An Archaeological Watching Brief for the Installation of a Water Meter in Marshgate Lane, London Borough of Newham, E15 2PF

Site Code: MGF09

Central National Grid Reference: TQ 38062 83301

Written and Researched by John Payne

Pre-Construct Archaeology Limited
March 2009

Project Manager: Helen Hawkins

Commissioning Client: Thames Water Plc

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

Tel: 020 7732 3925
Fax: 020 7732 7896

E-mail: hhawkins@pre-construct.com
Website: www.pre-construct.com

March 2009

CONTENTS

FIGURES

1 ABSTRACT

1.1 This report details the results and working methods of an archaeological watching brief undertaken on a trench excavated for the installation of a water meter at Marshgate Lane in the London Borough of Newham. The watching brief was commissioned by Thames Water Plc. The work was undertaken on 6th March 2009.

1.2 The excavation was located at the southern end of Marshgate Lane, approximately 5 metres from the junction with the A 118 (Figure 1).

1.3 During the watching brief a sequence of existing tarmac surface, re-enforced concrete surfacing and disturbed cobbled surfacing which overlay mixed gravels containing discarded rectangular stone cobbles was observed. These deposits were above a large diameter iron water pipe. No archaeological features or deposits were observed.

2 INTRODUCTION

2.1 An archaeological watching brief of a trench excavated for the installation of a new water meter was undertaken in Marshgate Lane, within the London Borough of Newham on 6th March 2009 by Pre-Construct Archaeology Limited.

2.2 The trench was located at the southern end of Marshgate Lane, approximately 5 metres from its junction with the A118. The trench measured 1.20 x 1.00m and was placed on the southwest side of the road with its southwestern edge defined by the existing kerbstones.

2.3 The site is located at National Grid Reference TQ 38062 83301.

2.4 The trench was hand excavated by the contract workers to a depth of 0.85m below current ground level and was recorded as an archaeological watching brief.

2.5 The work was commissioned by Thames Water Plc. The project was managed for Pre-Construct Archaeology by Helen Hawkins and supervised by the author. The project was managed for Thames Water Plc. by Claudia Innes and monitored by David Divers of the Greater London Archaeological Advisory Service (GLAAS).

2.6 The site was assigned the code MGF09.

3 PLANNING BACKGROUND

3.1 In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) "Archaeology and Planning" providing guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.

3.2 In considering any planning application for development, the local planning authority is bound by the policy framework set by government guidance, in this instance PPG16, by current Structure and Local Plan policy and by other material.

3.3 The trench was located within the London Borough of Newham and the archaeological planning framework for this authority is listed below.

Policy E4- Archaeological Remains

Applications for development involving significant groundwork within the Archaeological Priority Zones (as identified on the Proposals Map) will only be granted if accompanied by an archaeological evaluation that proposes effective mitigation measures that protect the zones from adverse development.

Justification:

To reflect Strategic Policy 2 (Green Environment), guidance contained in PPG16 (Archaeology and Planning) and the London Plan there is a presumption against development that would damage archaeological resources depending on their importance. Where development is allowed and preservation *in situ* is not feasible, the Council will require that adequate arrangements for a full investigation, including excavation and recording, are agreed prior to development taking place.

(http://www.redbridge.gov.uk/cms/environment__planning/planning_and_regeneration/planningpolicy/ldfpage.aspx)

3.4 **Archaeology in Newham and the Newham Plan**

The London Borough of Newham's Unitary Development Plan 2001 (UDP) contains clauses that relate to archaeological practice in the Borough.

The trench was located within the Newham Archaeological Priority Area, and was subject to the Council's Archaeology Policies outlined in the Plan:

Archaeology: Investigation, Excavation and Protection

3.114 Archaeological remains often provide the only evidence of the Borough's past. They are a finite and fragile resource very vulnerable to modern development and land use. The archaeology of the Borough is a community asset which should be preserved and the needs of development balanced and assessed against this. Early consideration of and consultation on archaeological issues will maximise preservation in accordance with PPG16. The destruction of such remains should be avoided if possible and either left in situ if the remains are of national or particular local interest, or excavated and recorded prior to development, where remains are of lesser importance. Site layouts designed to retain archaeological features intact will be considered favourably by the Council.

3.115 The Greater London Archaeology Advisory Service (GLAAS - part of English Heritage) provides impartial advice to Newham Council. Sites of potential archaeological importance, to which this policy relates, can be defined as any site within an Archaeological Priority Area (APA). APAs are defined by GLAAS as areas

having particular interest or value (Please refer to Map EQ6), or as sites where it can reasonably be shown from existing sources of information (most notably the Greater London Sites and Monuments Record) that remains of archaeological importance may survive. For further information, please refer to SPG Note 'Archaeological Code of Practice'. An archaeological assessment (either a desk study or a preliminary field investigation) will normally be required for any development involving a site more than 0.4 acres within an APA. The Council will also require such an assessment for smaller sites within the APAs, and sites outside the APAs, where this is clearly justified by the archaeological sensitivity of the site. Developers should undertake early consultation with the Council, and recognised archaeological organisations such as GLAAS, to avoid uncertainty and later delays.

POLICY EQ43: THE COUNCIL WILL PROMOTE THE CONSERVATION, PROTECTION AND ENHANCEMENT OF THE ARCHAEOLOGICAL HERITAGE OF THE BOROUGH. DEVELOPERS OF SITES OF POTENTIAL ARCHAEOLOGICAL IMPORTANCE WILL BE REQUIRED TO PRODUCE A WRITTEN REPORT, AS PART OF THE APPLICATION FOR PLANNING PERMISSION, ON THE RESULTS OF AN ARCHAEOLOGICAL ASSESSMENT OR FIELD EVALUATION CARRIED OUT BY A SUITABLY QUALIFIED ARCHAEOLOGICAL CONTRACTOR; AND WHEN REMAINS OF IMPORTANCE ARE IDENTIFIED, THE COUNCIL WILL SEEK PRESERVATION OF THE REMAINS IN SITU. ON OTHER IMPORTANT SITES, WHERE THE BALANCE OF OTHER FACTORS IS IN FAVOUR OF GRANTING PLANNING PERMISSION BY MEANS OF THE IMPOSITION OF CONDITIONS ON THE GRANT OF PLANNING PERMISSION, AND POSSIBLY BY LEGAL AGREEMENTS, THE COUNCIL WILL ENSURE THAT ADEQUATE PROVISION IS MADE FOR THE PROTECTION, EXCAVATION AND RECORDING OF REMAINS, AND THE SUBSEQUENT PUBLICATION OF THE RECORDS OF EXCAVATION, PROVIDING A WRITTEN ACCOUNT OF THE ARCHAEOLOGICAL EXPLORATION, INCLUDING RECORDS OF FINDS.

3.116 The Council will promote co-operation between landowners, developers and archaeological organisations in accordance with the British Archaeologists' and Developers' Liaison Group Code.

(http://www.newham.gov.uk/Services/UnitaryDevelopmentPlan/AboutUs/UnitaryDevPlan.htm)

4 GEOLOGY AND TOPOGRAPHY

4.1 Within the general area of Marshgate Lane the Tertiary bedrock is variably London Clay and Woolwich and Reading Beds, overlain by Late Pleistocene river gravel. Overlying the gravel is a sequence of naturally derived alluvial sediments that would have supported a range of different environments, which are likely to have existed within the Lea Valley from the Mesolithic period onwards. These environments would have been constantly changing throughout the Holocene period.

4.2 The trench was located immediately to the south of the Bow Back River, which is located on the western side of the floodplain (valley bottom) of the Lea Valley. The extent to which this river is natural or has been manipulated or even entirely created by people in the past is not yet known.

4.3 The landscape of the area in the past bears little relation to the visible landscape of today, with the deposition of made ground deposits completely obscuring the earlier topography.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Prehistoric

5.1.1 A number of Palaeolithic flint implements have been found in the Taplow and Boyn Hill Gravels, which were deposited there as the terraces were formed by the River Thames.

5.1.2 In the later prehistoric period, the terrace gravels would have been attractive to settlement on account of their free-draining nature. Those located at the boundary between the alluvium and the gravel would have been particularly attractive due to their proximity to the rich natural resources of the floodplain.

5.2 Roman

5.2.1 The Roman road that connected the main port at Londinium (London) with the early military base and colony at Camulodunum (Colchester) is projected across the Lea Valley. This may have taken the form of a ford or via timber bridges or raised platforms, crossing the braided channels from island to island.

5.2.2 Associated with this road is fragmentary evidence for settlement activity in the near vicinity; either a nucleated settlement or several small farms or farmsteads dotting the landscape with associated field systems.

5.3 Medieval

5.3.1 Although no archaeological evidence for medieval activity comes from within the area, to the west, occupation and exploitation is known from at least the 13th century. The series of rivers collectively known as the Bow Back Rivers have potential for medieval deposits and features relating to the mill complexes known to have existed in the area. These features may include timber wharfing and leats set back from the waterfront themselves.

5.3.2 Evaluations undertaken as part of the Olympic project have recorded activity to the north, which comprised a ditch cut containing both Roman and medieval pottery fragments, and timber revetments associated with riverside activity.

5.4 Post-Medieval

5.4.1 During the 16th and 17th century the land within the area was as earlier, characterised by marshes and remained undeveloped and it is probable that the marsh no doubt hindered development. However as industrialisation continued, noxious industries were attracted to the area and by the 19th-century tar and turpentine distilleries were located between the Pudding Mill and City Mill rivers.

5.4.2 Other evidence of post medieval activity relates to quarrying and subsequent ground consolidation. In some places the made ground may infill areas of historic excavation, such as gravel quarries, brick pits and diverted river channels.

6 ARCHAEOLOGICAL METHODOLOGY

6.1 The location of the trench was marked out by the contractors after the approximate position of the targeted water main had been located by electronic scanning. The existing tarmac surface of around 0.10m thickness was cut using a circular disc cutter and then broken for removal using a pneumatic chisel. This was then removed by hand to expose the remains of the earlier road surface that comprised rectangular stone cobbles. This was then mechanically broken using the pneumatic chisel and removed by hand. The remaining deposit of mixed gravel, reinforced concrete and discarded cobbles was excavated using a variety of techniques as appropriate to the substrate encountered, although all were removed from the trench using hand tools. The required depth of the trench was dictated by the existing water main, which was located at approximately 0.80m below the existing ground surface.

6.2 An archaeologist monitored the excavation of the trench.

6.3 Once the pipe had been located it was exposed and the surrounding trench base was reduced to below the base of the pipe to allow for the laying of a concrete pad. This pad will function as the base for an inspection pit that will allow access to the planned meter. The trench was then backfilled using the excavated spoil and the tarmac temporarily reinstated until the work associated with insertion of the planned meter is undertaken.

6.4 No archaeological deposits were identified during the monitoring of this work.

7 SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1: Made ground deposits

7.1.1 The earliest deposits encountered comprised dark grey sandy gravels that contained discarded stone cobbles as well as the remains of a reinforced concrete surface that appeared to occupy the southern half of the trench. As these deposits overlay the existing water main they are clearly of fairly recent date.

7.1.2 The underlying natural soil was not observed, at it is probable that beneath the base of the water pipe ramp deposits associated with raising the road surface in preparation for the bridge that carries Marshgate Lane across the adjacent Bow Back River would be present (it may be of interest to note that the base of the excavated trench was probably only slightly lower than the existing surface of the A118, which lies approximately five metres to the north).

7.1.3 Directly beneath the existing tarmac surface the remains of the previous, cobbled road surface was observed. This was constructed of rectangular cobbles, typical of 19th century road surfacing.

7.2 Phase 2: Modern

7.2.1 A tarmac surface or 0.10m thick, which was laid directly onto the earlier cobbled surface, represents the existing road surface encountered in Marshgate Lane.

8 INTERPRETATION AND CONCLUSIONS:

8.1 The main objectives of the archaeological watching brief were to evaluate and mitigate the impact of the work on the archaeological resource and to preserve by record any archaeological remains that are uncovered during construction work. These objectives were achieved and the results are summarised below.

8.2 It is likely that all of the deposits encountered during this watching brief were associated with the construction of Marshgate Lane. These deposits may have been re-excavated during the laying of the existing water pipe and subsequently redeposited as trench infilling. The dark coloured gravel probably represents a deposit lain in order to raise the level of the road surface in preparation for crossing the Bow Back River at a height that would enable river traffic to pass underneath. The disturbance of the associated cobbled surface was probably caused by the laying of the re-enforced concrete surface, which may have originally been associated with access into an adjacent property entrance.

8.3 No deposits or features of archaeological significance were observed during the watching brief.

9 ACKNOWLEDGEMENTS

9.1 Pre-Construct Archaeology Limited would like to thank Claudia Innes, Thames Water for commissioning the project.

9.2 The author would like to thank Helen Hawkins for her project management and the construction crew for their on-site co-operation. Illustrations were produced by Josephine Brown.

10 BIBLIOGRAPHY

London Borough of Newham: Unitary Development Plan, 2001 http://www.newham.gov.uk/Services/UnitaryDevelopmentPlan/AboutUs/UnitaryDevPlan.htm

Museum of London Archaeology Service, 1994 *Archaeological Site Manual*

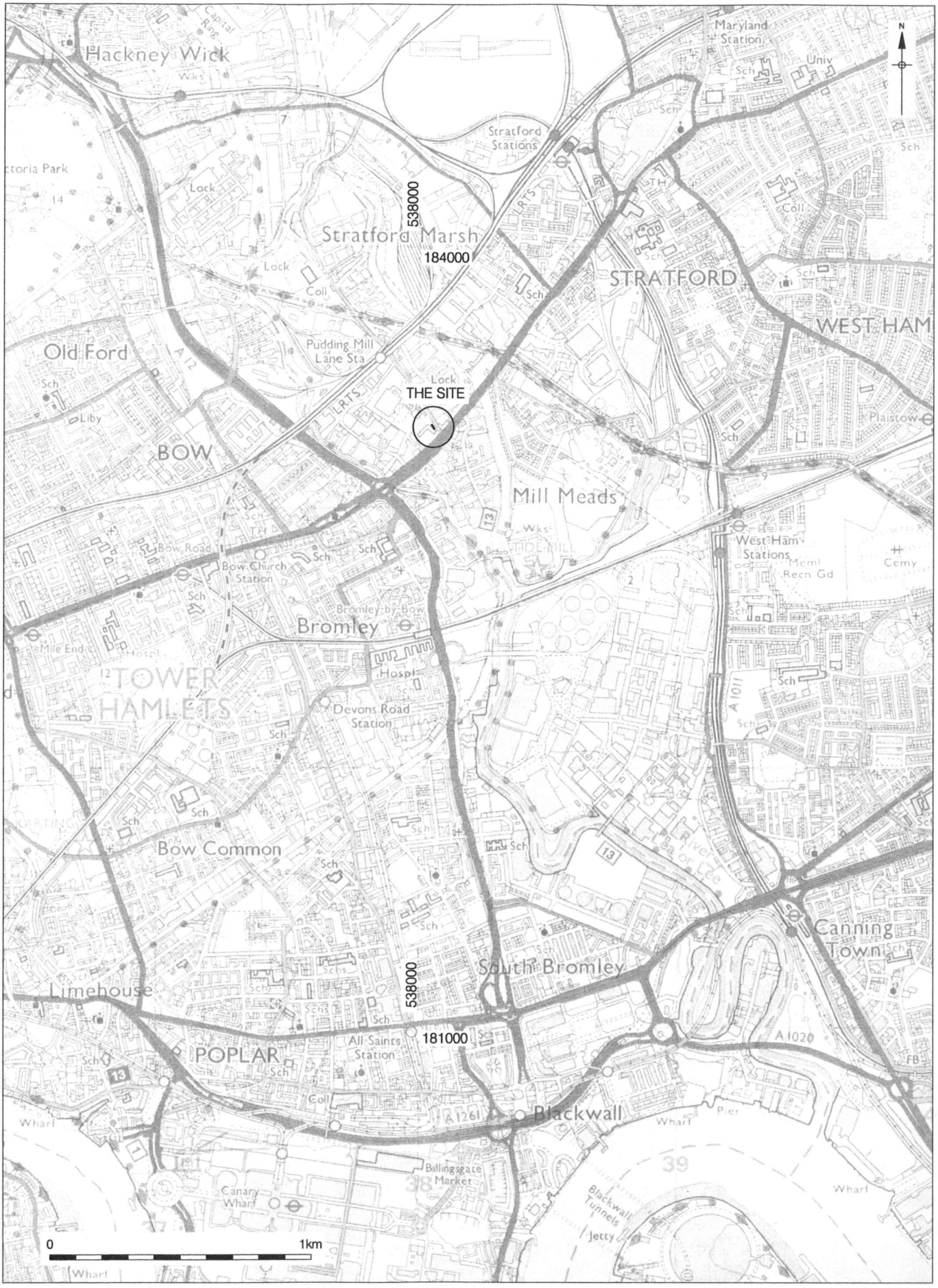

Figure 1
Site Location
1:20,000 at A4

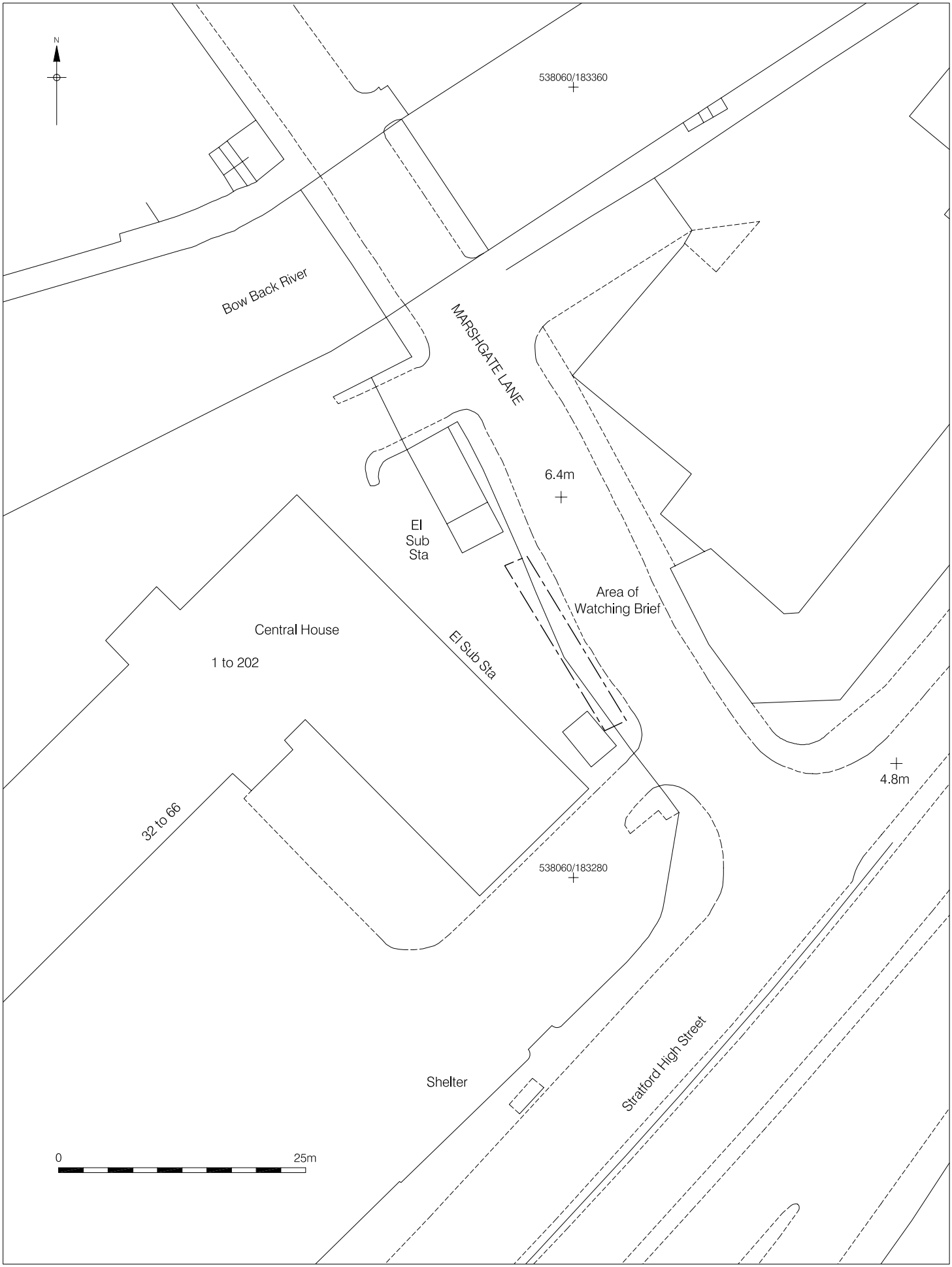

Figure 2
Watching Brief Location
1:500 at A4

APPENDIX 1: OASIS FORM

OASIS ID: preconst1-57287

Project details

Project name	An Archaeological Watching Brief for the installation of a water meter in Marshgate Lane, London Borough of Newham, E15
Short description of the project	An Archaeological Watching Brief for the installation of a water meter in Marshgate Lane, London Borough of Newham, E15 2PF
Project dates	Start: 06-03-2009 End: 06-03-2009
Previous/future work	No / Not known
Any associated project reference codes	MGF09 - Sitecode
Type of project	Field evaluation
Site status	Local Authority Designated Archaeological Area
Current Land use	Other 11 - Thoroughfare
Monument type	ROAD SURFACE Post Medieval
Monument type	ROAD SURFACE Modern
Significant Finds	NONE None
Significant Finds	NONE None

Project location

Country	England
Site location	GREATER LONDON NEWHAM NEWHAM marshgate lane E15 2PF
Postcode	E15 2PF

Study area	1.00 Square metres
Site coordinates	TQ 538062 183301 50.9432920621 0.189574581850 50 56 35 N 000 11 22 E Point

Project creators

Name of Organisation	PCA
Project brief originator	English Heritage/Department of Environment
Project design originator	Pre-Construct Archaeology Ltd
Project director/manager	Helen Hawkins
Project supervisor	John Payne
Type of sponsor/funding body	Utility Company
Name of sponsor/funding body	Thames Water plc

Project archives

Physical Archive Exists?	No
Digital Media available	'Text'
Paper Media available	'Report'

Entered by	john payne (jpayne@pre-construct.com)
Entered on	24 March 2009