

**An Archaeological Evaluation at Bushy House, former National Physical
Laboratories, London Borough of Richmond upon Thames.**

Site Code: BUO 04

Central National Grid Reference: TQ 1560 7050

**Written and Researched by Helen Clough
Pre-Construct Archaeology Limited, June 2004**

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CONTENTS

1	Abstract	1
2	Introduction	2
3	Geography and Topography	4
4	Historical and Archaeological Background	5
5	Archaeological Methodology	6
6	Archaeological Sequence	8
7	Conclusion	10
8	Acknowledgements	11
Illustrations	Figure 1 Site Location	3
	Figure 2 Trench Location	7
	Figure 3 Sections 1 + 2	9
Appendices		
Appendix 1	Context Descriptions	12
		13
Appendix 2	Sites & Monuments Record Form	

1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological field evaluation undertaken by Pre-Construct Archaeology at Bushy House, former National Physical Laboratories, London Borough of Richmond upon Thames. The central National Grid Reference is TQ 1560 7050. The field evaluation was undertaken on 7th June 2004 and the commissioning client was DTi.
- 1.2 The evaluation comprised of two trenches. Trench 1 measured 1.80m x 5.50m and Trench 2 measured 1.80m x 10.00m.
- 1.3 The evaluation identified the presence of natural gravel and brickearth and modern overburden. No archaeological deposits were encountered.

2 INTRODUCTION

- 2.1 This archaeological evaluation forms part of a number of archaeological investigations within the grounds of Bushy House. Previous work has included an archaeological desk based assessment¹ and an archaeological evaluation and excavation²
- 2.2 The site lies directly to the east of Bushy Road, and to the south of a new housing development. To the east of the site is a sports ground. The proposed development is centred at TQ 1560 7050.
- 2.3 The site was previously occupied by buildings relating to the National Physical Laboratory, built in the earlier 20th century. These have been demolished in advance of the new development.
- 2.4 The evaluation aims to satisfy the objectives of the London Borough of Richmond upon Thames, which fully recognises the importance of the buried heritage for which they are the custodians.
- 2.5 The site of the proposed development lies in an area that has been proven to contain significant archaeological remains.
- 2.6 There are no Scheduled Ancient Monuments within the development site.

¹ Hawkins, D., 1997 'An Archaeological Desk Based Assessment of land at The National Physical Laboratory, Teddington' CgMS unpublished report December 1997

² Divers, D., 1998 'Archaeological Evaluation and Excavation at the National Physical Laboratories, Teddington, London Borough of Richmond upon Thames' PCA unpublished report

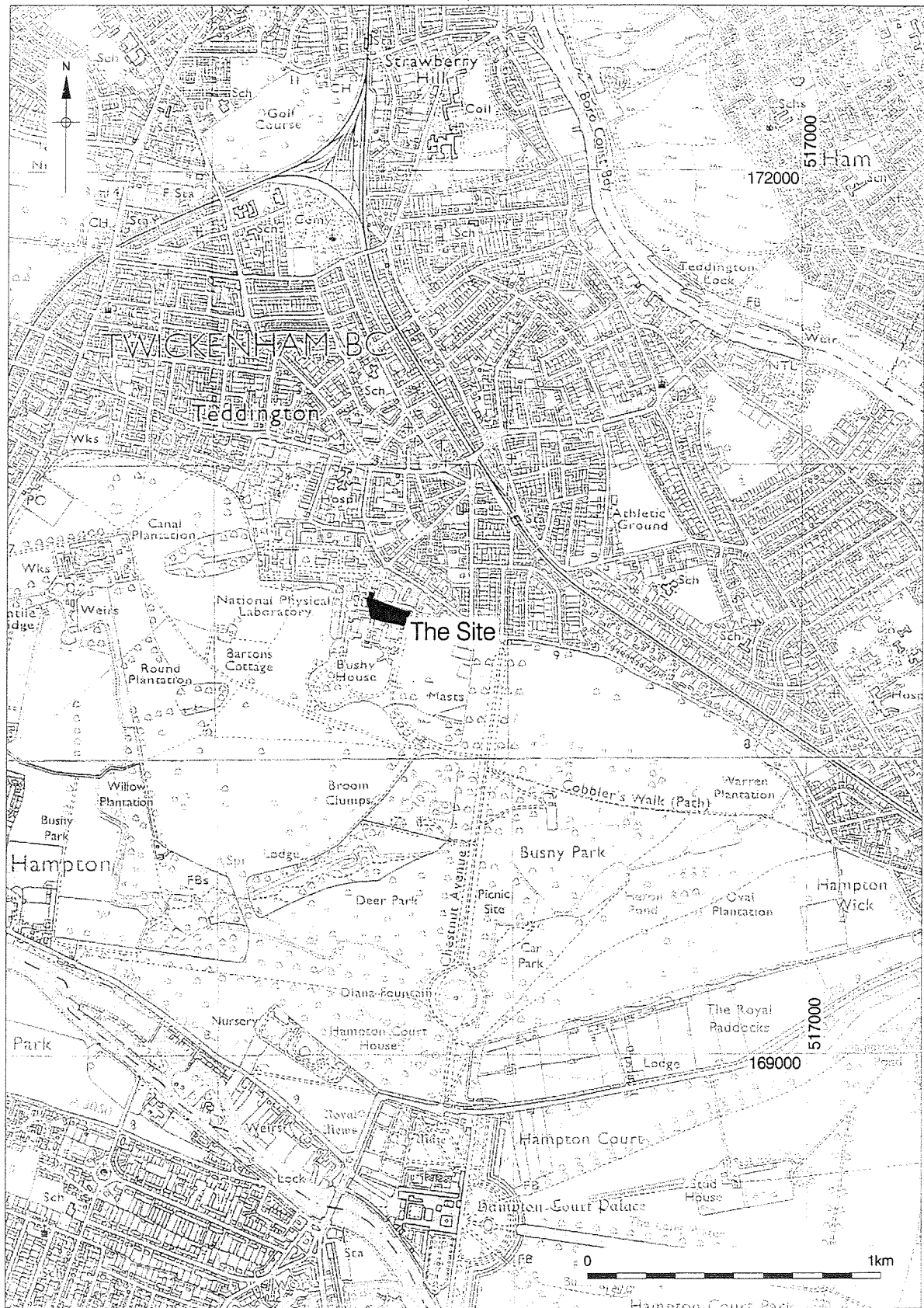


Figure 1
 Site Location
 1:20,000

3 GEOLOGY AND TOPOGRAPHY

3.1 GEOLOGY

- 3.1.1 The site is located on flood plain (first level River Terrace) gravels, which in turn overlay the London Clay. A large amount of gravel extraction is known to have taken place within the vicinity of Bushy House³

3.2 TOPOGRAPHY

- 3.2.1 The site is generally level at c. 8.50m OD

³ Hawkins, D., 1997 'An Archaeological Desk Based Assessment of land at The National Physical Laboratory, Teddington' CgMS unpublished report December 1997

4 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 4.1 The historical and archaeological background of the area has been discussed elsewhere⁴. The results are summarised below.
- 4.2 There is little archaeological evidence for the Palaeolithic, Mesolithic and Neolithic periods in the vicinity of Bushy House. However, Bronze Age activity was encountered during the earlier phase of this project, to the east of the current evaluation. Several archaeological features containing pottery from the late Bronze Age or early Iron Age were identified. Other Bronze Age activity in the area comprised a large burial mound on Sandy Lane, which was excavated in the 19th century and found to contain two early Bronze Age cremation burials⁵.
- 4.3 No evidence for the Iron Age or Roman periods has been identified in the vicinity of Bushy House.
- 4.4 A possible Saxon burial was recorded within the Bronze Age burial mound, but no other Saxon activity has been noted in the area.
- 4.5 During the medieval period the area was used for arable and pasture land. The land was emparked in the post-medieval period and a lodge built, which was later replaced by the current Bushy House, the construction of which was ordered by Charles II. In 1900, the house and its surrounding park were granted to the Royal Society by Queen Victoria to be adapted for use as the National Physical Laboratory.

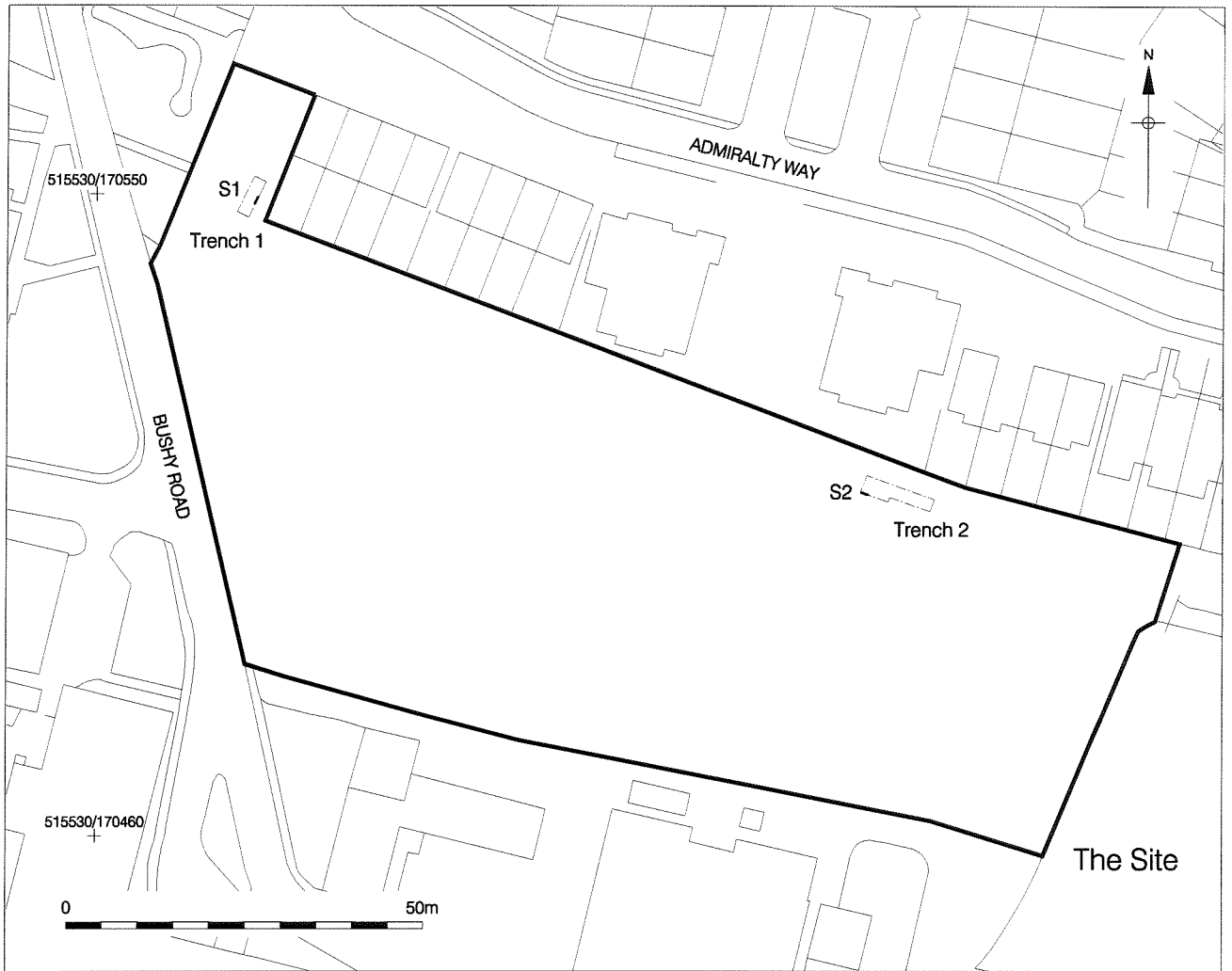
⁴ Hawkins, D., 1997 'An Archaeological Desk Based Assessment of land at The National Physical Laboratory, Teddington' CgMS unpublished report December 1997

⁵ Divers, D., 1998 "Archaeological Evaluation and Excavation at the National Physical Laboratories, Teddington, London Borough of Richmond upon Thames' PCA unpublished report

5 ARCHAEOLOGICAL METHODOLOGY

- 5.1 The evaluation was conducted in accordance with the archaeological method statement⁶.
- 5.2 Two trenches were excavated, and these trenches were initially proposed to be 20m length x 1.80m width. However, Trench 1, aligned north-south, was discovered during excavation to be located in an area heavily truncated by the demolition of a previous building, and the natural gravel deposits had been reduced to 1.40m below ground level. Therefore, this trench was reduced in length to 5m. During the excavation of Trench 2, undisturbed deposits were encountered at the eastern end of the trench, but the western end had been heavily disturbed by modern intrusions and therefore, the eastern end of the trench was widened to 2m and the overall trench length reduced to 10m.
- 5.3 The trenches were excavated with a JCB mechanical excavator with a flat bladed ditching bucket, under archaeological supervision. Excavation continued until the top of the natural gravel was revealed in Trench 1 and the natural brickearth was revealed in Trench 2.
- 5.4 As no archaeological deposits were encountered, there was no further excavation by hand, other than for examination and recording.
- 5.5 For each trench a photographic record was made (colour), a plan was drawn at 1:50, a section was drawn at 1:10, and context descriptions recorded.
- 5.6 A temporary benchmark was established on a central manhole cover, with a value of 8.55m OD.

⁶ Leary, 2004 'Method Statement for an Archaeological Evaluation at Bushy House, former National Physical Laboratories, Teddington, London Borough of Richmond upon Thames' PCA Ltd unpublished report, June 2004



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Figure 2
Detailed Site Location
1:1000

6 ARCHAEOLOGICAL SEQUENCE

6.1 The area of investigation had previously been occupied by early 20th century buildings, which had subsequently been demolished. In Trench 1 the natural brickearth had been wholly truncated and the gravel below had been heavily impacted upon, and therefore no archaeological deposits had survived. In Trench 2, some undisturbed natural deposits survived at the eastern end of the trench, but no archaeological material was encountered.

6.2 Trench 1

6.2.1 The earliest deposit in this trench was the natural river gravel [2], located at 7.34m OD.

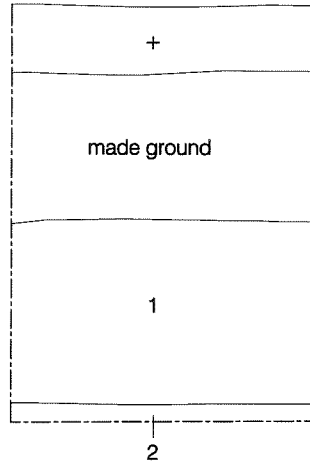
6.2.2 Overlying the gravel was a layer of redeposited brickearth [1], which contained coal fragments. This was 0.60m thick and was sealed by a layer of demolition rubble 0.50m thick, covered by a layer of topsoil. The top of the trench was at 8.70m OD.

6.3 Trench 2

6.3.1 The earliest deposit encountered in this trench was brickearth [5], located at a level of 8.00m OD. A number of modern intrusions were cut into the brickearth, but no archaeological material was identified.

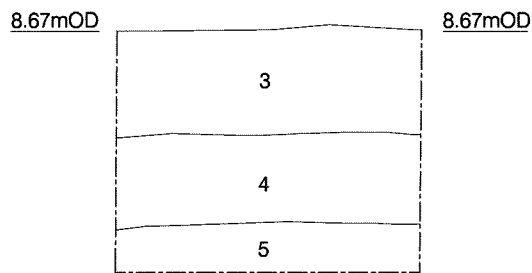
6.3.2 Sealing the brickearth was a layer of subsoil [4], which was 0.30m thick. The top of this layer was at 8.30m OD. This layer was overlain by a layer of overburden [3], which was mainly composed of concrete. The top of the trench was located at 8.77m OD.

N S



Section 1
West facing

E W



Section 2
North facing



Figure 3
Section 1 & 2
1:25

7 CONCLUSIONS

- 7.1 No archaeological evidence was found on this site. This was largely due to the presence of deep demolition impacts throughout the site. The location of the brickearth, so close to the surface in Trench 2, resulted in heavy impact by below ground intrusions relating to its previous use for a laboratory building.
- 7.2 In Trench 2 it was clear that the brickearth did not survive to the west and south of the trench, but there is still potential for its survival, perhaps in a less disturbed form to the north and east of the trench. However, the lack of residual finds implies that even where the brickearth is better preserved, the potential for archaeological evidence is still low.

8 ACKNOWLEDGEMENTS

- 8.1 Pre-Construct Archaeology Limited would like to thank Duncan Hawkins of CgMS for commissioning this report on behalf of DTi who funded the evaluation. The author would like to thank Strephon Duckering for his assistance on site, Jim Leary for his project management and Hayley Baxter for the illustrations.

Appendix 1

Context Descriptions			
Context No.	Type	Description	Trench No.
1	Layer	Layer of redeposited brickearth	1
2	Layer	Natural Gravel	1
3	Layer	Layer of overburden	2
4	Layer	Layer of subsoil	2
5	Layer	Layer of brickearth	2

APPENDIX 2

SMR ARCHAEOLOGICAL REPORT FORM

1. TYPE OF RECORDING

Evaluation ✓ Excavation Watching brief
Other (please specify)

2. LOCATION

Borough: London Borough of Richmond upon Thames
Site address: Bushy House, Bushy Road, former National Physical Laboratory, Teddington
Site name: National Physical Laboratory, Teddington Site code: BUO 04
Nat. Grid Refs: Centre of site: TQ 1560 7050
Limits of site: a)N:- new housing b)E:-sports field
c)S:- Laboratory building d)W:- Bushy Road

3. ORGANISATION

Name of archaeological unit/company/society: Pre-Construct Archaeology Limited
Address: Unit 54, Brockley Cross Business Centre, 96 Endwell Road, Brockley, SE4 2PD

Site director/supervisor: Helen Clough Project manager: Jim Leary
Funded by: DTi

4. DURATION

Date fieldwork started: 7.6.04 Date finished: 7.6.04
Field work previously notified? no
Fieldwork will continue? no

5. PERIODS REPRESENTED

Palaeolithic Roman
Mesolithic Saxon (pre-AD 1066)
Neolithic Medieval (AD 1066 -1485)
Bronze Age Post-Medieval
Iron Age Unknown

6. PERIOD SUMMARIES. Use headings for each period (Roman; Medieval; etc.), and continue on additional sheets as necessary.

No archaeological deposits encountered

7. NATURAL. (state if not observed; please **DO NOT LEAVE BLANK**)

Type: brickearth and gravel

Height above Ordnance Datum: Gravel=7.40m OD (truncated), brickearth=8.05m OD

8. LOCATION OF ARCHIVES.

a) Please indicate those categories still in your possession:

Notes - Plans - Photo - Negatives

Slides - Correspondence - Manuscripts

10. BIBLIOGRAPHY.

Clough H., 2003 'An Archaeological Evaluation at Bushy House, former National Physical Laboratories, London Borough of Richmond upon Thames' Pre-Construct Archaeology unpublished report, June 2004

Hawkins, D., 1997 'An Archaeological Desk Based Assessment of land at The National Physical Laboratory, Teddington' CgMS unpublished report December 1997

SIGNED:

DATE: 9.7.04

NAME (Block capitals): Helen Clough