



Land off Rockingham Street (Grunwergs 2) Sheffield, South Yorkshire

Archaeological Watching Brief Report



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Unit R6
Sheaf Bank Business Park
Prospect Road
Sheffield
S2 3EN

www.wessexarch.co.uk

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Fieldwork directed by Martina Tenzer


Project management by Milica Rajic

Document compiled by Martina Tenzer and Ashley Tuck

Contributions from Jess Irwin (pottery) and Ashley Tuck (other finds)

Graphics by Ian Atkins

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Summary

Wessex Archaeology was commissioned by Watkins Jones Group, to undertake an archaeological watching brief during a geotechnical site investigation. The insertion of 14 boreholes using a rotary drilling rig and a window sampling drilling rig was monitored (BH 1–12, 15 and 16). Hand excavation of a further four foundation pits was also monitored (FP 13, 14, 17 and 18). The site covers 0.47 ha, centred on NGR 43947 387397 (SK 34947 87397), between Rockingham Street and Bailey Lane, Sheffield, S1 4EG.

The watching brief was successful in achieving the objectives laid out in the WSI (Wardell Armstrong 2019).

Substantial anthropogenic layers are present on the site, extending to a maximum depth of 6.1 m below ground level. Despite the presence of a large basement in the north of the site, an additional 2.6 m of anthropogenic layers was identified below the floor of the basement. All areas of the site therefore have archaeological potential.

The recorded layers primarily comprise made ground likely dating to the 19th/20th centuries although the presence of 18th-century or earlier material cannot be ruled out. Pottery dating from the 19th century was recovered. No evidence for activity pre-dating the industrial period was identified; however, again its presence cannot be ruled out.

Material relating to industrial processes was identified. Fragments of refractory firebricks were recovered from BH 7 (704) which may have been related to a furnace or other hot process, however firebricks were also often used opportunistically for construction and there is no sign that these bricks have been exposed to heat (which does not exclude their use in a furnace structure). Recovered slag, crucible, a fireclay object and a piece of heat-affected stone all hint at the industrial processes known to have taken place on the site from maps and other historic sources. Possible ganister, perhaps from a furnace, was noted in made ground 1504. However, the context of these objects is not secure and they may have been imported and be unrelated to activity on site (see Cumberpatch 2005).

A variety of possible structures were identified scattered across the site and at various depths. Given the small window of observation afforded by any borehole survey, it is possible that these structures instead represent rubble fragments. It is, however, probable that structural remains survive somewhere within the large depth of anthropogenic layers on the site. These may relate to any of the previous land uses known from historic maps and other documentary sources including industrial works (including the *Bailey Lane Works* occupied by Carr J. & Riley, and the *Swedish Steel and File Works*) and domestic housing. Given the depth of anthropogenic layers on the site, some of the identified possible structures may relate to buried cellars associated with demolished buildings that formerly occupied the site.

The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. It is unlikely that Museums Sheffield will accept the archive resulting from the work due to the nature of the results and it is not intended that the archive will be deposited with a museum. This report will be submitted to the South Yorkshire Sites and Monument Record. An OASIS form under the ID number wessexar1-371559 has been completed.



Acknowledgements

Wessex Archaeology would like to thank Watkin Jones Group for commissioning the archaeological watching brief. Wessex Archaeology is also grateful for the advice of Dinah Saich, who monitored the project for the South Yorkshire Archaeological Service (SYAS), and to Jonny Swindells from Tier Environmental for their cooperation and help on site.

The project was managed by Milica Rajic on behalf of Wessex Archaeology. The fieldwork was directed by Martina Tenzer. This report was written by Martina Tenzer and edited by Ashley Tuck. Jessica Irwin assessed the pottery; the other finds were assessed by Ashley Tuck. The report figures were prepared by Ian Atkins.



Land off Rockingham Street (Grunwergs 2), Sheffield, South Yorkshire

Archaeological Watching Brief Report

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by Watkins Jones Group, to undertake an archaeological watching brief during a geotechnical site investigation). The insertion of 12 boreholes using a rotary drilling rig and a window sampling drilling rig was monitored. Hand excavation of a further four foundation pits was also monitored. The site covers 0.47 ha, centred on NGR 43947 387397 (SK 34947 87397), between Rockingham Street and Bailey Lane, Sheffield, S1 4EG (**Figure 1**).

1.1.2 Planning permission (18/02170/FUL) has been granted under condition for a mixed-use development comprising residential and student accommodation, commercial spaces, landscaping and limited off-street parking. The site was occupied by the warehouse of Grunwerg Ltd. during the watching brief. Historic fabric of the J & Riley Carr building survives incorporated into the warehouse complex.

1.1.3 A Desk Based Assessment have been produced by Wardell Armstrong (2018) to detail the archaeological and historical background and to assess the potential impact on known and unknown archaeological sources within the site.

1.1.4 The watching brief was undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed (Wardell Armstrong 2019). Dinah Saich, Principle Archaeologist with South Yorkshire Archaeological Services, approved the WSI on behalf of the Local Planning Authority (LPA), prior to fieldwork commencing. The watching brief was undertaken between 1 October and 16 October 2019.

1.2 Scope of the report

1.2.1 The purpose of this report is to provide the results of the watching brief, to interpret the results within their local or regional context (or otherwise), and to assess their potential to address the aims outlined in the WSI (Wardell Armstrong 2019). The result of this watching brief will provide information about the archaeological resources within the site to determine the necessity of further archaeological works.

1.3 Location, topography and geology

1.3.1 The following information is a summary of details given in the WSI (Wardell Armstrong 2019).

1.3.2 The watching brief was located on the premises of the former Grunwerg Ltd. which was until recently used as commercial warehouse. The site is bounded to the west by Rockingham Street and to the east by Bailey Lane. Historic fabric is incorporated into the modern building facing Bailey Lane. Commercial buildings are located immediately to the south of the site and Boden Lane borders the site to the north. The northern part of the building contains a basement and a further cellar is present beneath the partially surviving



building of J & Riley Carr, located in the south-east of the site. The southern portion of the site is used as car park.

- 1.3.3 Existing ground levels vary slightly from 82.5 m to 81.5 m above Ordnance Datum (aOD) sloping towards the north.
- 1.3.4 The underlying geology is mapped as siltstone and mudstone of the Lower Coal Measures Foundation with no superficial deposits recorded (British Geological Survey online viewer).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

- 2.1.1 Wardell Armstrong prepared a DBA (2018) and a WSI (2019) for the site. The following provides a summary of the information detailed in these documents.

2.2 Previous investigations related to the development

Rockingham House, ARCUS [2007]

- 2.2.1 Pits dating to the Bronze Age were recorded during the development of the site at Rockingham House located to the west of the northern portion of the site. The pits were sealed by a buried soil, potentially of medieval date. This soil was again recorded in 2008 at an adjacent plot at Bailey Fields. A subsequent excavation in this area did not provide further evidence of this soil or of prehistoric activity.

2.3 Archaeological and historical context

- 2.3.1 Broad Lane to the north of the site was potentially already established as military route during the Roman period. It was probably utilised as drove way during the medieval period. The site lay to the west of the medieval core of Sheffield until the settlement expanded during the industrial period.
- 2.3.2 The Bailey Lane Works, originally occupied by the company Carr and Co, was present from the 1820s. The population of Sheffield nearly doubled during the years 1821 to 1851 leading to an expansion of the settlement into the area of the site. The detail of the 1853 map shows much of the site occupied by back-to-back housing laid out around courts such as 'Smiths Square' in the north of the site and served by water pumps.
- 2.3.3 Bailey Lane Works (Iron and Steel) was situated in the central section of the site between Bailey Lane and the former Woodhouse Lane. The OS map 1853 depicts the location of a furnace within the Site. Further evidence for a cast steel furnace in this location was provided by Fairbanks' sketch map of 1834. The location of hardening furnace in the vicinity, also mentioned in Fairbanks' accompanying notes, is unknown.
- 2.3.4 The majority of the remaining tenement blocks appear to have been removed by the time of the production of the 1935 Ordnance Survey map. A trade directory of 1938 recorded 'Carr J. & Riley, file mfrs' on Bailey Lane and fronting Rockingham Street 'Clay Wm, H. & Co. joiners' tool mfrs'. A building fronting Carr Lane was recorded as 'Whitely William & Sons (Sheffield) Ltd. Scissors mfrs. (works)'. Other smaller structures fronting Rockingham Street in the south-western quadrant of the site included an etcher and two cutlery manufacturers.



2.3.5 Further development during the mid-20th century was associated with industrial activity until in 1968 Grunwergs was listed and usage of the premises changed from production to warehousing.

3 OBJECTIVES

3.1 General objectives

3.1.1 The objectives of the watching brief, as laid out in the WSI (Wardell Armstrong 2019), were:

- *to determine the likely survival of deposits with archaeological potential and the necessity for further evaluation;*
- *to investigate evidence for activity pre-dating the industrial period development of the site;*
- *to investigate evidence for industrial activity;*
- *to investigate evidence for domestic activity;*
- *to identify and understand, as far as reasonably possible, the nature, depth, extent, date, character and relationship of each of the features encountered across the site; and,*
- *to ensure that an accurate and comprehensive record and report of any archaeological deposits found during the ground works is produced and disseminated to the appropriate organisations, including the South Yorkshire Historic Environment Record.*

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methodology set out in the WSI (Wardell Armstrong 2019) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a). The methods employed are summarised below.

4.2 Geoarchaeological borehole survey and foundation pits

General

4.2.1 A total of 18 locations was investigated (BH 1–12, FP 13–14, BH 15–16 and FP 17–18). Preparation for the boreholes included initial hand digging to a depth of 1.2 m below ground level to avoid buried services. These hand-dug interventions were around 0.3 m across. A window sampling drilling rig was initially used, however this was not successful for BH 5–10 due to a void (BH 5) and impenetrable deposits (BH 6–10). A rotary rig was successfully used to insert BH 5–10, which had to be relocated slightly to accommodate the larger rig. No hand digging was done in preparation for the rotary coring. Both methods of drilling produced sleeved cores of 0.12 m diameter.

4.2.2 A slightly different methodology was used for BH 16, which aimed to investigate the natural geology beyond a depth of 30 m. No sleeved cores were produced; instead the material transported to the surface by the rotary drilling was monitored as far as was practicable.

4.2.3 Four hand-excavated foundation pits were located in the car park and the office area (FP 13 and 14) and in the basement of the former public house (FP 17 and 18). These varied in size from a diameter of 0.3 m (FP 13) to rectangular excavations of 1 m by 2 m (FP 18). No pit was excavated beyond a depth of 0.9 m. FP 18 was relocated from the location specified in the WSI to the southern corner of the basement to be able to investigate the foundation of two perpendicular walls.

4.2.4 The ground beneath an oil tank in the basement of the former public house was contaminated from a probable leak. Three minor additional hand interventions to the west of FP 17 were undertaken to identify the extent of the contamination.

Recording

4.2.5 All exposed archaeological deposits and borehole cores were recorded using Wessex Archaeology's pro forma recording system.

4.2.6 All relocated boreholes and foundation pits were surveyed using a tape measure (**Figure 1**).

4.2.7 A full photographic record was made using digital cameras equipped with an image sensor of not less than 10 megapixels. Digital images have been subject to managed quality control and curation processes to ensure long term accessibility of the image set.

4.3 Artefactual strategies

4.3.1 Appropriate strategies for the recovery, processing and assessment of artefacts and environmental samples were in line with those detailed in the WSI (Wardell Armstrong 2019). The treatment of artefacts was in general accordance with: *Guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b).

5 ARCHAEOLOGICAL RESULTS

5.1 Introduction

5.1.1 The following section provides information held in the site archive, with a full list of context numbers and context descriptions contained in **Appendix 1**.

5.2 General stratigraphy

Natural

5.2.1 The natural bedrock (eg 507) comprised grey siltstone and mudstone, sometimes overlain by a layer of grey clay (eg 506) derived from the weathered bedrock.

5.2.2 Boreholes BH 1–4 and 15 were excavated in the main basement (**Figure 1**). The natural geology (109, 110, 305, 406 and 1508, 1509) was identified below 1.10 m (305) to 2.80 m (1508) below the level of the basement floor. BH 2 did not reach natural.

5.2.3 Boreholes BH 5–12 and 16 and foundation pits FP 13 and 14 were excavated from ground level, with BH 11, BH 12, FP 13 and BH 16 situated in the car park area (**Figure 1**). The ground-level boreholes encountered the natural substrate (506, 507, 609, 706, 803, 804, 909, 1010, 1107, 1206, 1605) at a depth between 3.5 m (1107) and 6.10 m (609) below ground level. Foundation pits FP 13 and FP 14 did not reach natural.



5.2.4 Foundation pits FP 17 and FP 18 were excavated in the basement of the former public house (**Figure 1**). Foundation pits FP 18 did not reach natural, however FP 17 did apparently reach natural at only 0.8 m below ground level (1705). It is possible that this material was redeposited.

Made ground

5.2.5 The majority of the recorded sequences comprised various layers of made ground of industrial character (104–105, 107–108, 204, 304, 404–405, 503–505, 602, 604–605, 607, 702, 704–705, 802, 903, 905–906, 908, 1002, 1004–1009, 1103–1106, 1203–1205, 1303–1305, 1402, 1504–1505, 1507, 1603–1604, 1702–1703, 1803 and 1806). These are described in detail in **Appendix 1**.

5.2.6 In the main basement they were found at depths of between 0.3 m and 2.6 m below the level of the basement. In the ground-level interventions they ranged from 0.25 m to 5.8 m below ground level. In the basement of the former public house the made ground was seen from 0.05 m to over 0.9 m below the level of the basement floor.

5.2.7 These made ground deposits were often dark and ranged in hue through brown, black, grey and yellow. Ash, brick debris, coal, stone and clinker were common inclusions. Possible ganister (a refractory grade of sandstone) was noted within layer 1504. Some layers (eg 108) comprised redeposited natural mixed with other material. Made ground 1004 (2.35 m to 2.6 m below ground level) was dissimilar to the other deposits, comprising red clay.

Extant surfaces

5.2.8 In the main basement the modern surface layers consisted of a sand and gravel levelling layer (103, 203, 303, 403 and 1503) overlain by a layer of blue plastic sheeting (102, 202, 302, 402 and 1502) and a concrete surface (101, 201, 301, 401, and 1501) typically 0.19–0.25 m thick.

5.2.9 The extant floor surface comprised 0.05 m to 0.25 m of concrete (501, 601, 701, 801, 901, 1001 and 1301), although it was 0.45 m thick in FP 13. In BH 5 this was set on a steel bar above a void extending to 0.83 m below ground level. The car park instead was sealed by a levelling layer of around 0.2 m of sand and gravel (1102, 1202, 1302 and 1602) and 0.05 m of tarmac (1101, 1201, 1301 and 1601).

5.2.10 The surface of the basement of the former public house comprised sandstone flags 0.05 m thick (1701, 1801).

5.3 Structures

5.3.1 Identification of archaeological structures within borehole cores rich in rubble is a matter of interpretation.

5.3.2 In the main basement trenches, it is possible that brick layer 106 (at 1.9 m to 2 m below the basement floor in BH 1) and concrete 1506 (at 2 m to 2.2 m below the basement floor in BH 15) may represent structural remains; however these may also represent non-structural rubble, particularly when their shallow thicknesses are considered.

5.3.3 As noted above, BH 5 contained a 0.83 m deep void below the extant surface (501). Below the void was a sandstone surface 0.2 m thick (502).



- 5.3.4 A 0.1 m-thick concrete slab (603) was present in BH 6 at 0.4 m below ground level. Yellow sandstone 0.5 m thick (606) was present at 4.2 m below ground level, and wet brick 0.3 m thick at 5.8 m below ground level (608). It is possible that these structures may relate to former cellars or other buildings. They may also represent rubble.
- 5.3.5 BH 7 contained 0.6 m of red and yellow brick (703) at 1.4 m below ground level.
- 5.3.6 A stone structure comprising slate, shale or some similar stone was 0.2 m thick at 0.25 m below ground level in BH 9 (902). Structure 902 was immediately before the extant concrete surface and may have been related to it. Concrete (903) was also seen at 0.7 m below ground level, and red brick (907) 0.3 m thick at 3.5 m below ground level.
- 5.3.7 BH 10 contained 0.15 m of yellow sandstone at 2.2 m below ground level.
- 5.3.8 A concrete foundation (1304) was 0.3 m thick in foundation pit FP 13 at a depth of 0.5 m below ground level.
- 5.3.9 The extant wall of the former public house was traced to 0.6 m below the basement floor in FP 17. Similarly, four courses of brick (1804) set on a concrete foundation (1805) extended to 0.9 m below the basement floor in FP 18.

6 ARTEFACTUAL EVIDENCE

6.1 Introduction

- 6.1.1 A small assemblage of finds was recovered consisting of ceramic building material, metal, pottery and slag. This is all likely of 19th- to 20th-century date. All finds are listed by material type and context in Table 1.

Table 1 Finds by material type (number of pieces/weight in grammes)

Material	Context	Count	Weight	Comments
CBM	704	17	700	Concrete, mortar and brick
CBM	905	1	245	Brick
CBM	1204	6	1680	Firebrick
Metal	609	1	195	Likely steel
Pottery	104	1	5	19th century
Pottery	1105	8	66	19th century
Other ceramic	104	4	124	Possibly crucible
Other ceramic	1204	1	243	Fireclay object
Other ceramic	1205	2	117	Drain pipe
Slag	1204	5	955	
Stone	905	1	815	Heat-affected
Stone	U/S	1		Dedication stone

6.2 Ceramic Building Material

- 6.2.1 Fragments of concrete, ash mortar and brick with a coarse fabric including reduced areas in the core were recovered from 704. A similar fragment of brick was also retained from 905. Fragments of refractory firebrick with a depth of 62 mm were recovered from 1204. It was not possible to determine the other dimensions of these bricks.



6.3 Pottery

- 6.3.1 Pottery was recovered from contexts 104 and 1105. Five small fragments of Whiteware from 1105 date from the early 19th century. Two sherds of Black Glazed Earthenware from 1105 and one from 104 date from the late 19th century.

6.4 Other finds

- 6.4.1 Four possible crucible fragments were recovered from 104. One of these fragments resembled standard nineteenth-century steel crucible and was 21 mm thick; the other three fragments were rather thinner at 11 mm thick. Black vitreous material up to 8 mm thick adhered to the surface of all four fragments. The thinness of three of the sherds and the nature of the vitreous material may argue against identification as steel crucible.
- 6.4.2 A fireclay object, possibly a mould or tuyere, was recovered from 1204.
- 6.4.3 An unstratified dedication stone (**Cover**) was also recovered reading 'M. BERNARD & Co./APRIL/1939./THIS STONE WAS LAID ON BEHALF/OF THE ABOVE BY/MISS SHIERA & MASTER DEREK MILLER'.
- 6.4.4 Other finds include a fragment of a rough metal bar (likely steel) 40 mm wide and 7–8 mm thick (609), slag (1204), a piece of heat-affected stone masonry (905) and fragments of glazed drainpipe (1205).

7 ENVIRONMENTAL EVIDENCE

7.1 General

- 7.1.1 Due to the method of core sampling and limited soil extraction no environmental samples were taken.

8 DISCUSSION

8.1 Conclusion

- 8.1.1 The watching brief was successful in achieving the objectives laid out in the WSI (Wardall Armstrong 2019).
- 8.1.2 Substantial anthropogenic layers are present on the site, extending to a maximum depth of 6.1 m below ground level. Despite the presence of a large basement in the north of the site, an additional 2.6 m of anthropogenic layers was identified below the floor of the basement. All areas of the site therefore have archaeological potential.
- 8.1.3 The recorded layers primarily comprise made ground likely dating to the 19th/20th centuries although the presence of 18th-century or earlier material cannot be ruled out. Pottery dating from the 19th century was recovered. No evidence for activity pre-dating the industrial period was identified; however, again its presence cannot be ruled out.
- 8.1.4 Material relating to industrial processes was identified. Fragments of refractory firebricks were recovered from BH 7 (704) which may have been related to a furnace or other hot process, however firebricks were also often used opportunistically for construction and there is no sign that these bricks have been exposed to heat (which does not exclude their use in a furnace structure). Recovered slag, crucible, a fireclay object and a piece of heat-affected stone all hint at the industrial processes known to have taken place on the site from maps and other historic sources. Possible ganister, perhaps from a furnace, was



noted in made ground 1504. However, the context of these objects is not secure and they may have been imported and be unrelated to activity on site (see Cumberpatch 2005).

- 8.1.5 A variety of possible structures were identified scattered across the site and at various depths. Given the small window of observation afforded by any borehole survey, it is possible that these structures instead represent rubble fragments. It is, however, probable that structural remains survive somewhere within the large depth of anthropogenic layers on the site. These may relate to any of the previous land uses known from historic maps and other documentary sources including industrial works (including the *Bailey Lane Works* occupied by Carr J. & Riley, and the *Swedish Steel and File Works*) and domestic housing. Given the depth of anthropogenic layers on the site, some of the identified possible structures may relate to buried cellars associated with demolished buildings that formerly occupied the site.

9 ARCHIVE STORAGE AND CURATION

9.1 Museum

- 9.1.1 The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. It is unlikely to be accepted by Museums Sheffield due to the nature of the results. A copy of this report will be supplied to the South Yorkshire HER upon acceptance of the report by the SYAS Principle Archaeologist.

9.2 Preparation of the archive

- 9.2.1 The archive resulting from the watching brief is not currently intended to be deposited with a museum. The documentary archive will be scanned and held on Wessex Archaeology's computer system for such time as it may be commercially useful.

9.3 Selection policy

- 9.3.1 Wessex Archaeology follows national guidelines on selection and retention (SMA 1993; Brown 2011, section 4). In accordance with these, and any specific guidance prepared by the museum, a process of selection and retention will be followed so that only those artefacts or ecofacts that are considered to have potential for future study will be retained.
- 9.3.2 In this instance, the assemblage is small and by virtue of its nature and date range (commonly occurring and well documented types of relatively recent origin) will be discarded.

9.4 Security copy

- 9.4.1 In line with current best practice (eg, Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

9.5 OASIS

- 9.5.1 An OASIS online record (<http://oasis.ac.uk/pages/wiki/Main>) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.



10 COPYRIGHT

10.1 Archive and report copyright

- 10.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.
- 10.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

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APPENDICES

Appendix 1: Context description

BH 1, Basement			Depth 3.80 m
Context Number	Interpretative Category	Description	Depth BGL (m) 77.97
101	Floor surface	Concrete	0–0.19
102	Vapor barrier	Blue plastic sheet	0.19–0.20
103	Bedding layer	Yellow gravel and sand	0.20–0.30
104	Made ground	Dark brown to black silty sand, slate and brick debris, clinker, coal	0.30–1.20
105	Made ground	Yellow to brown silty sand, stone and red brick debris, slag, coal, burnt brick	1.20–1.90
106	Layer	Red brick, structural? Floor surface?	1.90–2.00
107	Bedding layer	Yellowish brown sandy clay, sandstone inclusions	2.00–2.50
108	Made ground	Dark brown silty sand, small stone and brick inclusions	2.50–2.60
109	Natural	Dark yellowish-brown clay, bedrock fragments	2.60–3.80
110	Natural	Grey clay (mudstone) very wet	3.80+

BH 2, Basement			Depth 1.90 m
Context Number	Interpretative Category	Description	Depth BGL (m) 77.96
201	Floor surface	Concrete	0–0.25
202	Vapor barrier	Blue plastic sheet	0.25–0.26
203	Bedding layer	Yellow sand and gravel	0.26–0.60
204	Made ground	Greyish brown silty sand, stone and brick debris, coal, clinker	0.60–1.90+

BH 3, Basement			Depth 3.30 m
Context Number	Interpretative Category	Description	Depth BGL (m) 77.96
301	Floor surface	Concrete	0–0.21
302	Vapor barrier	Blue plastic sheet	0.21–0.22
303	Bedding layer	Yellow sand and gravel	0.22–0.45
304	Made ground	Dark brown silty sand, sandstone fragments, coal and clinker	0.45–1.10
305	Natural	Red sandy clay (decayed bedrock) turning to grey mudstone from 2.00 depth	1.10+



BH 4, Basement			Depth 3.40 m
Context Number	Interpretative Category	Description	Depth BGL (m) 77.97
401	Floor surface	Concrete	0–0.22
402	Vapor barrier	Blue plastic sheet	0.22–0.23
403	Bedding layer	Yellow sand and gravel	0.23–0.43
404	Made ground	Dark brown silty sand, stone and red brick debris, coal, clinker, brick	0.43–1.00
405	Made ground	Grey clay, redeposited natural, coal inclusion	1.00–2.60
406	Natural	Grey clay (mudstone)	2.60+

BH 5, Ground floor			Depth 6.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 81.85
501	Floor surface	Raised concrete floor on steel bar	0–0.05
	Void	Void	0.05–0.83
502	Structure	Sandstone	0.83–1.03
503	Made ground	Dark brown silty sand, ashes, stone and brick debris	1.03–1.80
504	Made ground	Dark greyish brown clay, small stone and brick fragments	1.80–4.50
505	Made ground	Redeposited natural, grey clay, sandstone inclusions	4.50–5.20
506	Natural	Grey clay, decayed bedrock	5.20–5.80
507	Natural	Grey clay (mudstone)	5.80+

BH 6, Ground floor			Depth 6.10 m
Context Number	Interpretative Category	Description	Depth BGL (m) 81.87
601	Floor surface	Concrete	0–0.18
602	Made ground	Brown silty sand, brick and sandstone debris	0.25–0.40
603	Structure	Concrete slab	0.40–0.50
604	Made ground	Brown silty sand, concrete, brick and sandstone debris, slate, coal	0.50–3.50
605	Made ground	Redeposited natural grey clay, brick and sandstone inclusions	3.50–4.20
606	Structure	Yellow sandstone, structural?	4.20–4.70
607	Made ground	Grey clay, stone fragments, redeposited natural	4.70–5.80
608	Structure	Brick, very wet	5.80–6.10
609	Natural	Grey clay (mudstone)	6.10+



BH 7, Ground floor			Depth 6.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 80.82
701	Floor surface	Concrete	0–0.25
702	Made ground	Brown silty sand, abundant brick debris	0.30–1.40
703	Structure	Red and some yellow brick, structural?	1.40–4.00
704	Made ground	Grey silty sand, brick and sandstone fragments	4.00–4.80
705	Made ground	Redeposited Natural, yellow clay, some sandstone fragments	4.80–5.50
706	Natural	Grey clay (mudstone)	5.50+

BH 8, Ground floor			Depth 4.80 m
Context Number	Interpretative Category	Description	Depth BGL (m) 80.50
801	Floor surface	Concrete	0–0.25
802	Made ground	Brown silty sand, abundant stone and red, frogged brick debris, concrete, coal	0.25–4.20
803	Natural	Grey clay, decayed bedrock	4.20–4.80
804	Natural	Grey clay (mudstone)	4.80+

BH 9, Ground floor			Depth 5.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 80.50
901	Floor surface	Concrete	0–0.25
902	Structure	Stone/slate structure	0.25–0.45
903	Made ground	Black sand and gravel, abundant red, frogged brick, coal, slate, metal	0.45–0.70
904	Structure	Concrete	0.70–n/a
905	Made ground	Building debris, rubble, red brick debris, sandstone fragments	2.0–2.50
906	Made ground	Yellow clay, ash, brick and sandstone debris, coal	2.50–3.50
907	Structure	Red brick	3.50–3.80
908	Made ground	Yellowish grey clay, redeposited natural, brick and sandstone fragments	3.80–4.20
909	Natural	Grey clay (mudstone), very wet	4.20–5.00+



BH 10, Ground floor			Depth 6.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 81.85
1001	Floor surface	Concrete	0–0.25
1002	Made ground	Brown silty sand, brick and stone debris, coal, clinker	0.25–2.20
1003	Structure	Yellow sandstone	2.20–2.35
1004	Made ground	Red clay	2.35–2.60
1005	Made ground	Dark brown/black silty sand, ash, stone and brick debris	2.60–3.20
1006	Made ground	Yellow sand and small stones	3.20–3.35
1007	Made ground	Brown clay, stone and brick debris	3.35–3.90
1008	Made ground	Black silty sand, red brick fragments	3.90–4.50
1009	Made ground	Brown clay, red brick fragments, redeposited natural	4.50–5.50
1010	Natural	Greyish brown clay (mudstone)	5.50+

BH 11, Car park			Depth 3.50 m
Context Number	Interpretative Category	Description	Depth BGL (m) 81.63
1101	Surface	Tarmac	0–0.05
1102	Bedding layer	Sand and gravel	0.05–0.25
1104	Made ground	Dark brown silty sand, brick debris	0.25–0.80
1105	Made ground	Dark brown/black silty sand, coal, clinker, slate	0.80–2.00
1106	Made ground	Brown clay, brick fragments, redeposited natural	2.00–3.50
1107	Natural	Grey clay (mudstone)	3.50+

BH 12, Car park			Depth 5.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 82.78
1201	Floor surface	Tarmac	0–0.05
1202	Bedding layer	Sand and gravel	0.05–0.20
1203	Made ground	Brown sandy silt, frogged brick debris	0.20–0.70
1204	Made ground	Dark greyish brown silty sand, ash, coal, brick debris	0.70–1.30
1205	Made ground	Brown clay, redeposited natural, brick fragments, wet	1.30–3.00
1206	Natural	Grey clay (mudstone)	3.00+



FP 13, Car park		Dimension: 1.00 x 2.00 m	Depth 0.90 m
Context Number	Interpretative Category	Description	Depth BGL (m) 78.50
1301	Surface	Tarmac	0–0.05
1302	Bedding layer	White sand and gravel	0.05–0.25
1303	Made ground	Brown silty sand, brick and stone fragments, coal	0.25–0.50
1304	Structure	Concrete wall foundation	0.50–0.80
1305	Made ground	Brown silty sand, brick and stone fragments	0.50–0.90

FP 14, Ground floor		Dimension: 0.30 m diameter	Depth 0.90 m 78.50
Context Number	Interpretative Category	Description	Depth BGL (m)
1401	Floor surface	Concrete	0–0.45
1402	Made ground	Blackish brown sandy clay, redeposited natural, stone and brick fragments	0.45–0.90+

BH 15, Basement			Depth 3.20 m
Context Number	Interpretative Category	Description	Depth BGL (m) 77.96
1501	Floor surface	Concrete	0–0.20
1502	Vapour barrier	Blue Plastic sheet	0.20–0.21
1503	Bedding layer	Yellow sand and gravel	0.21–0.45
1504	Made ground	Brown silty sand, ashy, sandstone and brick debris, coal, ganister and clinker	0.45–1.50
1505	Made ground	Yellow clay, redeposited natural, brick and sandstone debris	1.50–2.00
1506	Structure	Concrete layer	2.00–2.20
1507	Made ground	Greyish yellow clay, redeposited natural, sandstone and brick debris	2.20–2.40
1508	Natural	Dark grey clay	2.40–2.60
1509	Natural	Grey clay (mudstone)	2.60+

BH 16, Car park			Depth 5.00 m
Context Number	Interpretative Category	Description	Depth BGL (m) 82.26
1601	Surface	Tarmac	0–0.05
1602	Bedding layer	Yellow sand and gravel	0.05–0.20
1603	Made ground	Brown silty sand, brick fragments, coal	0.20–2.50
1604	Made ground	Grey clay, brick and stone debris, redeposited natural	2.50–5.00
1605	Natural	Grey clay (mudstone)	5.00+



FP 17, Pub basement		Dimension: 0.50 x 0.50 m	Depth 0.90 m
Context Number	Interpretative Category	Description	Depth BGL (m)
1701	Floor surface	Sandstone slab	0–0.05
1702	Made ground	Brown silty sand, brick and sandstone debris, coal	0.05–0.25
1703	Made ground	Yellowish grey clay, redeposited natural, brick fragments	0.25–0.80
1704	Structure	Brick wall foundation	0–0.60
1705	Natural	Grey clay (mudstone)	0.80+

FP 18, Pub basement		Dimension: 0.80 x 0.60 m	Depth 0.90 m
Context Number	Interpretative Category	Description	Depth BGL (m)
1801	Floor surface	Sandstone slab	0–0.05
1802	Structure	Concrete foundation of urinal	0.05–0.20
1803	Made ground	Brownish black silty sand, slate, brick and sandstone debris, coal	0.20–0.40
1804	Structure	Brick wall foundation, 4 courses	0.20–0.60
1805	Structure	Concrete foundation of brick wall	0.60–0.90
1806	Made ground	Yellow clay, sandstone and brick fragments, redeposited natural	0.90+



Appendix 2: Oasis form

OASIS ID: wessexar1-371559

Project details

Project name	Grunwergs 2
Short description of the project	<p>Wessex Archaeology was commissioned by Watkins Jones Group, to undertake an archaeological watching brief during a geotechnical site investigation (SI). The SI comprised 15 boreholes using a rotary drilling rig and a window sampling drilling rig and four hand excavated foundation test pits. The monitored works covered 0.47 ha, centred on NGR 43947 387397 (SK 34947 87397), between Rockingham Street and Bailey Lane. Planning permission (18/02170/FUL) has been granted under condition for a mixed-use development comprising residential and student accommodation, commercial spaces, landscaping and limited off-street parking. The Site was occupied by the warehouse of Grunwerg Ltd. during the watching brief. Historic fabric of the partially surviving J and Riley Carr building has been retained and incorporated into the warehouse complex and is supposed to be preserved during the demolition process of the adjacent structures. The watching brief was successful in so far as to identify the presence and location of probable structures and deposits associated with former industrial premises and tenement blocks across the site as depicted on OS maps of 1853 and 1890. Despite the levelling of the Site and the creation of a basement in the northern portion of the site below ground structures and deposits have survived the numerous development phases. Boreholes along the eastern side of the site produced evidence for probable structures associated with the Bailey Lane Works occupied by 'Carr J. and Riley, steel manufacturers' as shown on the OS maps of 1853 and 1890. This could be evidence for the previously unknown location of the hardening furnace in close vicinity to the known location of the cast steel furnace in the centre of the Site. A layer containing slate and metal objects located at the southern end of the Bailey Lane works can be associated with buildings for the production of cutlery or tools which is known to have occupied the Site during the 20th century.</p>
Project dates	Start: 01-10-2019 End: 16-10-2019
Previous/future work	No / Yes
Any associated project reference codes	226160 - Sitecode
Type of project	Recording project
Site status	None
Current Land use	Industry and Commerce 4 - Storage and warehousing
Monument type	STEEL FURNACE Post Medieval
Monument type	WORKERS HOUSING Modern
Significant Finds	SLAG Post Medieval
Significant Finds	BRICK Post Medieval
Investigation type	"Watching Brief"



Prompt Planning condition

Project location

Country	England
Site location	SOUTH YORKSHIRE SHEFFIELD SHEFFIELD Grunwergs 2
Postcode	S1 4EG
Study area	0.47 Hectares
Site coordinates	SK 34947 87397 53.382000320758 -1.474559168403 53 22 55 N 001 28 28 W Point
Height OD / Depth	Min: 81.5m Max: 82.5m

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Wardell Armstrong
Project design originator	Wardell Armstrong
Project director/manager	Milica Rajic
Project supervisor	Martina Tenzer
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Watkin Jones Group

Project archives

Physical Archive Exists?	No
Digital Archive recipient	Wessex Archaeology
Digital Contents	"none"
Digital Media available	"Images raster / digital photography"
Paper Archive recipient	Wessex Archaeology
Paper Contents	"none"



Paper Media available "Context sheet", "Diary", "Report"

Project bibliography 1

Publication type Grey literature (unpublished document/manuscript)

Title Grunwergs 2

Author(s)/Editor(s) Tenzer, M.

Other bibliographic details 226160.1

Date 2019

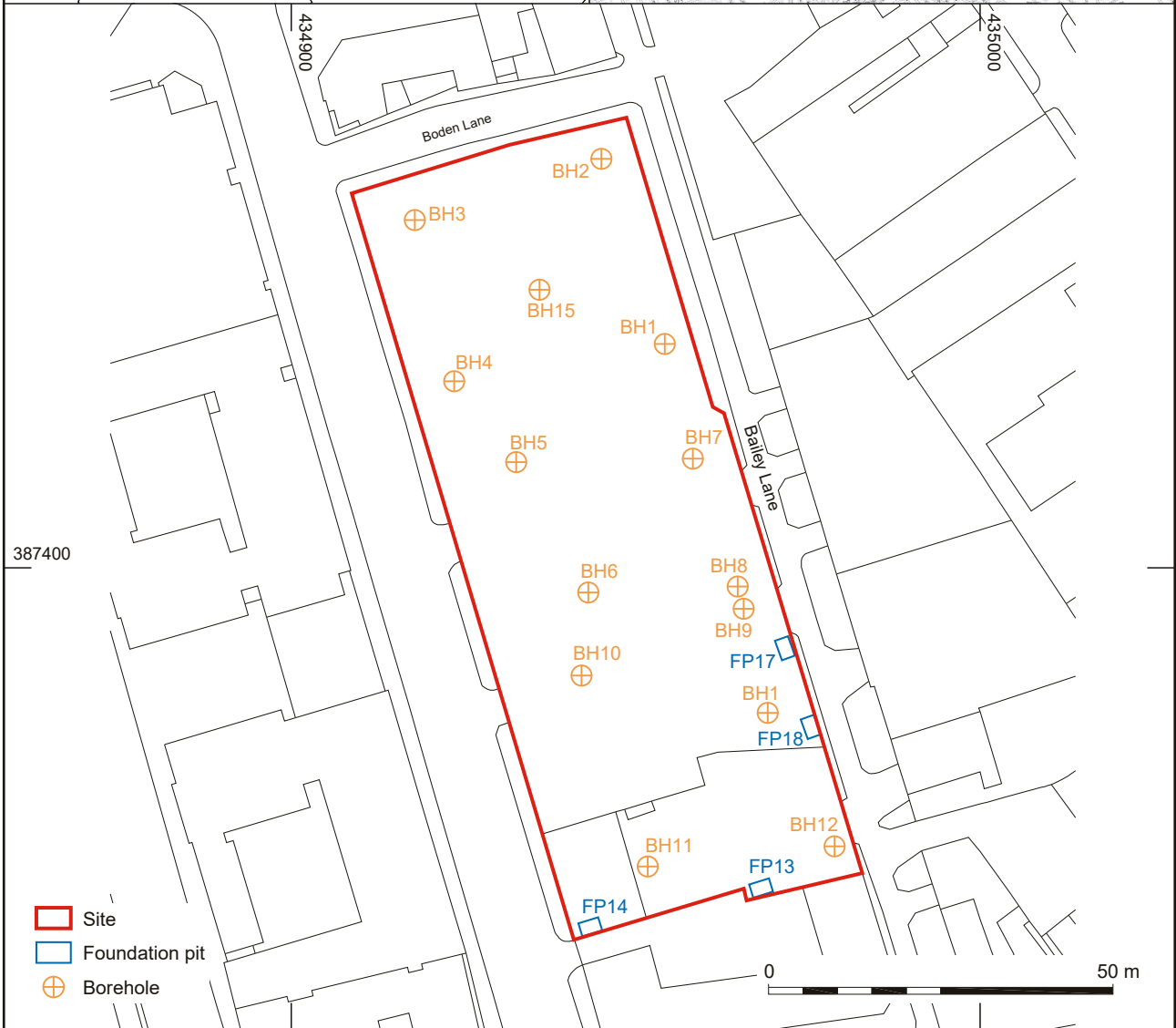
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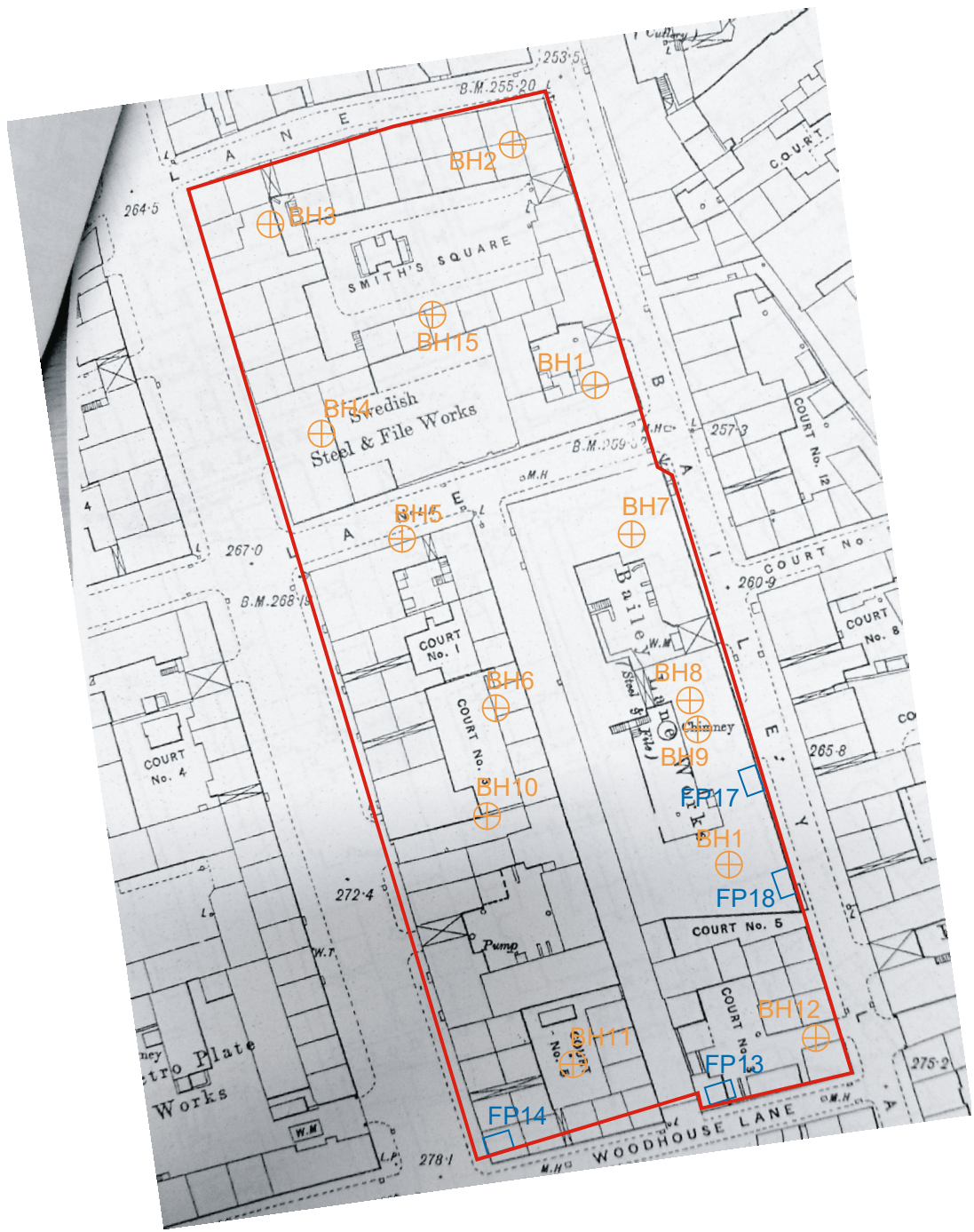
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Site location

Figure 1



- Site
- Foundation pit
- ⊕ Borehole



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Borehole and foundation pit locations over 1890 Ordnance Survey mapping

Figure 2



Plate 1: BH 1, plan view



Plate 2: BH 1, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m (from the top)


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Plate 3: BH 2, plan view



Plate 4: BH 2, drilling core, depth 1.2–2.0 m


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Plate 5: BH 3, plan view



Plate 6: BH 3, drilling core, depth 1.2–2.0 m, 2.0–3.0 m (from the top)


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Plate 7: BH 4, plan view



Plate 8: BH 4, drilling core, depth 1.2–2.0 m, 2.0–3.0 m


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Plate 9: BH 5, plan view



Plate 10: BH 5, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m, 4.0–5.0 m, 5.0–6.0 m (from top to bottom)


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Plate 11: BH 6, plan view



Plate 12: BH 6, drilling core, depth 2.0–3.0 m, 3.0–4.0 m, 4.0–5.0 m, 5.0–6.0 m (from the top)


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Plate 13: BH 7, plan view



Plate 14: BH 7, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m, 4.0–5.0 m, 5.0–6.0 m (from the top)


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Plate 15: BH 8, drilling core 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m (from the top)



Plate 16: BH 9, plan view


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Plate 17: BH 9, drilling core, depth 1.2–2.0 m, 2.0–3.0m, 3.0–4.0 m (from the top)

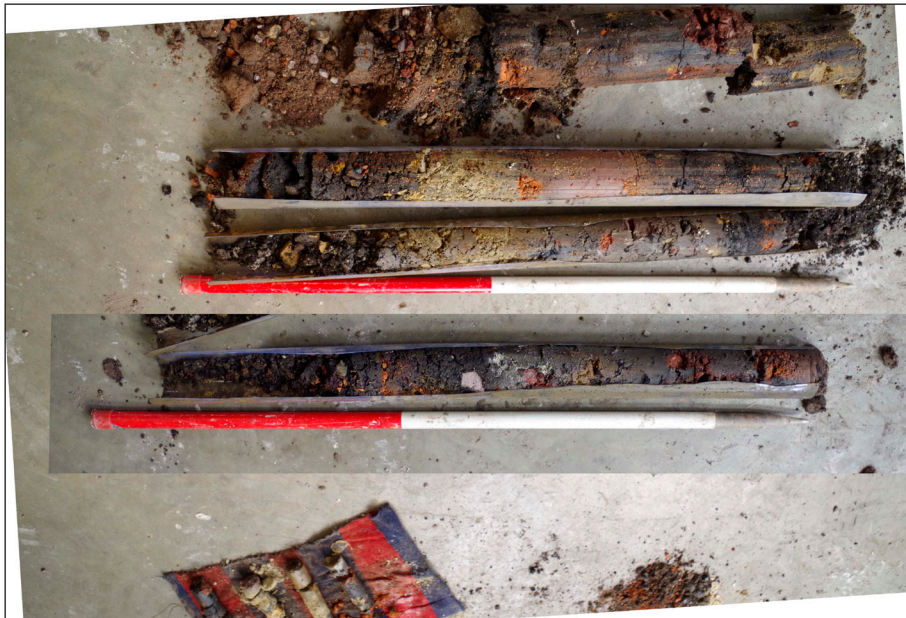


Plate 18: BH 10, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0m, 5.0–6.0 m (from the top)


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Plate 19: BH 11, plan view



Plate 20: BH 11, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m (from the top)


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Plate 21: BH 12, plan view



Plate 22: BH 12, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m (from the top)


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Plate 23: FP 13, plan view from north



Plate 24: FP 13, section view from the west


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Plate 25: FP 14, plan view



Plate 26: BH 15, drilling core, depth 1.2–2.0 m, 2.0–3.0 m, 3.0–4.0 m (from the top)


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Plate 27: BH 16, Rotary drilling rig



Plate 28: BH 16, made ground at around 2.0 m


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Plate 29: BH 16, layer at around 3.0 m



Plate 30: FP 17, plan view from west



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Plate 31: FP 17, section view from north



Plate 32: FP 18, plan view from west

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Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk

