

**IMPROVEMENT WORKS AT  
ST PAUL'S SQUARE, BEDFORD**

**PROGRAMME OF ARCHAEOLOGICAL  
OBSERVATION, INVESTIGATION, RECORDING,  
ANALYSIS AND PUBLICATION**

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## **Preface**

*Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.*

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## **Structure of the Report**

After the introductory Section 1, there is a summary of the results of the programme of archaeological observation and recording in Section 2, followed by a brief conclusion (Section 3). Section 4 is a bibliography and Appendix 1 contains an archaeological context summary.

## **Key Terms**

Throughout this report the following terms or abbreviations are used:

<i>Albion</i>	Albion Archaeology
<i>Client</i>	Bedford Borough Council
<i>IFA</i>	Institute of Field Archaeologists
<i>Procedures Manual</i>	<i>Procedures Manual Volume 1 Fieldwork, 2<sup>nd</sup> Edition 2001.</i> Bedfordshire County Council



## **Non-Technical Summary**

*In April 2003 Albion Archaeology was commissioned by Bedford Borough Council to undertake a programme of archaeological observation in St Paul's Square, Bedford. It was necessitated by the groundworks required for the insertion of thirteen safety bollards in the south-eastern corner of the square.*

*The development area is situated on the north side of the town bridge and to the east of St Paul's Church. It is centred at TL 0505 4967. The ground slopes down very gently from north to south and has an average height of about 28.4m aOD. The geology of the site is alluvium and river gravels overlying Oxford Clay.*

*St Paul's Square forms the original nucleus of the historic core of Bedford. It is likely to preserve remains dating from the middle Saxon period to the present day.*

*Although no significant archaeological remains or artefacts were uncovered during the investigations, useful information on the depth of overburden within this area was recorded.*

*A possible former ground surface (potentially post-medieval or earlier in date) was identified at a depth of c.0.90m below present ground level. This in turn sealed earlier deposits, probably derived at least in part from alluvium deposited by the River Great Ouse, albeit altered by human activity.*

*Above the former ground surface were a series of deposits, which probably represent (at least in part) make-up layers for more recent ground surfaces. They may be associated with attempts to level up the southern side of the square, which overall slopes down from north to south towards the river.*



## 1. INTRODUCTION

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### 1.1 *Planning Background*

Bedford Borough Council granted planning permission for the insertion of retractable safety bollards on the south-eastern corner of St Paul's Square, Bedford (Figures 1 and 2). This involved groundworks in order to create holes large enough to hold the thirteen individual bollards.

Bedfordshire County Council's County Archaeological Officer (CAO) advised that the area of the development was archaeologically sensitive and within an area of high archaeological potential. St Paul's Square lies at the heart of the original middle to late Saxon settlement which ultimately developed into Bedford town.

A brief was issued by the CAO for a programme of archaeological works, which would mitigate the archaeological impact of the construction work (BCC 2002). Albion Archaeology was commissioned by Bedford Borough Council to undertake the necessary programme of archaeological observation, investigation, recording, analysis and publication. A project design (Albion Archaeology 2003) was approved by the CAO prior to the commencement of the work.

### 1.2 *Site Location and Description*

The development area is situated on the north side of the town bridge and to the east of St Paul's Church. It is centred at TL 0505 4967.

The ground slopes very gently from north to south and has an average height of about 28.4m aOD. The geology of the site is alluvium and river gravels overlying Oxford Clay.

### 1.3 *Archaeological Background*

St Paul's Square forms the original nucleus of the historic core of Bedford. The historical and archaeological background to Bedford has been summarised in the extensive urban survey, undertaken by English Heritage and Bedfordshire County Council (Albion Archaeology 2001). In addition, relevant HER and BLARS references were also consulted.



## 2. RESULTS OF OBSERVATION AND RECORDING

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### 2.1 Introduction

The programme of archaeological observation was undertaken between 5<sup>th</sup> June 2004 and 25<sup>th</sup> April 2005. During this period all groundworks requiring archaeological monitoring were completed.

Detailed technical information on all deposits and archaeological features discussed below can be found in Appendix 1.

### 2.2 Methodology

With the exception of bollard holes (BH) 7, 8, 11, 12 and 13 (which were excavated and backfilled before Albion Archaeology attended the site) the programme of archaeological observation adhered to the field methods set out in the Project Design (Albion Archaeology 2003). In the case of BH 1, 2, 3, 4, 5, 6, 9 and 10 the methodology specifically included the following;

- 1 All excavation was monitored to try to identify *in situ* archaeological deposits.
- 2 All disturbed soil was scanned for artefacts.
- 3 Potential archaeological deposits were investigated to determine stratigraphic relationships and to recover artefactual material.
- 4 All deposits were fully recorded in accordance with Albion's *Procedures Manual* and the Project Design.
- 5 All archaeological observations were recorded at a suitable scale on base plans that were tied in to the OS national grid.
- 6 Significant features were recorded using a digital camera.

Throughout the project the standards set out in the Institute of Field Archaeologists Codes of Conduct and Standards and Guidance documents (specifically *Standard and Guidance for an Archaeological Watching Brief*, September 1999), in English Heritage's *Management of Archaeological Projects* (1991) and Albion Archaeology's *Procedures Manual* were adhered to.

### 2.3 Extent and Nature of Groundworks

The groundworks consisted of the excavation of thirteen bollard holes within an area of c.100m<sup>2</sup> in the south-eastern part of St Paul's Square, Bedford (Figures 1 and 2). The bollard holes were excavated using a mechanical hammer and hand tools. They varied from 0.40m to 0.50m wide and long, and 1.25m to 1.35m deep.

### 2.4 Observations

#### 2.4.1 Present ground surface (Figure 2)

Within BH 1 to 5 the current ground surface consisted of a layer of c.90mm deep granite cobbles (100). Within BH 6 to 10 the ground surface was formed by a c.70mm deep layer of paving slabs (111).



#### 2.4.2 Recent make-up layers (Figure 2)

A series of modern make-up layers were observed to a depth of 0.85m within the bollard holes. The uppermost layer (101) formed a bedding deposit for cobble surface (100) and slab surface (111). Deposit (101) was 0.11m deep and present within all thirteen holes.

Sealed by (101) was a former modern ground surface (102). This now buried surface consisted of a tarmac layer 0.20m deep and an associated foundation deposit (103), which was 0.23m deep.

Within BH 1, 2, 3 and 5 (Figure 2, Sections 1, 2, 3 and 5) the remains of the former ground surface sealed make-up layers (104) and (105). In BH 4 (Figure 2, Section 4) make-up layers (108) and (105) occupied a similar stratigraphic position. Make-up layer (112) was the equivalent deposit in BH 9 and 10.

The function of these layers of made ground is uncertain. However, it is possible that they were deliberately deposited during the late post-medieval period in order to create a more level surface upon which to construct the existing St Paul's Square.

#### 2.4.3 Surface (106) (Figure 2)

Layer (106) was identified at a depth of *c.*0.90m below the existing ground level in BH 1, 2, 3, 4 and 9. It contained a moderate quantity of limestone pieces, which appeared to form a rough surface (Figure 2, Sections 1, 2, 3, 4 and 6). It is possible that this layer represents a post-medieval, or earlier surface, within St Paul's Square.

#### 2.4.4 Subsoil layers (Figure 2)

Present in all the bollard holes, several subsoil layers (107), (109), (110), (113), (114) and (115) were sealed by possible surface (106). The stratigraphic position and the depth at which these deposits were encountered (over 0.85m) suggest that they are likely to be of considerable antiquity. They are likely to have been formed during the post-medieval or earlier periods.

Subsoil deposits (107), (109), and (115) were identified in BH 1, 2, 3, 4 and 9 (Figure 2, Section 1, 2, 3, 4 and 6). BH 5 contained a single subsoil deposit (110) while BH 10 contained three distinct subsoil layers (113), (114), and (115). No date could be assigned to these deposits and the absence of layer (106) in both BH 5 and BH 10 suggests that modern disturbance may have reached slightly deeper levels in the vicinity of both these bollard holes. In the case of BH 5 this was almost certainly caused during the groundworks required for a modern service (Figure 2).

These deposits may derive in part from alluvium deposited by the nearby River Great Ouse (Figure 1). However, they have almost certainly also been altered by human agency, containing charcoal flecks and occasional fragments of ceramic building material.

#### 2.4.5 Undisturbed Geological Deposits (Figure 2)

No undisturbed geological deposits were encountered in the bollard holes. Clearly, the groundworks required for these safety works were not of a sufficient depth to reach such deposits.



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### 3. CONCLUSION

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The small scale of the excavation work undertaken during installation of the safety bollards allows only limited conclusions to be drawn from the results of the fieldwork. However, although no significant archaeological remains or artefacts were uncovered during the investigations, useful information on the depth of overburden within this part of St Paul's Square was recorded.

A possible former ground surface (106), which could potentially be post-medieval or earlier in date, was identified in five of the bollard holes at a depth of c.0.90m below present ground level. This in turn sealed earlier deposits, probably derived at least in part from alluvium deposited by the River Great Ouse, albeit altered by human activity. Again, these could potentially be post-medieval or earlier in date.

The deposits above the possible ground surface (106) also did not produce any datable artefacts. At least in part, they represent make-up layers for more recent ground surfaces. Their considerable depth (<0.85m) may reflect the fact that, in the past, the southern side of St Paul's Square probably sloped down more steeply towards the river than it does at present. Any attempt to level up the square would have necessitated the deposition of considerable volumes of material in this area.





## 4. BIBLIOGRAPHY

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## **5. APPENDICES**

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### ***Appendix 1, Context Summary***



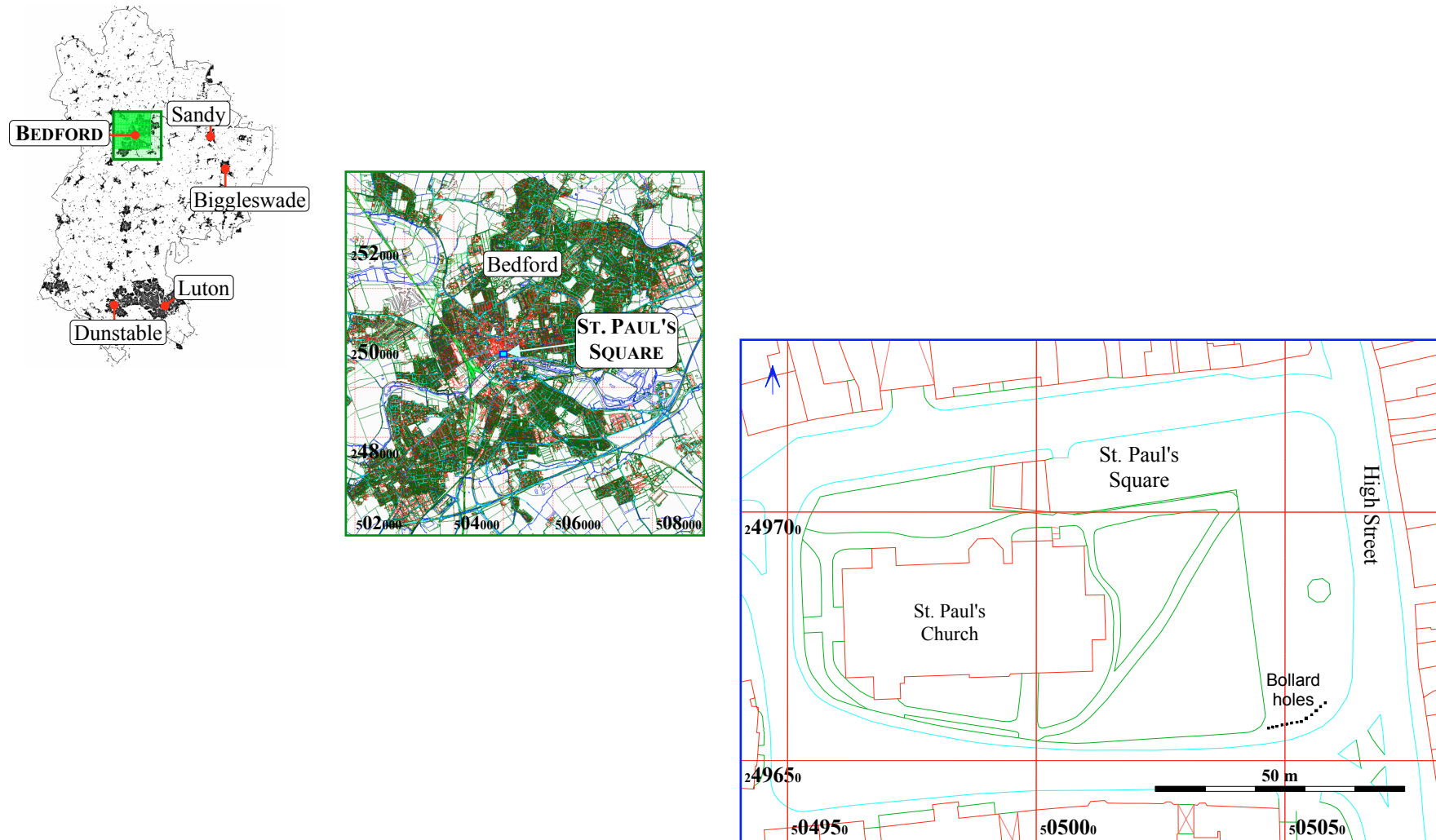
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**Extent (ha):**

**OS Co-ordinates:**

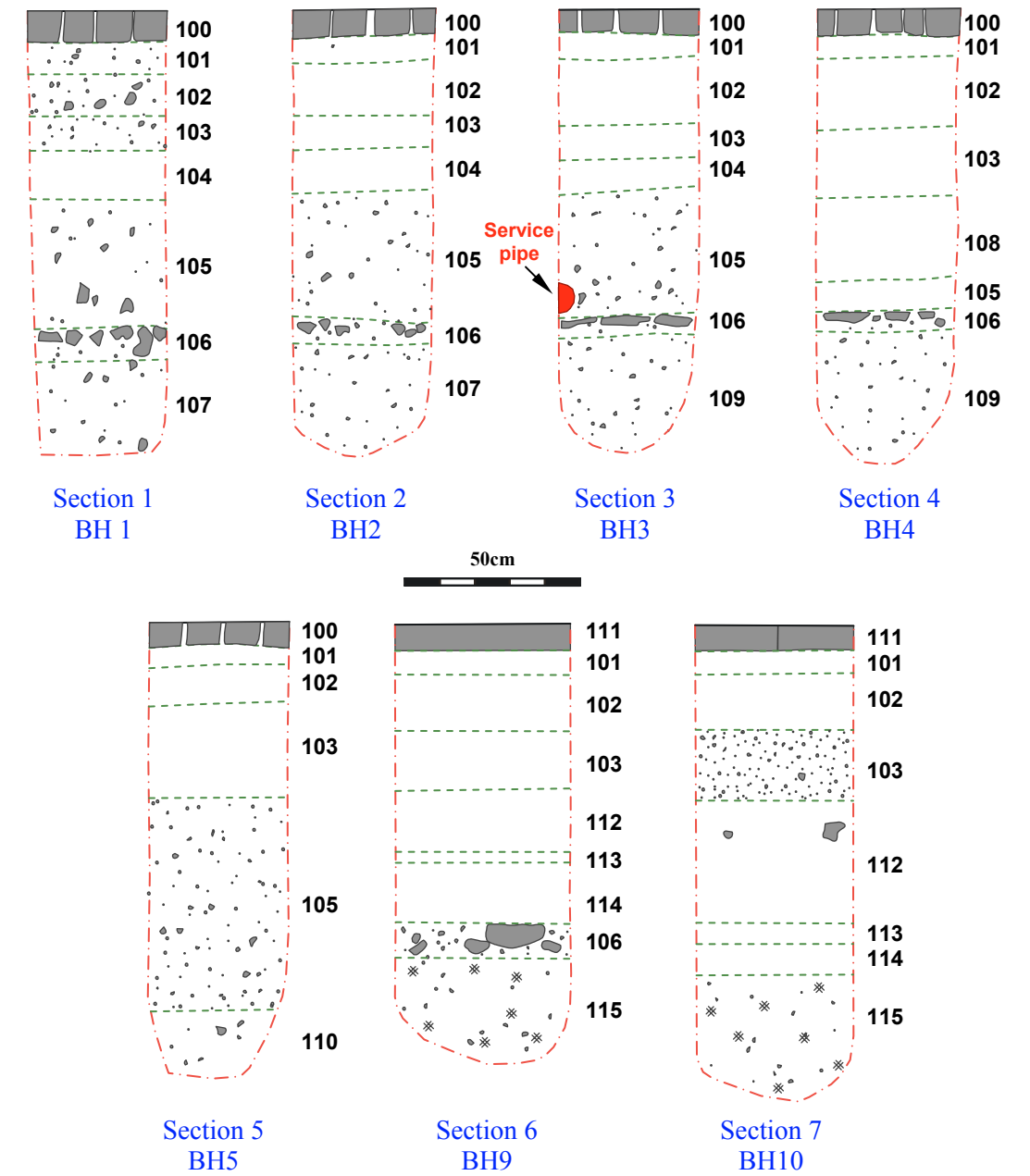
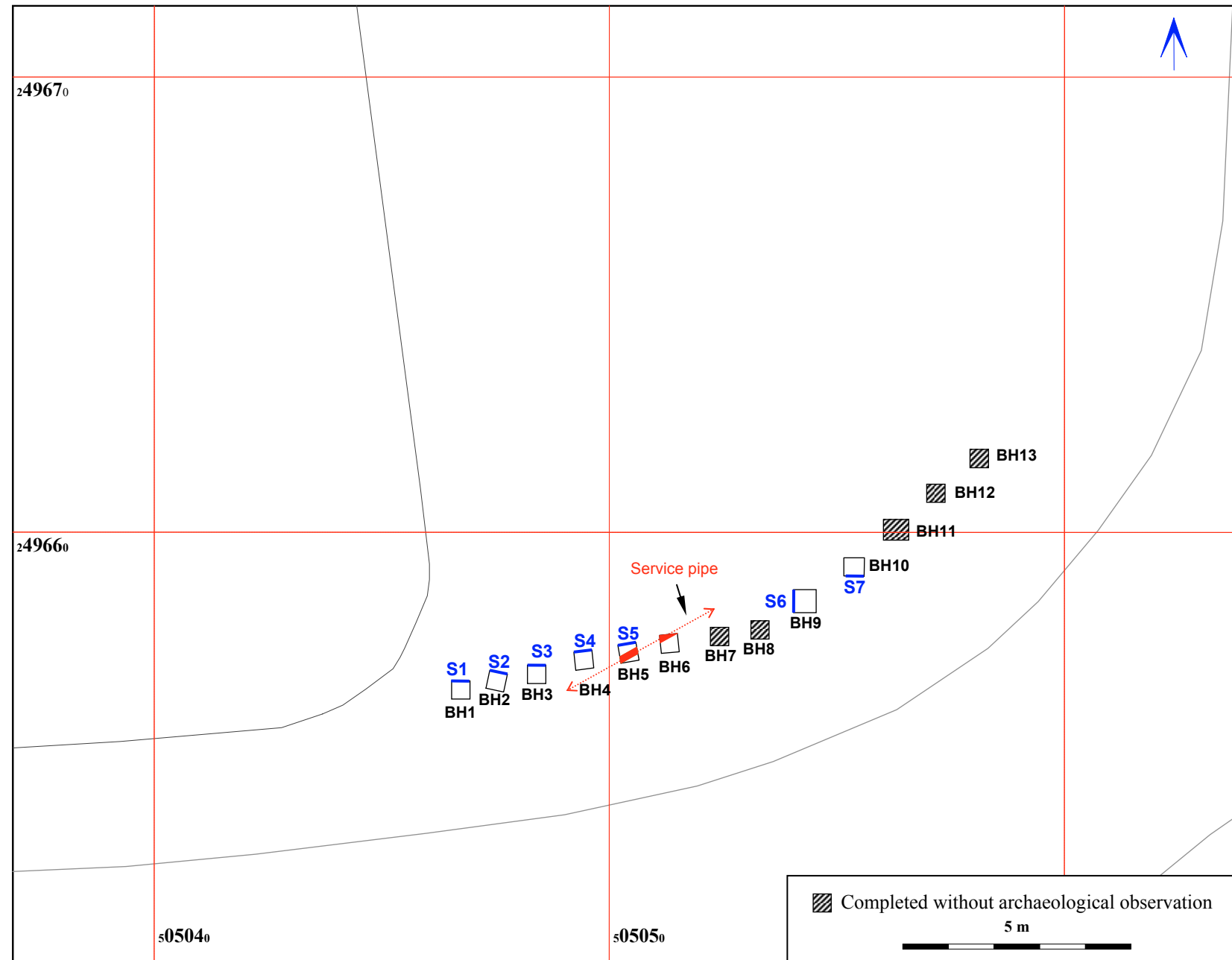
**Description: A series of thirteen bollard holes.**

<b>Context:</b>	<b>Type:</b>	<b>Description:</b>	<b>Excavated:</b>	<b>Finds Present:</b>
100	Surface	Cemented . Modern granite cobbles. c.90mm in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
101	Layer	Loose light brown yellow sand . Bedding layer for cobbles (100). c.0.11m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102	Tarmac	Cemented dark black . Buried tarmac layer. c.0.20m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
103	Layer	Loose pinkish brown . Type 1 Hardcore c.0.26m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
104	Make up layer	Firm mid orange brown clay moderate medium-large ceramic building material. Modern makeup layer c.0.14m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
105	Make up layer	Firm mid brown sandy silt occasional small-large ceramic building material, occasional flecks charcoal. Contained fragments of limestone c.0.60m in depth	<input checked="" type="checkbox"/>	<input type="checkbox"/>
106	External surface	Firm mid brown sandy silt moderate small-large stones. Layer of limestone fragments forming a rough surface. c.0.10m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
107	Subsoil	Firm mid brown sandy silt moderate small-medium stones. c.0.33m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
108	Make up layer	Loose light yellow silty sand . c.0.23m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
109	Subsoil	Firm dark brown sandy silt . c.0.38m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
110	Make up layer	Firm mid yellow brown sandy clay moderate small-medium stones. Possible make up layer. c.0.19m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
111	External surface	Light grey . Modern paving slabs. C.70mm in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
112	Make up layer	Hard mid yellow brown clay silt occasional small-large ceramic building material, moderate small-medium stones. Deposit contained patches of yellow sand. c.0.35m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
113	Subsoil	Firm dark brown black clay silt occasional small-large ceramic building material, occasional small-medium stones. c.0.06m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
114	Subsoil	Firm mid yellow brown clay silt occasional medium-large ceramic building material, moderate small-medium stones. c.0.17m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
115	Subsoil	Firm mid brown clay silt frequent flecks charcoal, moderate small-medium stones. c.0.35m in depth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



**Figure 1:** Site location map

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**Figure 2: Plan of bollard installation holes and selected section drawings**

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