



Land at Denmark Road Gloucester

Archaeological Watching Brief



for Redrow Homes Ltd

CA Project: 6681 CA Report: 18401

August 2018



Land at Denmark Road Gloucester Gloucestershire

Archaeological Watching Brief

CA Project: 6681 CA Report: 18401













Document Control Grid								
Revision	Date	Author	Checked by	Status	Reasons for revision	Approved by		
А	20 August 2018	D. Sausins & C. Haines	L. Coleman	Internal review		C. Bateman		

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

SUMM	IARY	2
1.	INTRODUCTION	3
2.	ARCHAEOLOGICAL BACKGROUND	3
3.	AIMS AND OBJECTIVES	6
4.	METHODOLOGY	6
5.	RESULTS (FIGS 2-3)	6
6.	THE FINDS	7
7.	DISCUSSION	8
8.	CA PROJECT TEAM	8
9.	REFERENCES	8
APPE	NDIX A: CONTEXT DESCRIPTIONS	10
APPE	NDIX B: THE FINDS	12
APPFI	NDIX C: OASIS REPORT FORM	. 13

LIST OF ILLUSTRATIONS

- Fig. 1 Site location plan (1:25,000)
- Fig. 2 Trial Pit location plan, showing previous archaeological works, geophysical survey results and archaeological features (1:1000 & 1:5000)
- Fig. 3 Trial Pits 45 and 51; photographs

SUMMARY

Project Name: Land at Denmark Road

Location: Gloucester

NGR: 383661 219549

Type: Watching Brief

Date: 25-26 July 2018

Location of Archive: To be deposited with Museum of Gloucester

Site Code: CSPF 18

An archaeological watching brief was undertaken by Cotswold Archaeology during ground investigation works on land at Denmark Road, Gloucester. Twenty-two Ground Investigation trial pits were excavated.

Evidence for extensive post-medieval/modern quarrying on the site was recorded. Historic gravel extraction is documented on cartographic records and was identified during previous phases of archaeological work. No evidence for earlier activity was identified.

1. INTRODUCTION

- 1.1 In July 2018 Cotswold Archaeology (CA) carried out an archaeological watching brief for Redrow Homes Ltd on land at Denmark Road, Gloucester (centred at NGR: 383661 219549; Fig. 1). The watching brief was undertaken during Ground Investigation (GI) works which will inform a supplementary ground investigation report.
- 1.2 The watching brief was carried out in accordance with a *Written Scheme of Investigation* (WSI) produced by CA (2018) and approved by Andrew Armstrong, Gloucester City Archaeologist, Gloucester City Council (GCC). The fieldwork also followed Standard and guidance: Archaeological watching brief (ClfA 2014).

The site

- 1.3 The proposed development area is approximately 3.8ha in extent, and comprises the former Civil Service Playing Field and an area of hard standing to the south of the A38 (Estcourt Road) and to the north of Denmark Road. The site lies at approximately 20m AOD on land that is relatively flat.
- 1.4 The underlying bedrock geology of the area is mapped as Blue Lias Formation and Charmouth Mudstone Formation of the Jurassic and Triassic Periods overlain by superficial deposits of Cheltenham Sand and Gravel of the Quaternary Period (BGS 2018). Sand and gravel natural substrate was identified during the watching brief.

2. ARCHAEOLOGICAL BACKGROUND

2.1 The site has been subject to a number of previous archaeological investigations including a watching brief undertaken in 2012 (CA 2012), a geophysical survey (GCC 2012a) and excavation in 2012 (GCC 2012b), a desk-based assessment (DBA) in 2013 (CA 2013), further geophysical survey in 2013 (AS 2013), and trial trench evaluation undertaken in two phases during 2014 (CA 2014). The results of these studies, along with other publically available pertinent information, are summarised below:

Potential for Palaeolithic remains

2.2 The potential for the site to contain features, finds and/or deposits of Palaeolithic date has been highlighted by Andrew Armstrong, Gloucester City Archaeologist and Vanessa Straker, the former Science Advisor English Heritage (South West). Seven flint artefacts have been recovered from Estcourt Road, located immediately to the north of the site (pers. comm. Andrew Armstrong). Furthermore, a hand axe and a hand axe-like implement, along with other artefacts and the remains of Pleistocene cold-stage fauna including mammoth, woolly rhinoceros, horse and musk ox have been found during gravel extraction at Barnwood and Forty Acre Field approximately 1.5km south-east of the site (Saville 1984, 61). Additionally a ficorn-type handaxe was recovered from a gravel deposit beneath the garden of a house in Longlevens, approximately 2km to the east of the site (Saville, 1984, 62).

Roman (AD 43 – 410)

- 2.3 The site is located in the vicinity of the 1st-century AD Kingsholm Roman Fortress. The exact alignment of the fort's eastern defences is not known, but it has previously been suggested they may extend through the current site (see Fig. 2 inset). Previous archaeological investigations within the site have failed to conclusively identify the fortress defences (CA 2013).
- 2.4 Following the abandonment of the Kingsholm Fortress in the late 1st century AD, the Kingsholm area was utilised as part of the Roman cemetery to the north of the civilian settlement of Gloucester. The site is located within the conjectural boundaries of the cemetery, and antiquarian sources record the recovery of Roman inhumations and artefacts during historic gravel extraction within, and in the vicinity of, the site (CA 2013). This extraction is documented on cartographic sources, and has also been identified during all previous phases of archaeological fieldwork on site (CA 2014).
- 2.5 Following the Roman period the cemetery fell out of the use and the site appears to have reverted to agricultural use. The site is likely to have formed part of the agricultural hinterland of Gloucester (and other nearby settlements) throughout the early medieval, medieval and post-medieval periods, with periods of gravel extraction in the 18th century. Only in the 20th century, with the expansion of Gloucester, was the site subsumed by residential development (CA 2013).

2012 Geophysical Survey and Excavation

2.6 In 2012 the site was the focus of a community project designed to investigate the potential remains of the Roman Kingsholm fortress. These investigations comprised geophysical survey (GCC 2012a) and excavation, comprising targeted trenches and test pits (GCC 2012b). The geophysical survey identified no anomalies of clear archaeological origin, but defined a large area of probable post-medieval extraction hollows. The subsequent excavations recorded a small number of 1st-century AD features, comprising pits and a segment of ditch, that had been disturbed by the extensive post-medieval quarrying (ibid.).

2012 Watching Brief

2.7 A watching brief undertaken by CA during the demolition of buildings in the northern part of the site identified an undated ditch and an undefined feature that contained pottery dating to the 1st-century AD, along with post-medieval extraction pits (CA 2012). The ditch was identified close to a projected possible alignment of the Roman fortress defences (Atkin 1986).

2013 Geophysical Survey & 2014 Trial Trench Evaluation

2.8 The results of the geophysical survey indicated a north-west/south-east alignment of possible structural remains or robbed foundation trenches, activity associated with possible quarrying, and possible ditches and pits (AS 2013). However, the subsequent evaluation revealed no evidence of structures and found that the anomalies initially interpreted as such appeared to relate to the edges of postmedieval extraction pits which were proven to extend widely across the site (CA 2014). Quantities of residual Roman pottery recovered from these pits attest to the presence of Roman deposits or features which have been impacted upon by the quarrying, and it is likely that the recovered Roman pottery derives from extramural settlement or defensive features associated with the 1st-century AD Kingsholm Fortress. Despite the impact of the post-medieval/modern guarrying, it is believed that archaeological features/deposits may survive between (and potentially below) the truncated areas. In addition to the extraction pits, the evaluation identified five modern ditches, three of which correspond to paths or boundaries depicted on the 1886 Ordnance Survey Map (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 excavation of 22 GI trial pits in the location shown on Figure 2. An additional six trial pits proposed in the WSI were not excavated.
- 4.2 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.
- 4.3 The archive and artefacts from the watching brief are currently held by CA at their offices in Kemble. The artefactual material all dates to the post-medieval/modern period and will be discarded in due course. The archive will be deposited with the Museum of Gloucester. A summary of information from this project, set out within Appendix C, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGS 2-3)

5.1 This section provides an overview of the watching brief; detailed summaries of the recorded contexts and finds are to be found in Appendices A and B respectively.

- With the exception of Trial Pit 43, a similar stratigraphy was recorded across the site. The natural geological substrate, comprising red sand and gravel, was recorded between 0.75m and 1.8m below present ground level (bpgl) in Trial Pits 36-51. In Trial Pits 34, 36, 39-42 and 44-51, deposits of clay silt, sand and gravel that are likely to represent the backfill of post-medieval quarry pits, were recorded. With the exception of Trial Pit 34 where the quarry backfill was the earliest deposit recorded, the quarry pits cut the natural substrate. A single sherd of post-medieval pottery was recovered from the quarry backfill deposit 34001 in Trial pit 34.
- 5.3 The earliest deposit recorded in Trial Pits 31-33 and 35 was a layer of grey silt sand subsoil. Subsoil also sealed the quarry pit backfills in Trial Pits 36, 39-42 and 45-48. The subsoil was sealed by topsoil in Trial Pits 31-33, 35-42, 45-48. In Trial Pits 34, 44, and 49-51, the topsoil directly overlay the quarry backfill deposits. In Trial Pit 30 the topsoil was the earliest deposit recorded. In Trial pit 51 the topsoil was overlain by *c*. 0.3m of modern rubble. With the exception of the quarry pit backfills described above, no archaeological features or deposits were recorded in any of the trial pits.
- In Trial Pit 43 the natural substrate was overlain by a layer of subsoil *c*. 0.28m in thickness. This deposit was sealed by a layer of buried topsoil *c*. 0.35m in depth, which was in turn sealed by a modern dumped deposit containing burnt material 43001. This deposit was *c*. 0.2m thick and was sealed by topsoil.

6. THE FINDS

6.1 Artefactual material was hand-recovered from two deposits (quarry pit back fill and topsoil). All of the recovered material dates to the post-medieval/modern period and will be discarded in due course. The pottery has been recorded according to sherd count/weight per fabric. Pottery fabric codes (in parenthesis in the text) are equated to the online Gloucester pottery type series (http://glospot.potsherd.net/docs/intro).

Pottery

6.2 An abraded unfeatured bodysherd of glazed earthenware (TF50, 9g), dateable to the mid 16th to 18th centuries, was retrieved from quarry pit back fill 34001.

Other finds

- 6.3 Topsoil deposit 49001 produced a fragment from the bowl of a clay tobacco pipe (1g). Such pipes were in use from the late 16th to late 19th centuries.
- 6.4 Also recovered from deposit 49001 were five fragments (85g) of hard, coarse mortar with plaster or whitewash on one surface. Post-medieval or modern dating is most likely.

7. DISCUSSION

- 7.1 Further evidence for the extensive post-medieval/modern quarrying known to have taken place on the site was recorded during the watching brief. Historic gravel extraction within, and in the vicinity of, the site is documented on cartographic sources and has also been identified during all previous phases of archaeological fieldwork (CA 2014). Quarry pit backfill deposits were identified in Trial Pits 34, 36, 39-42, and 44-51. Due to the limited nature of the current works no evidence for the edges of any of the quarry pits were identified, as the trial pits appeared to be located entirely within the limits of these features.
- 7.2 No evidence for the use of the site relating to the 1st-century AD Kingsholm Roman Fortress or later Roman cemetery (see archaeological background above), was identified during the watching brief.

8. CA PROJECT TEAM

Fieldwork was undertaken by Pete Searle. The report was written by Daniel Sausins and Charlotte Haines. The finds report was written by Jacky Sommerville. The illustrations were prepared by Tom Brown. The archive has been compiled by Charlotte Haines, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Laurie Coleman.

9. REFERENCES

AS (Archaeological Surveys) 2013 Civil Service Playing Field, Estcourt Road, Gloucester: Magnetometer Survey Report Ref No. **515**

- Atkin, M. 1986 'Excavations in Gloucester 1985: an Interim Report', Glevensis 20, 312
- BGS (British Geological Survey) 2018 Geology of Britain Viewer http://mapapps.bgs.ac.uk/geologyofbritain/home.html Accessed 02 July 2018
- CA (Cotswold Archaeology) 2012 Civil Service Playing Field, Denmark Road, Gloucester:

 Archaeological Watching Brief, Fieldwork Summary
- CA (Cotswold Archaeology) 2013 Civil Service Playing Field, Estcourt Road, Gloucester:

 Archaeological Desk-Based Assessment CA Report No. **13520**
- CA (Cotswold Archaeology) 2014 Civil Service Playing Field, Denmark Road, Gloucester:

 Archaeological Evaluation CA Report No. 13723
- CA (Cotswold Archaeology) 2018 Land at Denmark Road, Gloucester, Gloucestershire:

 Written Scheme of Investigation for an Archaeological Watching Brief
- GCC 2012a Kingsholm: History on your Doorstep: Geophysical Surveys
- GCC 2012b Kingsholm: History on your Doorstep: Archaeological Excavation at the former Civil Service Playing Field, Gloucester
- Saville, A. 1984 Archaeology in Gloucestershire

http://glospot.potsherd.net/docs/intro (viewed 8 August 2018)

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Туре	Fill of	Context interpretation	Description	L (m)	W (m)	Depth/thi ckness (m)	Spot- date
30	30000	Layer		Topsoil	Dark grey silt sand			>0.5	
31	31000	Layer		Topsoil	Dark grey silt sand			0.5	
31	31001	Layer		Subsoil	Mid grey brown silt sand			>0.1	
32	32000	Layer		Topsoil	Dark grey silt sand			0.4	
32	32001	Layer		Subsoil	Mid grey brown silt sand			>0.2	
33	33000	Layer		Topsoil	Dark grey silt sand			0.35	
33	33001	Layer		Subsoil	Mid grey brown silt sand			>0.15	
34	34000	Layer		Topsoil	Dark grey silt sand			0.45	
34	34001	Deposit		Quarry backfill	Mid brown silt sand with stone and charcoal flecking			>0.23	C16-18
35	35000	Layer		Topsoil	Dark grey silt sand			0.4	
35	35001	Layer		Subsoil	Mid grey brown silt sand			>0.25	
36	36000	Layer		Topsoil	Dark grey silt sand			0.4	
36	36001	Layer		Subsoil	Mid grey-brown silt sand			0.6	
36	36002	Deposit		Quarry backfill	Dark grey black loam			0.5	
36	36003	Layer		Natural substrate	Mid red brown sand and gravel				
37	37000	Layer		Topsoil	Dark grey silt sand			0.35	
37	37001	Layer		Subsoil	Dark grey brown silt sand			0.43	
37	37002	Layer		Natural substrate	Mid brown sand and gravels				
38	38000	Layer		Topsoil	Mid grey silt sand			0.35	
38	38001	Layer		Subsoil	Mid grey brown silt sand			0.4	
38	38002	Layer		Natural substrate	Mid red brown sand and gravels				
39	39000	Layer		Topsoil	Mid grey silt sand			0.26	
39	39001	Layer		Subsoil	Mid grey brown silt sand			0.24	
39	39002	Deposit		Quarry backfill	Dark grey brown silt sand			1.3	
39	39003	Layer		Natural substrate	Mid red brown sand and gravels				
40	40000	Layer		Topsoil	Mid grey silt brown			0.3	
40	40001	Layer		Subsoil	Mid grey brown silt sand			0.2	
40	40002	Deposit		Quarry backfill	Mid brown silt sand with CBM and charcoal flecking			0.7	
40	40003	Layer		Natural substrate	Mid red brown sand and gravels				
41	41000	Layer		Topsoil	Mid grey silt sand			0.3	
41	41001	Layer		Subsoil	Mid grey brown silt sand			0.35	
41	41002	Deposit		Quarry backfill	Mid brown silt sand with CBM and charcoal flecking			0.7	
41	41003	Layer		Natural substrate	Mid red brown sand and gravels				
42	42000	Layer		Topsoil	Mid grey silt sand			0.3	
42	42001	Layer		Subsoil	Mid grey brown silt sand			0.4	
42	42002	Deposit		Quarry backfill	Mid grey brown silt sand with stone			0.7	
42	42003	Layer		Natural substrate	Mid red brown sand and gravels				
43	43000	Layer		Topsoil	Mid grey silt sand	<u> </u>		0.3	

43	43001	Layer	Dumped deposit	Dark grey black sand silt	0.17
43	43002	Layer	Buried topsoil	with fire waste Mid grey brown silt sand	0.35
43	43002	Layer	Subsoil	Mid grey brown silt sand	0.28
43	43004	Layer	Natural	Mid red brown sand and	0.20
40		Layer	substrate	gravels	
44	44000	Layer	Topsoil	Mid grey silt sand	0.25
44	44001	Deposit	Quarry backfill	Mid brown clay silt with stone, clinker, CBM and modern pottery	1.5
44	44003	Layer	Natural substrate	Mid red brown sand and gravels	
45	45000	Layer	Topsoil	Mid grey silt sand	0.35
45	45001	Layer	Subsoil	Mid grey brown silt sand	0.25
45	45002	Deposit	Quarry backfill	Mid brown clay silt with stone, clinker, CBM and modern pottery	0.6
45	45003	Layer	Natural substrate	Mid red brown sand and gravels	
46	46000	Layer	Topsoil	Mid grey silt sand	0.35
46	46001	Layer	Subsoil	Mid grey brown silt sand	0.15
46	46002	Deposit	Quarry backfill	Dark grey brown silt sand	1.2
46	46003	Layer	Natural substrate	Mid red brown silt sand	
47	47000	Layer	Topsoil	Mid grey silt sand	0.35
47	47001	Layer	Subsoil	Mid grey brown silt sand	0.2
47	47002	Deposit	Quarry backfill	Dark grey brown silt sand	0.8
47	47003	Layer	Natural substrate	Mid red brown silt sand	
48	48000	Layer	Topsoil	Mid grey silt sand	0.25
48	48001	Layer	Subsoil	Mid grey brown silt sand	0.25
48	48002	Deposit	Quarry backfill	Dark grey brown silt sand	0.35
48	48003	Layer	Natural substrate	Mid red brown silt sand	
49	49001	Layer	Topsoil	Mid grey silt sand	0.33
49	49002	Deposit	Quarry backfill	Dark grey brown silt sand	0.95
49	49003	Layer	Natural substrate	Mid red brown sand and gravel	
50	50000	Layer	Topsoil	Mid grey silt sand	0.23
50	50001	Deposit	Quarry backfill	Mixed red sand and gravels and grey silt sand	0.3
50	50002	Layer	Natural substrate	Mid red brown sand and gravels	
51	51000	Layer	Rubble	Demolition rubble and gravels	0.3
51	51001	Layer	Topsoil	Mid grey brown silt sand	0.3
51	51002	Deposit	Quarry backfill	Mid brown clay silt with stone	0.9
51	51003	Layer	Natural substrate	Mid red brown sand and gravels	

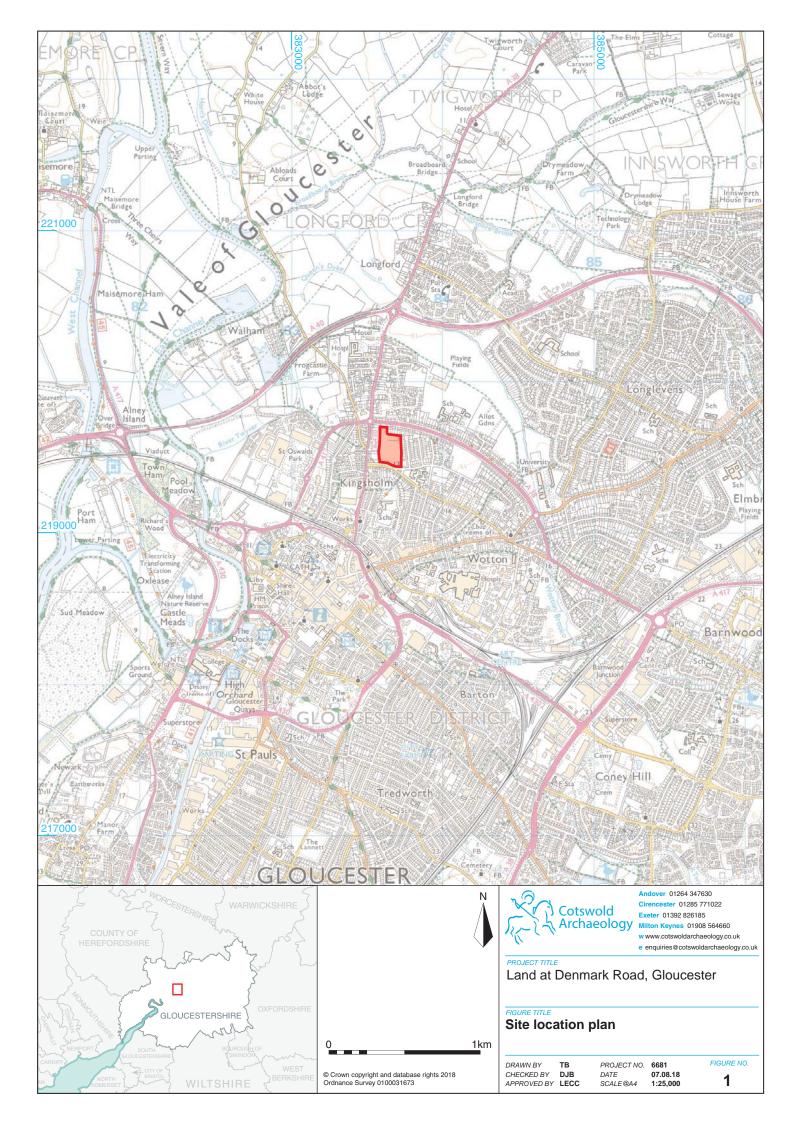
APPENDIX B: THE FINDS

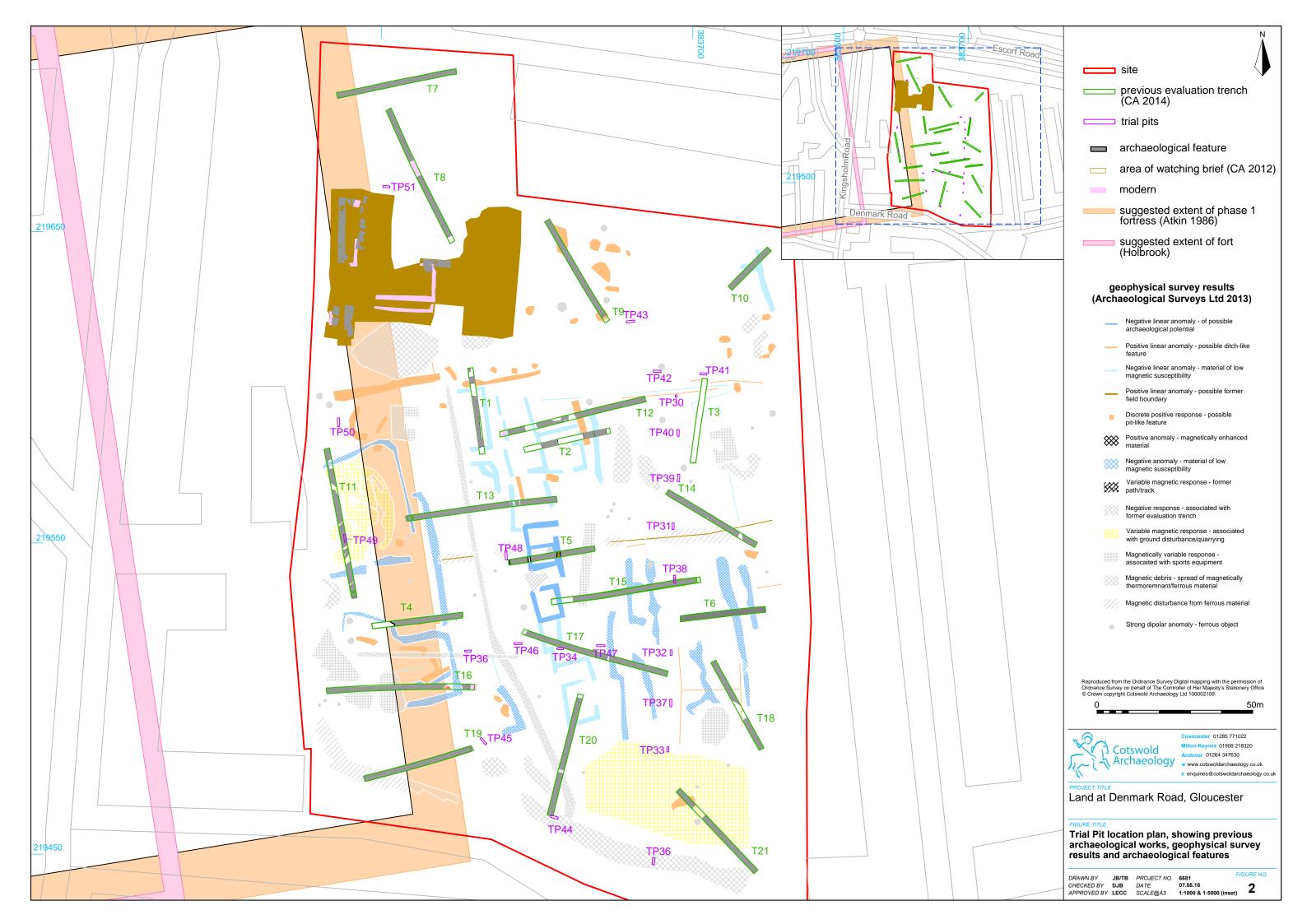
Context	Category	Description	Fabric Code	Count	Weight (g)	Spot-date
34001	Post-medieval pottery	Glazed earthenware	TF50	1	9	MC16-C19
43001	Industrial waste			3	98	-
49001	Clay tobacco pipe			1	1	LC16-LC19
	Wall plaster			5	85	

APPENDIX C: OASIS REPORT FORM

Project Name	Land at Denmark Road, Gloucester					
Short description	Archaeology during ground investigat	An archaeological watching brief was undertaken by Cotswold Archaeology during ground investigation works on land at Denmark Road, Gloucester. Twenty two ground investigation trial pits were excavated.				
	was recorded. Historic gravel ex cartographic records and has been	Evidence for extensive post-medieval/modern quarrying on the site was recorded. Historic gravel extraction is documented on cartographic records and has been identified during all previous phases of archaeological work. No evidence for the use of the site				
Project dates	25 – 26 July 2018	identined.				
Project type	Watching Brief					
Previous work	Watching Brief (CA 2012)					
1 10 10 do Work	Geophysical survey (GCC 2012)					
	Excavation (GCC 2012)					
	Desk-based Assessment (CA 2013)					
Geophysical Survey (AS 2013)						
	Evaluation (CA 2014)					
Future work	Unknown					
PROJECT LOCATION						
Site Location	Denmark road, Gloucester, Gloucestershire					
Study area (M²/ha)	3.8ha					
Site co-ordinates	383661 219549	383661 219549				
PROJECT CREATORS						
Name of organisation	Cotswold Archaeology					
Project Brief originator	n/a					
Project Design (WSI) originator	Cotswold Archaeology					
Project Manager	Laurie Coleman					
Project Supervisor	Peter Searle					
MONUMENT TYPE	None					
SIGNIFICANT FINDS	None					
PROJECT ARCHIVES	Intended final location of archive	Content				
Paper	Museum of Gloucester	Trench sheets, photo sheets				
Digital	Museum of Gloucester Database, digital photos, survey data					
BIBLIOGRAPHY						

CA (Cotswold Archaeology) 2018 Land at Denmark Road, Gloucester, Gloucestershire: Archaeological Watching Brief. CA typescript report **18401**







Test pit 45, looking north (1m scale)



Test pit 51, looking south-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 826185

Milton Keynes 01908 564660 w www.cotswoldarchaeology.co.uk e enquiries@cotswoldarchaeology.co.uk

Land at Denmark Road, Gloucester

FIGURE TITLE

Photographs

DRAWN BY TB
CHECKED BY DJB
APPROVED BY LECC

 PROJECT NO.
 6681

 DATE
 07.08.18

 SCALE@A4
 NA

FIGURE NO.



Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 53
Basepoint Business Centre
Yeoford Way
Marsh Barton Trading Estate
Exeter
EX2 8LB

t: 01392 826185

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

