



Northamptonshire Archaeology

An archaeological watching brief in the north-
western compartment of the Tiltyard Garden
Hampton Court Palace
February 2013



Northamptonshire Archaeology
Bolton House
Wootton Hall Park
Northampton NN4 8BN
t. 01604 700493 f. 01604 702822
e. sparry@northamptonshire.gov.uk
w. www.northantsarchaeology.co.uk



**Northamptonshire
County Council**

John Walford

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STAFF

Project Manager: Adam Yates BA, MifA
Fieldwork: John Walford MSc

Text and illustrations: John Walford
Historical background: Brian Dix BA, FSA
The architectural fragment: Tim Upson-Smith BA, PG Dip

QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman	<i>PC</i>	20/08/2013
Verified by	Adam Yates	<i>AY</i>	20/08/2013
Approved by	Andy Chapman	<i>AC</i>	20/08/2013

HAMPTON COURT PALACE, TILTYARD GARDEN

OASIS REPORT FORM

PROJECT DETAILS		OASIS No. 157267
Project name	An archaeological watching brief in the north-western compartment of the Tiltyard Garden, Hampton Court Palace	
Short description	Northamptonshire Archaeology was commissioned by Historic Royal Palaces to carry out a watching brief during the removal of tarmac from a former tennis court in the Tiltyard Garden, Hampton Court Palace. The watching brief identified no features pre-dating the 20th century. One dressed and shaped architectural fragment, possibly from a windowsill, was recovered from amongst a modern deposit of rubble.	
Project type	Watching brief	
Site status	Scheduled Monument, No LO83	
Previous work	Geophysical survey (Butler and Dix 2011)	
Current Land use	Garden	
Future work	Not known	
Monument type/ period	Post medieval garden, modern tennis court	
Significant finds	Architectural masonry fragment	
PROJECT LOCATION		
County	Greater London / Surrey	
Site address	Hampton Court Palace, KT8 9AU	
Study area	c 0.1ha	
OS grid reference	TQ 1558 6880	
Height OD	c 11 m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology (NA)	
Project brief originator	Historic Royal Palaces	
Project Design originator	NA	
Director/Supervisor	John Walford	
Project Manager	Adam Yates	
Sponsor or funding body	Historic Royal Palaces	
PROJECT DATE		
Start date	12 February 2013	
End date	19 August 2013	
ARCHIVES	Location	Content
Physical	Historic Royal Palaces, Hampton Court Palace	One architectural fragment. Photographs
Paper		Site record sheets and drawings
Digital		Digital photographs
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	An archaeological watching brief in the north-western compartment of the Tiltyard Garden, Hampton Court, February 2013	
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**AN ARCHAEOLOGICAL WATCHING BRIEF IN THE NORTH-
WESTERN COMPARTMENT OF THE TILTYARD GARDEN,
HAMPTON COURT PALACE
FEBRUARY 2013**

ABSTRACT

Northamptonshire Archaeology was commissioned by Historic Royal Palaces to carry out a watching brief during the removal of tarmac from a former tennis court in the Tiltyard Garden, Hampton Court Palace. The watching brief identified no features pre-dating the 20th century. One dressed and shaped architectural fragment, possibly from a windowsill, was recovered from amongst a modern deposit of rubble.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Historic Royal Palaces to conduct a watching brief during the removal of a tarmac surface from the north-western compartment of the Tiltyard Garden, Hampton Court (Scheduled Monument No. LO83; NGR TQ 1558 6880; Fig 1). The fieldwork took place on 12 – 15 February 2013. It was performed under scheduled monument consent (English Heritage reference S00052584) and in accordance with a method statement for the project (NA 2013).

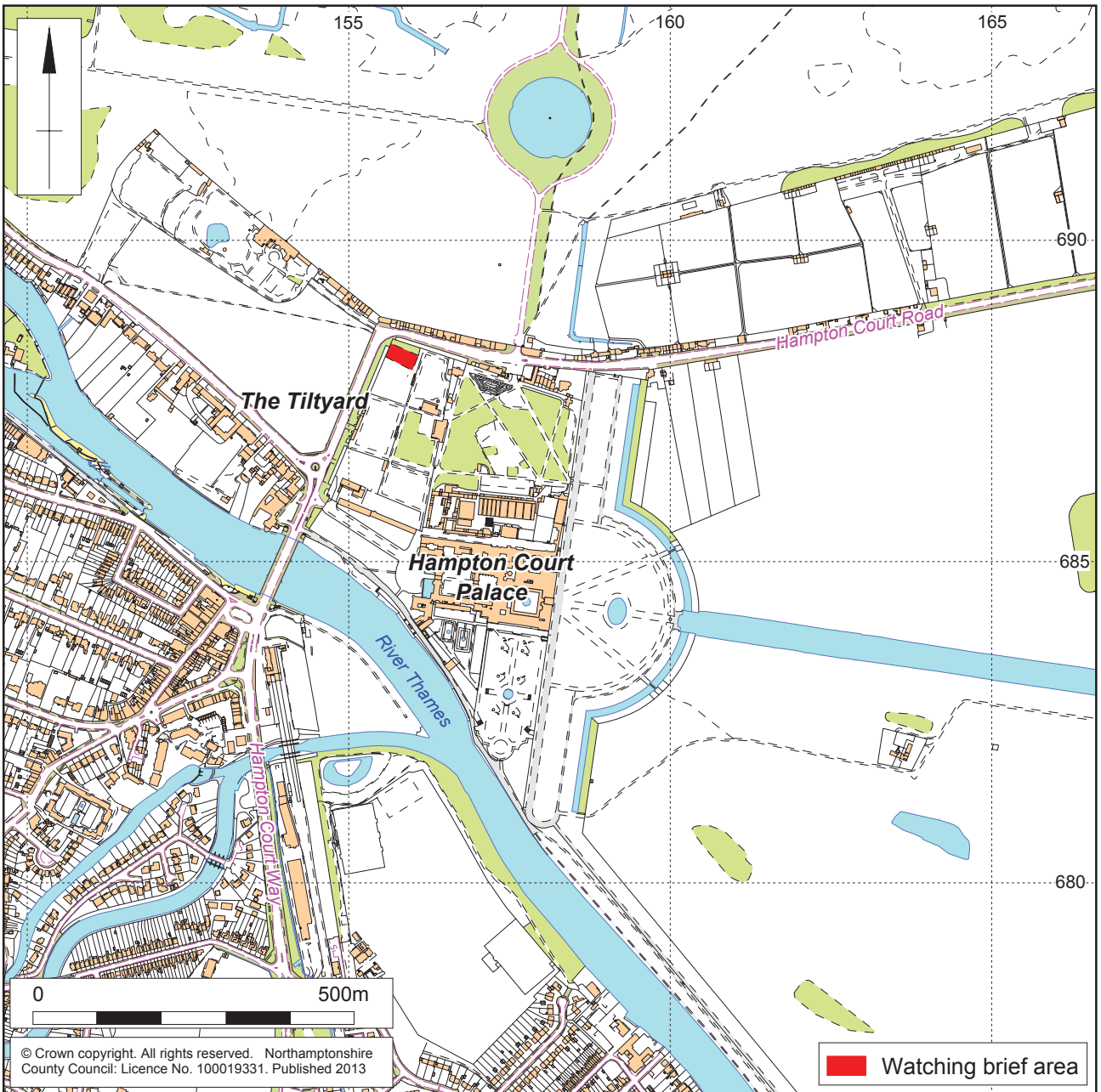
2 TOPOGRAPHY AND GEOLOGY

The watching brief was conducted in the north-western compartment of the Tiltyard Gardens, in the north-western corner of the palace grounds (Fig 1). The garden stands at an elevation of c11m aOD, and is underlain by alluvial brickearth and First Terrace (Kempton Park) gravels above Thames Group London Clay (BGS 2011).

Until a few years ago, the north-western compartment was occupied by a block of six tarmac-surfaced tennis courts. When these fell into disuse, the majority of the tarmac was removed and the ground re-turfed, but a rectangular area of tarmac, measuring c 46m x 24m, was retained in the northern half of the compartment. It was this area which was the subject of the watching brief.

3 HISTORY AND PREVIOUS ARCHAEOLOGY by Brian Dix

The Tiltyard was created by King Henry VIII on the western part of the Great Orchard in 1537 and whilst its earliest recorded use for a tournament does not occur for another twenty years, he presumably hosted such events there in addition to using the space for training and other exercise (Gregory 2011, 14-16). A series of towers, comprising two along the eastern edge and three others located more centrally within the Tiltyard, may have provided guest or staff accommodation as well as being used for banquets and related entertainments (ibid 16-18). They were shown in Wyngaerde's view of the north side of Hampton Court c 1558 (ibid, fig 02) and further illustrated for Cosimo III de Medici in 1669 (ibid, fig 05), by which time the Tiltyard had been turned into pasture. Most of the towers had disappeared by the end of the



Scale 1:10,000 (A4)

Site location Fig 1

century (ibid 19-21). Remains of the north-east tower have been located by archaeological trial excavation together with the partially robbed-out east wall of the one at the southern end of the central group, suggesting that those in the middle probably lay to the east of the spine wall of the later gardens (Sykes and Ford 2010: trenches 4 and 6, especially discussion on pages 26 and 28).

The Tiltyard was turned into a kitchen garden and divided into six compartments as a result of partitioning early on in the reign of King William III and Queen Mary. It continued to supply food for the royal household until the mid-18th century but only intermittently thereafter, following the lease of the ground to local market gardeners. This rental arrangement continued until the 1920s when the ground was converted into recreational and flower garden areas for visitors to enjoy (Longstaffe-Gowan 2005, 136-45; Gregory 2011, 22-9). The layout of the individual gardens up to that time can be traced through a series of historical maps and views, which show an evolving pattern of perimeter and cross paths, borders, and variously worked or dug-over areas (cf Gregory 2011, figs 06-15).

Previous geophysical survey and limited archaeological trial excavation show that some paths and other elements of the former kitchen gardens survive beneath modern levelling and cultivation deposits (Sykes and Ford 2010; Butler and Dix 2011).

4 METHODOLOGY

The tarmac and underlying hardcore layer were stripped from the site by a mechanical excavator fitted with a toothless ditching bucket. The exposed surface was examined for archaeological features and artefacts, and was hand-cleaned where necessary to aid interpretation or recording.

Recording was in accordance with the WSI for the project (NA 2013) and followed standard Northamptonshire Archaeology procedures as described in the *Fieldwork Manual* (NA 2011). Deposits were described on *pro-forma* sheets to include measured and descriptive details of the context, its relationships and interpretation. Photography was with 35mm black and white film and colour slides, supplemented with digital images.

All works were conducted in accordance with the Institute for Archaeologists' *Code of Conduct* (IfA 2010) and *Standard and guidance for an archaeological watching brief* (IfA 2008). The project was undertaken in accordance with English Heritage, *Management of Research Projects in the Historic Environment*, MoRPHE (EH 2006).

5 THE EXCAVATED EVIDENCE

5.1 The tarmac surface

The former tennis court surface comprised an upper layer of tarmac (100), and a lower layer of hardcore (101), with respective depths of c 0.04m and c 0.20m. The hardcore was an unconsolidated dark bluish-grey deposit consisting of small fragments of slag or clinker in a gritty matrix. It contained a single artefact: a copper alloy (?brass) rose from a watering can.

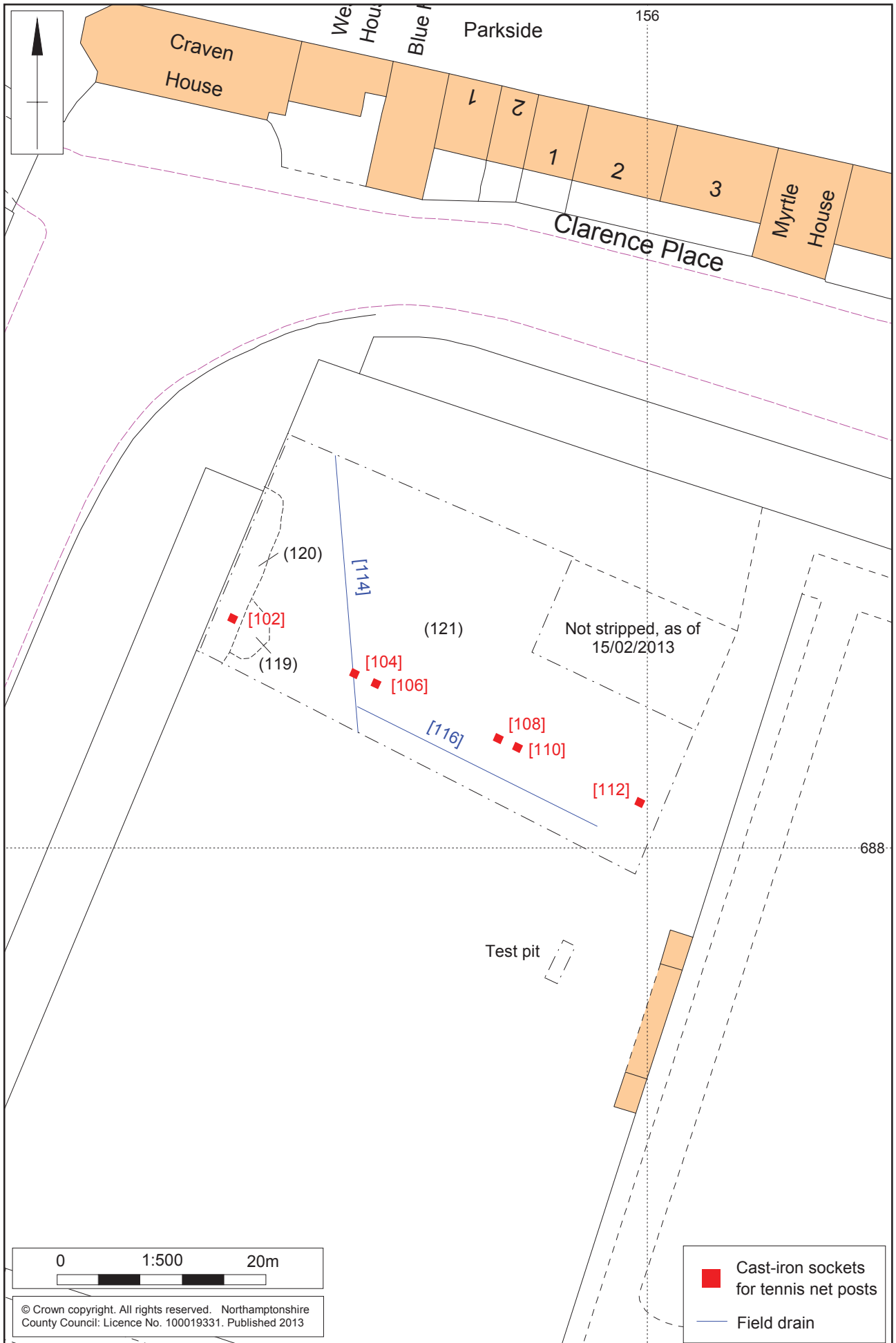
The removal of the tarmac and hardcore exposed a firm, dark grey, gritty silty loam (121), which had an oxidized, orange-brown upper surface and contained locally variable inclusions of flint gravel, small pieces of brick, and charcoal flecks. This appeared to be a levelling deposit using imported soil, extending across all but the westernmost part of the watching brief area. It produced a small assemblage of 19th to 20th century pottery and glass, including sherds of stoneware, china, white-glazed earthenware and terracotta.

At the western end of the stripped area, beneath hardcore layer (101), there was a layer of pinkish red sandy grit with c 20% pebble-sized inclusions of slag and clinker, 0.05m deep (120). The finds from this context comprised 19th to 20th century stoneware and white-glazed earthenware sherds. Much of this context had been machined away together with the overlying hardcore, but the surviving patches suggested that it once formed a path surface, about 2m wide, along the western edge of the garden.

A series of cast-iron sockets were present for containing the posts that formerly held up the individual tennis nets. Five were set into square pits cut through levelling layer (121), and a sixth was in a pit cutting path surface (120). Each socket was square-sectioned, 0.12m wide, and was marked SLAZENGERS L^{TD} LONDON on its upper face (Figs 3 & 4). They were arranged in an east-west line, with regular spacings of 12.8m for net length (14 yards) and a c 2m gap between adjacent nets (Figs 2 & 3). Five of the socket-pits, [102], [104], [106], [108] and [112] were concrete-filled and had dimensions of c 0.8m across and 0.35m deep. The other [110] was filled with a softer deposit of mortar, and was only 0.6m across.

When the concrete pad was removed from socket-pit [104], a ceramic field drain was found to be adhering to its base. The drain (115) was tubular with a ribbed outer surface, and occupied a cut [114] which could be traced as a line of slight subsidence in the surface of (121). A similar line of subsidence indicated that another drain cut [116] approached [114] from the east (Figs 2 & 3).

Beneath the path surface (120) there was a mid greyish-brown sandy loam with minor inclusions of gravel and brick fragments and sparse flecks of coal (118). This appeared to be a garden soil, and produced one fragment of clay tobacco pipe stem and one sherd of green bottle glass. Its lateral extent was not well defined, as it merged eastwards into the levelling deposit (121). Nor was its full thickness determined, although an exposure in the side of socket-pit [102] showed that it must be in excess of 0.35m deep.



1:500 (A4)

Overall site plan Fig 2

In the area where garden soil (118) and levelling deposit (121) merged, there was a localised spread of brick rubble and other debris (119), including a fragment of dressed limestone masonry (Fig 6). Although the rubble itself was not very modern, other finds from the same context, including fragments of glass bottles and a highly corroded sheet of zinc alloy, were evidently of 20th century date.



Cast-iron sockets [110] and [108] formerly containing the posts that held up the tennis nets and field drain cuts [114] and [116] (arrowed), looking west Fig 3



Cast-iron socket formerly containing a post that held up a tennis net
(dimensions 120mm x 120mm) Fig 4

5.2 The test pit

A small test pit was machine-excavated to the south of the main watching brief area to investigate the quality of the previous lawn re-instatement works (Fig 2). Particular aims were to confirm the presence of residual hardcore beneath the turf and to determine the cause of two zones of differential parching in the lawn.

The test pit was dug across the junction of the two zones, and showed that each was underlain by a layer of clinker and slag hardcore which represented the basal make-up of the former tennis court. There was a distinct contrast between the northern half of the trench, where the hardcore lay 0.35m below the turf and was overlain by a dark brown loamy topsoil, and the southern half, where it lay only 0.2m below the turf and was overlain by a sandy silt with abundant brick and mortar fragments. The transition from one zone to another was moderately sharp.



Test pit, looking east towards pavilion Fig 5

6 FINDS

The majority of the finds recovered from the watching brief were of modern (19th to 20th century) date and of very little archaeological significance. All, apart from the masonry fragment, have been discarded by agreement with the client, but digital photographs have been taken and will be retained in the site archive.

6.1 Pottery

The pottery from the site was all of 19th to 20th century date and represented a mix of different vessel types. Two pieces of terracotta flowerpots came from context (119), and a third from (118). A fragment of a stoneware bottle came from context (120), and contexts (118), (119), and (121) all produced fragments of china and white-glazed earthenware. Some of the latter bore traces of floral patterns and other decoration, and one sherd had an impressed 'MINTON' maker's mark.

6.2 Glass

Six fragments of bottle-glass were recovered from contexts (118), (119) and (121). All were of late 19th to early 20th century date. The most distinctive and noteworthy was a light green bottle base, 80mm in diameter, marked RICKETTS BRIS [TOL].

6.3 Clay tobacco pipes

Two 19th century clay tobacco pipe stem fragments were recovered. One was from context (118) and the other was unstratified. Both were of similar size, with an external diameter of 7mm and a bore of 2mm.

6.4 Metalwork

Three items of metalwork were recovered from the site. An iron cleat, 100mm long, came from the surface of context (121), a highly fragmented sheet of zinc alloy came from context (119), and a crushed and corroded copper alloy (?brass) rose from a watering can came from context (101). The rose was 120mm in diameter and of two-piece construction with a convex back and a flat front. Traces of a silvery surface coating (possibly tin) were apparent.

6.5 Bricks

The bricks in context (119) were unfrosted and had soft orange-red fabrics. One intact example had dimensions of 230mm x 115mm x 85mm. Two other fragments had dimensions of 100mm x 70mm x >200mm, and 35mm x >170mm x >120mm. Small fragments of brick and tile were present in other contexts but did not merit detailed recording.

6.6 Architectural masonry by Tim Upson-Smith

An architectural fragment was recovered from context (119). The fragment is broadly rectangular although it is incomplete in length (Fig 6). It is cut from fine grained

limestone and measures 220mm wide by 130mm deep and 400mm long. On the unbroken end of the stone there is a socket for joining the piece to another. On the underside of the piece there is a narrow channel running the length of the stone, which is likely to be a drip gully suggesting that the fragment may have been part of a window sill. There is no indication of date for the piece.



The architectural fragment (scale interval 10mm) Fig 6

7 CONCLUSION

The watching brief identified the remains of a tennis court, two field drains and a possible perimeter path, all of which appeared to be of 20th century date. No earlier features were observed, and the only find of significance was a re-deposited piece of architectural masonry, believed to be part of a windowsill.

It is likely that the absence of pre-20th century remains is due to the shallow depth to which the groundworks penetrated. Investigations elsewhere in the Tiltyard Garden have shown that earlier deposits and features are buried more deeply (Sykes and Ford 2010, 33-6).

BIBLIOGRAPHY

BGS 2011 *Online Geology Mapping* www.bgs.ac.uk/geoindex.htm ; British Geological Survey accessed November 2011

Butler, A, and Dix, B, 2011 *Archaeological Geophysical Survey of the Wilderness and Tiltyard Gardens at Hampton Court Palace Richmond, Surrey November 2011* Northamptonshire Archaeology report, **11/270**

EH 2006 *Management of Research Projects in the Historic Environment, MoRPHE*, English Heritage

Gregory, A, 2011 *Hampton Court Palace, The Tiltyard and Wilderness: Desk Based Assessment Report and Statement of Significance*, Historic Royal Palaces

IfA 2008 *Standard and guidance for an archaeological watching brief*, Institute for Archaeologists

IfA 2010 *Code of Conduct*, Institute for Archaeologists

Longstaffe-Gowan, T, 2005 *The Gardens and Parks at Hampton Court Palace*, Frances Lincoln Ltd, London

NA 2011 *Archaeological Fieldwork Manual*, Northamptonshire Archaeology

NA 2013 *Method statement for archaeological watching brief: Removal of the tennis court: North-west compartment of the Tiltyard Gardens, Hampton Court Palace, KT8 9AU*, Northamptonshire Archaeology

Sykes, D, and Ford, B, 2010 *Hampton Court Palace, Tiltyard and Bowling Alley (Time Team Special): Archaeological Evaluation Report*, Oxford Archaeology South, No. **4243**.



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Bolton House
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