

King's Square (SI Works) Gloucester Gloucestershire

Archaeological Watching Brief



for
ADI UK Ltd

CA Project: 6700
CA Report: 18503

October 2018



King's Square (SI Works) Gloucester

Archaeological Watching Brief

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Document Control Grid						
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by
A	5 October 2018	Alex Thomson	Cliff Bateman	Internal review	Draft	

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SUMMARY

Project Name:	King's Square (SI Works)
Location:	Gloucester
NGR:	383376 218562
Type:	Watching Brief
Date:	13 September 2018
Location of Archive:	To be deposited with Museum of Gloucester
Site Code:	SIKS 18

An archaeological watching brief was undertaken by Cotswold Archaeology during the drilling of a site investigation (SI) borehole at King's Square, Gloucester.

A series of deposits of archaeological interest were observed during the groundworks that correlate with the results of previous archaeological evaluation trenching at the site. Probable Roman deposits were identified sealing the natural substrate and, in turn, were sealed by thick deposits of medieval, post-medieval and modern levelling and made-ground materials.



1. INTRODUCTION

1.1 In September 2018 Cotswold Archaeology (CA) carried out an archaeological watching brief for ADI UK Ltd during the drilling of a site investigation (SI) borehole in King's Square, Gloucester (centred at NGR: 383376 218562; Fig. 1).

1.2 The watching brief was carried out in accordance with a request by Andrew Armstrong, City Archaeologist, Gloucester City Council (GCC), the archaeological advisor to GCC, and with a subsequent detailed *Written Scheme of Investigation* (WSI) produced by CA (2018) and approved by Andrew Armstrong. The fieldwork also followed *Standard and guidance: Archaeological watching brief* (ClfA 2014).

The site

1.3 The site is located on the north-eastern edge of the historic core of Gloucester (Fig. 1). King's Square is covered by hard-standing with steps leading into a sunken area at its centre, around which there are grassed areas and a small number of trees (Fig. 2). St Aldate Street and The Oxbode lead into King's Square at its north-western and south-western corners respectively. The square is surrounded by retail outlets. The site lies at approximately 17m AOD.

1.4 The underlying bedrock geology of the area is mapped as Jurassic and Triassic Blue Lias and Charmouth Mudstone formations overlain by Quaternary superficial tidal flat deposits consisting of clay, sand and silt (BGS 2018).

2. ARCHAEOLOGICAL BACKGROUND

2.1 The proposed development site has been subject to a preceding Archaeological Desk-Based Assessment (CA 2013) and to archaeological evaluation (CA 2014a and b). It is not intended to fully reprise these reports here, but the following is a summary of their conclusions.

2.2 The assessment concluded that there was little known evidence for prehistoric activity within the immediate area, excepting possible Iron Age activity recorded at 45-9 Northgate Street, approximately 175m to the north-west of site (CA 2013).



- 2.3 Roman occupation at Gloucester (Glevum) began with a legionary fortress that was built at Kingsholm in the late AD 40s. This fortress was abandoned during the AD 60s at the same time as a new fortress was established close to the modern city centre. The conversion of this second fortress into a *colonia*, a settlement for retired soldiers, is likely to date to the very late 1st century AD (Hurst 1986). King's Square lies immediately within the north-east corner of the defensive circuit of the Roman town, adjacent to the line of the Roman town defences (CA 2013).
- 2.4 The assessment considered there to be a high potential for remains associated with the Roman defences and intramural settlement to survive within King's Square. Excavations 125m to the north-west of site at the Bon Marche site (now Debenhams) in 1955 and 1958-9, within the area of the walled Roman town, recorded a series of walls with plaster designs, tessellated pavements and an opus signinum floor, with a courtyard to the west (*ibid.*). These features were interpreted as the remains of a possible series of Roman town houses, the latest of which dated to the 2nd century AD (Craster 1961; Hunter 1963). During the late 20th-century redevelopment of King's Square, the corner of a feature formed from large oolitic blocks was recorded c. 2m to the south of the Roman town wall (Hurst 1986, 89). In close proximity, a deposit containing a column fragment, in addition to other stone and mortar fragments, was also recorded. These remains may represent a building, possibly associated with the defences such as an intervallum building, or associated with the occupation of this area of the Roman town (*ibid.*).
- 2.5 To the south of the oolitic blocks, remains of the intervallum road were identified (*ibid.*). It is postulated that the road may survive beneath the current site (CA 2013).
- 2.6 Deposits of post-Roman dark loam have been recorded in the King's Square area, as have the remains of probable mid-11th century street metalling. No early medieval settlement remains have been recorded in the immediate vicinity, and the presence of the dark loam may indicate that the area was under cultivation during this period (*ibid.*).
- 2.7 The King's Square area may have remained as open/unused space within the defensive circuit of the medieval and possibly the early post-medieval town. The town defences were used and reconsolidated during the medieval period, and remains of the Almesham Postern gate and bridge may survive within the north-east corner of King's Square (*ibid.*).

- 2.8 Between 1970 and 1972 King's Square was redeveloped with a consequent impact on archaeological remains, particularly the removal of a short stretch of the Roman town wall, an area of the rampart and other Roman deposits (*ibid.*).
- 2.9 In 2014 an archaeological evaluation at the former Golden Egg Restaurant within King's Square demonstrated that structural remains, comprising a possible compacted limestone surface and a wall, of probable Roman date survive at a depth of between 2.65m and 3m (14.35m AOD) below the present ground level (bpgl; CA 2014a; see Fig. 2 of this report for location and extent).
- 2.10 Two further evaluation trenches were excavated later in 2014, with Trench A being located adjacent to the borehole's location (CA 2014b; see Fig. 2 of this report for location and extent). These trenches further demonstrated that Roman structural remains, as well as evidence for medieval and post-medieval activity, survives throughout the proposed development area. It identified Roman structural remains, comprising compacted limestone surfaces and walls most probably dating to the 2nd-century, at depths of between 2.6m and 3m bpgl (14.34m-14.11m AOD). Within Trench B, these earlier Roman structures were replaced by a mid to late 4th-century building within which pilae stacks, indicative of a surviving hypocaust system, were identified. This later building incorporated large, re-used masonry blocks that may have originated from a renovated or demolished civic structure such as the town wall, the forum or bath house (*ibid.*).
- 2.11 Evidence of post-Roman demolition deposits was also revealed, as were a number of later cut features, including medieval and possibly post-medieval robber trenches that targeted the Roman walls, and two pits/postholes that may be representative of later, wooden structures. A series of post-medieval deposits observed sealing the latest of the identified cut features have been interpreted as heavily re-worked cultivation soils or episodes of ground make-up/levelling (*ibid.*).

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the archaeological works were:



- to monitor groundworks, and to identify, investigate and record all significant buried archaeological deposits revealed on the site during the course of the development groundworks;
- at the conclusion of the project, to produce an integrated archive for the project work and a report setting out the results of the project and the archaeological conclusions that can be drawn from the recorded data.

4. METHODOLOGY

- 4.1 The fieldwork followed the methodology set out within the WSI (CA 2018). An archaeologist was present during intrusive groundworks, comprising the drilling of a single borehole (BH1), measuring 110mm in diameter, to a depth of 10.7m bpgl (Fig. 2).
- 4.2 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*. Furthermore, the borehole log, generated over the course of the SI works, is presented in Appendix C.
- 4.3 The archive from the watching brief is currently held by CA at their offices in Kemble. Subject to the agreement of the legal landowner the site archive will be deposited with the Museum of Gloucester. A summary of information from this project, set out within Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGS 2-4)

- 5.1 This section provides an overview of the results of the watching brief; detailed summaries of the recorded contexts can be found in Appendix A. Details of the relative heights of the principal deposits, expressed as metres Above Ordnance Datum (m AOD), appear in Appendix B.
- 5.2 The borehole investigation revealed a sequence of layers descending to a depth of 10.7m bpgl (6.74m AOD), upon which investigations ceased. The natural geological substrate was identified by the attendant archaeologist at 4.35m bpgl (13.09m

AOD), consisting of dark grey-blue lias clay 107 and orangey-brown sand and alluvial clay 106; these measured at least 6.4m in thickness (Fig. 3). It should be noted that no such differentiation is recorded at this depth in the SI log, although possible Cheltenham sands and gravels are recorded from 4.3m bpgl (see Appendix C).

- 5.3 Overlying the natural substrate, made ground layers 105 and 104, of probable Roman date, were identified at a depth of 3.8m (13.64m AOD). They consisted of sandy-silts and clays, measuring 0.25 and 0.3m in respective thickness (Fig. 4). No artefactual material was retained from these layers, although frequent charcoal fragments were recorded within both deposits.
- 5.4 These probable Roman layers were sealed by a disturbed deposit of probable re-worked Roman material, 103, identified at a depth of 3.1m bpgl (14.34m AOD). Measuring 0.7m in thickness, this material consisted of mixed sandy-silts and contained fragments of oyster shell.
- 5.5 This was sealed by a succession of mixed made-ground deposits 102 and 101, dating to the post-medieval period, with plaster, slag, clay tobacco pipe, glass and clinker being recorded in these layers. These deposits measured a total of 1.5m in thickness and were sealed by modern concrete paving and associated levelling and bedding materials 100, measuring 1.6m in total thickness.

6. DISCUSSION

- 6.1 The limited nature of these investigation works hinders definite interpretation of the recorded sequence; however, the deposits identified during the current works correlate closely to the evaluation investigations previously undertaken across the site (see Archaeological Background above). Deposit 103 was identified at 3.1m bpgl (14.34m AOD), closely correlating to the Roman levels recorded during the preceding evaluation within King's Quarter at 14.37m AOD in Trench A (CA 2014b) and 14.35m AOD at the Golden Egg Restaurant (CA 2014a). However, the disturbed nature of deposit 103 suggests that it probably represents the fill of a later intrusive feature cutting into the Roman horizon, as was also evidenced during the preceding works (*ibid.*). It remains undetermined whether this activity relates to a later pit or the robbing of a Roman wall.

- 6.2 Probable Roman deposits 104 and 105, identified from 3.8m bpgl (13.64m AOD), likely relate to levelling and made ground deposits from this period. Comparable deposits were not identified during the preceding evaluation, although that is largely due to the maximum depth of the excavated trenches lying above such horizon (see Appendix B).
- 6.3 The overlying medieval, post-medieval and modern layers further mirror the deposits seen elsewhere across King's Square and likely relate to domestic, cultivation and levelling activities from these periods.

7. CA PROJECT TEAM

Fieldwork was undertaken by Mark Brett. The report was written by Alex Thomson. The illustrations were prepared by Tom Brown. The archive has been compiled by Mark Brett, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Cliff Bateman.

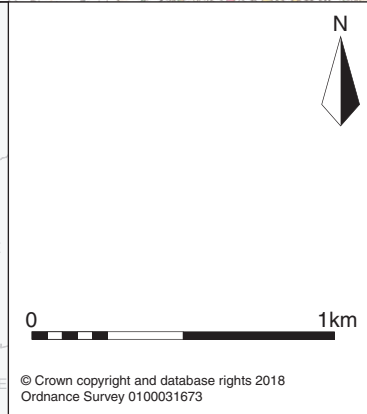
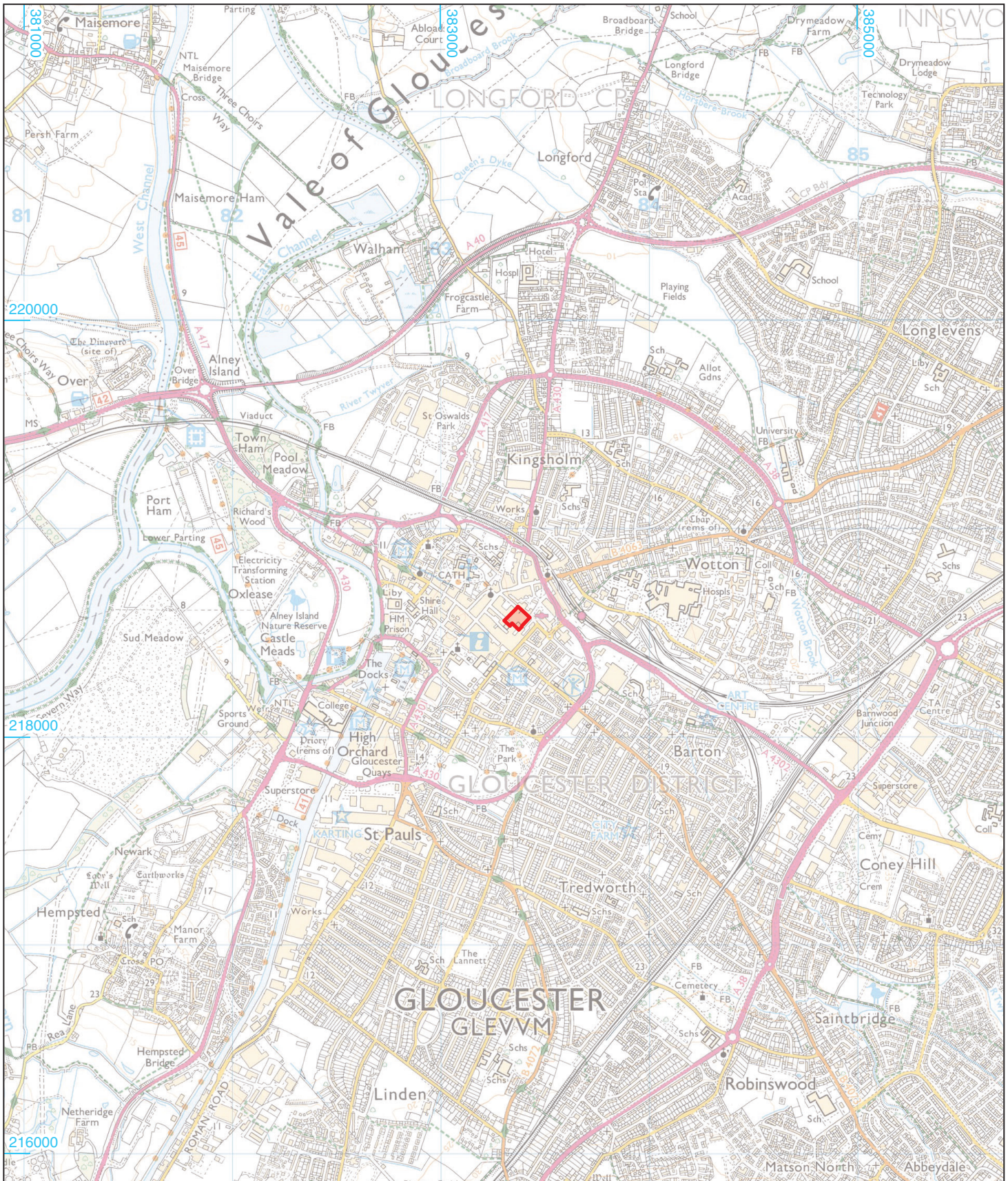
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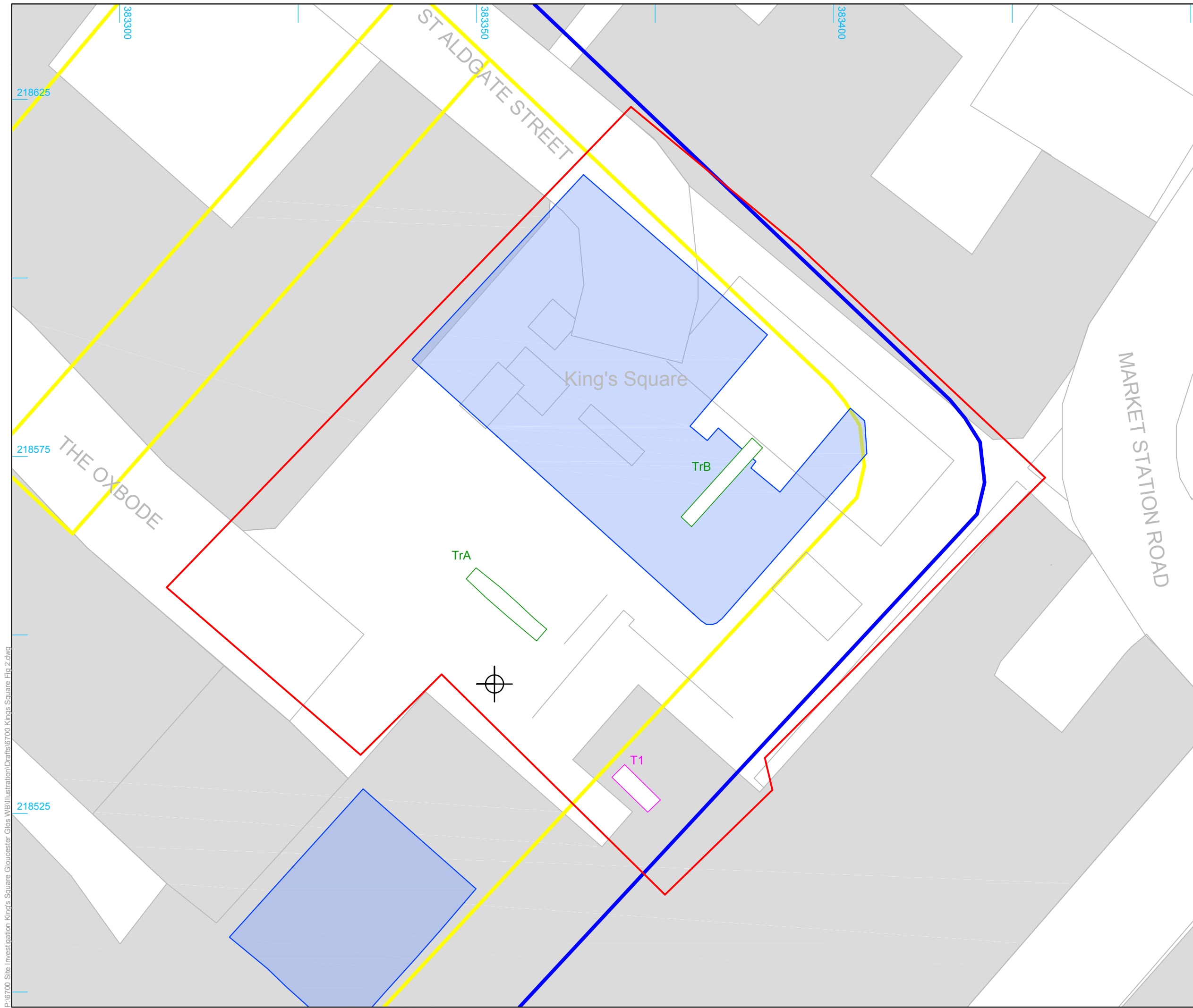
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PROJECT TITLE
 King's Square (SI Works), Gloucester, Gloucestershire

FIGURE TITLE
 Site location plan

DRAWN BY	TB	PROJECT NO.	6700	FIGURE NO.
CHECKED BY	DJB	DATE	12.10.18	
APPROVED BY	CMB	SCALE@A4	1:25,000	1

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 Ordnance Survey 0100031673



- site boundary
- previous evaluation trench (Cotswold Archaeology 2014a)
- previous evaluation trench (Cotswold Archaeology 2014b)
- scheduled monument
- borehole
- Roman street
- Roman town wall



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PROJECT TITLE
King's Square (SI Works), Gloucester, Gloucestershire

FIGURE TITLE
The site, showing location of observed borehole, previous archaeological investigations and known archaeological resources

DRAWN BY	TB	PROJECT NO.	6700	FIGURE NO.
CHECKED BY	DJB	DATE	12.10.18	2
APPROVED BY	CMB	SCALE@A3	1:500	

P:\6700 Site Investigation\King's Square Gloucester\Glos\WB\Illustration\Drafts\6700 Kings Square Fig 2.dwg



Borehole core, showing exposed natural substrate



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PROJECT TITLE

King's Square (SI Works), Gloucester,
 Gloucestershire

FIGURE TITLE

Photograph

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CHECKED BY **DJB** DATE **12.10.18**
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FIGURE NO.

3



Borehole core, showing exposed Roman deposit 105 and natural substrate



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PROJECT TITLE

King's Square (SI Works), Gloucester,
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FIGURE TITLE

Photograph

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CHECKED BY **DJB** DATE **12.10.18**
APPROVED BY **CMB** SCALE@A4 **NA**

FIGURE NO.

4

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Type	Context interpretation	Description	L (m)	W (m)	Depth/thickness (m)
BH1	100	Layer	Modern surface	Concrete paving, sand and gravel, mixed made ground	0.11	0.11	1.6
BH1	101	Layer	Made ground	Dark brown silt with CBM and charcoal	0.11	0.11	0.5
BH1	102	Layer	Made ground	Dark brown silt with limestone and CBM	0.11	0.11	1
BH1	103	Layer	Made ground	Dark brown silty-sand with gravel, limestone, CBM and oyster shell	0.11	0.11	0.7
BH1	104	Layer	Made ground	Dark brown sandy-silt with gravel and oyster shell	0.11	0.11	0.3
BH1	105	Layer	Made ground	Dark greenish-brown sandy-clay with charcoal and gravel	0.11	0.11	0.25
BH1	106	Layer	Natural substrate	Orangey-brown sandy alluvial clay	0.11	0.11	1.5
BH1	107	Layer	Natural substrate	Dark greyish-blue lias clay	0.11	0.11	>4.9

APPENDIX B: LEVELS OF PRINCIPAL DEPOSITS AND STRUCTURES

Levels are expressed as metres below current ground level and as metres Above Ordnance Datum (AOD).

	Borehole 1	Trench 1, Golden Egg (CA 2014a)	Trench A, Kings Quarter (CA 2014b)	Trench B, Kings Quarter (CA 2014b)
Current ground level	0.00m (17.44m)	0.00m (16.90m)	0.00m (17.28m)	0.00m (16.74m)
Top of probable disturbed Roman deposits	3.1m (14.34m)	N/A	N/A	N/A
Top of Roman deposits	3.8m (13.64m)	2.65m (14.35m)	2.91m (14.37m)	2.63m (14.11m)
Top of natural substrate	4.35m (13.09m)	N/A	N/A	N/A
Limit of excavation	10.7m (6.74m)	3.30m (13.60m)	3.37m (13.91m)	3.31m (13.43m)

Upper figures are depth below modern ground level; lower figures in parentheses are metres AOD.

APPENDIX C: SI BOREHOLE LOG

APPENDIX C: SI BOREHOLE LOG

DrillingApparatus: Auto-Trip Standard Penetration Test Drop Hammer
BoreholeDiameter: Started at 110mm, reduced to 50mm by 10.7m deep
Scheme: Proposed Large T.V.Screen, 27 St Aldate Street, Gloucester, GL1 1RP.
Date: 13/09/18

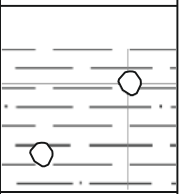
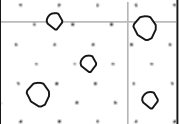
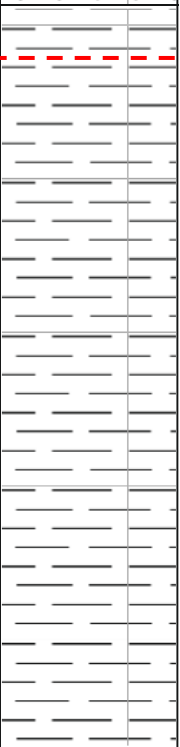
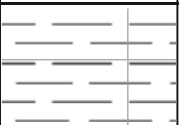



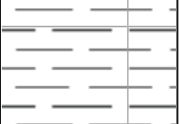


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Drillers Borehole Log No. 1 – Top of Borehole @ 17.435m AOD

Depth (m)	Description	Archaeological Context	Symbol
0.0	MADE GROUND- 65mm thick concrete paving slab over a brown sand base		
	MADE GROUND- gravel with sand (possible lean mix sub-base) 120mm		
	MADE GROUND- fine, medium & coarse angular gravel & sand		
0.5	MADE GROUND- reddish/brown sand, gravel & stone cobbles		
	MADE GROUND- stone cobbles, brick, gravel & sand with a piece of blue polythene at 1.0m deep	100	
1.0	MADE GROUND- dark grey, silty sand with gravel, brick & with rare fragments of glass & grey slate		
1.5	MADE GROUND- dark grey, slightly clayey sand, with gravel, rare brick fragments, rare black ash & clinker & a fragment of a clay tobacco pipe & rare fragments of brown glass at depth	101	
2.0			
2.5		102	
3.0			
	MADE GROUND- soft, soily, sandy clay with gravel inclusions & very occasional traces of oyster shell	103	
3.5	Probable MADE GROUND- soft, grey, sandy silty clay with rare rootlets	104	
4.0	MADE GROUND- soft, brown, sandy clay (re-worked) looks like a possible re-worked material)	105	
4.5			
	Firm, brown, sandy CLAY with rare gravel inclusions (becoming very sandy at depth)	106	
5.0	Continued Overleaf		

Log Continued

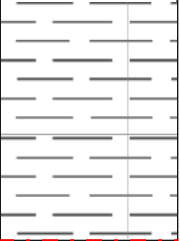
Borehole Log No. 1

Depth (m)	Description	Archaeological Context	Symbol
5.0	As before Firm, brown, sandy CLAY with rare gravel inclusions	106	
5.5	Loose, medium grained, mid brown, gravelly SAND (the gravel was fine & medium in size and sub-rounded)		
6.0	Stiff, grey & brown mottled CLAY with rare inclusions of rotting vegetation visible up to 6.8m deep	107	
6.5			
7.0			
7.5			
8.0	Stiff, dark grey CLAY		
8.5			
9.0			
9.5			
10.0			

Continued Overleaf

Log Continued

Borehole Log No. 1

Depth (m)	Description	Archaeological Context	Symbol
10.0 — — — — 10.5 — — —	As before Stiff, dark grey CLAY	107	
11.0 — — — 11.5 — — — 12.0 — — — 12.5 — — — 13.0 — — — 13.5 — — — 14.0 — — — 14.5 — — — 15.0 —	<p style="text-align: center;">End of Bore</p> <p>GROUND WATER: Water strike at 4.2 metres deep during drilling & the standing water remained at this level on completion of the borehole.</p> <p style="text-align: center;">Ground water levels are subject to seasonal variations & should not be taken as constant</p>	<hr style="border-top: 1px dashed red;"/>	

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS		
Project Name	King's Square (SI Works), Gloucester	
Short description	<p>An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with site investigation borehole works at King's Square, Gloucester.</p> <p>A series of deposits of archaeological interest were observed during the groundworks that correlate with the results of previous archaeological evaluation trenching at the site. Probable Roman deposits were identified sealing the natural substrate and, in turn, were sealed by thick deposits of medieval, post-medieval and modern levelling and made-ground materials.</p>	
Project dates	13 September 2018	
Project type	Watching Brief	
Previous work	Desk Based Assessment (CA 2013) Field Evaluation, Former Golden Egg (CA 2014a) Field Evaluation, Kings Quarter (CA 2014b)	
Future work	Unknown	
PROJECT LOCATION		
Site Location	King's Square, Gloucester	
Study area		
Site co-ordinates	383376 218562	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	Gloucester City Council	
Project Design (WSI) originator	Cotswold Archaeology	
Project Manager	Cliff Bateman	
Project Supervisor	Mark Brett	
MONUMENT TYPE	None	
SIGNIFICANT FINDS	None	
PROJECT ARCHIVES		
	Intended final location of archive	Content
Physical	N/A	N/A
Paper	Museum of Gloucester	Field recording sheets, etc.
Digital	Museum of Gloucester	Digital photographs, etc.
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2018 <i>King's Square (SI Works), Gloucester: Archaeological Watching Brief</i> . CA typescript report 18503		

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