Insights into the development of medieval and post-medieval riverside buildings at Mortlake

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with contributions by
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Archaeological excavations were recently undertaken on two riverside sites along the north side of Mortlake High Street, in an area where the 16th century mathematician Dr John Dee once resided, and where Flemish weavers produced works for Charles I in the 17th century at the Mortlake tapestry works. A succession of late medieval and post-medieval buildings was discovered on plots between the river Thames and Mortlake High Street, in the London Borough of Richmond-upon-Thames. Two pits, a ditch and a structure, represented by stakeholes and postholes, pre-dated the late medieval buildings. The excavations revealed a complex sequence of floor surfaces and wall footings of houses, outbuildings and drains that once stood here. The earliest masonry structure may have been used as a 15th century bakery or kitchen at the rear of a commercial property.

Documentary research focusing on two 17th century surveys has linked the changing ownership of properties with the development of the Mortlake tapestry works and the probable location of Dr John Dee’s house. The changes in the architecture and plot layouts of the excavated buildings between the late medieval and post-medieval periods reflect urban building trends and show Mortlake increasingly becoming part of the City of London’s trading hinterland.

Introduction

Pre-Construct Archaeology Ltd excavated two adjacent sites along Mortlake High Street in advance of their redevelopment (fig 1). Site 1 was excavated at 77–91 Mortlake High Street (MKH 00) for Berkeley Homes (West London) Ltd, and site 2 to the east was excavated for Goldway Properties Ltd, at Tapestry Court (MLT 01). The Berkeley Homes development comprised flats with a basement car park preventing preservation of the remains in situ. Basements were included in the development at Tapestry Court and consequently a mitigation strategy was followed in consultation with English Heritage to preserve the archaeology through excavation and record at both sites. As the two sites were adjacent it was decided that they would be published together so as to maximize the analysis of the archaeological excavations. The sites were supervised by Lorraine Darton and project managed by Peter Moore.

SITE 1

An evaluation at a former petrol station at 77–91 Mortlake High Street, Richmond, London SW14, carried out in August 2000, identified the need for full excavation of the eastern half of the property (Darton 2000, 1). This work revealed post-medieval brick buildings and a possible prehistoric pit. Archaeological deposits on the western half of the site had been removed during the construction of petrol tanks and 19th century structures. The archaeological excavation was undertaken between 13 November and 22 December 2000 (Darton 2001, 5). The area excavated formed an L-shaped trench measuring approximately 486m². The trench was extended to the south in order to investigate the possible prehistoric activity on the alluvial deposits. Machining stopped when 18th/early 19th century structures or alluvial silts were encountered. Site 1 was originally divided into at least three properties, although pre-19th century buildings were found only in the two eastern properties (Buildings 1 and 2) which were later incorporated into Building 3.
Fig 1  Mortlake. Site and trench location. (© Crown Copyright. NC/2004/33611)
The archaeological investigations at Tapestry Court began during August 2001 with a watching brief on underpinning works. Underpinning of the extant Tapestry Court building took place in trenches extending 0.5m from its southern and eastern walls. The excavation took place between 10 September and 10 October 2001 (Darton 2002, 2). The work focused on the eastern half of the site within two trenches in the footprint of the new development. The northern trench (trench 1) was approximately 52.5m², and was located at the rear of the existing building and included the underpinning trenches. The southern trench (trench 2) was located on the street frontage, and measured approximately 37.5m². The two excavation trenches fitted neatly within the basement walls of 18th century buildings, and were excavated down to the appropriate formation levels for each building in the new development. The excavation of trench 1 included three footing trenches, which provided a window into the medieval activity on the site. At site 2, two houses had fronted the High Street, of which only the eastern building (Building 4) was excavated; the Queen’s Head public house occupied the river front and a building between the two faced on to the alley (Building 5).

Geology and topography

The sites lay on a very gradual slope from the High Street in the south down to the Thames in the north. This slope is no longer reflected in the present topography because development on the riverfront and the dumping of material has levelled the ground and formed a terrace down to the riverside path, about 1.5m in depth at the western site. Geotechnical investigations carried out on site 1 have shown that the natural sands and gravels slope gradually from south to north by 1m (Parkman Environment 1998). The drift geology encountered was River Terrace 1 Gravel, overlain by alluvial sands and silts, with a gradual interface between the two. Interlaced with the alluvial sands and silts were thin layers of white silt. The alluvial deposits on both sites were recorded at c 3.5m OD to the north, and c 3.4m OD to the south. The natural gravels were recorded at c 3.3m OD. Therefore the alluvial deposits were thicker in the north of the sites than where they were closer to the erosional processes of the river Thames to the south.

Archaeological and historical background

PREHISTORIC

Mortlake lies on a southern meander of the river Thames and would have been well located for hunting and fishing and for siting temporary camps. Excavations along Mortlake High Street have demonstrated the presence of prehistoric occupation and activities along the Thames foreshore. To the west of the site at 61–69 Mortlake High Street (MOT 97) a small pit of possible prehistoric date was found. Adjacent to the site, at 71–75 High Street (HSL 96), three prehistoric pits and a north–south ditch were revealed both containing struck flint (Sloane & Hoad 2003, 44). At 105 High Street (MTS 97) possible prehistoric activity was found comprising a curvilinear gully and several stakeholes and postholes although none produced any artefacts. At 107 High Street (MTK 96) a probable Roman east–west ditch contained residual struck flints and abraded pottery dating to the late Iron Age (Sloane & Hoad 2003, 45).

SAXON AND MEDIEVAL

Evidence of Saxon occupation has been recorded at 107 Mortlake High Street. Two sunken-featured buildings were found dating to c AD 500, one of which had an external oven attached with a small exit flue (Cowie & Blackmore in prep). The manor of Mortlake was
mentioned in the Domesday Book in 1086 as part of that of Wimbledon. It was referred to as Mortelage in the Brixton Hundred, it had a church, probably located at Wimbledon, and two mills. Mortlake’s earliest focal point was probably to the west at Ship Lane, near the Thames, where the ground is slightly higher and there is a view up and down the meander of the river (Hailstone 1983, 10). The riverside manor house, in existence from 1095 onwards, later became the palace of the Archbishop of Canterbury (Sloane & Hoad 2003, 45); this lay to the west of the sites.

Between the 11th and 13th centuries a system of farming large open fields was adopted in Barnes and Mortlake. Tenants were permitted to farm strips in the fields for obligatory services on the manorial demesne land (Brown 1997, 15). The earliest church stood on the north side of the High Street to the east of the manor house; Edward III licensed its construction in 1348 (Sloane & Hoad 2003, 45). The medieval church was moved to the present site of St Mary’s, on the opposite side of the High Street to the south-east of the present sites, by Henry VIII in 1543. A 14th century arch of the medieval church was re-erected in the churchyard of the present building and still stands. The common fields of Mortlake are mentioned in the court roll of the Manor of Wimbledon from 1461, they extended south of the High Street for 1\frac{1}{2} miles into Richmond Park. By the end of the medieval period the tenant farmers had begun to purchase and enclose the High Street ends of the Ewe Furlong (Hailstone 1983, 13).

POST-MEDIEVAL

By the late 16th century Mortlake had become a popular residential village, with its most celebrated resident being the Elizabethan mathematician, philosopher and alchemist Dr John Dee (1527–1608). He lived in his mother’s house at Mortlake in the 1570s and 80s during which time he built up England’s greatest library, with at least 4000 volumes. John Dee was a pioneering mathematician, a visionary of the British Empire and a leading authority on astronomy and astrology and practised séances. It was his dealings with the occult that led to his work being discredited in the 17th century and forgotten about until recently. In a survey of 1616, Dee’s house is described as an ancient rambling place standing between the church and the river; Dee probably added rooms and acquired adjacent properties. Additional space may have been needed for his collections, certainly to house his many scientific instruments and laboratories (French 1972, 40). Thus it is thought John Dee may have lived just to the east of the subject site where the tapestry works was built in the 17th century. It has been suggested that the garden wall of his property is incorporated into the western wall of St Mary’s churchyard (Grimwade 2000, 12). It is possible that the alignment of the churchyard wall is significant, and on the north side of Mortlake High Street this alignment may have formed the boundary of his property. Therefore John Dee’s house could have been sited on the eastern side of Tapestry Alley. Courlander (1953, 6) has suggested that the tapestry works was constructed on the site of the deceased Dr Dee’s laboratory.

The Mortlake tapestry works produced beautiful tapestries, many of which are still surviving, including the ‘Acts of the Apostles’ cartoons originally designed for the Sistine Chapel (Brown 1997, 26). In 1619 King James granted an annual subsidy to Sir Francis Crane, who established a tapestry works in Mortlake. The tapestry building, known locally as the Lower Dutch House, stood to the east of the Queen’s Head until its demolition in 1951 (M Brown, pers comm). Flemish weavers arrived in Mortlake with their families and Francis Cleyn, a designer from Rostock, directed the designs. Cleyn lived in a specially built house opposite the tapestry works and to west of the parish church, where a number of smaller cottages were built for the weavers. The tapestries soon became famous on the Continent and the works produced tapestries for Charles I, but after the Civil War the quality of the workshop’s products declined and the weavers left soon after the Restoration (Weinreb & Hibbert 1983, 544). The workshop was finally closed in 1703. After the closure of the tapestry works the main documented industries were brewing, pottery manufacture and market gardening.
Recent archaeological excavations have revealed a sugar refinery to the west of the sites and a malthouse to the east. The sugar refinery was revealed during the excavation at 61–69 High Street, where sugar moulds were found dating from 1688 to c. 1740 (Sloane & Hoad 2003, 51). At that site the remains of walls, floors, drains and a kiln flue and quantities of tin-glazed and salt-glazed pottery fragments, as well as kiln furniture, were excavated and interpreted as the remains of the pottery of William Sanders (1750–1842). A dump of Sanders’ tin-glazed pottery wasters and kiln furniture was also found at 71–75 High Street. The Sanders pottery produced blue and white or plain white tin-glazed utilitarian wares such as small ointment pots, jars and jugs. On the south side of Mortlake High Street, opposite the Sanders pottery, the Kishere pottery produced salt-glazed stoneware in the 19th century. At 107 a building fronting on to the High Street and which had been demolished in the 19th century, was found to date from the 16th century (Gostick et al 1997, 53). One of the later 18th century buildings on the site was a well-preserved malthouse (c. 1791–1825). In addition, a building was recorded with intact walls, floors and fixtures that produced evidence of 19th century metalworking (Jackson et al 1999, 246).

Several Georgian houses survive along the High Street with gardens on the river, such as ‘The Limes’ at 123 (nos 103–5, 115, 117 and 119) Mortlake High Street (Cherry & Pevsner 1983, 513). The 1838 tithe map shows that Mortlake had undergone a process of consolidation of medieval properties on the northern side of the High Street with large blocks being amalgamated for industrial and warehousing purposes. The tithe map shows the eastern half of site 1 (87–91 High Street) as open ground with the western half (77–85 High Street) occupied by buildings and alleys, apparently representing several properties. Site 2 was divided into three plots on the tithe map, one fronting the High Street split into two properties, the eastern property representing Building 4, the second fronting the river and a third between the two, representing Building 5. Tapestry Alley bounds the properties to the east.

The excavations

PREHISTORIC AND MEDIEVAL ACTIVITY (fig 2)

Further excavation in the south-eastern corner of site 1, where an evaluation trench had revealed possible prehistoric activity, was inconclusive in determining the nature of the prehistoric settlement or activities. Two sub-circular shallow pits were identified; however, one was truncated by a 19th century pit and no datable finds apart from burnt flints were recovered from the fills. The pit found during the evaluation was interesting since a stakehole found at its centre could have supported a small structure. A single worked flint blade retouched on one side was recovered from a redeposited sandy silt layer; it was residual though not very abraded. Residual burnt flints were found on site 2 in the fill of an early medieval ditch. The small quantity of burnt flints recovered does not provide enough evidence to suggest there was settlement on either of the sites in the prehistoric period. However, the pits at site 1 may have been part of structures perhaps relating to riverside activities.

At site 1 a structure (Building 6) was found in the north-east corner of the excavated area; it was defined by two parallel north–south lines of stakeholes and postholes. Unfortunately no dating evidence was recovered from the fills or the patch of in-situ burning inside it. A north–south alignment of nine stakeholes and one posthole, 2.2m long, were found to the east, and three postholes with one stakehole were recorded to the west. They may form the remains of an early medieval or prehistoric structure, possibly a building which would have been 3.5m wide. There was a gradual slope from the stakeholes to the centre of the structure forming an internal depression up to 0.2m in depth. The northern and southern extents of the building were not ascertained; it may have formed a small timber building by the riverfront. The interpretation of the burnt silty clay to the west of the line of stakeholes as a hearth, favours the idea that the structure may have been a building. A posthole in the eastern alignment contained packing stones which suggests it was a fairly substantial structure. Two
early 6th century sunken-featured buildings have been recorded to the east also near the riverside at 107 High Street. Consequently if there was a Saxon settlement along this meander of the Thames less than 50m east of site 1, Building 6 could be contemporary, although without dating evidence for the timber structure the only certainty is that it pre-dates the 15th century.

At site 2 a late 12th/13th century north-west to south-east aligned ditch was found in trench 1, the fill contained three large fragments of early South Hertfordshire coarseware cooking pots dating to 1150–1300 (J Pearce, pers comm). The ditch was U-shaped in profile and may have formed part of an early medieval field system, draining water into the Thames. A similarly aligned ditch was recorded in the south-east of the trench, and may be part of the same feature. The angle of the ditches in relation to the High Street implies they were not boundary ditches as these would probably have run at right-angles to the road.

LATE MEDIEVAL AND EARLY POST-MEDIEVAL BUILDINGS AND ACTIVITIES (fig 3)

Buildings 1 and 2

Between the late 15th and 17th centuries there were two, probably contemporary, properties situated on narrow plots in the eastern half of site 1. Each had a western passageway that may have led from the High Street through to the river Thames. The two properties are referred to as Building 1 (the westernmost) and Building 2 (the easternmost). The existence of the two properties is inferred from the presence of buildings on two distinct areas,
Fig 3  Mortlake. Buildings 1 and 2 between the late 15th and early 17th centuries. Early 15th to early 16th centuries (above). Early 16th to early 17th centuries (below).
north–south strips of land running at right angles to the High Street. The rear elements of the properties were revealed; all remains of the main houses fronting the High Street had been removed by later activity. The earliest element was probably an outbuilding to the rear (north) of the western property at 77 Mortlake High Street (Building 1). It was timber framed with a stone chimney in its north-west corner and a rubble stone plinth. No dating evidence was recovered from within its construction cut, though the style of masonry and stratigraphic situation suggests these elements pre-date the 16th century. The tenement to the east was occupied by a building element with two rooms, referred to as Building 2; the northernmost room was floored with re-used medieval plain glazed Flemish floor tiles. At Building 1 it is the ancillary buildings, later additions and extensions of the property that is discussed here. The high-status room at the north of Building 2 implies that the property may have fronted on to the river.

Late medieval to 17th century buildings depicted in a view of Mortlake from the Thames provide an indication of the form of local buildings that were contemporary with Buildings 1 and 2. They stood on the south side of the High Street, further from the centre of the village than site 1 and had three to four storeys. Each storey was jetted out over that below and their gables faced the street. They were built against each other in a typically urban arrangement in the vernacular style. Buildings 1 and 2 were closer to the village centre and were probably very similar.

BUILDINGS 1 AND 2 IN THE 15TH/EARLY 16TH CENTURIES

The earliest building element found at site 1 was Building 1, a stone-plinthed building in the north-west of the site with evidence of several hearths and a chimney base. The Reigate stone elements of this outbuilding suggest a 15th century date for the structure at the latest, as Reigate stone was not used externally after this time (T Tatton-Brown, pers comm). A north–south boundary wall, which dates to the 15th century, formed the western wall of a passageway that probably extended to the river and provided access to this outbuilding. The western external wall of the building formed the other side of the passage and had a robbed-out stone chimney attached to the north end, thus there was a fireplace in the north-west corner of the room. The remains of two hearths were found in the south of the room, indicated by areas of burning with deposits of burnt brick and charcoal. In the north of the room the structural remains of two hearths were found. The earlier one was constructed of east–west pitched tiles dating to the 15th century, and laid into a deposit of burnt clay and charcoal. Overlying this hearth to the west was a more substantial hearth or oven with a floor of bricks and Reigate flagstones. This oven was constructed with a layer of tiles, perhaps robbed from the earlier hearth, placed in a circular depression as a bedding layer. The floor was formed with bricks set on edge aligned north-west to south-east, butting up to Reigate flagstones and set in mortar. The presence of an enclosed chimney and open pitched tile and brick hearths indicates that it was probably a single-storey building in which small-scale industrial activity or cooking was undertaken. It may have been separated from the buildings fronting the road to reduce the risk of fire. The substantial nature of the brick and stone built oven is further evidence that the activities taking place in Building 1 were not domestic. The oven may have extended to form a circular shape, its large size indicating possible use as a bakery. The passageway alongside Building 1 was blocked when a brick-plinthed extension was added in the south-west of the room in the late 15th/16th centuries. A ground-raising layer of silty sand dumped to the west of Building 1 contained a copper-alloy dresshook, and a decorated medieval tile fragment.

Building 2 had a similar form to Building 1, with timber-framed buildings on brick plinths extending back from the street. One of these building elements had relatively substantial brick foundations suggesting a brick rather than a timber-framed superstructure, possibly of more than one storey. A western side passage may have led to the Thames, and appears to have divided the two buildings, though its southern extent was not clear. An east–west wall divided
the two rooms and tied into the west wall of the building; these walls were constructed with bricks dating to the 15th century. The eastern limit of the rooms was formed by the fragmentary remains of a north–south brick wall.

The northern room had two phases of decorative flooring and may have been an important room of a building fronting on to the river. The earliest floor was a patterned brick surface set into a mortar bedding layer: the 15th century bricks were arranged in strips, laid header to header then stretcher to stretcher. The brick floor was replaced by one made with yellow- and green-glazed tiles set into another mortar bedding layer. The irregular placing of the green and yellow tiles suggests they were probably re-used or that the floor had been repaired. A sequence of four mortar floors was found in the southern room, preceded by redeposited natural silty clay layers used as damp-proofing, from which a sherd of 14th century pottery was recovered.

A further building element was constructed at the south end of Building 2: a north–south wall tied into an east–west aligned wall which extended eastwards beyond the excavation area. The poorly fired dark red bricks dated to the late 15th/early 16th century. Too little of the building survived to identify whether they formed an east–west party wall, between separate buildings abutting one another, or cross frames of a single phase of building that extended back from the street frontage. The north–south wall either represents an internal division in a wider building element or the external wall of a smaller building, possibly a store.

**Buildings 1 and 2 in the early to mid-16th century**

During the 16th century Building 1 was remodelled again, and the passageway re-opened. The brick extension in the south-west corner of the room was demolished and replaced with a brick chimney structure and a new north–south brick and tile wall formed the external western wall of the building. The chimney base had an angled hearth, in the form of a triangular section of brickwork. This re-siting of the fireplace suggests the earlier hearths were no longer in use.

**Buildings 1 and 2 in the late 16th/early 17th centuries**

Building 1 was rebuilt again as additions were made in the passageway and around the fireplace in the south-west corner of the room. Enclosing the angled hearth was a brick corner structure with an external hard mortar surface. The outbuilding survived the major late 17th century rebuilding phase in site 1. The position of the corner fireplace, butting the rear wall of the later Building 3, indicates that the rear wall of Building 3 followed the line of the southern wall of the earlier outbuilding. A larger brick corner structure was built further towards the street frontage. This structure may have been a sleeper wall beneath a timber floor, or the north-east corner of a timber-framed room or building. The passageway was modified by replacing the original wall with a new north–south one, on the same alignment as a contemporary wall forming the southern continuation of the passageway. Two small square brick structures were added in the north of the passageway, creating a gateway. A small square of brick and stone was added in the gap between the chimney and the robbed-out stone wall. This addition may have provided more support for the western face of the brick and tile wall.

Building 2 was substantially rebuilt in this period. The party wall in Building 1 had its plinth re-founded with stone along the eastern edge of the room, and would have also formed the western wall of the Building 2 passageway. Further towards the High Street a brick north–south wall was built against the south side of the wall from the 16th century outbuilding. The alignment of the wall respected the passageway to the north of Building 2 and may represent the eastern wall of a passageway extending to the High Street. A 0.6m-thick external brick wall formed the eastern boundary of the room. It had a sill defining the position of a doorway which would have led inside the building. The wall had a timber impression left in
the render on the top, indicating the building was built with brick plinths and may have been timber framed. A rough stone yard surface lay in the west of the area with imprints of the robbed-out stones. The materials used were Kentish Ragstone and Reigate stone, set in a mortar bedding layer. The floors were bounded by an east–west sandstone wall to the north; the stone wall returned to the south as a brick north–south wall. The remains of a brick floor surface were set in a mortar bedding layer. The bricks may represent a later repair to the stone floor. Overlying these floors was a sandy mortar layer, a possible floor surface from which an early 16th century Nuremburg medieval stock jetton was recovered.

Site 2 between the late 15th and early 17th centuries

Activity continued in the northern part of site 2 (trench 1) later in the medieval period with the use of a well and a pit or possible north–south ditch. The well went out of use in the late 15th century when it was backfilled. The latest fragment of pottery in the domestic waste with which it was backfilled was from a Raeren mug (AD1480–1610). Towards the south of the trench a possible linear feature was backfilled in the late 15th century. This feature may have formed a north–south ditch, although it was not picked up to the north, possibly as a result of truncation by a 16th century rubbish pit, the finds from which include a fragment of a Raeren stoneware drinking mug with a frilled base. The presence of a well, and pits backfilled with domestic refuse suggests there was a dwelling possibly fronting on to the High Street in the 15th century, with pits dug in its back garden. The basement of the late 17th century property, Building 4, would have removed evidence of any medieval building to the south.

A brick building was constructed at Tapestry Court in the late 16th/early 17th centuries at the north end of the site. Located in the north-west corner of trench 1 was an east–west brick wall, and a contemporary east–west brick drain overlay the linear feature to the south. These structures represent a late 16th or early 17th century building that probably fronted on to the river Thames. While no direct evidence of the house of Dr John Dee exists, the indications of domestic activity and a structure possibly dating to the Tudor period, along with documentary evidence placing his dwelling in the vicinity, suggests these discoveries could be linked to one of his buildings. However, the brick structures may date to the latter half of this period and if they are early 17th century in date may have formed part of the original tapestry works.

Pre-dating the further developments in this part of the site a dumped make-up layer was deposited, with inclusions of 17th century pottery, bone and ceramic building material, sealing the aforementioned features. The pottery assemblage included two imported wares: a Dutch redware and a Spanish coarseware. The expansion in cross-Channel trade during the 15th century is a well-charted phenomenon in European history. From the mid-14th century, stonewares from the Rhineland formed a regular and increasingly significant component of Continental ceramic products traded across the Channel to English ports. Raeren stonewares dominate imported pottery assemblages of the early 16th century, in London and the south-east, on sites of upper- and middle-class status (Gaimster & Nenk 1997, 172). Stoneware captured a niche in the popular tableware market, enabling the socially aspirant mercantile and artisan classes to imitate aristocratic rituals in a less expensive medium. It is therefore fitting that these stoneware imports were found in the vicinity of Dr John Dee’s house and may have been used by his household.

REDEVELOPMENT IN THE LATE 17TH/EARLY 18TH CENTURIES

Construction of Building 3 at site 1 (figs 4–5)

In the late 17th century Buildings 1 and 2 were demolished and Building 3 was constructed across the boundaries of both properties. Three external walls of a substantial late 17th
Fig 4  Mortlake. Building 3 between the late 17th and early 19th centuries.
century building were recorded in the south of the site. The structure spanned the previous two properties up to the passageway of Building 1, and as far east as the present site boundary. It was brick built with deep foundations, the walls were three bricks thick, and their width suggests the building was at least three or more storeys high. A north–south internal wall created a partition forming two separate rooms and re-used a late 16th/early 17th century wall as a plinth. A fireplace was found in the western room built into the north–south wall, over which a later fireplace was constructed slightly to the south. The building may have been a large dwelling house. Outside the structure, a north–south brick-lined drain led north towards the Thames, probably from a downpipe on the north face. The drain was capped with Purbeck limestone. The existence of this drain outside the building supports the evidence that any previous phases in the area were demolished with the construction of Building 3. To the west of the passageway there was no evidence of buildings in this period. A silty clay layer was encountered in the western half of the site, the dumping of which may have been a result of flooding or ground raising.

Building 3 was constructed with bricks which had uneven bases and sunken top margins, both characteristics of pre-1700 bricks. Some were early variants of purple bricks (fabric 3033 near 3032 using the Greater London system of building material classification) indicating a late 17th century date. This building represents either a large double-fronted house or two speculatively built semi-detached houses that more or less respected the two original properties. The builder was sensitive to the problems of building close to the river and went to considerable lengths to guard against potential water damage. The foundations were built to a considerable depth to provide stability. The outer front and side walls were three bricks thick, while the rear wall was two and a half bricks thick. This would have amply conformed to the minimum ground floor wall thickness, stipulated by the 1667 Act for the rebuilding of London, for the largest classification of urban building of four storeys excluding the basement and attic (Knowles & Pitt 1972, pl facing 32). Although the Act’s jurisdiction did
not extend to Mortlake, it was understood that thick walls were required for large brick buildings and it is likely that the building was three or more storeys high. If the buildings to the rear of Building 1 were lower than the road to the front of the building there may have been enough height to have accommodated a semi-sunken basement. However, the distance of the building from the road suggests that the construction of a basement would have required the dumping of a considerable amount of material in front of the house to raise the ground sufficiently. The need for excessive drainage precautions may also have deterred the builders from adding a basement.

Construction of Building 4 at site 2 (fig 6)

By the early 18th century the land at site 2 was subdivided into three plots: two fronting on to the High street including Building 4; a second fronting on to the river Thames where a public house was later sited, and a third middle plot where Building 5 was located.

Two narrow-fronted terraced houses were built between 77 and 91 Mortlake High Street and Tapestry Alley in the early 18th century. The basement of the eastern property (Building 4) was recorded at site 2. The excavation trench lay exactly within the external walls of Building 4, which had an internal wall creating front and back rooms that were connected by a doorway at its eastern end. The front room was probably the kitchen with an angled fireplace in its north-west corner. Its original floor was made with tiles imported from the Low Countries. The northern or rear room originally had a brick floor, and was paved in the late 17th century. The rear room would have served as a scullery and storage space. A timber staircase would also have been situated here. A vaulted cellar extended beneath Tapestry Alley which may have been a storage area beyond the east side of the house. Projecting brickwork that extended along the west wall to the north of the fireplace probably supported a similar fireplace above, suggesting the two ground floor rooms both were served by angled fireplaces. The adjoining house may have been a mirror image of Building 4 with the potential for two fireplaces on each floor all using the same stack. The basement had two splayed openings in its front (south) wall. A network of drains found beneath the floors drained to a soakaway in the south-east corner of the room and were probably contemporary with the construction of the building. The bricked-up openings on the front wall would originally have been windows that lit the front basement room with small lightwells in front of the openings. The brickwork of Building 4 was built with orange bricks (fabric types 3033 and 3046) with uneven bases, many of which have sunken top margins. These features are usually associated with brick pre-dating c 1700. The fact that the building was probably built in 1706 or 1707 suggests that this type of brick was still in use in the early 18th century in the villages around London, although within London itself it had been superseded.

Building 4 probably represents part of the speculative redevelopment of the site by John Chamberlen and John Dunstan after 1706. This building appears to have been sold in 1708, the deeds describing it as being ‘new built’. The house is visible on a photograph of c 1910, behind the sign for the Queen’s Head (fig 7), and the archaeological and photographic evidence together present a comprehensive picture of the type of speculative building taking place in Mortlake at this time. The house had two storeys with a basement and an attic. The basement walls were two bricks thick and the house was built economically to maximize profits. The prominent roof with overhanging eaves is characteristic of classical designs built before the legislation of 1707, which outlawed the wooden eaves cornice in London (Cruckshank & Wyld 1990, 24) and encouraged a change in fashion towards buildings with the roof hidden behind a parapet. The cornice is plain, reflecting the social status of the intended occupants. It is of interest that brick drains were inserted beneath the buildings prior to construction, a practice that was not universal at the time. The preoccupation with drainage shown in the construction of Building 3 and the fact that Building 4 was basemented meant that proper drainage was deemed essential so close to the river. The c 1910 photograph shows that this building consisted of a small terrace of two houses, each of which was two
Fig 6  Mortlake. Buildings 4 and 5 between the early 18th and 19th centuries.
bays wide. The photograph shows a stuccoed front elevation, which is likely to date to the later 18th or 19th century. The shop fronts on both houses are 19th century in date, although the ground floors may originally have had shops in their front rooms. The front door of Building 4 would have occupied the western bay with the shop or front parlour in the eastern bay.

Construction of Building 5 at site 2

An early 18th century double-roomed floor plan was revealed within the limits of trench 1 (Building 5), representing the basement of the house that occupied the middle plot of land. Building 5 was two rooms wide (from north to south) with a central east–west wall. There was a chimney stack and fireplace on its south end wall and there may have been another on the north wall. The southern room had a central fireplace and a brick floor, while the
northern room also had a brick floor: both probably had a service function. The north–south and east–west external brick walls of the building formed the eastern and southern limits of the trench. The east–west wall continued westwards from the excavation trench and was recorded in the watching brief trench. Two symmetrical L-shaped sections of brick wall were revealed to the south and to the north of the internal east–west wall. An area of brick flooring was revealed to the south-west of the corner. Later in the 18th century the brick floor of the southern room was replaced with a raised wooden floor, discernible by the addition of a north–south sleeper wall in the centre of the space. This suggests a possible change of function for the space.

Building 5 was built as a brick tenement facing on to Tapestry Alley. A sketch map of 1723 (SHC: 830/5) shows the land behind this building (to its west) extending around the western side of the public house that faced on to the river. The sketch map illustrates an abstract of title reciting a lease and release of 28 February and 1 March 1722/3. The building was more or less contemporary with Building 4 and may have been developed by the same builder, suggesting that it would have had similarly simple classical detailing. The outer walls were two bricks thick indicating the building was probably two storeys high with an attic. It was built within a combination of red and purple bricks (fabrics 3033 and 3032). The latter fabric type was more durable and more economical to make (including quantities of domestic fire ash and rubbish in its clay which saved fuel during manufacture) and was in use in London from the 1670s (LPL: MS 2723 ff 21–2). The use of these more up-to-date bricks in this house suggests four possibilities: Building 5 may be later than Building 4; Chamberlen may have used various brick suppliers who manufactured their bricks using a variety of methods; Chamberlen could also have laid out the plots for the tenements that were then built upon by different builders who obtained materials from various sources; the orange bricks were re-used from the demolition of the tapestry buildings and that supplies were augmented by newly manufactured purple bricks. The full depth of the building is not known and the absence of surviving evidence regarding the front fenestration precludes further discussion of the internal room arrangement. The front door in the east wall may have been either side of the internal east–west wall.

EXTENSIONS IN THE 18TH CENTURY

18th century modifications to Building 3

During the 18th century Building 3 had its interior remodelled, and extensions and improved drainage were added to the rear. Loose industrial waste material was placed beneath the floor levels to ensure that these were kept dry; ventilation holes were built into the internal north–south partition or party wall. The floor in the western room was improved as a layer of slag and then mortar was laid down for damp-proofing purposes beneath the new timber floor. Two gaps in the south façade represented lightwells that had been cut into the original external wall and rendered on the inside. Gaps for ventilation beneath the floorboards of the hallway were cut through the partition wall and ventilation channels led out beneath the hallway. The northernmost vent cut contained two lengths of brick lining on the inside of the channel. Ventilation would have been especially necessary if a tiled floor was replaced later by a timber floor. This suggests there may have been a change of function in the room. The two later openings built in the front wall would also have increased air circulation beneath the floors. These later openings would, for structural cohesion and design symmetry, have been set immediately beneath the windows of the front elevation, indicating that there were two bays on the west side of the building. Later brickwork projecting beyond this wall to the east of the two western bays would have been a central feature on the front elevation, being located approximately half-way between the west wall of the building and the surviving eastern property boundary. This central feature may have supported the steps leading up to the front door. The building may therefore have been of five bays with two windows either
side of a central door at ground floor level. If this were the case the surviving wall partitioning the internal space may have formed part of a narrow central hall, providing access to the two ground floor rooms either side as well as the staircase to the first floor. The western chimney stack would probably have been mirrored by another on the eastern wall.

The building was extended northwards towards the Thames utilizing the brick plinths of the earlier elements of Buildings 1 and 2. The outline of the former outbuilding of Building 1 was re-used and a south-facing fireplace was installed in the room. A short length of wall ran north from the north-west corner of Building 3, overlying the corner fireplace of Building 1, thus strengthening the western external wall in this room. Layers of slag and mortar were also laid down beneath the timber flooring here. A 15th century north–south wall of Building 2 was re-used as a partition wall forming a hallway with a tiled floor set into a mortar bedding layer, constructed of square unglazed tiles. Door sills made of slate, indicated where the doorways connected the rooms. An east–west wall was built on top of the stone and brick plinthed wall of Building 2, and formed the northern extent of the building at this time. The wall had a single course of tiles in its construction, one of which was a decorated tin-glazed English tile. This north-eastern area of Building 3 was divided into two rooms by a partition wall, and both rooms had flagstone floors.

As Building 3 was extended northwards the original north–south drain fell into disuse, and the northern half was rebuilt and ran towards the Thames from a downpipe on the new east–west external wall. In the western half of the site a sequence of drainage networks drained water from downpipes on the west side of Building 3. A north-west to south-east aligned brick culvert drained north-westwards towards the river, and was served by two north-east feeder drains with capping stones from downpipes on the building to the east.

An unusual hexagonal-shaped feature comprised six lengths of brick wall, and probably represented an ornamental fountain. The sunken walls were only one brick thick and were rendered on the inside face, with yellow clay damp-proofing on the outside face. The structure was dug 2.4m into the natural gravel. A thick layer of pottery, wasters, saggars and ceramic building material, dating to the 18th century, filled its base and may have been mostly kiln waste from the nearby Pottery of William Sanders. Resting upright on this layer was a lead water pipe, 1.5m tall. The pipe was 40mm in diameter, narrowed towards the top and had a slight bulge and a thread for screwing on another fixture at its top. The pipe rested in the centre of the feature and was served by a connecting section, positioned at right-angles to the base, which was rendered into the north-east corner of the structure, and had been later severed. A 0.3m-thick layer of bluish-grey clay buried the pipe, which was overlain by a layer of yellow sandy gravel 0.2m thick. Thus it was constructed in order to hold water. A plug of puddled clay filled a cut in the gravel layer beneath what appeared to have been an outlet hole in the northern line of brickwork. All the indicators suggest that this structure was a fountain that could periodically be drained. The buried dump of pottery beneath the pipe and the layers of clay and gravel above it probably stabilized the pipe and prevented ground water from seeping in. The fountain could have been associated with the large house to the east. Thus it is possible that Building 3 had a garden on its western side with a plunge pool or fountain. An 18th century engraving of Mortlake from the north bank of the Thames by John Boydell (Sloane & Hoad, 2003, 52), shows two houses on site 1 with an open area to the west. The site is shown unchanged in a drawing from 1820 – the ‘Panorama of the Thames’, by Samuel Leigh (Brown 1997, 30). A six-bay wide warehouse and a house with a bay window known as Montpelier House (M Brown, pers comm) were built along the river by 1820. The riverside warehouse must have been located beyond the north edge of the excavated area as the later foundations in the north of the trench were too insubstantial to have supported a warehouse wall. While industrial processes such as the pottery, a malthouse and the tapestry works were present along the river from the 17th century onwards, it appears this part of the site remained primarily residential until the mid-19th century.
Rebuilding of Buildings 4 and 5

Building 4 was repaired in the 18th century when the partition wall between the two rooms was rebuilt. The internal east–west brick wall contained some timbers, which had been incorporated into the coursing to level each side of the brickwork. A new north–south brick wall in the southern room of Building 5 indicates a new timber floor was built at this time.

REDEVELOPMENTS IN THE LATE 18TH/EARLY 19TH CENTURIES

Further improvements to Building 3 and backfilling of the fountain

A later network of drainage to the west of Building 3 replaced the 18th century drains as each silted up with use. A small area within Building 3 was used to draw rainwater from the roof. A square-shaped conduit with four channels took water eastwards. The drain was brick built with Purbeck marble capstones. The fountain was demolished in the late 18th/early 19th century and backfilled with 18th century domestic rubbish: animal bone, ceramic building material, pot and glass. The external faces of Building 3 were repaired and a doorway was inserted at the main southern entrance to the property between two balusters. In the north-eastern extreme of the building an east–west brick wall was recorded, which probably belonged to an outbuilding. The last addition to Building 3 was a north–south wall connecting this outbuilding with Building 3. In the early 19th century a layer of gravelly silt was dumped across the western half of the site to raise the level of the ground. Building 3 must have been demolished before 1832 as a tithe map of the area records the site as open ground. A 1m-thick demolition layer of brick, tile, mortar, plaster and marble sealed the building foundations and preserved them. However, most of the later 18th century floors were ripped out as part of this process. Fragments of moulded wall plaster decorated with neo-classical motifs, probably dating to the Georgian period, were identified. The pieces were from a cornice and show the main body to be of a rough lime and sand mortar, while the surface plaster is of much finer quality. Further decorative elements, most likely from the same phase of building as the plaster, included fragments of marble, and polished ‘conglomerate’, cut to resemble marble facing. These were all fragmented and non-diagnostic, but probably represent the remains of thin panels, floor tiles or slabs. They represent the interior decorations of the building prior to demolition, and include decorative architectural elements from the late 18th century; many small finds were also recovered from this layer including coins, pins, dress accessories and structural ironwork.

Improvements to Buildings 4 and 5

A number of iron wall fittings of 19th century date were found inside both rooms of Building 4. A panel with two iron fixings, which pre-dated the Portland cement render, may have housed a boiler or sink in the southern wall. The floors of both rooms were repaired and the southern room had a tiled floor laid down. The tiles were machine made and stamped ‘W BLYTH’ on the reverse. The fireplace had a brick frontage added. The floor of Building 5 was also repaired, and a brick soakaway was inserted in the corner of the northern room. A brick culvert was built running eastwards from the external wall.

LATE 19TH/20TH CENTURIES

New developments at site 1

Nineteenth century OS maps of Mortlake show the land use at site 1 changed from residential to industrial. The map of 1893 at a scale of 1:3960 shows that the buildings at 77–85 High Street had been demolished, and a Coal Wharf was present at 87–91 High Street. Granite setts were identified over the eastern half of the site (87–91), forming the surface of the coal wharf and successive layers of tarmac surfaced the west of the site. A north–south brick culvert
traversed the middle of the property before draining into the river. By 1940 a foundry replaced the Coal Wharf at site 1, and a weighbridge was built at the south side by 1952, although by 1963 they had been turned into a garage.

**Demolition at site 2**

By 1865 Building 5 appears to have been demolished and replaced by another building which was in turn replaced in 1892 by the Queen’s Head public house fronting the river. The backfilled deposit in the basement contained 19th century domestic rubbish such as pottery, clay pipes and animal bones. The property boundaries changed as the former middle property was incorporated into the Queen’s Head, leaving the two houses fronting on to the High Street. Building 4 was still standing when a photograph was taken of Mortlake High Street in c.1910. The date of the backfilling of the basement is late 19th/early 20th century. A concrete and corrugated iron structure forming a Second World War bomb shelter was found in the northern room of the basement. Building 4 was demolished by 1952 leaving the Queen’s Head to the north.

**Archival research**

**DR JOHN DEE’S HOUSE AND THE MORTLAKE TAPESTRY WORKS**

Archival research by Dr Roger Leech has allowed the complex history of land ownership on the sites to be traced back to the early 17th century. Site 2 is interpreted here as the western half of the former Mortlake tapestry works; this land was recorded in detail because it became Crown property. The factory building stood to the east of Tapestry Alley, but it is possible that the courtyard of the tapestry works extended westwards across to site 2. Archival research on the tapestry works has been undertaken by Sloane & Hoad (2003, 46–8), although they locate the tapestry works to the east of Tapestry Alley. Site 1 is less well documented, although named occupants of plots to the west of the tapestry works are listed in a survey of 1617. A detailed view of the south bank of the Thames at Mortlake is provided by Ralph Treswell’s survey of 1617, undertaken for the Lord of the Manor of Wimbledon (NRO: Spencer papers). In two separate sections this survey lists the plots facing the river, providing the names of the occupants and the relative sizes of the different plots. The latter cannot unfortunately be mapped using the data for the relative areas, since it appears that the curtilages extended at that date to the low water mark. Treswell is best known to archaeologists for his maps of London properties in the early 17th century (Schofield 1987, 9). There may well have been a map or maps, now lost, to accompany the survey of 1617.

The location of the excavation sites within the survey of 1617 is revealed by a reference of 1620, contained within a breviate of the court rolls of the Manor of East Sheen and Westhall. It is apparent from this breviate that a number of properties on the riverfront were held by copyhold from the Manor of Wimbledon, but fell within the jurisdiction of the Manor of East Sheen and West Hall. One of these properties was noted as ‘Dr Francis Crane for 2 houses late Bartholomew Brickwoods’ (SHC: K4/17). Crane had acquired his property to be used as the tapestry works in 1619. In 1617 this must have been one or both of the properties by then owned by the heirs of Bartholomew Brickwood (Leech 2002):

**Copyhold:** The heires of Bartholomew Brickwood, one auncyent mesuage with outhowes orchard & garden lyinge east of the sayde Bartholomew Brickwood heires, west of Willyam Symonds, south of the Theames, and north of the foresayde highway

**Copyhold:** The heires of Bartholomew Brickwood, one howse with a yarde & garden plot lyinge east of Thomas Perpoynte, west of the sayde Bartholomew
The strip of land excavated at site 2 was probably located on the westernmost plot owned by Bartholomew Brickwood. The plots immediately to the west of Bartholomew Brickwood’s land are listed as belonging to ‘Thomas Perpoynte; Mary and Sara Perpoynte; The heires of Thomas Hamond’ and ‘John Poole’ in the survey of Ralph Treswell of 1617 (NRO: Spencer Papers, 1617 Survey). If both properties of the heirs of Bartholomew Brickwood were acquired to be used as the tapestry works in 1619, it is likely that these three copyholds were located on the subject sites. The narrow property lying at right angles to the Mortlake High Street on which Building 1 was found in the excavation could have been owned by the heirs of Thomas Hamond. The property on which Building 2 was recorded could have been owned by Mary and Sara Perpoynte, and the unexcavated area in the western half of site 2 could have been owned by Thomas Perpoynte, leaving the excavated area in the ownership of the heirs of Bartholomew Brickwood. The detailed descriptions in the survey of each copyhold are particularly interesting when compared with the archaeological record. Thomas Hamond’s land is described as ‘one howse with an orchard garden and outhouses’, and one or possibly two outhouses at Building 1. The land belonging to Mary and Sara Perpoynte is described as ‘one howse with a barne & yarde’; the late 16th/early 17th century elements of Building 2 appear to have formed a yard. Archaeological investigations at site 1 revealed that the land to the west of the Building 1 alleyway was unoccupied in the early post-medieval period. Treswell’s survey recorded that John Poole owned ‘one parcel of ground called the Rose garden cont 20 perches’ to the west of Thomas Hamond’s property. Poole’s land extended approximately 100m to the west which would have bounded the extant Bull’s Alley; this alley can be found on the 1838 tithe map and has probably retained the line of a boundary or alleyway since at least the early 17th century. Therefore the 1617 survey provides a workable description of the parcels of land owned and occupied on sites 1 and 2 in the early 17th century. Overall, the survey provides an insight into the wealth and status of the landowners in Mortlake, since several of the plots are owned by the named individuals of the same family.

Bartholomew Brickwood was one of a number of citizens of London and Southwark who held properties alongside the Thames at Mortlake by or before 1617. Brickwood was a wealthy pewterer living in St Saviour’s, Southwark. Owners of riverside properties to the east of Brickwood’s included the courtier Lavinus Munke, one of the clerks to the King’s Signet, and alderman Sir Thomas Bennett. To the west was the house and garden of Sir Clement Scudamore, another alderman of the City of London, and beyond that lay the former palace of the Archbishops of Canterbury, by 1617 held by Lionel Bostock and Ralph Myles; the Bostocks were prominent in the City of London (PRO: PROB 11, wills of Brickwood, Muncke, Bennett and Scudamore). The ownership by wealthy citizens of second residences in the surrounding countryside, especially on the Thames downstream and upstream of the City of London, was an element of élite urban culture from the 15th century onwards – paralleled elsewhere in Bristol (Leech 2000; 2003, 76).

Brickwood’s easternmost property is recorded as ‘one auncent mesuage with outhouses’ which may refer to an older property, possibly that of John Dee. The records of the manors of Wimbledon and of East Sheen and Westhall are widely scattered and might repay further scrutiny to identify the process by which Brickwood acquired the property formerly of John Dee.

THE TAPESTRY WORKS

By 1619 the two houses owned by the heirs of Bartholomew Brickwood stood on the site of the tapestry works. In August of that year tenure of these passed to Dr Francis Crane, who acquired the property so as to ‘make a work house for tapestry’ (PRO: E317/Surrey 37).
Crane died c. 1637, his son Dr or Captain Richard Crane then taking up the tenancy. In the same year Crane ‘delivered into the hands of the […] king the court or yard belonging to the said house’ (*ibid*). A survey of 1651 described the property in detail:

> A Survey of all the messuages or tenements called or known by the name of The Tapestry House [...] lyeng and being in the parish of Mortlake, County of Surrey, late in the possession of Charles Stuart late King of England. Done in September 1651 according to Act of Parliament.

A messuage or tenement of brick [...] in the occupation of:
- John Hollingbourne – four lowe rooms
- Garrett Uslake four lowe rooms
- John Bennith four lowe rooms
- David De Maude two lowe rooms, and two above stairs
- Peter English one lowe room and one room above stairs
- John Uxa four lowe rooms
- William Benwith four lowe rooms
- John Hollliburie four lowe rooms, and
- George Dewaye four lowe rooms

In the second storie one Great Working Room where are twelve looms for making the tapestry work of all sorts and doth contain in length 82 and in breadth 20ft of Assize; together with one other Working Room where are six tapestry looms [...] and doth contain in length 40ft and breadth 20ft of Assize; and also one other Great Room called the Limmers Roome; And the third storie one long gallery over the aforesaid long working room, now divided into two rooms, and also one other gallery divided into three Rooms with one Courtyard to the said House belonging. All which afsd. building and grounds are bounded to land of Mr. Francis West to the East; on the Highway [...] from Mortlake to Barnes to the South; and on certain other lands and houses of Mr. West to the West; and on the River Thames to the North. And doth extend itself in length 115½ft and in breadth 84ft of Assize.

From the survey it is clear that this was now regarded as former Crown property, to be acquired for the Commonwealth. There is no evidence that by 1651 the property was still held by copyhold tenure from the manor of Wimbledon (PRO: E317/Surrey 37).

At the Restoration in 1660 the tapestry works again became the possession of the Crown and remained so until 1667 when they were sold to Robert, Earl of Sunderland and Henry Brounter esq. They passed then to Daniel Harvey of Leiston in Suffolk, who sold the property in 1706 to John Chamberlen of Westminster, a carpenter/builder, and John Betts of St Dunstan’s in the West, a woollen draper, and probably the financial backer to the redevelopment scheme that then followed (SHC: 830/1–10).

The precise location of the tapestry works is provided through the deeds for the later Queen’s Head public house, part of the site redeveloped in 1708 (SHC: 830/1–10). In or by 1708 the former tapestry works were being subdivided and sold as separate plots. One plot in 1708, sold by John Chamberlen of Westminster a carpenter and Thomas Zachary citizen and skinner of London, was described as being a tenement, yard and ground abutting south on the street, west on a tenement and yard intended to be sold by John Chamberlen, north on another tenement and yard of John Chamberlen, and east on a passage set out by John Chamberlen leading from Mortlake [High] Street to the Thames. The deed of sale adds that the tenement being sold was late among others ‘new built on part of the ground or soyle whereon certain messuages houses and buildings heretofore used or employed for the making of tapestry and for the habitation of those employed therein lately stood.’ Other plots developed in 1708 lay to the east of the passage. The present day width of the two plots either
side of the passage combined is exactly 84 feet from east to west, precisely the same measurement as given in the Parliamentary Survey of the Tapestry Works of 1651. The same plots are shown on a plan of 1723, confirming beyond any doubt that the tapestry works occupied this plot. The schematic plan is annotated and Tapestry Alley is named King’s Head Court while the plots of Buildings 4 and 5 are shown as Lots 1 and 2; Lot 1 which would have been occupied by Building 5 is labelled only as ‘Tenement’, while Lot 2 which was the site of Building 4 is labelled as ‘Mr Simms’. Therefore Buildings 4 and 5 were domestic residences and the plot of land fronting the river was a public house.

The finds

CERAMIC BUILDING MATERIAL, by John Brown

The majority of these finds consisted of post-medieval ceramic building materials. The fabric classification used follows the London type series as held at the Museum of London archive. It was noted that many of the fabrics showed a greater amount of fine quartz (0.1mm or less) within the clay matrix than is usual in Greater London. This reflects the use of local clay sources.

Roofing

Small numbers of medieval roof tile fragments were recovered, all in fabric types common to the Greater London area. Of the diagnostic fragments only pegged roof tiles were noted in the assemblage.

Fabric 2276 was the most common of the post-medieval roof tile fabric types and was found in peg tile form. This system was probably adopted for the buildings at both sites during the post-medieval period at least until the late 18th century when cheap slate became widely available (Brunskill 2000, 88). Pantiles were present in small numbers in the above fabrics and none were found in situ. They were imported in the 17th century from the Netherlands and produced in this country from the 18th century (ibid, 94). If they were utilized at the site the small amount of material suggests that they formed the roofing systems of minor structures or extensions, and they are generally associated with sheds or penticness (Neve 1726, 267).

Masonry

The most common brick fabric at site 1 was the local variant of 3046, with numerous small quartz inclusions not greater than 0.4mm. This fabric was used throughout the late medieval and post-medieval phases, as were 3033 and to a lesser extent 3065. In all fabrics unfrogged examples were the norm. Very sandy fabric 3065 was used almost exclusively in the earliest phase of Building 1 particularly in the hearths associated with the structure. This could suggest one initial source, with later material coming from further afield. The use of fabric 3065 in the hearths might also be related to the superior refractory qualities this sandy fabric might offer. From site 2 one possible example of a medieval great brick in fabric 3046 was recovered with dimensions of ? x 121 x 60mm; apart from this, all the brick fabrics were of early post-medieval date or later, in fabrics 3033 and 3046. All the fabrics are of the same fabric family, and are produced with local variations across the London area, as in this case.

From site 2 fragments of Reigate stone blocks were recovered, one of which was worked to ashlar and showed evidence of burning. At site 1 Building 1 utilized Reigate stone in the earliest period of construction for a wall and chimney stack. Generally, Reigate stone was not used as an external walling material after the 15th century because of its poor weathering qualities (Clifton-Taylor 1962, 126–7). Both Kentish Rag and Reigate stone were used as flooring in an early 17th century room in Building 2, possibly re-used from an earlier structure.

At both sites fabric 3032 replaces 3046 as the most common fabric after the mid-18th century, and is an evolved form of fabric 3033. Inclusions were added to the clay to provide
internal fuel and make the brick lighter when this had burned away. Both frogged and unfrogged examples are noted (unfrogged, with sharp arrises were most common).

**Internal or decorative materials**

The majority of tiles recovered were plain glazed and unglazed floor tiles of Flemish type fabric 2505. The glazed tiles found in situ in Building 2 showed yellow or dark green lead glazes and dimensions of 184 to 188mm on each side and an average thickness of 24mm. Their stratigraphic position above a brick floor may suggest re-use. This is supported by the discovery of mortar on broken areas of tile and by the somewhat random ‘chequered’ pattern in which they had been laid. Later unglazed examples were noted in Buildings 3 and 4, in fabrics 1678, 1977 and 2318. These were larger with a range of 204–233mm² but mainly 228–233mm². They were typically 32–40mm thick.

Seven fragments of tin-glazed ‘delftware’ wall tile were identified, all of which showed decoration (fig 8, nos 1–3), with the exception of one plain glazed fragment of unusual trapezoidal shape (fig 8, no 4). Imported Dutch tiles are represented in addition to English tiles. One tile was found in situ in a wall of Building 3 and the majority of tiles from site 1 were found in the demolition layers associated with this building.

Also recovered from the demolition of Building 3 were several fragments of moulded wall plaster (fig 8, no 5), decorated with neo-classical motifs, and probably dating to the Georgian period. The pieces were from a cornice, and show the main body is of a rough lime and sand mortar, while the surface plaster is of much finer quality.

From site 1 further decorative elements, probably from the same phase of building as the plaster, included fragments of marble, and polished ‘conglomerate’, cut to resemble marble facing. These were all fragmented and non-diagnostic, but probably represent the remains of thin panels, floor tiles or slabs. Again this material was from demolition layers associated with Building 3.

The range of decorative material from Building 3 indicates a building of high status, with many imported materials including Flemish floor tiles, tin-glazed wall tiles and marble. The remodelling of the building throughout the late 17th and 18th centuries until its demolition suggests that the occupants were wealthy enough to maintain the fashionable appointment of the property.

**Pottery, by Frank Meddens**

The pottery assemblage consists of a total of 1717 potsherds with a weight of 35,495g and an estimated vessel equivalent (EVE) of 19.31 (based on rim EVEs). The pottery derives from 21 contexts and includes a small amount of unstratified material. The great majority of the assemblage, namely 1692 sherds (98.5%) weighing 35,043g (98.7%), dates to the post-medieval period and there is a very small amount of earlier material, all medieval in date and all residual.

The material from site 1 comprises large amounts of tin-glazed ware, totalling 1362 sherds (79.3%) with a weight of 17,806g (50.2%) and 65 sherds (3.8%) of English stoneware with a weight of 5425g (15.3%). Both of these included notable groups of kiln furniture and props. This assemblage is dominated by English stoneware and tin-glazed ware production waste, some of which may have originated in William Sanders’ Pottery located just to the west of the site. The assemblage at site 2 was much smaller and earlier in date and came from a pit, a well and a ditch, containing late medieval and early medieval domestic rubbish, none of which merits further description.

Some of the more noteworthy pieces from site 1 include a base of a crucible, used for working with copper, which came from an unstratified deposit. It was of 19th century date and in a graphite-tempered fabric.
Context 166, a backfilling deposit found within the garden fountain, included an 18th century tin-glazed coffee can (fig 9, no 1) and the base of a tin-glazed ware bowl (TGW H) with a footring, dating between 1755 and 1760 (fig 9, no 2). On the interior it was inscribed in blue, ‘…one...more : an...then...’ probably a text which originally read ‘one more bowl and then’ after an inscription below a satirical coat of arms entitled ‘The Drunkard’s Arms’
Fig 9 Mortlake. 1: tin-glazed ware coffee can; 2: tin-glazed ware bowl with inscription; 3: stoneware setter.
issued as a print in the mid-18th century. Examples are known from tin-glazed wares produced in Bristol (Archer 1997, 152, b76). The kiln furniture found from this deposit included tin-glazed ware saggars with triangular holes, stoneware saggars and setters, the latter represent curved kiln spacers with a very sandy fabric (fig 9, no 3).

SMALL FINDS, by Chris Jarrett and Geoff Egan

The dresshook found to the west of Building 1 was made of two lengths of wire, twisted together into a bourchier knot, with two ends splayed and the pointed tips recurved; one of the other ends is cut short at the knot and the other has its pointed tip recurved over it (fig 10, no 1). This dresshook is paralleled by a distorted example from the AD1507 Pottergate fire deposits in Norwich (Margeson 1993, 18–19). Several double-hooked fasteners are known from the late 15th/early 16th century, where they are part of the fashion that prominently featured both hook and elaborate wirework; the parallels cited are the only other triple examples traced. The opposed pair of hooks may have held together some thick garment such as a cloak, leaving the additional one perhaps to hold some pendant chain or other decorative dress item. As with many of the repertoire of cheap but complicated-looking accessories from the period indicated, this one seems to have no specific upmarket version that is recognizable from contemporary paintings.

The jetton from Building 2 was a significant and important find (fig 10, no 2). The closest parallel of a jetton, with both sides similar, is suggested to be perhaps early 16th century by Barnard (1916, 222–3, pl 33 no 89). Jettons were made of copper alloy and used with a reckoning board as a means of accounting. In the late 15th century German manufacturers took over supply and by the middle of the 16th century the market seems to have been

Fig 10  Mortlake. 1: dresshook; 2: jetton.
dominated by makers in Nuremburg. Jettons seem to occur in small numbers as part of
general refuse deposits (Schofield & Vince 1994, 132), though it is no surprise that a jetton,
which is an indication of trading, was found on this riverside site.

Two complete pipeclay hair or wig curlers were present in the backfill of the fountain.
The first has both its ends cut flat with a knife; there are also marks indicating lathe turning,
but they were wiped with a cloth rather than burnished. The second has a slimmer profile
than the first but was made in the same way, though with one flat end having a slight
indentation where it was attached to the lathe. This type of hair-curler appears to be of a mid-
18th century date and corresponds with the similar example found at Aldgate (Grew 1984,
fig 56.87). The hair-curlers were found with a clay tobacco pipe of Oswald’s (1975) type 12,
dated 1730–80, and pottery dated also to the mid-18th century. The presence of wig curlers
suggests the inhabitants of site 1 in the 18th century were fairly wealthy. The wearing of wigs
became fashionable at the French court of Louis XIV during the mid-17th century and was
quickly taken up by the English, who continued to wear them until the end of the 18th century
when they had become almost passé (Le Cheminant 1982, 187). Although an uncommon
find in London, the distribution of hair curlers tends to be along the Thames and in areas
of high social status or among the middle classes as well as at the Inns of Court. The
occurrence of the hair curlers on a site which could afford a water feature in the garden is
therefore in keeping with the social status generally assigned to these items.

ANIMAL BONE, by Philip Armitage

A total of 284 hand-collected animal bones from site 1 were submitted for analysis. The faunal
assemblage from site 2 was very small and did not warrant further analysis since the majority
of bone was recovered from 19th century backfilling of the basements. Through employing
standard archaeozoological methodological procedures, 248 (87.3% of the total) are identified
to species/taxon and part of skeleton, and 36 (12.7%) fragments lacking diagnostic features
remain indeterminate. The identified portion comprises 226 (91.1% of the total) mammal
and 22 (8.9%) bird bone fragments. Six species are represented by the assemblages: cattle
Bos (domestic); sheep Ovis (domestic); pig Sus (domestic); rabbit Oryctolagus cuniculus; domestic
fowl Gallus gallus (domestic); rock dove/domestic pigeon Columba livia (domestic).

The combined bone samples from site 1 represent discarded household (kitchen/table) food
waste. The period up to the 17th century yielded only very modest samples of animal
bones/food debris and it was considered unwise to attempt any further, more detailed
interpretation based on these. By amalgamating data relating to the later post-medieval
assemblages it was however possible to carry out a basic analysis that provided some insight
into the dietary (meat) preferences of the Mortlake High Street inhabitants during the
18th/early 19th century, as well as revealing something of the livestock husbandry systems
that produced this food. In terms of the proportional quantities consumed of ‘butchering units’
(ie cuts/joints of meat) those of mutton outnumbered those of beef/veal, with pork only
representing a relatively minor component of the diet. In terms of actual amounts of meat
consumed, however, cattle clearly made the greatest contribution to the overall diet with sheep
second in importance, while pigs again played only a minor role. This dietary profile based
principally upon the two staples of beef (and veal) and mutton cannot be considered one of
great extravagance or variety but is certainly adequate and was somewhat enlivened by the
occasional eating of pork and the flesh of domestic fowl, rabbits and domestic pigeon – the
last species (represented by a femur from context 306) often features in 18th century recipes
braised, fricasseed, juggled or (more simply) rolled up in pastry and boiled as dumplings (eg
McKendry 1973, 124–5; Wilson 1976, 123). The presence of calf bones indicates
consumption of veal as well as mature beef, but there is no comparable evidence for the eating
of lambs – all the sheep were apparently fully mature at time of slaughter, as evidenced by
the preponderance of mature animals in the sample of twelve lower jawbones from contexts
160 and 166 (the backfill of the fountain) aged using the criteria of Payne (1973).
This kill-off pattern – which is dominated by mature sheep – indicates these animals had been kept primarily for their wool before being culled as a meat source. The absence of specimens of succulent young lambs is particularly noticeable. From length measurements (GL) taken of the two complete metatarsi and complete femur (all from context 109; early 19th century demolition layer) it is possible to calculate (using the factors of Teichert) the stature (shoulder heights) in three of the sheep represented among the site 1 assemblages. The calculated values (57.2, 61.4 and 71.3cm) fall within the size range (52–80.5cm) documented for southern English post-medieval sheep, by Armitage and other workers, and reveal the presence of lanky, long-legged individuals (? long-woolled sheep) as well as shorter-legged animals (? heath sheep). The mutton eaten by the site 1 inhabitants comprised meat from ewes and wethers (castrates) as indicated by the identification of innominate bones of one female and one castrate sheep (sexed according to the criteria of Armitage 1977); both specimens from late 18th/early 19th century context 166.

Although a few of the domestic fowl bones from the post-medieval food refuse at Mortlake High Street match in size those of modern (improved) stock, the majority of the archaeological specimens are noticeably smaller – comparable to modern bantams – suggesting many of the birds eaten then were not perhaps of the best quality (and to the modern eye familiar with plump intensively reared chickens would have appeared somewhat scraggy). The rabbit bones from the deposits are also on the small side, comparable with those of modern wild rabbits rather than the domestic breeds. It therefore seems the rabbits eaten by the Mortlake High Street inhabitants were of the scraggy warren-bred variety rather than the plumper/meatier, hutch-reared stock of that period. Knight (1889, 401) commented on the inferiority of such animals supplied to the meat markets, saying: ‘The numerous warrens in the UK send forth tons of rabbit flesh during the season; but some of the rabbits are very small and weakly, by reason of the “in-and-in” breeding which has gone on for years – defects which an occasional interchange of stock would, to a certain extent, have obviated’. Animal bones recovered from the site represented discarded household food waste from mostly the 18th and 19th century contexts. In terms of actual amounts of meat consumed, cattle made the greatest contribution to the overall diet followed by sheep, while pigs played only a minor role in the diet. This dietary profile based principally upon the two staples of beef (and veal) and mutton cannot be considered one of great extravagance or variety. This zoo-archaeological evidence indicates that whoever was eating these animals did not acquire the best possible quality. Animal remains from contexts in the later post-medieval period are more likely to have come from outside the site particularly after the buildings were demolished.

Discussion

The excavations at Mortlake have revealed evidence of possible prehistoric and early medieval activity in addition to a sequence of late medieval and post-medieval buildings. The late 12th/13th century ditch found at site 2 suggests the land was open and the ditch was part of a field system in this period. The dual aspects of the sites, with properties facing on to the High Street and river, created pressure for development at both ends of each plot, which was heightened with the relocation of the church in 1543. By the late medieval period the High Street properties were prime development land and residents included several City of London citizens. At site 1 the inhabitants utilized the riverside location to their advantage by siting a room with relatively high-status flooring at the riverside end of their plot, reflecting the importance of the river as a transport artery.

By integrating documentary and cartographic sources with the archaeological record, the sequence of development on these two sites has been revealed. The identity of inhabitants at the ‘Tapestry House’ site can be traced owing to the detailed records about the subdivision and acquisition of land recorded in a survey of 1651. By tracing the measurements given in the Parliamentary Survey of the Tapestry Works of 1651, this study has produced an alternative location for the tapestry works to that of Sloane & Hoad (2003, 46), placing the
western side of the works on site 2. Fortunately, Ralph Treswell’s survey of 1617 has provided an interesting and thorough account of landowners on the two sites pre-dating the tapestry works. Although the exact site of John Dee’s house is still not known, archaeological evidence of late 16th century occupation was found on both sites. The late medieval/early post-medieval jetton from site 1 and imported stoneware fragments from site 2 were indicative of a mercantile class of inhabitant. Dee’s house must have been a fairly substantial size in order to house his wife and their eight children, plus servants and visitors, as well as his library. He probably bought adjoining property to enlarge his grounds (M Brown, pers comm). The decoratively floored room at site 1 could have been used by Dee to entertain his guests. The land at site 2 could have housed the tapestry workers or ancillary buildings, though no archaeological evidence of these buildings was recovered. The construction of a substantial late 17th century building adjacent to the site of the tapestry works at site 1 may have been linked to its success. The ornamental fountain built within the garden of this house implies increasing wealth in the 18th century and the wig curlers found within the backfill of this feature are further evidence of higher status. The economic opportunities were exploited to the full by the speculative developers of site 2 at the beginning of the 18th century. John Chamberlen built an alley (named Tapestry Alley on the 1838 tithe map, but originally called King’s Head Court) between the High Street and the river (SHC: 830/1–10) which allowed for the construction of buildings inhabited by different occupants facing the High Street, the riverfront and the alley, thus maximizing both the density of development and his profits. With the benefits of its riverside location for local industries, Mortlake was becoming increasingly part of the hinterland of the City of London. Consequently the architectural styles of the buildings and material culture recovered from them signify increasingly wealthy inhabitants from the late medieval through to the post-medieval period. While Sloane & Hoad (2003, 81) have highlighted the importance of industrial development in post-medieval Mortlake, it is clear that Mortlake was valued equally as a second home for wealthy Londoners and retained this residential character through the post-medieval period. The animal bone recovered from the excavations contradicts the high status implied by the documentary and architectural evidence, because the animals eaten were not of the best quality. However, it is possible that some of the material did not originate as refuse on the site and may have been brought in from elsewhere, as was the kiln waste from William Sanders’ Mortlake pottery.

An inherent difficulty of the excavation has been the tight dating of the building phases on a site where the succession of development and redevelopment has been rapid, and the floor surfaces, which would ordinarily provide some dating evidence, have been removed by later buildings. This may also explain why such a small finds assemblage was recovered from the sites. The archaeological evidence has highlighted developments in architectural styles such as the type of building materials used, changing from brick and stone plinths for timber frames to the sole use of brick for taller more permanent buildings. The use of more durable and fireproof materials was an important development, as brick was increasingly used for the main structure of the houses (Crossley 1990, 257). The difference in quality and permanence of the housing shows a willingness to invest in house building and not only a commitment to a higher degree of material affluence but also a greater desire to invest on a long-term basis (Johnson 1997, 149). The structural remains recorded at both these Mortlake sites reflect developments in building techniques and styles and not least cultural developments on a local and regional scale.

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