Archaeological Watching Brief at Parcel J, QUVL Quedgeley, Gloucester

Worcestershire Archaeology for RPS Group

March 2020







PARCEL J, QUVL QUEDGELEY GLOUCESTER

Archaeological watching brief report







©Worcestershire County Council

Worcestershire Archaeology
Worcestershire Archive & Archaeology Service
The Hive
Sawmill Walk
The Butts
Worcester
WR1 3PD



SITE INFORMATION

Site name: Parcel J, Quedgeley

Local planning authority: Gloucester City Council

Planning reference: 13/00585/OUT

Central NGR: SO 81015 13316

Commissioning client: Neil Wright, RPS Group Limited

WA project number: P5742

WA report number: 2797

Oasis reference: fieldsec1-380670

DOCUMENT CONTROL PANEL					
Version	Date	Author	Details	Approved by	
1	04/03/2020	Graham Arnold	Draft for comment	T Rogers	
2	09/03/2020	Graham Arnold	Edit following comments	T Rogers	
3	26/03/2020	Graham Arnold	Edit following Curator comments	T Rogers	

CONTENTS

S	UMM	ARY	1
R	EPOR	RT	2
1	INT 1.1 1.2	RODUCTION Background to the project Site location, topography and geology	2
2	AR 2.1	CHAEOLOGICAL AND HISTORICAL BACKGROUND	
3	PR	OJECT AIMS	3
4	PR	OJECT METHODOLOGY	3
5	AR 5.1 5.2 5.2.1 5.2.2 5.2.3 5.2.4 5.2.5 5.2.6	CHAEOLOGICAL RESULTS Natural deposits Archaeological Monitored Areas Trial pits Model trial pit table Reduced ground works Air Raid Shelter Model summary trench description table Foundation trenches within building footprint and drainage runs	4 4 4 5 5 6
6 7	AR	TEFACTUAL EVIDENCE	7
8		SCUSSION AND CONCLUSIONS	
9	PR	OJECT PERSONNEL	8
1	0 B	BIBLIOGRAPHY	8

ACKNOWLEDGEMENTS

FIGURES

PLATES

APPENDIX 1: SUMMARY OF PROJECT ARCHIVE



An archaeological watching brief at Parcel J, QUVL, Quedgeley, Gloucestershire

By Graham Arnold

Illustrations by Laura Templeton

Summary

An archaeological watching brief was undertaken at Parcel J, QUVL, Kingsway, Quedgeley, Gloucestershire (NGR SO 81015 13316), monitoring groundworks associated with the construction of a Lidl food store. It was commissioned by Neil Wright of RPS Ltd on behalf of their client Robert Hitchins Ltd. A planning application was granted by Gloucester City Council, subject to a programme of archaeological works (13/00585/OUT).

The site is situated within the footprint of the former RAF Quedgeley Royal Air Force Station and lies approximately 5km south of Gloucester and south-east of the historic settlement of Quedgeley. It was previously subject to an archaeological evaluation by Worcestershire Archaeology (Illiff, 2018).

The evaluation recorded a shallow ditch in the north of the site dated to the Roman period. The location of this feature lay outside of the development area.

No evidence of Roman activity was observed during the watching brief stage. The only significant feature recorded on the site was a Second World War air-raid shelter in the north-west corner of the development site, constructed of reinforced concrete, with an arched corrugated iron roof. This building was constructed as part of the RAF station and is likely to relate to the officers' quarters at Avionics House to the north and presence of two small ancillary buildings which can be seen on a 1954 and 1967 OS Map. The results of the evaluation in the remainder of the site demonstrated that 20th Century development had truncated the natural substrate and this was confirmed in the watching brief stage.

The site was previously developed in the 20th Century for RAF buildings and later industrial use. Only truncations from this and modern surfacing were recorded on site, together with the modern topsoil, subsoil and natural substrate. The Roman ditch recorded during the evaluation stage in the north of the site was in an area that was not affected by the development. This shows that the southern part of the site was heavily truncated by the 20th Century developments of the RAF occupation and later industrial development of the site.

Report

1 Introduction

1.1 Background to the project

An archaeological watching brief was undertaken by Worcestershire Archaeology (WA) from November 2019 to January 2020 at Parcel J, QUVL, Kingsway, Quedgeley, Gloucestershire (NGR SO 81015 13316). This comprised observation of trial holes, and a series of ground reduction areas, prior to construction of a food store and associated car parking. Foundations for the building footprint and associated storm drainage running across the site was also monitored. The project was commissioned by Neil Wright, Senior Archaeological Consultant of RPS Ltd on behalf of his client Robert Hitchins Ltd. Planning permission has been granted subject to a programme of archaeological works (planning reference 13/00585/OUT).

The archaeological advisor to the local planning authority, Andrew Armstrong considered that the development had the potential to impact upon possible heritage assets. Previous evaluation on the site had identified a Roman ditch in the north of the site, although this area was not subject to any groundworks during the construction phase.

No brief was provided but a WSI was prepared by Worcestershire Archaeology (WA 2019) and approved by the curator Andrew Armstrong (Archaeological Advisor for Gloucester City Council). The watching brief also conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in the *Standard and guidance: for an archaeological watching brief* (CIfA 2014).

1.2 Site location, topography and geology

The Parcel J site is located within the former HQ site of RAF Quedgeley, and lies approximately 5 km south of Gloucester and south-east of the historic settlement of Quedgeley. Much of the former HQ site has been redeveloped in recent years. The site is broadly level. The geology of the site is mapped as undifferentiated Blue Lias Formation and Charmouth Mudstone Formation, overlain by superficial deposits of Cheltenham Sand and Gravel (BGS 2019).

2 Archaeological and historical background

The most significant archaeological feature near the site is Manor Farm, a group of listed farm buildings and moat, which is a scheduled monument. Manor Farm is located approximately 600m to the north-east of the Parcel J area and dates to the medieval period. There is further evidence of medieval agricultural landscape within the former RAF site in the form of both ploughed out and extant ridge and furrow, along with drainage and boundary ditches.

Historic maps indicate the area of Parcel J was in agricultural use in the 19th Century. The wider site was used as a munitions factory during the First World War, and then as an RAF supply depot until 1995. It was then sold to Quedgeley Urban Village Ltd and has since been used as a commercial and light industrial estate.

2.1 Previous archaeological work on the site

Geophysical survey had been undertaken within the wider RAF site although none has been conducted in the Parcel J area. The geophysical survey identified a number of features believed to be part of the former munitions base that occupied the area during the First World War, and areas of potential recent activity, most likely from military activity in the 20th century (AMEC Foster Wheeler, 2016). The only earlier features identified from the survey were medieval ridge and furrow.

Previous phases of archaeological investigation have been conducted across the former RAF site consisting of multiple phases of trial trenching and excavation. To the west of Manor Farm evidence

of a 1st century settlement, including a number of substantial ditches and smaller gullies was identified (AMEC Foster Wheeler, 2016). Whilst fragments of tegula, suggesting a building in the area were identified, no clear evidence for structural remains was found. Further evidence of Roman activity has been identified outside of the site area, including the remains of a villa excavated at Olympus Park to the north (AMEC Foster Wheeler, 2016).

A second area of features was identified comprising ditches, pits and gullies (AMEC Foster Wheeler, 2016). The linear features were interpreted as eleventh century field boundary and land drainage, although the purpose of the pits was less clear. This area was excavated further in advance of development. Another group of archaeological features identified by the previous trial trenching were three possible Iron Age and/or Bronze Age enclosures (AMEC Foster Wheeler, 2016).

More recently, a phase of evaluation trenching was conducted by Worcestershire Archaeology across the Framework Plan 5 area within the former HQ site of RAF Quedgeley (Walsh and Iliff, 2016). This identified two distinct phases of activity. In order to further investigate the results of the evaluation trenching, an excavation was conducted by Worcestershire Archaeology at Parcel G, c. 50m to the east of Parcel J, which confirmed the two phases of activity previously identified, including a period of later Iron Age waterholes and ditches, and a group of Roman ditches which may have formed part of a drove or trackway (Walsh, 2017). Further Strip Map and Sample works were undertaken by Foundations Archaeology, which identified the continuation of the Roman ditch system found during the adjacent excavations, together with a post-medieval field boundary (FA, 2017).

A second phase of open area excavation was most recently completed in November 2019 at Parcel F, c. 200m to the east and north east of Parcel J, with further evidence of Roman enclosure ditches and ancillary Roman settlement activity recorded (WA, forthcoming).

An archaeological evaluation of the Parcel J site was undertaken by Worcestershire Archaeology in 2018, on behalf of CgMs Consulting (Illiff, 2018). Four trenches were excavated in a grid array across the site.

The only archaeological feature identified on the site was a ditch, containing a single sherd of abraded Roman pottery, which was interpreted as part of a possible droveway or field boundary. This feature may be connected with Roman remains identified on Parcel G and Parcel F, sites previously investigated in the immediate vicinity to the east of the site or widely distributed boundaries identified in an archaeological evaluation of the site as a whole. No other significant archaeological features, layers, structures, horizon or artefacts were identified.

The Roman ditch found in the north of the area during evaluation phase was not within the footprint of the current development and no groundworks were required in this area.

The site had recently been demolished and the trees felled. It was previously used for commercial purposes as part of the Quedgeley Enterprise Park used as a storage yard for landscaping and construction materials. It is an enclosed site with tarmac and concrete surfaces and areas of grass verges and trees, that have been felled ahead of the development. The building previously on site has been demolished together with a number of temporary structures.

3 Project aims

The aims of the watching brief were to observe, investigate and record archaeological deposits, and to determine their extent, state of preservation, date and type, as far as reasonably possible within the constraints of the Client's groundworks.

4 Project methodology

A Written Scheme of Investigation (WSI) was prepared by Worcestershire Archaeology (WA, 2019) and approved by Andrew Armstrong. Fieldwork was undertaken between November 2019 and January 2020.

The WSI had specified the areas that required archaeologically monitoring and these are listed below.

- Foundation trenches for new building;
- Drainage;
- Tree pits:
- Areas of car park where maximum formation levels are below 21.90m aOD, to provide a buffer of 0.3m above highest level of natural ground level of 21.60m aOD
- Any remaining services required

On site discussions with the construction team established that a reduced dig would be necessary over the footprint of the new building prior to the excavation of foundation trenches. Therefore, this area was also archaeologically monitored, together with the reduced areas for the car park in the east of the site. Neil Wright and Andrew Armstrong were informed of the change to the project methodology and a site visit was made to approve the works.

Reduced areas, foundations and drainage trenches excavated across the site, amounting to 4600m² in area, were monitored. The location of the observed reduced ground excavations is indicated in Figure 2 and building foundations and drainage in Figure 3.

Groundworks were undertaken by the contractor using a 360° tracked excavator, employing a toothless bucket, under constant archaeological supervision. Subsequent excavation of significant areas were undertaken by hand.

Observation of excavated areas was undertaken during and after machine excavation. The exposed surfaces were sufficiently clean to observe well-differentiated archaeological deposits, though any less clear may have not been identified. Selected areas surrounding the Air Raid shelter in the northwest extent of the site were cleaned by hand. Access to deep foundation trenches and during removal of the air raid shelter was not made for safety reasons.

Deposits were recorded according to standard Worcestershire Archaeology practice (WA, 2012) and trench and feature locations were surveyed using a differential GPS with an accuracy limit set at <0.04m.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through an assessment of the structural evidence, allied to the information derived from other sources.

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited at Gloucester Museum.

5 Archaeological results

5.1 Natural deposits

The natural substrate comprised a firm reddish-brown sand with occasional seams of greyish white gravels and was observed over the majority of the site at a height of 21.60m, as recorded in the previous evaluation phase, in foundation and drainage trenches and the site stripping for the building footprint where tree throws and modern disturbance had levelled the ground.

5.2 Archaeological Monitored Areas

5.2.1 Trial pits

In the first instance a series of trial holes were monitored to establish the general stratigraphy on site (Figure 2, Plate 2). These demonstrated the depth of modern made ground, topsoil, subsoil and the natural substrate. It also indicated areas of modern disturbance, particularly in the centre of the site.

A table of the trial holes is listed below.

5.2.2 Model trial pit table

Test Pit	Dimensions (m	Max depth (m)	Topsoil depth (m)	Subsoil depth (m)	Natural	Comments
1-5 + 7-9	0.60 x 3.00m	0.60	0.35	0.25	0.60+	Topsoil or modern surfacing underlaid by subsoil and natural substrate of sand
6	1.00m x 3.00m	1.00	0.50 (hardcore)	0.20 (modern made ground)	0.70m +	Modern disturbance due to 20 th Century development with services and foundations

Table 1: Test pit descriptions

5.2.3 Reduced ground works

The next phase of works involved a reduced ground reduction (Figure 2). This occurred in the area of the building footprint (Plate 3-4), removing the topsoil overburden and tree roots and in the area to the east for car parking. The car park area was only reduced to the subsoil, with evidence of modern hedgerows and disturbance recorded (Plate 7). Deeper trenches were also excavated on the southwest and southern edge of the building footprint to install foundations for a gabion wall (Plate 5) and retaining wall (Plate 6). These excavations demonstrated the full stratigraphy of the site and were excavated into the natural sands and gravels.

5.2.4 Air Raid Shelter

The only significant feature exposed during the site ground reductions was an air-raid shelter from the Second World War period, found in the north-west corner of the development site (Figure 2 inset). After discussions on site with Neil Wright (RPS Ltd) and Andrew Armstrong (GCC), the full extent of the air-raid shelter was exposed and photographed. Once exposed and recorded, the air-raid shelter was demolished, under archaeological supervision, before backfilling the area with ballast and concrete to make it safe for construction.

The air-raid shelter (Plates 8-14) was constructed of reinforced concrete, with an arched corrugated iron roof and a concrete floor, which had filled up with a silty clay material. On the eastern side it had a concrete access tunnel and stairway that faced south. The metal entrance door to the shelter was still intact and the stairwell and access tunnel were backfilled with brick rubble. No significant finds were recovered from the air-raid shelter.

The air raid shelter was 3.00m wide, 8.00m long and a maximum of 2.00m deep, after removing the concrete floor. The western edge of the cut for the air-raid shelter, which was backfilled by the brick rubble sand and concrete fragments, had been truncated when the modern A38 dual carriageway bypass was constructed in the later 20th Century.

The air raid shelter is similar in construction to the domestic and government-supplied 'Anderson' shelter, but of a more robust form but is likely to have been a bespoke military construction.

The shelter was likely to have been constructed during the second world war, at a similar time to the officers' quarters (now Avionics House) and the other RAF buildings on site as part of security during the war effort. The buildings are not visible on a 1938 OS map and are then all on the 1954 OS Map, with no available mapping of the area readily available during the period of the war. An OS map from 1967 (Figure 4) is included as it is at a better scale to show the buildings, and there is little change from the 1954 map.

The air-raid shelter is related to the RAF occupation of the site and the vicinity of the officers' quarters at Avionics House to the north and presence of two small ancillary buildings which can be seen on the 1967 OS map of the area (Figure 4), prior to the construction of the cutting for the A38 bypass.

5.2.5 Model summary trench description table

5.2.5.1 Reduced area excavations, western gabion wall and southern retaining wall (Tr 1-4 – Figures 2 and 3)

Context	Brief description	Max depth (m)	Depth from ground surface (m)	Comments
100 / 300	Topsoil	0.45	0.00	Friable dark blackish brown sandy silt with frequent tree rooting
101 / 301	Subsoil	Unexc.	0.40	Moderately compact orange and yellowish brown sity clay with occasional rooting
102	Tarmac roadway	0.25	0.00	Black tarmacadam pathway and hardcore bedding above wall foundation (103).
103	Concrete surfacing	0.15	0.00	Modern concrete surfacing
104	Made ground of hardcore and clay below tarmac and concrete surfacing	0.30	0.25	Hardcore and redeposited natural clay surface above sand natural
105 / 302 / 402 (Gabion	Natural substrate	-	0.60	Firm reddish-brown sand with occasional seams of greyish white gravels.
wall and southern retaining wall only)				Natural ground with frequent truncation from modern development footings and disturbance and tree throws (see figure 2.

Table 2: Summary context descriptions for reduced level excavations on site

5.2.6 Foundation trenches within building footprint and drainage runs

Following the reduced dig, the building footprint was backfilled with aggregates to provide a firm platform. Foundations for the building and associated drainage trenches were archaeologically monitored (Figure 3). The building foundations were between 1.20m and 2.00m in depth and these demonstrated the modern made ground stone mat, overlying the surviving subsoil and the natural firm sand and gravel substrate (Plate 15). Drainage running around the building footprint and a storm drain running east—west across the whole of the car park area was monitored (Tr7 - Plate 16-18), with a similar topsoil, subsoil and natural stratigraphy, truncated by modern drainage, services and made ground disturbance. No significant archaeological finds, features or deposits were observed during these works, with the natural strata recorded at between 0.60m and 1.20m below the ground level depending on the depth of overburden and modern truncations.

5.2.6.1 Building foundation trenches (Tr 5-6 – Figure 3)

Context	Brief description	Max depth (m)	Depth from ground surface (m)	Comments
500 / 600	Made ground	0.40 -0.80	0.00	Type 1 stone brought into site to build up area following initial site strip.
501 /601	Subsoil	0.30	0.60	Moderately compact orange and yellowish brown silty clay with occasional rooting
502 / 602	Natural	0.50+	1.10	Firm reddish-brown sand with occasional seams of greyish white gravels.

Table 3: Summary context descriptions for building foundation trenches

5.2.6.2 Storm drainage trench (Tr7 – Figure 3)

Context	Brief description	Max depth (m)	Depth from ground surface (m)	Comments
700	Topsoil	0.30	0.00	Friable dark blackish-brown sandy silt
701	Subsoil	0.30	0.30	Moderately compact orange and yellowish brown sity clay
702	Made ground	1.20	0.00	Type 1 gravels, redeposited natural clay and modern refuse
703	Modern truncation by services	1.20	0.00	Modern service truncations
704	Natural	-	0.60 – 1.20	Firm reddish-brown sand and gravel

Table 4: Summary context descriptions for storm drain monitoring

6 Artefactual evidence

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA, 2012). In the event, no artefacts were identified which were considered to be suitable for analysis.

7 Environmental evidence

Environmental sampling was approached using standard Worcestershire Archaeology practice (WA, 2012). In the event, no deposits were excavated which were considered to be suitable for environmental analysis.

8 Discussion and conclusions

The only significant feature recorded on the site was the Second World War air-raid shelter in the north-east corner of the site. This is likely to have been constructed for the use of the officers' quarters at Avionics House to the north and/or two small ancillary buildings depicted on the 1967 OS Map of the area (Figure 4). There was no evidence of the footings of these buildings found on site due to the present development on site. he results of the watching brief in the remainder of the site demonstrated that modern 20th Century development had truncated the natural substrate.

No evidence of Roman activity was observed during the watching brief stage. The site was previously developed in the 20th Century for RAF buildings and later industrial use. Only truncations from this and modern surfacing were recorded on site, together with the modern topsoil, subsoil and natural substrate. The Roman ditch recorded during the evaluation stage in the north of the site was in an area that was not affected by the development. This shows that the southern part of the site was heavily truncated by the 20th Century developments of the RAF occupation and later industrial development of the site.

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were suitable in all of the areas to identify the presence or absence of archaeological features. It is considered that the nature, density and distribution of archaeological features provides an accurate characterisation of the development site as a whole.

9 Project personnel

The fieldwork was led by Graham Arnold, PCIfA.

The project was managed by Tom Rogers, MClfA. The report was produced and collated by Graham Arnold. Illustrations for the report were completed by Laura Templeton MClfA. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

Acknowledgements

Worcestershire Archaeology would like to thank the following for the successful conclusion of this project: Neil Wright, (Senior Archaeological Consultant, RPS Group ltd), Neil Crump (Operations Director, Contour Civil Engineering), Rob Dixon (Project Manager, Barnwood Construction) and Martin Boyle (Contracts Manager, Barnwood Construction) and Andrew Armstrong (Archaeological Advisor, Gloucester City Council).

10 Bibliography

AMEC Foster Wheeler 2016 Quedgeley Framework Plan 5: Written Scheme of Investigation for field evaluation (trial trenching), dated January 2016

BGS, 2020 Geology of Britain viewer. Available: http://mapapps.bgs.ac.uk/geologyofbritain/home.html Accessed: 13 February 2020

ClfA, 2014a Standard and guidance: for an archaeological watching brief. Reading: Chartered Institute for Archaeologists

Foundations Archaeology, 2017 Land at the Junction of Naas Lane and Newhaven Road, Quedgeley, Gloucester – Archaeological Strip Map and Sample, Foundations Archaeology, unpublished report **1198**, dated June 2017

Iliff, E 2018 Archaeological evaluation at Parcel J, Kingsway, Quedgeley, Gloucester, Worcestershire Archaeology Unpubl report **2588**. Worcestershire County Council

Walsh, A 2017 Archaeological Investigations at Quedgeley Framework Plan 5, Gloucester,

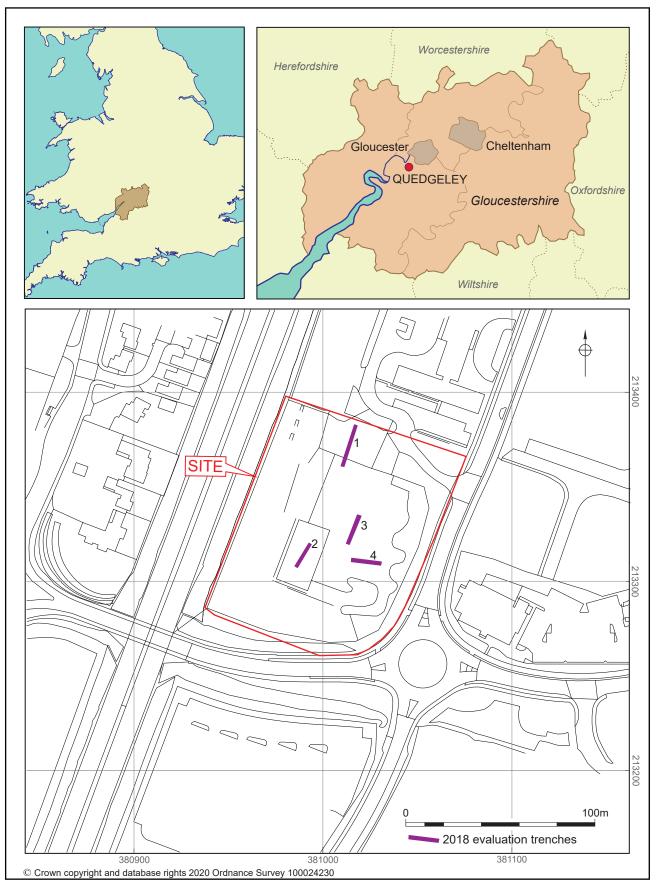
Gloucestershire, Worcestershire Archaeology, Worcestershire County Council, unpublished report **2489**, dated 22 September 2017

Walsh, A, and Iliff, E 2016 *Archaeological evaluation at Quedgeley Framework Plan 5, Gloucester*, Worcestershire Archaeology, Worcestershire County Council, unpublished report **2360**, revision 1, dated 1 August 2016

WA, 2012 Manual of service practice, recording manual, Worcestershire Archaeology Unpubl report **1842**. Worcestershire County Council

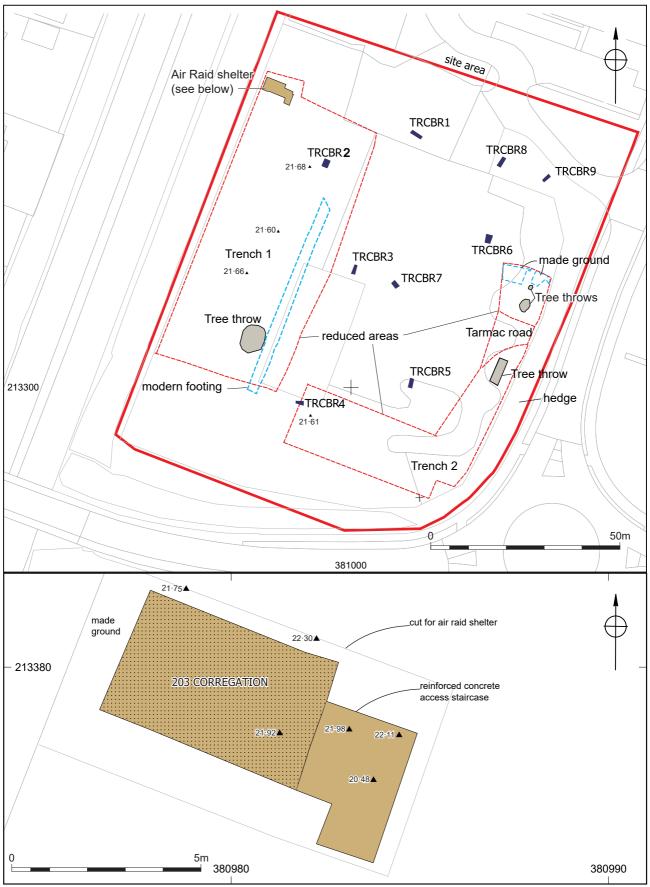
WA, 2019 Written Scheme of Investigation for an archaeological watching brief at Parcel J, QUVL, Quedgeley, Gloucester, Worcestershire Archaeology Unpubl document dated 24 October 2019. Worcestershire County Council

Figures



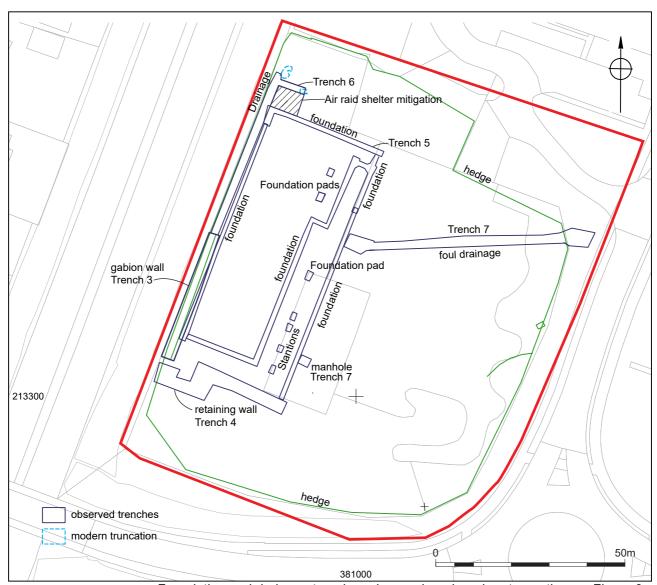
Location of the site

Figure 1

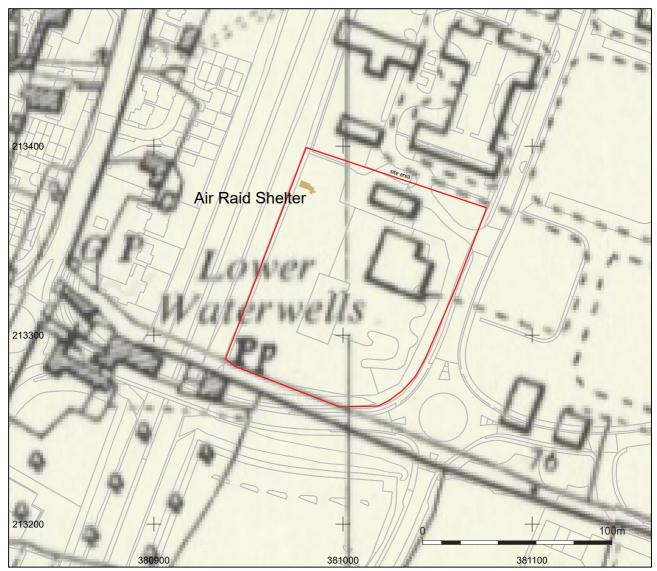


Test pits, reduced areas and archaeological features

Figure 2



Foundation and drainage trenches observed, and modern truncation. Figure 3



Ordnance Survey, 1967 Figure 4

Plates



Plate 1: The site prior to works, with trees felled, looking south



Plate 2: Example of CBR trial hole with 1m and 0.50m scales, looking southwest



Plate 3: Trench for Gabion wall onto natural firm sand and gravels, 1m scales looking south



Plate 4: Reduced site strip on building footprint, with 1m scale looking north



Plate 5: Overburden of tarmac and made ground above subsoil to east of building footprint. 1m scales looking southeast



Plate 6: Natural sand in retaining wall trench, south of building footprint. 1m scales looking east



Plate 7: Reduced excavation for eastern car park area, 1m scales looking north



Plate 8: Air-raid shelter when first exposed, showing corrugated roof and concrete entrance. 1m scales looking northeast



Plate 9: Air-raid shelter when first exposed, showing corrugated roof and concrete entrance. 1m scales looking west



Plate 10: Air-raid shelter when first exposed, showing corrugated roof and concrete entrance. 1m scales looking southwest



Plate 11: Air-raid shelter with concrete roof of access removed showing surviving metal door. 1m scales looking southwest



Plate 12: Air-raid shelter stairway. 1m scales looking south



Plate 13: Air-raid shelter when first exposed, showing corrugated roof and concrete entrance looking east



Plate 14: Air-raid shelter removed before backfilling, looking northeast



Plate 15: Example of foundation trench excavated through ballast with subsoil and natural below. 1m scale looking north



Plate 16: Drainage trench in progress, showing overburden in East of site and natural sand, looking southwest



Plate 17: Drainage trench in progress, with 1m scales, looking west



Plate 18: Drainage trench in progress, nearing completion, with 1m scales, looking east

Appendix 1: Summary of project archive

TYPE	DETAILS*
Artefacts and Environmental	No significant artefacts and environmental samples were found
Paper	Context sheet, Diary (Field progress form), Drawing, Matrices, Photograph, Plan, Report, Section, Survey
Digital	GIS, Images raster/digital photography, Survey, Text
*O 1 C 1 C 40 mm in a la en 1	

^{*}OASIS terminology