

**AN ARCHAEOLOGICAL  
WATCHING BRIEF ON A  
GEOTECHNICAL TRIAL PIT  
AT THE PROPOSED  
LOCATION OF AN EDF  
SUBSTATION AT THE  
BRITISH MUSEUM, LONDON  
BOROUGH OF CAMDEN**

**APRIL 2009**

**PRE-CONSTRUCT ARCHAEOLOGY**

## DOCUMENT VERIFICATION

### Site Name

British Museum, North west Development: Substation,  
Great Russell Street, London Borough of Camden

### Type of project

Watching Brief

### Quality Control

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|--|------------------|--------------------|--------|
| Pre-Construct Archaeology Limited Project Code |                  |                    | K2020  |
|  | Name & Title     | Signature          | Date   |
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**An Archaeological Watching Brief on a Geotechnical Trial Pit at the  
Proposed Location of an EDF Substation at the British Museum, London  
Borough of Camden**

**Central National Grid Reference: TQ 3005 8185**

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**Commissioning Client: The British Museum**

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April 2009**

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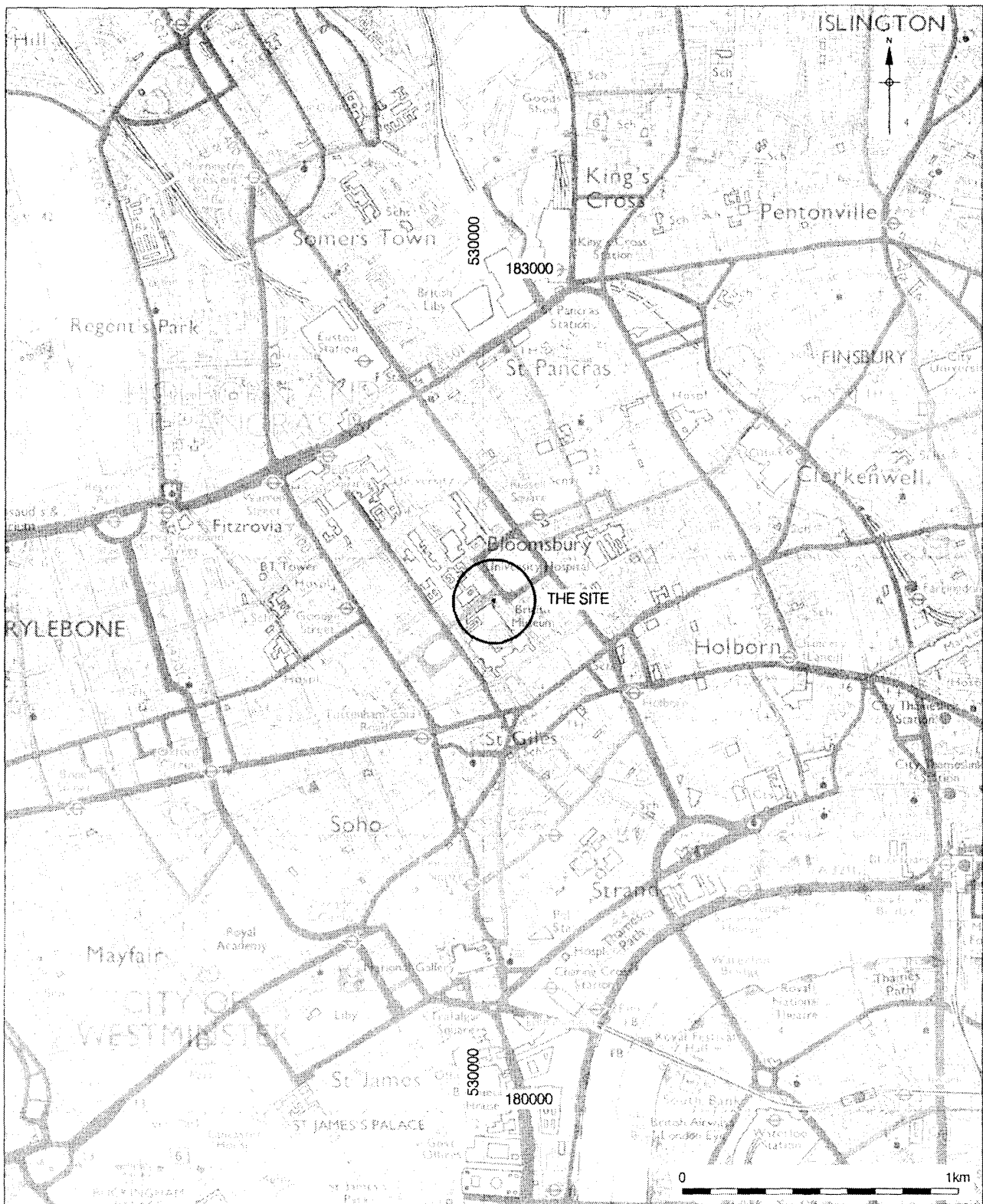
## 1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological watching brief on a geotechnical trial pit situated in a former carpenter's workshop near the north-eastern perimeter of the British Museum, in advance of the proposed construction of an EDF substation.
- 1.2 The trial pit aimed to determine the nature and depth of the northern perimeter wall foundations and the soil types. The watching brief was a continuation of the watching brief and evaluation being undertaken in advance of the North West Development, and aimed to establish the level of natural deposits in this area and the presence of any archaeological deposits or structures.
- 1.3 The earliest structure found was a wall foundation comprising brick rubble and ashlar blocks which is interpreted as being part of an 18<sup>th</sup> century boundary delineating an extension of the Bedford House garden from the surrounding farmland. This part of the extension wall was a northern extension of a 17<sup>th</sup> century property boundary between Bedford House to the southeast and Montague House to the southwest. This boundary continued to be used, defining the very early 19<sup>th</sup> century the western wall of a basement, constructed at the rear of No.38 Montague Street (built circa 1801-3). The basement wall was constructed on top of the earlier wall and the trial pit showed the basement to have had a window facing northwards, presumably into a lightwell, and a fireplace built into the western wall. Extensions to the trial pit revealed another north-south wall to the east which is interpreted as being the eastern side of the basement. Flagstones east of that wall may either relate to an entrance to this building or to another building to the east. To the south the basement/boundary wall continued for at least another 5m but no eastward return was found. It may lie beneath a later concrete floor.
- 1.4 The basement was short lived as the window was blocked up and the room backfilled. The extant wall facing onto Montague Place, and the presence of garden soils suggest that this space was subsequently used as a rear garden or yard, containing a sequence of small sheds until the construction of the current lean-to used as a carpenter's workshop.

## **2 INTRODUCTION**

- 2.1 An archaeological watching brief was undertaken at The British Museum by Pre-Construct Archaeology Ltd between the 23<sup>rd</sup> March and 3<sup>rd</sup> April 2009 (fig.1).
- 2.2 The work was commissioned by Giorgio Conrator of the British Museum North West Development Team and was undertaken by Pre-Construct Archaeology Ltd under the supervision of Alexander Pullen and Malcolm Gould, and the project management of Peter Moore. The site code is MPB 09. The site is located at TQ 3005 8185.
- 2.3 The site is currently occupied by a former carpenter's workshop immediately east of the British Museum's King Edward XVII building. It is proposed that an EDF substation is constructed here to replace the current one which is in the footprint of the proposed North West Development.
- 2.4 A previous geo-technical watching brief carried out by Pre-Construct Archaeology Ltd., in May/June 2008 identified high natural ground surviving towards the southern end of the NWD site, dropping down sharply northwards, which could coincide with the possible location of a Civil War defensive ditch known to have been located somewhere in the vicinity. The relevant historical background information for this site is detailed elsewhere in a number of reports (GLSMR 2000; AOC 1995; Boyer 2005; Spence 2007; Moore 2008 and most recently Purcell Miller Tritton 2009). The substation trial pit offered the opportunity to examine natural soil and help establish the potential location of the ditch. As it turned out the trial pit was fully located within a 19<sup>th</sup> century basement, the northern wall of which is already listed and the revealed southwestern return was established during the investigation as being "listed by curtilage". Eastern and southern extensions to the trial pit attempted to establish the dimensions of the underground listed walls and the implications to them of the proposed substation walls and underground cable trenches.
- 2.5 A spot height of 25.95m on the concrete floor of the workshop was used as the benchmark. The site code is
- 2.6 The excavation, shoring and attendance works were undertaken by Coniston Construction.

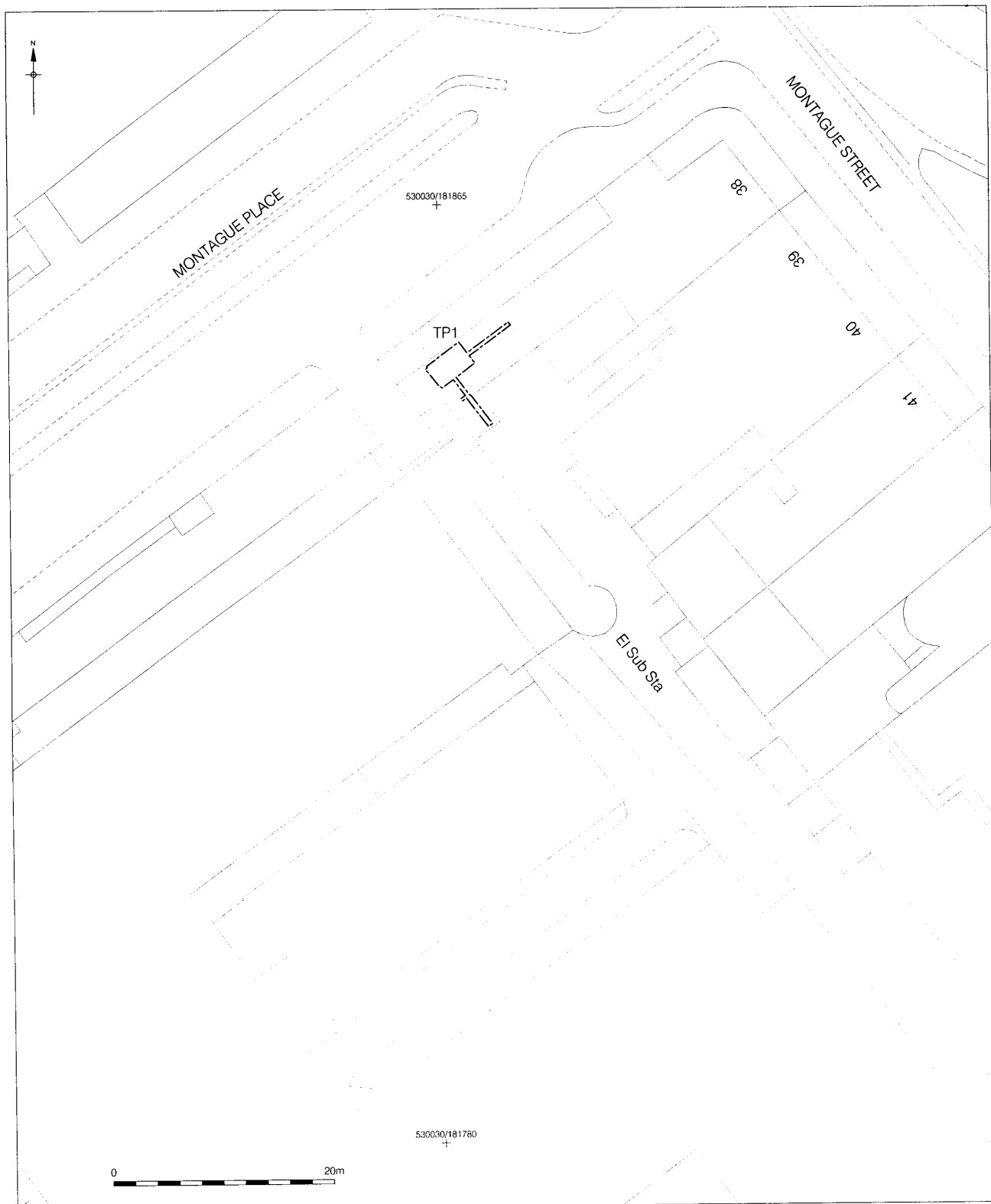




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Figure 1  
Site Location  
1:20,000 at A4



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Figure 2  
Trench Location  
1:500 at A4



### 3      **ARCHAEOLOGICAL METHODOLOGY**

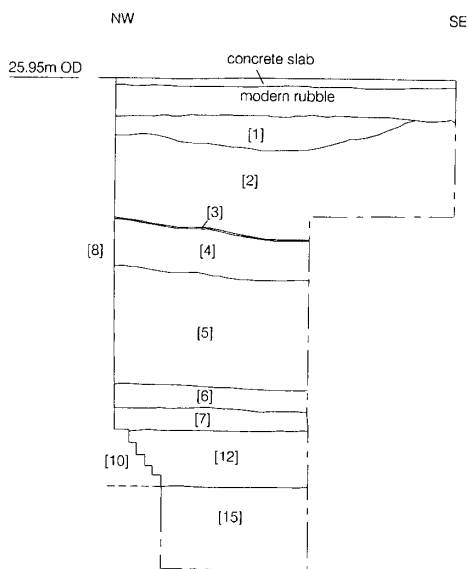
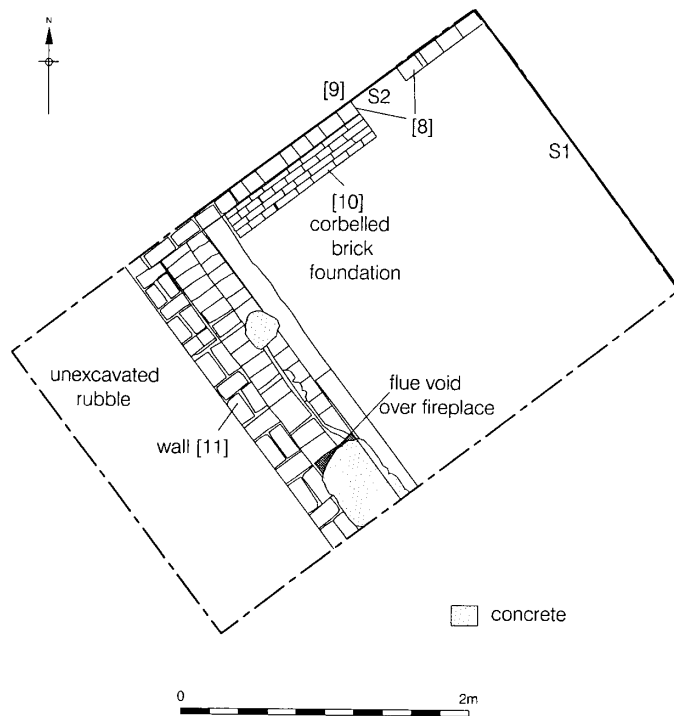
- 3.1      The trial pit measured 3.95m by 2.40m and at its maximum was 3.55m deep. After a depth of 1.5m was reached the pit was shored to allow safe access. Further excavation was then restricted to the northern side of the trial pit where a depth of 3.0m below the current ground surface was reached. The northwest corner was further excavated to a maximum depth of 3.55 m. Subsequently a strip was extended 5m to the SE and 4.5m to the NE to try and see if the full extent of the basement walls, which on being revealed were confirmed as being "listed by curtilage" by the London Borough of Camden, could be determined.
- 3.2      The concrete floor of the workshop was broken with an electric breaker. All deposits were excavated and removed using hand tools under archaeological supervision. Datable archaeological material was recovered from relevant archaeological deposits, which were also recorded.
- 3.3      A plan was drawn of exposed walls at 1:20 scale. Section drawings were made of the west, east and south facing sections at 1:10 scale.
- 3.4      Recording on site was undertaken using the single context recording system as specified in the Museum of London Site Manual. Contexts were numbered sequentially and recorded on *pro-forma* context sheets.

## 4 ARCHAEOLOGICAL SEQUENCE

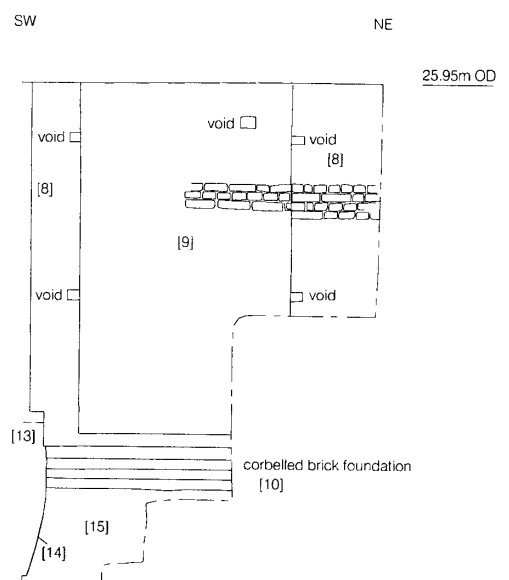
- 4.1 The earliest deposit recorded on site was a natural light yellowish-brown brickearth deposit [15] (fig 3), observed at a height of 23.10m OD. No archaeological features were recorded cut into the features and it was assumed that, as it was found below the likely basement floor level, it was significantly truncated.
- 4.2 This natural deposit was truncated by the construction cut for a north-south wall foundation [14]. This cut was filled by a very hard red brick rubble and mortar foundation [13] with occasional large pieces of dressed stone (see Appendix 3). The top of the construction cut was 23.65m OD, the bottom 22.50m OD.
- 4.3 Abutting this earlier foundation was a stepped or corbel wall foundation [10] bonded to an east-west Flemish bonded wall [8]. The base of [10] was 23.10m OD, the top 23.50m OD. Bonded to the east-west wall, was a north-south wall [11] which utilised the earlier and deeper trench built foundation [13]. Because of subsequent demolition the highest surviving level of wall [11] was 25.95m OD. Set within wall [11] was the partially exposed arch of a brick fireplace, with its flue visible on the truncated surface of wall [11] (subsequently obscured by a concrete post foundation). Wall [8] had a opening for a window and four voids were visible on either side for the window frame timber supports. The window and fireplace showed that this space was a basement looking onto a lightwell to the north, a similar arrangement that can still be seen at No.38 Montague Street. It is likely that it was constructed at the same time or soon after the main part of the property in circa 1801-3. In the eastern extension to the trial pit a probable return to the basement was uncovered with flagstones still surviving to the east. This wall and flagstones could either represent a separate building or a flagged entrance from a possible doorway through the northern wall. The extension to the south identified wall [8] continuing for a further 5m but could find no eastern return. A possible location for a wall return may lie under the boundary between the later concrete floor and external garden soil (fig 4).
- 4.4 Overlying the corbel foundation was a layer of re-deposited brick-earth material [12] representing part of the construction phase of the basement.
- 4.5 The window space was then infilled [9] with similar bricks and mortar to the surrounding wall [8] (see Appendix 3) but in an English bond, which shows a separate event but not a great period of time passing between the construction of the basement and its abandonment. The window space on the south side of the wall was 2.45m wide.
- 4.6 Above the re-deposited brick-earth layer [12] and lying against the window infill [9] were a series of dumped deposits thought to represent the deliberate backfilling of the basement. The lowest of these was [7], a layer of brick and mortar rubble, lying at a maximum level of 23.65m OD. Overlying [7] was a layer of light-brown silt [6] containing frequent mortar flecks and occasional CBM material, at 23.83m OD. Above this was [5], a similar deposit to [6], but containing less mortar, at 24.65m OD. Overlying [5] was a mid-brown mixed clay silt with occasional CBM inclusions. A thin band of mortar [3] overlay [4], above which lay [2], a poorly consolidated deposit of sandy-silt with frequent fragments of CBM, bottle glass, mortar, plant pots, occasional animal bone, at 25.65m OD. The cream ware pottery fragments in this deposit are dated to 1800-1840.<sup>1</sup> Overlying [2] was a dark blackish-brown sandy-silt [1] at 25.70m OD. Above this deposit was a late concrete floor on the western side and southern extension of the trial pit and a rubble build up layer for the current carpenters workshop.

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<sup>1</sup> Chris Jarrett pers. comm..



Section 1  
South west facing section



Section 2  
South east facing section



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Figure 3  
Plan of TP1 and Sections 1 and 2  
1:50 at A4

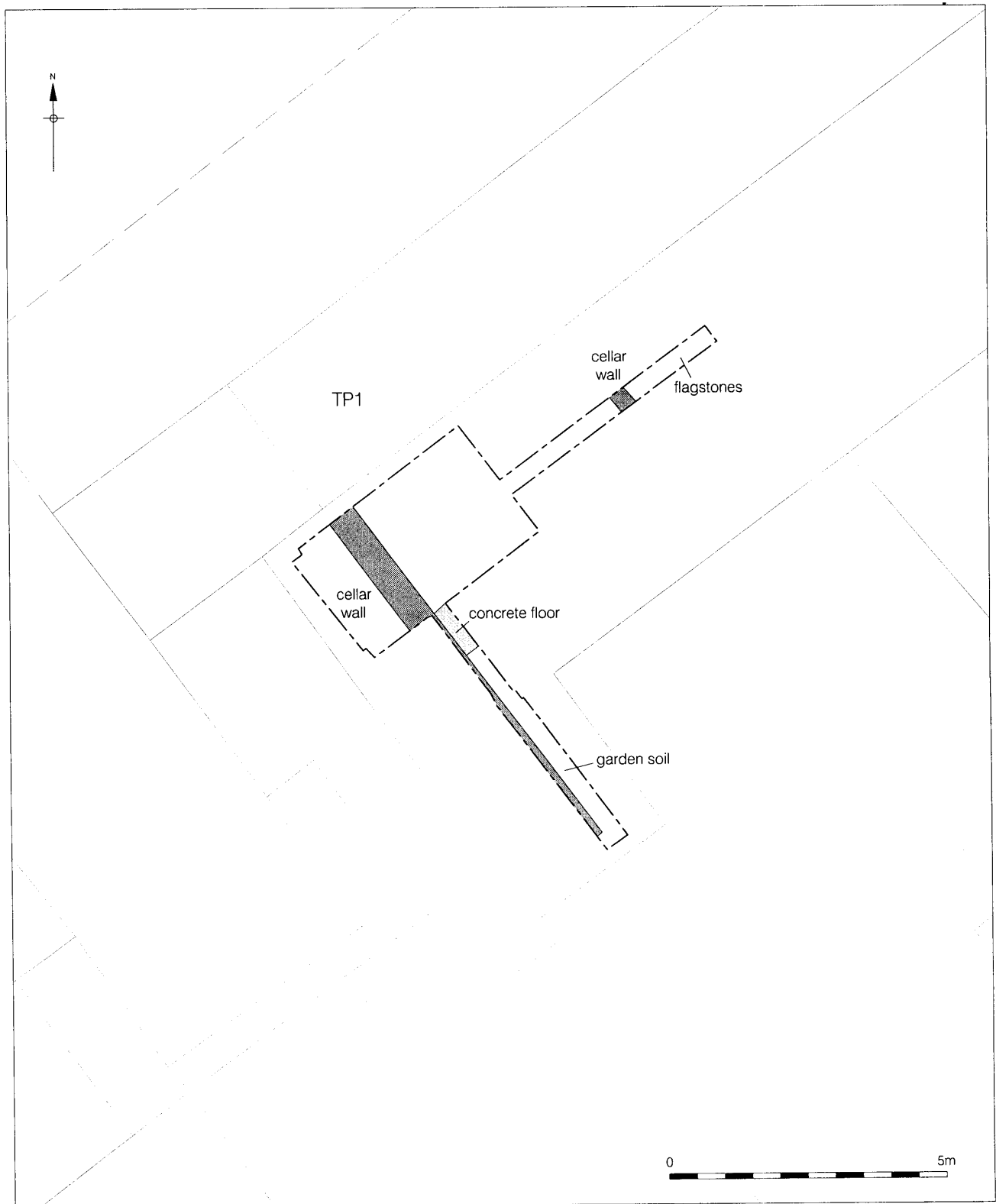


Figure 4  
Additional Watching Brief  
1:500 at A4

## **5 CONCLUSIONS**

- 5.1 Truncated natural brick-earth was observed at 23.50m OD or 2.45m below the current ground surface.
- 5.2 An early wall foundation was visible underlying the north-south wall of the basement, and while its broken constituent material is dated to circa 1700 to 1800, its mortar suggests a later 18<sup>th</sup> century date. This is probably the 18<sup>th</sup> century northern extension to an earlier property boundary between Montague House and Bedford House.
- 5.3 It's line became fossilised in later boundaries around and then within the British Museum, and it became the property boundary between the museum and the rear of No.38 Montague Street. The first construction recorded here was a basement with windows facing onto the lightwell along Montague Place. This basement may have been short lived as it's windows were blocked up and the space backfilled with material containing pottery dating to circa 1800-1840. A concrete floor with a possible stock brick wall stub as seen in the southern extension, a series of later concreted iron posts, and maps suggest a series of small outbuildings to have been located in this area. The garden soil to the south of the southern extension suggest that otherwise the area would have been a yard or garden after the basement was buried.

## **6 ACKNOWLEDGEMENTS**

- 6.1 Pre-Construct Archaeology Limited would like to thank the British Museum North West Development team, especially Giorgio Conrator, for commissioning the work, and Coniston Construction, especially Richard Etridge and his team for their help and co-operation.
- 6.2 The author would like to thank Malcolm Gould and Sarah Barrowman for their hard work on site, Josephine Brown for the illustrations, Kevin Hayward for the building materials, Chris Jarrett for the pottery dating and Peter Moore for his project management and editing.

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AOC Archaeology Limited "British Museum Millennium Project – The Great Court And Main Forecourt; An Archaeological Assessment", unpublished report January 1995.

A. J. Spence, "Assessment Report On The Watching Brief At The Forecourt Of The British Museum", British Museum unpublished report.

Peter Boyer, "An Archaeological Evaluation At The Forecourt: Great Court Project, The British Museum, London Borough of Camden", Pre-Construct Archaeology Limited unpublished report May 2005.

A. J. Spence "British Museum North-West Development: Civil War Defence Ditch Alignment; sheet 1 – St Giles circa 1700, Flitcroft 1728; sheet 2 – 1846 Plan of Smirke Building, Watercolour of circa 1780's; sheet 3 – Detail from watercolour", British Museum unpublished report 2007.

Greater London Sites And Monuments Record, "Enquiry Report 7602 British Museum" unpublished report 1/4/08 (including reports 'Site Ref 1154, Bedford Square, May 2000' and 'Site Ref 1121, Russell Square, May 2000').

Peter Moore "Written Scheme Of Investigation For An Archaeological Evaluation At The British Museum Northwest Development, London Borough Of Camden", Pre-Construct Archaeology Limited unpublished report revision 1 February 2008.

Purcell Miller Tritton LLP "British Museum North West Development, Electrical Substation Relocation: Historical Assessment", unpublished report March 2009.

## Appendix 1: Context Index

| Context | Type       | Description                 |
|---------|------------|-----------------------------|
| 1       | layer      | blackish-brown sandy-silt   |
| 2       | layer      | mid-brown sandy-silt        |
| 3       | layer      | mortar layer                |
| 4       | layer      | clay-silt                   |
| 5       | layer      | mid-brown sandy silt        |
| 6       | Layer      | mid-brown silt              |
| 7       | layer      | brick and mortar rubble     |
| 8       | wall       | east-west basement wall     |
| 9       | wall       | infilled window             |
| 10      | foundation | corbel brick foundation     |
| 11      | wall       | north-south basement wall   |
| 12      | layer      | redeposited natural         |
| 13      | fill       | brick and mortar foundation |
| 14      | cut        | construction cut            |
| 15      | natural    | brick-earth natural         |



## Appendix 2: Stone and Ceramic Building Materials Observations

Kevin Hayward

A visit to the substation trial trench was made on 31<sup>st</sup> March so as to examine the sequences of building materials in situ.

Lower wall [13] consisted of a lot of broken up brick nearly all of which is fabric (F) 3033 (1450-1700 AD), one or two F 3032nr3033 bounded by a hard gritty brown cement (Roman) but in the top two courses this appears to be lighter and contain some chalk fragments. Incorporated into it were a number of stone fragments, Kentish rag and a large Ketton stone ashlar (Middle Jurassic – Rutland) oolitic grainstone. This size of the block (300 x 250mm) in section would indicate that the wall extended back some way and is substantial. The broken material in this wall/foundation suggest a date of 1700-1800 but the binding mortar is dated to the late 18<sup>th</sup> century.

The E-W wall [8], its return N-S wall [11] and corballed footing [10], as well as window infills are all essentially the same brick fabric and form: stock moulded (F 3032/3034 50% and some thicker F 3033 50%), often narrow (95mm) average thickness (64mm) length (220mm)– Flemish Bond 1650-1850. These differ markedly from [13] in that all bricks are complete, some are frogged, and there are more, much later, thicker post Great Fire purple fire bricks. The mortar is no longer brown but white and hard, almost like Portland cement.

It is likely that, as with those visible on wall [11] where shallow frogging could be seen, that most of the brick would be frogged. The use of frogged stock moulded bricks is 1750-1850 but given the Portland type cement mortar an early 19<sup>th</sup> century date is suggested.

An examination of the building material from backfill rubble layer [7] shows a mixture of material including later F 3032 and earlier F 3033, adhered to which was the same brown mortar used in the early foundation wall [13].

## APPENDIX 2: OASIS DATA COLLECTION FORM

### 8 OASIS DATA COLLECTION FORM: ENGLAND

[List of Projects](#) | [Search Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Change country](#) | [Log out](#)

#### 8.1.1 Printable version

[Printable version of the OASIS Data Collection Form](#)

#### 8.2 OASIS ID: preconst1-57942

[View details of project preconst1-57942](#)

##### Project details

Project name British Museum North West Development: Substation

Short description of the project An archaeological watching brief was undertaken on a geotechnical trial pit situated in a former carpenter's workshop near the north-eastern perimeter of the British Museum, in advance of the proposed construction of an EDF substation. The earliest structure found was a wall foundation comprising brick rubble and ashlar blocks which is interpreted as being part of an 18th century boundary delineating an extension of the Bedford House garden. This part of the extension wall was a northern extension of a 17th century property boundary between Bedford House to the southeast and Montague House to the southwest. This boundary continued to be used, defining the very early 19th century the western wall of a basement, constructed at the rear of No.38 Montague Street (built circa 1801-3). The basement wall was constructed on top of the earlier wall and the trial pit showed the basement to have had a window facing northwards, presumably into a lightwell, and a fireplace built into the western wall. Extensions to the trial pit revealed another north-south wall to the east which is interpreted as being the eastern side of the basement. Flagstones east of that wall may either relate to an entrance to this building or to another building to the east. The basement was short lived as the window was blocked up and the room backfilled. The extant wall facing onto Montague Place, and the presence of garden soils suggest that this space was subsequently used as a rear garden or yard, containing a sequence of small sheds until the construction of the current lean-to used as a carpenter's workshop.

Project dates Start: 23-03-2009 End: 03-04-2009

Previous/future work Yes / Yes

Any associated project reference codes MPB09 - Sitecode

Type of project Recording project

|                    |  |
|--------------------|--|
| Site status        | Local Authority Designated Archaeological Area           |
| Current Land use   | Community Service 2 - Leisure and recreational buildings |
| Monument type      | WALLS Post Medieval                                      |
| Significant Finds  | NONE None  |
| Investigation type | 'Watching Brief'   |
| Prompt             | Direction from Local Planning Authority - PPG16          |



#### Project location

|                   |   |
|-------------------|---|
| Country           | England   |
| Site location     | GREATER LONDON CAMDEN HOLBORN British Museum North West Project         |
| Postcode          | WC1B 3DG  |
| Study area        | 7.50 Square metres  |
| Site coordinates  | TQ 3005 8185 51.5200809940 -0.125344516858 51 31 12 N 000 07 31 W Point |
| Height OD / Depth | Min: 22.40m Max: 23.10m   |



#### Project creators

|              |                                  |
|--------------|----------------------------------|
| Name         | of Pre-Construct Archaeology Ltd |
| Organisation |                                  |

|                    |                                     |
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| Project originator | brief Pre-Construct Archaeology Ltd |
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| Project originator | design Peter Moore |
|--------------------|--------------------|

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| Project director/manager | Peter Moore |
|--------------------------|-------------|

|                    |                  |
|--------------------|------------------|
| Project supervisor | Alexander Pullen |
|--------------------|------------------|

Type of Museum  
sponsor/funding  
body

Name of British Museum  
sponsor/funding  
body

Project archives

Physical Archive British Museum  
recipient

Physical Contents 'Ceramics'

Digital Archive British Museum  
recipient

Digital Contents 'Stratigraphic','Survey'

Digital Media 'Survey','Text'  
available

Paper Archive British Museum  
recipient

Paper Contents 'Ceramics'

Paper Media 'Context sheet','Photograph','Plan','Report','Section','Survey '  
available

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

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