for the Medway Valley borehole survey

office development

The year 2001 saw the continuation of several large archaeological projects and the start of many new ones at office development sites in Central London and elsewhere in the Greater London area, reflecting the continued buoyancy of the London commercial property market and the strength of London's role as a world financial and business centre.



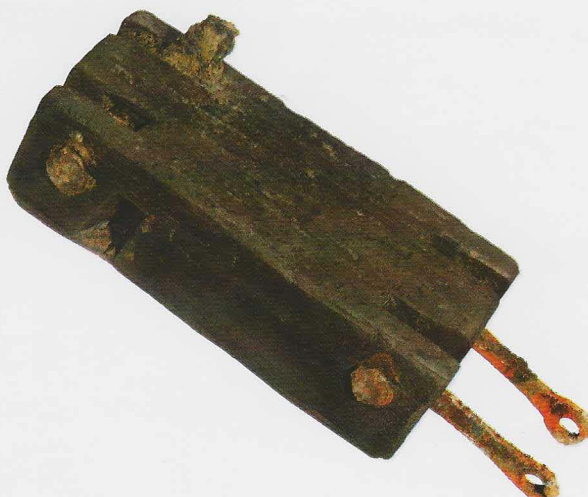
12 Arthur Street

ABOVE Senior Archaeologist David Sankey examining the remains of a mid to late Roman tessellated floor from one of several substantial Roman masonry buildings recorded at pile locations across the site

RIGHT Excavation of a Roman cistern produced several parts of a water-lifting device. Similar to those recently found at Blossom's Inn but even better preserved, the 'water-boxes' were linked together by the metal couplings shown, and formed part of a continuous 'bucket-chain' used to draw water from the depths of the rectangular, timber-lined cistern

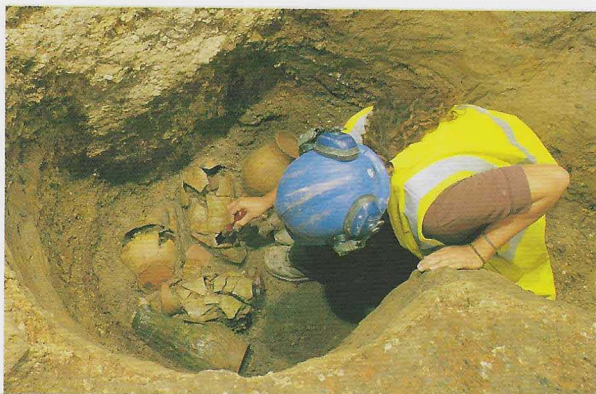
CITY At **12 Arthur Street, EC4** (Shieldpoint Ltd), redevelopment required implementation of an archaeological mitigation scheme involving excavation of 52 pile locations and an associated watching brief. Work revealed a complex sequence of Roman and medieval deposits up to 4m thick. Roman waterfronts on the northern bank of the Thames, wells and masonry buildings – some with hypocaust systems and mosaic floors – have been found. A particularly important discovery was of a wooden bucket-chain water-lifting device in a Roman well, similar to those found in the western well at Blossom's Inn. The Roman sequence was overlain by medieval reclamation, pitting and walls associated with masonry buildings. More work will take place in 2002.

Watching brief coverage in advance of construction of the Swiss Re tower at **Baltic House, St Mary Axe, EC3** (Skanska Construction UK Ltd on behalf of the Swiss Re Group), follows on from archaeological excavations in 1995–6 and recently published. The recent work revealed further evidence of Roman quarrying, an early Roman boundary ditch, late Roman occupation and medieval pitting.



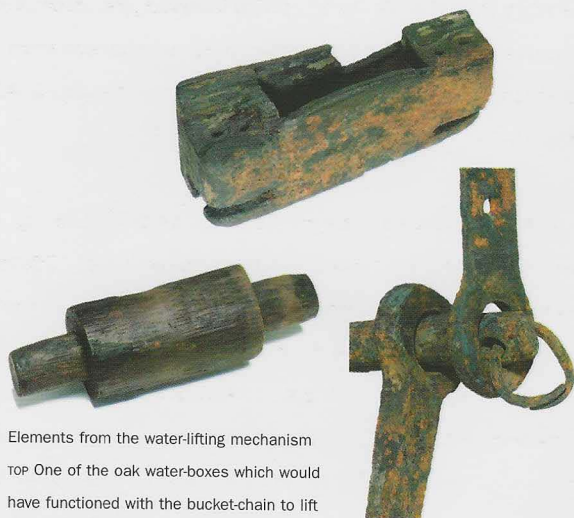


View looking west from Tower 42 across
central London, with the large Lion Plaza
development visible in the lower foreground



Blossom's Inn

CLOCKWISE FROM TOP LEFT Uncovering a group of 12th-century London ware baluster jugs found in a medieval barrel-lined well / Elizabeth Goodman of the Specialist Services conservation team cleaning the left hand and forearm from a gilded bronze Roman statue which was broken up and thrown away in c AD 70 / Archaeologist Kate Quinteros and Senior Archaeologist Ian Blair cleaning the cross bracing within the massive 1st-century 'western' well dated by dendrochronology to AD 63 / Careful cleaning of the base of a perfectly preserved half-cask, found in the bottom of the 1st-century well / Elements from the water-lifting mechanism / Chris Clarke of AOC Archaeology and MoLAS Archaeologist Catherine Edwards examine a complete copper-alloy cauldron found in the primary fill of the 'eastern' well

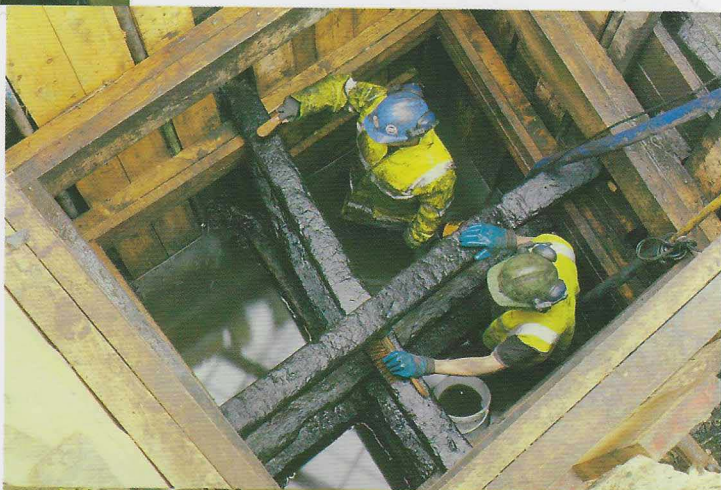


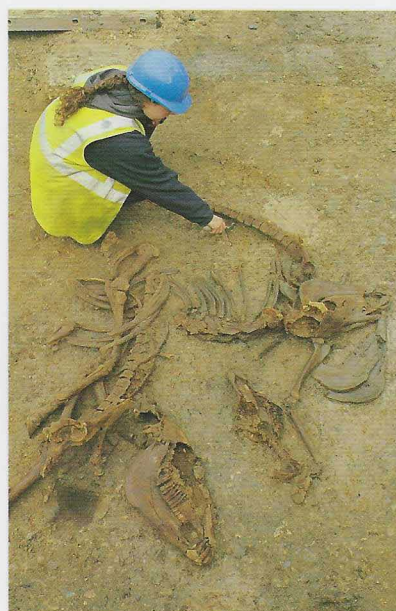
Elements from the water-lifting mechanism

TOP One of the oak water-boxes which would have functioned with the bucket-chain to lift water. The side of the container was broken in antiquity, revealing the internal water reservoir

ABOVE LEFT A beautifully preserved wooden roller found in the 1st-century softwood half-cask

ABOVE RIGHT Close-up showing the iron ring fastening through the linkage pins and couplings of the wrought iron bucket-chain. Removal of the connecting rings would have allowed the bucket-chain to be shortened or lengthened depending upon the water level in the well





Blossom's Inn

FAR LEFT The head of Bacchus as depicted on wall plaster, of a richness of colour and excellence rarely found in Roman Britain

LEFT Detailed view of the jumbled remains of the three horses found in early Roman levels. They were probably whole carcasses which were subsequently disturbed by scavenging dogs

One of the major projects of 2001 took place at **Blossom's Inn, 20–30 Gresham Street, EC2** (Land Securities PLC), a collaboration between MoLAS and AOC Archaeology Ltd. Sherds of Late Neolithic pottery were found at the site, where a natural stream channel had persisted until the 1st century AD. The Romans first stripped the topsoil and quarried gravel, and three burials were also found, but the area generally was not built on in the 1st century. Backfill of the largest quarry included 1st-century amphorae (storage jars) and the life-sized left hand and forearm of a gilded, cast bronze statue which had been hacked apart and discarded unceremoniously.

Roman roads were laid out as part of the reconstruction of Londinium after the Boudican revolt of AD 60. Some roadside buildings were constructed, including multi-room houses with stone foundations and mosaic floors, but large areas remained open well into the 2nd century and were used for the disposal of demolition debris, soil and rubbish. Painted plaster from these layers included scenes showing Bacchus (the god of wine) and female figures, and panels depicting fluted columns, horses and seahorses.

Two unusually large timber-lined Roman wells and a cistern were found near the southern side of the site. Tree-ring dating of timbers from the earliest well indicates that it was built in about AD 63. The well was abandoned in c AD 71 following its partial collapse which had preserved a significant find: part of a rare water-lifting mechanism, a 'bucket-chain', comprising 12 hollowed-out wooden water-boxes, originally linked by iron pins and couplings, and a wooden roller possibly from a gear. An even larger well to the east and dated to the early 2nd century contained part of a second bucket-chain made of boarded oak buckets and wrought iron pins and couplings. The water containers were charred, indicating that

the overlying well house had been destroyed by fire. A complete copper-alloy cauldron was found in the base of the well, along with late 2nd-century finds. The nearby cistern stored water from the wells, perhaps a supply for the nearby baths at Cheapside or general public consumption. The Blossom's Inn wells were capable of supplying several thousand Londoners with fresh water, and their discovery demands a reconsideration of the public infrastructure of a town which lacked any obvious aqueduct or integrated water supply system.

Evidence from the late Roman period included pits, external soil horizons and a small, square, stone-lined subterranean room interpreted as a shrine and containing coins of Claudius II (AD 268–70) to Constantine the Great (AD 306–37).

Saxo-Norman rubbish pits were found across the site, along with several sunken-floored timber buildings. The cellars of 12th- to 16th-century buildings were located along the medieval street frontages, with stone-lined cesspits and wells in the gardens and yards behind. A 13th-century Jewish ritual bath or *mikveh* was discovered within a building on Milk Street, including seven stone steps leading down into a small apsidal bath. Generous funding from the Bevis Marks Synagogue Trust has allowed the *mikveh* to be dismantled and removed for rebuilding in an appropriate setting. A 17th-century barrel-vaulted icehouse, a culvert and several wells were also found. One well contained debris from the Great Fire of 1666.



10 Gresham Street

CLOCKWISE FROM TOP LEFT

Reconstruction of the Roman

mosaic / View along the line of

the gravel surface of a Roman road,

leading from the Cripplegate fort to the

settlement's main east-west road to the south; the Roman

building containing the mosaic floor lay to the left of the road

in the far background / 1st-century ceramic label inscribed

with the word THEOPOMPUS / Archaeologist Neville Constantine

recording archaeological strata revealed in section / View of

construction and groundworks following the main archaeological

excavation, with the archaeological watching brief taking place

in the foreground / View of the early 2nd-century Roman

building containing a polychrome mosaic. The room in the

foreground, separated from other parts of the building by

upstanding brickearth walls, may have been a kitchen and

contained pottery which was broken and scattered across

the floor when the building was destroyed by a fire



Senior Archaeologist Ian Blair cleans the lining of a post-medieval cesspit at the Newgate Triangle site, part of the Paternoster Square redevelopment. Fills of the pit contained an assemblage of high-status Chinese porcelain



Another large excavation, begun in 2000 and reported on in *MoLAS 2001*, took place just to the west at **10 Gresham Street, EC2** (the Standard Life Assurance Company). In the early Roman period the site lay near the western boundary of the settlement and just to the south of the later location of the fort at Cripplegate. Evidence of up to 11 early Romano-British roundhouses may prove hugely significant. The buildings, which date from c AD 50–70, were between 5m and 8m in diameter and contained hearths, beaten earth floors and, in two cases, had east-facing doorways. Activities associated with these huts include glassmaking in a British style but using Roman materials. This early phase of activity may represent a definably 'British' enclave on the periphery of the new Roman settlement. If so, it was swept away before the end of the 1st century and replaced by the expanding Roman street pattern and the more familiar rectilinear buildings of Roman London.

By the early 2nd century two Roman roads crossed the site; one running east–west and another leading north towards Cripplegate fort. Roadside buildings lay along the north–south road, and included a well-preserved mudbrick and timber building destroyed by fire. One room in the building possessed a fine mosaic with a central polychrome design of simple lozenges and triangles combined with more complex twisted chains ('guilloche') and ivy leaves. A collapsed wall with painted wall plaster covered the mosaic floor. A veranda and a gravel courtyard lay to the east of the room. Another room to the west may have been a kitchen and contained at least 18 broken pots, strewn across the floor. The post-Roman ground surface was truncated by modern cellars and nearly 200 pits, although some medieval cellars and foundations survived, including the base for a staircase turret.

Excavations at **19–31 Moorgate, EC2** (the Moorgate Investment Partnership), found evidence of Roman occupation but, interestingly, a relative absence of industrial activity in an area of the Upper Walbrook known for it. There was some evidence of medieval industry and occupation, including hearths and wattle buildings dating to the 11th and 12th centuries. The basements of two post-medieval buildings destroyed in the Great Fire were also recorded.

Redevelopment at Paternoster Square, EC4, included several archaeological sites just to the north of St Paul's Cathedral. At **Newgate Triangle, EC4** (Paternoster Associates/Griffiths McGee Demolition Company Ltd), the earliest features were two early Roman burials, a ditch and several large quarry pits. The main Roman road leading west from the city to Silchester lay at the northern edge of the site. There were at least five roadside timber strip buildings, separated by narrow gravel alleyways. The buildings were destroyed by fire in the Boudican revolt of AD 60. Scattered medieval foundations and deep cesspits were also found. A post-medieval Delftware drinking cup in the shape of a penis was perhaps the most unusual find of 2001.





LEFT Senior Archaeologist Bruno Barber uses a metal detector to scan archaeological deposits at Juxon House for coins and other artefacts during the excavation of a large Roman or medieval channel or ditch



RIGHT An archaeological watching brief took place at Plantation Place as part of the programme of piling works

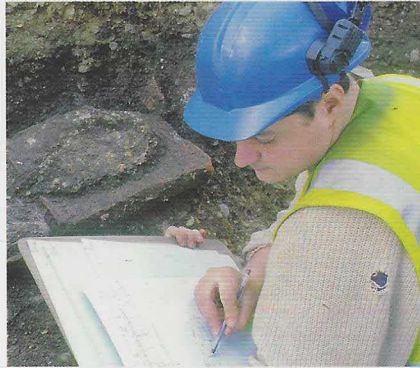
Excavations at the south-western corner of Paternoster Square, at **Juxon House, St Paul's Churchyard, EC2** (the Standard Life Assurance Company), revealed early Roman timber buildings, wells, pits and surfaces. Another Roman road, again aligned north–south, crossed the site, flanked by three phases of buildings to the east, some overlying quarries. A large north–south channel running across the western part of the site was probably an early medieval ditch, established as part of the *vallum* of St Paul's precinct or associated with the post-Conquest refortification of the city. The eastern part of the site was a cemetery in the medieval period, and nearby foundations may be part of the bishop's palace complex.

On the southern part of the Paternoster site, excavations at **Charterhouse Building, EC4** (Charterhouse Bank Ltd/Griffiths McGee Demolition Company Ltd), uncovered early Roman timber buildings overlain by upcast from nearby quarrying. At the same time a north–south road was established and roadside buildings constructed. One of these contained evidence for plastered walls and a small oven in one of its rooms. A 3rd-century building had tessellated floors, but by the 4th century much of the area had reverted to open ground and graves were dug into the surface of the Roman road. Little survived from later periods because of truncation associated with development of the site in the 1960s. The remains of a buried lead pipe formed part of the medieval 'Great conduit', London's first public water supply, established in the 13th century. The conduit's main cistern was found at the site of 1 Poultry, near the eastern end of Cheapside, in 1994.

The view north across the Plantation Place site during piling works and the archaeological watching brief, following the major excavations there in 2000, a markedly different scene to that shown in *MoLAS 2001*

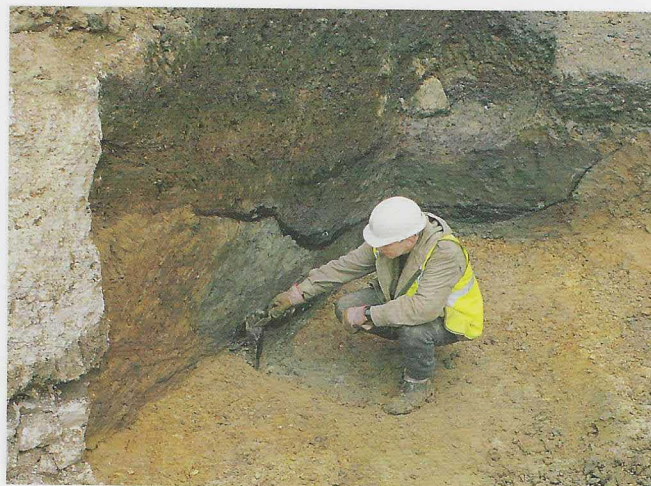
Our largest excavation in 2000, reported on in *MoLAS 2001*, was at **Plantation Place, Fenchurch Street, EC3** (The British Land Company PLC). In 2001 further work included archaeological excavation in advance of foundation piling and the monitoring of other construction works. This follow-up proved valuable, allowing the recording of deep features such as Roman gravel quarries and medieval wells.





Charterhouse Building

CLOCKWISE FROM TOP LEFT Senior Archaeologist Raoul Bull recording one of the 4th-century graves which cut into the disused Roman road / Part of a lead pipe associated with the Great Conduit, a 13th-century water supply to the City from the Tyburn stream 3km to the west, being examined by Senior Archaeologist Kieron Heard / Archaeologist Austin Ainsworth excavating the small oven located in one of the early Roman earth and timber buildings / Senior Archaeologist Raoul Bull and Archaeologists Joe Severn and Cindy Paquin excavating the Roman road and roadside buildings / Roman pestle made from Purbeck marble / View of the Paternoster Square development site looking north from St Paul's. The chapter house is visible in the centre-left foreground



1 London Wall

LEFT Archaeologist Will Johnston recording an unusual stone-lined Roman well

ABOVE Senior Archaeologist Kieron Heard excavating a large Roman feature, possibly a disused quarry or pond

RIGHT A London-type ware jug in Rouen style, dating to c 1180–1250

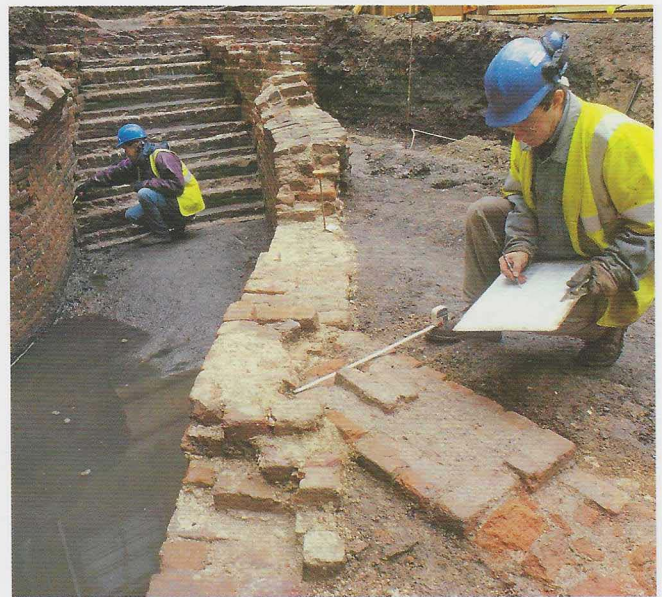


A watching brief conducted during construction of the basement slab for the new building allowed accurate quantification of surviving strata. Archaeological features below the level of the new basement slab were recorded and left *in situ*, including a north–south aligned Roman road and associated buildings. The findings generally confirmed the results of the main excavation, with additional evidence for a post-Boudican military enclosure recorded to the north of the main east–west road.

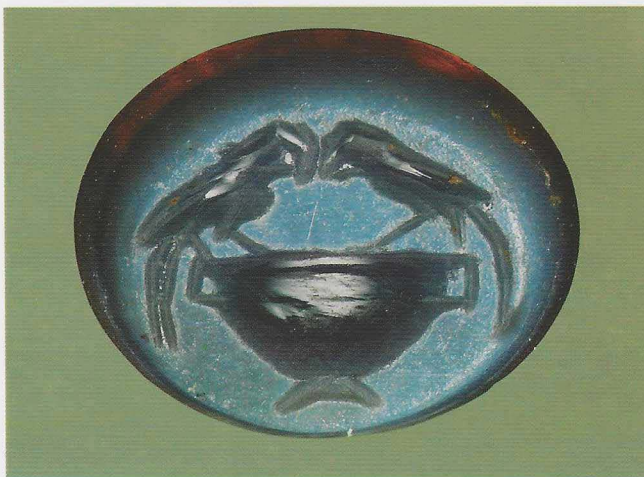
The year 2001 saw the redevelopment of two of MoLAS's old offices. Excavations opposite the Museum of London at **1 London Wall, EC2** (Hammerson UK Properties PLC), uncovered important new evidence of Roman landfill, quarrying, rubbish pits and ditches on the edge of the settlement near the Roman fort. Medieval pits, wells and part of the City defensive ditch were also present. Parts of the defensive ditch were excavated, allowing profiles of the ditch to be drawn. A surviving section of the Roman and medieval city wall was recorded west of Noble Street. At **Walker House, 87 Queen Victoria Street, EC4** (Legal and General Group PLC), an evaluation located isolated archaeological remains in the south-eastern corner of the site but elsewhere nothing had survived deep basementing in the 1960s and before.

ISLINGTON Evaluation work at **1–3 Rawstone Place, N1** (Bennett Associates Ltd), found that the site had been occupied by a livestock watering pond before the construction of the first buildings in the late 18th century. The Barn, a listed three-storey brick building documented from 1790, still stood in the centre of the site and is to be retained in the new development.

A watching brief at **29–30 Glasshouse Yard, EC1** (CgMs Ltd), located a medieval burial which may have been part of the West Smithfield Black Death cemetery or, alternatively, a burial within the garden of cell S in the London Charterhouse. The latter possibility is summarised in the recently published MoLAS monograph on the London Charterhouse.



Archaeologists Caroline Chissell and Richard Lee recording the brick walls of what is thought to be the Hope theatre, built in 1613, rediscovered beneath Bear Wharf and Riverside House



116–126 Borough High Street

ABOVE TOP An early Roman timber building was part of an important sequence relating to the occupation of Roman Southwark

ABOVE A Roman intaglio found on the site



Senior Archaeologist Rosemary Joynson exposing the wattle lining of a Middle Saxon well at 8–9 Long Acre

S O U T H W A R K An excavation at **116–126 Borough High Street, SE1** (El Da Management Ltd), uncovered early Roman ditches containing human bones, overlain by a Roman building sequence with evidence of associated industrial activity. Large storage pots and a complete flagon were found beneath the floor of one of the buildings, which were truncated by medieval pits.

Excavations at **Bear Wharf and Riverside House, SE1** (Chelsfield PLC), recorded the chalk foundations of two 13th-century buildings. A post-medieval waterlain deposit contained horse and dog bones relating to the animal baiting that took place on Bankside from c 1540. A brick building with polygonal walls may be the Hope theatre, built in 1613. Biscuit-fired earthenware pottery provides

evidence of the Bear Garden kiln, which was producing tin-glazed pots or Delft-style ware from 1702 to c 1707. Several other brick buildings related to the late 17th- or early 18th-century Bear Gardens glasshouse.

W E S T M I N S T E R Excavations at the start of the year at **8–9 Long Acre, WC2** (Liverpool Victoria Friendly Society Ltd), found pits and a barrel-lined well dated to the early or middle Saxon period. Finds included pottery dated to c AD 650–730, a loomweight, a quernstone and a sandstone hone. Post-medieval features included three 17th-century wells associated with the development of the area in 1630–41.



excavation

excavation

Museum of London archaeologists have been responsible for digging one of the largest and most complex deeply stratified 'sites' in Europe: the historic centre of London, today covering the City, Westminster, Southwark and parts of the surrounding boroughs. MoLAS has also excavated many hundreds of sites scattered across southern England and varying widely in type. Taken together, these experiences have helped MoLAS to develop robust and tested excavation techniques that are widely recognised as the industry standard, now adopted elsewhere in Britain and in many other countries. These are formulated and set out in the Museum of London's *Archaeological site manual* (3rd edition, 1994).

MoLAS carries out **more than 100 excavations** in an average year, from small-scale trenching within standing buildings to large open-area excavations. Projects range from urban redevelopments to rural, greenfield sites and infrastructure work. Consultation between MoLAS and the client is continuous from the planning stage onwards, with excavation integrated into the detailed design of the development wherever possible.

The field team is led by **Senior Archaeologists with extensive experience** of directing a wide range of urban and rural projects in challenging construction conditions and within strict timescales and budgets. A team of experienced Archaeologists is supplemented by additional staff during busy periods. On-site advice is provided by a wide range of in-house experts, and site visits can be quickly arranged with finds and environmental staff from Specialist Services and outside institutions to ensure that excavation strategies are constantly reviewed and updated. Projects reflect national and local archaeological research priorities and are tightly focused on evolving research aims. This ensures that resources are tightly targeted and work is only undertaken where it will contribute directly to the identified outcomes.

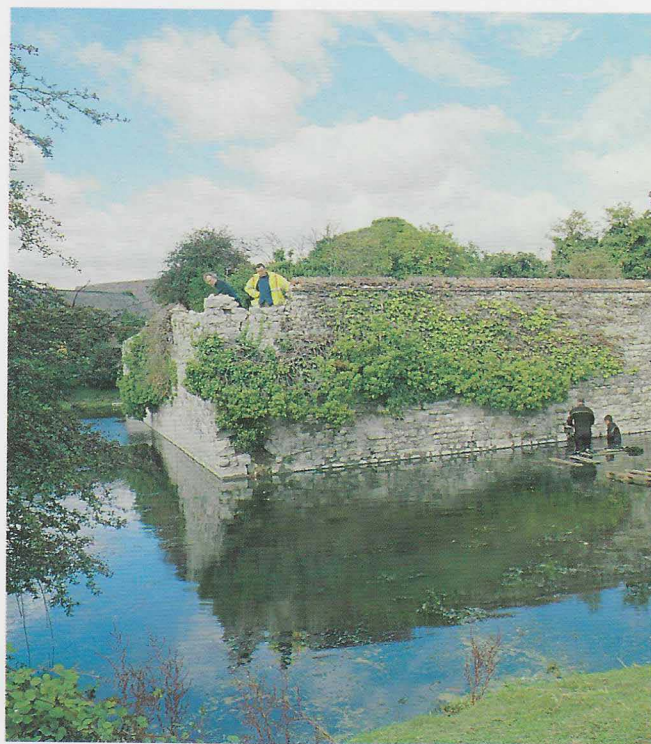
MoLAS also provides specialist **forensic** archaeological excavation skills, and has been providing a range of services to the Metropolitan Police for several years. Drawing on the experienced field team, MoLAS has now expanded its forensic work beyond London. In 2001 support was provided to several police forces, ranging from expert advice to the police and in court, carrying out area searches, excavation of human remains, bone identification and skeletal analysis. The forensic team also provides training for the police in archaeological techniques and for our own archaeologists in police forensic procedures.

standing buildings

The recording of standing buildings frequently forms an important part of redevelopment and refurbishment schemes. MoLAS saw an increase in the need for historic building survey work, with more projects requiring a mixture of building and archaeological recording and preservation.

BARNETT The **Hasmonean Primary School, 8 Shirehall Lane, NW4** (Jewish Secondary Schools Movement), had, since 1970, occupied a Grade 2-listed building. The building, a relatively isolated semi-rural villa until suburban Hendon became built up at the turn of the 20th century, had an interesting structural history. It contained the remnants of a two-storey timber-framed building constructed in the 17th or 18th century and modified in 1796. Substantial alterations took place by 1828, and by 1862 a cast and wrought iron loggia was added to the street front. In about 1930 a new wing was added in international modern style, constructed of concrete, brick and steel.

BEXLEY A three-dimensional topographic survey at the **Howbury moated site, Erith, DA8**, for the Trustees of Russell Stoneham Estate, recorded the south-western and south-eastern walls of the moat and complements a rectified photography survey. A digital terrain model of the moat and surrounding area was also produced.

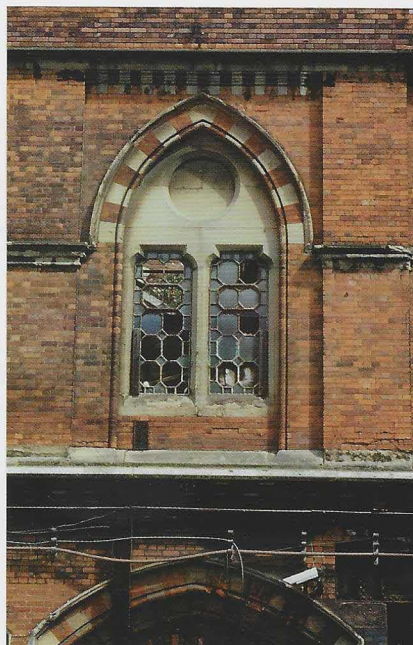


Howbury moated site

LEFT AND ABOVE MoLAS geomatics staff undertook survey work at the Howbury moated site in Erith as part of a programme of renovation at the Scheduled Ancient Monument. Port of London Authority divers repointed the stonework below the waterline using waterproof grout and a special pump



Detail of the richly
decorated front porch of
The Rookery, Roehampton



St Pancras Station
 FAR LEFT This ramp for cabs leaving St Pancras Station was built in 1866–8. The Midland Grand Hotel, visible in the background, dates from 1868–74
 LEFT Architectural detail of a window in a former parcels depot on the western side of the station, facing Midland Road

CAMDEN Work at **St Pancras Railway Station, N1**, and in the surrounding area (Union Railways (South) Ltd), has concentrated on recording a number of important buildings, many listed Grade 1 or 2. St Pancras Station was constructed in 1863–8 for the Midland Railway, and Somers Town Goods Depot, to its west, dates from 1878. Construction of the London terminus of the Channel Tunnel Rail Link will require demolition and partial reconstruction of platform-level buildings to the west of the train shed. Brick vaults facing Midland Road and Pancras Road to the west and north of the train shed, shopfronts on Pancras Road and to the east, and a brick retaining wall around the edge of the former goods depot will also be demolished.



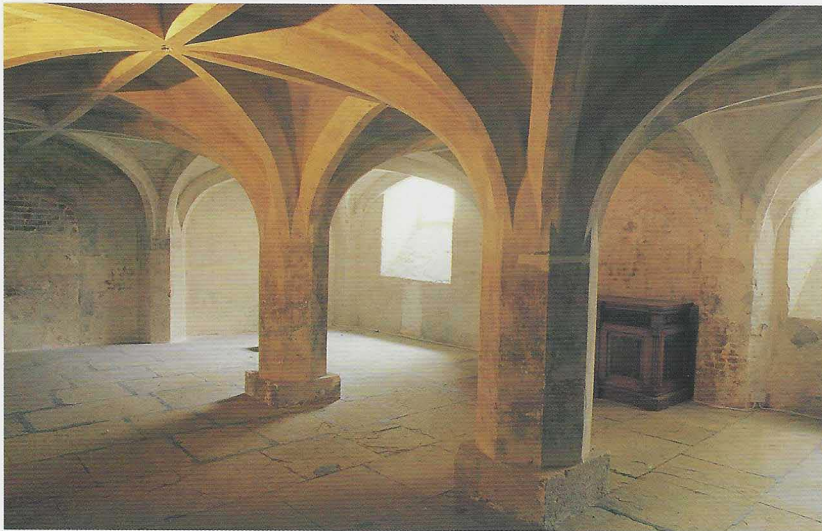
CITY Work at the **Middle Temple Hall kitchens, EC4** (the Honourable Society of the Middle Temple), documented to c 1562–73, recorded the foundations of the Grade 1-listed first-floor hall. Enlargement of the existing kitchens of the hall, built in 1830 to a neo-gothic design by James Savage, exposed parts of the original walls at ground level. The construction of new services required 71 moulded stones to be removed, and many of them were found to be medieval, possibly from buildings in the Temple precinct. Some of them will be displayed in the Middle Temple gardens. The substantial oak timbers of the 16th-century upper hall floor were recorded from below. At ground level suspended stone-flagged floors were recorded in the existing Parliament Chamber, originally the library and documented as having been added to the southern side of the hall in 1822 to designs by Henry Hakewill.



ABOVE MIDDLE View of Middle Temple Hall, where recent work on the kitchens found that medieval moulded stones had been reused in the 16th-century foundations. Stones recovered from parts of the demolished wall can be seen lined up along the garden path in the foreground

ABOVE View west down the nave of St Ethelburga the Virgin, which was badly damaged by a bomb in 1993. MoLAS archaeologists can be seen cleaning and recording the damaged floor in advance of rebuilding as a Centre for Reconciliation and Peace

The church of **St Ethelburga the Virgin, Bishopsgate, EC2** (London Diocesan Fund and Trustees of St Ethelburga's Centre for Reconciliation and Peace), is one of the few remaining medieval



The vaulted undercroft in the western range of Syon House, recorded during a MoLAS standing building survey and previously identified as part of Syon Abbey

buildings in the City, but was badly damaged by a bomb in April 1993. The standing remains were surveyed, and limited investigation took place below ground, in the course of converting the building to its new charitable use. The church had been rebuilt in 1387–1446, and no intact fabric has appeared that can definitely be ascribed to an earlier building than this.

HOUNSLOW

Work at **Syon House, Brentford, TW8** (Syon Park Ltd), uncovered scattered features and a gully thought to be contemporary with Syon Abbey, a Bridgettine house that moved from its original site in Twickenham in 1431. Domestic rubbish and building rubble were associated with occupation of the abbey. A gravel path or road was no later than Tudor in date, and probably part of the abbey complex. Syon House was built on the site of the abbey after the Dissolution in 1539. Today very little survives of the abbey and evidence for its original layout and appearance is limited. Nevertheless, a standing building survey provided information about structures in and around Syon House that might be remnants of the abbey. These included a vaulted undercroft in the western range of Syon House (previously identified as part of the abbey), a doorway in the so-called 'abbey barn' and a Tudor archway in a brick wall abutting Laundry Cottages.

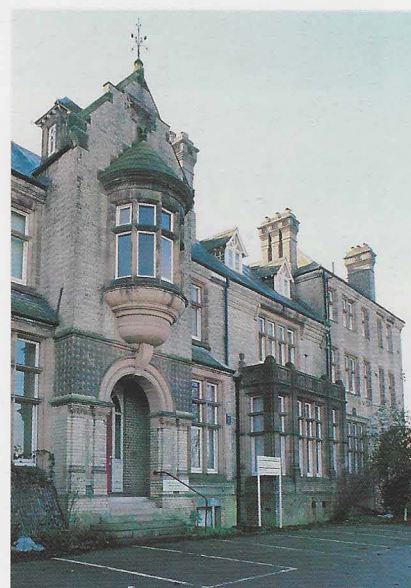
TOWER HAMLETS

Survey of the Grade 2-listed **Gun public house, Isle of Dogs, E14** (Derek Latham and Company Ltd), was carried out prior to its enlargement. Work was limited by the fact that the pub continued in operation and no opening-up of the fabric was possible. A riverside tavern is documented on the site from as early as 1722, called successively the King and Queen, the Rose and Crown, the Ramsgate Pink (after a type of sailing vessel) and eventually, in 1771, the Gun. The oldest visible parts of the building were brick-

lined and -paved cellars, and a large first-floor room overlooking the Thames and suitable for use as a dining room for whitebait suppers, a fashionable annual event in taverns along this stretch of the river between about 1720 and 1900. The room is also reputedly associated with Lord Nelson and Lady Emma Hamilton.

WANDSWORTH

A standing building survey of **The Rookery, Queen Mary's Hospital Roehampton, SW15**, for the South-west London Community NHS Trust, recorded an unlisted building before its demolition, a substantial and expensively decorated suburban villa constructed in the 1860s. Notable features included moulded floral ceramic tiles, a front doorcase containing painted glass showing owls catching mice, a monumental oak staircase, tall bay windows and bow windows and a ballroom. During the Second World War the basement was reinforced, the basement windows blocked and a blast-proof entrance added, probably for ARP fire-watchers.



The front of The Rookery, an 1860s suburban villa more recently used as part of Queen Mary's Hospital, Roehampton



historic building recording

historic building recording and interpretation

The MoLAS historic buildings team has extensive knowledge and experience of recording, understanding and interpreting historic buildings, landscapes and gardens. Its work ranges from preparing historic building assessments for submission with planning applications to detailed analysis for the purposes of managing properties. Recent projects have included work at St Paul's Cathedral and the Queen's House in Greenwich, recording of the Roman and medieval city wall around London, surveys of terrace housing, industrial buildings and 19th-century infrastructure, analysis of historic gardens and surveys of 20th-century military installations.

The team bases its approach on understanding the fabric and value of standing structures, and is able to bring a multidisciplinary expertise to bear on each project, to suit the particular needs of each scheme. With a wide range of clients in the property and heritage sectors, the historic buildings team also has experience of Heritage Lottery Funded projects.

Refurbishment and development schemes demand a strong knowledge of **listed building consent and conservation area regulations**. Good working relationships with conservation and archaeology officers enables the team to prepare focused reports which take account of the particular values of individual local and unitary plans, in support of planning applications. The team also prepares **conservation and management plans** which entail detailed survey and analysis as well as reconstruction and interpretation. The historic buildings team has established relationships with other specialist consultants, including environmentalists, surveyors and landscape architects.

Site survey can take many forms and is an essential part of understanding the construction and meaning of a structure or landscape. Depending on the scheme, this might range from **measured sketches**, using traditional hand survey to a detailed **metric survey**, using technology such as REDM (reflectorless electronic distance measurement). **Photographic survey** is also undertaken, using techniques such as rectified photography and photogrammetry. **Geophysical investigation** is carried out in association with specialists in remote sensing.

Analysis often takes the form of an interpretative record with clearly annotated drawings. **Illustrations** include analytical drawings, such as phase plans and three dimensional reconstructions. **Technological understanding** helps the team to address original design concepts and to identify and understand architectural fabric and details, which can have a significant influence on both management and planning decisions. **Materials analysis and interpretation** draws on expertise in Specialist Services, who are skilled in the study of **ancient woodworking technology** and ceramic and other **building materials**. Conservators provide expertise in monument condition surveys and research details such as **architectural paint analysis**.

In 2001 MoLAS carried out over 20 historic building projects, on a wide variety of structures and landscapes dated from the Roman period up to the late 20th century, and in circumstances from pre-demolition recording through to conservation and disaster planning

View across the rear of the Midland Grand Hotel,
looking towards the new British Library, as seen from
the roof of the train shed above St Pancras Station

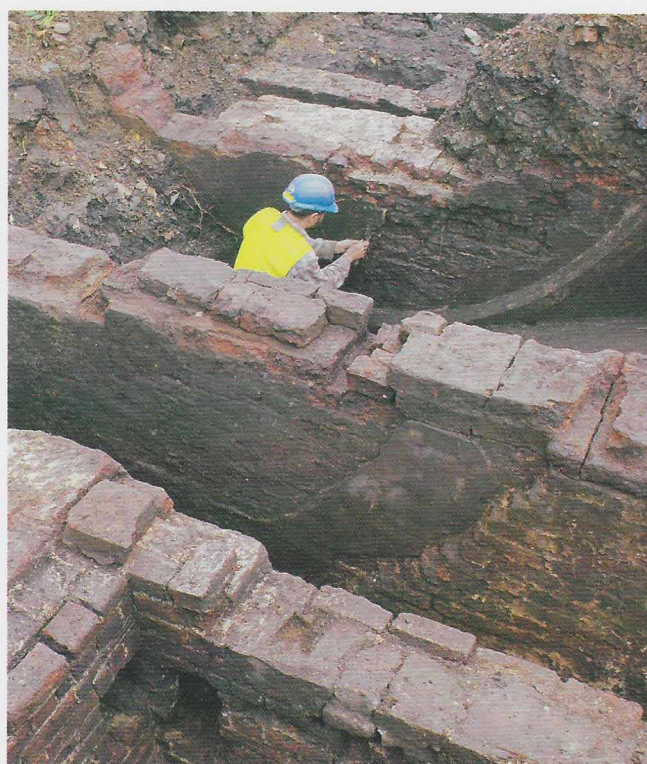
retail, leisure and mixed use

As sustainable development moves to the forefront of the UK's urban regeneration ambitions, development proposals increasingly involve an imaginative mix of different uses, and this is reflected by some of the archaeological projects that MoLAS carried out in 2001.

MERTON An intensive programme of evaluation at **Merton Priory, SW19** (Countryside Properties (Commercial) PLC), took place at this major site, which was excavated by the Museum of London between 1986 and 1990 when the priory church, chapter house and infirmary complex were identified. The current evaluation – designed so as to inform the careful integration of archaeological and historic remains into the development proposals – involved the southern part of the monastic complex, where further development is planned. Evaluation revealed the foundations of more buildings associated with the priory. A building located close to the historic course of the River Wandle was part of the medieval priory mill. The infilled millpond was located, and the headrace for the 17th-century mill was recorded. Other important finds included evidence of a calico mill built by John Leach in 1802. By 1820 the business was in the hands of Leach's son-in-law, Thomas Bennett, who produced colourful handkerchiefs.

Archaeologist Ryszard Bartkowiak cleaning the brick walls of the gear pit at the early 19th-century Bennett's Mill, found on the River Wandle at Merton Priory

HAMMERSMITH AND FULHAM Excavations at **Hammersmith Embankment, Winslow Road, W6** (Hammersmith Embankment Ltd), uncovered several phases of archaeological activity, the earliest including several pits containing prehistoric pottery, worked flint and a leaf-shaped arrowhead. Evidence for Saxon settlement at the site is particularly important. An early Saxon sunken building contained an assemblage of pottery, including imported wheel-thrown ware, and lead weights, Roman copper-alloy coins, glass beads and worked bone. To the south, substantial posthole alignments containing early Saxon pottery may define the location of a timber hall. Contemporary rubbish pits and hearths or ovens were also recorded. Post-medieval





MoLAS archaeologists were
surrounded by construction work
at West India Docks, Canary Wharf



Hammersmith Embankment, Winslow Road

TOP Excavation of an early Saxon sunken-floored building, dated to the late 5th century AD

ABOVE Senior Archaeologist David Jamieson excavating the 17th-century brick cellar of the Jacobean Brandenburg House

remains included an 18th-century cellar, filled in with glassworking waste and kiln fragments, and a brick-built structure identified as a kiln used for the production of glass beads in the late 18th century. A medieval or earlier palaeochannel (Parr's ditch) was also identified.

CITY A watching brief was carried out at **23–25 Leadenhall Market, EC3** (Chamberlain and Thelwell Ltd), during the refurbishment of the building. Excavation of new drains in the basement revealed part of a large stone wall whose location corresponds with the second Roman forum-basilica and may be part of a previously unknown partition.

Excavations at **Lion Plaza, 40–53 Threadneedle Street, EC2** (Lionheart Properties Ltd), uncovered fragmentary early Roman



View of the second phase of excavations at Lion Plaza, which took place behind the retained facades of Victorian buildings

timber buildings and a gravelled road leading north from the main east–west road to the south of the site. Following a 2nd-century AD fire a larger masonry building was constructed. A later Roman building had been robbed of stone in the early medieval period. Part of a medieval wall survived beneath Adams Court, but elsewhere pitting was all that remained.

NEW HAM A geological survey at the site of the **ETAP Hotel, North Woolwich Road, E16** (Construction Team Services Ltd), found evidence of a prehistoric peat sequence, including large timbers which may have been fallen trees or a man-made structure such as a timber trackway. The sequence is comparable to other sites in North Woolwich, and the potential of the former Silvertown Goods Yard site is particularly good, including rare evidence for the Iron Age environment of the area.



Lion Plaza

ABOVE LEFT Archaeologist Robert Sutton records part of an arched medieval foundation found immediately beneath the surface of Adams Court. An associated cellar went out of use and was backfilled in the 17th century

ABOVE RIGHT Archaeologists Jen Lam and Mark Anderson excavating the rendered wall of an early Roman earth and timber building



LEFT A medieval stone corbel in the form of a human head
RIGHT The fragmentary remains of a large late Roman masonry building survived between later foundations

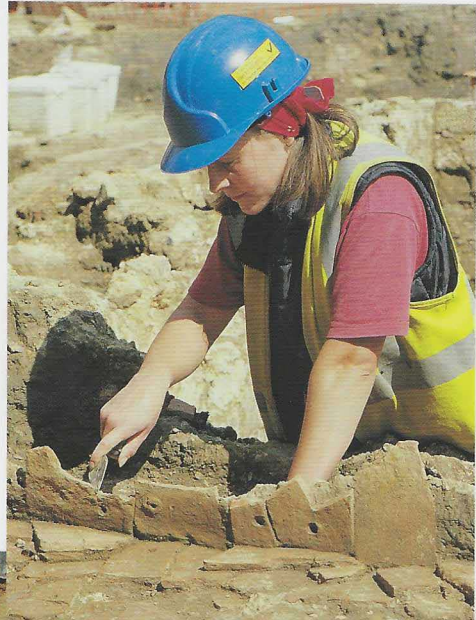


Watching brief work at Borough Market, SE1 (Trustees of the Borough Market), involved monitoring of 23 testpits and two boreholes. Archaeological deposits included late medieval foundations and pits, and an early Roman timber building which had been destroyed in a fire. The work continues. At **18–48 Newington Causeway, SE1** (Hollybrook Ltd), medieval ploughsoil was cut by a ditch which may be associated with London's Civil War defences.

One of our largest projects over recent years, the Spitalfields Market redevelopment, saw continued archaeological work in 2001. Excavations at **Spitalfields Market areas 1 and 2, E1** (Spitalfields Development Group), uncovered Roman quarry pits and 14 Roman skeletons, two with grave goods and two laid on chalk. Early medieval quarrying took place before the precincts of the priory and hospital of St Mary Spital were established in 1235. Two phases of stone and

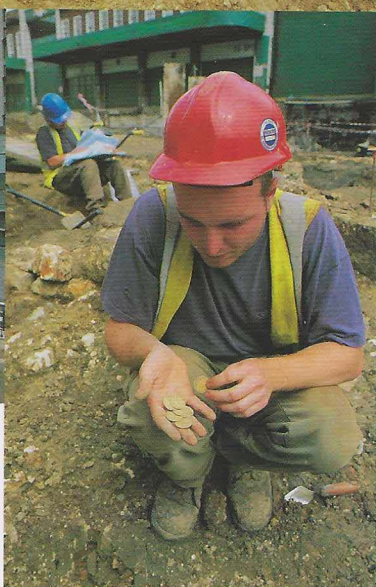
timber buildings were found, with associated earth floors and pitched tile hearths. A chalk-built cellar contained the robbed-out remains of a timber staircase. A group of gold and copper-alloy coins had been discarded in the building before it was demolished in the 1530s.

A ditch to the south of the buildings separated them from the 'outer precinct', where chalk and timber buildings and a pond were recorded. At the northern end of the site a further 130 burials were excavated in the medieval cemetery, some in individual graves and others in mass burial pits. From 1538 to 1682 the area was part of the 'Old Artillery Ground' and evidence was found for bedding trenches and a covered walkway within it. In 1682 the site was sold and the cellars, cesspits and wells of houses, fronting onto Steward Street and Fort Street and dating from this period up until the 19th century, were recorded.



Spitalfields

CLOCKWISE FROM TOP LEFT A group of ceramic vessels found placed outside the coffin of a Roman plaster- or chalk-lined burial / Archaeologist Emily Burton excavating part of a tile damp course within a late medieval tenement / Archaeologist Carl Crozier excavating the entrance of a clay-lined and chalk-walled medieval cellar / A group of eight Henry VIII gold 'angels' dating to around 1520, found in a demolished house at Spitalfields / Archaeologist Carl Crozier examines the gold coins upon discovery / General view of the medieval levels at Spitalfields area 1, looking south-west towards Bishopsgate / Senior Archaeologist Ken Pitt excavating the Roman plaster- or chalk-lined burial with five ceramic vessels placed around the coffin





West India Docks, Canary Wharf

LEFT A view of the continuing construction work

BELOW MoLAS recorded part of the 'banana' wall, built in about 1800 to a special design to accommodate the shape of ships' hulls. The sloping wall and its angled timber supporting frame can be clearly seen

A survey at **West India Docks, Canary Wharf, E14**, for Heron Quays Properties Ltd (Canary Wharf Group), recorded part of the southern 'banana' wall of the West India (middle) Export Dock, built in about 1800 and Grade 1-listed. Investigation of the wall revealed the skilful engineering involved in its construction. The main brick build of the wall incorporated a curving or banana-shaped section for structural stability and to accommodate the shape of ships' hulls. This build, surviving to a height of nearly 10m and backed by buttresses, was laid onto a wooden frame, set at a 30 degree angle and supported by a series of wooden piles, driven into the natural gravel.



WESTMINSTER A watching brief at the church of **St Martin-in-the-Fields, WC2** (Purcell Miller Tritton and Partners for St Martin-in-the-Fields), monitored the excavation of testpits in the basement. Early masonry structures included a chalk foundation, probably relating to the medieval church, and an intriguing tile structure. It was seen in a very limited area, making interpretation difficult, but may be part of the underfloor heating system of a large building, or a tile kiln or similar structure.

And finally, excavations at **33 Floral Street, WC2** (Mrs J Otnes), revealed middle Saxon features which included pits, postholes and a gravel yard or path, adding to our knowledge of Lundenwic. A series of 17th-century drains and other features were also recorded.



geomatics and survey

geomatics and survey

The term *geomatics* covers all aspects of the collection, interpretation and presentation of spatial information, including landscape surveys collected using global positioning systems (GPS), the use of antiquarian maps, and plans drawn on site. The range of services offered by MoLAS falls into three principal categories: surveying, geographical information systems (GIS) and computer-aided design (CAD).

Survey work includes the implementation and maintenance of control networks and project grids, including those on the Ordnance Survey National Grid and project specific coordinate systems. Surveyors also carry out the rapid capture of digital topographic data on site, using GPS and total stations interfaced with dataloggers and pencomputers to produce real-time results. Three-dimensional standing building and monument survey uses state-of-the-art reflectorless instruments.

MoLAS **GIS** work links spatial information to finds, environmental and stratigraphic data and allows inter- and intra-site cross-referencing. Thematic and landscape analysis is also referenced to geological, hydrological and topographic data sets. Other work includes the statistical analysis of spatial data sets and artefact distribution patterns and the interpretation of distribution maps of Sites and Monuments Record data.

CAD work at MoLAS includes mapping site locations onto OS digital data, historic map regression analysis, preparation of spatial data sets for GIS analysis, preparation of full-colour digital terrain models and contour mapping, the measured recording and reconstruction of standing buildings and the digitising of drawn site plans for publication, client reports and research archives.

MoLAS understands the importance of high quality survey, spatial and location data in the successful delivery of project requirements, employing a dedicated team of six staff experienced in survey and spatial data processing. The team is responsible for ensuring that all MoLAS field projects are accurately georeferenced, and works with excavation staff to provide a high quality and affordable service.

MoLAS geomatics staff carry out
archaeomagnetic sampling of a medieval hearth
or kiln at the Hammersmith Embankment site

research and publication in 2001

Along with numbers of articles and short reports, MoLAS completed work on five more major publications in 2001, with many others moving to an advanced stage and poised for publication in 2002. Deposition of a digital archive for the Royal Opera House project with the Archaeology Data Service is also noteworthy and a pointer to future developments in the dissemination of our work. Nearly 50 monographs and 30 studies papers, as well as many more articles and short reports, are scheduled for publication over the next five to seven years.

In June 2001 a launch was held to celebrate the publication of **London bridge: 2000 years of a river crossing**, a MoLAS monograph by Bruce Watson, Trevor Brigham and Tony Dyson. Publication was funded by English Heritage as part of the Greater London publication programme. The book brings together the archaeological,

architectural, historical and pictorial evidence for London's greatest bridge, the place where the 'keep left' rule on the road began in 1722. The Romans realised that the location was the lowest convenient point to bridge the Thames. The Roman bridge went out of use during the 4th century AD and the river was not bridged again until c AD 1000, when the first of a series of timber bridges was erected, initially to prevent Viking raiders sailing upstream. The great stone bridge, lined with houses, was constructed c 1176–1209 and replaced in 1831.

At the end of 2001 four more publications were jointly launched at the Museum of London. **Roman defences and medieval industry: excavations at Baltic House, City of London** by Elizabeth Howe (Kvaerner Trollope and Colls Ltd and Skanska Construction UK Ltd) is a monograph about the Baltic Exchange site, badly damaged by a bomb in 1994 and now the location of Foster's Swiss Re tower. Evidence from the site included a late 1st-century AD defensive ditch which formed part of Londinium's early town boundary. Medieval activity dated from the 11th century onwards, with evidence of the manufacture of bells and kitchen utensils in the 13th to 15th centuries.



Medieval London bridge as
interpreted by Peter Jackson



Roman painted wall plaster
from the Baltic House site



A selection of vessels found at the important 2nd-century kiln site at Northgate House. They range from flagons and jars for everyday kitchen use to more unusual fine tablewares, including mica-dusted ware strainers and indented beakers. Potters who worked at the kilns can be identified from stamps on the mortaria (mixing bowls) and included Lucius, Valentinus and Maximus. This analysis work will feature in a forthcoming MoLAS monograph about the site

Roman and medieval townhouses on the London waterfront: excavations at Governor's House, City of London (Argent Real Estate) is a monograph by Trevor Brigham with Aidan Woodger. Excavations in 1969 revealed a substantial Roman building, interpreted as a townhouse attached to the 'Governor's palace' complex. In 1994–7 new work uncovered Roman revetments and two Roman buildings predating the townhouse, one thought to be a goldworker's premises. The new evidence indicates that the townhouse developed separately from other large Roman buildings to the west. Post-Roman strata included 11th-century pitting succeeded by cellared buildings, including the walls of the 14th-century Pountney's Inn, later the Manor of the Rose.

The London Charterhouse (the Governors of Sutton's Hospital with support from English Heritage) is a monograph by Bruno Barber and Christopher Thomas which brings together the findings from a number of sites to produce an important new work on the Carthusian monastery, founded in 1371 just outside the walled City. This fully illustrated account considers the development of the monastery, the pre-monastic Black Death cemetery, and the post-Dissolution setting of the 16th-century mansion and the hospital established in 1613 at one of London's most fascinating historic sites.

Excavations at 25 Cannon Street, City of London: from the Middle Bronze Age to the Great Fire by Nicholas J Elsdon is the latest in the MoLAS Archaeology Studies Series, a 74 page book on the recent excavations funded by Fidelity Investments. The site produced rare evidence in the City of Middle Bronze Age activity. Roman quarrying and timber buildings gave way to late Roman

masonry buildings covered by 'dark earth'. Cellared buildings had been constructed by the mid 11th century, and pre-dated Friday Street and the church of St Werburga, founded between 1098 and 1108. The church was not rebuilt after the Great Fire of 1666, though the churchyard continued in use as a burial ground.



Author Nick Elsdon excavating a complete pot found beneath the floor of a 12th-century cellared building at 25 Cannon Street



visualisation

visualisation: photography, graphics, design and production

MoLAS has highly regarded in-house capabilities in the illustration of archaeological findings. The graphics team is responsible for the design and production of a wide variety of publications, including the **MoLAS Monograph and Archaeology Studies series**. Traditional and digital illustration techniques and design are used to produce quality artwork not only for articles and books, but also for exhibitions and privately sponsored booklets and other literature.

MoLAS illustrators use CorelDraw and other **graphics programmes** to prepare site plans, elevations, maps and reconstructions. Illustrations are designed to convey information with maximum clarity, whether for use in client reports, academic publications, general artwork, or as exhibition material. Experience in the **illustration of archaeological finds** includes flintwork, pottery, building materials, textiles, leather, glass, metal, bone and antler, and of objects ranging in size from microscopic seeds to timber ships and stone buildings.

MoLAS photographers provide professional **studio and location images** in a variety of conventional formats, together with digital photography, rectified photography and image manipulation. The MoLAS studio is fitted with Bowens lighting and dark rooms, allowing production of complex large-set photographs and product shots. Studio images can be produced on film or as publication quality digital images for academic and popular books, magazines, television programmes and public exhibitions.

The in-house **design and production of publications** takes products from the initial concept through typesetting and pre-press work to print buying and quality control. In 2001 several books and many smaller publications were produced in-house as part of the expanding MoLAS publication programme.

The front door of The Rookery, Roehampton, was flanked
by stained glass panels showing owls hunting mice

adding value

Archaeology continued to generate tremendous public interest in 2001. The results of MoLAS's excavations are disseminated to as wide an audience as possible. MoLAS supports a policy of *outreach* through public access and education, and has found that clients want to see the wider social benefits of archaeological work maximised. Initiatives have received the enthusiastic support of many developers, and have included temporary exhibitions and displays, lectures, teaching and other educational work, the hosting of conferences, opening sites to the public on National Archaeology Day, radio, television and newspaper coverage, and many other projects.

exhibitions and displays

MoLAS has a wealth of experience designing display panels and exhibitions for both commercial and public sector clients. Staff have worked with Museum of London curators to provide permanent 'outsites' – specially commissioned small displays of archaeological findings in new buildings – as well as temporary 'recent results' displays and exhibitions in the main Museum.

In September 2001 an exhibition about the two early Roman wells from **Blossom's Inn, 20–30 Gresham Street EC2** (Land Securities PLC), opened at the Museum of London. The exhibition displayed fragments of the unique water-lifting mechanisms recovered from the wells, along with a selection of finds, illustrations and reconstructions, including a working model of the mechanism from the eastern well. Illustrated stories about the exhibition appeared in *The Evening Standard*, *The Sun*, *The Times* and *The Daily Telegraph*. A project has been set up in association with experts in

contemporary and ancient engineering to reconstruct a working model of the waterwheel.

Early in 2001 the final phase of archaeological work was completed at the new **Merrill Lynch Financial Centre, Giltspur Street, EC1** (Merrill Lynch Europe PLC). Findings, reported in earlier MoLAS reviews, included evidence of early Roman buildings along Newgate, the Roman city defences, medieval defences, the Greyfriars Friary and the Giltspur Street Compter built 1787–91. The preservation and display of part of the Roman city wall and a medieval bastion within the new building will be enhanced by explanatory panels commissioned by Merrill Lynch.

MoLAS also produced a display for the Spitalfields Development Group and Foster & Partners for use during the public consultation on the proposed development at **Spitalfields Market**. Work is also progressing on the design of an outsite for the new headquarters of Cazenove and Company Ltd at **Northgate House** near Moorgate in the City, where MoLAS excavations discovered important evidence of Roman London's early pottery industry.

publicity

A press release about the beautifully preserved Roman building and mosaic floor at **10 Gresham Street, EC2** (the Standard Life Assurance Company), resulted in coverage in newspapers and on television and radio in the spring of 2001. Visitors to the Museum of London were able to view the mosaic after it was lifted and observe staff working on its initial conservation during two special weekend sessions.



View of the 13th-century Jewish ritual bath, or *mikveh*, found at Blossom's Inn. Senior Archaeologist Ian Blair can be seen examining the ashlar lining of the sunken bath, with its steps in the background



Baroness Blackstone, Minister of State for the Arts, joined children in the Museum of London for 'The dig'



Adam Hart-Davis, TV and radio presenter, being shown the remains of 19th-century Bennett's Mill by Senior Archaeologist David Saxby

Later in the year, the discovery of the Jewish ritual bath, or *mikveh*, at **Blossom's Inn** (Land Securities PLC), was reported on radio and television and featured in several national newspapers. The find was of great interest to members of London's Jewish community, many of whom visited the site to see it first-hand, including Lord and Lady Levene and members of the Jewish Historical Society of England. Proposals have been formulated for the rebuilding of the structure elsewhere.

Another initiative at Blossom's Inn was an agreement with the developer and AOC Archaeology that Time Team could produce a documentary tracking the progress of a real project from beginning to end. The results will be broadcast in 2002.

At **Windsor Castle** (Royal Household Property Section) archaeological work in advance of the creation of the new Jubilee Gardens was the subject of a BBC documentary on the archaeology and history of the castle, also scheduled for transmission in 2002.

public events and open days

MoLAS has had great success with public events programmes in 2001, many run concurrently with major excavations. These have ranged from public viewing galleries overlooking excavation 'work in progress' to 'open days' across a number of sites where Londoners

can get to see and feel what it is like to be an archaeologist.

MoLAS archaeologists have been active in helping train volunteers through the 'training dig' run by **Birkbeck College**.

In 2001 MoLAS also worked with Museum curators in a highly successful, interactive exhibition sponsored by Land Securities PLC at the Museum of London. Called '**The dig**', it has allowed children to get to grips with digging in a simulated archaeological environment. Seven archaeological staff took part in 'The dig' as site supervisors, working in shifts with groups of enthusiastic 'diggers'.

During recent archaeological work at **Merton Priory, SW19** (Countryside Properties (Commercial) PLC), MoLAS site staff organised three public open days on Saturday mornings. These included a tour around the trenches and a display of finds and photographs in the medieval chapter house. Nearly 1000 people visited the site and the events attracted interest from BBC radio and the local press. The chapter house will serve as a visitor centre during the proposed redevelopment of the site, displaying many of the finds from the excavations.

To help celebrate National Archaeology Days on the weekend of July 21st and 22nd, groups of visitors were given guided tours around the MoLAS excavations at **Spitalfields Market** and shown the latest findings and continuing work on the assessment of the thousands of medieval skeletons recovered from the site.

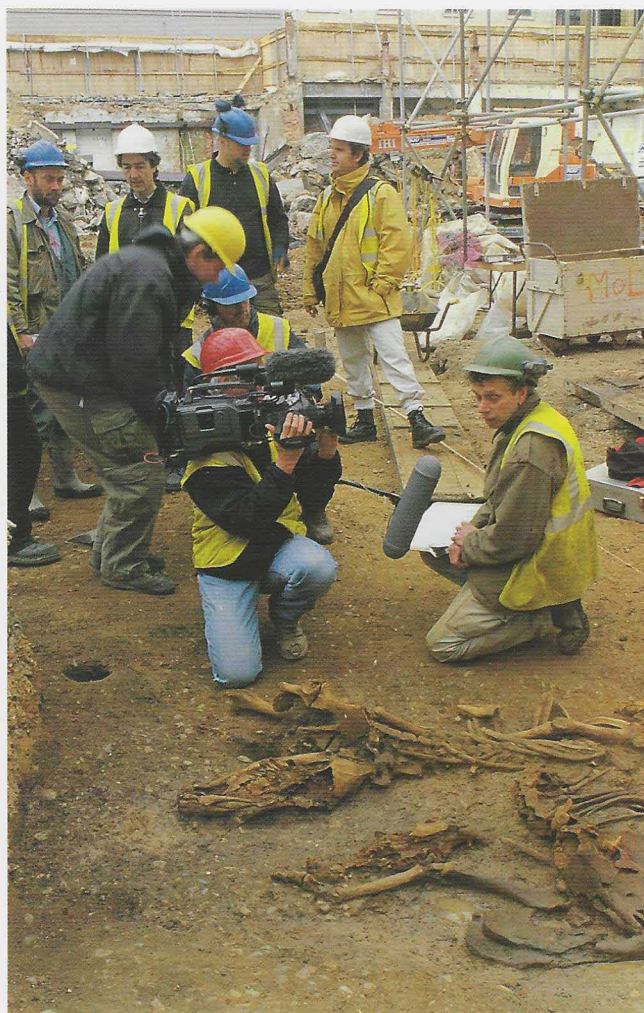


Specialist Services conservator Liz Barham working on the Roman mosaic from 10 Gresham Street

lectures

Every year MoLAS archaeologists give dozens of lectures to local history and archaeological societies, private groups, clients, fellow archaeologists and historians, international conferences, and visitors to the Museum of London. Topics range from site summaries to academic debates about specific themes, all illustrated with images from MoLAS sites. Notable evening events in 2001 included a 'round-table' discussion staged by the **Corporation of London's City Property Advisory Team** to look at the impact of archaeology on development in the City, attended by important members of the property world. Continuing Professional Development (CPD) presentations on the work of MoLAS and archaeology in the planning framework were given to several firms involved in development.

MoLAS also contributed to academic events, including providing lecturers for the MA courses in London archaeology at **University College London** and archaeological techniques at **Birkbeck**. Staff spoke at conferences throughout Britain and the Continent. These included speeches on medieval London at a conference about the



Time Team interviewing Senior Archaeologist Ian Blair at Blossom's Inn, with the remains of the skeletons of three horses found beneath an early Roman road visible in the foreground

Hanseatic League held in the German town of **Lubeck**, and staff contributions to **Keele University's summer school** on 17th- and 18th-century London ceramics.

conferences

Staff from MoLAS organised a second international conference on preserving archaeological remains *in situ* (known as the **PARIS conference**), in collaboration with English Heritage and the University of Bradford. Over 30 speakers took part in the three-day conference, addressing key resource management issues. The proceedings of the conference will be published as a MoLAS monograph.



research and publication

research and publication

A significant proportion of archaeological work and expenditure takes place after fieldwork has been completed and the management of this work is essential to meeting planning requirements, client needs and academic goals. Post-excavation work at MoLAS is carefully managed to ensure projects progress smoothly through the completion of site archive work and assessment, in accordance with English Heritage's guideline *Management of archaeological projects* (1991). Where assessment demonstrates the potential to contribute to identified research objectives, a programme for analysis and publication of appropriate data is drawn up. Consultation and review stages track projects and amend and update research designs as appropriate.

MoLAS calls upon the skills of Specialist Services and experts at many academic institutions around Britain and abroad for specialist analysis of finds and environmental assemblages from many of its projects. The effective use of IT systems is a central element in the successful and efficient operation of MoLAS post-excavation work, and a comprehensive IT strategy has been established for the programming of work, analysis and publication.

Research work can lead to a wide variety of publication types, depending upon the size and importance of projects. More substantial work tends to be published in the MoLAS series of monographs, archaeology studies, popular books and booklets, or as papers or articles in peer-reviewed periodicals. Larger publications are organised and written as integrated texts, with the stratigraphic, finds and environmental data brought together in a single narrative wherever possible. Supporting data are made available through edited and accessible research archives held at the London Archaeological Archive and Research Centre (LAARC) or the appropriate regional archive centre.

Major research work is currently made up of a mixture of English Heritage and developer funded projects, including study of the prehistoric West London landscape, prehistoric Southwark and Lambeth, Roman urban development at sites such as Poultry and Plantation Place, the Roman amphitheatre at Guildhall, London's Roman cemeteries, the Saxon settlement of Lundenwic and the small Saxon settlements at Clapham, Battersea and Hammersmith, London's medieval religious houses, the medieval palaces at Westminster and Southwark, the cemetery and buildings of Spitalfields, London's playhouses and its pottery production centres at Southwark, Lambeth and Limehouse.

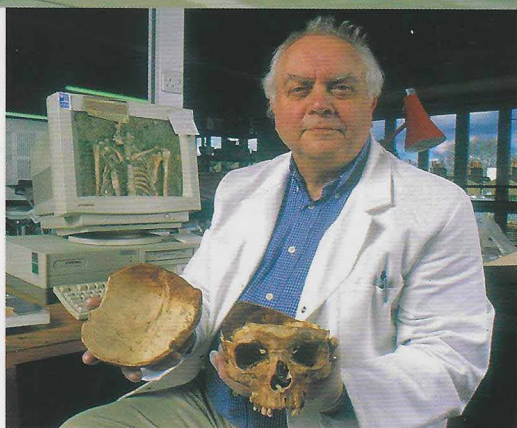
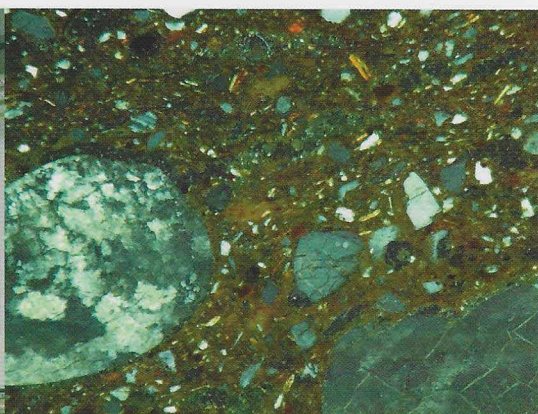
Reconstruction of the area of medieval Newgate, based on the results of recent excavations at King Edward's Buildings, for use in display panels on the Roman and medieval defences preserved at the new Merrill Lynch building in Giltspur Street

Mortimer Wheeler House and the LAARC

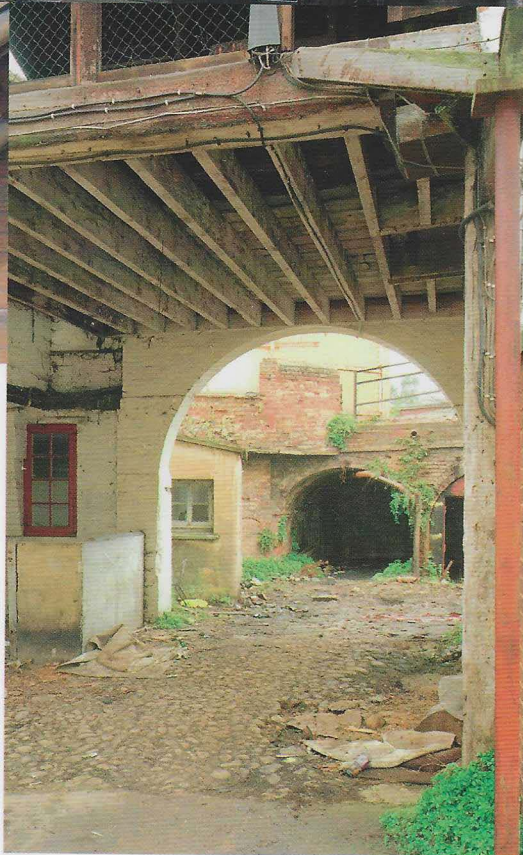
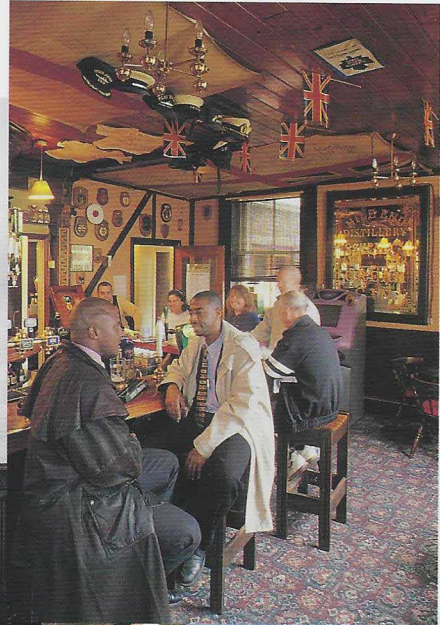
At the end of June 2001 MoLAS moved to new purpose-built offices next to the Regent's Canal at Mortimer Wheeler House, 46 Eagle Wharf Road, London, N1, only a mile north of the City, between Old Street and the Angel. MoLAS took on the role of developer, commissioning the 'new build' on top of the Museum's existing warehouse which holds the London Archaeological Archive and Research Centre (LAARC), Specialist Services, and the Museum of London's social history collections. Bringing all of these people and objects under one roof represents a tremendous advance in our ability to do more and better integrated work and to realise the potential of London's enormously rich archaeological resource.

As 2001 came to a close, preparations for the February 2002 opening of the London Archaeological Archive and Research Centre (LAARC) accelerated. The artefacts and records from the majority of the 5200 archaeological interventions known to have taken place in Greater London's 32 boroughs and the City in the past 75 years, many of them previously at inaccessible stores and unpublished, were reorganised within the new building. These form what is by far and away the largest archaeological archive in the country, representing over 20% of the whole of England's archaeological archive and a collection of national importance. In terms of shelving space, this represents 1000m of field records, another 10km of registered finds, numbering around 250,000; the LAARC holds 120,000 boxes of general finds, pottery and bone. A major programme of work was carried out by the Museum's archive team to make the archive more accessible for researchers of all types.

A related initiative, also aimed at opening the doors to the archived material and fostering new research and new discoveries, is the production of *A research framework for London archaeology*, due for publication in 2002. Involving over 150 external consultees and the collaboration of staff throughout MoLAS, Specialist Services and the Museum, the document will seek to realise the potential of the London Archaeological Archive, chart ways of managing it effectively, and help to target academic endeavour to where it will have greatest effect. A key aim is to widen commercially-funded activities to include partnerships with the many individuals and organisations who make up London's archaeological community. Work has already identified material in the archive which will complement recent fieldwork, enhancing the value of projects already underway. An important part of the research policy is to harness the relevance of archaeological discoveries to our lives today, and to return the stories of London's past to the residents, local communities, office workers and indeed to the property professionals who sponsor archaeological work. In essence, the LAARC has created the opportunity to study long-neglected material, and in developing new research projects will promote much more tightly focused and inclusive research where we hope the real value of the archives will be realised.



CLOCKWISE FROM TOP LEFT Sue Pringle of Specialist Services, at work assessing material from a MoLAS site / The copper-alloy cauldron found in one of the wells at Blossom's Inn was carefully cleaned by conservators / A photomicrograph of a sample of sandy shelly ware / 17th-century glass vessel handles from the site at 1 Poultry / Bill White is a human palaeopathologist in the Specialist Services department / Study and storage in the heart of the newly opened LAARC



Standing building recording projects

CLOCKWISE FROM TOP RIGHT The landward facade of the Gun, an Isle of Dogs public house built in the 1870s but incorporating 18th-century cellars and earlier buildings / The saloon bar in the Gun / Senior Archaeologists Sadie Watson and Andrew Westman discuss the recording of a retaining wall which once supported Somers Town Goods Depot, built in 1883-7 to the west of St Pancras Station / One of the 1832 buildings surveyed at Queen Street, Hitchin / Close-up of brick and stone dressings outside St Pancras Station, showing evidence of severe weathering

clients

2-16 Phipp Street Ltd	City and West End Developments Ltd	The Governors of Sutton's Hospital	Land Securities PLC	PMB Holdings Ltd	Stanhope PLC
24seven Utility Services Ltd	City Loft Developments Ltd	Great Portland Estates PLC	Land Securities Properties Ltd	ProLogis Developments Ltd	Stiles Harold Williams
Accor UK Ltd	City North Group PLC	Greater London Authority	Laxfield Properties Ltd	The Property Merchant Group Ltd	Stockwell Park Limited
Alfred McAlpine Construction Ltd	City of London Archaeological Trust	Green Property UK Ltd	Legal and General Group PLC	Prudential Portfolio Managers Ltd	Stone Eye Productions
Alfred McAlpine Homes East Ltd	City of Westminster Corporate Property Department	The Greenwich Foundation for the Royal Naval College	Lionbrook Property Partnership	Purcell Miller Tritton and Partners	Store Property Investments Ltd
Archaeology Data Service	CM International Ltd	Greycoat Group PLC	Lionheart Properties Ltd	Railtrack Property Investments Ltd	Strategic Rail Authority Company Ltd
Argent Real Estate	Compstar Ltd	Griffiths McGee Demolition Company Ltd	Liverpool Victoria Friendly Society Ltd	Regime Developments Ltd	Suffolk Development Management
Arlington Development Management Ltd	Construction Team Services Ltd	Grosvenor Ltd	London Borough of Hackney	Rennie and Partners	Suffolk Holdings Ltd
Asticus (UK) Ltd	The Corporation of London	Grosveworld Ltd	London Borough of Islington	Rialto Homes PLC	Sunley Homes Ltd
Astral Developments Ltd	Costain Skanska Mowlem Joint Venture	The Guild Church Council of St Dunstan in the West	London Borough of Lewisham	Richmond Archaeological Society	The Swiss Re Group
B&Q PLC	Costain Taylor Woodrow	The Guild Church of St Andrew's Holborn	London Borough of Merton	RM Project Services Ltd	Sydale Limited
Barking, Havering and Redbridge Hospitals	Countryside Properties (Commercial) PLC	Hammersmith Embankment Ltd	London Borough of Southwark	Rooff Ltd	Syon Park Ltd
Barts and the London NHS Trust	Countryside Properties PLC	Hammerson UK Properties PLC	London Borough of Tower Hamlets	Royal Hospitals NHS Trust	Taylor Woodrow Capital Developments Ltd
Baynham Meikle Partnership Ltd	County and Metropolitan Homes Ltd	Hawkes, Edwards and Cave HDG Ltd	London Diocesan Fund	Royal Household Property Section	Texaco Ltd
Bee Bee Developments Ltd	Croudace Homes Ltd	Heron Quays Properties Ltd (Canary Wharf Group)	London Electricity PLC	Royal London Asset Management Ltd	Thames Water PLC
Bellway Homes Ltd	D B Trading Ltd	Higgins Construction PLC	London Guildhall University	St George North London Ltd	Thameslink 2000
Bellway Homes South East Ltd	DECO Design and Build Company Ltd	Higgins Homes Ltd	London Town Group PLC	St Martin-in-the-Fields	The British Land Company PLC
Bennett Associates Ltd	Derek Latham and Company Ltd	The Highways Agency Ltd	London Underground Ltd	St Martins International Property Investment	Thomas More School
Berkeley Homes (City & East London) Ltd	Deutsche Property Asset Management Limited	Hollybrook Ltd	Lotta Properties Ltd	St Martins Property Corporation Ltd	Time Team
Berkeley Homes PLC	Diamondpool Ltd	The Honourable Society of the Middle Temple	Lovell Partnerships Ltd	St Mary-at-Finchley	Tishman Speyer Properties UK Ltd
The Big Yellow Self Storage Company	Dixons	Howard de Walden Management Ltd	Luxor Developments Ltd	St Mary's Hospital Paddington NHS Trust	Tonbridge Stock and Cattle Market Company
Birkbeck College	Dr Johnson's House Trustees	Humboldt University of Berlin	M3 Consulting	St Modwen Developments Ltd	Trillium Ltd
Bovis Homes Ltd (Central Region)	Durkan Homes Ltd	Hyder Consulting Ltd	M J Gleeson Group PLC	Scottish Life Assurance Company	Trustees of Russell Stoneham Estate
Bovis Homes South East Ltd	Ealing Parks and Countryside Service	ICOMOS (International Council on Monuments and Sites)	M M Cox Properties Ltd	Servite Houses Ltd	Trustees of St Ethelburga's Centre for Reconciliation and Peace
Bovis Lend Lease Ltd	El Da Management Ltd	IDP II (Trading Subsidiary) Ltd	McCann Erickson Ltd	Shieldpoint Ltd	Trustees of the Borough Market
Bride Hall Group Ltd	English Heritage	Imperial College London	Mansell Construction Services Ltd	Shurgard Storage Centres UK Ltd	Union Railways (South) Ltd
The British Broadcasting Corporation	English Partnerships Ltd	The Institute of Field Archaeologists	Mansell PLC	Sidell Gibson Partnership	Universities Superannuation Scheme Ltd
British Telecommunications PLC	The Environment Agency	Island Securities Ltd	The Manser Practice	Sir Robert McAlpine Ltd	University College London Centre for Sustainable Heritage
Buckley Gray Architects Ltd	ESA Planning	J Sainsbury PLC	Margaux Developments Ltd	SITA	Viewmile Limited
Bucknall Austin Ltd	The European Parliament	Jarvis University Partnership Programme	Matthews Homes Ltd	Skanska Construction UK Ltd	Wandle Housing Association
Building Construction Joint Venture (BCJV)	Fashion Crest Ltd	Jewish Secondary Schools Movement	Mayday Healthcare NHS Trust	Skanska Whitehall	Warings Construction Group Ltd
The Cabinet Office	Fidelity Investments	JNI Property Developments	MEPC Developments Ltd	Skillcrown Homes Ltd	Wates Construction Ltd
The Caledonian Club	First Stop Hotels Ltd	John Doyle Group PLC	The Mercers' Company	South Bank University	West Sussex County Council
Calmont (Weald) Ltd	Fitzpatrick Construction Ltd	K M C Mason and Sons Ltd	Merrill Lynch Europe PLC	South-west London Community NHS Trust	Willerby Properties
Carillion Building Ltd	F L Estates (Old Church Street) Ltd	Keith Harrison and Associates	Mills Whipp Partnership	Southern Water PLC	Willmott Dixon Housing Ltd
Cazenove and Company Ltd	Fort Knight Group PLC	King's College London	The Moorgate Investment Partnership	Southgate Developments Ltd	Wilmar Estates Ltd
CgMs Ltd	Galliford Hodgson Ltd	Kohn Pedersen Fox Associates	Museum of London	Spitalfields Development Group	Wiltshier Construction (London) Ltd
Chamberlain and Thelwell Ltd	Galliford Midlands Ltd	Kvaerner Trollope and Colls Ltd	The National Gallery	Spitalfields Historic Buildings Trust	Wimpey Homes PLC
The Chartered Institute of Personnel and Development	Gaunt Francis Associates	Kwik-Fit Properties Ltd	The National Maritime Museum	The Standard Life Assurance Company	Winterthur Properties Ltd
Charterhouse Bank Ltd	GE Capital Corporation (Estates) Ltd		The National Museum of Wales		The Worshipful Company of Merchant Taylors
Chelsfield PLC	George Wimpey Central London Ltd		Nightingale Estates Ltd		WS Atkins Consultants Ltd
Churchill Securities Ltd	Gibb Ltd		Mrs J Otnes		
City and General Ltd	Goldcrest Homes PLC		Partnerships in Care Ltd		
City and Provincial Properties PLC			Pasquini and Barker Ltd		
			Paternoster Associates		
			The Paul Strickland Scanner Centre		
			Pegasus Retirement Homes Ltd		

sites

BARKING AND DAGENHAM

Odeon Barking, Longbridge Road, IG11 **LGG01** (David Jamieson)

BARNET

Hasmonean Primary School, 8 Shirehall Lane, NW4 **SLL01** (Andrew Westman)

BERKSHIRE

Castle Hill Garden, Windsor Castle **BR-CAS01** (Isca Howell)

BEXLEY

Belvedere Football Club, DA17 **LWD01** (Elaine Eastbury)
Howbury moated site, Moat Lane, Slade Green, Erith, DA8 **HBM01** (Duncan Lees, Elaine Eastbury)
1–31 Palm Avenue and 53–79 Maidstone Road, Sidcup, DA14 **PMF01** (Jane Corcoran)
Project Alice (former British Gypsum site), Erith, DA8 **CQA01** (Graham Spurr)

BROMLEY

16 Fairfield Road and 117–133 High Street, Beckenham, BR3 **FFL01** (Charles Harward)

CAMDEN

Hotel Curve, King's Cross Underground Station redevelopment, NW1 **KXS01** (Raoul Bull)
6–10 Kirby Street and 119–124 Saffron Hill, EC1 **KIY00** (Raoul Bull, Simon Davis)
St Pancras Railway Station, N1 **PNC01** (Andrew Westman)
University College London Hospital, WC1/NW1 **GWT01** (Mike Morley, Jane Corcoran)

CITY

12 Arthur Street, EC4 **AUT01** (Dan Swift)
the Baltic House site, St Mary Axe, EC3 **BAX95** (Nicholas J Elsdon)
Bastion House, 140 London Wall, EC2 **LWN01** (Nicholas J Elsdon)
5 Billiter Street, EC3 **BII00** (Malcolm McKenzie)
45–48 Bow Lane, EC4 **BWN01** (David Jamieson)
100 Cannon Street, EC4 **CNQ01** (Nicholas J Elsdon)
Charterhouse Building, Paternoster Square, EC4 **PNS01** (Kieron Heard)
Condor House, 5–14 St Paul's Churchyard, EC4 **SCY01** (Tony Mackinder)
Custom House, Riverside Walkway, Lower Thames Street, EC3 **CHW99** (David Jamieson)
Dr Johnson's House, 17 Gough Square, EC4 **GHE01** (David Saxby)
41 Eastcheap and 16–18 Rood Lane, EC3 **EAE01** (Malcolm McKenzie)
56–59 Fenchurch Street, 18 London Street and 76 Mark Lane, EC3 **FHC00** (David Bowsher)
11–12 Foster Lane and 1–4 Carey Lane, EC2 **FOT01** (Jo Lyon)
10 Furnival Street, EC4 **FUT01** (Sadie Watson)
15–17 Furnival Street, EC1 **FUN01** (David Sankey)
3–6 Gracechurch Street, EC3 **GRK01** (Lesley Dunwoodie)
10 Gresham Street, EC1 **GSM97** (Julian Ayre, Lindy Casson, James Drummond-Murray, Antony Francis)
25 Gresham Street, EC2 **NHG98** (Jo Lyon)
20–30 Gresham Street, 20–23 Lawrence Lane, 3–6 Trump Street and 1–10 Milk Street, EC1 **GHT00** (Ian Blair, Diccon Hart, Karl Hulka, Jeremy Taylor, Bruce Watson; MoLAS with AOC Archaeology Ltd)
8–10 Half Moon Court, EC1 **HMC01** (Pat Miller)
2–12 Hosier Lane, EC1 **HSN99** (Alison Telfer)
Juxon House, St Paul's Churchyard, EC2 **SLY00** (Bruno Barber)
68 King William Street, EC4 **KWM00** (Malcolm McKenzie)
23–25 Leadenhall Market, EC3 **LLM01** (Bruno Barber)
26–27 Leadenhall Market, EC3 **LET01** (Lesley Dunwoodie)
21 Lime Street, EC3 **LME01** (Lesley Dunwoodie)
Lion Plaza 40–53 Threadneedle Street and 1–18 Old Broad Street, EC2 **TEA98** (Malcolm McKenzie)
10–15 Lombard Street, EC3 **LOD00** (Raoul Bull)
1 London Wall, EC1 **LDN01** (Dick Bluer, Raoul Bull, Malcolm McKenzie, Jon Sygrave, Andrew Westman)
41 Lothbury, EC2 **LBU01** (Jon Sygrave)

Merchant Taylors Hall, EC2 **MTY99** (David Saxby)
Merrill Lynch Financial Centre, 2 King Edward Street, EC1 **KEW98** (Jo Lyon)
Middle Temple Hall kitchens, Middle Temple Lane, EC4 **MTN00** (Andrew Westman)
19–31 Moorgate, EC2 **MGA00** (Jon Sygrave)
11–23 New Fetter Lane, 25 New Street Square, 11 Bartlett Court, 1 and 8–9 East Harding Street, EC4 **NFL01** (Nicholas J Elsdon)
Newgate Triangle, Paternoster Square, EC4 **NGT00** (Sadie Watson)
the former Patent Office, 1 Furnival Street, EC4 **FUV01** (Alison Telfer)
Paternoster Square (stonemasons' yard ramp), EC4 **PSU99** (Nick Holder)
Plantation Place, 31–35 Fenchurch Street, EC3 **FER97** (Charles Harward, Ken Pitt, Phil Treveil)
45 Quality Court, EC4 **QLY01** (David Sankey)
29–30 Queen Street, EC4 **QUS00** (Alison Telfer)
Queensbridge House, Upper Thames Street, EC4 **UPH01** (Robin Wroe-Brown)
the Rolls Estate, Chancery Lane, WC2 **CEY99** (Kieron Tyler)
St Andrew's Church, Holborn, EC1 **HUD01** (Adrian Miles)
St Bartholomew's Hospital west wing, EC1 **WTM01** (Malcolm McKenzie)
St Dunstan in the West, 184a Fleet Street, EC4 **FTC01** (Alison Telfer)
St Ethelburga the Virgin, Bishopsgate, EC2 **SEC98** (Andrew Westman, Sadie Watson)
St Pancras Churchyard, Pancras Lane, EC4 **PNN01** (Nathalie Cohen)
St Sepulchre North Churchyard, Newgate Street, EC1 **SCU01** (Adrian Miles)
4 Snow Hill, EC1 **SN001** (David Jamieson, Julian Bowsher)
Walker House, 87–95 Queen Victoria Street, EC4 **QVR00** (David Sankey)

CROYDON

10–12 Bulganak Road, Thornton Heath, CR7 **BKN01** (Richard Hewett)
Croydon Centrale, Croydon, CR0 **TMH01** (Robert Cowie)
22 Haling Park Road, South Croydon, CR2 **HPD01** (Raoul Bull)
New Ward Block, Mayday Hospital, CR7 **MYD01** (David Jamieson)
Thomas More School, Russell Hill, Purley, CR8 **RHL01** (Raoul Bull)
202–216 Thornton Road, Croydon, CR0 **TON01** (David Sankey)

EALING

Horsenden Hill, Greenford, UB6 **HLH01** (Jeremy Taylor)

ENFIELD

Edmonton Green Shopping Centre, Edmonton Green, N9 **EGS01** (Jon Sygrave)

ESSEX

St Mary's Church, Ramsden Cray **EX-BARC01** (Julian Ayre)

GLOUCESTERSHIRE

RAF Fairford **GL-FAI00** (Stewart Hoad)

GREENWICH

Anchor Iron Wharf, Hoskins Street, SE10 **LAS01** (Julian Bowsher)
Borthwick Street–Gonson Street cable trench, SE8 **BWI01** (Elaine Eastbury)
British Telecom and Gas trenches, former Royal Naval College, SE10 **RNY01** (Julian Bowsher)
173–185 Greenwich High Road, SE10 **GWH01** (Julian Bowsher)
the National Maritime Museum (CCTV), SE10 **NMU01** (Julian Bowsher)
Sir Walter Raleigh statue, former Royal Naval College, SE10 **RNR01** (Julian Bowsher)
Thamesmead Town residential site, Thamesmead, SE28 **CWY01** (Tony Mackinder)
Trinity Hospital, Old Woolwich Road, SE10 **OWR01** (Julian Bowsher)
Tunnel Avenue–Peterboat Close, SE10 **TLA01** (Julian Bowsher)
Woolwich Church Street and Ruston Road, Woolwich, SE18 **WCS01** (Rosemary Joynson)

HACKNEY

152–154 Curtain Road, EC2 **CIA01** (Charles Harward)
7–27 Drysdale Street, N1 **DYL01** (Dan Swift)
14–15 Hoxton Square, N1 **HXT01** (David Sankey)
196 Shoreditch High Street, EC2 **SDC01** (Andrew Westman)

HAMMERSMITH AND FULHAM

Hammersmith Embankment, Winslow Road, W6 **HWR99, W1001** (David Jamieson)

HARINGEY

Athenaeum Place, Muswell Hill, N10 **ATP01** (Adrian Miles)

HAVERING

Oldchurch Hospital, Romford, RM7 **ODC01** (Raoul Bull)

HERTFORDSHIRE

Bovis residential housing, Hatfield Aerodrome areas 1 and 2 **HE-RES01** (Simon Davis, Jon Sygrave)

Hatfield Aerodrome commercial redevelopment **HE-HAD00** (Simon Davis, Jon Sygrave)

1–2 Nails Lane, Bishops Stortford **HE-NAI01** (Natasha Powers)

40 Queen Street, Hitchin **HE-QUE01** (Simon Davis, Rosemary Joynson, Alison Telfer)

HILLINGDON

184 Bury Street, Ruislip, HA4 **BYP01** (David Jamieson)

114 High Street, Uxbridge, UB8 **HUX01** (Isca Howell)

Home Farm, Harmondsworth, UB7 **HOM98** (Stewart Hoad)

Mount Vernon Hospital, HA6 **MVH01** (David Jamieson)

HOUSLOW

Ferry Lane, Brentford, TW8 **FRY98** (Ken Pitt, David Saxby)

641–647 London Road, Isleworth, TW8 **LDI01** (Tony Mackinder)

Magnolia Park, Dye Works, TW3 **HID00** (Portia Askew)

St George's Church, Hanworth, TW13 **CWG01** (Isca Howell)

Syon House, Brentford, TW8 **PKD01** (Robert Cowie, Andrew Westman)

The Cottage, Chiswick Mall, W4 **CKM01** (Tom R G Wilson)

INTERNATIONAL

Apulum, Alba Iulia, Romania **APU00** (Peter Rauxloh, Andreas Kabisch)

ISLE OF WIGHT

37 Pyle Street, Newport **IW-PYL01** (Portia Askew)

ISLINGTON

1–2 Finsbury Square, EC2 **FBY01** (Sadie Watson)

27–30 Finsbury Square, EC2 **FSU99** (Jeremy Taylor, Malcolm McKenzie)

24 Gaskin Street, N1 **GIS01** (David Jamieson)

Oliver House, 51–53 City Road, EC1 **CIO01** (Alison Telfer)

1–3 Rawstorne Place, N1 **RTPO1** (Andrew Westman)

47–48 St John's Square, EC1 **STQ01** (Sadie Watson)

Therese House, 29–30 Glasshouse Yard, EC1 **GLY01** (Bruno Barber)

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A2/M2 widening zone 2, borehole survey **KT-MMB00** (Jane Corcoran)

the Boilershop, Chatham Maritime **KT-BOS01** (Graham Spurr, Jane Corcoran)

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Springhead, Gravesend (Peter Rauxloh; in association with Wessex Archaeology and English Heritage Centre for Archaeology)

Westcourt Marshes, Gravesend **KT-WEM01** (Portia Askew)

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river wall, Creekside, SE8 **CEK01** (Duncan Lees)

Deepway, 85 Evelyn Street, SE8 **EVL01** (Alison Telfer)

44–45 Deptford Broadway, SE8 **DEB99** (David Sankey)

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Haslemere First School, Mitcham, CR4 **HME01** (Jeremy Taylor)

Merton Priory, SW19 **MMY99** (David Saxby)

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the London Millennium Bridge foreshore survey, Southwark and City of London **MBC98, MFB98** (Robin Wroe-Brown)

Molesworth Street to Creek Road cable trenches, Greenwich and Lewisham, SE8/SE13 **CKP01** (Julian Bowsher, Simon Davis)

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All Saints Church, E15 **VIE00** (Adrian Miles)

Burford Road, Stratford, E15 **BUA00** (Raoul Bull, Dick Bluer)

ETAP Hotel, North Woolwich Road, E16 **NWH01** (Jane Corcoran, Graham Spurr)

241–263 High Street, Stratford, E15 **HGD01** (David Jamieson)

2–6 New Mount Street, Stratford, E15 **NMS01** (Raoul Bull)

the Three Rabbits public house, E12 **RFD01** (Jon Sygrave)

Twelvetrees Crescent, Bromley-by-Bow, E3 **TWC01** (Jane Corcoran, Bruno Barber)

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36 Station Road, Hampton, TW12 **SI001** (Nicholas J Elsdon)

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Borough Market, SE1 **BKT01** (Dick Bluer, Austin Ainsworth)

1–2 Bowling Green Place, SE1 **BLG01** (Jane Corcoran)

Gatehouse Square, 55 Thrale Street and 20, 21 and 23 Park Street, SE1 **PKK01** (Jane Corcoran)

Hartley's Jam Factory, Green Walk, SE1 **GEN00** (Robert Cowie)

44–47 Hopton Street, SE1 **HPT01** (Andrew Westman)

24seven cable trench, More London to Tower Bridge Road, SE1 **NCB01** (Raoul Bull)

Newent Close, Peckham, SE15 **NTC01** (Alex Brett)

18–48 Newington Causeway, 69–84 Borough Road, SE1 **NEV01** (Jeremy Taylor)

Riverside House and Bear Wharf, SE1 **BAK99** (Tony Mackinder)

South Bank University, Keyworth Street, SE1 **KYW01** (Alison Telfer)

Southwark Business Village, SE1 **SUB00** (Mike Morley, Graham Spurr)

5 Spa Road, Bermondsey, SE16 **SPX01** (Tony Mackinder)

255 Tooley Street, SE1 **TYS00** (Isca Howell)

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14–20 Alie Street and 14–16 North Tenter Street, E1 **AEE01** (Rosalind Aitken)

Eden House, 5–13 Spital Square, London, E1 **SQR00** (Chris Thomas)

57–83 Fairfield Road, Bow, E3 **FAF01** (Dick Bluer)

40–46 Fieldgate Street, E1 **FIG01** (Nicholas J Elsdon)

18 Folgate Street, E1 **FOG01** (David Jamieson)

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St Botolph's Hall, 35 Spital Square, E1 **SSA01** (Charles Harward)

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324 Battersea Park Road, SW11 **BKD01** (Tom R G Wilson)

Chelsea Bridge Wharf, Queenstown Road, SW8 **QST01** (Tony Mackinder)

66–84 Putney Bridge Road, SW18 **PBD01** (Isca Howell, Tom R G Wilson)

The Rookery, Queen Mary's Hospital, Roehampton, SW15 **ROL01** (Andrew Westman)

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33 Floral Street, WC2 **FLL01** (Jeremy Taylor)

King's College, Strand Lane, WC2 **KCL01** (Tony Mackinder)

8–9 Long Acre and 16 Garrick Street, WC2 **LGC00** (Robert Cowie)

50–51 Marylebone High Street, W1 **MAB01** (Julian Bowsher)

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23 Nassau Street, W1 **NAS01** (Andrew Westman)

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22 Whitehall, SW1 **WTH99** (Alison Telfer)

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- Barber, B, and Thomas, C, 2002 *The London Charterhouse*, MoLAS Monogr Ser 10, London
- Barber, B, with Giorgi, J, and Stephenson, R, 2001 Saving the Globe?: Part 1, Archaeological excavation occasioned by the redevelopment of the Anchor Terrace Car Park, Park Street SE1, *London Archaeol* 9(11), 300–8
- Blackmore, L, and Cowie, R, 2001 Saxon and medieval Battersea: excavations at Althorpe Grove, 1975–8, *Surrey Archaeol Collect* 88, 67–92
- Blair, I, and Hall, J, 2001 Water management in Roman London, *Minerva* 12(6), 4
- Bowsher, J, and Woollard, P, 2001 Clay tobacco pipes from Greenwich (Presidential address), *J Greenwich Hist Soc* 2(4), 94–108
- Bowsher, J, 2001 Capitolas, Decapolis, and Gerasa, in Negev, A, and Gibson, S, (eds), *Archaeological encyclopaedia of the Holy Land*, rev and updated edn, 114–15, 136–7, and 193–4, New York and London
- Brigham, T, with Woodger, A, 2001 *Roman and medieval townhouses on the London waterfront: excavations at Governor's House, City of London*, MoLAS Monogr Ser 9, London
- Cassar, M, Brimblecombe, P, Nixon, T, Price, C, Sabbioni, C, Saiz Jimenez, C, and Van Balen, K, 2001 *Technological requirements for solutions in the conservation and protection of historic monuments and archaeological remains*, European Parliament, Directorate General for Research, ref EP/IV/A/STOA/2000/13/04, Luxembourg
- Cohen, N, 2001 St Alban's, Wood Street, in Milne, G, *Excavations at medieval Cripplegate, London: archaeology after the Blitz, 1946–68*, Engl Heritage Archaeol Rep, 86–100, London
- Cohen, N, and Milne, G, 2001 Houses and halls, in Milne, G, *Excavations at medieval Cripplegate, London: archaeology after the Blitz, 1946–68*, Engl Heritage Archaeol Rep, 37–66, London
- Cowie, R, 2001 Prehistoric Twickenham, *London Archaeol* 9(9), 245–52
- Cowie, R, 2001 Mercian London, in *Mercia: an Anglo-Saxon kingdom in Europe* (eds M Brown and C Farr), 194–209, Leicester
- Cowie, R, and Cloake, J, 2001 An archaeological survey of Richmond Palace, *Post-Medieval Archaeol* 35, 3–52
- Elsden, N J, 2001 Excavations at 36–40 Tanner Street and 159–161 Tower Bridge Road, Bermondsey, *London Archaeol* 9(10), 275–82
- Elsden, N J, 2002 *Excavations at 25 Cannon Street, City of London: from the Middle Bronze Age to the Great Fire*, MoLAS Archaeol Stud Ser 5, London
- Hill, D, and Cowie, R (eds), 2001 *Wics and emporia: the early medieval trading centres of northern Europe*, Sheffield
- Howe, E, 2002 *Roman defences and medieval industry: excavations at Baltic House, City of London*, MoLAS Monogr Ser 7, London
- Malcolm, G, 2001 Jobs in British archaeology 2000, *The Archaeologist* 40, 18–20
- Nixon, T, 2001 Foundations for growth – tall buildings and archaeology, *Construction Industry Times* (autumn), 9–10
- Nixon, T, 2001 From risk to opportunity: one small step for the development team, in Institute of Field Archaeologists, *Yearbook and directory of members 2001*, 37–8, Reading
- Rowson, P, 2001 Heart of the City: archaeological work around Bank, *The Old Lady* 77(319), 18–24
- Rowson, P, Kendall, M, Nixon, T, and Malt, D (eds), 2001 *MoLAS 2001: annual review for 2000*, London
- Sloane, B, 2001 When a pilgrim dies, in Brykczynska, G (ed), *Body and soul: hospitality through the ages on the roads to Compostela*, Confraternity of St James, 22–30, np
- Thomas, C, 2001 London's medieval hospitals and St Mary Spital, in Brykczynska, G (ed), *Body and soul: hospitality through the ages on the roads to Compostela*, Confraternity of St James, 16–21, np
- Tyler, K, 2000, The 'Western Stream' reconsidered: excavations at the medieval Great Wardrobe: Wardrobe Place, City of London, *Trans London Middlesex Archaeol Soc* 51, 21–44
- Tyler, K, 2001 The excavation of an Elizabethan/Stuart waterfront site on the north bank of the River Thames at Victoria Wharf, Narrow Street, Limehouse, London E14, *Post-Medieval Archaeol* 35, 53–95
- Watson, B, Brigham, T, and Dyson, T, 2001 *London bridge: 2000 years of a river crossing*, MoLAS Monogr Ser 8, London
- Watson, B, Taylor, J, and Hall, J, 2001 A gilded bronze arm from Roman London, *Minerva* 12(4), 5
- Wroe-Brown, R, 2001 Archaeology, in Sudjic, D, *Blade of light: the story of London's Millennium Bridge*, 40–5, London

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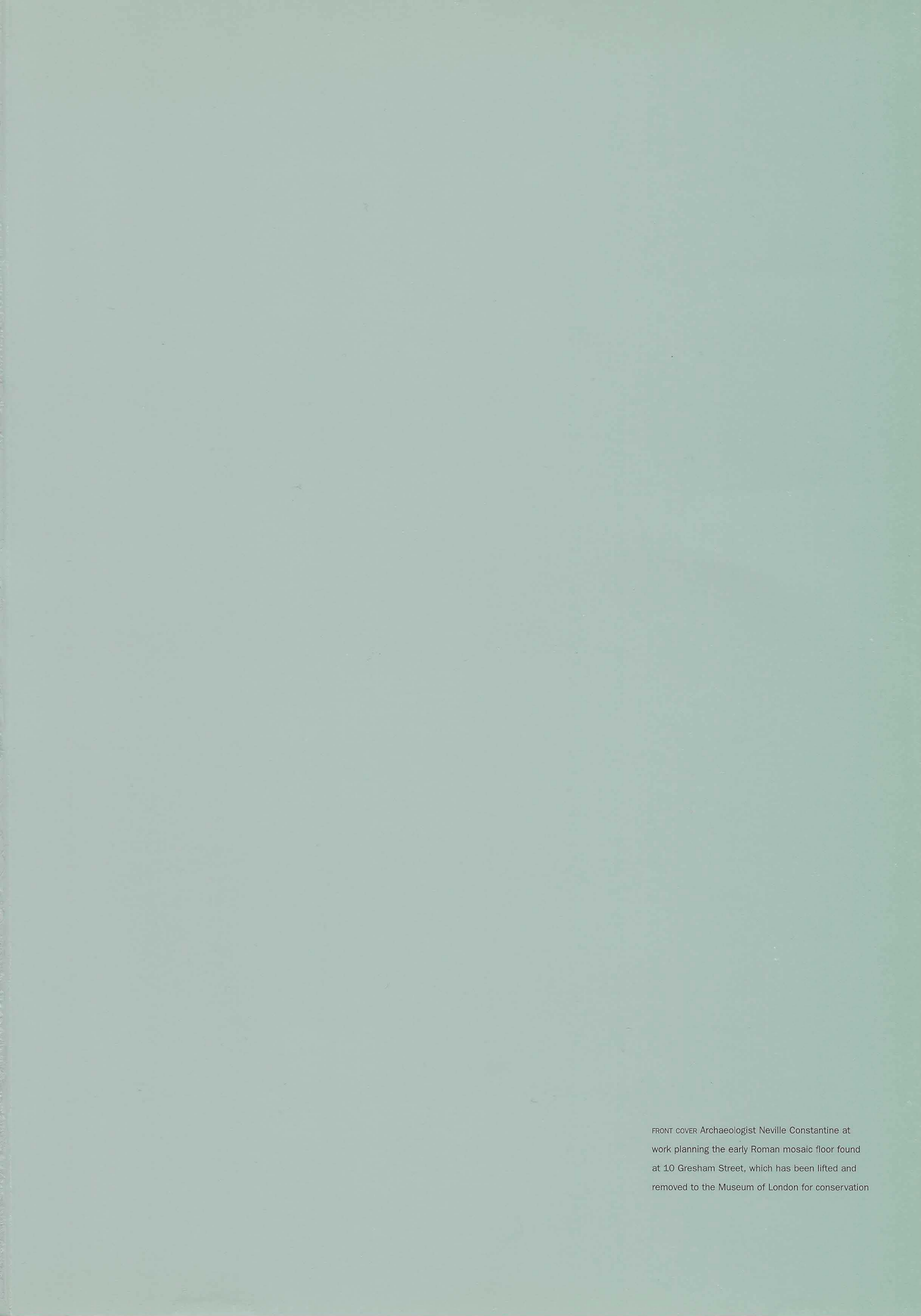
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FRONT COVER Archaeologist Neville Constantine at
work planning the early Roman mosaic floor found
at 10 Gresham Street, which has been lifted and
removed to the Museum of London for conservation

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