Land at Waterwells, Quedgeley, Gloucestershire.

Archaeological Evaluation Report

July 2017

Client: CgMs Consulting on behalf of Crest Nicholson South West

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Land at Waterwells, Quedgeley, Gloucestershire

Archaeological Evaluation Report

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Summary

During June 2017 Oxford Archaeology South undertook an eight trench evaluation for CgMs on behalf of Crest Nicholson South West on land at Waterwells, Quedgeley, Gloucestershire which is, at this time at pre-Application stage and being considered for residential development. Previous investigations within the surrounding area had indicated a moderate potential for Prehistoric and Roman-British archaeology at the Site, however, a recent geophysical survey revealed no identifiable anomalies as Prehistoric or Roman features within the Site boundary. Some geophysical anomalies indicating possible ridge and furrow were identified, as well as some other 'unknown' anomalies, both were targeted by the trenching.

The evaluation revealed no evidence for archaeological features and no archaeological artefacts were recovered. The anomalies identified by the geophysical survey were shown to be caused by variations in the natural geology.

The evaluation indicates this Site is of low archaeological potential.

Acknowledgements

Oxford Archaeology would like to thank CgMs for commissioning this project. Thanks is also extended to Richard Smalley who monitored the work on behalf of CgMs for their advice and guidance.

The project was managed for Oxford Archaeology by Ben Ford MIFA. The fieldwork was directed by Tom Black, who was supported by Mike Sims. Survey was carried out by Tom Black. Thanks is also extended to the teams of OA staff that prepared the archive under the management of Nicola Scott.

1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology (OA) was commissioned by Richard Smalley of CgMs Consulting on behalf of Crest Nicholson South West to undertake a trial trench evaluation on land at Waterwells, Quedgeley, Gloucestershire, henceforth referred to as the Site.

1.1.2 The work was undertaken to inform the Planning Authority in advance of a submission of a Planning Application for residential development at the Site. Although the Local Planning Authority did not set a brief for the work, discussions between CgMs Consulting and both Andrew Armstrong, City Archaeologist for Gloucester City Council and Charles Parry, Senior Archaeological Officer for Gloucestershire County Council established the trench lay out, and scope of work required. Oxford Archaeology prepared a Written Scheme of Investigation (June 2017) and this document outlined how OA would implement the works.

1.2 Location, topography and geology (Figure 1)

1.2.1 The Site lies to the south-east of Quedgeley, and is centred on NGR SO 8162 1243 (Figure 1). It slopes down to the north and west, with ground level ranging in height from 32.70m OD in the SE corner to 30.25mOD in the SW corner to relatively level ground at c 24.4m OD at the northern limit just to the south of the Dimore Brook.

1.2.2 The proposed development consists of agricultural land, bounded to the west and north by Waterwells Business Park, with Marconi Drive immediately to the west and industrial buildings beyond Dimore Brook to the north. To the south, further agricultural land has been recently excavated by Oxford Archaeology in advance of development (Allen, T *pers. comm*.).

1.2.3 The solid geology of the site is mapped as Mudstone of the Blue Lias Formation and Charmouth Mudstone Formation. No superficial deposits are recorded for the site on the BGS resource (British Geological Survey Online Viewer), however excavation revealed a clay drift geology, and varying depths of colluvial deposits.

1.3 Archaeological and historical background

1.3.1 The archaeological and historical background of the site has been described in detail in an Archaeological Desk-Based Assessment produced by CgMs Consulting (April 2017) which contained a geophysical report undertaken by Sumo (April 2017), and will not be reproduced here.

1.3.2 Upslope, and covering slightly higher ground immediately to the south of the Site, recent excavations conducted by Oxford Archaeology uncovered the remains of Iron Age and Romano-British activity. The site has only just been completed, and was therefore not included within the DBA (*ibid.*) but interim plans show ditched field and enclosure boundaries (co-axially arranged on cardinal points), with a large Iron Age enclosure near the southern limit of the site, numerous concentrations of post-holes (indicating fencing and possibly structures), and two north-south orientated human

inhumations (probably Romano-British) at the northern limit of the site (Tim Allen *pers. comm.*).

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The project aims and objectives were as follows:

i. To determine or confirm the general nature of any remains present.
ii. To determine or confirm the approximate date or date range of any remains, by means of artefactual or other evidence.
iii. to determine the date range of any surviving remains by artefactual or other
iv. means,
v. to determine the condition and state of preservation of any remains,
vi. to determine the degree of complexity of any surviving horizontal or vertical stratigraphy,
vii. to assess the associations and implications of any remains encountered with reference to the historic landscape,
viii. to determine the potential of the site to provide palaeoenvironmental and/or economic evidence, and the forms in which such evidence may survive,
ix. to determine the implications of any remains with reference to economy, status, utility and social activity,
x. to determine or confirm the likely range, quality and quantity of the artefactual evidence present.

2.2 Specific Aims and Objectives

2.2.1 The specific aims and objectives of the evaluation were:

i. to investigate the anomalies identified by the geophysical survey and determine their character, state of preservation and date,
ii. to investigate the potential continuation of the archaeological features, and in particular the human inhumations, discovered on the adjacent site to the south,
iii. to generate an accessible and useable archive which will allow future research of the evidence to be undertaken if appropriate,
iv. to disseminate the results of the work in a format and manner proportionate to the significance of the findings

2.3 Methodology (Figure 2)

2.3.1 A total of eight linear trenches were excavated (Trenches 1 – 8, see Figure 2), six measured 1.8m x 50m, and two measured 1.8m x 25m; in total these covered a *c* 2% sample by area of the *c* 3ha Site. The trenches were located to target specific geophysical anomalies, an area in the southern part of the site where very recent neighbouring excavation revealed human inhumations, orientated N-S and possibly Roman (Tim Allen *pers. comm.*), as well as providing a representative coverage of the 'blank' areas.

2.3.2 The contingency for up to a further 2% of the development area of trenching was not used.

3 RESULTS

3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below, and include a stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds data and spot dates are tabulated in Appendix B.

3.1.2 Context numbers reflect the trench numbers unless otherwise stated e.g. pit 102 is a feature within Trench 1, while ditch 304 is a feature within Trench 3.

3.2 General soils and ground conditions

3.2.1 The sequence of different soils throughout all trenches was relatively similar. The natural drift geology of blue – grey - orangey clay (variations possibly caused by differential oxidization of the surface interface) was overlain by an orangey brown possible colluvial deposit with manganese inclusions, which in turn was overlaid by an orangey brown subsoil and then a topsoil.

3.2.2 Ground conditions throughout the evaluation were generally good, and the trenches remained moist throughout the period of fieldwork.

3.3 General distribution of archaeological deposits

3.3.1 No archaeological features or deposits were present, and no artefacts or ecofacts were recovered. Details of the trenches and the soils encountered are contained in Appendix A, and supplement the descriptions below.

3.4 Trench 1

3.4.1 Trench 1 was located in the north-west corner of the site and was oriented east-north-east to west-south-west. This trench targeted geophysical anomalies which turned out to be undulations in the natural clay (103) filled with the overlying possible colluvial deposit (102). The natural clay sloped down from west to east, from a height of 23.91m OD to 23.10m OD.

3.5 Trench 2 (Figure 3 and Plate 1)

3.5.1 Trench 2 was located in the north-west centre of site and was oriented west-north-west to east-south-east. This trench targeted several geophysical anomalies which were seen to be created by undulations in the surface of the clay (203) filled with the overlying possible colluvial deposit (202). The clay horizon undulated around 25.95 – 26.13m OD with no discernable slope observed along the length of the trench. (202) was overlain by subsoil (201) and then topsoil (200). A representative section of this trench can be seen in Figure 3 and Plate 1.

3.6 Trench 3

3.6.1 Trench 3 was located in the south-west centre of site and was oriented north-east to south-west. This trench was not targeting any geophysical anomalies and was totally devoid of archaeology. The natural clay (302) was sloping in this trench from south to

north, from a height of 29.06m OD to 28.15m OD. It was overlain by subsoil (301) and then topsoil (300).

3.7 Trench 4 (Figure 3 and Plate 2)

3.7.1 Trench 4 was located in the south-west corner of site and was oriented west-north-west to east-south-east. This trench did not target geophysical anomalies but did have potential for human burials as noted from the nearby excavation to the south. However, no archaeological features were present. The natural clay (403) sloped down from from south-south-east to north-north-west, from a height of 30.24mOD to 29.25mOD. (403) was overlain by possible colluvial deposit (402), then subsoil (401) and finally topsoil (400). A representative section of this trench can be seen in Figure 3 and Plate 2.

3.8 Trench 5 (Figure 3 and Plate 3)

3.8.1 Trench 5 was located in the north-east corner of site and was oriented north-east to south-west. It targeted geophysical anomalies which were seen to be variations in the natural. The natural orangey clay (502) sloped down in this trench from north-east to south-west, from a height of 23.45mOD to 24.49mOD, this was overlain by subsoil (501), then topsoil (500). A representative section of this trench can be seen in figure 3 and plate 3.

3.9 Trench 6 (Figure 3 and Plates 4 and 5)

3.9.1 Trench 6 was located in the east centre of site and was oriented north-west to south-east. It targeted one anomaly which was not revealed during excavation. The natural clay (603) in this trench sloped from south-east to north-west, from a height of 28.10m OD to 26.06m OD. A sondage was dug in the south-east end of this trench in order to test the natural to a depth of 27.34m OD, as evidenced by the representative section in figure 3 and plates 4 and 5.

3.10 Trench 7 (Plate 6)

3.10.1 Trench 7 was located in the south-east corner of site and was oriented north-east to south-west. It targeted two geophysical anomalies, both of which were the result of variations in the natural. The natural clay (703) sloped from south-west to north-east, from a height of 30.85m OD to 30.29m OD. This was covered by a layer of possible colluvium (702), then subsoil (701), and finally topsoil (700). A sondage was excavated at the north-east end of the trench to test the natural to a depth of 30.08m OD (see Plate 6).

3.11 Trench 8

3.11.1 Trench 8 was also in the south-east corner of site and was oriented west north-west to east south-east. It did not target geophysical anomalies but did target an area to the north of human burials as noted from the nearby excavation to the south. No archaeological features were present. The natural clay (802) was encountered at a height of 31.17m OD and undulated without significant slope. The clay was directly overlain by subsoil (801), which was overlain by topsoil (800).

3.12 Finds summary

3.12.1 No finds were recovered from the work.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The natural was generally clear and bright even after weathering slightly. The interface between the overlying colluvium, and oxidised elements of the sequence did create some difficulty in finding the right level to excavate to and perhaps led to limited 'over-machining' in places, however if any archaeological features were present these would have been easy to identify.

4.2 Evaluation objectives and results

4.2.1 The evaluation identified that the geophysical anomalies were variations in the natural and natural undulations or fissures filled with the overlying layer of possible colluvium, and subsoils.

4.2.2 It seems as though the western edge of site has been subject to previous works as there is quite a difference in the thicknesses of topsoil and subsoil between the western trenches and the eastern trenches. To the west the subsoil is generally reduced across the western end of the trenches and the topsoil and subsoil of these trenches contained various construction related debris such as large lumps of concrete, hi-viz vests, plastic cones etc. It seems likely that the area along Marconi drive has been truncated and reinstated at some point quite recently.

4.3 Significance

4.3.1 The absence of archaeological features, deposits and artefacts would suggest the Site is of low archaeological potential.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					**Orientation**	E-W
Trench devoid of archaeology. Consists of topsoil, subsoil and a possible colluvial deposit overlying natural geology of clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.70
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
100	Layer	-	0.30	Topsoil: Firm, dark grey brown, sandy silty clay.	-	-
101	Layer	-	0.10	Subsoil: Firm, dark orangey brown, sandy clay.	-	-
102	Layer	-	0.25	Colluvium?: Firm, mid orangey brown and grey veins, sandy clay with manganese.	-	-
103	Layer	-	-	Natural: Firm, blue grey clay with chalky flecks and fissures filled with (102).	-	-

Trench 2						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil, subsoil and a possible colluvial layer overlying natural geology of clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.67
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
200	Layer	-	0.26	Topsoil: Firm, dark grey brown, sandy clay.	-	-
201	Layer	-	0.10	Subsoil: firm, dark orangey brown, sandy clay.	-	-
202	Layer	-	0.20	Colluvium?: Firm, dark orangey brown, sandy clay with manganese.	-	-
203	Layer	-	-	Natural: Firm, blue grey clay with natural fissures and undulations filled with (202).	-	-

Trench 3						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.50

Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
300	Layer	-	0.30	Topsoil: Firm, dark grey brown, loamy clay.	-	-
301	Layer	-	0.25	Subsoil: firm, dark orangey brown, sandy clay.	-	-
302	Layer	-	-	Natural: Friable, blue grey clay with flecks of limestone and some orange brown sandy clay.	-	-

Trench 4						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil, subsoil and a possible colluvium overlying natural geology of clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.78
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
400	Layer	-	0.30	Topsoil: Firm, dark grey brown, sandy clay.	-	-
401	Layer	-	0.15	Subsoil: firm, mid grey brown silty clay.	-	-
402	Layer	-	0.55	Colluvium?: Firm, mid grey brown with blue and orange patches. Slightly sandy, silty clay.	-	-
403	Layer	-	-	Natural: Firm, blue grey clay with orange veins and chalky inclusions.	-	-

Trench 5						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil, subsoil and possible colluvium overlying natural geology of sandy clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.90
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
500	Layer	-	0.37	Topsoil: Firm, dark grey brown, clayey loam.	-	-
501	Layer	-	0.40	Subsoil: firm, dark orangey brown, sandy silty clay with abraded limestone inclusions.	-	-
502	Layer	-	-	Natural: Firm, orangey grey sandy clay with manganese.	-	-

503	Layer	-	0.22	Colluvium?: Firm, mid orangey brown, sandy clay with manganese.	-	-

Trench 6						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil, subsoil and possible colluvium overlying natural geology of sandy silty clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.80
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
600	Layer	-	0.42	Topsoil: Firm, dark grey brown, sandy clay.	-	-
601	Layer	-	0.30	Subsoil: firm, dark orangey brown, sandy silty clay.	-	-
602	Layer	-	-	Natural: Firm, orangey yellow brown sandy silty clay with manganese.	-	-
603	Layer	-	0.20	Colluvium?: Firm, dark orangey brown, sandy clay with manganese.	-	-

Trench 7						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.65
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
700	Layer	-	0.30	Topsoil: Firm, dark grey brown, sandy clay.	-	-
701	Layer	-	0.55	Subsoil: firm, dark yellowy brown, sandy clayey silt.	-	-
702	Layer	-	0.10	Colluvium?: Firm, light orangey brown, sandy clay.	-	-
703	Layer	-	-	Natural: Firm, blue grey clay with abraded limestone inclusions.	-	-

Trench 8						
General description					**Orientation**	ESE-WNW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of silty clay.					**Length (m)**	50
					Width (m)	1.80
					Avg. depth (m)	0.65
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**

800	Layer	-	0.40	Topsoil: Firm, dark grey brown, sandy clay.	-	-
801	Layer	-	0.35	Subsoil: firm, dark yellowy brown, silty clay.	-	-
802	Layer	-	-	Natural: Firm, pale yellowish grey silty clay with orange brown sandy clay patches, manganese streaks and limestone inclusions.	-	-

APPENDIX B BIBLIOGRAPHY

CgMs Consulting, April 2017, Land at Waterwells, Quedgeley, Gloucestershire Archaeological Desk Based Assessment. Client Report, Reference RAJS/23195

Oxford Archaeology, June 2017, Land at Waterwells, Quedgeley, Gloucestershire Written Scheme of Investigation for an Archaeological Evaluation. Client Report. Issue 3, Reference No: 6747

APPENDIX C SITE SUMMARY DETAILS

Site name:	Land at Waterwells, Quedgeley, Gloucestershire
Site code:	OAQUW17
Grid Reference	SO 8162 1243
Type:	Evaluation
Date and duration:	19/06/2017 – 22/06/2017
Area of Site	3ha
Location of archive:	The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES. Note: Stroud Museum would be the receiving museum however they are currently closed to any further archive deposition, therefore there is no Accession number.
Summary of Results:	During June 2017 Oxford Archaeology South undertook an eight trench evaluation for CgMs on behalf of Crest Nicholson South West on land at Waterwells, Quedgeley, Gloucestershire which is, at this time at pre-Application stage and being considered for residential development. Previous investigations within the surrounding area had indicated a moderate potential for Prehistoric and Roman-British archaeology at the Site, however, a recent geophysical survey revealed no identifiable anomalies as Prehistoric or Roman features within the Site boundary. Some geophysical anomalies indicating possible ridge and furrow were identified, as well as some other 'unknown' anomalies, both were targeted by the trenching. The evaluation revealed no evidence for archaeological features and no archaeological artefacts were recovered. The anomalies identified by the geophysical survey were shown to be caused by variations in the natural geology. The evaluation indicates this Site is of low archaeological potential.

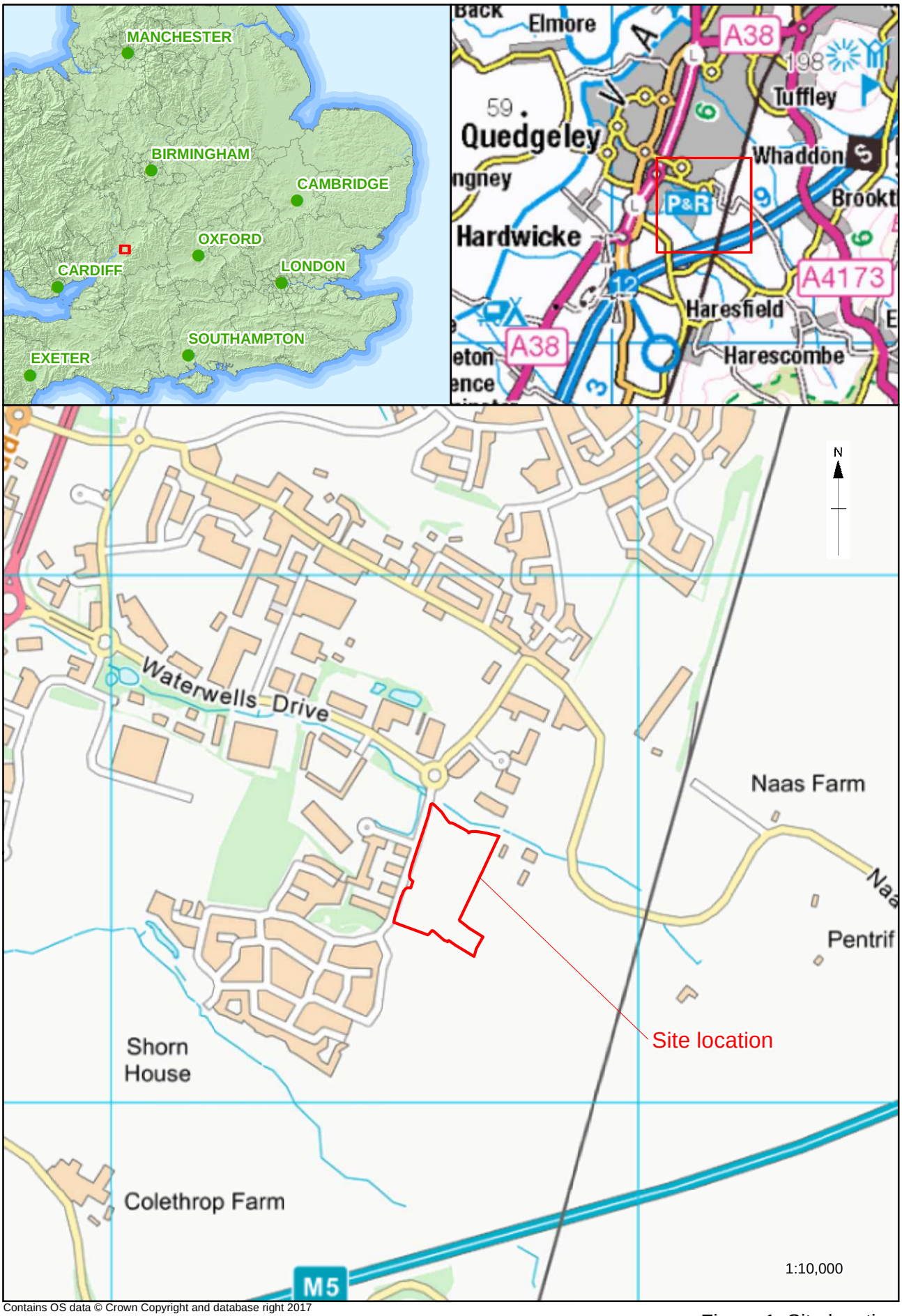
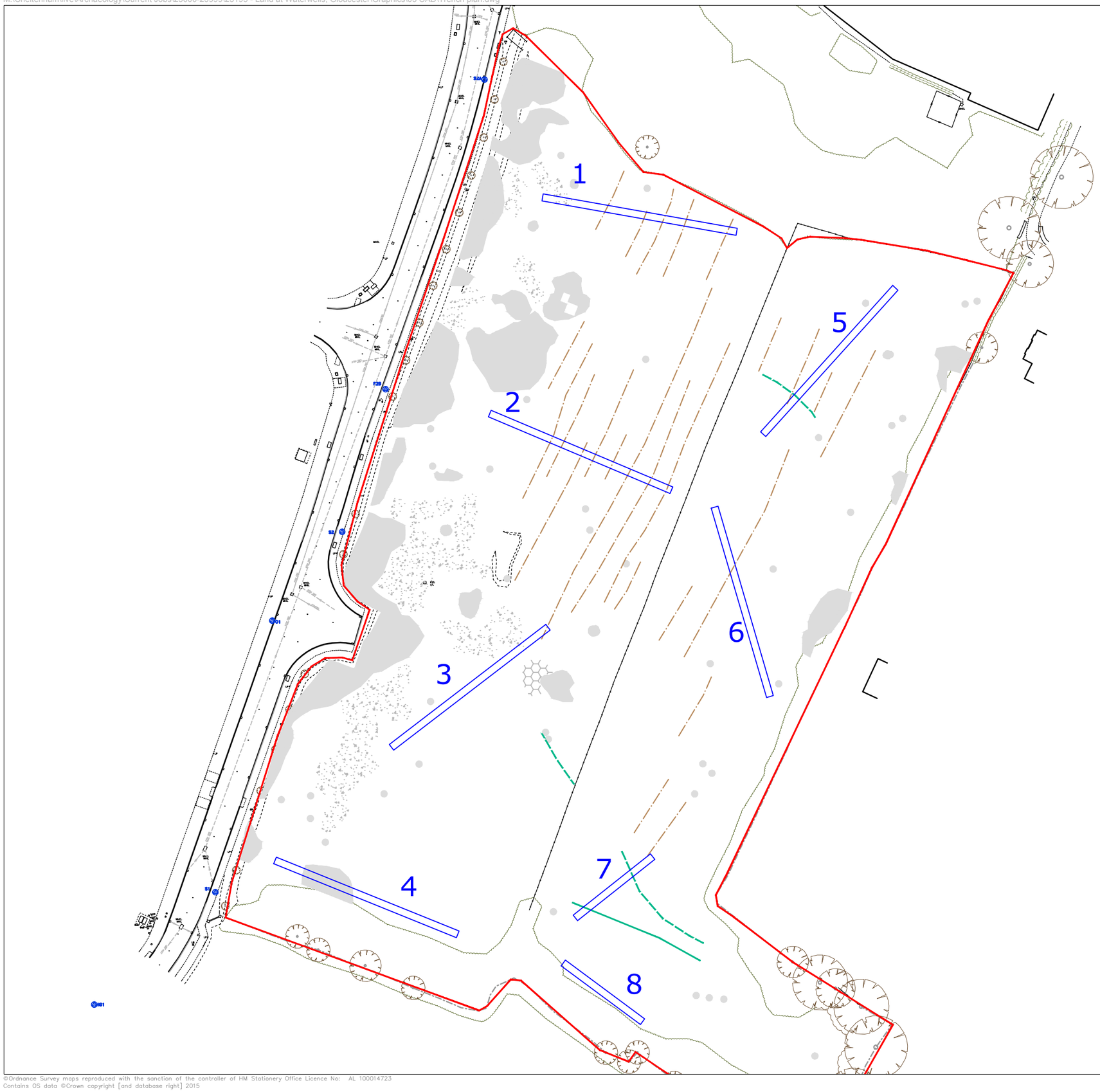


Figure 1: Site location



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Site Boundary
Proposed trench location

N

Scale @ A3:
0 1:1000 20 m

Figure 2: Trench location plan (based upon CgMS drawing)

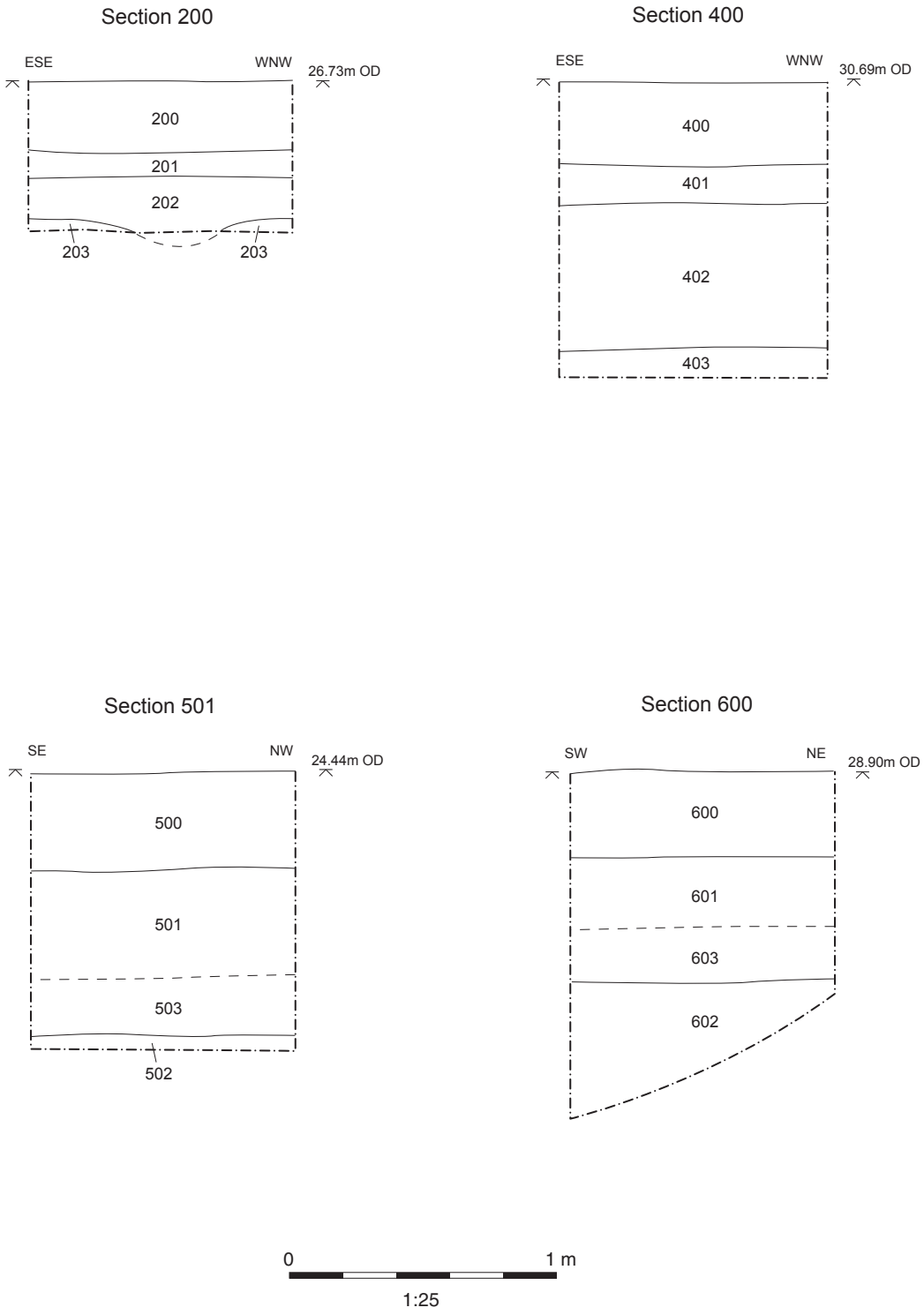

Figure 3: Representative Sections from Trenches 2 (S. 200), 4 (S. 400), 5 (S. 501), and 6 (S. 600)

Plate 1: Trench 2, Section 200 looking south-south-west

Plate 2: Trench 4, Section 400 looking south-south-west

Plate 3: Trench 5, Section 501 looking north-west

Plate 4: Trench 6, Section 600 looking south-west

Plate 5: Sondage in south-east end of Trench 6 looking south-east

Plate 6: Sondage in north-west end Trench 7 looking south-west

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