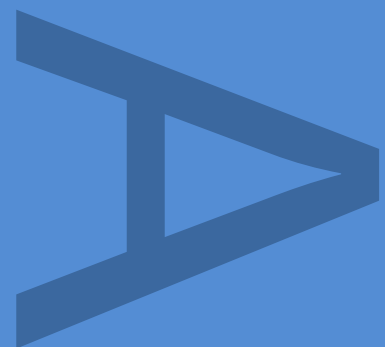


**THE SANCTUARY,
WESTMINSTER ABBEY, CITY OF
WESTMINSTER SW1P 3PA**

**AN ARCHAEOLOGICAL
WATCHING BRIEF DURING THE
INSTALLATION OF DUCTING**

SITE CODE: TSA 08

JULY 2010



PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

**THE SANCTUARY, WESTMINSTER ABBEY, CITY
OF WESTMINSTER SW1P 3PA**

**AN ARCHAEOLOGICAL WATCHING BRIEF
DURING THE INSTALLATION OF DUCTING**

Quality Control

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An Archaeological Watching Brief during the Installation of Ducting at The Sanctuary, Westminster Abbey, City of Westminster SW1P 3PA

ISSUED DOCUMENT

Site Code: TSA 08

Central National Grid Reference: TQ 2997 7948

Written by Iain Bright

Pre-Construct Archaeology Limited, July 2010

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1 ABSTRACT

- 1.1 This report details the results and working methods of archaeological watching brief undertaken during the excavation of a service trench for the installation of ducting at The Sanctuary, Westminster Abbey. The watching brief, commissioned by West One Infrastructure Services, was undertaken by Pre-Construct Archaeology Limited between the 18th and 27th January 2010.
- 1.2 The excavation of a single trench was monitored which ran from The Sanctuary to the south through the archway which leads into Dean's Yard. The investigations found evidence of late 20th century made ground, underlying bedding layers for a modern road surface. Within the made ground were various service pipes were observed, a number of which were no longer in use. No archaeological features or natural deposits were observed, nor were any deposits pre-dating the 20th century.

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 18th and 27th January 2010, during the excavation of trenching for the installation of new ducting runs. The investigation encompassed 1 service that was aligned north – south through the archway which connects The Sanctuary and Dean’s Yard, before turning and following the curb line once inside Dean’s Yard into a roughly east – west alignment. It measured approximately 35.80m N-S and the general width of the trench was 0.55m. Once in Dean’s Yard it turned and continued on an E-W alignment for 8.60m. The trench was excavated to depths between 0.50m and 0.95m below ground level.
- 2.3 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 Iain Bright and project-managed by Chris Mayo for Pre-Construct Archaeology Ltd. The work was monitored by Diane Walls of English Heritage, Archaeology Advisor to the City of Westminster.
- 2.4 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.
- 2.5 The central National Grid Reference of the site is TQ 2997 7948.
- 2.6 Pre-Construct Archaeology Ltd has previously undertaken watching brief work in The Sanctuary in immediate proximity to the works detailed here (see Jorgensen 2008 and Barrowman 2009), and has subsequently retained the same Museum of London site code: TSA 08.
- 2.7 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

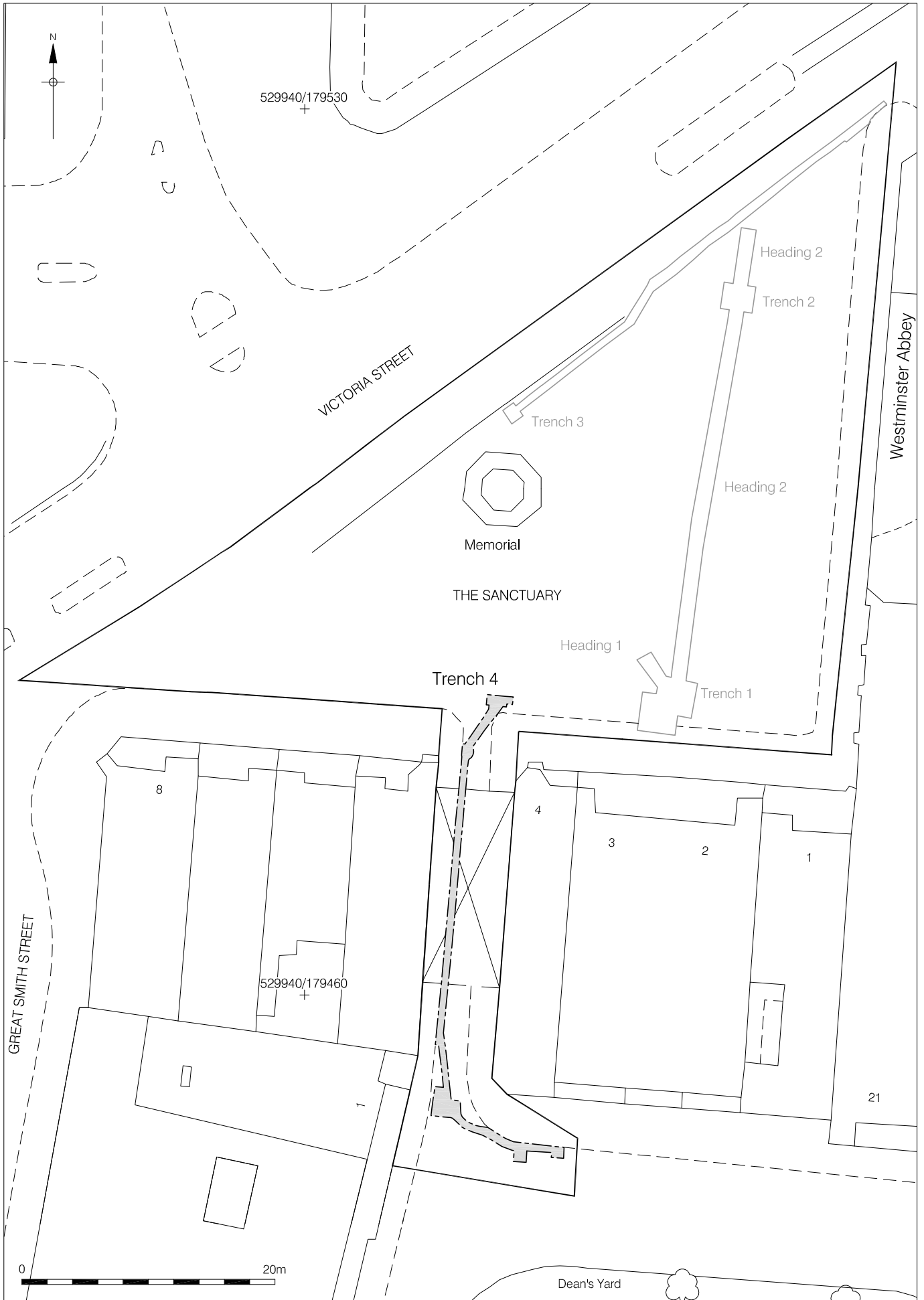


Figure 2
 Trench Location
 1:400 at A4

3 PLANNING BACKGROUND

3.1 National Policy: Planning Policy Statement (PPS 5)

3.1.1 In March 2010 the Department for Communities and Local Government issued Planning Policy Statement 5: Planning for the Historic Environment (PPS5), which provides guidance for planning authorities, property owners, developers and others on the investigation and preservation of archaeological remains.

3.1.2 In considering any planning application for development, the local planning authority will be guided by the policy framework set by government guidance, in this instance PPS5, by current Unitary Development Plan policy and by other material considerations.

3.2 Local Policy: City of Westminster Unitary Development Plan

3.2.1 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. 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'.

3.3 Other considerations

- 3.3.1 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).

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

- 5.1.1 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 present (Thomas et al 2006). The Roman and Saxon periods were represented by both features and finds. Those investigations also revealed substantial medieval and post-medieval remains.
- 5.1.2 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 (Weinreb and Hibbert 1995).
- 5.1.3 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 (Weinreb and Hibbert 1995).
- 5.1.4 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 (Jorgensen 2008). This investigation was also recorded under the site code TSA 08.

- 5.1.5 An archaeological excavation was also undertaken by Pre-Construct Archaeology Ltd at Dean's Yard (DYR09), immediately to the south of the archway. A struck flint of possible Later Neolithic/Early Bronze Age date was recovered from the top of the natural sand and hints at a prehistoric presence on Thorney Island at this time. Additionally a single pit containing a few sherds of late Iron Age or early Roman pottery was observed cutting the natural sand and a few sherds of residual Saxon pottery collected from later features may indicate activity during this period in the vicinity of the trench. The majority of the strata recorded dated to the medieval and post-medieval periods consisted of ground raising deposits pertained to the formation and evolution of the yard although occasional pitting activity was also observed along with a single ditch and the remains of a hearth or oven, both of medieval date (Jorgensen 2010).
- 5.1.6 Most recently, in 2009, an additional archaeological watching brief was undertaken at The Sanctuary, during the installation of ducting and bollards. 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 earlier archaeological features or natural deposits were observed (Barrowman 2009). Once again this watching brief retained the site code TSA08.

6 METHODOLOGY

- 6.1 One service trench for the installation of new ducting was excavated by J. Murphy & Sons. The trench was, for the majority, aligned north – south turning and following the curb line once inside Dean's Yard into a roughly east – west alignment. The trench measured approximately 35.80m N-S and the general width of the trench was 0.55m aside from the south-western corner where it extended to 2.60m. Where the trench turns to an E-W alignment it continues for 8.60m. The trench was excavated predominantly to a depth of 0.50-0.55m below ground level, with the exception of one area in Dean's Yard which extended to 0.95m BGL.
- 6.2 The trench was excavated by a mechanical excavator equipped with a toothless bucket under archaeological supervision, operating in c.100mm-thick spits.
- 6.3 Levels for the site work were calculated from readings taken during a previous archaeological watching brief undertaken by Pre-Construct Archaeology Ltd for drainage repair at The Sanctuary (Jorgensen 2008).
- 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 pro forma 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 began with numbers 58 and 52 respectively, and the trench was referred to as Trench 4.
- 6.6 The work was undertaken following English Heritage guidelines (GLAAS1998) and in accordance with a Written Scheme of Investigation (Mayo 2009) which had been approved by Diane Walls of English Heritage, Archaeology Advisor to the City of Westminster.

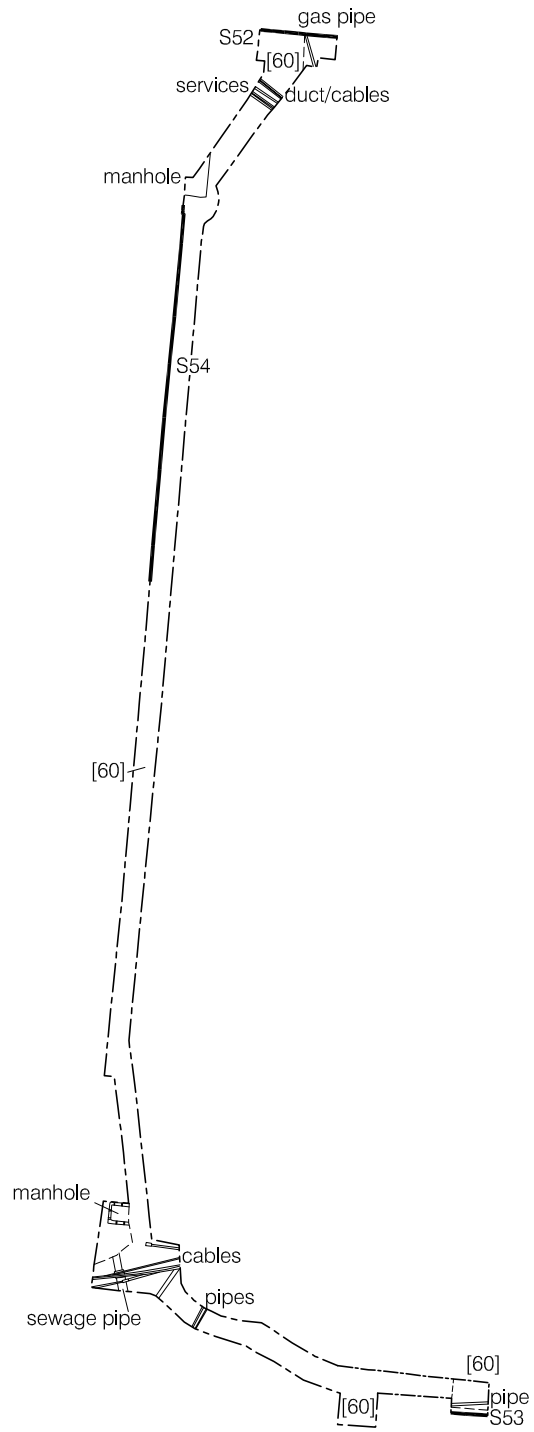
7 ARCHAEOLOGICAL SEQUENCE

7.1 Phase 1

- 7.1.1 The earliest recorded deposit encountered was a layer of late 20th century made ground [60]. It was observed between 3.71m OD to 3.99m OD. It comprised of a moderately compacted mid brownish grey silty clay containing frequent fragments and flecks of mortar, occasional flecks and fragments of ceramic building material, clinker/charcoal, oyster shell, pot and small to medium sub-rounded to sub-angular pebbles. It also contained some evidence of everyday human refuse including a Pepsi can, the design of which could be dated to the 1970's/1980's, thus demonstrating the recent deposition date of the layer.
- 7.1.2 Observed within the made ground were a series of service pipes and cables, a number of which were inactive, including a small service inspection chamber formed of machine moulded yellow stock brick located towards the south-west corner of the trench where it reaches Dean's Yard. This appeared to have housed a disused sewage pipe. Overall it can be said that the area in which the ground works took place had already been heavily truncated during the course of the 20th century by a series of service runs.

7.2 Phase 2

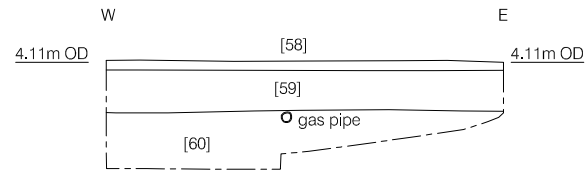
- 7.2.1 Overlying the made ground was a 0.20-.0.25m thick layer of indurated greyish white concrete [59]. This was observed between heights of 4.01m OD and 4.06m OD and forms a layer of ground consolidation for the overlying tarmac road surface.
- 7.2.2 The present day road surface [58] comprises of an indurated bluish black tarmac which measured a thickness of 0.10m – 0.23m. This was recorded around a level of 4.11m OD.



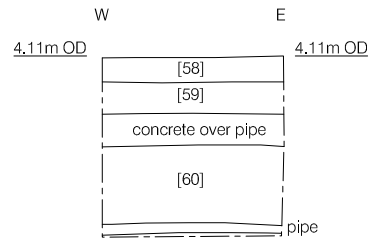
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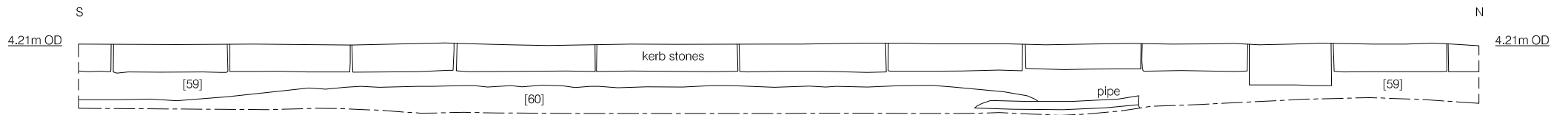
Figure 3
Plan of Trench 4
1:200 at A4



Section 52
Trench 4
South Facing



Section 53
Trench 4
South Facing



Section 54
Trench 4
East Facing

0 20m

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Figure 4
Sections 52 - 54
1:40 at A4

8 INTERPRETATION AND CONCLUSIONS

- 8.1 The trench contained a layer of made ground dating from the 20th century. This contained a series of service pipes and cables, a number of which were no longer in use. It was sealed by a layer of concrete which consolidated the ground for the overlying tarmac road surface.
- 8.2 The results of this watching brief confirmed the findings of the 2008 watching brief at the Sanctuary which revealed modern made ground occurring to at least a depth of 1.00m below current ground level, or 3.04m OD (Jorgensen 2008). Although earlier medieval wall foundations were observed at a higher level, no such structures were evident during the works undertaken during this phase of the watching brief.
- 8.3 No natural deposits were observed during the watching brief.
- 8.4 No archaeological finds or features pre-dating the 20th century 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, and Jenny Simonson for the illustrations.

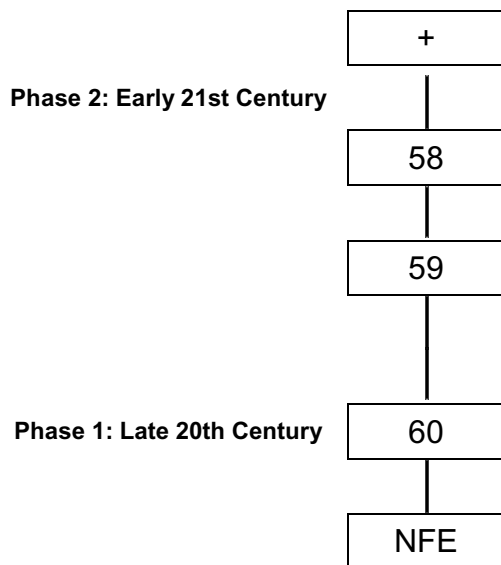
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11 APPENDIX 1: CONTEXT REGISTER

| Site Code | Context No. | Plan | Section | Type | Description | Date |
|-----------|-------------|------|------------------|-------|-------------------------------|--------|
| TSA08 | 58 | Tr 4 | S52, S53 | Layer | Modern road surface | Modern |
| TSA08 | 59 | N/A | S52, S53, S54 | Layer | Concrete ground consolidation | Modern |
| TSA08 | 60 | Tr 4 | S52, S53, S54 | Layer | Late 20th Century made ground | Modern |

12 APPENDIX 2: MATRIX



13 APPENDIX 3: OASIS DATA COLLECTION FORM

OASIS ID: preconst1-78520

| Project details | |
|--|---|
| Project name | An Archaeological Watching Brief During the Installation of Ducting at The Sanctuary, Westminster Abbey, City of Westminster |
| Short description of the project | The investigations found evidence of late 20th century made ground, underlying bedding layers for a modern road surface. Within the made ground were various service pipes were observed, a number of which were no longer in use. No archaeological features or natural deposits were observed, nor were any deposits pre-dating the 20th century. |
| Project dates | Start: 18-01-2010 End: 27-01-2010 |
| Previous/future work | Yes / Not known |
| Any associated project reference codes | TSA08 - Sitecode |
| Type of project | Field evaluation |
| Site status | World Heritage Site |
| Current Land use | Transport and Utilities 1 - Highways and road transport |
| Project location | |
| Country | England |
| Site location | GREATER LONDON CITY OF WESTMINSTER CITY OF WESTMINSTER Installation of Ducting at The Sanctuary, Westminster Abbey, City of Westminster, London |
| Postcode | SW1P 3PA |
| 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 | Iain Bright |
| Type of sponsor/funding body | Developer |
| Name of sponsor/funding body | West One Infrastructure Services |
| Project archives | |
| Physical Archive Exists? | No |
| Physical Archive recipient | Westminster Abbey Museum |
| Physical Archive ID | TSA08 |
| Digital Archive recipient | Westminster Abbey Museum |
| Digital Archive ID | TSA08 |
| Digital Contents | 'none' |
| Digital Media available | 'Database','Images raster / digital photography','Spreadsheets','Text' |
| Paper Archive recipient | Westminster Abbey Museum |
| Paper Archive ID | TSA08 |
| Paper Contents | 'none' |
| Paper Media available | 'Context sheet','Diary','Drawing','Plan','Report','Section' |
| Project bibliography 1 | |

| | |
|-------------------------------|--|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | A Watching Brief During the Installation of Ducting at The Sanctuary, Westminster Abbey, City of Westminster, London |
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