

London's Waterfront 1100–1666: summary

This monograph brings together the archaeological and documentary evidence for a number of medieval and post-medieval secular properties and a parish church on four waterfront sites excavated in the City of London by the Museum of London in 1974–84: from west to east, Swan Lane (site A), Seal House (site B), New Fresh Wharf (site C) and Billingsgate Lorry Park (site D). Here the findings for the period 1100 to 1666 (the Great Fire of London) are presented.

The waterfront excavations in London since 1972 have produced great advances in our knowledge about the nature of reclamation on the river bank and extension of properties into the river; the inclusion of a multitude of artefacts and pottery sherds in the reclamation and foreshore deposits which are an unequalled catalogue of the material culture of medieval London; and the carpentry of the wooden revetments, with consequences for study of medieval buildings which have otherwise not survived in London to be recorded. The excavation narrative is arranged in four consecutive periods from 1100 to 1666. The nature of London's waterfront, including its public buildings and Thames Street itself, is considered for each period; the developing relationship of the waterfront area to the rest of the medieval and Tudor City of London is also outlined.

A first overall objective is to study the local environment and topography, the riverfront, its buildings and churches, to provide the setting for the lives of the people who lived and worked there. The wider area of the study is the waterfront south of Thames Street between the sites of the 11th-century All Hallows the Great church in the west and the probably 10th-century Billingsgate dock in the east, a length of about 475m (about 1550ft). Just over half way long this length of waterfront, the north end of medieval London Bridge met the bank of the river and the street. The focus of research is two blocks of properties, eight tenements upstream of the Bridge, labelled for this study Tenements 1–8; and a second block downstream of the bridge, labelled Tenements 9–16. Generally it was only the parts nearest to Thames Street, which would have contained the most important buildings, which were excavated; documents, early views and maps provide context and setting. The excavations here of 1974 to 1984 are the main focus of this study, but more recent excavations of 2003–6 on some of the same properties and nearby are fitted into the narrative, with their complementary results.

Between 1100 and 1666 the waterfront area of the City of London, between Thames Street and the River Thames, grew by extension into the river, until fossilised by the erection of stone river walls. By the end of the main periods of reclamation, around 1450, the new land south of the street could be up to 100m wide, formed by innumerable expansions on private properties, which had the effect of making indented inlets or docks for ships at Queenhithe and Billingsgate. Earth and rubbish were used to make the reclamation units, which are often dated by the dendrochronology of timbers used in the waterfront structures (Fig 1).



Fig 1 The early 13th-century waterfront excavated on the Billingsgate site, 1982. The section of revetment on the left (D: Waterfront 14) was later conserved and displayed in the Medieval Gallery of the Museum of London

Now is the time to take an overview. Over the long period of five and a half centuries studied here, changes in the topography, building design and material culture of the properties south of Thames Street (and occasionally looking at the whole street) can be observed (Table 1).

Period	Properties and buildings, building materials	Pottery	Non-ceramic artefacts
M1 1100–1200/1220	extensive reclamation; buildings of stone and timber on the reclaimed land; dyehouses	London-type wares predominate	
M2 1200–1350	more reclamation; subdivision of waterfront properties (more tenants); tiled roofs from 1200, brick appears before 1350; possible first example of glazed window	Kingston-type ware 1230, Surrey-Hants ware 1270; decline of Andenne ware and Rhenish ware imports; shift to wares from S France and Mediterranean	apparent abundance of artefacts thrown away, perhaps a consumer culture
M3 1350–1500	more subdivision; some large houses on the reclaimed land, including two livery company halls; dyehouses and brew houses interchangeable	London-type wares decline; increased import of stonewares from Rhineland	from documentary sources, massive imports of objects of all kinds, household and trade
P1 1500–1666	houses now 3–4 storeys tall; warehouses named as room functions		

Table 1 Observed changes over time on the study sites and along Thames Street

The documentary history of these tenements is among the richest that can be provided for any secular properties in the City. From it the history of owners and tenants can be reconstructed, and information compared with the archaeological findings to study public and private space, the network of waterfront alleys, the components of tenements and the process of subdivision, specialised buildings and equipment, warehouses and cranes. There are also detectable differences in land use above and below the Bridge, particularly from the 16th century onwards.

A further source is drawings of the time. It is suggested that an arcaded building on the waterfront at Billingsgate, probably built about 1440, is shown in a manuscript miniature of the early 1480s. From about 1540, the four sites – two above the medieval bridge and two below it – are shown in several panorama views of London, drawn from the south. The two earliest are the anonymous low-level view of the waterfront of about 1540, and the contemporary panorama of Anthonis van Wyngaerde. Though there are several later (and pre-Fire) panoramas, the only one of real usefulness is that by Wenceslaus Hollar, drawn for this section of the waterfront, as far as we know, in 1638–9 and engraved in 1647. These views show the waterfront ends of the properties in the study, with evidence for their use.

Evidence of the Great Fire of London in 1666, which broke out nearby, was extensive on the Billingsgate and New Fresh Wharf sites. There is more to be studied about the artefacts trapped in the fire debris of the buildings, but one study of buildings and drains, full of artefacts of 1620–66 from Billingsgate has so far been published.

The study addresses several major questions. The reclamation generally contained thousands of medieval and Tudor artefacts (Fig 2), and hundreds of kilos of native and foreign pottery. Where did the pottery and artefacts come from? Do the pottery and artefacts have any significance in their locations behind waterfront revetments or on foreshores, or are they all hopelessly mixed up because they were mixed up before they were brought here?



Fig 2 Artefacts from reclamation deposits: clockwise from top left, a group of armorial mounts with identical shields, found probably surrounded by coarse cloth on site A, probably mid 15th century, from horse harness or for swords ; a horse pendant from site D; an adult's shoe from an early 13th-century reclamation deposit at site B; a fragment of an enamelled Near Eastern glass vessel, probably a drinking glass, from site A

Two of the study sites, Swan Lane and Seal House (sites A and B), were particularly fruitful in this regard, and many of their major landfill units were dated by dendrochronology. Coins were present but being always residual were not useful for dating the strata. No local concentrations of individual types of artefact was noticed, except for a large number of metal dress fittings like buckles on site A. The soil for the reclamation dumps was probably gathered from rubbish tips on properties all over the city; their sources cannot now be specified (except in one case of a possibly royal source for dumps at Baynard's Castle). Reclamation along the foreshore included dumps containing large amounts of broken pottery from the second half of the 11th century. From the pottery, the conclusion has been that reclamation dumps were usually of slightly mixed date but probably coming from the general area of the waterfront in question, whereas the foreshores contained more contemporary material. It is not possible to rely on the finds from a particular reclamation dump to date its deposition by themselves; nor, as they were almost certainly brought from further afield, can they tell us about activities taking place in a particular waterfront tenement. The foreshores are a little better at suggesting trades on the waterfront, in the case of cloth seals found both on excavated foreshores near the cloth-finishing establishments at Swan Lane.

Objects can speak. The thousands of medieval and post-medieval artefacts tell us about specific aspects of culture, fashion and religious beliefs. The range of these everyday things, the evidence of mass production of, for example, buckles, belt fittings and dress ornaments, and the sheer number of

near-identical items witnesses to the thriving market for the consumption of goods that documentary sources attest. Many of the artefacts were probably imported objects, but research has yet to show this by analysis of them. We can explore how the finds on London waterfront sites in general, not just those in the study sites, contribute to a suggestion that the early modern consumer revolution began not in the 18th century, as argued elsewhere, but in the late Middle Ages. And perhaps along with a consumer society came fashion, which can be detected in the objects.

Objects are intimate evidence of the beliefs of Londoners, whether an elaborate pilgrim souvenir from Canterbury or seals from indulgences, buried with people (Fig 3). A study of pilgrim badges largely from the waterfront sites as a whole has shown that badges from 39 sites in Britain and 109 sites in continental Europe, from Vadstena in Sweden to Bari in Italy, have been found in London; and many come from the sites in this study.



Fig 3 Religious items: left, an elaborate pilgrim souvenir from Canterbury, 1370s; right, two seals from papal bullae probably from indulgences buried with people in St Botolph's church, though found in later layers, lost through grave-digging

The medieval waterfront silts also produced the Billingsgate trumpet (so called from the site where it was found), one of the earliest surviving examples of a medieval musical instrument from Europe, and the only known example of a medieval European straight trumpet (Fig 4).



Fig 4 The 14th- or early 15th-century Billingsgate trumpet, the only known example of a medieval European straight trumpet known to have survived; found during earth-moving on the Billingsgate site, 1984

Next, we wish to study the the functions of the buildings and open areas on the study sites. What did the interiors of the buildings look like? How did they change over time? To what extent is this illustrated by the artefacts and environmental evidence? To what extent can each property and new development be linked to specific owners or occupiers, as specified in the documentary record?

The deep deposits along the waterfront, by comparison with those in most of the rest of the City of London, mean that buildings survive well; though the buildings have been altered many times and inevitably replaced during the centuries. Stone buildings, perhaps with vaulted undercrofts, were built on the reclaimed land by 1200; at Swan Lane they included a large dye-house, active for a prolonged period. Timbers reused in waterfront structures tell us about early buildings on land; in particular, that the techniques of constructing buildings with timber frames of squared timbers and a range of joints was developed in London in the 13th century. As a group, the excavated buildings provide an important collection of dated examples from the waterfront area to match others now being produced by other large archaeological projects in the City, for instance the study of the east end of Cheapside and Poultry published in 2011. We can now compare areas of the City through their medieval and Tudor building stock. This is an analysis of London's former townscape at a new level which did not seem possible a few decades ago.

The archaeological remains are informative about the appearance and layout of buildings – houses and outbuildings – from the 12th to the 17th centuries. Their rooms and spaces include vaulted undercrofts, halls, outbuildings and yards; there is detailed evidence of doorways and windows, stairs, tile floors, and household fittings and equipment (Fig 5).

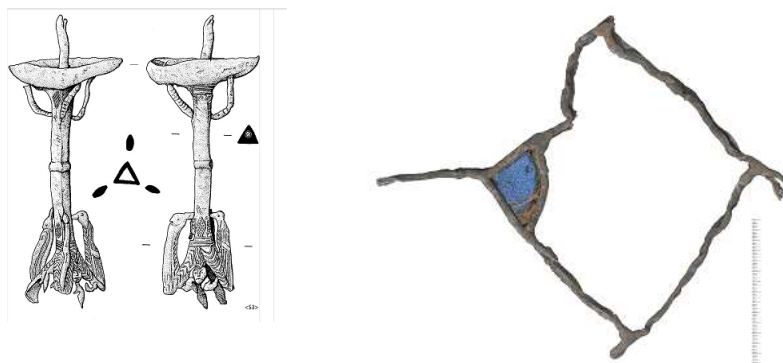


Fig 5 Household fittings and equipment from the Swan Lane site: left, an iron and lead candlestick with birds and possibly human figures, perhaps 12th-century, from a reclamatisation dump of 1180–1270; right, a fragment of window comes with coloured glass, from a reclamation deposit of 1270–1330

The pottery in and around the buildings is generally homogenous, and ways have not yet been found to analyse pottery in order to illustrate activities or the uses of buildings at any one moment or over time, with the notable and encouraging exceptions of the two specific exercises studying pottery in 17th-century drains at site C (New Fresh Wharf) (Fig 6) and site D (Billingsgate) (Fig 7 and Fig 8). From the rich evidence on the Billingsgate site, we can begin to elucidate the functions of rooms and spaces at a level not often possible on sites in London or elsewhere, by a conjunction of examination of the buildings, the artefacts within them, and the documentary evidence.



Fig 6 Native and foreign 17th-century pottery from a drain on the New Fresh Wharf site, perhaps from the household of William Widmore, plasterer



Fig 7 Pewter lid from a Westerwald stoneware mug, from a drain on the Billingsgate site full of artefacts, part of the household effects destroyed in the Great Fire (see also Fig 8)



Fig 8 Pottery from the 17th-century drain at Billingsgate: left, Raeren stoneware statuette of a woman with an elaborate head dress; right, a Metropolitan slipware rounded jug



Study of the pottery shows trade and cultural links with many places around the North Sea and deep into the Rhineland; pottery made in the London area in the 12th and 13th centuries is found in British towns up to the north of Scotland, and in present-day Norway, Sweden and Denmark.

For the Tudor period, there are far more documentary records which illustrate London's position in the international market. It is generally held that by 1600 London was becoming an entrepot like Amsterdam, i.e. it had the warehouses on its waterfront which held immense amounts of merchandise; so that ships came and went with full cargoes. Goods came and went to destinations outside the country and were not distributed into Britain. This is an important stage in the development of an imperial centre. It requires such warehouses on a grand scale, just to hold merchandise which is coming and going from the entire known world. It requires complete new building forms, and these can be seen emerging in pre- and post-Fire 17th-century London.

These tenements were a mixture of domestic and work buildings from the start. Industries or crafts which made or processed things are evident in the 12th-century dyeworks on the Swan Lane site, a possible fish-drying house at Seal House, and other industrial buildings to be explored from debris within them. We publish a room by room inventory of Dyers' Hall, on the Swan Lane site, in 1602. What is probably another dyeworks on the waterfront south of the site is shown by Hollar in 1647 and is identified with known construction works on the site in this part, of 1638 (Fig 9).

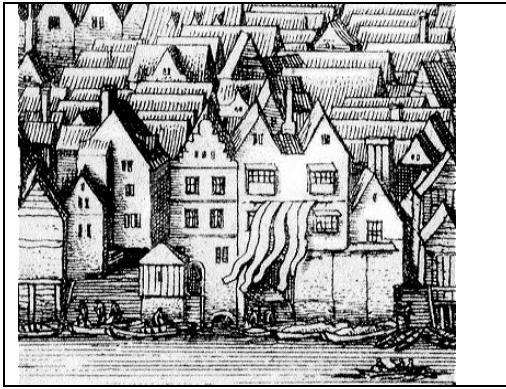


Fig 9 Detail from the panorama of 1647 by Wenceslaus Hollar, showing cloths hanging from poles on a building on the Swan Lane (site A) site, probably part of a documented rebuilding of the property after 1638 as a house and dyeing establishment

The dyeing industry, requiring a large amount of river water, was a feature of the area upstream of the north end of London Bridge from the 12th century, and continued to be so until the Great Fire. By the 14th century its facilities were shared with brewing establishments, which had become complexes of equal size by 1600. In the 14th to 17th centuries there was probably an industrial tone to the properties south of Thames Street, which would influence the landuse and form of the private and corporate buildings.

St Botolph Billingsgate, first mentioned around 1140, expanded to the south in the middle of the 15th century through a bequest from John Reynewell, mayor 1426–7; a grave in the new extension contained two skeletons, and one may be Reynewell himself (Fig 10). The church extension included an existing stone building a few metres to the south, then incorporated into the body of the church. It stood on a vault, which was let out as part of the storage facilities on the Wharf, certainly from the opening of the 17th century and possibly before. The function of the building above, now the southernmost part of the church, is not clear. Many aspects of the internal features and decoration of the church can be reconstructed from the survival of its accounts from the late 15th century up to the Great Fire. One intriguing find was made during the earth-moving during construction at Billingsgate in 1983–4: an impressive stone corbel carved with an angel holding a shield bearing a merchant’s mark, probably from the church, and possibly from the roof of Reynewell’s extension (Fig 11).



Fig 10 [left] Is this John Reynewell, mayor of London in 1426–7? In the extension southwards of St Botolph’s in the 15th century, this man and a woman were buried in brick tombs facing the new altar. This may be the sponsor of the extension, John Reynewell (d 1445). He was a prominent City merchant and rebuilt the gate at the north end of London Bridge

Fig 11 [right] An angel corbel found during the earth-moving after excavation at Billingsgate in 1983–4, suggested to be from St Botolph's church; the angel holds a shield on which there is a merchant's mark

Forty-two people were buried in the south part of the parish church of St Botolph which was excavated on the Billingsgate site. They are probably of late 15th to mid 17th-century date. The degree of survival of human remains was good, and they form a valuable group of parish interments. In general the people had the range of skeletal pathologies and conditions seen in other contemporary London populations.



Fig 12 Details from the analysis of human remains at Billingsgate: left, multiple linear enamel hypoplastic defects in the mandibular canines and premolars of skeleton D[301], a juvenile of 6–11 years; right, evidence of Diffuse Idiopathic Skeletal Hyperostosis (DISH) on the spine of skeleton D[783], possibly John Reynewell

The excavations and their results are also compared to others in London and elsewhere. From the large campaigns of urban excavation in London since the 1970s, we now have published reports on many comparable sites. The history of this waterfront zone of the City can be compared with central sites around Cheapside, to see how the two zones were different in their buildings, material culture and development. The results from London are also compared to work on the archaeology of waterfront areas in other towns and cities for this period, both in Britain and abroad.

Fundamentally, this is an account of four excavations carried out at a crucial time, the first decade of reasonable archaeological provision in the City of London; and of their artefactual material, the study of which laid the foundations of many kinds of archaeological research in London and by imitation elsewhere in the decades which followed, and continue to do so. The four excavations in this study form a starting-point for further study of the material culture of the whole City because of the wealth of information recovered and the length of the archaeological sequences recorded. That said, the work is not yet finished. For the period from 1100 to about 1500, we have laid out tables of information on pottery and non-ceramic artefacts as they have been studied since the 1970s. There are two parts of the project still remaining before all the relevant information is recorded and studied to the same initial level. Non-ceramic artefacts from layers after 1500 have not yet been studied like their earlier counterparts; and the large amount of medieval and post-medieval pottery from the largest excavation, site D (BIG82), awaits adequate resources for analysis.

The present work, however, is perhaps long enough as a first statement.

The detailed report will be placed on line during 2017, and conventional publication then discussed.

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