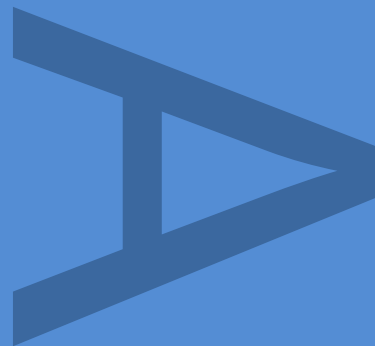


**THE SANCTUARY,
WESTMINSTER ABBEY,
CITY OF WESTMINSTER,
LONDON**

**AN ARCHAEOLOGICAL
WATCHING BRIEF DURING
DUCTING INSTALLATION**

JULY 2009

PRE-CONSTRUCT ARCHAEOLOGY



DOCUMENT VERIFICATION

**THE SANCTUARY, WESTMINSTER ABBEY,
CITY OF WESTMINSTER, LONDON**

**AN ARCHAEOLOGICAL WATCHING BRIEF
DURING DUCTING INSTALLATION**

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**An Archaeological Watching Brief During Ducting Installation at The
Sanctuary, Westminster Abbey, City of Westminster, London**

**Site Code: TSA 08
Central National Grid Reference: TQ 2997 7948**

**Written by Sarah Barrowman
Pre-Construct Archaeology Limited, July 2009**

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July 2009**

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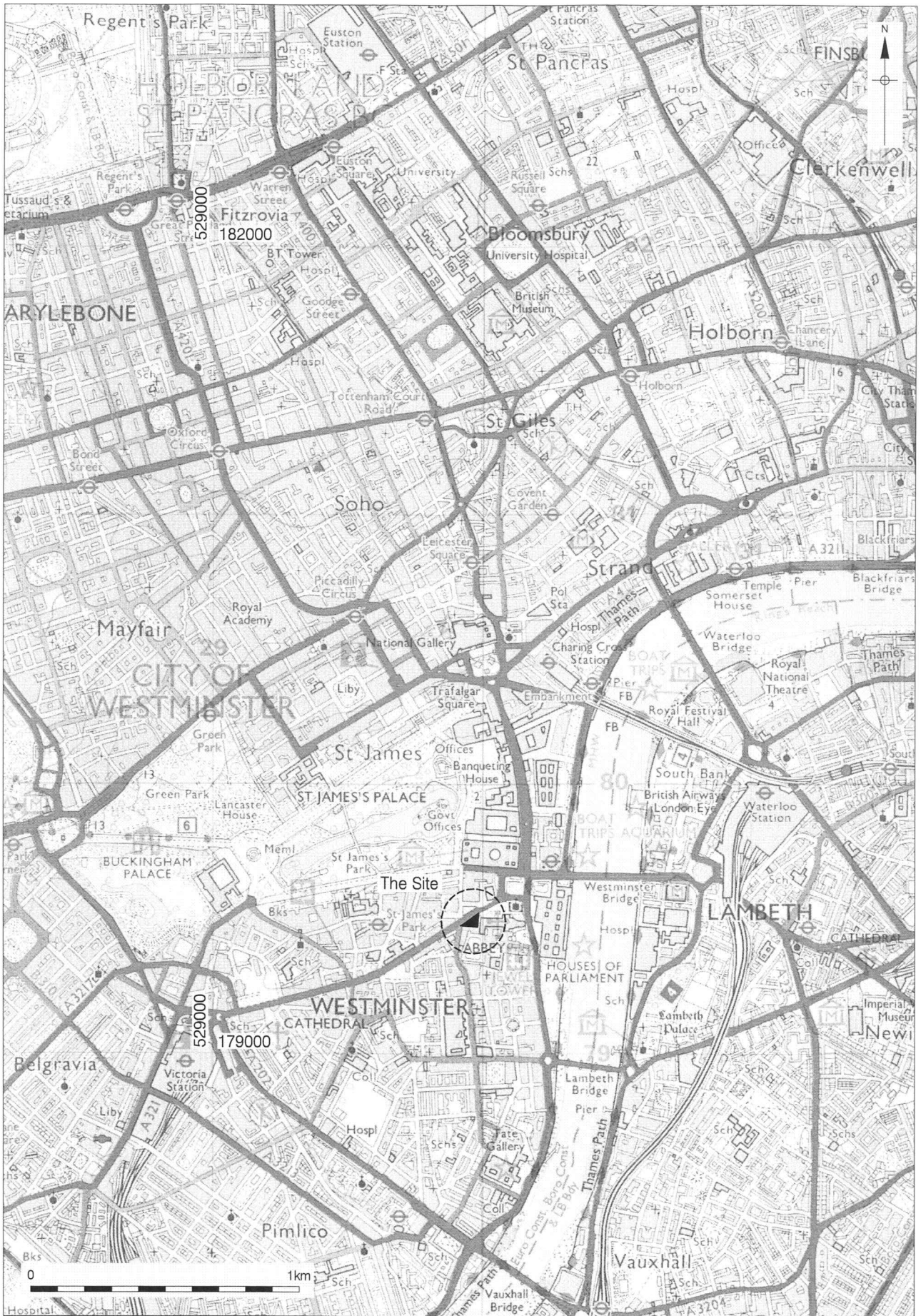
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1 ABSTRACT

- 1.1 This report details the results and working methods of archaeological watching brief during the excavation of a service trench for the installation of ducting in The Sanctuary, Westminster Abbey. The watching brief, commissioned by West One Infrastructure Services, was undertaken by Pre-Construct Archaeology Limited between the 13th and 15th of May 2009.
- 1.2 The investigations found evidence of late post-medieval made ground, underlying bedding layers for a modern road surface, cut by a modern service trench and associated backfill. No archaeological features or natural deposits were observed, nor were any deposits pre-dating the late post-medieval period.

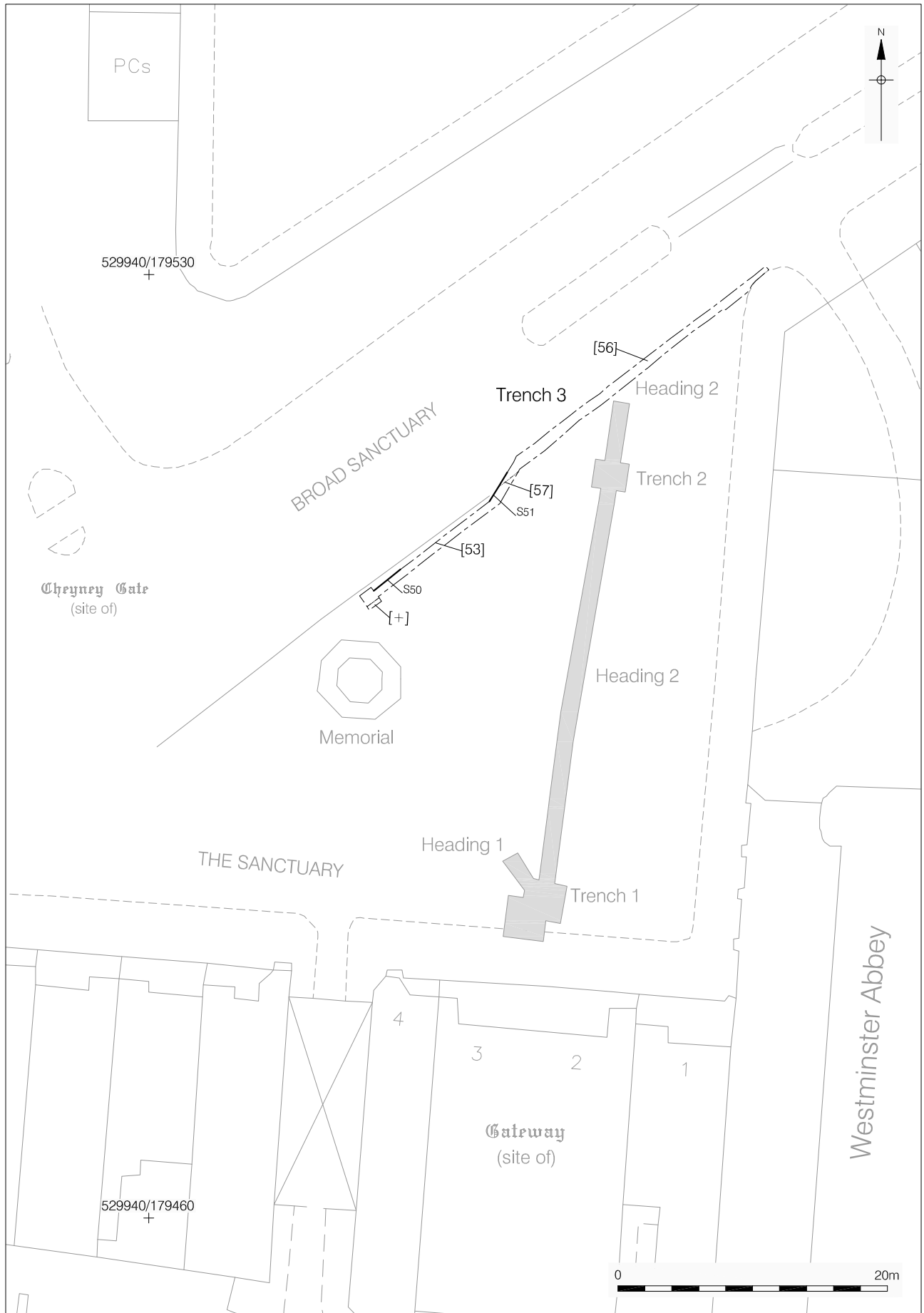
2 INTRODUCTION

- 2.1 This report details the methodology and results of an archaeological watching brief conducted by Pre-Construct Archaeology Ltd during the installation of ducting at The Sanctuary, Westminster Abbey, City of Westminster, SW1P 3PA.
- 2.2 The watching brief was undertaken from the 13th to the 15th May 2009, during the excavation of trenching for the installation of new ducting runs. The investigation encompassed 1 service trench that ran parallel with Victoria Street (Figure 1). The work was commissioned by West One Infrastructure on behalf of Westminster City Council. The groundworks were undertaken by J. Murphy & Sons. The watching brief was supervised by Sarah Barrowman and project-managed by Chris Mayo for Pre-Construct Archaeology Ltd.
- 2.3 The site was located within The Sanctuary, Westminster Abbey, in the City of Westminster, London (Figure 2). Westminster Abbey lies immediately to the east of the site, buildings lining The Sanctuary stand to the south, and Victoria Street borders the site to the north.
- 2.4 The central National Grid Reference of the site is TQ 2997 7948.
- 2.5 Pre-Construct Archaeology Ltd has previously undertaken watching brief work in The Sanctuary in immediate proximity to the recent ducting (Jorgensen 2008), and based on this has used the same Museum of London site code for all work: TSA 08.
- 2.6 Westminster Abbey, along with Westminster Palace and St Margaret's Church, is a World Heritage Site (number 426, designated inscription in 1987).



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Figure 1
 Site Location
 1:20,000 at A4



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Figure 2
 Detailed Site and Trench Location
 1:400 at A4

3 PLANNING BACKGROUND

- 3.1 The study aims to satisfy the objectives of the City of Westminster, which fully recognize the importance of the buried heritage for which they are the custodians. In November 1990 the Department of the Environment issued Planning Policy Guidance Note 16 (PPG16) 'Archaeology and Planning'. It provides guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains.
- 3.2 The site is located within the World Heritage Site of the Palace of Westminster and Westminster Abbey including St. Margaret's Church (number 426, designated inscription in 1987).
- 3.3 The Council's Archaeology Policy, as defined in the City of Westminster's Unitary Development Plan adopted 24 January 2007, is as follows:

DES 16: WORLD HERITAGE SITE

Aim

10.188 To safeguard the World Heritage Site.

POLICY DES 16: WORLD HERITAGE SITE

Permission will only be granted for developments that protect and conserve the character, appearance, setting and ecological value of the World Heritage Site

Policy application

10.189 Although no additional statutory controls follow from the designation of a World Heritage Site, PPG15: Planning and the Historic Environment states, in paragraph 2.22, that the designation highlights the outstanding international importance of the site which should be a key material consideration to take into account when determining planning and listed building consent applications. Great weight is placed upon the need to protect them for future generations. Development proposals affecting these sites or their settings need to be compatible with this objective and require careful scrutiny, often by way of formal environmental assessments, to ensure that their immediate and long term impact are fully evaluated.

Chapter 10: Urban Design and Conservation

City of Westminster 552 Unitary Development Plan adopted 24 January 2007

Reason

10.190 The member states of United Nations Educational Scientific and Cultural Organisation UNESCO adopted the Convention concerning the Protection of World Cultural and Natural Heritage in 1972. This Convention provided for the creation of the World Heritage Committee which, in 1987, inscribed the area formed by the Palace of Westminster, St Margaret's and Westminster Abbey as a World Heritage Site, now one of twenty six in the United Kingdom. This area has thus been recognised as being of 'outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view'.

4 GEOLOGY AND TOPOGRAPHY

- 4.1 Topographically there is little variance within the site. It slopes gently from the north towards the south. The current ground surface in the area of the trench varies from 4.58m OD to the west to 4.40m OD at the east, varying with the slope of the road surface.
- 4.2 The study site is located on what used to be Thorney Island, the largest and probably the highest of the islands within the Tyburn delta. The island was located at the confluence of the Tyburn and the Thames rivers. Geologically Thorney Island consisted primarily of sand and gravel overlying London Clay.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 5.1 The site of Westminster Abbey is located on the former Thorney Island, which was separated from the surrounding area by the River Tyburn. Investigations of the area around the site in advance of the Jubilee Line Extension Project in the 1990s revealed that evidence of activity from the Mesolithic, Neolithic and Early Bronze Age was present¹. The Roman and Saxon periods were represented by both features and finds. Those investigations also revealed substantial medieval and post-medieval remains.
- 5.2 Westminster Abbey is rumoured to have its' origins in the 7th century, although the first historical reference to the church comes from the reign of Edward the Confessor in the 11th century. Elements of that high medieval church were found beneath the nave and sanctuary of the Abbey in the 19th century.
- 5.3 In common with many churches of the medieval period, successive monarchs made alterations to the building. At the Dissolution in 1540 the Abbey church survived, largely due to its royal connections, and became the cathedral of the new diocese of Westminster. Thenceforth alterations to the building were limited to restoration and repair by, for example, Sir Christopher Wren in the late 17th and early 18th centuries, and Sir George Gilbert Scott in the 19th century. The Abbey has been used as the coronation site for all English monarchs since William I in 1066.
- 5.4 In 2008 Pre-Construct Archaeology Ltd conducted a watching brief during excavations within The Sanctuary to repair a collapsed sewer (Jorgensen 2008). This work, focused around two shaft trenches immediately to the south of the proposed ducting and a connecting header, revealed medieval walls presumably associated with the Chapter Clerks dwelling and the Bishop of London's Prison. Additional archaeological features including several pits dating to the medieval period and a construction cut likely associated with the abbey precinct wall were also identified and recorded within the header. The northern shaft, closest to the proposed ducting, revealed several post-medieval gravel road surfaces and a medieval palaeochannel. These surfaces were found at approximately 0.5m BGL, beneath modern makeup and the current ground surface. This investigation is also recorded under the site code TSA 08.

6 METHODOLOGY

- 6.1 One service trench for the installation of new ducting was excavated by J. Murphy & Sons. The trench was aligned north-east to south-west, parallel with Victoria Street (Figures 1 & 2). The trench was approximately 36.40m by 0.60m, and was excavated to an average depth of 0.55m below ground level.
- 6.2 The trench was excavated by a mechanical excavator equipped with a toothless bucket under archaeological supervision in c.100mm spits.
- 6.3 Levels and co-ordinates for the site work were calculated from a TBM established during a prior archaeological investigation by Pre-Construct Archaeology Ltd within Dean's Yard.
- 6.4 Site records were compiled in plan at a scale of 1:20 and in section at a scale of 1:10. All written data was entered on *proforma* sheets following standard recording methods, and a photographic record using digital format, colour slide and monochrome 35mm film was made as appropriate.
- 6.5 As prior work had been undertaken in The Sanctuary under the Site Code TSA 08 context and section registers were started from 50, and the trench was referred to as Trench 3.
- 6.6 The work was undertaken following English Heritage guidelines (GLAAS1998).

7 ARCHAEOLOGICAL SEQUENCE

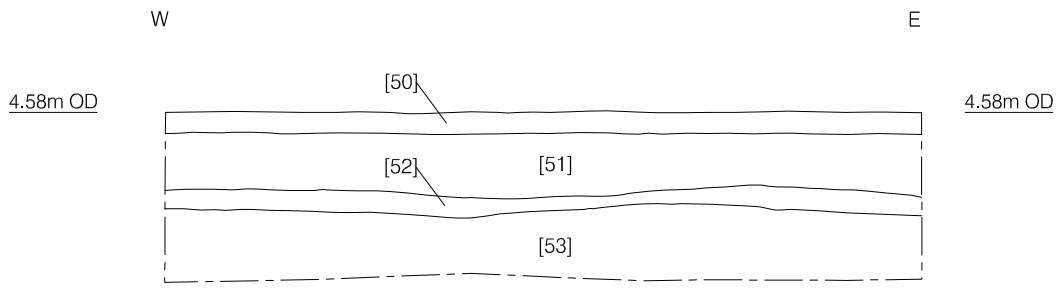
7.1 Phase 1

7.1.1 The earliest deposit encountered, from 4.02m OD, was a layer of made ground [53] composed of firm mid brownish-grey sandy-silt. The deposit had inclusions of frequent CBM and mortar fragments, moderate gravels, and occasional oyster shells and clay tobacco pipe pieces. This deposit formed the basal limit of excavation.

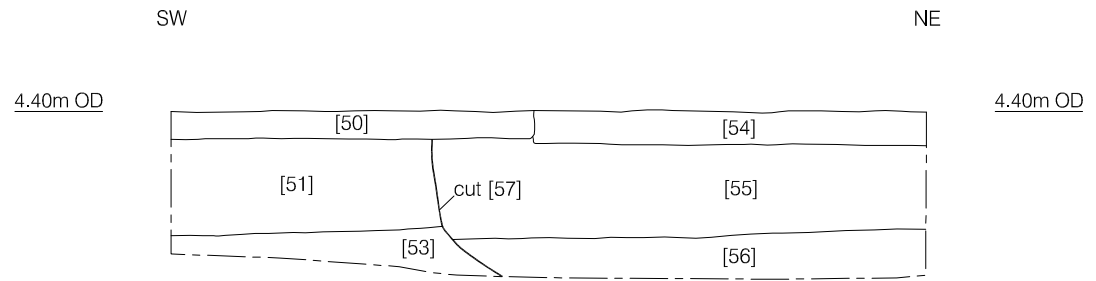
7.2 Phase 2

7.2.1 Overlying the made ground [53] was a levelling layer of loose light greyish-yellow gravelly-sand [52]. This was 0.08m thick and encountered at 4.34m OD. It was overlain by an indurated layer of light greyish-white concrete [51], which was 0.32m thick and encountered from 4.51m OD. This formed the bedding for a layer of indurated dark bluish-black tarmac [50], which was encountered at 4.58m OD, being 0.09m thick, and forms the modern road surface of The Sanctuary.

7.2.2 The road surface [50] was truncated by a linear east-west service trench [57] that was encountered from 4.40m OD, extended beyond the limits of excavation, and formed the line followed for approximately half of the excavation. It was backfilled with loose mid brownish-pink gravels [56] which were encountered from 4.01m OD and extended beyond the limits of excavation. This was overlain by a layer of re-laid light brownish-grey concrete bedding [55], which was 0.33m thick and encountered from 4.31m OD. Above this and sealing the trench was a layer of indurated dark-bluish-black tarmac [54], with a thickness of 0.11m. It was encountered from 4.40m OD, and formed the latest observed deposit.



Section 50
South Facing
Trench 3



Section 51
South East Facing
Trench 3



Figure 3
Sections 50 and 51
1:25 at A4

8 INTERPRETATION & CONCLUSIONS

- 8.1 The trench contained a layer of made ground dating from the late post-medieval periods. It is likely that these layers relate to build up of the area, with such deposits being used to alter the ground level prior to the construction of the existing road surface.
- 8.2 The results of this watching brief show a variance with those of recent work in The Sanctuary by Pre-Construct Archaeology Ltd in 2008. The closest trench in that earlier phase of work, Trench 2 (located approximately 3m to the SE of Trench 3), revealed a sequence of nine 20th century road surfaces between surface heights of approximately 3.81m OD and 2.91m OD. Trench 3, however, did not show such a thickness of old surfaces; the post-medieval made ground was found at an upper height of 4.02m OD. This substantial difference may suggest that the surfaces revealed in Trench 2 are sealing or capping an old feature within The Sanctuary, the extent of which was not seen at the time.
- 8.3 No natural deposits were observed during the watching brief.
- 8.4 No archaeological finds or features pre-dating the late post-medieval period were identified during the investigation.
- 8.5 As no further impacts are associated with the works associated with this phase of ducting installation are anticipated, no additional work is recommended or required.

9 ACKNOWLEDGEMENTS

- 9.1 Pre-Construct Archaeology Limited would like to thank West One Infrastructure Services for commissioning the work on behalf of Westminster City Council. Thanks are also extended to the staff at Murphys who undertook the work.
- 9.2 We also thank Diane Walls of English Heritage, Archaeology Advisor to the City of Westminster, and Warwick Rodwell, Westminster Abbey Consultant Archaeologist, for monitoring the work.
- 9.3 The author would like to thank Chris Mayo for his project management, Mark Roughley for the illustrations, and Phil Frickers for his assistance on site.

10 BIBLIOGRAPHY

English Heritage, Greater London Archaeology Advisory Service, 1998 *Archaeological Guidance Papers: 1 Written Schemes of Investigation; 2 Desk-Based Assessments; 3 Standards and Practices in Archaeological Fieldwork in London; Archaeological Reports; 5 Evaluations*

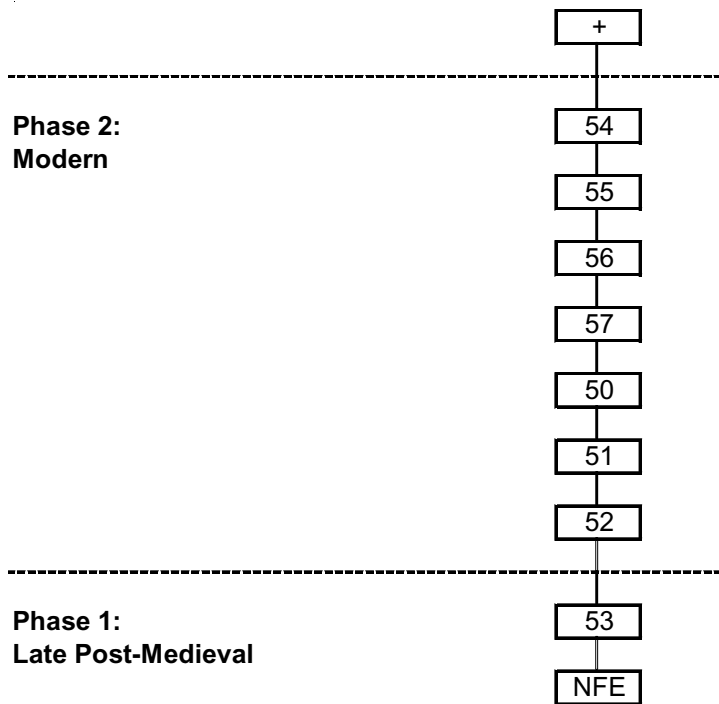
Jorgensen, P. 2008. 'An Archaeological Watching Brief During Drainage Repair Works at the Sanctuary, Westminster Abbey, City of Westminster, London'. Pre-Construct Archaeology Ltd, unpublished report.

Mayo, C. 2009. 'Written Scheme of Investigation For An Archaeological Watching Brief During Ducting Installation At The Sanctuary, Westminster Abbey, City of Westminster, SW1P 3PA'. Pre-Construct Archaeology Ltd, unpublished report.

APPENDIX 1: CONTEXT REGISTER

Context No.	Type	Description	Date
50	Surface	Tarmac Road Surface of The Sanctuary	Modern
51	Layer	Concrete Bedding for [50]	Modern
52	Layer	Sand Bedding for [51]	Modern
53	Layer	Made Ground	Late Post-Med
54	Surface	Re-laid Tarmac Road Surface of The Sanctuary	Modern
55	Layer	Re-lain Concrete within [57]	Modern
56	Fill	Fill of [57]	Modern
57	Cut	Service Trench	Modern

APPENDIX 2: MATRIX



APPENDIX 3: OASIS FORM

OASIS ID: preconst1-59766

Project details

Project name	Ducting Works at The Sanctuary, Westminster Abbey
Short description of the project	An archaeological watching brief was undertaken during the excavation of a service trench for the installation of ducting in The Sanctuary, Westminster Abbey, between the 13th and 15th of May 2009. The investigations found evidence of late post-medieval made ground, underlying bedding layers for a modern road surface, cut by a modern service trench and associated backfill. No archaeological features or natural deposits were observed, nor were any deposits pre-dating the late post-medieval period.
Project dates	Start: 13-05-2009 End: 15-05-2009
Previous/future work	Yes / Not known
Any associated project reference codes	TSA 08 - Sitecode
Type of project	Field evaluation
Site status	World Heritage Site
Current Land use	Transport and Utilities 1 - Highways and road transport
Development type	Pipelines/cables (e.g. gas, electric, telephone, TV cable, water, sewage, drainage etc.)
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	GREATER LONDON CITY OF WESTMINSTER WESTMINSTER The Sanctuary, Westminster Abbey
Postcode	SW1P 3PA
Study area	65.00 Square metres
Site coordinates	TQ 2997 7948 51.4987986724 -0.127370811860 51 29 55 N 000 07 38 W Point

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	Pre-Construct Archaeology Ltd
Project design originator	Chris Mayo
Project director/manager	Chris Mayo
Project supervisor	Sarah Barrowman
Type of sponsor/funding body	Developer

Name of sponsor/funding body West One Infrastructure Services

Project archives

Physical Archive recipient Westminster Abbey Museum

Physical Contents 'Ceramics'

Digital Archive recipient Westminster Abbey Museum

Digital Contents 'none'

Digital Media available 'Images raster / digital photography', 'Spreadsheets', 'Survey', 'Text'

Paper Archive recipient Westminster Abbey Museum

Paper Contents 'none'

Paper Media available 'Context sheet', 'Drawing', 'Plan', 'Report', 'Section'

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

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