

**A SERIES OF ARCHAEOLOGICAL WATCHING BRIEFS
ON LAND ADJACENT TO
THE UPPER & LOWER PEN PONDS, RICHMOND PARK**

London Borough of Richmond-upon-Thames



COMPASS



ARCHAEOLOGY

October 2011

AN ARCHAEOLOGICAL WATCHING BRIEF ON LAND
ADJACENT TO THE UPPER AND LOWER PEN PONDS,
RICHMOND PARK

London Borough of Richmond-upon-Thames,

Planning Application numbers:

11/0766/FUL (Spillways)
&
11/2070/FUL (Sand Martin Bank)

Site Code: RCH11

NGRs:

TQ1998 7313 (Point between two spillways)
&
TQ1971 7236 (Sand martin bank)

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Abstract

Between 7th September and 17th October 2011 a series of archaeological watching briefs were conducted in Richmond Park, focusing on groundworks associated with the construction of new spillways on the north-western corners of the Lower and Upper Pen Ponds and an artificial Sand martin bank on the south-eastern corner of the Upper Pen Pond. These works related to two separate planning applications; nos. 11/0766/FUL and 11/2070/FUL respectively, and were commissioned by The Royal Parks, in response to recommendations by English Heritage.

Archaeologically significant features were limited to two undated linears, and two Neolithic / Bronze Age worked flints recovered from the topsoil in the area of the Lower Pond. The rest of the spillways watching brief revealed a thin layer of topsoil overlying an equally thin subsoil atop 'naturally occurring' silt-clay geology.

The only variation on this theme was when groundworks crossed the areas of gravel path where the existing gravel surface overlay a deposit of made ground. This imported material sealed a buried topsoil in places, or otherwise directly overlay the 'natural', truncating any previous ground surfaces entirely.

The sand martin bank was situated amongst the reed beds by the pond's edge, and water ingress prevented in depth recording. However, the exposed stratigraphy comprised the humic / organic topsoil / reed bed material overlying a compacted, grey, alluvial clay-sand. No archaeologically significant deposits were observed.

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Site location plans and observation plans, (figs.2,3,7,16 and 20), modified from originals available online as part of the Borough of Richmond-upon-Thames planning website. Figs.2,7,16,20 application reference number 11/0766/FUL, fig.3 application reference number 11/2070/FUL

1 Introduction

This document details the results of an archaeological watching brief on land adjacent to the upper and lower pen ponds in Richmond Park, London Borough of Richmond-upon-Thames, between 7th September to 17th of October 2011.

The watching briefs were conducted upon the recommendation of English Heritage, and on behalf of the client, The Royal Parks, in further response to planning conditions associated with applications 11/0766/FUL (construction of the spillways), and 11/2070/FUL, (construction of the Sand martin bank).



Fig.1: Site locations circled in red

2 Site location and Geology

2.1 The groundworks for the spillways focused on two separate areas. The northwest corner of the Lower Pen Pond, and the northwest corner of the Upper Pen Pond, (figs.2, 7 and 20). These lie in the centre of the park and in a bowl of land gradually sloping to the east, and steadily rising to the west.



Fig.2 : Location of spillway groundworks

The Sand Martin Bank was to be constructed on the south-eastern tip of the Upper Pen Pond amongst reed beds by the water's edge. The ground is flat and densely vegetated, being within the Pen Ponds Plantation which encircles the southern end of the Upper Pen Pond, (see.fig.3)



Fig.3: Location of Sand martin bank groundworks

2.2 The British Geological Survey (*Sheet 270, 1998, fig.4*) indicates that the higher ground is covered by River Terrace Deposits (a mix of Black Park, Taplow and Boyn Hill Gravel), which extend across the Park. Outside this area much older London Clay is exposed. The Pen Ponds area is on head material with mixed gravel geology.

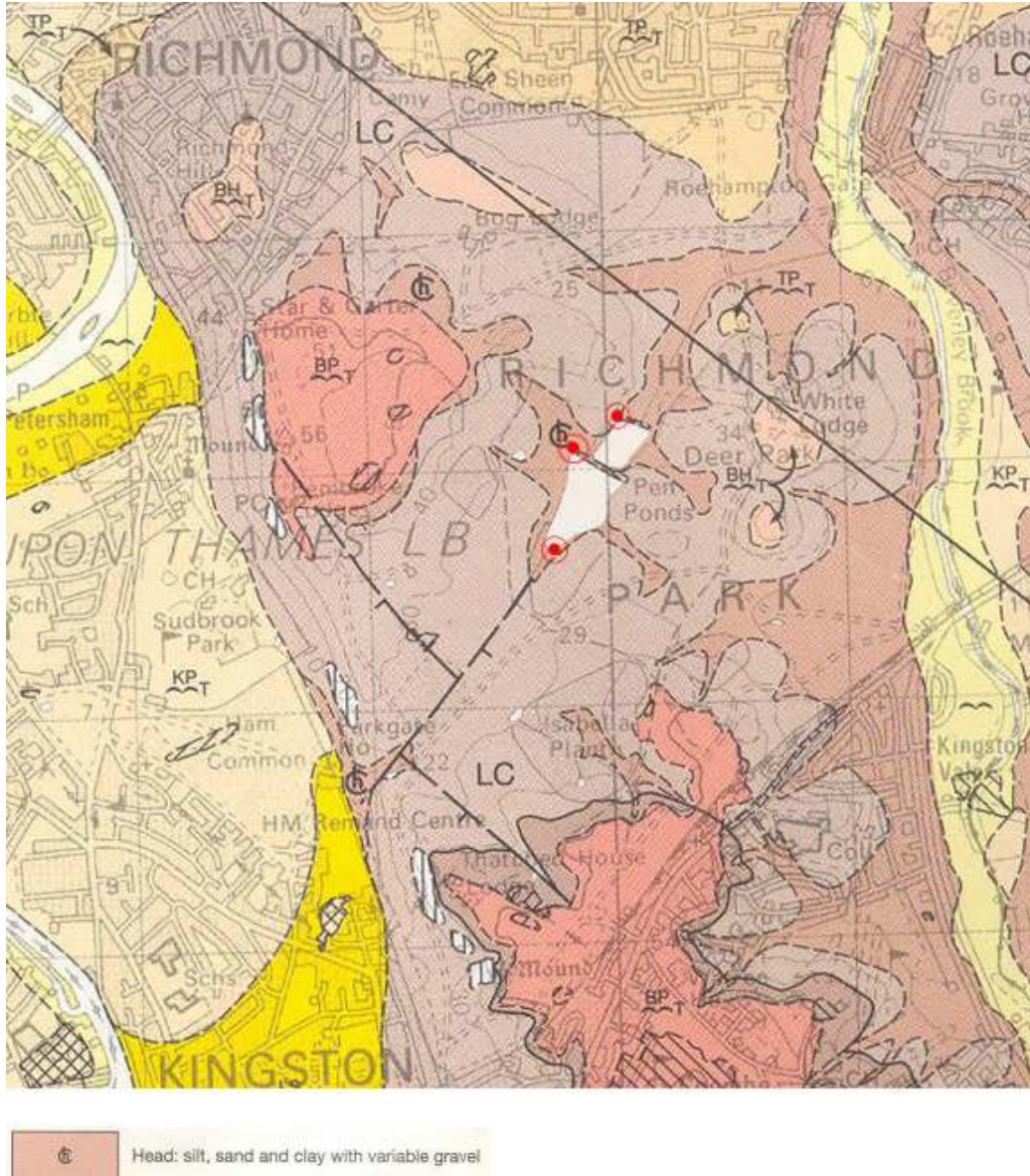


Fig.4: Site locations in relation to underlying geology

3 Archaeological and Historical background

Richmond Park is the largest Royal Park in London covering an area of 2,500 acres and has changed little over the centuries. Little archaeological investigation has taken place in the Park, primarily because the area has not been heavily developed in recent years. This in turn means that any buried archaeology could also have been preserved in a better state than otherwise.

Evidence from several sources illustrates the prehistoric, medieval and post-medieval potential of the Park. The Museum of London's Archaeological Archive (LAARC) was consulted, as was the Greater London Sites and Monuments Record (GLSMR) and resources available on the Heritage Gateway website.

3.1 Prehistoric Richmond

Richmond is well known for its concentration of lithic artefacts dating through the prehistoric periods, owing to its close proximity to the River Thames and the associated fertile Terrace Gravel deposits. Miscellaneous lithic implements have been found from Richmond Park, including a Palaeolithic handaxe, a possible Clactonian flake, a leaf-shaped flake, a possible unfinished barbed and tanged arrowhead of probably Early Bronze Age date, a knife, a dagger and a flint axe. An axe was found in 1875 and a broken knife was found in 1889. Jon Cotton recorded struck flints from Ham Dip Pond, Richmond Park in the *Surrey Archaeol Collections* for 1996 (vol. 83, 73-80). These finds included mixed elements of Palaeolithic and Mesolithic to Neolithic/Bronze Age types, consistent with other local assemblages; the Ham Dip Pond is approximately 1.5km to the southwest of the site area.

The majority of prehistoric finds from the Richmond area recorded in the SMR were discovered in the late 19th or early 20th centuries and are generally unprovenanced beyond a simple listing within the Richmond area. Therefore, it is not known whether these finds were residual in nature or part of *in situ* prehistoric deposits. The area around White Lodge Hill overlooking Beverley Brook in Richmond Park has yielded an assemblage of lithic artifacts including a core, a transverse arrowhead, broken blades, flakes and scrapers. Fifty-four flints, apparently found in a Boyn Terrace on the 75ft contour south of White Lodge, Richmond Park, were presented by Kingston Museum to Kingston Technical College in 1955 for use in the Geological Department, although their exact provenance is not known. The assemblage consisted of twenty seven Mesolithic blades, four Neolithic scrapers and twenty three flakes.

There is a possible barrow in Richmond Park situated on the cleared avenue running through Sidmouth Wood from King Henry VIII mound. It was destroyed during gravel digging between 1760-1868, when several inhumations were discovered. However, field investigations in 1995 by RCHME field staff located no trace of the mound. Rendall recorded Iron Age and Roman Pottery Sherds from Richmond Park in the 1983 *Surrey Archaeol Collections*, (Vol. 74, 217-19), from an area circa 200m south of the Bog Gate and just north of Bog Lodge, approximately 1 km to the north of the Pen Ponds area. In 1992 Greeves T, published his '*Richmond Park, London: archaeological survey 1992*', a copy of which is housed in the Richmond Local Studies Library.

3.2 Medieval and Post- Medieval History of the Park¹

The medieval occupation of Richmond was extensive, focused mainly around the Richmond Palace complex and what was then the Royal Manor of Sheen. Richmond was formerly the hamlet of Sheen or Shene, which is not mentioned in the Domesday Survey of 1087, being then a part of the neighbouring manor of Kingston. The exact date at which Sheen became a manor in its own right is unclear, but it was certainly independent by the latter half of the reign of Henry I in the 12th century. It is also unclear as to when a royal residence was first erected at Sheen, but surviving records indicate that a 'palace' stood there from at least the 13th century; this was renamed Richmond in the late 15th century by Henry VII².

The Park itself was probably open pasture through the medieval period, with only scattered dwellings, due to its location on the periphery of the town. The known royal connections with the Park date from Edward I (1272-1307), when the area was known as the Manor of Sheen. The name was changed to Richmond during Henry VII's reign.

In 1625 Charles I brought his court to Richmond Palace to escape the plague in London and turned it into a park for hunting red and fallow deer. He realised that Richmond gave him the best opportunities for hunting near London. The area included open grassland with individual oaks - some of which were mature trees at the time of Charles' visit and are still standing. There were also small farms and common land where local people had a right to graze cattle or collect timber. Charles ignored all these claims on the land and, in 1637, he created a hunting park. He introduced around 2,000 deer, and to make sure they didn't stray he built a brick wall eight miles long, which is Listed and elements of it still stand today. Local people were furious about the King's action. He was forced to pay compensation to some landowners and had to restore the right of people to walk in the park and collect firewood by installing a ladder in the wall.

From then on, deer and hunting began to change the appearance of the Park. Deer grazed the leaves and bark of young trees and stopped the open grassy areas turning into woods. Ancient trackways and field boundaries disappeared as the grassland developed. Large established trees were pollarded (cut regularly at about 3 metres from the ground). This technique encouraged the trees to grow straight tall branches that were suitable for timber and also protected them from browsing deer. Even today, the lowest branches of trees in the park are all about the same height from the ground - just out of a deer's reach. In the second half of the 17th century, King Charles II spent over £3,000 on repairs. He created new ponds for the deer to drink from and gave permission for gravel to be dug in the park.

¹ Much of this research is sourced from the Royal park web pages, with additional research data from archaeological databases appended.

² Henry's father Edmund was made 1st Earl of Richmond in 1452. Additional data from: Brown M B, 1985 'Richmond Park: the History of a Royal Deer Park'; Cloake J, (1991) 'Richmond Past' and Greeves T, (1992) 'Richmond Park, London: Archaeological Survey 1992'.

In the 18th century, two planned vistas were created to show important guests the best views of the park and beyond. One looked down to the grand avenue of Queen's Ride to White Lodge, a hunting lodge built for King George I. The other looked out from King Henry's Mound - a high point, said to have used by Henry VIII to watch hunting. There is speculation that the mound has an older history, and may have originally been a prehistoric burial mound, (see *Prehistoric Richmond* section above, pg.5).

The Pen Ponds, (which is really a large lake divided in two by a causeway), was dug by the 1740s and the gravels arising chosen for quarrying. In the 19th century, several small woods were added. These include Sidmouth Wood and the ornamental Isabella Plantation, both of which are fenced to keep the deer out. Also in the 19th century people were no longer given the right to remove firewood, which is still true to this day, to help in preserving the park. Both ponds were drained in World War II because they formed too noticeable a landmark for the Luftwaffe. The water pumped from the Pen Ponds feeds the Main Stream in the Isabella Plantation.

The later post-medieval development of the Park is well demonstrated by cartographic sources. Figure 5 shows Rocque's 1746 map. The Richmond area underwent dramatic development in the 19th century. The 1816 Ordnance Survey 2 inch to the mile First Edition (fig.6) shows the Park area in a similar state of development as Rocque's map, but by the 1861-71 Ordnance Survey (not illustrated) far more urbanization has taken place in the area around the Park.



Fig.5: Extract from Rocque's survey 1746



Fig.6: Richmond Park, from the 1816 First edition, 2 inch to 5 mile, OS map

4 Archaeological research questions

The watching brief presented an opportunity to address the following general and specific research questions:

- Is there any evidence for prehistoric activity and what is the nature of this activity- settlement or agriculture?
- Is there any evidence for Roman to medieval activity, and what is the likely nature of this?
- What evidence is there for post-medieval activity, and can this be related to the cartographic evidence – in particular for the development of the Pen Ponds in the 18th century?
- At what levels do any archaeological deposits survive across the area?
- At what levels do natural deposits survive, and do these accord with the Geological Survey record?

5 Methodology

5.1 Fieldwork

The fieldwork was carried out in accordance with current English Heritage guidelines (in particular, *Standards and Practice in Archaeological Fieldwork, Guidance Paper 3*) and to the standards of the Institute of Field Archaeologists (*Standard and Guidance for Archaeological Watching Briefs*). Overall management of the project was undertaken by a full member of the Institute.

The archaeological watching brief took place during contractors' groundworks, and involved one archaeologist on site as required; to monitor works and to investigate and record any archaeological remains.

Ground reduction for the spillways was undertaken by a 5 tonne 360° mechanical excavator fitted with a toothless grading bucket under constant archaeological supervision. A smaller 3 tonne machine was used during the Sand Martin Bank works. When archaeological remains were exposed adequate time was given for investigation and recording, although every effort was made not to disrupt the contractors' programme.

The recording system followed the procedures set out in the Museum of London recording manual and the recording and drawing sheets used were directly compatible with those developed by the Museum. Archaeological deposits and features were investigated and recorded in stratigraphic sequence, and where appropriate finds and other dating evidence recovered. Archaeological deposits and features were recorded as appropriate on *proforma* trench sheets, and drawn in plan with measured sketches taken of sample sections. The investigations were recorded on a general site plan and related to the Ordnance Survey grid. The fieldwork record was supplemented as appropriate by digital photography.

Close liaison was maintained with the groundworks team to ensure a presence on site as and when necessary. The Client and the representatives of English Heritage were kept advised of the progress of the fieldwork.

5.2 Post-excavation work

The fieldwork was followed by off-site assessment and compilation of a report, and by ordering and deposition of the site archive.

Finds were treated in accordance with the appropriate guidelines, including the Museum of London's *'Standards for the Preparation of Finds to be permanently retained by the Museum of London'*. Finds and artefacts were retained and bagged with unique numbers related to the context record, although some material was discarded following assessment. Assessment was undertaken by appropriately qualified staff.

Copies of this report will be supplied to the Client, English Heritage and the local planning authority and the local studies library. A short summary of the fieldwork has been appended to this report using the OASIS Data Collection Form, and in paragraph form suitable for publication within the 'excavation round-up' of the *London Archaeologist*.

6 Results

The three watching brief areas are discussed below in the order to which they observed; refer to site location plan figs.2 & 3

6.1 The Lower Pond (fig.7)

The Lower Pen Pond watching brief took place over two visits, one on the 7th September to observe the topsoil strip and then a second on 14th September to observe areas of the reduced dig. The groundworks were located on the northwestern corner of the Lower Pen Pond and formed a large star-like shape approximately 61.5m E-W and 40.75m from northernmost to southernmost tip.

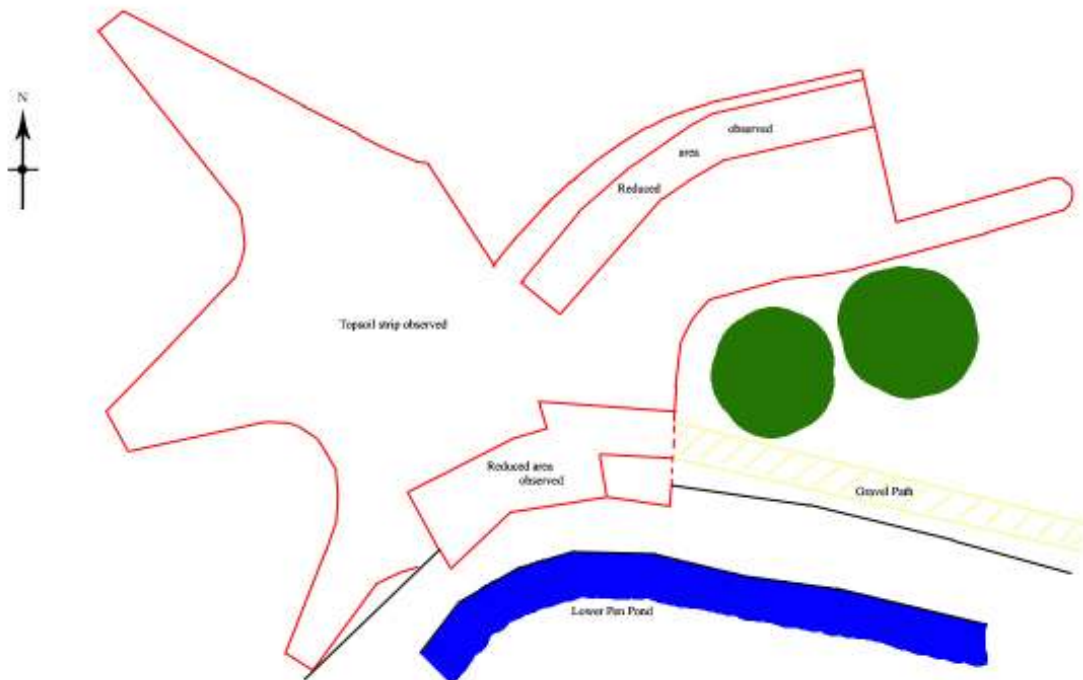


Fig.7: Plan of observations around Lower Pen Pond

The basic stratigraphy comprised a very thin layer of existing topsoil, (1), never more than 0.10m thick, but a rich, fine sandy silt in composition. Two worked flints were recovered from this surface. One took the form of a narrow flake / blade, and another was a retouched, bifacially worked, struck flint. They were not recovered from a feature and can only be roughly dated to the Neolithic / Bronze Age³. Their presence

³ Pers.comm. Jonathan Cotton

could intimate prehistoric activity within the local area as flint scatters have also been uncovered on sites just east of the Lower Pond⁴. They could just as likely have drifted down the hill amongst colluvium / hillwash material from other nearby locations. The topsoil overlay a mottled pale-brown-grey / orange-yellow sandy silt containing frequent inclusions of humic material, and sub-angular flints and rounded pebbles, (2), probably part hillwash and part alluvium from episodes of overspill from the adjacent Pen Pond. This in turn sealed the underlying geology, (3), of vivid orange-brown clay-silts with patches of siltier, grey material and also occasional iron staining, (presumably from chemical leeching). This was present from within 0.4m of the existing ground surface.



Fig.8: *Sample section through centre of dig area, (0.4m scale)*

The stratigraphy differed little across the site except under the gravelled pathways, where the existing gravels, forming the path, overlay a levelling layer of dark brown-grey silt-clay containing occasional Ceramic building material fragments and late post medieval pottery sherds, and glass (not retained). This material was more than likely imported from elsewhere off-site and used to raise the ground around the pond edge and form a more solid base for the path. The presence of this material truncated the topsoil and subsoil, and was placed directly atop the orange-brown ‘natural’.

⁴ Cotton, J, (1996), pg.74, fig.1



Fig.9: Section through pathway, facing N, (0.4m scale)



Fig.10: Topsoil strip of central area, made-ground in foreground forming base of existing gravel path



Fig.11: *Topsoil strip of Lower Pen ponds area taken from westernmost tip facing ESE*



Fig.12: *Flint blade / flake from topsoil of Lower Pen Pond area (10cm scale)*



Fig.13: *Flint blade / flake from topsoil of Lower Pen Pond area (10cm scale)*



Fig.14: *Bi-facially worked struck flint form topsoil of Lower Pen Pond area (10cm scale)*



Fig.15: *Bi-facially worked struck flint form topsoil of Lower Pen Pond area (10cm scale)*

The only archaeological features recorded were two linears, [5] and [7], observed below the topsoil and cutting the subsoil in the eastern half of the watching brief area, (see fig.16 below).

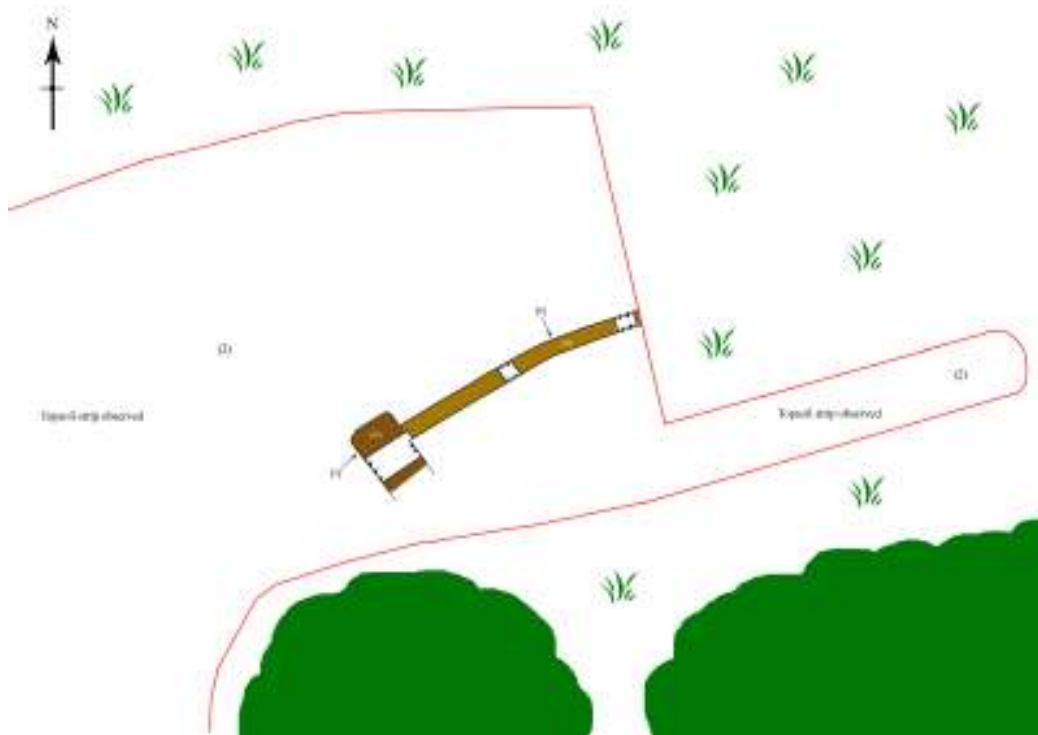


Fig.16: Linears [5] and [7] in eastern side of dig area. 1:200 scale

Linear [5] extended in a slight curve NE-SW from the eastern edge of excavation for approximately 5m and measured between 0.26-0.43m wide and between 0.10-0.16m deep. The section revealed a sharp sided, 45-60° sloping cut with a flat base. The cut was filled by (4), a medium compacted sandy-silt, mottled grey in hue with occasional water-smoothed pebbles and rooty inclusions from overlying topsoil.



Fig.17: Sections through linear [5]. Facing WSW, (0.2m scale)

Linear [5] was cut at a right angle, by linear [7], aligned N-S from the southern edge of the long eastern arm extension of the watching brief area. This feature was heavily truncated at the southern end, and appeared to terminate in a square ended cut, just beyond where it cut linear [5] to the north. It was visible for a length of 1.8m and measured 1.36m across by 0.08-0.13m deep. It had a similar fill to (4), in this case

context (6), which was a grey silty-clay with smoothed pebbles and rooty inclusions. This fill was within a wide, shallow cut, slightly deeper on the eastern side, and with steep, 45° sloping sides, (see figs.18 and 19).



Fig.18: North facing section through linear [7] (1m scale)

No dating evidence was recovered from fills (4) or (6), but the fact they appeared to cut the subsoil suggests a relatively later date. Neither was there enough of them remaining to suggest their function, though it is possible they may have been earlier runoff channels / drainage gullies, associated with the nearby pen pond. Or perhaps [7] was the end of a former furrow associated with earlier cultivation of the area pre-17th creation of the deer park, though the absence of other visible, similar features, would make this less plausible.



Fig.19: *Linears [5] and [7], facing E*

6.2 Upper Pen Pond (fig.20)

The Upper Pen Pond was also visited on two occasions on the 30th September to monitor the topsoil strip, and on the 3rd October to view the reduced dig. It was located either side of the gravelled path on the north-west corner of the pond and formed a somewhat trapezoid shape, approximately 28m N-S by 31.75m E-W, with a long thin eastern arm extending in a curve approximately 52m long by 2.25m wide, to the east.

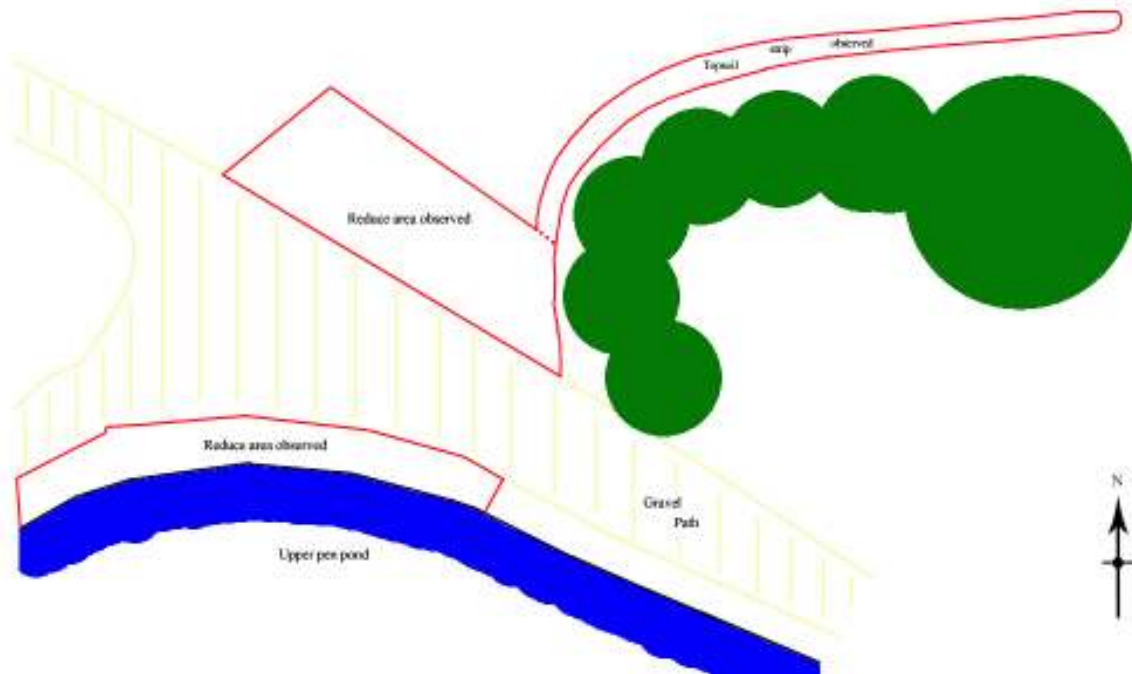


Fig.20: Plan of Upper Pen Pond observations

The stratigraphy was very similar to that observed in the Lower Pen Pond area. A thin layer of topsoil, no thicker than 0.14m, and in some places as thin as 0.05m, overlay a rich, pale-brown-yellow sandy-silt subsoil up to 0.2m thick, containing occasional small rounded pebbles and sub-angular flints. This subsoil represented a mix of hill-washed material from further up slope to the west, and alluvial deposits from episodes of overspill from the adjacent Pen Pond.

As with the Lower Pen Pond the only variation was over the pathed areas where the existing gravels overlay a made ground deposit, but this time the made ground looked to have been dumped directly over, and thus sealing the former topsoil. This buried topsoil was up to 0.18m thick in places.



Fig.21: *Sample section through eastern arm, facing W, (0.2m scale)*



Fig.22: *Working shot by Upper Pen pond, facing E along pond edge*



Fig.23: Section through pathed area along pond edge, alluvial silty-clays below gravels, (0.2m scale)



Fig.24: Section along edge of path and grassed area, facing SW, note buried topsoil at base of section, (0.5m scale)



Fig.25: Reduced dig on grassed area, north of path by Pen Pond. Facing E



Fig.26: Reduced dig over grass, facing W

6.3 Sand martin bank (fig.3)

The ground reduction for the base of the sand martin bank was monitored on afternoon of the 17th October. The reduced area formed a rough rectangle measuring approximately 7m long, SW-NE, and 3m wide NW-SE. The material removed included the humic and waterlogged topsoil of the reed bed which was up to 0.15m thick and 0.30m of underlying compacted grey clay-silt alluvium containing infrequent medium sized sub-angular flints and pebbles. This formed a solid enough base for the construction of the sand martin bank and so no further reduction took place.

Water ingress from the adjacent Pen Pond prevented in-depth recording. However no archaeologically significant features or deposits were observed.



Fig.27: Pre-ex shot of proposed area of Sand martin Bank, facing E



Fig.28: Section across southern edge of reduced dig. Facing N, (0.6m scale)



Fig.29: Reduced dig facing W, red pins denote outline of proposed bank

7 Conclusions

The groundworks observed during the archaeological watching brief at the Upper and Lower Pen Ponds revealed limited significant archaeology. Due to the low level development of the surrounding area pre-1637, and even less after the enclosure of the deer park, the chances of substantial post-medieval remains or deposits being encountered was minimal. The Pen Ponds themselves are thought to be relatively young in age, dating to the later 17th/early-18th century, and any *in situ* archaeology present during their construction would have been heavily disturbed if not completely destroyed.

Therefore the stratigraphy encountered was as to be expected; an undisturbed topsoil, overlying a naturally occurring, largely sterile subsoil, over underlying 'natural' geology in the spillway watching brief, and topsoil over alluvium in the area of the Sand martin bank.

The two linear features by the Lower Pen Pond remain somewhat ambiguous, due to their lack of dating evidence and incompleteness within the area, but cannot be said to be of major archaeological significance. More interesting is the presence of worked flint within the lower levels of the topsoil, but without a more secure context their usefulness is also limited.

In terms of the archaeological research questions outlined in section 4, it can be said that the watching brief was largely successful in answering them;

- Prehistoric activity is apparent from the two worked flints recovered from the topsoil, which may have been deposited locally or from further afield, but was not *in situ*, by the Lower Pond.
- There was no obvious evidence of Roman or medieval activity in the immediate area.
- It was established that the pathways around the pen ponds are laid over made ground in the late post-medieval period.
- Archaeology, where present, survives within 0.15m of the ground surface.
- The natural geology occurs within 0.4m of the existing ground surface in the Lower Pen Pond area, and within 0.55m in the area of the Upper Pen Ponds.
- The observed geology largely follows the 1998 survey, being a mix of colluvium and alluvial silts containing some probable river gravels.

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Appendix A: OASIS data collection form

OASIS ID: compassa1-112289

Project details

| | |
|--|--|
| Project name | A series of Archaeological Watching Briefs on land adjacent to the Upper and Lower Pen Ponds, Richmond Park |
| Short description of the project | Between 7th September and 17th October 2011 a series of archaeological watching briefs were conducted in Richmond Park, focusing on groundworks associated with the construction of new spillways on the north-western corners of the Lower and Upper Pen ponds, and a new artificial sand martin bank on the south-east corner of the Upper Pen Pond. Archaeologically significant features were limited to two undated linears, and two worked flints recovered from the topsoil in the area of the lower pond. The flints comprised a bi-facially worked / struck flint with signs of retouching and a narrow flake / blade implement, roughly dated to the Neolithic / Bronze Age. The rest of the spillways watching brief revealed a thin layer of topsoil overlying an equally thin subsoil atop 'naturally occurring' silt-clay geology. The only variation on this theme was when groundworks crossed the areas of gravel path where the existing gravel surface overlay a deposit of made ground. This imported material sealed a buried topsoil in places, or otherwise directly overlay the 'natural', truncating any previous ground surfaces entirely. The sand martin bank was situated in the reed bed by the pond's edge, and water ingress prevented in depth recording. However, the uncovered stratigraphy comprised the humic / organic topsoil/ reed bed material overlying a compacted, grey, alluvial clay-sand. No archaeologically significant deposits were observed. |
| Project dates | Start: 07-09-2011 End: 17-10-2011 |
| Previous/future work | No / No |
| Any associated project reference codes | 11/0766/FUL - Planning Application No. |
| Any associated project reference codes | 11/2070/FUL - Planning Application No. |
| Type of project | Recording project |

| | |
|--------------------|---|
| Site status | National Nature Reserve |
| Site status | Area of Archaeological Importance (AAI) |
| Site status | English Heritage List of Parks and Gardens of Special Historic Interest |
| Current Land use | Woodland 6 - Parkland |
| Monument type | GULLY Uncertain |
| Monument type | GULLY Uncertain |
| Significant Finds | RETOUCHED FLAKE Late Neolithic |
| Significant Finds | RETOUCHED FLAKE Late Neolithic |
| Investigation type | 'Watching Brief' |
| Prompt | Planning condition |

Project location

| | |
|-------------------|--|
| Country | England |
| Site location | GREATER LONDON RICHMOND UPON THAMES RICHMOND UPON THAMES The Pen Ponds, Richmond Park |
| Study area | 1.90 Hectares |
| Site coordinates | TQ 1998 7313 51.4439352581 -0.273391649433 51 26 38 N 000 16 24 W Point |
| Site coordinates | TQ 1971 7236 51.4370713366 -0.277535718672 51 26 13 N 000 16 39 W Point |
| Height OD / Depth | Min: 0.35m Max: 0.60m |

Project creators

| | |
|----------------------|---------------------|
| Name of Organisation | Compass Archaeology |
|----------------------|---------------------|

| | |
|------------------------------|---|
| Project brief originator | English Heritage/Department of Environment |
| Project design originator | Compass Archaeology |
| Project director/manager | Compass Archaeology |
| Project supervisor | James Aaronson |
| Type of sponsor/funding body | Contractor and Charity |
| Name of sponsor/funding body | The Royal Parks, Taylor Woodrow & Thames Landscape Strategy |

Project archives

| | |
|----------------------------|---|
| Physical Archive recipient | Museum of London Archive |
| Physical Contents | 'Worked stone/lithics' |
| Digital Archive recipient | Museum of London Archive |
| Digital Contents | 'other' |
| Digital Media available | 'Images raster / digital photography','Survey','Text' |
| Paper Archive recipient | Museum of London Archive |
| Paper Contents | 'other' |
| Paper Media available | 'Notebook - Excavation',' Research',' General Notes','Plan','Report','Survey ','Unpublished Text','Map','Context sheet','Drawing' |

**Project
bibliography 1**

| | |
|-------------------------------|--|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | A series of Archaeological Watching Briefs on land adjacent to the Upper and Lower Pen Ponds, Richmond Park |
| Author(s)/Editor(s) | Aaronson, J |
| Date | 2011 |
| Issuer or publisher | Compass Archaeology |
| Place of issue or publication | 5-7 Southwark Street |
| Description | Short report of the results of the watching brief. Includes historical, archaeological, geological and topographical background of the site, details of the methodology used, photographs and descriptions of all trenches monitored, and brief conclusions reached. |

| | |
|------------|---|
| Entered by | James Aaronson (james.aaronson@gmail.com) |
| Entered on | 20 October 2011 |

Appendix B: London Archaeologist Summary

Site Address: Land adjacent to the Upper and Lower Pen Ponds, Richmond Park, London Borough of Richmond-upon-Thames
Project type: Watching Brief
Dates of Fieldwork: 7th September – 17th October 2011
Site Code: RCH11
Site Supervisor: James Aaronson
NGR: TQ1998 7313 (Point between two spillways)
TQ1971 7236 (Sand martin bank)
Funding Body: Taylor Woodrow (spillways)
Thames Landscape Strategy (Sand martin bank)

Between 7th September and 17th October 2011 a series of archaeological watching briefs were conducted in Richmond Park, focusing on groundworks associated with the construction of new spillways on the north-western corners of the Lower and Upper Pen ponds, and a new artificial sand martin bank on the south-east corner of the Upper Pen Pond. These works related to two separate planning applications; nos. 11/0766/FUL and 11/2070/FUL respectively, and were commissioned by The Royal Parks, in response to recommendations by English Heritage.

Archaeologically significant features were limited to two undated linears, and two worked flints recovered from the topsoil in the area of the lower pond. The flints comprised a bi-facially worked / struck flint with signs of retouching and a narrow flake / blade implement, roughly dated to the Neolithic / Bronze Age. The rest of the spillways watching brief revealed a thin layer of topsoil overlying an equally thin subsoil atop ‘naturally occurring’ silt-clay geology.

The only variation on this theme was when groundworks crossed the areas of gravel path where the existing gravel surface overlay a deposit of made ground. This imported material sealed a buried topsoil in places, or otherwise directly overlay the ‘natural’, truncating any previous ground surfaces entirely.

The sand martin bank was situated in the reed bed by the pond’s edge, and water ingress prevented in depth recording. However, the uncovered stratigraphy comprised the humic / organic topsoil/ reed bed material overlying a compacted, grey, alluvial clay-sand. No archaeologically significant deposits were observed.