

An Archaeological Watching Brief at Cutty Sark Gardens, London Borough of Greenwich

Site Code: GCU10

National Grid Reference: TQ 3825 7785

**Written and Researched by Joanna Taylor
Pre-Construct Archaeology Ltd**

Project Manager: Tim Bradley

Commissioning Client: London Borough of Greenwich

**Contractor: Pre-Construct Archaeology Ltd
Unit 54
Brockley Cross Business Centre
96 Endwell Road
Brockley
London
SE4 2PD**

Tel: 020 7732 3925

Fax: 020 7732 7896

Email: tbradley@pre-construct.com

Website: www.pre-construct.com

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1 ABSTRACT (figs. 1 & 2)

- 1.1 This document details the results and working methods of an archaeological watching brief of geo-technical works at Cutty Sark Gardens, London Borough of Greenwich. The watching brief was commissioned by the London Borough of Greenwich. The geo-technical work comprised the excavation of window samples and test pits undertaken on the 24th and 25th November 2010. The site was centred at National Grid Reference TQ 3825 7785.

- 1.2 The archaeological watching brief demonstrated that natural gravel was present between c.1.80m and c.0.80m below the existing ground level of the underground carpark, with possible archaeological horizons and/or cut features present at c.0.60m below the same level. Geo-technical investigations undertaken from ground level were abandoned prior to natural and identifiable archaeological deposits being reached due to the presence of reinforced concrete.

2 INTRODUCTION (figs. 1 & 2)

- 2.1 An archaeological watching brief on geo-technical works was commissioned by the London Borough of Greenwich at Cutty Sark Gardens, London Borough of Greenwich. The archaeological watching brief was undertaken by the author on behalf of Pre-Construct Archaeology. The geo-technical works were undertaken on the 24th and 25th November 2010. The site was centred at National Grid Reference TQ 3825 7785.
- 2.2 The site is located within the London Borough of Greenwich, and is bound to the north by the River Thames and Greenwich Pier, to the west by Coltman House and Rockfield House, to the south by Welland Street and to the east by the University of Greenwich.
- 2.3 The site is irregular in shape, covers an area of 1.19ha and incorporates an underground carpark. Surface heights range between 4.60m OD and 5.60m OD, with the surface level of the carpark being markedly lower (Mills Whipp 2010).
- 2.3 The archaeological watching brief demonstrated that natural gravel was present between c.1.80m and c.0.80m below the existent ground level of the underground carpark, with possible archaeological horizons and/or cut features present at c.0.60m below the same level. Geo-technical investigations excavated from ground level were abandoned prior to natural and definable archaeological deposits being reached.
- 2.4 A temporary Ordnance Datum Benchmark was not transferred to the site. As a consequence, reference to the 'height' of deposits within the recorded stratigraphic sequence is given as relative to the existent ground surface, e.g. '0.25m below ground level'.
- 2.5 The completed archive will be deposited at the Museum of London under the site code GCU10.

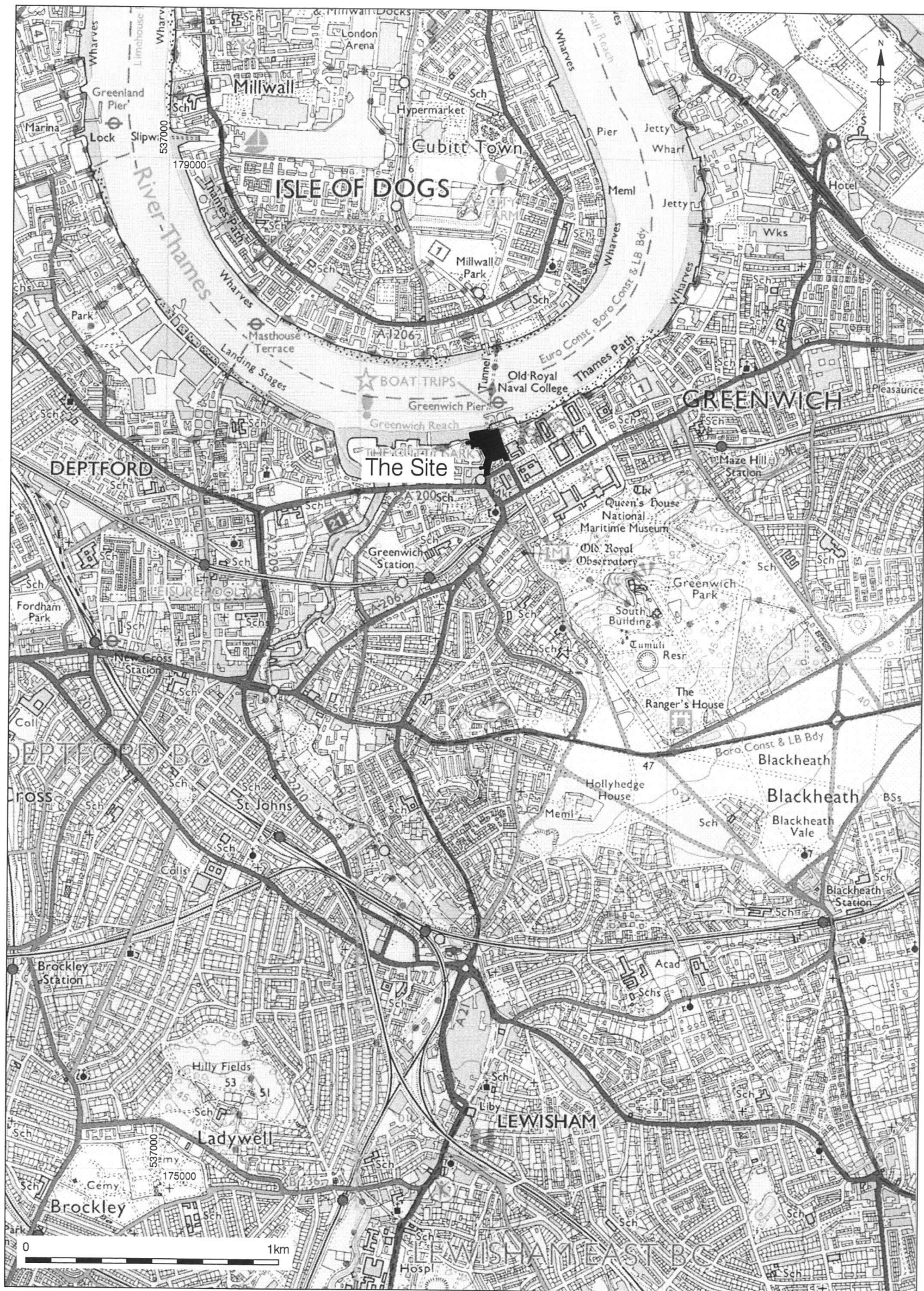
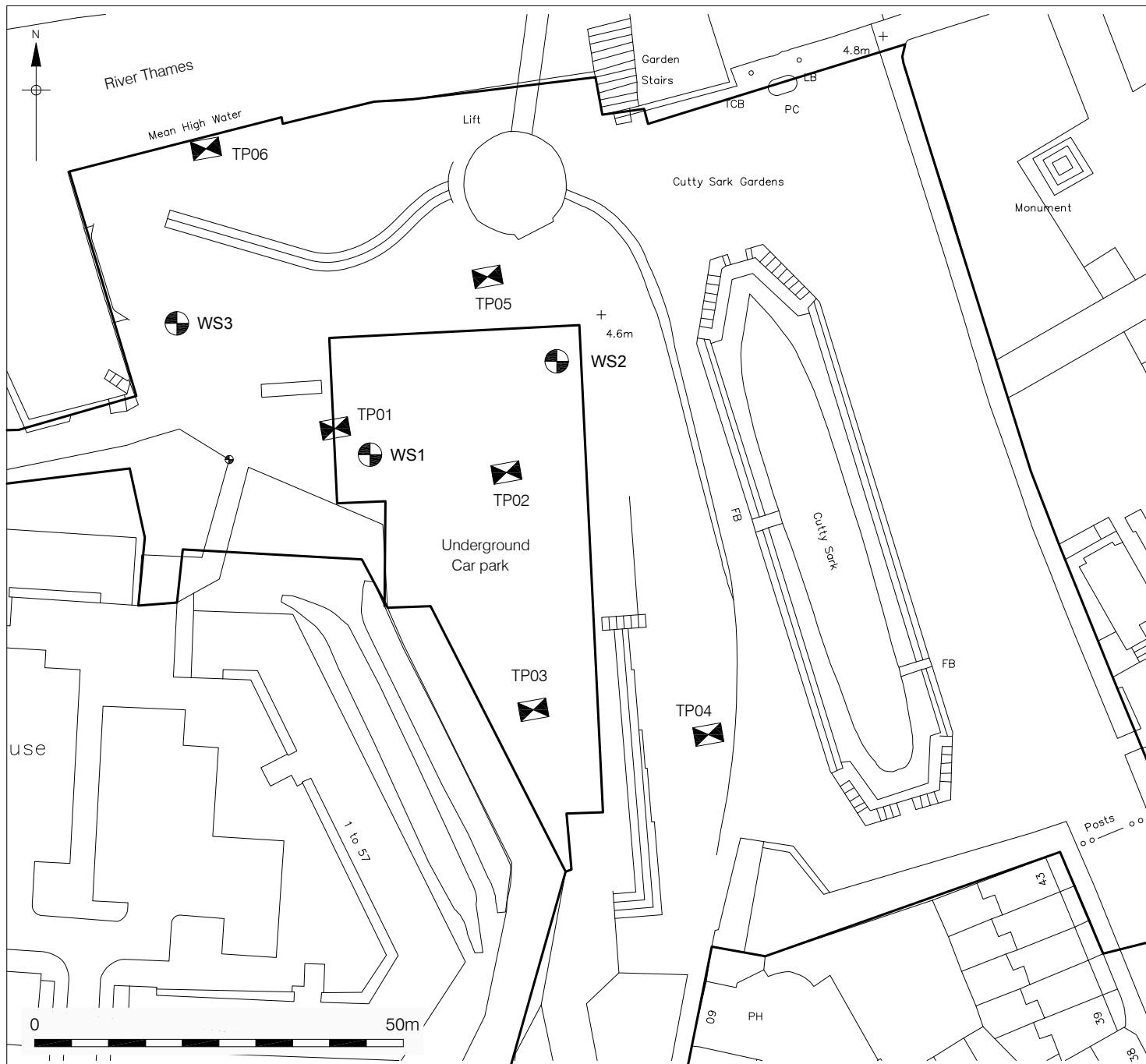


Figure 1
 Site Location
 1:20,000 at A4



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Figure 2
Indicative Test Pit and Window Sample Locations
1:800 at A4

3 PLANNING BACKGROUND

3.1 The site is located within an 'Area of Archaeological Potential' as defined by the 'Proposals Map' of the 'Greenwich Unitary Development Plan' (2006) and is situated to the immediate west of the University of Greenwich, formerly the Royal Naval College and Royal Hospital (London Scheduled Ancient Monument 52). In addition, the site is located within the boundaries of 'Maritime Greenwich World Heritage Site'.

3.2 As a consequence archaeological conditions have been applied to the redevelopment of the site and a site specific archaeological 'Desktop Assessment' was compiled earlier in 2010. This document concluded that:

'The site has archaeological potential and it is recommended a programme of archaeological evaluation is undertaken to establish the suitable archaeological mitigation strategy and to enable London Borough of Greenwich to make an informed planning decision regarding remodelling of the subject site' (Mills Whipp 2010).

3.3 At the time of Desktop Assessments compilation details regarding proposed landscaping and additional developments were undetermined. However it was advised that any anticipated geo-technical works should be archaeologically monitored, whilst in addition it was recommended that an archaeological evaluation of the site should be conducted to inform any planning decisions (Mills Whipp 2010).

3.4 A site specific method statement (Bradley 2010) was compiled prior to the commencement of the archaeological watching brief detailed in this report.

3.5 The watching brief was conducted to the following standards:

- The Institute of Field Archaeologists *Code of Conduct* (1999).
- The Institute of Field Archaeologists *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (1999).
- The Institute of Field Archaeologists *Standard and Guidance for Archaeological Watching Brief* (1994, Revised 2001).
- The European Association of Archaeologists *Principles of Conduct for Archaeologists Involved in Contract Archaeological Work* (1998).
- The Institute of Field Archaeologists *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials* (2001).
- ☐Brown, D *Archaeological Archives: A guide to Best Practice in creation, transfer and curation* (IFA 2007).

- The Museum of London *General standards for the preparation of archives deposited with the Museum of London* (1998).
- The *Treasure Act* (1996).
- The *Burial Act* (1857).

4 GEOLOGY AND TOPOGRAPHY

- 4.1 The site occupies the southern shore of the River Thames whilst 500m to the south the Greenwich escarpment rises to form the southern side of the Thames Valley at a height of 45m OD in Greenwich Park (Mills Whipp 2010).
- 4.2 The solid geology on site is comprised of Upper Cretaceous Chalk overlain by Thanet Sands, Woolwich Beds, Reading Beds and London Clay (1:50,000 Geological Survey of Great Britain, sheet 270). The drift deposits in the vicinity are generally comprised of floodplain gravels, overlain by alluvial and peat deposits formed at the boundary between wet and dry land (Mills Whipp 2010).

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1. The Archaeological and historical background of the site has been comprehensively documented in the site specific Desktop Assessment produced earlier in 2010 (Mills Whipp 2010). As such, there is little need to reiterate the results of this document and instead a general summary of the archaeological potential is referenced below:

'Archaeological and documentary evidence indicates the area of the subject site probably had transient prehistoric populations living, hunting and farming nearby. Some Roman occupation has been found in Greenwich but not near the site. The site was occupied in the Saxon period and the village of Greenwich established. The early settlement centred on the Church Street/Billingsgate Street which crossed the site. In the Late Saxon period the area was occupied by the southern Viking fleet and army.

In the early medieval period the settlement probably centred on Church Street/Billingsgate Street. Later in the medieval period the focus of settlement shifted east of the ducal and royal Palaces of Greenwich and the subject site appears to have been relatively undeveloped.

The site became densely occupied in the later post-medieval period until bomb damage and slum clearance after 1940 led to the creation of Cutty Sark Gardens...

... The overall archaeological potential for the site is medium to high' (Mills Whipp 2010).

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The 'Outline Method Statement' (Bradley 2010) compiled prior to the watching brief specified that geo-technical test pits were to be monitored under archaeological watching brief conditions. However, the anticipated methodologies were subsequently altered prior to the commencement of work and as a consequence the archaeological watching brief monitored the removal of geo-technical window samples and test pits.
- 6.2 The geo-technical works were conducted on the 24th and 25th November 2010 and comprised the excavation of three geo-technical window samples (WS1, WS2 and WS3) and six geo-technical test pits (TP1, TP2, TP3, TP4, TP5 and TP6). WS1, WS2, TP1, TP2 and TP3 were located within the underground carpark, whilst WS3, TP4, TP5 and TP6 were excavated from ground level.
- 6.3 WS1 and WS2 were cored to a depth of 5m+ below ground level whilst WS3 was cored to a depth of c.1.60m whereon a concrete obstruction was encountered. TP1, TP2 and TP3 were excavated to a depth of 0.15m whereon reinforced concrete was encountered and the test pits were abandoned. TP4, TP5 and TP6 were excavated to depths of 1.05m, 1.00m and 1.50m respectively.
- 6.4 The geo-technical investigations were assessed through visual inspection and recorded utilising pro-forma recording sheets. Where possible, estimates of depths below ground level and the nature/date of deposition were made.
- 6.5 A temporary Benchmark (TBM) was not traversed to the site as part of the watching brief and as such Ordnance Datum heights are unknown. As a consequence this report details the relative heights of recorded deposits as 'below ground level'.
- 6.6 The site was given the code GCU10.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: natural

- 7.1.1 The earliest deposit encountered on site was a loose, mid yellowish brown sandy gravel [1]. The deposit was representative of natural terrace gravels and was encountered in WS1 at c.1.60m below existent ground level and in WS2 at c.0.80m below ground level. Natural deposits were not encountered in WS3, TP1, TP2, TP3, TP4, TP5 and TP6.

7.2 Phase 2: unknown date

- 7.2.1 Post-dating the natural gravel in WS1 and WS2 was a mid/dark greyish brown deposit [2]. Whilst no artefactual evidence was apparent and the date of the deposit is unknown, it is probable that it represents either an archaeological horizon or fill of a cut feature/features. The deposit measured c.1.15m in thickness within WS1 and c.0.15m in thickness within WS2, being encountered between 0.45m and 0.65m below existent ground level. Similar deposits were not encountered in WS3, TP1, TP2, TP3, TP4, TP5 and TP6.

7.3 Phase 3: Late post-medieval/modern (19th and 20th century)

- 7.3.1 The upper section of WS1 and WS2 was comprised of a layer of concrete ranging between 0.45m and 0.65m in thickness and representative of the current ground surface within the underground carpark in these locations.
- 7.3.2 All deposits revealed during the removal of WS3 were considered to be modern in date. These deposits comprised: a concrete obstruction at c.1.60m below existent ground level; a mixed layer of rubble encountered at c.0.45m below existent ground level; a 0.30m thick layer of concrete; and 0.15m thick paving slabs representative of the current ground surface external to the underground carpark in the vicinity of WS3.
- 7.3.3 TP1, TP2 and TP3 were located within the underground carpark and comprised a concrete layer, encountered at c.0.15m below ground level which was overlain by 0.15m thick paving slabs. The paving slabs represent the current ground surface within the underground carpark in the vicinity of TP1, TP2 and TP3.
- 7.3.4 The earliest deposits encountered in TP4 comprised a 0.65m thick dark sandy silt rubble dump layer overlain by a 0.20m thick layer of cobbles, potentially representative of a surface. It is possible that these deposits date to the late post-

medieval or early modern periods. Sealing the cobbles was 0.08m thick layer of brick rubble overlain by 0.12m thick paving slabs. The paving slabs represent current ground level external to the underground carpark in the vicinity of TP4.

- 7.3.5 All deposits revealed during the excavation of TP5 and TP6 were considered to date to the modern era. The sequence within TP5 comprised a c.0.87m thick rubble layer overlain by 0.13m thick paving slabs, whilst deposits within TP6 comprised a 1.26m thick layer of rubble overlain by a 0.12m thick concrete layer, in turn overlain by 0.12m thick paving slabs. The paving slabs represented the current ground surface external to the underground carpark in the vicinity of TP5 and TP6.

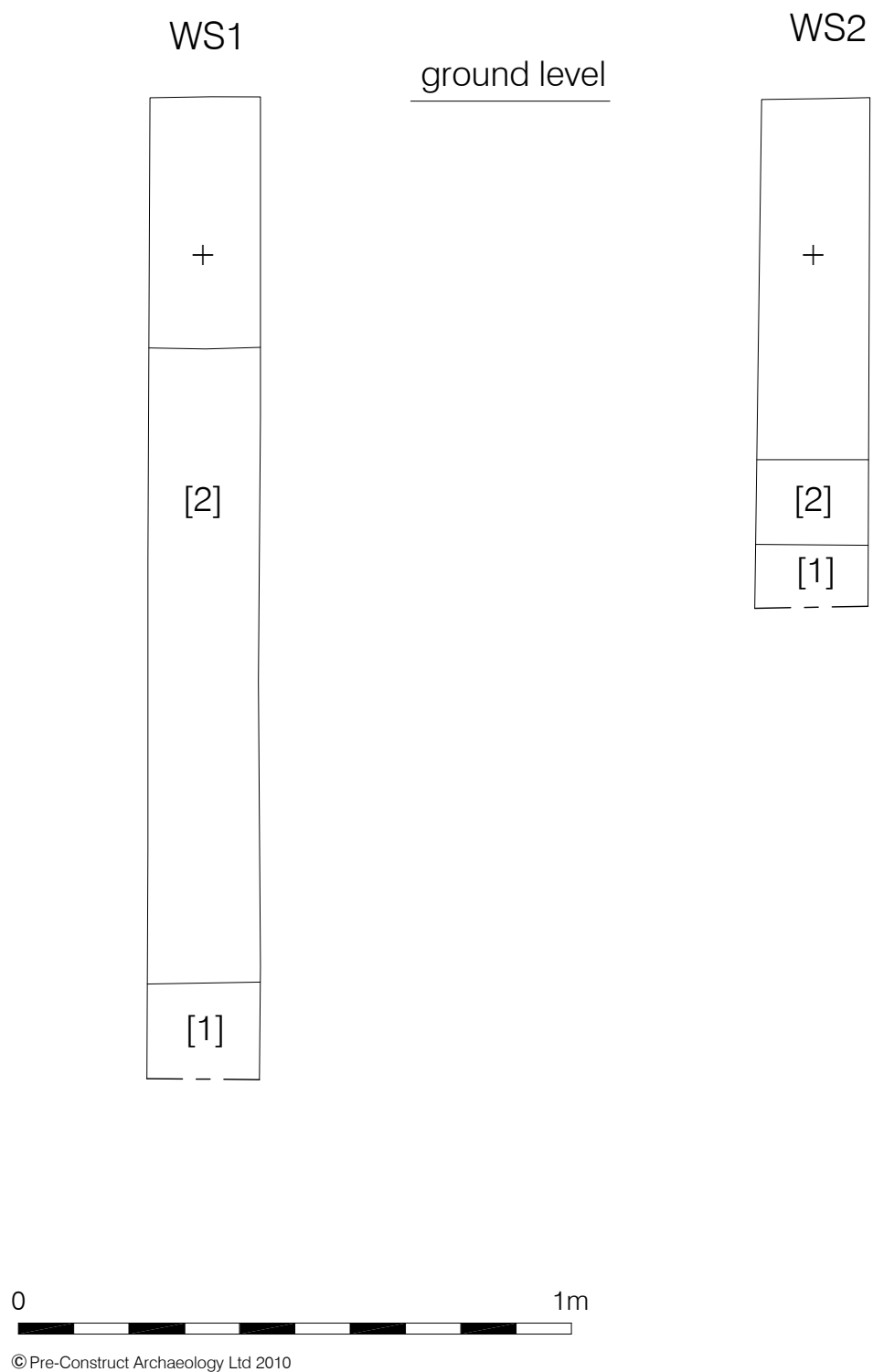


Figure 3
Window Samples 1 and 2
1:1.25 at A4

8 INTERPRETATION AND CONCLUSIONS

- 8.1 The earliest deposits recorded during the watching brief were naturally deposited Terrace Gravels (Phase 1) overlain by undated deposits which are most likely to be archaeological in nature (Phase 2).
- 8.2 The remainder of the archaeological deposits recorded on site dated to the late post-medieval and modern eras (Phase 3). These comprised made ground, a possible cobble surface, rubble dump layers, concrete and paving slabs associated with the use of the site as it exists today.
- 8.3 Monitoring of the geo-technical investigations has provided an indication of the archaeological potential of the site. The presence of probable archaeological deposits within WS1 and WS2 suggests that archaeological horizons and/or cut features survive in situ beneath the existent carpark. Similar data was not recorded during the observation of the external geo-technical works, however it remains possible that archaeological deposits pre-dating the late post-medieval and/or modern date may exist in situ beneath the geo-technical investigation depths.

9 ACKNOWLEDGEMENTS

- 9.1 PCA would like to thank Mills Whipp Projects and the London Borough of Greenwich for commissioning the work.
- 9.2 In addition, the author would like to thank Tim Bradley for his project management and editing, and Jenny Simonson for the illustrations.

10 BIBLIOGRAPHY

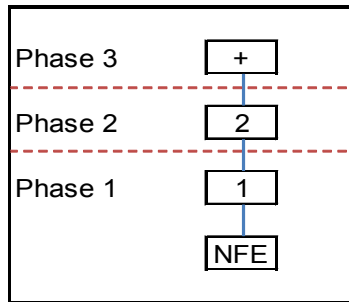
Bradley, T., 2010. 'Cutty Sark, London Borough of Greenwich; Outline Method Statement for Monitoring Geotechnical Investigations. Version 1'. Pre-Construct Archaeology: Unpublished Report.

Mills Whipp, 2010. Cutty Sark gardens, Greenwich, London SE10: Archaeological Desktop Study. Mills Whipp: Unpublished Report.

APPENDIX 1: SITE REGISTER

| Site Code | Context | Test Pit | Description | Phase | Date |
|-----------|---------|----------|-----------------------------|-------|---------|
| GCU10 | 1 | WS1, WS2 | Natural Gravel | 1 | Natural |
| GCU10 | 2 | WS1, WS2 | Archaeological horizon/fill | 2 | Undated |

APPENDIX 2: MATRIX



APPENDIX 3: OASIS REPORT

| | |
|--|---|
| OASIS ID: preconst1-88165 | |
| Project details | |
| Project name | An Archaeological Watching Brief at Cutty Sark Gardens, London Borough of Greenwich |
| Short description of the project | The document details the results and working methods of an archaeological watching brief on geo-technical works at Cutty Sark Gardens, London Borough of Greenwich. The watching brief was commissioned by Mills Whipp Projects Ltd on behalf of the London Borough of Greenwich. The geo-technical investigations were undertaken on the 24th and 25th November 2010. The site was centred at National Grid Reference TQ 3825 7785. The archaeological watching brief demonstrated that natural gravel was present between c.1.80m and c.0.80m below the existent ground level of the underground carpark, with possible archaeological horizons and/or cut features present at c.0.60m below the same level. A test pit excavated from the ground level of the site revealed evidence of a cobble surface which may be either late post-medieval or early modern in date. |
| Project dates | Start: 24-11-2010 End: 25-11-2010 |
| Previous/future work | No / Yes |
| Any associated project reference codes | GCU10 - Sitecode |
| Type of project | Recording project |
| Site status | Local Authority Designated Archaeological Area |
| Site status | World Heritage Site |
| Current Land use | Other 14 - Recreational usage |
| Monument type | ARCHAEOLOGICAL HORIZON/FILL Uncertain |
| Investigation type | 'Watching Brief' |
| Prompt | Direction from Local Planning Authority - PPS |
| Project location | |
| Country | England |
| Site location | GREATER LONDON GREENWICH GREENWICH Cutty Sark Gardens, London Borough of Greenwich |
| Study area | 1.19 Hectares |
| Site coordinates | TQ 3825 7785 51.4821809291 -0.00878483333166 51 28 55 N 000 00 31 W Point |
| Project creators | |
| Name of | Pre-Construct Archaeology Ltd |

| | |
|-------------------------------|---|
| Organisation | |
| Project brief originator | Mills Whipp |
| Project design originator | Mills Whipp |
| Project director/manager | Tim Bradley |
| Project supervisor | Joanna Taylor |
| Type of sponsor/funding body | London Borough of Greenwich |
| Project bibliography 1 | |
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | An Archaeological Watching Brief at Cutty Sark Gardens, London Borough of Greenwich |
| Author(s)/Editor(s) | Taylor, J |
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