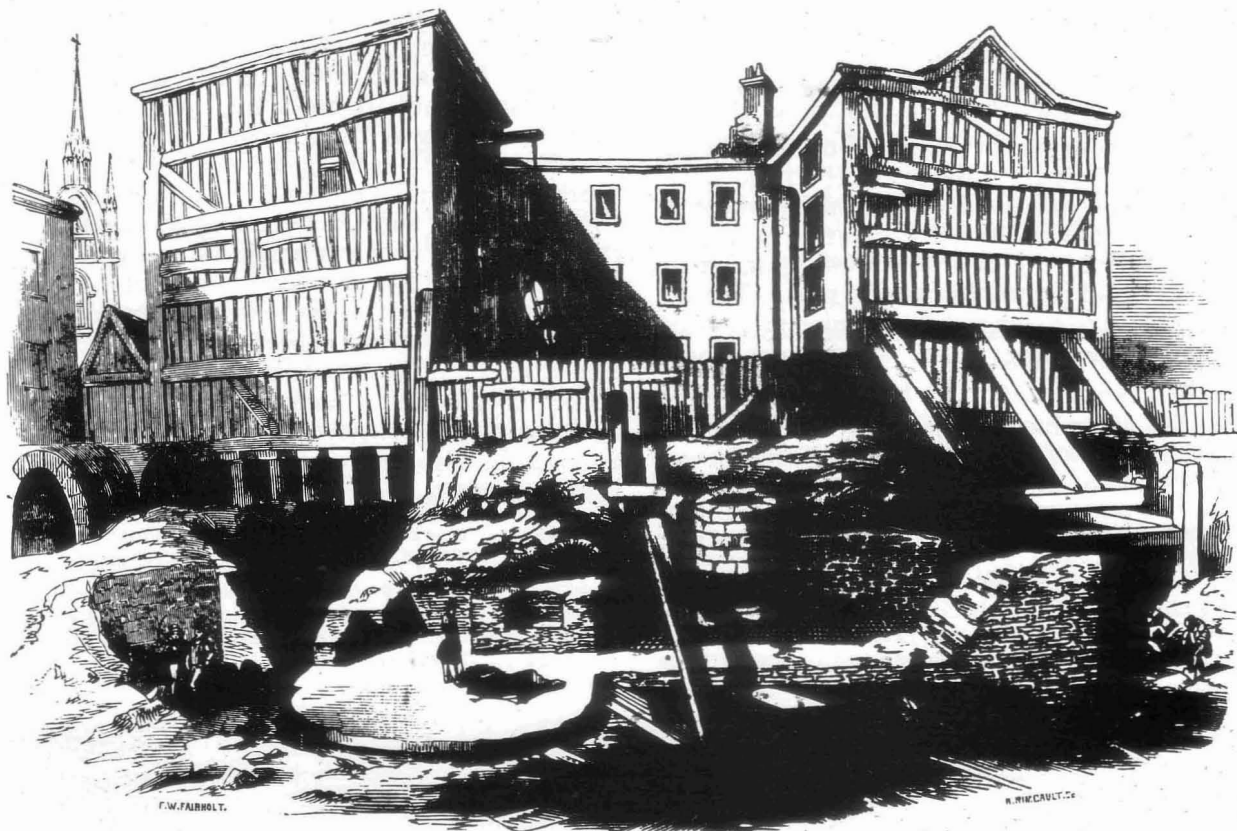


ROMAN VILLA DISCOVERED IN LOWER THAMES-STREET.



GENERAL VIEW OF THE REMAINS OF THE ROMAN VILLA, ON THE SITE OF THE NEW COAL EXCHANGE.

ROMAN VILLA DISCOVERED IN LOWER
THAMES-STREET.

are laid upon a concrete composed of quicklime, sand, and pounded
tiles, with a mixture of small stones. To the right of this apartment
is a doorway which leads into some other room, as yet unopened, at the

the centre is comparatively modern: it is of red glazed pottery, with a
granular white pattern on it; lions' heads project on each side, which
are perforated for a string or any other mode of suspension: it is pro-

Fig. 1: news of the discovery of the 'Roman villa' in Lower Thames Street in the *Illustrated London News* of February 5, 1848.

The Billingsgate Roman House and Bath – conservation and assessment

Peter Rowsome

THE VERY first issue of *London Archaeologist* contained an article on work at the site of a late Roman house and bath complex, excavated during the widening of Lower Thames Street¹. A large part of the Roman building, often referred to as 'Billingsgate bath house', was preserved within the basement area of a 1970s office block, but it has not yet proven possible to open the site to the public. This unusual, perhaps unique, Roman building

has long been recognised as being of particular importance to the understanding of late Roman London. In 1987 the Corporation of London (COL) decided to fund the conservation of the remains. The integration of archaeological recording and conservation work forms an important part of the COL strategy, and as a result the Museum of London's Department of Urban Archaeology (DUA), and subsequently the Museum of London Archae-

1. P Marsden 'Roman House and Bath at Billingsgate' *London Archaeol* 1 no 1 (1968) 3-5.

ology Service (MOLAS), were asked to carry out a detailed archaeological assessment of the site as part of the conservation project. The COL is now giving consideration to the feasibility of display.

A history of site excavation: 1848 – 1975

Roman remains were first discovered at the site in 1848 (Fig. 1), during the construction of the Coal Exchange², and part of the Roman bath block was preserved and displayed within the basement of the new building. Further excavation in 1859 revealed more of the bath block and parts of an associated building to the east and north³. The site was amongst the first to be scheduled in London following the passage of the 1882 Ancient Monuments Act.

The 1967 widening of Thames Street to form a dual-carriageway necessitated demolition of the Coal Exchange and neighbouring buildings be-

tween St Mary at Hill and St Dunstan's Lane. As a result the City of London Excavation Group (COLEG), under the direction of Peter Marsden, were able to carry out extensive excavation of the site of the Roman building complex discovered in 1848. In 1967-8 the bath block and the south part of the eastern wing of the adjacent Roman building were investigated, as well as an external area to the south⁴. Excavation continued in 1969-70 and uncovered more of the eastern and northern wings of the building, as well as a north-south aligned Roman road along the east side of the eastern wing. Sondages indicated that the building complex overlaid both masonry and timber building phases. The 1967-70 excavations showed that the bath block lay within a yard area which was at least partially enclosed by an associated winged building. The excavations also recovered large groups of late Roman artefacts, indicating that the building com-

2. Reports of the 1848 discovery appeared in *The Archaeological Journal* no v (1848), 25ff, and *The Journal of the British Archaeological Association* no iv (1849), 38ff. The JBAA article includes detailed plans and descriptions. A full page report was published in *The Illustrated London News* on February 5, 1848, and in *The Lady's Newspaper* in the same year. These records offer a fascinating insight into the work of anti-

quaries and their knowledge of Roman London.

3. The work was reported in *The Builder* on June 11, 1859. A more detailed report and plan was published in *JBAA* No xxiv (1868), 295ff. A summary of the 1848 and 1859 discoveries can be found in *the RCHM Inventory of the Historic Monuments in London Vol III Roman London* (1928), 142ff.

4. P Marsden *op cit* fn 1.



Fig. 2: the tepidarium hypocaust of the bath block undergoing conservation work in 1990 (looking north).

plex may have remained in use until the end of the Roman period⁵.

In 1974 excavation took place on the western part of the area formerly occupied by the Coal Exchange. This area had been deeply truncated during the 1848 work, and whilst traces of Roman timber structures and piles were recorded these are insufficient to prove whether or not the Roman building complex included a western wing. Trench excavations to the north of the bath block revealed more of the north wing of the building, and elements of an earlier masonry building and timber structures⁶. Yet another campaign took place in 1975 as late and post-Roman deposits were excavated at the north end of the building's east wing⁷.

The Roman buildings uncovered at the site in 1967-75 were consolidated and capped with cement mortar by masons from the Ministry of Public Buildings and Works, Ancient Monuments Division, and preserved within the basement of the new building at 100 Lower Thames Street.

Recent recording and conservation work: 1987-1990

By 1987 it had become clear that the Roman remains were in an unstable state, one of the more serious problems being that ground water evaporation was causing the movement and crystallisation of salts. This was made worse by the presence of inappropriate cements used to consolidate the Roman remains in the 1970s. Cement mortar, aside from containing salt itself, formed an impermeable barrier which caused an increase in damaging efflorescence on Roman walls. In deciding how to maintain the site and protect it from decay, the Corporation of London's Department of Building and Services (DOBAS) commissioned the DUA to compile a detailed record of the visible monument, and asked Nimbus Conservation Group and Ridout Associates to identify conservation and environmental problems and propose solutions⁸.

The general principle adopted for the conservation work was to remove harmful materials and

find methods to control other causes of decay. The replacement of 1970s consolidants would not prevent salt attack, and it was not feasible to isolate the entire site area from ground moisture. Monitoring of the environmental condition of the monument helped to establish criteria for the management of the salt crystallisation process, and conservation procedures were initiated which would allow the movement of moisture and crystallisation of salts to continue, but along 'sacrificial pathways' of more porous modern material.

The conservation programme required close liaison between the conservators and field archaeologists at every stage of the work. Archaeologists compiled a record of the visible remains before, during, and in some cases after conservation work. Where appropriate, limited archaeological excavation took place in order to better understand the sequence and enhance the appearance of the remains⁹. Nimbus used the archaeological planning grid and context numbering system to identify archaeological structures on their conservation forms, so that conservation treatments can easily be cross-referenced to archaeological data.

In practice the system of work first involved careful cleaning of walls to allow identification of original and reconstructed areas of masonry (Fig. 2). Once identified, Victorian and 1970s concrete was physically removed and the original structure desalinated. Some areas of *in situ* structure, such as *pilae* and sections of tessellated flooring, were lifted and reset above lead membranes intended to prevent moisture movement. New consolidation work included the pointing of Roman walls and repair of wall plaster with a porous lime mortar¹⁰. Restoration of the monument to its 1968 appearance was aided by close scrutiny of photographs taken during the 1967-70 excavations, which allowed identification of inconsistencies such as over-enthusiastic 1970s reconstruction (e.g. it was found that tiles had been brought from Huggin Hill and used to rebuild *pilae* to levels higher than those originally discovered). Careful thought was

5. The 1967-70 excavations were assigned Guildhall Museum site code GMIII. Excavation Register numbers were used to identify groups of artefacts, and a stratigraphic record compiled by way of site notebooks, sketch plans, and sections.

6. The 1974 excavation is described in an unpublished site report by Howard Pell entitled *Excavations on the Billingsgate Bath Site, August-September 1974*.

7. See J Maloney *Excavations at 100 Lower Thames Street [BIL75]* Museum of London DUA Archive Records (unpub). Summaries of the 1967-75 findings can be found in R Merrifield *London, City of the Romans* (1983), 247-55, and in P Marsden *Roman London* (1980), 151-5 and 182-6.

8. A detailed explanation of the proposed conservation work is contained in unpublished reports to DOBAS, including *The Roman Bath House, Lower Thames Street - Report on Conservation Work* Nimbus Conservation Group (1987), and *An analysis of moisture and salt distribution at the Roman bath, 100 Lower Thames Street* Ridout Associates (1987).

9. See J Oetgen *Roman Bath Building at 100 Lower Thames Street EC3 DUA Interim Report 1990* (unpub). Over 1200 individual contexts were recorded during the site work, of which nearly 500 relate directly to the conservation process.

10. The work is described in the report to DOBAS *Conservation work to the Roman Bath House Lower Thames Street* Nimbus Conservation Group (1990).

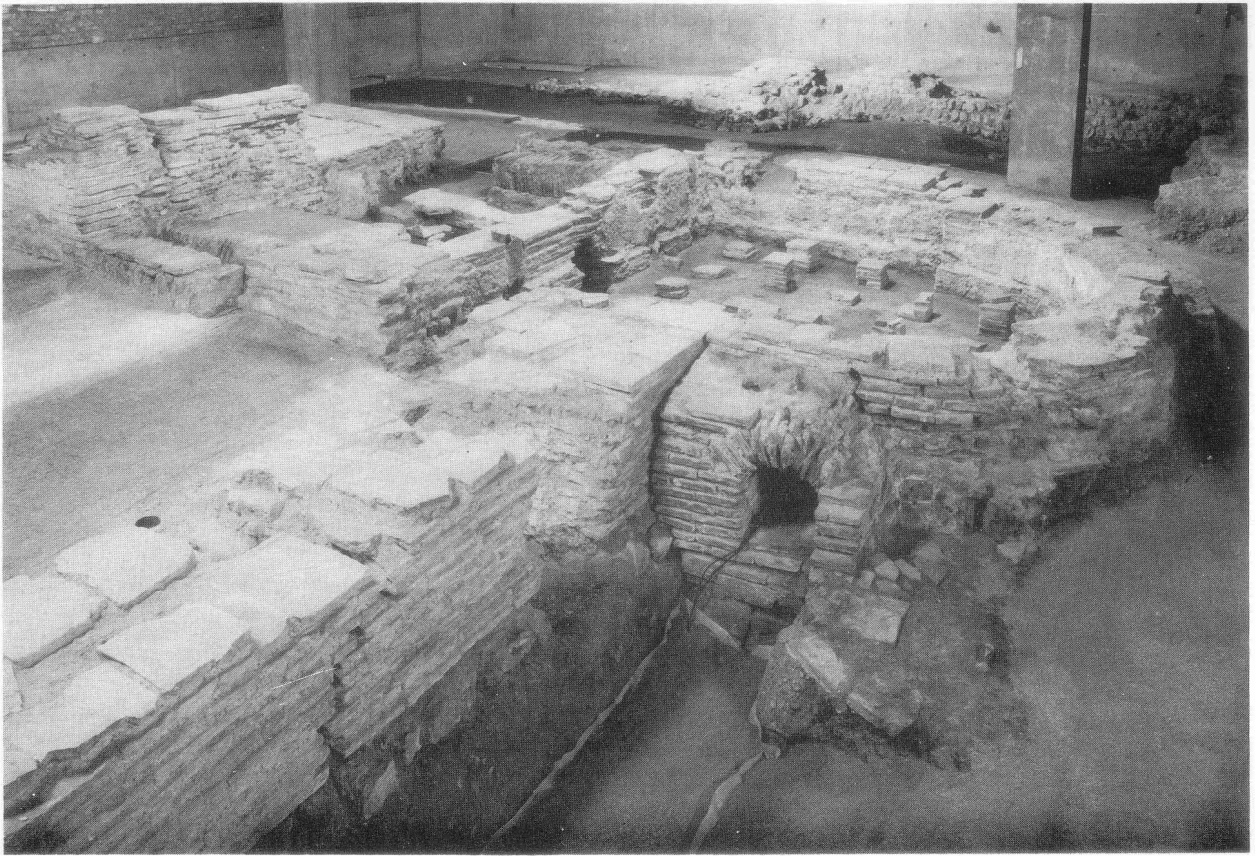


Fig. 3: the bath block following conservation work in 1990 (looking north-west).

also given to how best to display and interpret the site for the public – for instance it was decided to use different types and colours of aggregates, whose primary purpose was to provide yet another sacrificial route for salt, to show whether horizontal surfaces were internal or external to the Roman building (Fig. 3).

A reassessment of the Roman sequence

The 1987-90 conservation and recording work created a large body of survey, plan, and stratigraphic information which could undergo formal assessment. The assessment and analysis of the BIL75 and BBH87 evidence has produced a secure set of control data divided into *phasing units*, providing a framework for the future analysis of records and artefacts from earlier phases of work at the site back to 1848. It may eventually be possible to reconcile all of the various types of record from the site to form a single research archive¹¹.

Analysis of records relating to the late Roman building complex (Fig. 4) suggests that it was in use until the late 4th century, having taken its final form in the 3rd century, when it incorporated two

earlier structures. To the west of Road 1 a rectangular stone building (Building 2) containing three rooms (A-C) was enlarged through the addition of heated rooms (E-F) and a wide corridor (D) along its south and west sides. The corridor was also extended westwards (G) along the south side of an existing terrace wall or building, so that the enlarged Building 2 contained eastern and northern wings.

Contemporary with the additions to Building 2 a small bath block of unusual design (Building 3) was constructed in the area enclosed by the winged building. Two apsidal, heated rooms (B and C), identified as the *tepidarium* and *caldarium* respectively, and a short corridor or *vestibule* (D) were constructed on the north side of a large rectangular unheated room which was retained from an earlier building and now used as a *frigidarium* (A). The heated rooms shared a single *hypocaust* system which was served by a furnace area built into the south-east side of the *caldarium*. The bath block was connected directly to the north wing of Building 2 via the *vestibule* and corridor G.

11. P Rowsome *Billingsgate Roman House and Bath post-excavation programme* MOLAS Interim Report 1992 (unpub).

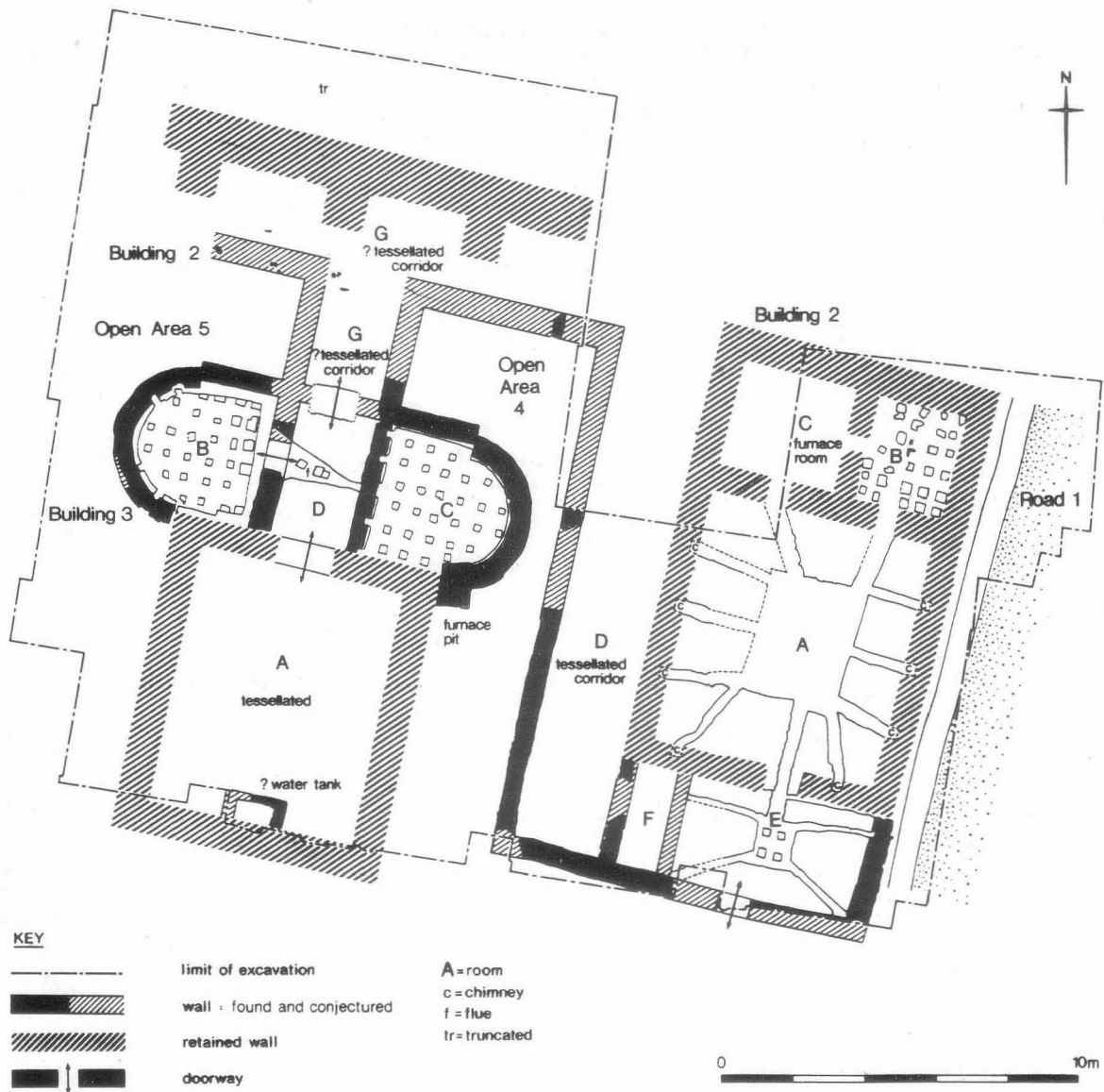


Fig. 4: ground plan showing the eastern and northern wings of the Roman house (Building 2) and the courtyard bath suite (Building 3). The structural evidence suggests that this phase of the complex retained elements of earlier buildings to form Room A of the bath block (the frigidarium) and the major part of the east wing.

The original use of the earlier buildings retained as parts of the winged house and bath is far from clear. Room A of the bath block is similar in dimension (6m x 7m) to Romano-British temple buildings, although the north-south orientation of the long axis and location of the doorway in the north wall would be unusual¹². Truncated masonry walls and a possible furnace flue beneath the addition of the apsidal rooms and may indicate

12. See G Webster *The British Celts and their Gods under Rome* (1986) and A Woodward *Shrines and Sacrifice* (1992) for examples and urban context.

13. H Pell *op cit* fn 6.

that the *frigidarium* of the bath block had originally been part of a larger building which may also have been a bath¹³.

Evidence from the hypocaust system of the late Roman building complex suggests that it had been poorly maintained prior to abandonment. Progressive blocking-up of flue ducts in the eastern wing meant that first room A and then room E were converted to unheated spaces¹⁴. The building was

14. Detailed descriptions of this and the other 109 phasing units making up the BIL75 and BBH87 site record can be found in P Rowsome *Billingsgate Roman House and Bath: post-excavation assessment of the 1975-90 archaeological investigations* MOLAS Archive Report 1993 (unpub).

probably subject to relatively slow decay and episodic vandalism and demolition in the very late and sub-Roman period¹⁵. Environmental analysis of dark earth deposits which sealed the north end of the building's east wing indicate an overgrown, waste ground environment progressing to scrub as the period of abandonment continued. Elder, blackberry, stinging nettle, hemlock, and henbane were common. Associated animal bones included mouse/vole, frog/toad, black rat, and weasel, all of which would have thrived in such an environment. Freshwater snails typical of damp and shady habitats were also ubiquitous¹⁶.

Form and function of the Billingsgate building complex

Winged buildings such as that found at Billingsgate (Figs. 4 and 5), whether L-shaped or symmetrical and three-sided, were relatively common in late Roman Britain¹⁷. The urban 'town houses' and rural 'winged corridor' villas of the 3rd and 4th century¹⁸ may reflect economic and social changes which led to increased privilege and privacy. The Billingsgate

winged building may well have been part of a private town house although it is also possible that it was a commercial building such as a *praetorium* (inn)¹⁹.

Whether part of a town house or a commercial property, the Billingsgate bath suite can be described as a *balnea*, a small privately-owned bath, but the design of the bath and its relationship to the winged building is unusual. The arrangement of bath rooms meant that a bather entering the bath from the house would first pass the heated rooms in order to reach a changing area which could only have been located in the *frigidarium*. He or she would then retrace their steps to use first the *tepidarium* and then the *caldarium*. The location of the heated rooms on the enclosed north side of the yard meant that little benefit could be gained from solar heating.

The layout of the Billingsgate building complex shoehorns the bath block into a yard area which one must assume also enclosed the bath on the west. None of the walls of the bath were keyed

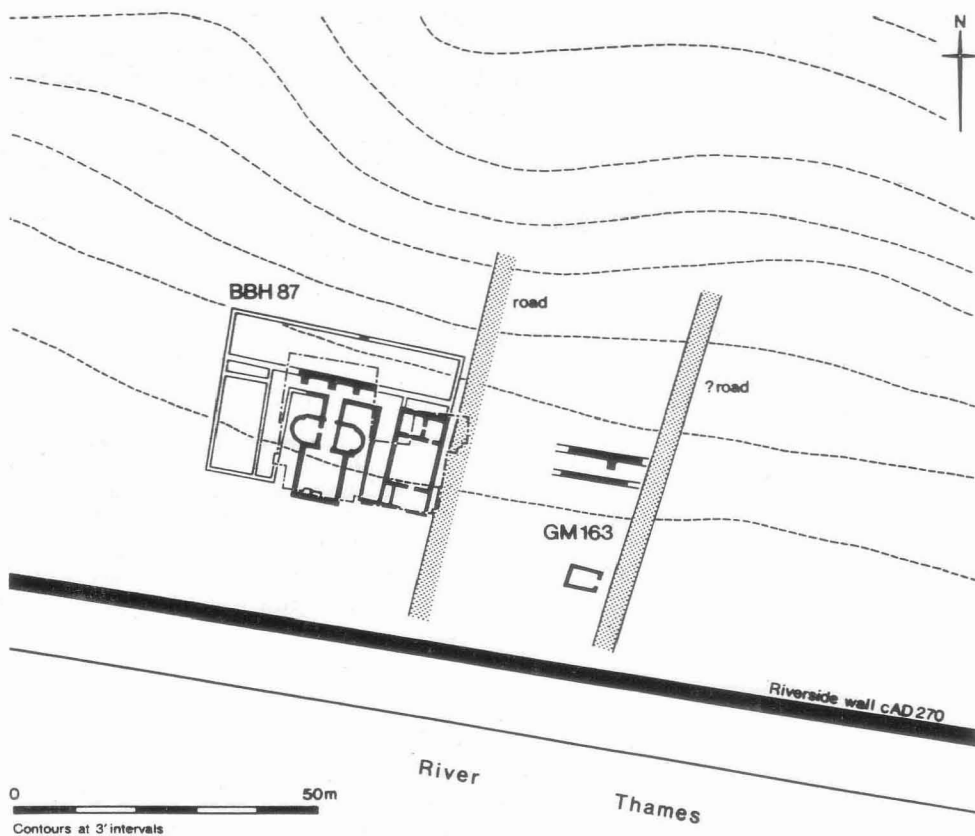


Fig. 5: the Billingsgate Roman building and its environs. Evidence of a possible temple, terrace walls, and a second road were recorded nearby to the east in 1964 (GM163). Construction of the riverside defensive wall in the late 3rd century interrupted easy access to the river and must have had a major impact on the setting, if not the use, of nearby buildings.

15. See Merrifield *op cit* fn 7 for an evocative description of the end of the Roman period and the circumstances in which an early Saxon brooch may have been dropped amongst the ruins.

16. Ann Davis *Environmental remains from Billingsgate Bath House* in P Rowsome *op cit* fn 14.

17. See G Boon *Silchester: the Roman town of Calleva* (1974), 190-3. Boon suggests that the addition of wings may in some cases have been a conscious attempt to reproduce the symmetry of the country villa.

18. S Frere *Verulamium Excavations* Society of Antiquaries (1983), 212-226. The 4th century town house in Insula xxvii is remarkably similar to the winged building at Billingsgate. See M Millett *The Romanization of Britain* (1990) 127-151, and D Perring *Roman London* 106-131 for discussion of economic and social factors at play in 3rd century Britain.

19. G Boon *op cit* fn 17, 138-144. The winged building in Insula viii at Sil-

together at foundation level, and its construction and finish were generally haphazard. The form and location of the bath may have been the result of an awkward attempt to reuse part of an existing structure. There may also have been a determination on the part of the owner to squeeze the bath into an internal area of their property, perhaps for reasons of privacy or security. It seems unlikely that building density in late Roman London would have demanded such a compact design. Indeed, examples of courtyard baths of any sort are rare, even in densely occupied towns such as Pompeii²⁰.

Baths in Roman London – can they be compared?

It is often said that the Romans had a passion for bathing, and there is no doubt that the bath house played a central part in daily life even in small provincial towns²¹. London would have contained its fair share of baths, both public and private, and five baths of varying date are relatively well known through excavation (Fig 6). In addition, several small baths can be provisionally identified from antiquarian records; no doubt there were others.

chester, interpreted as a praetorium, was also associated with a nearby bath block.

20. I Nielsen *Thermae et Balnea – The Architecture and Cultural History of Roman Public Baths* (1990) contains approximately 400 examples of Roman baths, none of which are comparable to the Billingsgate bath suite in design or setting.

21. Nielsen *op cit* fn 20. Monumental municipal baths first appeared in Rome during the early empire, and the capital eventually had several hundred of all types. Pompeii contained at least four major public baths, plus many private bathing suites attached to houses. An important provincial city would have been well provided for – Timgad in North Africa had at least fourteen, some of a vast size.

22. See P Rowsome 'The Huggin Hill Public Bath – London' in *Baths and Bathing – Proceedings of the International Conference on Roman Baths*, *Journal of Roman Archaeology* (forthcoming), P Rowsome *Excavations at Huggin Hill* [DMT88] DUA Archive Report (unpub), and P Marsden 'Two Roman Public Baths in London' *Trans London Middlesex Arch Soc* 27 (1976), 1-30.

23. P Marsden *op cit* fn 22, 31-53.

24. B Yule 'Excavations at Winchester Palace, Southwark' *London Archaeol* 6 (1989), 31-9.

25. G Milne *The Port of Roman London* (1985), 138-141.

Of the London baths only Huggin Hill, which was built in the Flavian period (AD 69-96) and demolished by the late 2nd, can be described as a true *thermae* (public bath), continental in design and almost certainly built, owned, and managed by a public authority (Fig. 7)²². The smaller Cheapside bath, thought to date from the late 1st century and abandoned in the 3rd century, may have been reserved for the military²³, or associated with a *collegium* (guild) or a commercial use. Different again was an opulent bathing suite located in the major Roman suburb to the south of the Thames (Fig. 6 only). This bath was part of a 'palatial' building dated to the mid 2nd to 4th centuries, and which may have included both the private bath of an important official and bathing facilities for his staff²⁴.

Finally, there is the bathing suite excavated at Pudding Lane, constructed in the mid 2nd century, in use until after AD 370 and interpreted as part of a prestigious private residence or small inn²⁵. The Pudding Lane and Billingsgate bath suites have much in common, being similar in date and location beneath the hillside spring-line on the north bank of the river, and of a size suitable for either wealthy private households or small commercial concerns.

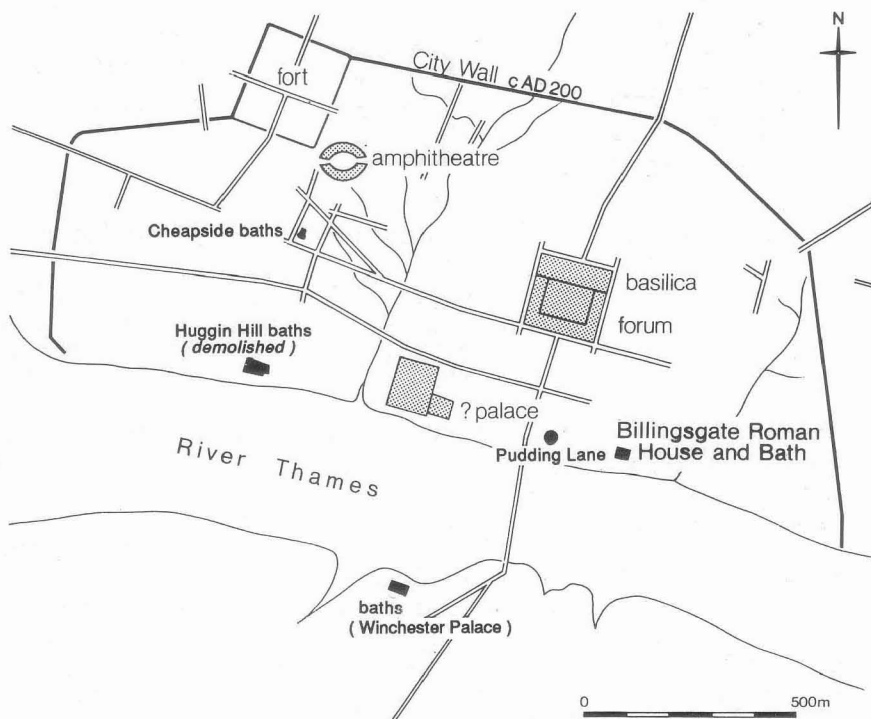


Fig. 6: location of the Billingsgate Roman building and other baths in the Roman city, with principal streets and public buildings.

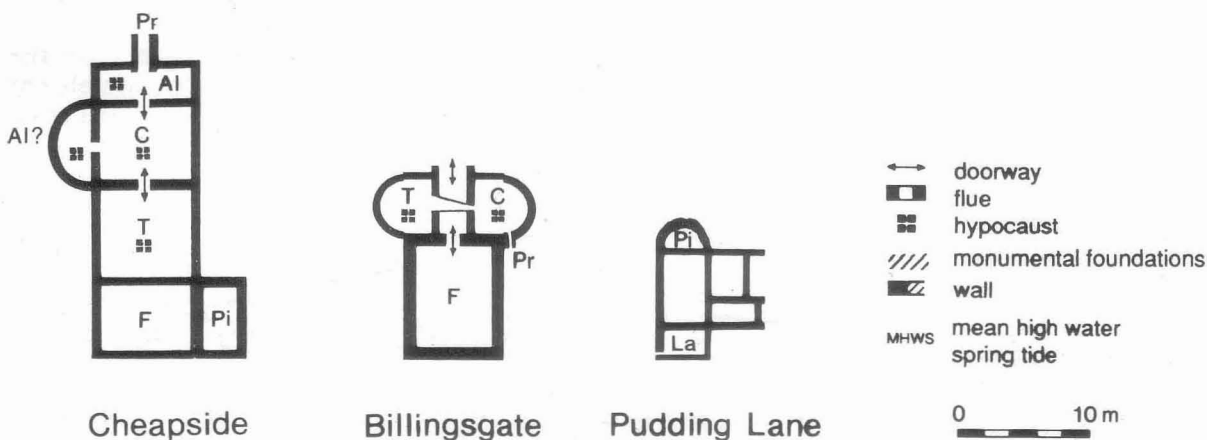
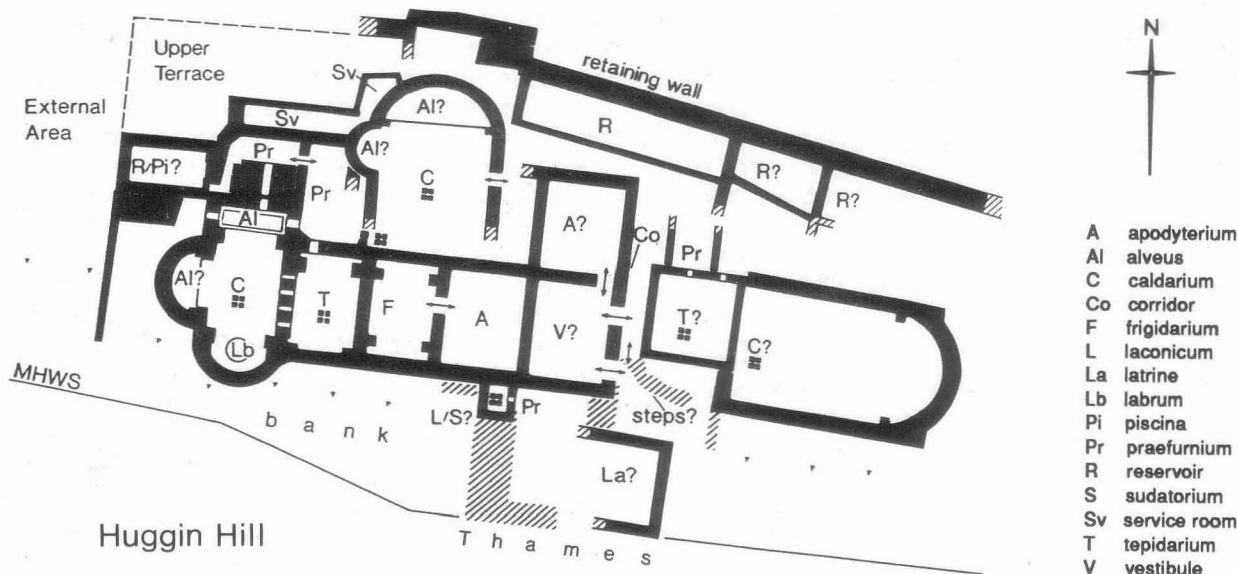


Fig. 7: four London baths. The 1st-century public bath at Huggin Hill dwarfs the others both in size and sophistication of design. The Cheapside bath may have been military or commercial whilst those at Billingsgate and Pudding Lane may best be described as 'private'.

The five London baths described above indicate the wide range of types of bathing establishment which could be found in a Roman town. On the face of it the five baths suggest a movement from public to private bathing in London between the 2nd and 4th centuries, and this seems to accord with evidence of social and economic change over the period, although one should be alert to the danger of drawing too many conclusions from what might be an unrepresentative sample. In any case it is clear that in London, as elsewhere in the empire, the bath remained an essential theme of Roman urbanism from the 1st through 4th centuries.

What next for the Billingsgate building?

It is important that future post-excitation work anticipates the particular needs associated with informative public display of the Roman building. This may mean that research will concentrate on the likely internal and external appearance of the building and how it was used. Public access to the site may be made more feasible by the presence of other historical sites nearby (Fig. 8), although the Corporation of London must weigh up not only the cost of display but also the fact that the 1970s office block above the Roman building faces an uncertain future. Given the rarity of Roman building remains on display *in situ* in London, one

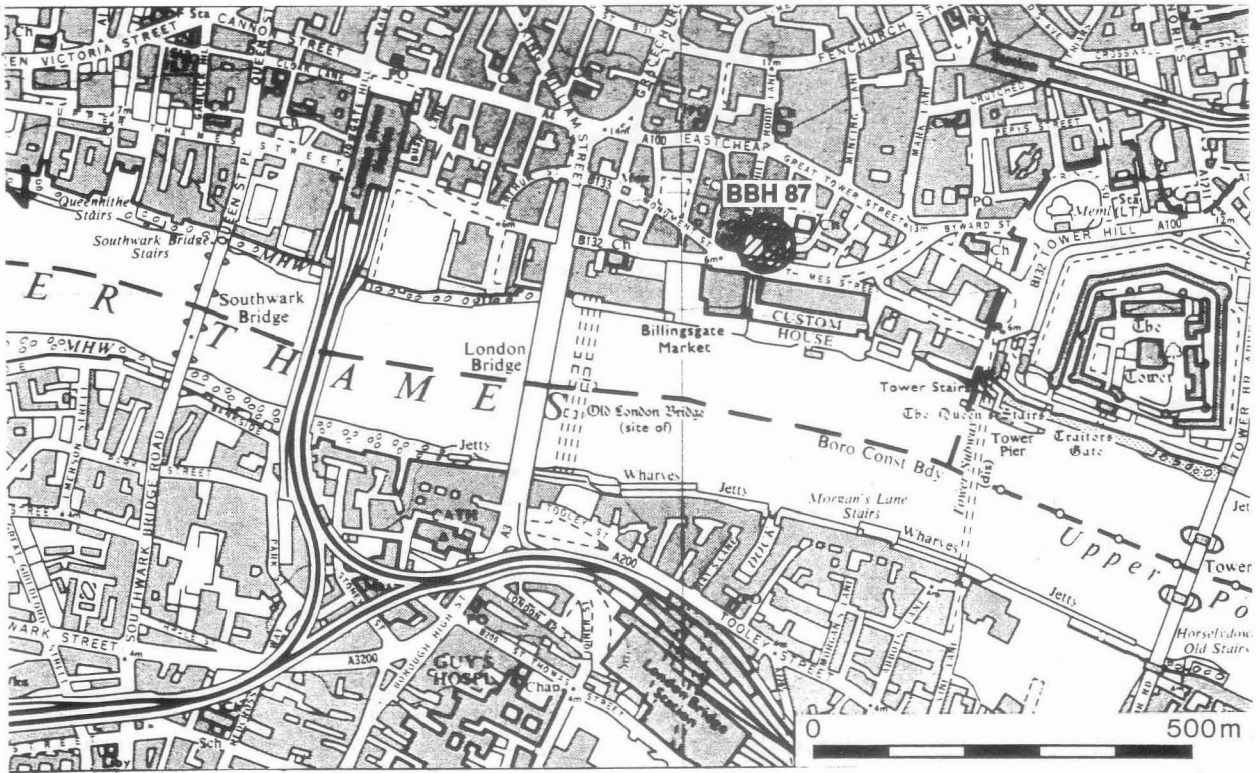


Fig 8: location of the Billingsgate Roman building in the south-east quarter of the City. Proximity to The Tower of London and The Monument may enhance its tourist potential.

can only hope that a way can be found to open the 'Billingsgate bath house' to the public.

Acknowledgements

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Excavations and post-excavation work

City of London. Museum of London Archaeology Service, Number One, London Wall, London EC2Y 5EA (0171-972 9111).

Croydon & District, processing and cataloguing of excavated and museum collections every Tuesday throughout the year. Archaeological reference collection of fabric types, domestic animal bones, clay tobacco pipes and glass ware also available for comparative work. Enquiries to Mrs Muriel Shaw, 28 Lismore Road, South Croydon, CR2 7QA (0181-688 2720).

Greater London (except north-east and south-east London), by Museum of London Archaeology Service. Excavations and processing in all areas. General enquiries to MOLAS, Number One, London Wall, London EC2Y 5EA (0171-972 9111).

Borough of Greenwich. Cataloguing of excavated and other archaeological material, the majority from sites in the borough. For further information contact Greenwich Borough Museum, 232 Plumstead High Street, London SE18 1JT (0181-855 3240).

Hammersmith & Fulham, by Fulham Archaeological Rescue Group. Processing of material from Fulham Palace. Tuesdays, 7.45 p.m.-10 p.m. at Fulham Palace, Bishop's Avenue, Fulham

Palace Road, SW6. Contact Keith Whitehouse, 86 Clancarty Road, SW6 (0171-731 4498).

Kingston, by Kingston upon Thames Archaeological Society. Rescue sites in the town centre. Enquiries to Kingston Heritage Centre, Fairfield Road, Kingston (0181-546 5386).

North-east London, by Passmore Edwards Museum. Enquiries to Pat Wilkinson, Newham Museum Service, Archaeology and Local History Centre, 31 Stock Street, E13 0BX (0181-472 4785).

Surrey, by Surrey County Archaeological Unit. Enquiries to Rob Poulton, Archaeological Unit Manager, Old Library Headquarters, 25 West Street, Dorking, RH4 1DE (01306-886 466).

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