



# HERITAGE NETWORK



## **HEADSTONE MANOR Pinner View, LB Harrow**

HN572 / HN774

*Archaeological Report*





HEADSTONE MANOR  
Pinner View, London Borough of Harrow

HN572  
HN774

*Archaeological Report*

*Prepared on behalf of London Borough of Harrow*

by

Helen Ashworth BA AIFA

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*The cover photograph shows the bridge after restoration, looking south-west*

## Acknowledgements

The fieldwork for this project was carried out by David Kaye (Phase 1) and Geoff Saunders (Phase 2), with Giles Sholl (Photography) and Tom Doig (Ceramic Buildings Specialist), under the supervision of David Hillelson. The report text and illustrations were prepared by Helen Ashworth, and edited by David Hillelson.

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## Summary

<b>Site name and address:</b>	Headstone Manor, Pinner View, Harrow, HA2 6PX		
<b>County:</b>	Greater London	<b>District:</b>	LB Harrow
<b>Village/town:</b>	Headstone	<b>Parish:</b>	n/a
<b>Planning reference:</b>	n/a	<b>NGR:</b>	TQ 14079 89688
<b>Client name and address:</b>	London Borough of Harrow, Civic Centre, Station Rd, Harrow, HA1 2XY		
<b>Nature of work:</b>	Restoration	<b>Current land use:</b>	Bridge
<b>Site Status:</b>	Scheduled Monument	<b>Reason for investigation:</b>	Condition of SMC
<b>Position in planning process:</b>	After Scheduled Monument Consent	<b>Project brief originator:</b>	English Heritage
<b>Size of affected area:</b>	c.865m <sup>2</sup>	<b>Size of area investigated:</b>	c.865m <sup>2</sup>
<b>Site Code:</b>	HN572 / HN774	<b>Other reference:</b>	n/a
<b>Organisation:</b>	Heritage Network	<b>Site Director:</b>	David Hillelson
<b>Project type, methods etc...</b>	Monitoring	<b>Archive Recipient:</b>	Harrow Museum and Heritage Centre
<b>Start of work</b>	24/01/2006	<b>Finish of work</b>	11/05/2009
<b>Related SMR Nos:</b>	n/a	<b>Periods represented:</b>	Post-medieval; modern
<b>Oasis UID:</b>	heritage1-12960 (Ph.1) heritage1-71381 (Ph.2)	<b>Significant finds:</b>	None
<b>Monument types:</b>	Bridge; Moat		
<b>Physical archive:</b>	None		
<b>Previous summaries/reports:</b>	n/a		

**Synopsis:**

In order to meet the requirements of the Scheduled Monument Consent for the de-silting of the moat and restoration of the moat bridge at Headstone Manor, Harrow, and to meet the requirements of planning consent for the creation of a temporary storage lagoon in the Headstone Manor Recreation Ground, the Heritage Network was commissioned by the London Borough of Harrow to undertake a programme of archaeological investigation and recording.

The project was undertaken in two phases. The first covered the sampling of the silt build-up in the moat prior to the clearance of these deposits, and the monitoring of groundworks for the creation of a bunded lagoon for the temporary storage of the removed deposits. The second covered the recording of the moat bridge and revetment walls in advance of and during the restoration works, and the investigation of the moat bed in the south-west arm.

The sampling of the silts was intended to investigate the survival of deposits predating the last clearance of the moat in 1973, which was undertaken using a drag line. Five core samples were removed but the potential for these to produce useful data was reconsidered as the clearance progressed and no processing of the samples has been carried out.

The monitoring of the groundworks for the storage lagoon demonstrated that all disturbance took place within the depth of the made ground in this area and no archaeological features or deposits were affected.

The investigation of the moat bridge established that the present structure is mid-17th century in origin, with significant remodelling taking place in the mid-19<sup>th</sup> century. It is possible that the bridge was originally wider by one arch on the landward side. The earliest observed phase of the revetment walls dates to the early 19<sup>th</sup> century, with several phases of subsequent rebuilding or refacing.

No significant artefacts were revealed in the bed of the moat following clearance of the silts in the south-west arm, and structural evidence was limited to a number of driven stakes to the north of the bridge on the landward side, which seem to be associated with the latest phase of the revetment walls in this area.

# 1. Introduction

## Introduction

**1.1** This report has been prepared on behalf of the *London Borough of Harrow*, as part of a programme of archaeological monitoring and recording associated with a restoration scheme which includes the de-silting of the moat and the restoration of the bridge which gives access to the island at Headstone Manor, Pinner View, Harrow, Middlesex. The site is part of a *Scheduled Ancient Monument* (County Monument no. 161) and the work has been the subject of an application for Scheduled Monument Consent (SMC). This has been granted by the *Department of Culture, Media and Sport* (DCMS) (ref.HSD9/2/7710).

**1.2** The Headstone Manor complex, which includes the Grade I listed 14th century moated manor house, and a Grade II\* listed 16th century timber framed Tithe Barn, is scheduled under the Ancient Monuments and Archaeological Areas Act 1979. The moat, which separates the manor house from its farm buildings, is believed to be contemporary with the manor house, and is crossed by a brick bridge, which had previously been recorded as being 18th century in date.

**1.3** The project has been undertaken in two phases. Phase 1 involved the de-silting of the north-west, north-east and south-east arms of the moat; Phase 2 involved the de-silting of the south-west arm of the moat, and the repair and refurbishment of the bridge and its associated revetment walls.

## Phase 1

**1.4** As part of the de-silting works, a temporary storage lagoon was constructed between the north-east arm of the moat and the north-east boundary of the *Headstone Manor Recreation Ground*. This was intended to allow the silts to dry out for subsequent re-use or disposal. The lagoon, which lies outside the area of the scheduled monument, was the subject of a separate planning application, which was granted subject to an archaeological condition issued in accordance with the provisions set out in *Planning Policy Guidance Note No.16* (PPG16) on Archaeology and Planning. The scope of the works carried out under this condition was agreed in correspondence with the *Greater London Archaeology Advisory Service* (GLAAS) of English Heritage.

**1.5** The aims of this stage of the project were to monitor groundworks undertaken to create the storage lagoon and to undertake a programme of environmental sampling of the sediments in each of the four arms of the moat, prior to the start of the de-silting operation.

## Phase 2

**1.6** The second stage of the project proposed:

- the de-watering of the southwest arm of the moat and the de-silting of exposed surfaces;
- the removal and retention of the identified rubble for possible reuse;
- further investigation of the bridge foundations;
- further investigation of the general structure of the bridge;
- further investigation of the structure of the revetments;
- dismantling and restoration of the bridge fabric as appropriate;
- dismantling and restoration of the revetment fabric as appropriate;
- smoothing of the base of the moat to improve water flow.

**1.7** The aims of this stage of the project were to make a record of the structure of the bridge and moat revetments and to record features in the moat bed in the vicinity of the bridge.

***Report***

**1.8** The present report describes the findings of the two phases of work, and places the site, and the bridge in particular, in its historical context. The completion of the report and the deposition of the project archive with the *Harrow Museum and Heritage Centre*, is intended to complete the requirements of the planning condition and of the Scheduled Monument Consent.



## 2. Phase 1 Works

### *LAGOON CONSTRUCTION*

#### *Topography and Geology*

**2.1** The site of the storage lagoon lies in a landscaped recreation ground, on gently sloping ground at approximately 55mAOD between the River Pinn to the north and Yeading Brook to the south (Figure 2). The recreation ground is surrounded by post-war housing development.

**2.2** The stratigraphy consists of 0.2m of very dark grey silty clay (10YR 3/1) overlying 0.3m of made ground. The natural geology was dark brown clay with frequent flints (10YR 3/3), defined as being part of the Lambeth Group of clay, silt and sand (BGS).

#### *Methodology*

**2.3** The rectangular lagoon, measuring 90 x 50m, is located along the north-east boundary of the Headstone Manor Recreation Ground, at approximately 10m separation from the eastern corner of the Headstone Manor moat. It was constructed by creating a rectangular bund, using the material stripped from within its boundaries, which was then lined with polythene.

**2.4** The machining was undertaken using a tracked 360° excavator fitted with a 2m toothless bucket. A one bucket wide test strip was machined to the impact level on three sides of the lagoon. To compensate for the slight slope in the ground, 0.45m of material was removed from the north-west end of the site, reducing to 0.3m from the south-east end.

**2.5** The machining was undertaken under the direct supervision of an archaeologist from the Heritage Network, and spoil from the groundworks was inspected for archaeological artefacts.

**2.6** The only place that the made ground was breached was a 3m length in the north-east corner at the start of the work. This area was slightly over-excavated so as to provide an indication of the true depth of the overburden.

#### *Results*

**2.7** The excavation was undertaken entirely within made ground (Plates 1 & 2). No archaeological cut features were observed and no artefacts recovered within the test strip. On this basis, it was considered unnecessary to continue the monitoring of the stripping operation.

### *CORE SAMPLING*

#### *Methodology*

**2.8** A total of five core samples were taken from the sedimentary silt deposits within the moat in advance of and during the de-silting operation (Figure 3). One was taken from each of the south-east, north-east and north-west arms, which were cleared in 1973 using a steam traction-engine and dredging lines, with the aim of recovering deposits that may predate the clearance. Two further samples were taken from the south-west arm, which was thought likely to preserve an older sequence of deposits.

**2.9** The samples were extracted on 23 February and 7 August 2006 by specialist geotechnical contractors, Geodrive Ltd, using the dredging contractor's pontoon to provide a stable platform in

the middle of the moat (Plates 3 & 4). The sampling was carried out in two stages: the first, before the start of the dredging operation, proceeding from the south-east side of the bridge as far as an existing blockage on the north-east arm; the second, following the clearance of the blockage, completing the circuit.

**2.10** The samples were extracted using a standard window corer, c.50mm diameter, in conjunction with 1m long plastic liners.

### ***Results***

**2.11** On the basis that the archaeological value of the samples is questionable, and on the instructions of the clients, the samples have been retained but no assessment or analysis has taken place.

## ***DE-SILTING OF SOUTH-WEST ARM***

### ***Methodology***

**2.12** A programme of site visits was undertaken to supervise the de-silting operations on the south-west arm of the moat, to ensure that all archaeological features and deposits encountered were recorded, and, wherever possible, protected and preserved in situ.

**2.13** The operation involved the creation of a temporary barrage at either end of the south-west arm using a system of water-filled tubes (Plate 5), and the use of a high pressure water jet to break down the accumulated silts, which were subsequently pumped to the storage lagoon (Plate 6). The technique was intended to allow visual inspection as the work progressed, and the retrieval of larger artefacts. The retrieval of small artefacts which were pumped into the lagoon as part of the suspension was not considered to be practical.

### ***Results***

**2.14** Because the barrages were not adequately water-tight, this stage of work was abandoned before the moat lining was exposed and the silts entirely cleared. Of the artefacts retrieved, all were of modern origins.

## 3. Phase 2 Works

**3.1** Phase 2 of the project ran from November 2008 to May 2009. The programme of works fell broadly into three stages:

- recording of the bridge fabric;
- investigation of the drained moat bed beyond the immediate limits of the bridge works;
- monitoring of repair works and associated groundworks.

### Methodology

**3.2** Before the bridge fabric or moat bed could be examined and recorded, the water was removed from the south-western arm of the moat and the silts cleared from the area of the bridge. This work was done carefully as, despite the comprehensive dredging of the moat in 1973, and the subsequent partial de-silting as part of the Phase 1 works, there was still considered to be a reasonable potential for the identification of archaeological features in the base of the moat, close to the existing bridge.

**3.3** The de-silting operation involved the creation of a temporary dam at either end of the south-western arm, using 1 tonne bags of sand, laid in a reducing stack and backed by polythene sheeting, which allowed the water to be removed from this arm only. The de-silting was carried out by diluting the accumulated silts and pumping them into the storage lagoon. As the silts were unexpectedly deep only the central arch was cleared for the purposes of the present project. At least 0.10m of silt was left at the base of the moat after the completion of the de-silting works.

**3.4** The recording of the bridge fabric was undertaken photographically on black & white film using medium format camera equipment, backed-up with colour photographs taken using a digital SLR camera. Subsequent works were recorded on 35mm black & white film and a digital SLR camera. A complete register of all photographs is included in the archive. Plans and sections were drawn of the fabric and features identified during the project, in relation to the structural engineer's drawings. A specialist in ceramic building materials also attended the site to examine the bricks used in the construction of the bridge and retaining walls *in situ*.

### Bridge Fabric

**3.5** The bridge, which is approximately 10.70m long and 3.20m wide, consists of two brick piers, of uneven length, supporting three arches and the bridge deck (Figure 4; Plates 7-9). The arch close to the island has been blocked to just below the modern waterline, but the presence of a cut-water on the adjacent pier indicates that water once flowed beneath it for the full width of the moat. A timber balustrade ran either side of the deck.

**3.6** Recording of the bridge revealed a number of differences in the construction of the piers and the arches. Each pier was constructed as a series of steps, rising from a rectangular base supported by a brick rubble foundation (Plates 10 & 11). That on the island (north-eastern) side is the larger, measuring 5.28m in length and 0.80m in width at the base (Figure 4). The pier on the land (south-western) side is smaller, measuring 3.97m in length and 0.80m in width at the base. A difference in the height of the brickwork supporting the central arch was also recorded. On the land side the height from base to string course is 0.56m, while on the island side it is 0.37m. The height from the string course to the arch measures 1.15m on the land side and 1.29m on the island side.

**3.7** The bricks which form the piers measure  $8\frac{3}{4}'' \times 4'' \times 2\frac{1}{2}''$  (22cms x 10cms x 6cms) (Plates 10 & 11). They are hand-made and bonded with a mortar formed of lime and sand, and have been dated to the mid-17<sup>th</sup> century. The cut-waters on either end of the pier on the island side have shorter and blunter points measuring 0.28m long. The cut-waters on the land side pier are longer and sharper, measuring 0.39m long. The bricks at the corners of the cut-waters, which were hand thrown into a mould, appear to have been made especially for these structures. Each brick has an angle of 135° and measures 7'' (17cms) above the angle and 2'' (5cms) below. The original mortar has survived well, particularly below the waterline. Above this is a band where the mortar has been exposed and subject to some frost damage (Plates 10 & 11). The bricks in the applied buttresses above the piers date to the 1950s or 1960s and are bonded with a cement based mortar. Poor modern re-pointing, probably contemporary with these buttresses, is visible at the top of the piers.

**3.8** The bricks which form the two landward arches measure  $8\frac{1}{2}'' \times 4\frac{1}{4}'' \times 2\frac{1}{2}''$  (21.5 x 10.5 x 6cms) (Plates 10 & 11). They have been dated to the mid-19<sup>th</sup> century.

**3.9** Two trial holes were opened in the deck above both the end arches (Figure 5). That on the landward side measured 1.40m in length, 0.40m in width and 0.42m in depth; that on the island side measured 0.60m in length, 0.40m in width and 0.37m in depth. Their stratigraphy was very similar, consisting of a layer of tarmac 0.07m deep bedded on a skim of loose soil, 0.01m deep. Below this was an earlier tarmac layer, 0.03m deep above made ground, 0.25m deep, formed of olive brown granular material. Occasional fragments of tile, brick and concrete were noted in this layer. A thin layer of light olive brown clay, 0.04m deep, was encountered between the granular material and the surface of the brick arches. No evidence for an earlier deck was observed.

**3.10** The subsequent removal of the entire existing bridge deck allowed a clear view of the upper surfaces of the arches (Figure 5). It showed that the western and central arches were of solid spandrel construction with the deck carried on the resulting flat top, while the eastern arch was of filled spandrel construction relying on fill material above the extrados to support the deck (Plate 12). A distinct joint was observed in the brickwork between the central arch and the eastern arch. Evidence for modern work was also revealed, including concrete footings for the balustrades on either side of the bridge and a modern drainage channel, which had been cut through the brickwork along the full length of the bridge.

**3.11** On the basis of these observations it appears likely that the eastern arch is of an earlier phase than the other two arches, possibly contemporary with the piers, although insufficient evidence was observed to confirm this. The length of the eastern pier would also suggest that the eastern arch was originally wider, and subsequently truncated at either end and refaced. In the mid-19<sup>th</sup> century, the western two arches were built, possibly replacing a wooden bridge supported on the brick piers. Modern repair works include the addition of buttresses to the tops of piers and the re-surfacing of the bridge deck.

### **Moat Bed**

**3.12** The south-western arm of the moat had retaining walls on either bank. To the south of the bridge, on the island side, the wall was constructed of bricks dating to the 1880s-1890s, built on top of an earlier wall, revealed after the draining of the moat (Plate 13). This rests on the clay bed of the moat and is in poor condition. It comprises a row of side-laid headers below three courses laid in English bond (0.35m in height); above a 0.21m wide offset are nine further courses, also laid in English bond. The lower wall is constructed using un-frogged red bricks, which date to the 1820s-1830s, measuring  $8\frac{1}{2}'' \times 4'' \times 2\frac{1}{4}''$  (21cms x 10cms x 6cms).

**3.13** To the north of the bridge, on the island side, the retaining wall also appears to have undergone a series of repairs and rebuilds. The wall immediately adjacent to the bridge dates to the 1930s-1940s. This was built in front of a wall dating to the 1880s-1890s, which was also built on top of an earlier wall, dating to the 1820s-1830s (Plate 14).

**3.14** The wall on the landward side is also modern, dating to the 1930s-1940s. To the north of the bridge, breaks in the facing bricks suggest that they stand in front of an earlier wall in poor condition.

**3.15** Although the moat appears to have been cut into the local clay, providing a natural lining to the structure, it appears that the clay was worked to provide protection to the bridge piers and to the footings of the retaining walls. This was observed during the recording of the bridge, forming a U-shaped profile against the piers and across the base of the moat below the arch (see Plates 10 & 11).

**3.16** A close examination of the bed of the moat was made in order to identify the presence of timber piles or footings of brick or stone, indicating the earlier existence of another bridge across the moat. A series of ten wooden posts, driven into the clay lining of the moat, was recorded to the north of the bridge on the landward side (Figure 5; Plates 15 & 16). Investigation of the area revealed that those nearest the bank (Posts 2, 4, 5, 7, 8 and 10) were holding wooden planks pressed up against the base of the brick retaining wall, possibly intended to support the base of the wall during construction. The outer posts (Posts 1, 3, 6 and 9) may have supported scaffolding or other buttressing.

**3.17** These posts are unlikely to form part of an earlier bridge, but instead appear to form part of the construction for the brick retaining walls which support the landward bank of the moat. It seems likely that any earlier bridge on the site actually followed the same alignment as the existing structure, with its remains either concealed by the clay lining to the moat, or destroyed by the later brick piers.

### *Associated groundworks*

**3.18** Two small curving service trenches were excavated through the tarmac path on either side of the bridge (Figure 5; Plate 17). Both were 0.41m in width and were dug to a maximum depth of 0.46m. The stratigraphy revealed in their sections was uniform, consisting of a layer of tarmac, 0.06m deep, above a bedding layer of yellowish brown aggregate, 0.09m deep. Below this was a layer of dark brown (10YR 3/3) sandy clay made ground which overlay the natural yellowish brown (10YR 5/8) slightly sandy clay. No archaeological features, deposits or finds were encountered during these works.

**3.19** The grading of the bank above the new retaining wall to the south of the bridge on the island side was monitored. The bank was removed to a depth of 0.75m and a distance of 2.20m from the wall face (Figure 5; Plate 18). All the excavation was through topsoil, consisting of dark greyish brown friable clayey sandy silt containing frequent roots, moderate amounts of sub-rounded pebbles and occasional small brick or tile fragments of post-medieval date. The unusual depth of the topsoil suggests that the bank may have been built up, though no dating evidence was retrieved to indicate when this may have occurred. No archaeological features, deposits or finds were encountered.

## 4. Discussion & Conclusions

### *Historical Background*

**4.1** Headstone manor appears to have been created from the larger manor at Harrow. It was owned by Earl Leofwine, brother of King Harold, in 1066, but then formed part of the holdings of the Archbishop of Canterbury (Williams & Martin 2003). During the 13<sup>th</sup> century Headstone was occupied by the de la Hegg (or de la Hays) family and in the 1330s it passed to Robert Wodehouse, Treasurer of the Exchequer and Archdeacon of Richmond (Baker et al 1970). At that period the manor of Headstone comprised a messuage, three carucates of land, 20 acres of meadow and 5 acres of wood and was worth 24s in rent. In 1348 it consisted of the manor house, a grange and 235 acres (ibid).

**4.2** Headstone manor remained as part of the property of the Archbishop of Canterbury until 1545, when Archbishop Cranmer was forced to exchange it with Henry VIII, who promptly sold Harrow and Headstone manors to Sir Edward North, Chancellor of the Court of Augmentations (Baker et al 1970). Headstone manor descended through a number of private owners until 1925, when the manor house and 63 acres were sold to Hendon Rural District Council for recreational uses, by Edward York, last lord of the manor.

**4.3** The house, which was described as a ‘well-built site’ in 1397, became the archbishop’s main residence in Middlesex. A chapel had been erected by 1367, which was removed during rebuilding in 1488-9. It is a Grade I listed building (LBS 202151) described as:

*Remnants of earlier C15, but mostly C16 with C17 wing. Brick facing, partly C18 (on south-west front). Interior has much later C16 and C17 timber. At east end is remaining bay of original aisled hall with contemporary cross wing. Small 2-light window to west with horned, leaded panes. Surrounded by moat and situated in the park.*

**4.4** The manorial complex also includes a Grade II\* listed 16th century timber framed Tithe Barn (LBS 202152) and Grade II listed timber-framed outbuilding, possibly of 17<sup>th</sup> century date, parallel to the barn (LBS 202153). The moat, which separates the manor house from its farm buildings, is believed to be contemporary with the manor house, and is crossed by a brick bridge, which had previously been recorded as being 18th century in date.

### *New Evidence*

**4.5** The present project involved the recording of the bridge structure, the moat bed and the retaining walls, prior to refurbishment. In the event, the impact of the works on the base of the moat proved limited, and most of the work concentrated on the structure of the bridge itself. This consists of two brick piers, of uneven length, supporting three arches and the bridge deck.

**4.6** An examination of the bricks used in the construction of the bridge has demonstrated that the brick piers date to the mid-17<sup>th</sup> century. They are well built and of a high quality, with corner bricks made specifically for the bridge. On the basis of the date of the bricks, there are two possible builders of the bridge: Simon Rewse, a former tenant, bought the manor in 1630, when the manorial rights were detached and sold (Baker et al 1971), and retained it until 1647, when it was sequestered by the Middlesex Committee for Compounding, a Parliamentary Committee which seized the property of ‘delinquents’ who supported the Royalist cause in the Civil War; William

Williams, bought the estate in 1649, after the sequestration order was discharged, and sold it in 1671 (ibid.).

**4.7** The eastern arch, closest to the island, may be contemporary with the piers, but truncated and refaced. The western two arches are of mid-19<sup>th</sup> century date.

**4.8** Evidence for 20<sup>th</sup> century repairs survive in the form of buttresses built of modern machine made bricks bonded with cement mortar, supporting the face of the bridge above the piers. Concrete plinths running along the parapets of the bridge were also installed.

**4.9** The south-western arm appears to be the only arm of the moat with retaining walls, and is also the narrowest arm of the moat. The brickwork for these walls demonstrates that the earliest wall on the island side dates to the early 19<sup>th</sup> century and survives as footings only. It was rebuilt in the late 19<sup>th</sup> century, on top of the earlier footings. Fragments of an early 19<sup>th</sup> century wall were also noted behind modern facing bricks on the landward side of the moat.

**4.10** A series of ten wooden posts were recorded driven into the moat bed to the north of the bridge on the landward side. These were located close to the retaining wall, those nearest to the bank supporting wooden planks pressed up against the wall. The evidence suggests that these posts formed part of the scaffolding erected during the construction of this stretch of wall.

## Discussion

**4.11** The observations made in the course of the present project indicate that the present bridge structure originated in the mid-17<sup>th</sup> century. No evidence for an earlier structure, either on the same or a different alignment, was recovered. It is plausible to suggest that any earlier bridge followed the same alignment.

**4.12** The two bridge piers and the eastern arch are likely to be contemporary and part of the original structure. The fact that the piers are of differing lengths suggests that the bridge deck varied in width, splaying out on the island side. It is not clear whether the earlier deck was supported on arches similar to the eastern arch, or whether the main spans of the bridge were formed of timber beams.

**4.13** The retaining walls in the south-western arm of the moat are indicative of erosion of the banks between the island and the farmyard, which would have been and is still the main access route, and the need to control this. The earliest evidence for walls protecting the banks is of early 19<sup>th</sup> century date. It is likely that the embanking and revetment of the south-western arm narrowed the moat in this location. The average width of the other three arms of the moat is 13.5m. It may be suggested that the south-western arm was originally of a similar width.

**4.14** Taking this into consideration, and noting the asymmetrical form of the existing bridge, it may be further suggested that the bridge in its original form had a further pier and arch on the landward side, matching those on the island side (Figure 7). This would allow either for a bridge with arched abutments leading to a beamed central span supported on the middle pier, or for a waisted bridge resting on an earlier generation of brick arches.

## Conclusions

**4.15** The present project was undertaken in two phases. The first covered the sampling of the silt build-up in the moat prior to the clearance of these deposits, and the monitoring of groundworks for

the creation of a bunded lagoon for the temporary storage of the removed deposits. The second covered the recording of the moat bridge and revetment walls in advance of and during the refurbishment works, and the investigation of the moat bed in the south-west arm.

- The sampling of the silts was intended to investigate the survival of deposits predating the last clearance of the moat in 1973, which was undertaken using a drag line. Five core samples were removed. The potential for these to produce useful data was reconsidered as the clearance progressed, and, on the instructions of the client, no processing of the samples was carried out, although they have been retained.
- The monitoring of the groundworks for the storage lagoon demonstrated that all disturbance took place within the depth of the made ground in this area and no archaeological features or deposits were affected.
- The investigation of the moat bridge established that the present structure is mid-17th century in origin, with significant remodelling taking place in the mid-19<sup>th</sup> century. It is possible that the bridge was originally wider by one arch on the landward side. The earliest observed phase of the revetment walls dated to the early 19<sup>th</sup> century, with several phases of subsequent rebuilding or refacing.
- No significant artefacts were revealed in the bed of the moat following clearance of the silts in the south-west arm, and structural evidence was limited to a number of driven stakes to the north of the bridge on the landward side, which seem to be associated with the latest phase of the revetment walls in this area.

### ***Confidence Rating***

**4.16** The conditions encountered for the Phase 1 works were generally acceptable for the effective identification and investigation of potential archaeological features and deposits, and for the retrieval of the core samples.

**4.17** The conditions encountered for the Phase 2 works were generally difficult, visual identification often being restricted by the presence of brick rubble that was retained in situ, and by a residue of silts at least 0.10m in depth.

**4.18** The overall confidence rating for the evidence collected in the course of the project should be considered to be high, but it should be noted that some evidence may not have been observed or recorded in the course of the Phase 2 works because of the site conditions encountered.



## 5. Sources Consulted

### *Bibliography*

Williams, A. & Martin, G.H. 2003 *Domesday Book, a Complete Translation*. London: Penguin

Baker, T.F.T., Cockburn, J.S. & Pugh, R.B.(eds.) 1971 *A History of the County of Middlesex, Volume 4*. London: Victoria County History

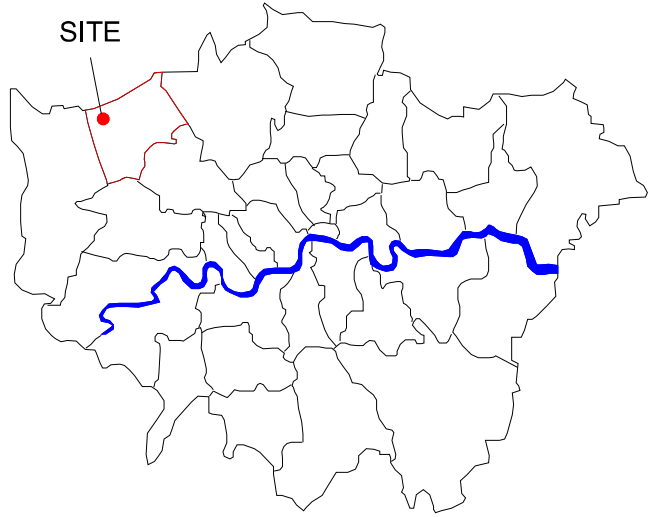
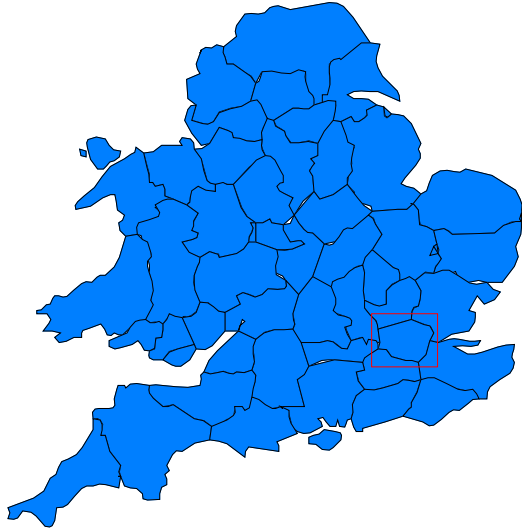
### *Internet*

Listed building information: [www.heritagegateway.org.uk](http://www.heritagegateway.org.uk)

## 6. Illustrations

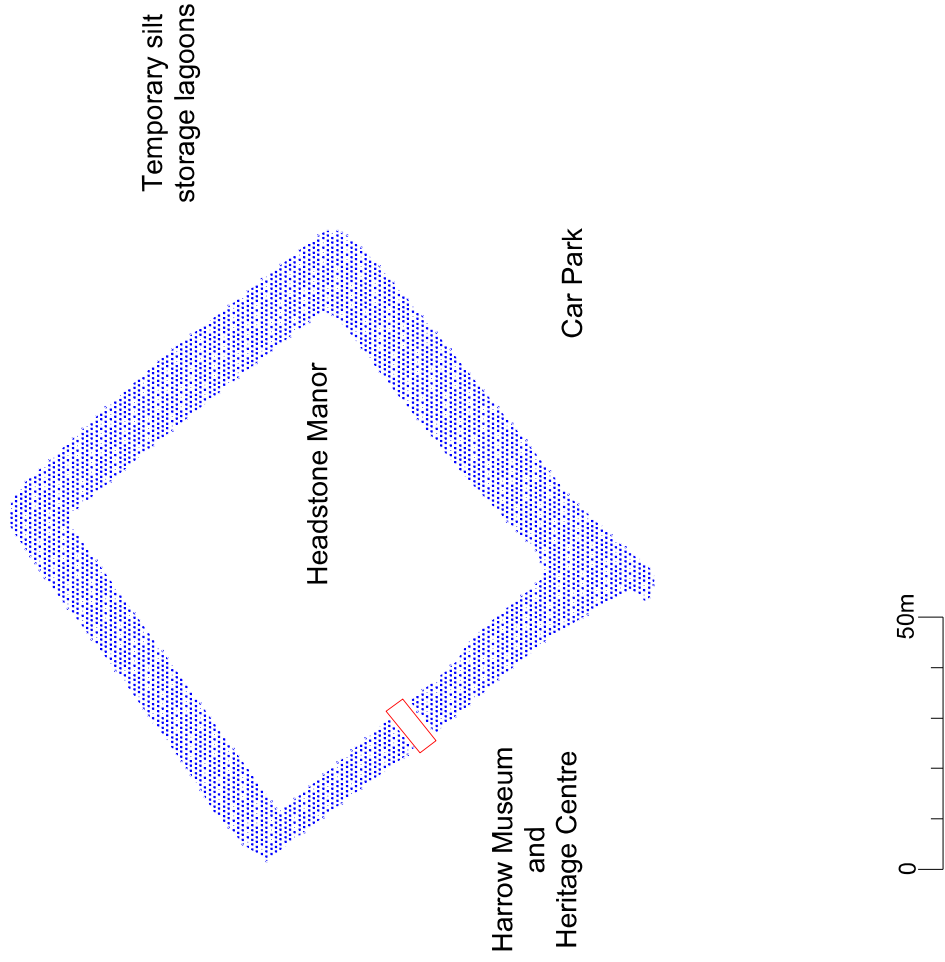
Figure 1..... Site location  
 Figure 2..... Site layout  
 Figure 3..... Monitored groundworks and location of retrieved core samples  
 Figure 4..... Bridge plan and elevations  
 Figure 5..... Monitored groundworks  
 Figure 6..... Plan and profile of bridge deck after removal of surfacing materials  
 Figure 7..... Suggested original plan and elevation of bridge

Plate 1..... Storage lagoon, test strip, NW arm looking NE  
 Plate 2..... Storage lagoon, test strip, NE arm looking SE  
 Plate 3..... Setting the core sampler in the SW arm of the moat  
 Plate 4..... Extracting the core from the sampler in the SW arm of the moat  
 Plate 5..... Water-filled barrage at NW end of SW arm of the moat  
 Plate 6..... Using a water-jet to clear silts from around the SW bridge pier  
 Plate 7..... South-east elevation of the bridge before restoration, looking NW  
 Plate 8..... North-west elevation of the bridge, looking SE  
 Plate 9..... South-west elevation of the bridge, looking NE  
 Plate 10..... Western pier, E elevation, detail of brickwork  
 Plate 11..... Eastern pier, W elevation, detail of brickwork  
 Plate 12..... Bridge deck following the removal of the surfacing materials, looking NE  
 Plate 13..... Earlier wall footings below late 19th century retaining wall to island side  
 Plate 14..... Retaining wall to N of bridge on island side  
 Plate 15..... Timber posts on the landward side to N of bridge  
 Plate 16..... Detail of posts [03] and [04]  
 Plate 17..... Island side service trench, looking SW  
 Plate 18..... Graded bank to S of bridge on the island side, looking SW



Site Location

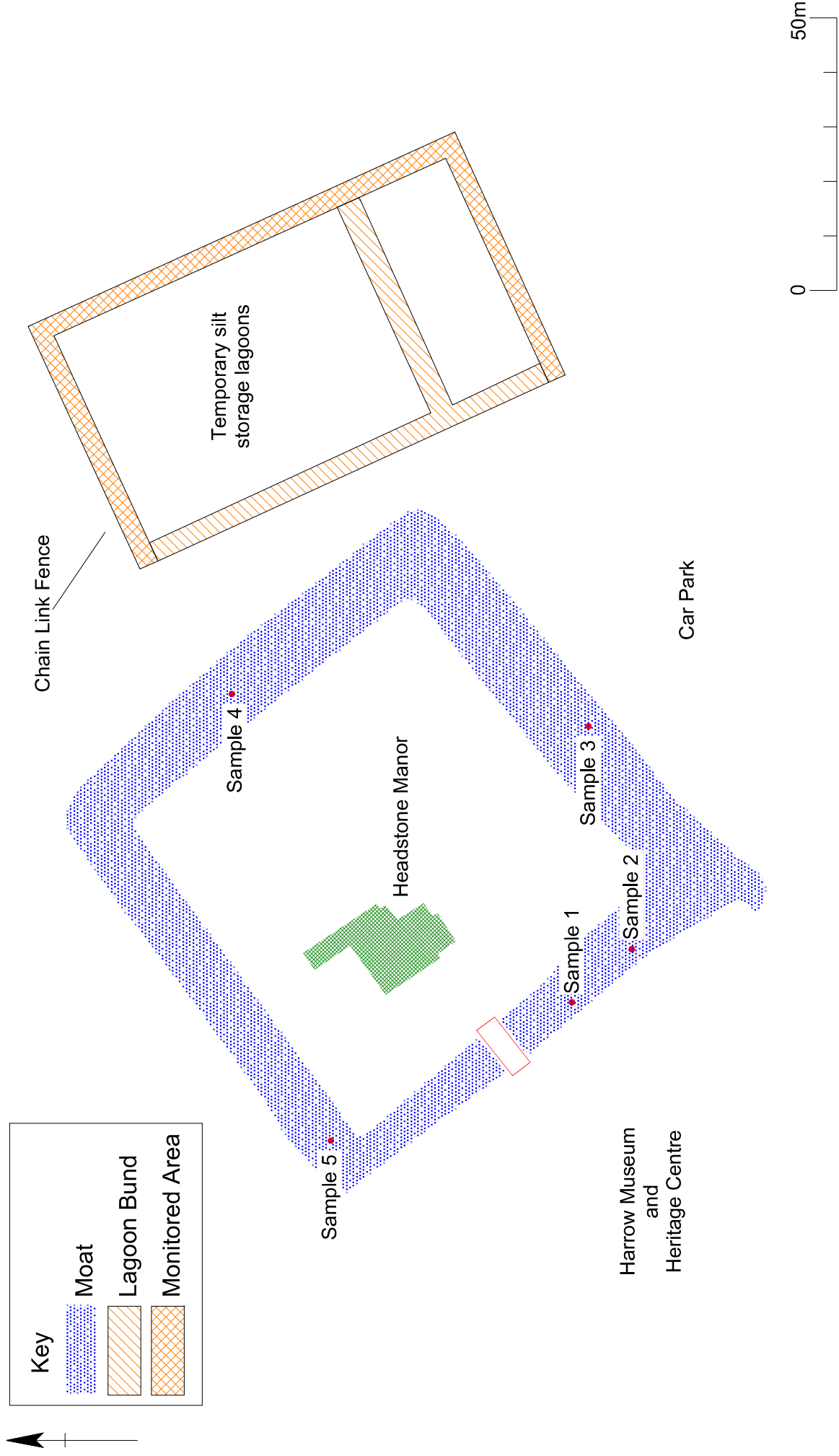
Scale 1:10000



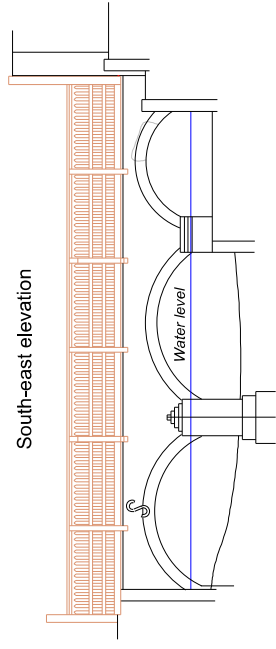
Key

- Moat
- Bridge

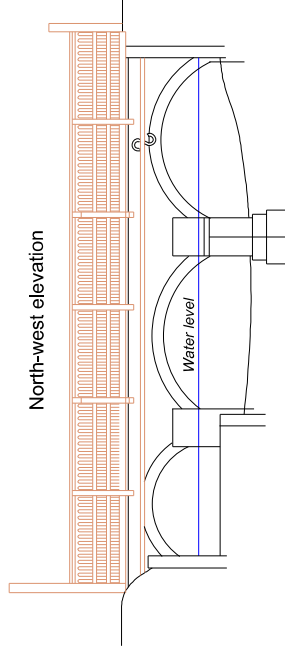
Site Layout



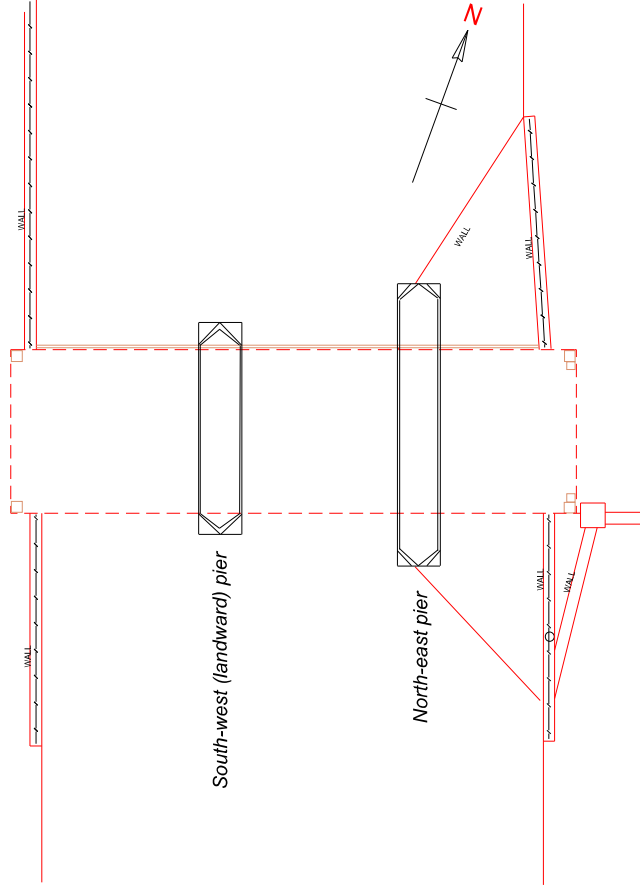
Monitored groundworks and location for retrieved core samples



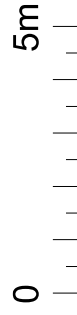
South-east elevation



North-west elevation



Bridge plan



Headstone Manor, Harrow

HN774 Scale 1:100 Figure 4

Bridge plan and elevations  
(Courtesy Hockley & Dawson, Consulting Engineers)

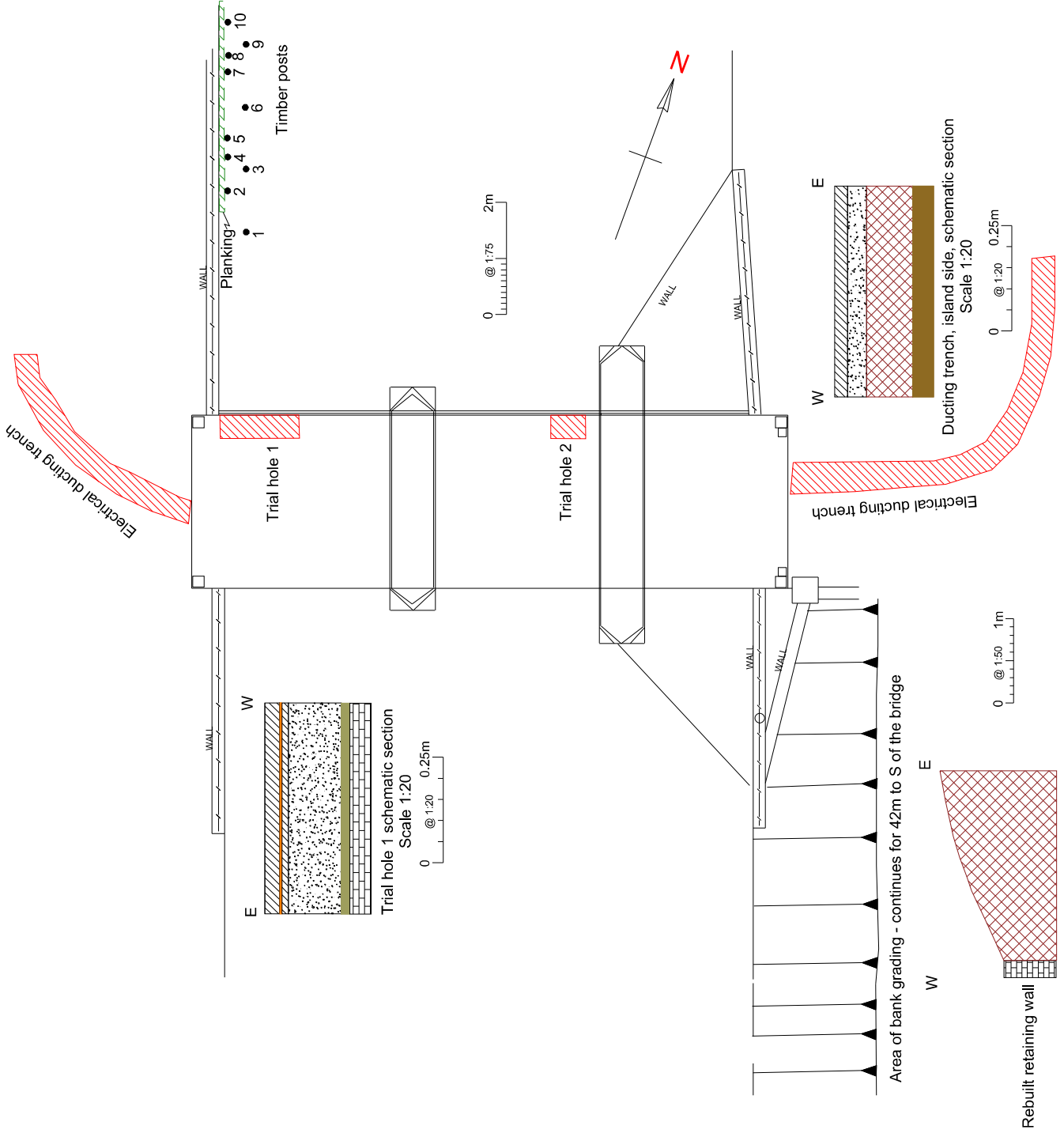
Monitored Groundworks

Key to sections

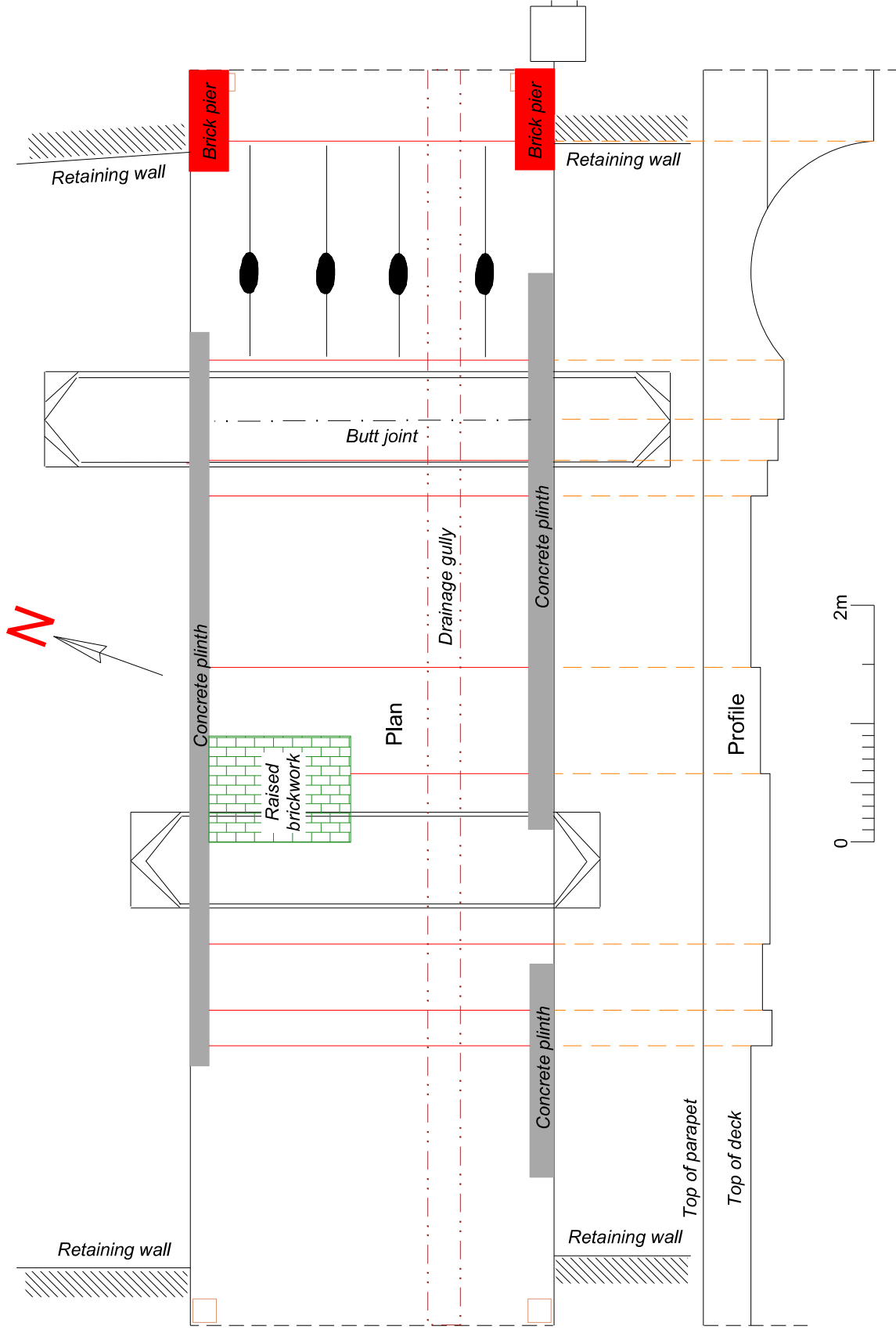
- Tarmac
- Loose mud
- Aggregate
- Light olive brown clay
- Brickwork
- Sandy clay overburden
- Yellowish brown clay

Scales - plan 1:75;  
sections - 1:50 and 1:20

Figure 5

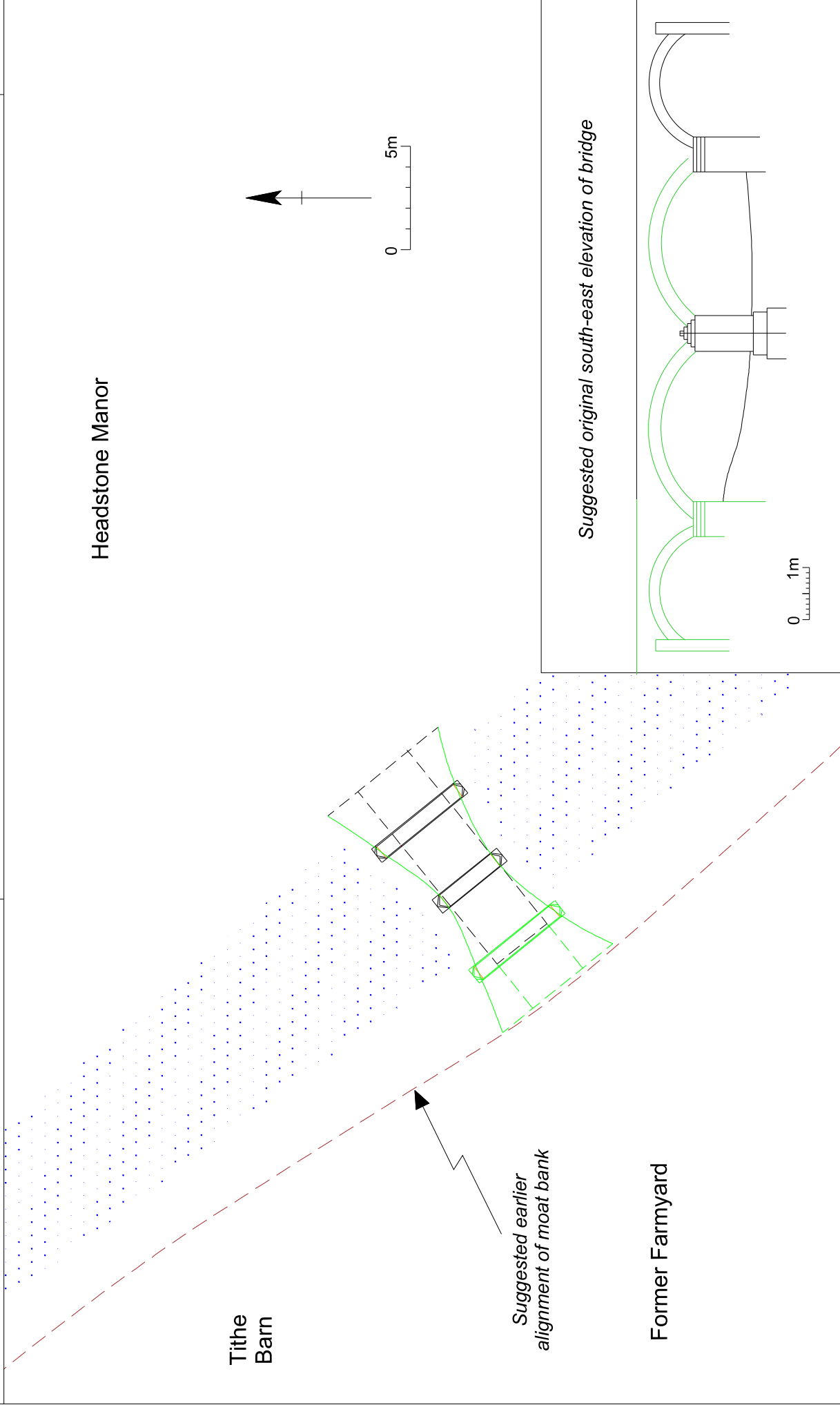


Schematic section, bank grading. Scale 1:50



Plan and profile of bridge deck after removal of surfacing materials  
Base plan courtesy Hockley & Dawson Consulting Engineers





Suggested original plan and elevation of bridge



Plate 1: Storage lagoon, test strip, NW arm looking NE



Plate 2: Storage lagoon, test strip, NE arm looking SE



Plate 3: Setting the core sampler in the SW arm of the moat



Plate 4: Extracting the core from the sampler in the SW arm of the moat



Plate 5: Water-filled barrage at NW end of SW arm of the moat



Plate 6: Using a water-jet to clear silts from around the SW bridge pier



Plate 7: South-east elevation of the bridge before restoration, looking NW



Plate 8: North-west elevation of the bridge, looking SE



Plate 9: South-west elevation of the bridge, looking NE



Plate 10: Western pier, E elevation, detail of brickwork



Plate 11: Eastern pier, W elevation, detail of brickwork



Plate 12: bridge deck following the removal of the surfacing materials, looking NE



Plate 13: Earlier wall footings below late 19th century retaining wall to island side



Plate 14: Retaining wall to N of bridge on island side





Plate 15: timber posts at the base of the retaining wall on the landward side to N of bridge

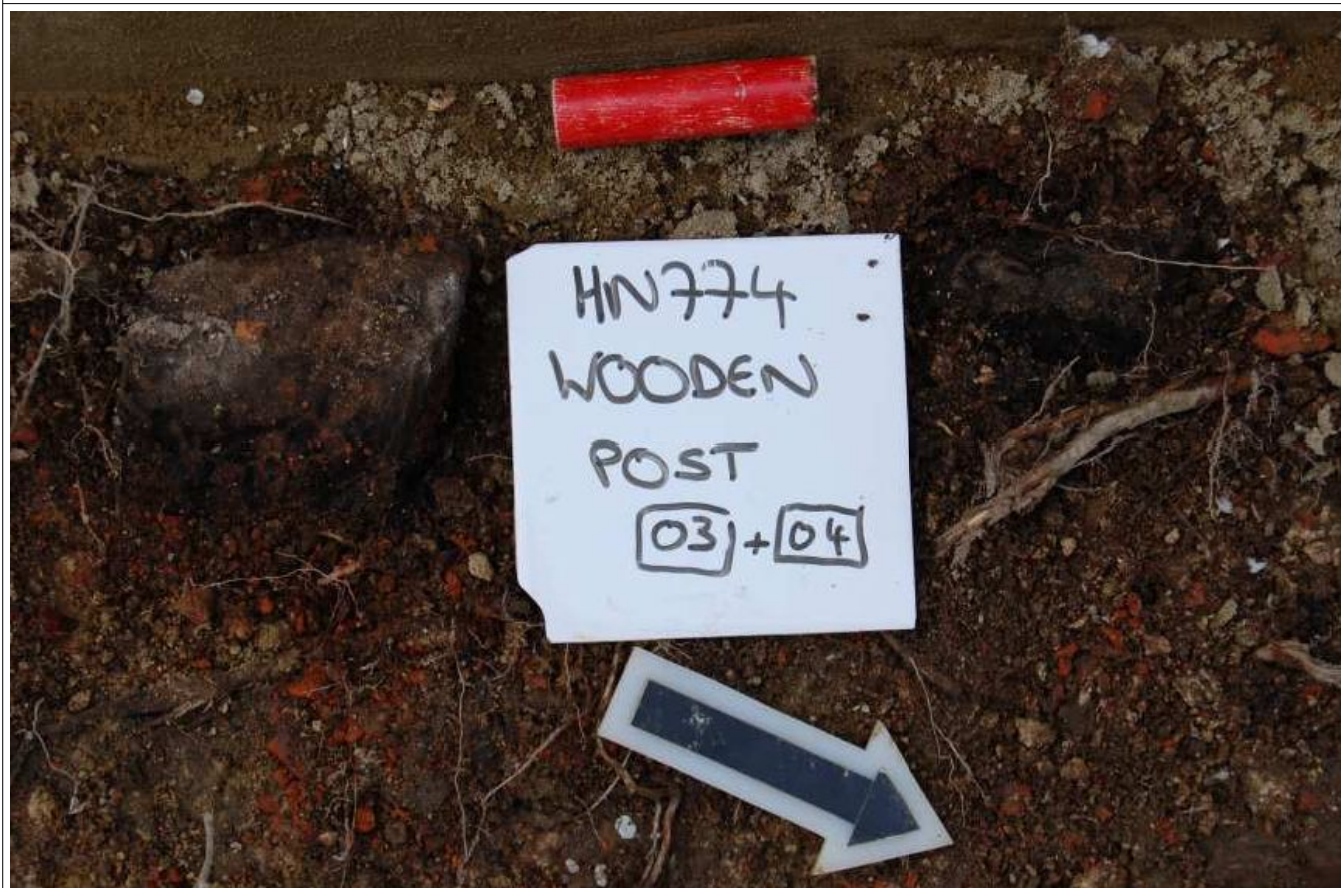


Plate 16: Detail of posts [03] and [04]



Plate 17: Island side service trench, looking SW



Plate 18: Graded bank to S of bridge on the island side, looking SW

# **Appendix 1**

## **Photographic Log**

### **Medium Format Photographs**

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Frame 1: Retaining wall, land side, N of bridge



Frame 2: Bridge, N elevation



Frame 3: View of manor & retaining wall, island side, N of bridge



Frame 4: Moat bank, island side, N of bridge



Frame 5: Moat bank, island side, N of bridge



Frame 6: Retaining wall, land side, N of bridge



Frame 7: Bridge, N elevation, looking SW



Frame 8: West pier, E elevation, detail of brickwork



Frame 9: E pier, W elevation, detail of brickwork



Frame 10: E pier, W elevation, detail of brickwork, view NW



Frame 11: E pier, W elevation, detail of brickwork, view SE



Frame 12: Bridge, S elevation, looking NW



Frame 1: E arch of bridge, S elevation



Frame 2: Bridge S elevation, looking SW



Frame 3: Bridge S elevation, looking NE



Frame 4: Bridge, N elevation, looking SE



Frame 5: Bridge, N elevation, looking SE



Frame 6: Retaining wall, island side, S of bridge



Frame 7: Retaining wall, land side, S of bridge



Frame 8: Earlier bricks, retaining wall, land side, S of bridge



Frame 9: Earlier bricks, retaining wall, land side, S of bridge



Frame 10: Bridge & manor, looking NE



Frame 11: Moat and manor, looking NW



Frame 12: Bridge, S elevation, looking NW

## Appendix 2

### Photographic Log

#### 35mm B&W and Digital Log

Frame No.	Description	Facing	35mm
HN572-01	SW arm of moat	NW	-
HN572-02	S corner of moat	N	-
HN572-03	Close-up of bridge	NW	-
HN572-04	SE arm of moat	SW	-
HN572-05	NE arm of moat	NW	-
HN572-06	NW arm of moat	SW	-
HN572-07	Headstone Manor	S	-
HN572-08	NE arm of moat	SE	-
HN572-09	SW arm of moat	SE	-
HN572-10	Headstone Manor	E	-
HN572-11	Excavating lagoon	S	-
HN572-12	Excavating lagoon	SE	-
HN572-13	Excavating lagoon	NW	-
HN572-14	Sampling 23/02/06. Dredger	NE	-
HN572-15	Loading dredger	SE	-
HN572-16	Bridge	W	-
HN572-17	Loading dredger	S	-
HN572-18	Manoeuvring dredger	S	-
HN572-19	Manoeuvring dredger	S	-
HN572-20	Manoeuvring dredger	SE	-
HN572-21	Manoeuvring dredger	SW	-
HN572-22	Preparing to take core sample	SE	-
HN572-23	Taking 1 <sup>st</sup> core sample	SE	-
HN572-24	Taking 1 <sup>st</sup> core sample	SE	-
HN572-25	Taking 1 <sup>st</sup> core sample	N	-
HN572-26	Taking 1 <sup>st</sup> core sample	N	-
HN572-27	Taking 2 <sup>nd</sup> core sample	N	-
HN572-28	Taking 2 <sup>nd</sup> core sample	N	-
HN572-29	Taking 2 <sup>nd</sup> core sample	N	-
HN572-30	Taking 2 <sup>nd</sup> core sample	N	-
HN572-31	Taking 2 <sup>nd</sup> core sample	N	-
HN572-32	Taking 2 <sup>nd</sup> core sample	N	-
HN572-33	Taking 2 <sup>nd</sup> core sample	N	-
HN572-34	Taking 2 <sup>nd</sup> core sample	N	-
HN572-35	Taking 2 <sup>nd</sup> core sample	SE	-
HN572-36	Taking 2 <sup>nd</sup> core sample	S	-
HN572-37	Taking 2 <sup>nd</sup> core sample	S	-
HN572-38	Taking 2 <sup>nd</sup> core sample	S	-
HN572-39	Taking 2 <sup>nd</sup> core sample	SE	-
HN572-40	Taking 2 <sup>nd</sup> core sample	S	-
HN572-41	Taking 2 <sup>nd</sup> core sample	E	-
HN572-42	Taking 2 <sup>nd</sup> core sample	E	-
HN572-43	Taking 2 <sup>nd</sup> core sample	E	-
HN572-44	Taking 2 <sup>nd</sup> core sample	E	-
HN572-45	Taking 2 <sup>nd</sup> core sample	E	-
HN572-45	Taking 2 <sup>nd</sup> core sample	E	-
HN572-46	Taking 2 <sup>nd</sup> core sample	E	-
HN572-47	Taking 2 <sup>nd</sup> core sample	E	-
HN572-48	Taking 2 <sup>nd</sup> core sample	E	-
HN572-49	Taking 3rd core sample	S	-
HN572-50	Taking 3rd core sample	S	-
HN572-51	Taking 3rd core sample	S	-
HN572-52	Taking 3rd core sample	S	-
HN572-53	Taking 4th core sample	NW	-
HN572-54	Taking 4th core sample	NW	-
HN572-55	Taking 4th core sample	NW	-

Frame No.	Description	Facing	35mm
HN572-56	Loading dredger	NE	-
HN572-57	Loading dredger	NE	-
HN572-58	Taking 5 <sup>th</sup> core sample	NE	-
HN572-59	Taking 5 <sup>th</sup> core sample	NE	-
HN572-60	Taking 5 <sup>th</sup> core sample	NE	-
HN572-61	Taking 5 <sup>th</sup> core sample	NE	-
HN572-62	Taking 5 <sup>th</sup> core sample	NE	-
HN572-63	Taking 5 <sup>th</sup> core sample	NE	-
HN572-64	Taking 5 <sup>th</sup> core sample	NE	-
HN572-65	Taking 5 <sup>th</sup> core sample	NE	-
HN572-66	Taking 5 <sup>th</sup> core sample	NE	-
HN572-67	Taking 5 <sup>th</sup> core sample	NE	-
HN572-68	Taking 5 <sup>th</sup> core sample	NE	-
HN572-69	Taking 5 <sup>th</sup> core sample	NE	-
HN572-70	Taking 5 <sup>th</sup> core sample	NE	-
HN572-71	NW face of bridge	E	-
HN572-72	Under NE arch of bridge	E	-
HN572-73	NW dam	NE	-
HN572-74	SE face of bridge	W	-
HN572-75	SE dam	SE	-
HN572-76	NW dam	NW	-
HN572-77	Island retaining wall NW of bridge	NE	-
HN572-78	Debris to the NW of the bridge	NW	-
HN572-79	Debris and dredging pipe	NW	-
HN572-80	Close-up of debris	W	-
HN572-81	SE face of bridge	N	-
HN572-82	SE bridge pier	N	-
HN572-83	Retaining wall	SW	-
HN572-84	Retaining wall	NE	-
HN572-85	NW face of bridge	E	-
HN572-86	NW dam	NW	-
HN572-87	NW face of bridge	E	-
HN572-88	Island retaining wall NW of bridge	NE	-
HN572-89	Close-up of debris	NW	-
HN572-90	SE dam	SE	-
HN572-91	Burst NW dam	NW	-
HN572-92	Bridge and retaining wall	S	-
HN572-93	Repair/extension to retaining wall	SW	-
HN572-94	Repair/extension to retaining wall	SW	-
HN572-95	Retaining wall SW of bridge	S	-
HN572-96	Island retaining wall SW of bridge	NE	-
HN572-97	NW arm	NE	-
HN572-98	Koi carp by NW dam	NE	-
HN572-99	Koi carp by NW dam	NE	-
<b>HN774</b>			
HN774 001	Retaining wall, land side, N of bridge	NW	-
HN774 002	N elevation of bridge	SE	-
HN774 003	View of manor & moat wall, N of bridge	NE	-
HN774 004	View of manor & moat wall, N of bridge	NE	-
HN774 005	Moat bank, island side, N of bridge	NE	-
HN774 006	Moat bank, island side, N of bridge	NE	-
HN774 007	Retaining wall, land side, N of bridge	SW	-
HN774 008	Moat & barn	NW	-
HN774 009	Bridge, S elevation	NW	-
HN774 010	Well head	-	-
HN774 011	Bridge, N elevation	SW	-
HN774 012	Bridge, N elevation	SW	-
HN774 013	West pier, E elevation	SW	-
HN774 014	East pier, W elevation	NE	-
HN774 015	Bridge, S elevation	NW	-
HN774 016	E arch of bridge, S elevation	NW	-
HN774 017	Bridge, S elevation	NW	-
HN774 018	Bridge, S elevation	NE	-



Frame No.	Description	Facing	35mm
HN774 019	Retaining wall, island side, S of bridge	NE	-
HN774 020	Retaining wall, land side, S of bridge	SW	-
HN774 021	Base, retaining wall land side	SW	-
HN774 022	Bridge & manor	NE	-
HN774 023	Moat & manor	NW	-
HN774 024	Bridge, S elevation	NW	-
HN774 025	Moat bank, island side, N of bridge	NE	-
HN774 026	Moat bank, island side, N of bridge	NE	-
HN774 027	Moat bank, island side, N of bridge	NE	-
HN774 028	Repairing the retaining wall, land side	W	-
HN774 029	Repairing the retaining wall, land side	W	-
HN774 030	Repairing the retaining wall, land side	W	-
HN774 031	Repairing the retaining wall, land side	W	-
HN774 032	General shot pump under bridge	n/a	-
HN774 033	General working shot across to island	NE	-
HN774 034	General working shot across to island	NE	-
HN774 035	General working shot across to island	NE	-
HN774 036	General working shot across to island	NE	-
HN774 037	N facing section, trial hole 1 (land side)	SW	✓
HN774 038	N facing section, trial hole 1 (land side)	SW	✓
HN774 039	N facing section, trial hole 1 (land side)	SW	✓
HN774 040	Trial hole 1, land side	E	✓
HN774 041	Detail, N facing section, trial hole 1	SE	✓
HN774 042	S facing section, trial hole 1	SE	✓
HN774 043	S facing section, trial hole 1	SE	✓
HN774 044	Trial hole 2 (island side)	SW	✓
HN774 045	Trial hole 2 (island side)	SW	✓
HN774 046	Trial hole 2 (island side)	SW	✓
HN774 047	Trial hole 2 (island side)	S	-
HN774 048	Trial hole 2 (island side)	S	-
HN774 049	Trial hole 2 (island side)	W	-
HN774 050	Bridge after removal of decking	SW	✓
HN774 051	Bridge after removal of decking	SW	✓
HN774 052	Bridge after removal of decking	SW	✓
HN774 053	Bridge after removal of decking	NE	✓
HN774 054	Bridge after removal of decking	NE	✓
HN774 056	Bridge after removal of decking	NE	✓
HN774 057	Retaining wall, island side, early footings	SE	✓
HN774 058	Retaining wall, island side, early footings	SE	✓
HN774 059	Retaining wall, island side, early footings	SE	✓
HN774 060	Retaining wall, island side, early footings	SE	✓
HN774 061	Retaining wall, island side, early footings	SE	✓
HN774 062	Retaining wall, island side, early footings	SE	✓
HN774 063	Retaining wall, island side, early footings	SE	✓
HN774 064	General shot, moat bank, land side	SW	-
HN774 065	General shot, moat bank, land side	SW	-
HN774 066	General shot, moat bank, land side	SW	-
HN774 067	General shot, moat bank, land side	SW	-
HN774 068	Bridge, S elevation, working shot	NE	-
HN774 069	Retaining wall, island side, S of bridge	SE	-
HN774 070	Retaining wall, island side, S of bridge	SE	-
HN774 071	Electric ducting trench, island side	SW	✓
HN774 072	Electric ducting trench, island side	SW	✓
HN774 073	Electric ducting trench, island side	SW	✓
HN774 074	Electric ducting trench, land side	SW	✓
HN774 075	Electric ducting trench, land side	SW	✓
HN774 076	Electric ducting trench, land side	SW	✓
HN774 077	General shot of timber posts	NE	✓
HN774 078	General shot of timber posts	NE	✓
HN774 079	General shot of timber posts	SE	✓
HN774 080	General shot of timber posts	SE	✓
HN774 081	General shot of timber posts	SE	✓
HN774 082	Detail, timber post [01]	S	-

Frame No.	Description	Facing	35mm
HN774 083	Detail, timber post [01]	S	-
HN774 084	Detail, timber post [02]	S	-
HN774 085	Detail, timber post [02]	S	-
HN774 086	Detail, timber post [03]	S	-
HN774 087	Detail, timber post [03]	S	-
HN774 088	Detail, timber posts [03] & [04]	SE	-
HN774 089	Detail, timber posts [03] & [04]	SE	-
HN774 090	Detail, timber posts [03] & [04]	SE	-
HN774 091	Detail, timber post [05]	SE	-
HN774 092	Detail, timber post [05]	SE	-
HN774 093	Detail, timber post [06]	SE	-
HN774 094	Detail, timber post [06]	SE	-
HN774 095	Detail, timber posts [04] & [05]	SE	-
HN774 096	Detail, timber posts [04] & [05]	SE	-
HN774 097	Detail, timber posts [07], [08] & [09]	SE	-
HN774 098	Detail, timber posts [07], [08] & [09]	SE	-
HN774 099	Detail, timber posts [07], [08] & [09]	SE	-
HN774 100	Detail, timber post [10]	SE	-
HN774 101	Detail, timber post [10]	SE	-
HN774 102	Detail, timber post [10]	SE	-
HN774 103	Graded bank, island side to S of bridge	SW	✓
HN774 104	Graded bank, island side to S of bridge	SW	✓
HN774 105	New gates on bridge	E	-
HN774 106	Bridge, N elevation after restoration	SW	-
HN774 107	Bridge, S elevation after restoration	NE	-
HN774 108	General view to N elevation of bridge	SW	-

HN572\_Headstone\_Manor\_LBHarrow: Digital Photographic Log



HN571-01



HN572-02



HN572-03



HN572-04



HN572-05



HN572-06



HN572-07



HN572-08



HN572-09



HN572-10



HN572-11



HN572-12



HN572-13



HN572-14



HN572-15



HN572-16



HN572-17



HN572-18



HN572-19



HN572-20



HN572-21



HN572-22



HN572-23



HN572-24



HN572-25



HN572-26



HN572-27



HN572-28



HN572-29



HN572-30



HN572-31



HN572-32



HN572-33



HN572-34



HN572-35



HN572-36



HN572-37



HN572-38



HN572-39



HN572-40



HN572-41



HN572-42



HN572-43



HN572-44



HN572-45



HN572-46



HN572-47



HN572-48



HN572-49



HN572-50



HN572-51



HN572-52



HN572-53



HN572-54



HN572-55



HN572-56



HN572-57



HN572-58



HN572-59



HN572-60



HN572-61



HN572-62



HN572-63



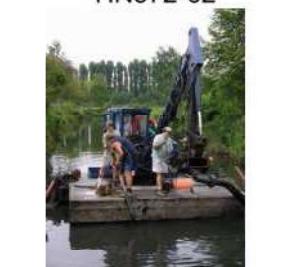
HN572-64



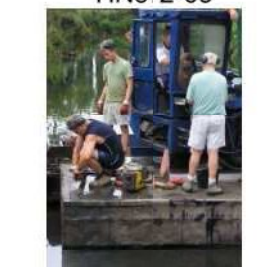
HN572-65



HN572-66



HN572-67



HN572-68



HN572-69



HN572-70

HN572\_Headstone\_Manor\_LBHarrow: Digital Photographic Log



HN572-71



HN572-72



HN572-73



HN572-74



HN572-75



HN572-76



HN572-77



HN572-78



HN572-79



HN572-80



HN572-81



HN572-82



HN572-83



HN572-84



HN572-85



HN572-86



HN572-87



HN572-88



HN572-89



HN572-90



HN572-91



HN572-92



HN572-93



HN572-94



HN572-95



HN572-96



HN572-97



HN572-98



HN572-99

HN774\_Headstone\_Manor\_LBHarrow: Digital Photographic Log



HN774\_001[S]



HN774\_002[S]



HN774\_003[S]



HN774\_004[S]



HN774\_005[S]



HN774\_006[S]



HN774\_007[S]



HN774\_008[S]



HN774\_009[S]



HN774\_010[S]



HN774\_011[S]



HN774\_012[S]



HN774\_013[S]



HN774\_014[S]



HN774\_015[S]



HN774\_016[S]



HN774\_017[S]



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HN774\_105[S]





HN774\_106[S]



HN774\_107[S]



HN774\_108[S]



## Appendix 3

### OASIS Data Entry Forms

<i>OASIS ID: heritage1-12960</i>	
<b>Project details</b>	
Project name	Headstone Manor, Harrow Middlesex
Short description of the project	In order to meet the requirements of the Scheduled Monument Consent for the de-silting of the moat and restoration of the moat bridge at Headstone Manor, Harrow, and to meet the requirements of planning consent for the creation of a temporary storage lagoon in the Headstone Manor Recreation Ground, the Heritage Network was commissioned by the London Borough of Harrow to undertake a programme of archaeological investigation and recording. The project was undertaken in two phases. The first covered the sampling of the silt build-up in the moat prior to the clearance of these deposits, and the monitoring of groundworks for the creation of a bunded lagoon for the temporary storage of the removed deposits. The sampling of the silts was intended to investigate the survival of deposits predating the last clearance of the moat in 1973, which was undertaken using a drag line. Five core samples were removed but the potential for these to produce useful data was reconsidered as the clearance progressed and no processing of the samples has been carried out. The monitoring of the groundworks for the storage lagoon demonstrated that all disturbance took place within the depth of the made ground in this area and no archaeological features or deposits were affected.
Project dates	Start: 24-01-2006 End: 20-09-2006
Previous/future work	No / Yes
Any associated project reference codes	HN572 - Contracting Unit No.
Any associated project reference codes	LO161 - SM No.
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Community Service 1 - Community Buildings
Monument type	MOAT Medieval
Monument type	MOAT Post Medieval
Significant Finds	NONE None
Investigation type	'Watching Brief'
Prompt	Scheduled Monument Consent
<b>Project location</b>	
Country	England
Site location	GREATER LONDON HARROW HARROW Headstone Manor
Study area	865.00 Square metres
Site coordinates	TQ 1407 8968 51.5939226305 -0.353044345339 51 35 38 N 000 21 10 W Point
Project creators	
Name of Organisation	Heritage Network
Project brief	English Heritage/Department of Enviroment

originator	
Project design originator	David Hillelson
Project director/manager	David Hillelson
Project supervisor	David Kaye
Type of sponsor/funding body	District Council
Name of sponsor/funding body	London Borough of Harrow
<b>Project archives</b>	
Physical Archive Exists?	No
Digital Archive recipient	Harrow Museum
Digital Contents	'other'
Digital Media available	'Images raster / digital photography','Text'
Paper Archive recipient	Harrow Museum
Paper Contents	'other'
Paper Media available	'Diary','Photograph','Plan','Report'
<b>Project bibliography 1</b>	
Publication type	Grey literature (unpublished document/manuscript)
Title	Headstone Manor Bridge, Headstone, London Borough of Harrow. Archaeological Report
Author(s)/Editor(s)	Ashworth, H.
Other bibliographic details	Report no.584
Date	2010
Issuer or publisher	Heritage Network
Place of issue or publication	Letchworth, Herts.
Description	A4 booklet, comb bound, green cover, 22 pages text, 7 figures, 18 photographic plates

<b>OASIS ID: heritage1-71381</b>	
<b>Project details</b>	
Project name	Headstone Manor Bridge
Short description of the project	<p>In order to meet the requirements of the Scheduled Monument Consent for the de-silting of the moat and restoration of the moat bridge at Headstone Manor, Harrow, and to meet the requirements of planning consent for the creation of a temporary storage lagoon in the Headstone Manor Recreation Ground, the Heritage Network was commissioned by the London Borough of Harrow to undertake a programme of archaeological investigation and recording.</p> <p>The project was undertaken in two phases. The second phase covered the recording of the moat bridge and revetment walls in advance of and during the restoration works, and the investigation of the moat bed in the south-west arm.</p> <p>The investigation of the moat bridge established that the present structure is mid-17th century in origin, with significant remodelling taking place in the mid-19th century. It is possible that the bridge was originally wider by one arch on the landward side. The earliest observed phase of the revetment walls dates to the early 19th century, with several phases of subsequent rebuilding or refacing.</p> <p>No significant artefacts were revealed in the bed of the moat following clearance of the silts in the south-west arm, and structural evidence was limited to a number of driven stakes to the north of the bridge on the landward side, which seem to be associated with the latest phase of the revetment walls in this area.</p>
Project dates	Start: 19-11-2008 End: 11-05-2009
Previous/future work	Yes / Not known
Associated project reference codes	HN572 - Contracting Unit No. HN774 - Contracting Unit No.
Type of project	Building Recording
Site status	Scheduled Monument (SM)
Monument type	BRIDGE Post Medieval
Significant Finds	NONE None
Methods	'Photographic Survey','Survey/Recording Of Fabric/Structure'
Prompt	Scheduled Monument Consent
<b>Project location</b>	
Country	England
Site location	GREATER LONDON HARROW HARROW Headstone Manor Bridge
Study area	864.00 Square metres
Site coordinates	TQ 141 897 51.5940963173 -0.352604889392 51 35 38 N 000 21 09 W Point
<b>Project creators</b>	
Name of Organisation	Heritage Network
Project design originator	David Hillelson
Project director	David Hillelson
Project supervisor	Geoff Saunders
Type of funding body	District Council
Name of funding body	London Borough of Harrow

<b>Project archives</b>	
Physical Archive Exists?	No
Digital Archive recipient	Harrow Museum
Digital Contents	'other'
Digital Media available	'Images raster / digital photography', 'Images vector', 'Text'
Paper Archive recipient	Harrow Museum
Paper Media available	'Miscellaneous Material', 'Photograph', 'Plan', 'Report'
<b>Project bibliography 1</b>	
Publication type	Grey literature (unpublished document/manuscript)
Title	Headstone Manor Bridge, pinner View, Harrow. Historic Building Record
Author(s)/Editor(s)	Ashworth, H.
Other bibliographic details	Heritage Network Report No.584
Date	2010
Issuer or publisher	Heritage Network
Place of issue	Letchworth, Herts
Description	A4 booklet, comb bound, green cover, 22 pages text, 7 figures, 18 photographic plates