

WOOD POND Kenwood House Hampstead Lane London NW3 7JR

London Borough of Camden

An archaeological watching brief report

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London Borough of Camden

An archaeological watching brief report

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Summary (non-technical)

This report has been commissioned by English Heritage in order to record and assess the results of a watching brief carried out at Wood Pond, Kenwood House, Hampstead Lane, London NW3 7JR, in the London Borough of Camden.

On 1st March 2006, a number of historic timbers were discovered by contractors working to strengthen the western face the 18th-century dam between Wood Pond and Thousand Pound Pond. In the course of this work twelve timbers were removed from their setting, and more were left in situ. The following day an elm water pipe was encountered and removed from a second location in the dam.

English Heritage therefore commissioned MoLAS to undertake an archaeological watching brief to both assess and record the ex situ timbers, and to observe and record the in situ timbers exposed during further works. This was carried out between 6th and 14th March 2006.

The post-medieval timbers comprise elements of a substantial double-truss structure extending from under the bank into Wood Pond, whose precise date and function are currently uncertain, but which are probably of 17th or 18th-century date. Although dendrochronological samples were analysed by Nottingham Tree-Ring Dating Laboratory, it was not possible to date them.

In addition, an elm water pipe formed part of a system constructed in the late 18th century, connecting Wood Pond and Thousand Pond.

Only tentative interpretations of the main structure may be made at this stage. It may have been associated with fish ponds seen on Rocque's map of 1746, and perhaps removed during the 1750s landscaping for the first Lord Mansfield. Alternatively, it may have been part of a substantial folly or other structure in the parkland which post-dated that phase of landscaping.

The remains of the timber structure, parts of which remain in situ beneath both the bank and Wood Pond, are of local significance. However, if their date and function can be determined, they might also make a contribution to studies of landscaped parks and gardens at a regional, or possibly national, level.

It is, therefore, suggested that these results are published as an article in a suitable journal. This would require detailed analysis of the timbers and their woodworking technology, and an in-depth archive search to assist in determining the function, date, and associations of the structure.

A programme of underwater archaeological work to supplement the current findings could also be considered as a separate project.

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1 Introduction

1.1 Site background

The watching brief took place at Wood Pond, Kenwood House, Hampstead Lane, London, NW3 7JR in the London Borough of Camden, hereafter called 'the site'. The site is located on the land between Wood Pond and Thousand Pound Pond, and extends into Wood Pond (see Fig 1). The centre of the site is at OS National Grid Reference 527190 187175. Modern ground level on the bank/dam near to the site lies at c 93–94m OD, and water level in Wood Pond at the time of the works was c 92.5m OD. The site code is KHT06.

The parkland at Kenwood is listed Grade II* on the English Heritage Register of Parks and Gardens of Special Historic Interest, reference GD1039.

On 1st March 2006, a number of historic timbers were discovered by contractors working to strengthen the western face the 18th-century dam between Wood Pond and Thousand Pound Pond with sheet piles. In the course of this work twelve timbers were removed from their setting, and more were left *in situ*. The following day an elm water pipe was encountered and removed from a second location in the dam.

English Heritage therefore commissioned MoLAS to undertake an archaeological watching brief to both assess and record the *ex situ* timbers, and to observe and record the *in situ* timbers exposed during further works. This took place between 6th and 14th March 2006.

Work ceased at the location where timbers remained *in situ* until a solution was achieved to the problem of the *in situ* timbers obstructing the sheet piles, and the timbers had been re-exposed and recorded. They were subsequently re-buried *in situ*.

1.2 Origin and scope of the report

This report was commissioned by English Heritage and produced by the Museum of London Archaeology Service (MoLAS). The report has been prepared within the terms of the relevant Standard specified by the Institute of Field Archaeologists (IFA, 2001).

The purpose of the watching brief was to record and assess both the *ex situ* and *in situ* timbers, in line with a brief prepared by Jeremy Ashbee, Inspector of Ancient Monuments at English Heritage (Ashbee 2006). A number of site-specific research aims and objectives were established in the preceding *Method Statement* (MoLAS 2006), and are outlined in the following section.

The purpose of the present report is to analyse the results of the fieldwork against the original research aims, and to suggest what further work, including analysis or publication (if any), should now take place.

1.3 Aims and objectives

The following research aims and objectives were established in the *Method Statement* for the watching brief (Section 2.2):

The limited nature of the works and the watching brief upon them made it unreasonable to establish many specific archaeological research objectives. The archaeological brief was essentially limited to recording the *ex situ* timbers, establishing where any further archaeological remains may survive (presence/absence), recording where necessary, and to ensuring that the proposed groundworks do not involve the destruction of any archaeological remains of national significance. Nevertheless, in addition, a few research questions were outlined:

- What was the level of natural topography?
- What are the earliest deposits identified?
- What are the latest deposits identified?
- Do any timber structures associated with the ponds survive? If so, can their function be ascertained?

All research is undertaken within the priorities established in the Museum of London's A research framework for London Archaeology, 2002.

2 Topographical and historical background

2.1 Local topography

The site lies on the southern side of the Hampstead-Highgate ridge, some 250m south of Kenwood House, and c 20m below it (ie at c 89m OD). To the south of the site, the land rises slightly to 110m OD in Kenwood (wood), before falling away again southwards towards the Thames.

The works were mainly located on the 18th-century dam which lies between Wood Pond to the west, and Thousand Pound Pond to the east (Fig 1).

In this area, a number of streams arise near the interface of the Bagshot beds and the underlying Claygate Member. These waters now run via Wood Pond and Thousand Pound Pond, and thence into Highgate Ponds, forming the eastern, or Highgate, arm of the River Fleet.

2.2 Medieval

At the time of the Domesday survey of 1086, the site lay in the manor of Tottenhall or Tothele, belonging to Saint Paul's, in the parish of Saint Pancras. At a subsequent date the manor passed out of the hands of the cathedral, to persons unknown.

The earliest documents dealing with Kenwood are dated 1226 when William de Blemont granted to the Priory of Holy Trinity, Aldgate, his lands in 'Kentistun' in the parish of Saint Pancras. The estate was noted as being enclosed with ditches. When Wood Pond was drained in c 1993 a series of depressions were recorded in its base, interpreted as fish ponds. If of these were of medieval date, they may have belonged to the cathedral, de Blemont, or the priory, or have continue in use by more than one landowner.

2.3 Early post-medieval, to 1750

The estate remained in the hands of the priory until 1532, when its financial difficulties were exploited by Henry VIII. The king subsequently exchanged the recently acquired priory with the Abbey of Waltham for the estate of Copt Hall in Epping Forest. When Henry dissolved that Abbey in 1540 the estate reverted to the crown once more, and was divided. The northern portion, Caenwood, in which the site is located, was sold into private hands 25 years later. The wood was later shown as 'Cane Wood' on Ogilby's map of Middlesex in 1672.

The first house at Kenwood was built by John Bill, the King's Printer, who acquired the estate in 1616. By the time his grandson sold the estate in 1690, a large part of the wood had been felled and converted into farmland.

The original house was remodelled or replaced by a red brick house c 1700, and passed though a number of hands in the first half of the eighteenth century, notably those of the Earl of Bute. The Earl, deeply interested in landscape gardening, is recorded in a letter of

1749 to have made 'improvements around' the house, but it is uncertain if these works involved landscaping, or extended to the current site.

Bute's enclosed formal gardens south of the house, however, are shown on Rocque's map of 1746 (Fig 2). Importantly for the current site, four small ponds, probably fishponds, lay to the south of the gardens and north of 'Kenwood' (wood). The eastern pair extended into the gardens to the north. Experience has shown that Rocque's surveying is difficult to fit precisely to modern mapping, but from comparison with the axis of the main house, it appears likely that the western three of these ponds fell within the footprint of modern Wood Pond. These may be the ponds that were seen in 1993, or successors to them.

2.4 Later post-medieval, from 1750

In 1754 the property of Kenwood passed to William Murray, who later became Lord Chief Justice and the first Earl of Mansfield. Major landscaping of the park appears to have commenced under the first Lord Mansfield, with further work carried out by the second and third Earls. Between 1764 and 1774 he had the house expanded and remodelled by James and Robert Adams (Cherry & Pevsner 2002, 369), including the pilastered stucco southern facade.

Mansfield also had the formal gardens and fish ponds were swept away and replaced by a naturalistic landscape in the style of Capability Brown. According to one account, this was to a plan of the previous owner, the Earl of Bute (Farmer 1984, 45, quoting the *Morning Herald* of 21 September 1781). This had open lawns sweeping down to two new large ponds or lakes, replacing the former small fishponds, with the wooded rise of Kenwood (wood) forming a backdrop, also having extensive views across the valley of the Thames.

The initial landscaping works, producing the open lawns and the ponds separated by the wooded 'dam', appear to have taken place in the second half of the 1750s. The area of wood pond appears to have been slightly less extensive in this early phase of work than later.

A painting of 'Caen Wood' by John Wooton (or Wootton) is signed and dated 1760 (now in Titsey Place, Surrey, http://www.titsey.org/index_fs.htm accessed on 2.6.06; reproduced in Farmer 1984, Fig 55), but Bryant and Colson (1990, 6) date it to 1755, and suggest that it may in fact represent Lord Mansfield's aspirations as much as the progress of the landscaping at that date. No structure is visible in the area of the current site in these small-scale reproductions of the painting. Frustratingly, the area of the site is obscured by the trees on the dam: whilst a darker area in the small reproductions might simply be a tree, it is just possible that it might be a tall structure on the edge of the dam. This should be confirmed by examining either the painting or a large-scale reproduction. What is clear, however, is that there was no substantial structure extending out into the water at that date, such as a boat house or bridge.

Bryant and Colson also note the existence of drawings by Mrs Delany of 1755 and 1757, whose viewpoint differ from Wooton's – although she may not have depicted the ponds, it is possible that these might prove useful for this project.

When Lord Stormont succeeded his uncle in 1793 to become the second Earl of Mansfield, he instigated a major programme of works to the house and surrounding buildings, and landscaping to the north of it, including realigning Hampstead Lane to the

north of its original route. The landscaping, carried out with advice from Humphry Repton, who commissioned three surveys of the estate between 1793 and 1796, may not have significantly affected the area south of the house (Farmer 1984, Fig 28), and was continued under the third Earl from 1796. No structure is shown in the area of the site on Pritchard's plan of 1793 (Bryant and Colson 1990, 11). However, Bryant and Colson note that the eastward extension of Wood Pond, with its wooded island, could have been made by William Eames, noted for such aquatic works. This may have taken place in the 1790s, and is depicted on Loudon's plan of 1838 (Bryant and Colson 1990, 8, 14–15, & 18).

In the 19th century, the Mansfields did not carry out any major works to the estate, instead keeping the surrounding area as park and farmland whilst concentrating on their lands in Scotland. The estate subsequently passed into public ownership in four stages, between 1889 and 1928.

The Ordnance Survey map of 1873 labels a boat house a little to the east of the current site, on the northern bank of the south-eastern extension of Wood Pond, known as the 'Shepherd's Crook'. This is still visible on an estate map of c 1923 (Bryant and Colson 1990, 19 & 25), but confusingly is only marked by what appears to be a small inlet, unlabelled, on the Ordnance Survey map of 1894 (Fig 3). The location corresponds with a 'sluice' labelled on modern Ordnance Survey mapping (Fig 1). This structure is clearly not that on the current site, unless the three different surveys are all incorrect, but it does indicate one possible function for the structure recorded c 25m to the west (see section 3.2).

3 The watching brief

3.1 Methodology

All archaeological excavation and recording during the watching brief was done in accordance with the *Method Statement* (MoLAS, 2006) and the MoLAS Archaeological Site Manual (MoLAS, 1994).

The timbers excavated by the contractors were examined and recorded by the MoLAS worked timber specialist and a senior archaeologist. The initial stages of excavation to reexamine and record the *in situ* timbers carried out under the supervision of MoLAS senior archaeologists, who subsequently conducted the final stages of excavation and cleaning.

The baseline used to locate the *in situ* timbers was surveyed onto the Ordnance Survey national grid by a MoLAS surveying team. The heights of the timbers were recorded relative to Ordnance Datum, via the fixed level of the top of the sheet pile walings: 93.20m OD (height supplied by the contractors, Land and Water).

Twelve timbers were retained for possible display and dendrochronological sampling. Seven more, and an iron fitting, are known to remain *in situ*. It is highly likely that there are others outside the area exposed.

Some 9 dendrochronological samples were taken and analysed by Nottingham Tree-Ring Dating Laboratory, via the English Heritage Scientific Dating Team. Unfortunately, it was not possible to date them. This will be explained in a specialist dendrochronological report (in prep).

The *in situ* timber structure was planned at a scale of 1:20, the individual timbers which had been removed by the contractors were drawn at 1:10. Numbered contexts (timber numbers) were allocated where appropriate.

The site has produced: 1 digital trench location plan; 1 1:20 plan of the *in situ* timber structure (plus 1 isometric sketch drawing), 9 sheets with multiple drawings of the *ex situ* timbers, and 2 sheets of preliminary reconstruction drawings. There are 20 context (timber) record sheets. The film(s) with photographs recording the timbers did not come out, and the timbers are to be re-photographed.

The site records can be found under the site code KHT06 in the MoL archive, the timbers are currently on display or stored by English Heritage at Kenwood House. The dendrochronological samples are currently stored at Nottingham Tree-Ring Dating Laboratory.

3.2 Results of the watching brief

It is not intended to present here a detailed context-level description or drawings of each individual timber, which is considered more appropriate to any future publication. The major groups of timbers will be described and illustrated, along with selected timber drawings.

The poor weather conditions during this work should be noted: for the majority of the time frequent bouts of heavy rain hindered recording, with obvious consequences for water levels within the excavated trench, where there was also a problem with water ingress from the pond.

3.2.1 The in situ timber structure

See Fig 4 to Fig 7

These were located on the western edge of the bank or dam between Wood Pond and Thousand Pound Pond (Fig 1). On excavation of the area from which timbers had originally been recovered, a series of oak timbers and an iron fitting were revealed at a level of c 91.25m OD. The bank in the immediate vicinity lay at c 93.0–93.5m OD, and before the works had sloped down towards the water in an eroded profile.

This group of timbers apparently formed part of the base of the structure from which the *ex situ* timbers had been removed previously (see 3.2.2). This was oriented approximately north-north-east to south-south-west. For convenience, this will be described below as if it were aligned north-south.

The longest visible timber [13] extended out southwards below the waters of Wood Pond, and timbers [14] and [17] continued eastwards within the adjacent bank (apparently running beneath a mature tree).

Beam [13] was more than 1.45m long, and like the majority of the horizontal timbers at this level was c 250mm wide by c 200mm deep. This appears to have been the base or sill beam of a linear component of the structure. To this another timber was joined via a 'seating' depression with large mortise, reinforced with a substantial iron strap or bracket [16], of c 25mm square cross-section. The strap had been slightly bent, probably when the timber which had fitted into it had been removed by the contractors.

Two further beams, [14] and [17], were at the same level as [13], but oriented east-west, and continued eastwards beyond the limits of excavation (into the pond in the case of [17]). The latter abutted timber [13], and is likely to have been joined to it (although without removal and dismantling, this could not be confirmed).

Timber [14] was abutted by sill beam [13], but with a small stake or wedge [21] inserted into one end of the gap between them. The eastern end of timber [14] had a depression, probably to take an upright timber that did not survive *in situ*. As this part of the beam extended beyond the limit of excavation, the character and function of this possible joint could not be determined.

The function of the fourth major timber, [15], remains enigmatic: it was the end of a beam of similar cross-section to the others, but with a large full-width tenon c 150mm long and c 120mm wide. Only c 0.50m was visible, as it lay below the level of the other timbers, and appears to have continued immediately beneath sill beam [13] for an unknown distance. This could be only a short length of a timber which had been cut off (compare with the slightly wider posts with tenons [4] and [7] in section 3.2.2, 1.2–1.3m long), and moved to this position during the initial works by the contractors. If not, this would indicate that part of the structure extended to the west of the other timbers seen in the trench.

The remaining items were seen a metre above than the base-structure described above, up to c 92.25m OD, and may have been machine-damaged remnants of a structure or

structures associated with the superstructure that lay above the base. Alternatively, they might have been remnants of more recent structures, such as revetting of the edge of the pond. They consisted of two small rectangular posts or stakes [18] and [19], c 125 x 75mm in section. The later was associated with a small remnant of planking [20].

3.2.2 The ex situ timbers

See Fig 8 & Fig 10

Eight oak timbers had been recovered following their disturbance during machining works before the watching brief, at the location described in section 3.2.1. On cleaning and recording, it became clear that many of these timbers were in pairs of similar pieces, and that various pieces joined to others. Indeed, the contractors who recovered them had noted that at least two of the timbers had been joined together, but had come apart during their removal.

The two types of structural elements into which the timbers are divided have been designated 'Assemblies' A and B, however, where there are pairs, it is not clear which timbers belonged together. Further analysis of the joints may help to clarify this.

3.2.2.1 'Assembly A'

See Fig 8

This assembly, or rather one of a pair of similar assemblies, had clearly been fixed to sill beam [13] of the timbers seen *in situ* (see 3.2.1). The matching assembly had presumably been attached to a second base that was not seen, but which presumably also remains *in situ*.

The largest components were a near-identical pair of 2.4m-long beams [1] and [8], both 200 x 180mm in cross-section. One of these had been most securely fixed to the sill beam [13] with a series of joints and a metal fitting, indicating that it was expected to take some considerable weight or stress. These were: a chase tenon fixed with two 25mm diameter wooden pegs into sill beam [13], a metal spike or bolt through that joint, and finally each had a groove to take the substantial iron strap or bracket [16] which remains *in situ* (see 3.2.1). The other end had been cut off with an axe in antiquity, through a mortice.

In addition to these joints, both beams had a scutch (sloping depression) to which another timber had been secured by a 40mm diameter wooden peg and two nails. Parts of the pegs remained in both of these beams. The timber which had been attached to [8] at this point was not recovered, except for a small remnant broken off at the joint. It is presumed that the remainder is still *in situ* under the bank or in/beneath the pond.

The peg hole, two nails, and an angled end of a rather less-substantial beam [2] fitted to this joint at an acute angle. The beam measured 1.76m x 170mm x 135mm. The other end had an iron spike or 'tosh nail' driven through it obliquely, and is likely to have connected to a vertical surface of a post or beam. The later would have been approximately 0.3—0.4m north of *in situ* timber [14], just north of stake [18]. Although no substantial timber was seen in the re-excavation of this area, it would probably have been within the bank, just beyond the limit of excavation.

The last members of this assembly are a pair of shorter struts, [3] and [6]. Strut [3] measured 1.32m x 180mm x 170mm, and had a tenon at one end, secured with a 25mm-

diameter oak peg, that probably fitted into the axe-damaged mortice in either beam [1] or [8]. Strut [6] had lost a similar tenon, and thus was slightly shorter. Both had an angled tenon at the second end, with peg holes, which probably fitted into joints in sill beams of [13] beneath the pond. Two 6mm diameter rose-head nails may have fixed some other item to what would be the southern face of strut [6].

3.2.2.2 'Assembly B'

See Fig 10

Again, this group represents a pair of similar elements of the structure, although they cannot immediately be connected to 'Assembly A'.

The major items in the assembly are a pair of similar large-section posts, [4] and [7], each c 1.15m long and 300–340mm square. These had been cut off at one end with an axe in antiquity (as with timbers [1] and [8] in 'Assembly A'), and have a substantial full-width tenon at the other, measuring 100mm x 125mm, with two peg holes, c 25–33mm diameter. Post [7] had been split in two lengthways, along the grain, apparently during machining.

In addition to the tenons, both of these ends also had a wedge-shaped 'lap' cut out of one corner, with nail holes which matched the nails remaining in brace [5].

Brace [5] measures 1.62m x 190mm x 140mm, and again one end was cut off with an axe in antiquity. The other, however, has a lap joint at 40° to its axis, with two chisel-ended 8 x 4mm spikes through it (now bent); this fits the cut-out and nail holes in post [4], and probably also fits [7].

The direction at which [5] would have joined the post was at right angles to that of the tenon. Given that the mortice and tenon joint between [1] and [13] lies along the axis of [13], and that a mortice across a beam would be as wide, if not wider, than the sill beam, it is assumed that the tenon was aligned with the axis of the sill beam ([13] or one hypothesised), and brace [5] at right angles to it.

There are additional nail holes in the lower part of post [4], in the face which lies at right angles to brace [5], on the side from which that brace extends. These form an L-shaped pattern, and may have been for another strut(s) or brace(s), but oriented along the axis of the sill beam.

It is notable that the lap joints on posts [4] and [7] are on the same faces, and not mirror-images. It is thus unclear if they fulfilled the same function on the two different sill beams, or if they both came from different points on the same sill beam.

3.2.2.3 The character and provisional date of the timbers

All of these *ex situ* timbers were oak, and saw marks indicated that they had been pit-sawn. Despite damage to some pieces, generally minor with a few exceptions such as [6] and [7], they were in a 'solid' condition. Many have obvious wood merchants' batch marks cut into one face with a race-knife, and a number have small carpenter's marks, perhaps simple face marks.

The woodworking technology appears to be of 16th to early 19th-century date, most likely late 17th or 18th-century.

3.2.3 The elm water pipe

A smaller number of additional timbers were recovered by the contractors from a second area of the dam between the two ponds: some 30 to 40m north of the *in situ* timbers, approximately opposite the centre of the western end of Thousand Pound Pond. These consist of a water pipe [11], and two softwood stakes, [9] and [10].

The bored Elm water pipe [11] had been roughly axe-hewn to an approximately circular, facetted, profile. One end was cut 'square' across, and had an iron reinforcing band set in the end, on edge, between the bore and the outer face. The other end was tapered to fit the 'square' end of the next section of pipe. It measured 3.08m x 400mm diameter, the internal bore being 125mm. This is of a type relatively common on sites in central London, and might date from possibly the 16th to the 19th century.

The two softwood stakes, measuring 1.25m x 125mm x 110mm, may have been associated with the pipe. Both bore marks of an axe with the same nick in the blade, and [9] and [10].

3.2.4 Dendrochronology

It was not possible to date the dendrochronological samples (see 3.1).

3.2.5 Interpretation

3.2.5.1 'Assemblies A and B'

It appears that both the *in situ* and *ex situ* timbers recovered from the same location belong to the same structure. This structure appears to start within the bank or dam between the ponds, and extend westwards out into Wood Pond.

It is likely that the timbers formed two diagonally-braced trusses set on horizontal sill beams, however, it is unclear if there are further timbers below the level of sill beam [13] (base at c 91.05m OD).

Again, it is unclear if the bracing (eg [5]) from posts [4] and [7] ran between the two trusses or along the line of one of them, as indeed is the distance between the two.

The function of this structure is currently unknown, but the substantial nature of some elements suggests that it was intended to carry either considerable weights or stresses. For example: posts [4] and [7], sill beam [13], and the multiple-method of securing diagonal brace [2] to the sill beam (with oak peg, iron strap, and spike or bolt).

This would in turn suggest that this is likely to have had a fairly massive superstructure above ground and water level. Interpretation is currently hindered by the uncertainty over its date, and it is uncertain if it belongs to the periods before, during, or after, the initial landscaping and construction of Wood Pond in the mid-late 1750s.

The location of this structure may give some clue as to the reason either for its dismantling to the waterline, or conversely for its construction. This point on the dam and ponds lies directly in front of the main, central, doors in the southern face of Kenwood House. It appears highly likely that this was intended as a focal point in a carefully constructed landscape view, where the curving extension of this corner of the pond, known as the 'Shepherd's Crook' leads off Wood Pond (Fig 1), producing an illusion that

the pond is part of a more extensive waterway. This appears to be a device intended to increase the visual impact of the carefully manufactured 'naturalistic' landscape

If the structure pre-dates the landscaping of this area, then it is likely that the axe-cut ends of various timbers record it being cut down to the water-line during the works in the 1750s, in order to remove it from views of the carefully-crafted landscape.

Alternatively, it may have been a structure constructed as part of the landscaping of the 1750s, or at a later date, and subsequently removed.

Tentative suggestions in the current absence of dating or archival evidence are that it might be:

• a sluice or similar water-management structure associated with the ponds pre-1754, either those seen on Rocque's map of 1746 (Fig 2), or earlier ponds in this location. If so, it is likely that it was subsequently razed to the waterline to remove it from the area during the landscaping of the 1750s.

Although no connecting watercourses are shown by Rocque, they must have been present, if the ponds were fed by the small sources of the eastern arm of the Fleet, and subsequently flowed south-east into the Hampstead Ponds and then to the Fleet. This depends on this location actually having been in one of the small ponds at the time. It is, however, possible that this structure was on dry land.

• A 'folly' or other structure in the parkland, dating from either the 1750s or later phases of landscaping.

Although Wooton's painting of 1760 or 1755 (see 2.4) has yet to be examined in detail, it appears less likely that this structure dates from the 1750s, as it is not readily visible in small-scale reproductions of the picture. The robust nature of the structure suggests something on the scale of a substantial bridge, boat house, lakeside pavilion, or tower. It is possible that the timbers were 'over-engineered' to produce a particular visual effect, however, timbers for the 18th-century 'Five Arched Bridge' at Painshill Park in Surrey were of rather smaller dimensions (R. Stephenson, pers comm; Howes 1991, Fig 7.5).

A preliminary search of documentary sources by Jeremy Ashbee of English Heritage has not produced an obvious candidate for the structure, but it is hoped that a further research may prove more productive. It is, however, possible that this was a relatively short-lived construction, and thus has not been recorded in historical documents or artwork.

3.2.5.2 Elm pipe

The elm water pipe, and the stakes which may be associated with it, are clearly part of a connection between the two ponds, and therefore either date from the construction of the ponds in the 1750s, or later works to them. The pipe may be the same as that seen during the 1993 works and noted in the Ham and High, Jan 22 1993 edition (pers comm. Drew Bennellick).

4 Potential of archaeology

4.1 Original research aims

• What was the level of natural topography?

'Natural' geology and topography were not apparent; the *in situ* timbers appear to have been founded within the relatively homogenous man-made clay bank or dam between the two ponds. However, given the wet conditions under which the fieldwork was conducted, it is possible that the difference between the clay bank and 'natural' Claygate Beds might not have been visible, although this seems less likely.

What are the earliest deposits identified?

This remains uncertain: all of the deposits observed were either associated with the timbers, or dated to the construction of the dam between the ponds in the 1750s.

• What are the latest deposits identified?

The elm water pipe either dates from the construction of the ponds in the 1750s, or later 18th-century works to them.

The date of the main timber structure has not yet been determined, although the woodworking technology appears to be of 16th to early 19th-century date, most likely late 17th or 18th-century.

As the material above the timbers had been disturbed before it was re-excavated and examined archaeologically, it was not possible to ascertain a stratigraphic relationship between the bank and the timbers.

• Do any timber structures associated with the ponds survive? If so, can their function be ascertained?

The elm water pipe clearly formed part of a drainage system from Wood Pond into Thousand Pound Pond.

The remaining timbers formed a substantial, robust, structure, whose function is currently unknown.

4.2 New research aims

- RA1: What is the date of the timber structure? In particular, does it pre-date or post-date the landscaping of the 1750s?
- RA2: What is the function of the timber structure? In particular, if post-1754, how did it fit into the landscaping and constructed views in the park?
- RA3: What can the timbers of both the structure and the water pipe tell us about woodworking technology and timber production?

4.2.1 Desk-based and archival work

Detailed analysis of the timbers and their woodworking technology, mainly from the watching brief records, should form the basis for any future publication. In addition, the date and function of the timber structure should be determined as far as possible.

An in-depth search of archival records, plans, and artistic representations may well help to determine both the function and date of the structure. At the least it is likely to reduce the number of options by eliminating some of the periods at which it may have been in use. However, if it were a short-lived feature, it is possible that it might have been constructed and dismantled in the interval between two plans or representations.

In particular, the suggestion that the structure is not visible in Wooton's painting of 1760 or 1755 (see 2.4) should be confirmed, as this makes it unlikely that it was erected as part of the initial 1750s landscaping for the first Lord Mansfield.

It may also be profitable to search for parallels from similar sites.

4.2.2 Possible future fieldwork

The full extent of the timbers which remain *in situ* is unknown. It would be most useful in determining the function of this enigmatic structure if it was possible to determine their extent, and preferably plan and levels beneath Wood Pond. This would, however, require either an underwater archaeology project (cf a more extensive programme of underwater survey conducted by the Nautical Archaeology Society and other organisations at Stourhead, Wilts.), or possibly a more conventional one if the ponds should ever be drained again as they were in 1993.

The use of remote sensing equipment might be able to provide an inexpensive alternative, or an preliminary survey, might also be explored.

Further excavations on the land side are likely to be severely hindered, if not prevented, by the presence of a tree on the edge of the bank at the likely location of the eastern side of the structure. In addition, the tie-backs that were installed to allow the sheet piles to rest at the level of the timbers, instead of requiring their removal, might also affect any future fieldwork in that location.

Such fieldwork, whether in water or on land, would form a separate project to the publication of the results of the watching brief.

4.3 Significance of the data

The remains of the timber structure, both ex situ and in situ are of some local significance, not least for informing and educating visitors to Kenwood. However, if their date and function can be determined, they might also make a limited contribution to studies of landscaped parks and gardens at a regional, or possibly national, level.

5 Publication and archiving

Information on the results of the excavation will be made publicly available by means of a database in digital form, to permit inclusion of the site data in any future academic researches into the development of London.

The site archive containing original records and finds will be stored in accordance with the terms of the *Method Statement* (MoLAS, 2006) with the Museum of London within 12 months of completing the report

In view of the relatively limited potential and significance of these data (Section 4), it is suggested that a short article on the results of the watching brief should appear in a suitable publication, either locally, such as the London Archaeologist and/or the Transactions of the London & Middlesex Archaeological Society, or nationally, such as Post-Medieval Archaeology, or possibly Studies in the History of Gardens and Designed Landscapes.

6 Conclusions

The watching brief recorded some seven timbers and an iron fitting which remain *in situ*, a further 12 timbers which had been removed by contractors from the same structure, plus three from an elm water pipe at a second location. What appear to be sill beams extend out into the pond for an unknown distance, where further timbers may well survive.

Apart from the elm pipe connecting the two ponds, the precise date and function of the timbers remains to be determined. The main group of *in situ* and *ex situ* timbers are likely to be of 17th or 18th-century date, and to have formed part of a substantial structure, formed of two trusses extending out from the bank into what is now Wood Pond.

Only tentative interpretations may be made at this stage. The structure may have been associated with fish ponds, and perhaps removed during the 1750s landscaping for the first Lord Mansfield. Alternatively, they may have been part of a substantial folly or other structure in the parkland which post-dated that phase.

The remains of the timber structure, parts of which remain *in situ* beneath both the bank and Wood Pond are of local significance. However, if their date and function can be determined, they might also make a contribution to studies of landscaped parks and gardens at a regional, or possibly national, level.

It is, therefore, suggested that these results are published as an article in a suitable journal. This would require detailed analysis of the timbers and their woodworking technology, and an in-depth archive search to assist in determining the function, date, and associations of the structure.

A programme of underwater archaeological work to supplement the current findings could also be considered as a separate project.

7 Acknowledgements

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NMR OASIS archaeological report form.

OASIS ID: molas1-16422

Project details

Project name Wood Pond, Kenwood House, Hampstead Lane NW3

the project

Short description of Watching brief commissioned by English Heritage following the discovery of timbers by contractors working to strengthen the ponds. The post-medieval timbers comprise elements of a substantial double-truss structure, precise date and function currently uncertain, and an elm water pipe connecting two ponds constructed in the

1750s.

Start: 06-03-2006 End: 14-03-2006 Project dates

Previous/future work No / No

associated KHT06 - Sitecode

project reference

codes

Type of project Recording project

English Heritage List of Parks and Gardens of Special Historic Site status:

Interest

Current Land use Woodland 6 - Parkland

Open Fresh Water 2 - Standing water Current Land use

STRUCTURE Post Medieval Monument type

Investigation type 'Watching Brief'

EH commission following accidental discovery Prompt 1

Project location

Country

England .

Site location

GREATER LONDON CAMDEN HAMPSTEAD Wood Pond, Kenwood

House, Hampstead Lane, NW3

Postcode

NW3 7JR

Study area

900.00 Square metres

National reference grid TQ 27190 87175 Point

Project creators

Name

of MoLAS

Organisation

Project

brief English Heritage/Department of Environment

originator.

Project

design MoLAS

originator

Project director/manager Ros Aitken

Project supervisor

Nicholas Elsden

Mark Ingram

Sponsor or funding English Heritage

body

Project archives

Physical

Archive unsure

recipient

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Digital

Archive LAARC

recipient

Digital Archive ID

KHT06

Paper recipient

Archive LAARC

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KHT06

Project bibliography 1

Grey literature (unpublished document/manuscript)

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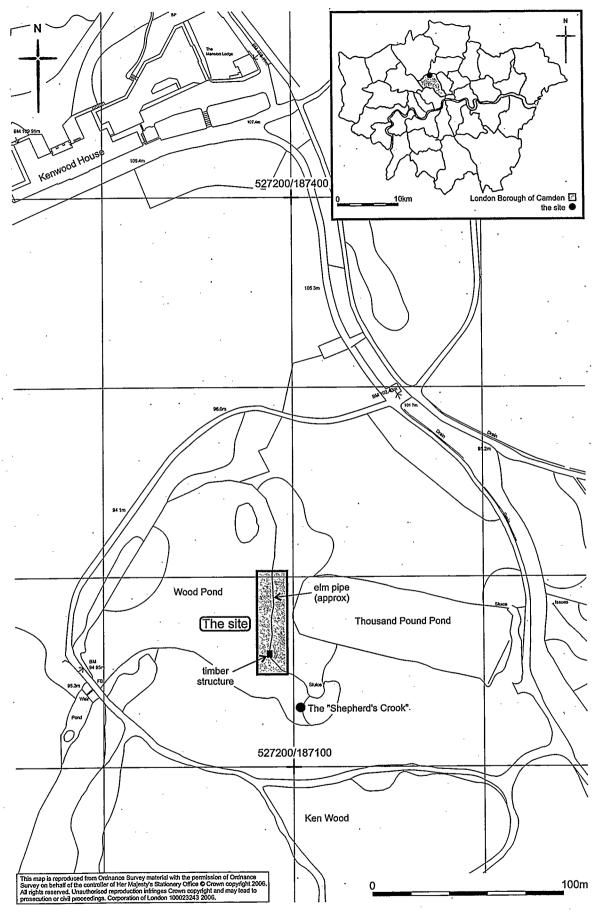


Fig 1 Site location



Fig 2 Rocque's map of 1746 Note the small fishponds at the southern end of the gardens

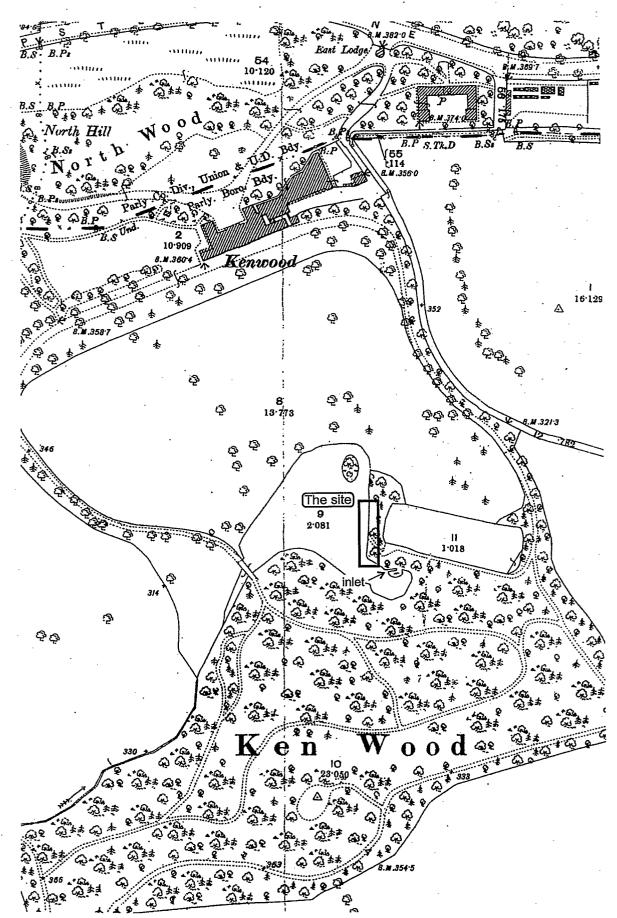


Fig 3 Ordnance Survey map of 1894, showing an inlet at the site of the boat house on the "Shepherd's Crook"

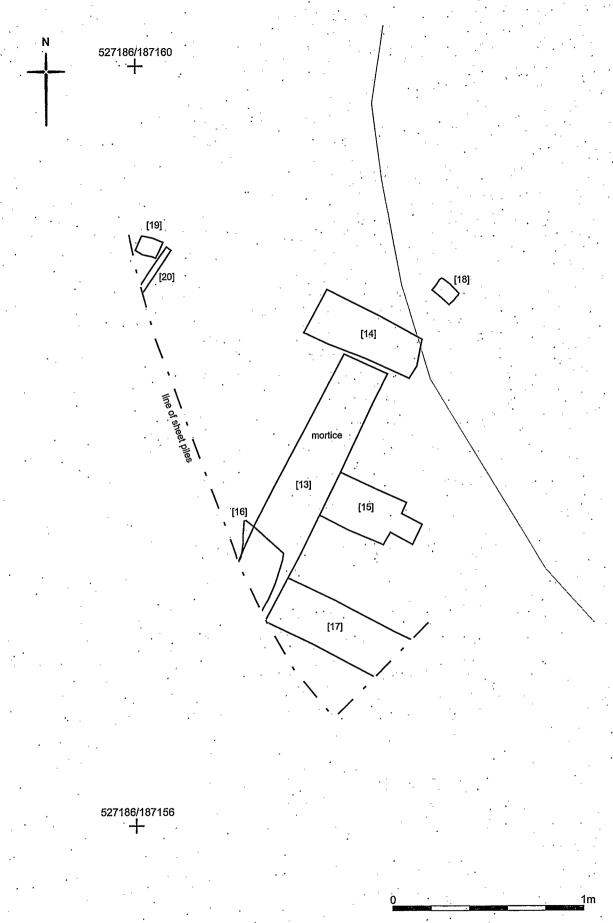


Fig 4 Plan of timbers [13] to [20], partially revealed in situ



Fig 5 The in situ timbers from the bank, looking west



Fig 6 The in situ timbers from the east (0.5m scale)

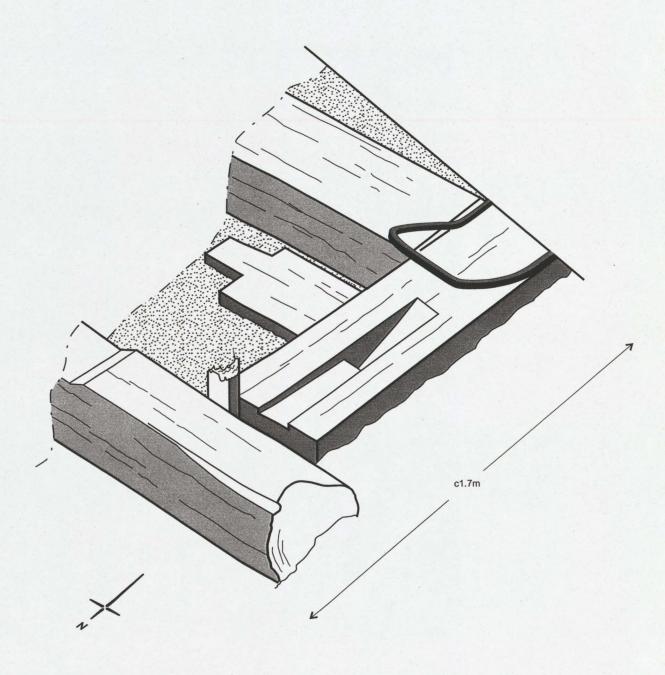


Fig 7 Isometric drawing of the timbers in situ, looking south-west (not to scale)

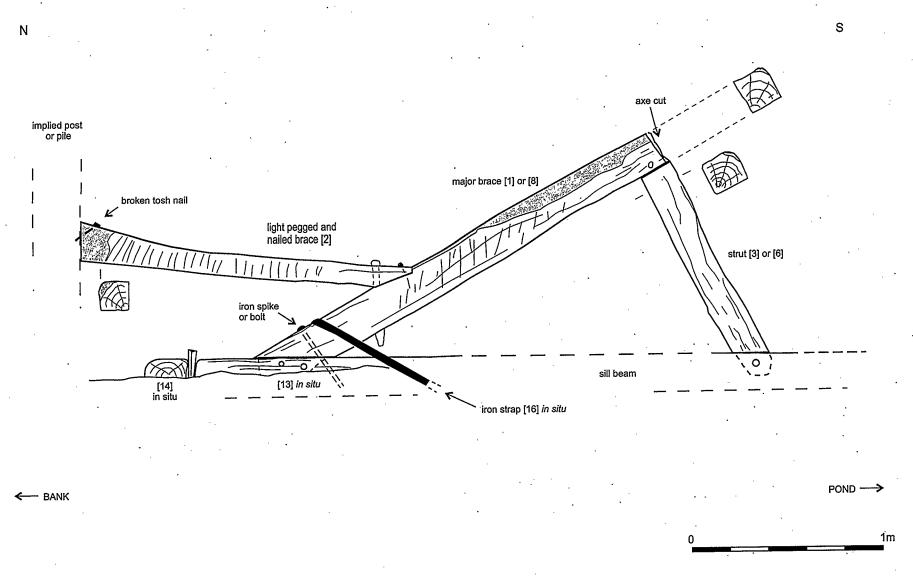


Fig 8 Reconstructed elevation of refitting timbers, forming 'Assembly A': part of a truss-like structure

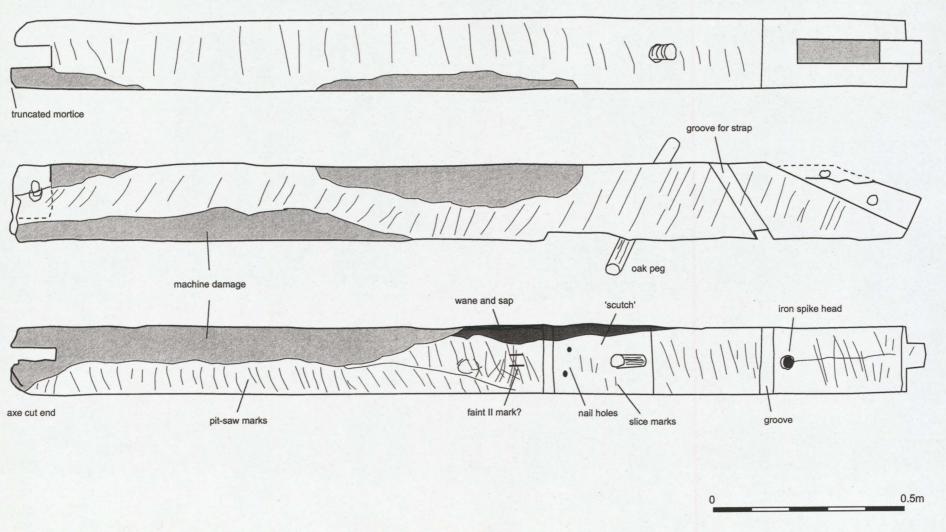


Fig 9 Sample timber drawing: timber [1] from 'Assembly A'

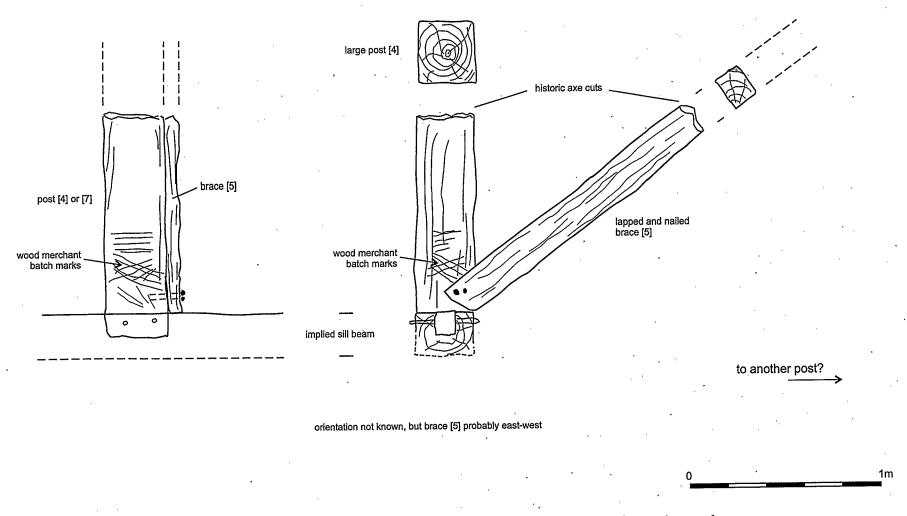


Fig 10 Reconstructed elevation of refitting timbers, forming 'Assembly B': a substantial post and diagonal cross-brace (probably oriented at right angles to Fig 8)