

Archaeological investigations on land off Parsonage Way Worcester

Worcestershire Archaeology
for RPS Ltd

November 2019



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LAND OFF PARSONAGE WAY, WARNDON, WORCESTER

Archaeological investigations report



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SITE INFORMATION

Site name: Land off Parsonage Way, Warndon, Worcester

Local planning authority: Worcester City Council

Central NGR: SO 388794, 255976

Commissioning client: RPS Ltd

WA project number: P5526

WA report number: 2734

HER references: Evaluation - WCM102406,
Earthwork Survey- WCM102407
Watching Brief - WCM102421

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Archaeological investigation on land off Parsonage Way, Warndon, Worcester

By Tim Cornah

Illustrations by Carolyn Hunt

Summary

Archaeological investigations comprising trial trench evaluation, earthwork survey and watching brief were undertaken on land off Parsonage Way, Warndon, Worcester (NGR SO 388794, 255976). It was commissioned by RPS Ltd, whose client intends development of the site. Following a previous stage of evaluation and watching brief by WA, the site was considered by the Archaeological Officer of Worcester City Council to have the potential for the survival of archaeological deposits. Planning permission was granted subject to conditions including a programme of archaeological works.

Nine trenches were excavated, adding to fifteen excavated during the earlier stage of evaluation. A picture of dispersed activity seen with in the earlier phase of evaluation was supported to some extent with two possible pits and a gully, which although undated, may be dated by association with the Iron Age and Roman activity identified in the previous evaluation. This phase further confirmed the focus of activity towards the northern area of the site, as the trenching on the south-east side was devoid of archaeological features. Beyond this only furrowing was present. Further furrowing was present in the watching brief areas, although these were not always clear.

The earthwork survey of the southern half of the field identified seven separate areas, largely split by ditch boundaries which respected the ridge and furrow within them. This indicates that the boundaries are remnants of a medieval or post-medieval field system along with the ridge and furrow.

Report

1 Introduction

1.1 Background to the project

Archaeological investigations comprising trial trench evaluation, earthwork survey and watching brief were undertaken by Worcestershire Archaeology (WA) between August and October 2019 on land off Parsonage Way, Warndon, Worcester (NGR SO 388794, 255976). This comprised six evaluation trenches in the northern area, as well as three along the south-east side. The watching brief was undertaken within the northern area of the site where the concentration of archaeological features was considered to be highest. The earthwork survey was undertaken in the southern half of the site where the ridge and furrow was best preserved.

It was commissioned by RPS Ltd whose client intends development of the site. Following a previous stage of evaluation by WA, the site was considered by the Archaeological Officer of Worcester City Council to have the potential for the survival of archaeological deposits. Planning permission was granted subject to conditions including a programme of archaeological works.

No brief was prepared this project, which conforms to the generality of briefs which have been previously issued by the planning authority. Method Statements were prepared for the evaluation, watching brief and earthwork surveys separately by WA (2019a-c) and approved by Worcester City Council. The investigations also conform to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for archaeological field evaluation* (CIfA 2014a), the *Standard and guidance: for an archaeological watching brief* (CIfA 2014b) as well as the *Guidelines for archaeological work in Worcester* (Worcester City Council 2016).

1.2 Site location, topography and geology

The local geology consists primarily of Sidmouth Mudstone Formation, with a band of Siltstone, Dolomitic of the Sidmouth Mudstone Formation running through the centre of the site.

The site sits at c 50m AOD and is relatively level. It is bounded to the north by Warndon Wood, on the east by the M5 motorway, to the south by a footbridge, and on the west by the A440.

2 Archaeological and historical background

A desk-based assessment has been prepared (CgMs 2017) and is summarised below.

Previous archaeological works in the area indicate that the prehistoric landscape would have consisted of woodland, with increasing levels of deforestation in advance of its adoption as farmland.

A Roman road is projected to run through the northern half of the site, aligned roughly north-east to south-west. An evaluation to the east of the site in 2010 revealed a possible roadside ditch dated to the Roman period.

Archaeological investigations to the west of the site in 1988 revealed evidence of a deserted medieval settlement, part of which may continue into the study site. Ridge and furrow earthworks are still visible in the south of the site, but have been truncated by more modern ploughing in the northern half, though are still partially visible on LIDAR survey (Figure 5). Within the northern half, the LIDAR data shows an alignment of the ridge and furrow within a north-west to south-east alignment, truncated by a wider and larger north-east to south-west alignment.

Fifteen trenches were excavated across the site as part of an earlier phase of trenching within the site (Lovett and Vaughan 2017). Two sides of a possible eves drip gully for a roundhouse of Middle to Late Iron Age were revealed toward the north-west corner of the site. It had an internal diameter of approximately 7m and no apparent internal features, although preservation was good so it is

considered likely that any other deeper features would have survived. A possible keyhole oven and a possible stone-built oven of similar date lay to the south-east. No other features or ditches of Middle-Late Iron Age date were identified. The activity is conjectured to be dispersed and unenclosed.

A Roman ditch adjacent to the ovens aligned roughly north-east to south-west appears to have been recut at least once, indicating either a long period of use, or re-use. The low density of general Roman material associated indicates a possible function as an agricultural enclosure. There was no indication of the putative Roman road across the site. A subsequent watching brief on trial holes and boreholes on the site revealed no further features (Lovett 2019).

Medieval or post-medieval ridge and furrow was found to survive across the southern half of the site, on two differing alignments separated by a ploughed out roughly north to south aligned ditch. There was no trace of surviving ridge and furrow in the northern portion of the site.

3 Project aims

The aims and scope of the project are given in the watching brief WSI (Section 1.2) and the Evaluation WSI (Sections 2 and 3):

This second phase of evaluation trenching was undertaken in the northern half of the site in an attempt to further define the limits of the area of archaeological interest represented by the Iron Age oven and Roman ditch. Trenches were also to be dug along the site's eastern boundary, where possible (taking into consideration the overhead power cables), to evaluate the archaeological potential of that area.

The earthwork survey was undertaken in the southern part of the study site. This survey was to record the earthwork remains of the extant Medieval ridge and furrow cultivation existing in that part of the site.

The aims of the watching brief were to observe 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.

The specific aims of this project are, where possible to:

- Establish whether any further Iron Age ovens are present within the site
- Understand the archaeological potential of the eastern boundary of the site
- Record the extant earthwork remains in the southern part of the site
- Examine any available evidence for economic activity and environmental conditions.
- Generate an archive which will allow future research of the evidence to be undertaken, if appropriate.
- Disseminate the results of the work in a format and manner proportionate to the significance of the findings.

In particular the project had the following aims, as identified in *An archaeological resource assessment and research framework for the city of Worcester* (Worcester City Council 2007a):

- RP2.9 Environmental material from later prehistoric contexts – cereal grains etc from oven deposits could be valuable in understanding crop management regimes and use of wider landscape, as well as domestic activity.
- RP3.31 The hinterland of Roman Worcester – possible field systems around Worcester are poorly understood.

4 Project methodology

Written Schemes of Investigation (WSI) were prepared by Worcestershire Archaeology (WA 2019a-c). Fieldwork was undertaken between 5 August and 23 October 2019.

4.1 Evaluation

Nine trenches, amounting to 620m² in area, were excavated over the 6.9ha site. The previous evaluation opened fifteen trenches amounting to 1,350m². Together the two projects represent a sample of 2.8%. The location of the trenches is indicated in Figure 2 (Trenches 16-24).

This second phase of trial trenching was undertaken in the northern half of the site in an attempt to further define the limits of the area of archaeological interest represented by the Iron Age oven and Roman ditch. Trenches were also dug along the site's eastern boundary to evaluate the archaeological potential of that area. Trench 24 was moved towards the south-east due to the presence of a tree. Three of the trenches were placed directly to test discreet geophysical anomalies of unknown origin.

Deposits considered not to be significant were removed under constant archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected, and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. 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. On completion of excavation, trenches were reinstated by replacing the excavated material.

4.2 Earthwork survey

Earthwork survey was undertaken of the southern half of the site, of extant ridge and furrow remains to the south of the field boundary which bisects the site from east to west. The orientations, top and bottom and more detailed sample profiles of the earthworks were surveyed using a differential GPS with an accuracy limit set at <0.04m. Where the earthworks were unclear (for example due to truncation), then spot heights were taken at regular intervals, on traverses across that part of the site.

4.3 Watching brief

The excavation of three areas was archaeologically monitored within the northern half of the site. The location of the trenches is indicated in Figure 2 (Trenches 25-7).

Within Trenches 25 and 27, deposits were removed under constant archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Within Trench 26, deposits were partially removed using a 360° tracked excavator, employing a toothless bucket and some of the area with a box grader, both under constant archaeological supervision. The box grader was used due to the area being below over-head power lines where there were height restrictions. This allowed only a small area of visibility between the tracks of the machine.

Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and features 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 a combination of structural, artefactual and ecofactual 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 Worcester City Museum.

5 Evaluation results

5.1 Introduction

The features recorded in the trenches are shown in Figures 2-3. The trench and context inventory is presented in Appendix 1.

5.2 Phasing

5.2.1 Natural deposits

Natural substrate deposits were observed in all of the trenches (1602, 1702, 1802, 1902, 2002, 2102, 2202, 2302 and 2402) and consisted of firm red clay marls, consistent with the local recorded geology.

Within Trench 21, a single ill-defined feature [2104] was present that was interpreted as a tree bole. The feature was not excavated.

5.2.2 Phase 1: Undated

Trench 23 contained three small features within close proximity. A possible elongated pit [2306] 1.15m long, 0.52m wide and 0.20m deep. This was aligned north-east to south-west and ran under the edge of excavation, so it is possible that it was a gully terminus. It was filled initially by (2307), a light yellow sandy clay which had a very diffuse boundary with the natural deposits. This was overlain by (2308) which was grey black silty clay with a high charcoal content.

Gully 2303 was aligned north-west to south-east, 0.57m wide and 0.22m and ran across the full extent of the trench. As with [2306], the earliest fill (2304) a light yellow sandy clay which had a very diffuse boundary with the natural deposits. This was overlain by (2305), a reddish brown silty clay.

Possible small pit [2309] was 0.45m in circumference and 0.13m deep, filled by (2310) which was a mid-grey brown clay silt.

No dating was recovered from these features, which were sealed by Phase 2 subsoil deposits.

5.2.3 Phase 2: Medieval to post-medieval

Furrows [2106, 2208, 2205] and a further furrow recorded in plan only within Trench 22 were aligned north-east to south-west, and up to 0.14m in depth.

A further furrow 2203 was north-west to south-east aligned and up to 0.09m in depth. The fills of all of these furrow features were broadly indistinguishable from the subsoil deposits.

Subsoil deposits (1601, 1701, 1801, 1901, 2001, 2101, 2201, 2301 and 2401) consisted of firm mid yellowish brown clay silts of between 0.06m and 0.21m. Within Trench 19, subsoil deposit 1901 contained post-medieval dating.

5.2.4 Phase 3: Modern

Topsoil deposits (1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300 and 2400) comprised moderate grey brown clay silt between 0.09 and 0.43m in depth.

6 Artefactual evidence, by Rob Hedge, PCIfA

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event only a small amount of material was recovered from a subsoil deposit (1901). These consisted of:

- a single abraded 8g sherd of post-medieval redware (fabric 78);
- one 38g fragment of flat roof tile, containing rounded iron slag inclusions typical of fabric 5 (Griffin 2008), of 16th to 18th century date.

7 Environmental evidence, by Elizabeth Pearson, ACIfA

7.1 Project parameters

The environmental project conforms to guidance by ClfA (2014) on archaeological evaluation and guidance by English Heritage (2011) and Association for Environmental Archaeology (1995).

7.2 Aims

The aims of the analysis were to determine the state of preservation, type, and quantity of environmental remains recovered, from the samples and information provided. This information will be used to assess the importance of the environmental remains.

7.3 Methods

Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (WA 2012). A single sample (of 10 litres) was taken from fill (2308) of an undated pit [2306] (Env Table 1).

Processing and analysis

The sample was processed by flotation using a Siraf tank. The flot was collected on a 300µm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residue was fully sorted by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammer scale. The flot was scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the New Flora of the British Isles, 3rd edition (Stace 2010).

Charcoal was examined under a low power MEIJI stereo light microscope in order to determine the presence of oak and non-oak charcoal.

7.4 Discard policy

Remaining sample material and scanned residues will be discarded after a period of three months following submission of this report, unless there is a specific request to retain them.

7.5 Report

The results are summarised in Env Tables 2 and 3.

No identifiable remains were identified from the fill (2308) of an undated pit [2306]. Only a small quantity of unidentified poorly-preserved charcoal was recorded.

Otherwise the flot was made up of uncharred remains. These were consisting of mainly root fragments are assumed to be modern and intrusive as they are unlikely to have survived in the soils on site for long without charring or waterlogging.

7.6 Significance

Environmental remains were poorly preserved and of low significance.

Context	Sample	Feature type	Fill of	Date	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
2308	1	Fill of pit	2306	undated	10	10	Yes	Yes

Env Table 1: List of bulk samples

context	sample	charcoal	unch*	artefacts
2308	1	mod	abt	occ fired clay

Env Table 2: Summary of environmental samples; occ = occasional, mod = moderate, abt = abundant, * = probably modern and intrusive

context	sample	preservation type	species detail	category remains	quantity/diversity
2308	1	unch*	unidentified root fragments (herbaceous)	misc	+++/low
2308	1	ch	unidentified wood fragments	misc	+/low

Env Table 3: Plant remains from bulk samples

Key:

preservation	quantity
ch = charred	+ = 1 - 10
unch* = uncharred	++ = 11- 50
	+++ = 51 - 100
	++++ = 101+
	* = probably modern and intrusive

8 Earthwork survey results

The area surveyed to the south of the former field boundary was split into areas 1 to 7 (Figure 6) with areas 8 and 9 added to the north of the field boundary. Areas 8 and 9 were not surveyed but are included in the discussion (Earthwork Survey Table 1).

The Areas 1-3 (Figure 7) were split by depressions aligned north-west to south-east that broadly respected the ridge and furrow alignment, and to their east was a further depression aligned north-east to south-west, that respected the head furrows in Areas 1 and 3, as well as the furrows within Area 4 (Figure 8). To the north of Areas 3, 4 and 7 was the former field boundary which again respected the areas. The north to south aligned depression between Areas 4 and 5 also respects the change in alignment of furrowing and a subtle change in the orientation and width between Areas 4 and 6 suggests separate use. This is likely to be due also to a change in topography in this area, accentuated at a later date by the excavation of a pond at this point.

The degree to which the areas of ridge and furrow and ditches respect each other suggests a broadly contemporary layout, although it is likely that the ditches have been reworked to varying degrees.

The LIDAR data (Figure 5) demonstrates the presence of ridge and furrow within Areas 8 and 9. It is likely that the north-west to south-east aligned striations within Area 9 are largely ploughed out ridge

and furrow elements parallel to those in Area 3. This alignment also corresponds with a furrow in Trench 22. These striations continue across Area 8, in which north-east to south-west aligned wide furrows can also be seen. The bases of these were also present in Trench 22. The dual alignment in Area 8 suggests two distinct periods of ridge and furrow cultivation.

Area	Orientation	Typical distance between ridges	Maximum height difference between ridge and furrow	Site monument visibility
1	North-south (head ridges)	2.3m (head ridges)	0.08m	Poor
2	North-west to south-east with head ridges at 90	4.3m and 1.9 to 4.1m (head ridges)	0.17m	Moderate
3	North-west to south-east	2.50m	0.05m	Poor
4	North-east to south-west	4.60m	0.13m	Moderate
5	East-west	4.50m	0.10m	Poor
6	North-east to south-west	2.60m	0.03m	Poor
7	North-east to south-west with head ridge at 90	4.90m	0.25m	Moderate
8	North-east to south-west	19m	Not recorded	Very poor
9	North-east to south-west	None clear	Not recorded	Not visible

Earthwork Survey Table 1 Details of the ridge and furrow by area

9 Watching brief results

Natural substrate deposits were observed in Trenches 25 and 26 (2502 and 2600) consisting of firm red clay marls, consistent with the rest of the site and local recorded geology. Subsoil deposits in Trench 25 (2501) consisted of firm mid yellowish-brown clay silts 0.14m in depth, overlain by topsoil (2500), a firm mid grey brown silty clay of 0.19m in depth. No subsoil or topsoil deposits remained in Trench 26, having been previously removed. Partial remnants of three north to south aligned features were intermittently visible between the tracks of the box grader (Figure 2, Plate 9) that were consistent with the alignment of furrowing. No further features were present in either trench. Within Trench 27 excavation was very shallow, such that only the topsoil was exposed.

10 Conclusions

A picture of dispersed activity seen with in the first phase of evaluation was supported to some extent with two possible pits and a gully within Trench 23, although these could not be dated. The conjectured continuation of a ditch from Trench 4 in the first fieldwork stage to Trench 22, was not found to be the case, with only furrowing present within Trench 22. This stage of investigations further confirmed the focus of activity towards the northern area of the site, as the trenching on the south-east side of the site was devoid of archaeological features. The features were undated, but may be dated by association with the Iron Age and Roman features in the previous evaluation stage. The environmental remains were poorly preserved and considered to be of low significance.

The only further consistent features present within the trenching was furrowing. Four of these within Trenches 22 and 23 were aligned north-east to south-west, although furrow [2203] was aligned north-west to south-east. Both of these alignments are confirmed from the LIDAR data, as are the north-east to south-west aligned furrows in the trenches.

The earthwork survey of the southern half of the field identified seven separate areas, largely split by ditch boundaries which respected the ridge and furrow within them. This suggests that the boundaries themselves are remnants of a medieval or post-medieval field system, along with the ridge and furrow.

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 trenches 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.

11 Project personnel

The fieldwork was led by Tim Cornah (ACIfA) and Elspeth Iloff (ACIfA), assisted by Richard Bradley (MCIfA) and Jesse Wheeler (ACIfA).

The project was managed by Tom Vaughan (MCIfA). The report was produced and collated by Tim Cornah. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

12 Acknowledgements

Worcestershire Archaeology would like to thank the following for the successful conclusion of the investigations: Richard Smalley (RPS Ltd), James Dinn (Archaeological Officer, Worcester City Council).

13 Bibliography

AAF 2011 *Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation*. Archaeological Archives Forum

Association for Environmental Archaeology 1995 *Environmental archaeology and archaeological evaluations: recommendations concerning the environmental component of archaeological evaluations in England*. Working Papers of the Association for Environmental Archaeology 2

BGS 2019 *Geology of Britain viewer*, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed: 30 September 2019

Cappers, T R J, Bekker, R M, & Jans, J E A, 2012 *Digitale Zadenatlas van Nederland: Digital seed atlas of the Netherlands*. Groningen Archaeological Studies, 4, Barkhuis Publishing and Groningen University Library: Groningen

CgMs Consulting 2017 *Archaeological Desk-Based Assessment, Parsonage Wood, Worcester, Worcestershire*, unpublished report **CP/SJ/23035**, dated February 2017

ClfA 2014a *Standard and guidance: for archaeological field evaluation*. Reading: Chartered Institute for Archaeologists

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

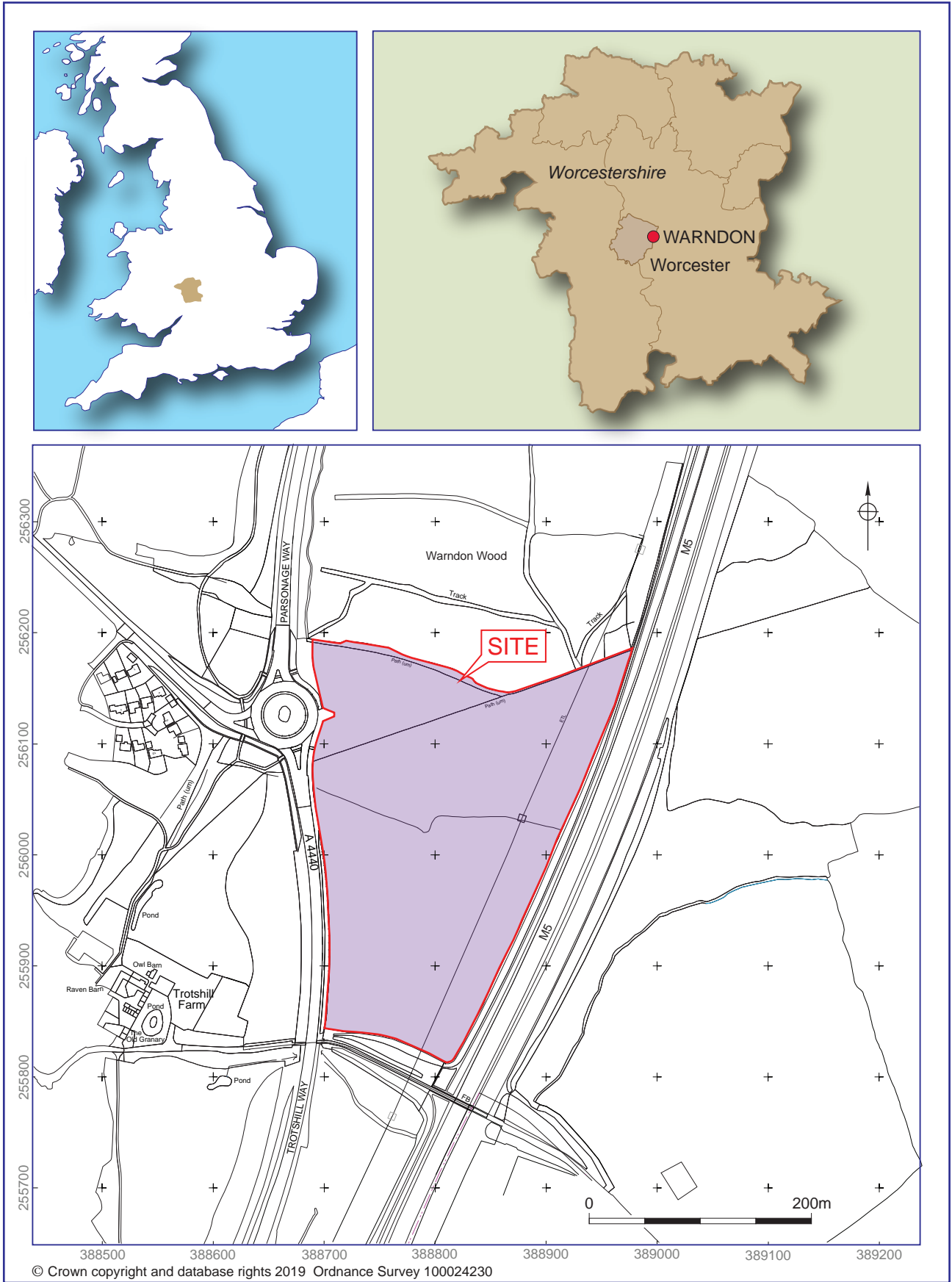
ClfA 2014c *Standard and guidance: for collection, documentation, conservation and research of archaeological materials*. Reading: Chartered Institute for Archaeologists

ClfA 2014d *Standard and guidance: for the creation, compilation, transfer and deposition of archaeological archives*. Reading: Chartered Institute for Archaeologists

English Heritage 2011 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*. English Heritage, Centre for Archaeology Guidelines

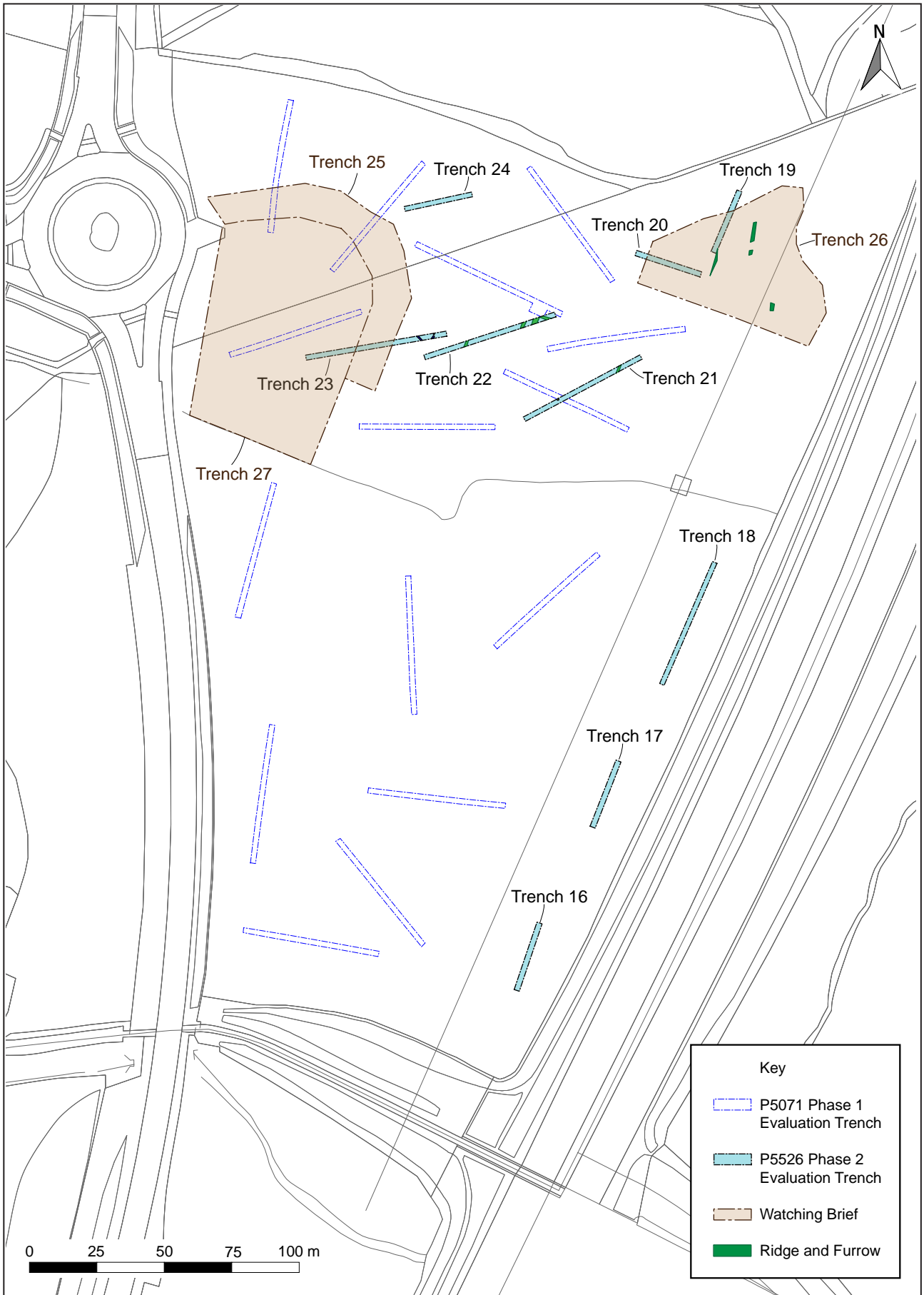
- Griffin, L, 2008, Ceramic building material, in D Miller *et al*, *Archaeological investigations at Church Lane, Hallow, Worcestershire*, Trans Worcestershire Archaeol Soc, 3 ser, **21**, 107-48
- Lovett, P and Vaughan, TM 2017 An archaeological evaluation of land off Parsonage Way / Trotshill Way, Worcester, Worcestershire County Council, Worcestershire Archaeology, unpublished report **2457**, revision 1 dated 27 April 2017, P5071, WCM 102229
- Lovett, P 2019 Archaeological watching brief at Parsonage Way, Warndon, Worcester, Worcestershire County Council, Worcestershire Archaeology, unpublished report **2704**, dated 14 June 2019, P5624, WCM 102402
- Stace, C, 2010 *New flora of the British Isles* (3rd edition). Cambridge: Cambridge University Press
- WA, 2012 Manual of service practice, recording manual, Worcestershire Archaeology Unpubl report **1842**. Worcestershire County Council
- WA 2019a Methods Statement for an archaeological evaluation of land at Parsonage Way, Warndon, Worcester, Worcestershire Archaeology Unpubl document dated 30 July 2019. Worcestershire County Council
- WA 2019b Methods Statement for an archaeological earthwork survey of land at Parsonage Way, Warndon, Worcester, Worcestershire Archaeology Unpubl document dated 20 August 2019. Worcestershire County Council
- WA 2019c Written Scheme of Investigation for an archaeological watching brief at Parsonage Way/Trotshill Way, Warndon, Worcester, Worcestershire Archaeology Unpubl document dated 24 September 2019. Worcestershire County Council
- Worcester City Council 2007a *An archaeological resource assessment and research framework for the city of Worcester*, version 2.51, dated September 2007
- Worcester City Council 2007 *Archaeology and the Historic Environment*, Supplementary Planning Document, Local Development Framework. Worcester City Council
- Worcester City Council 2016 *Guidelines for archaeological work in Worcester*. Worcester City Council

Figures



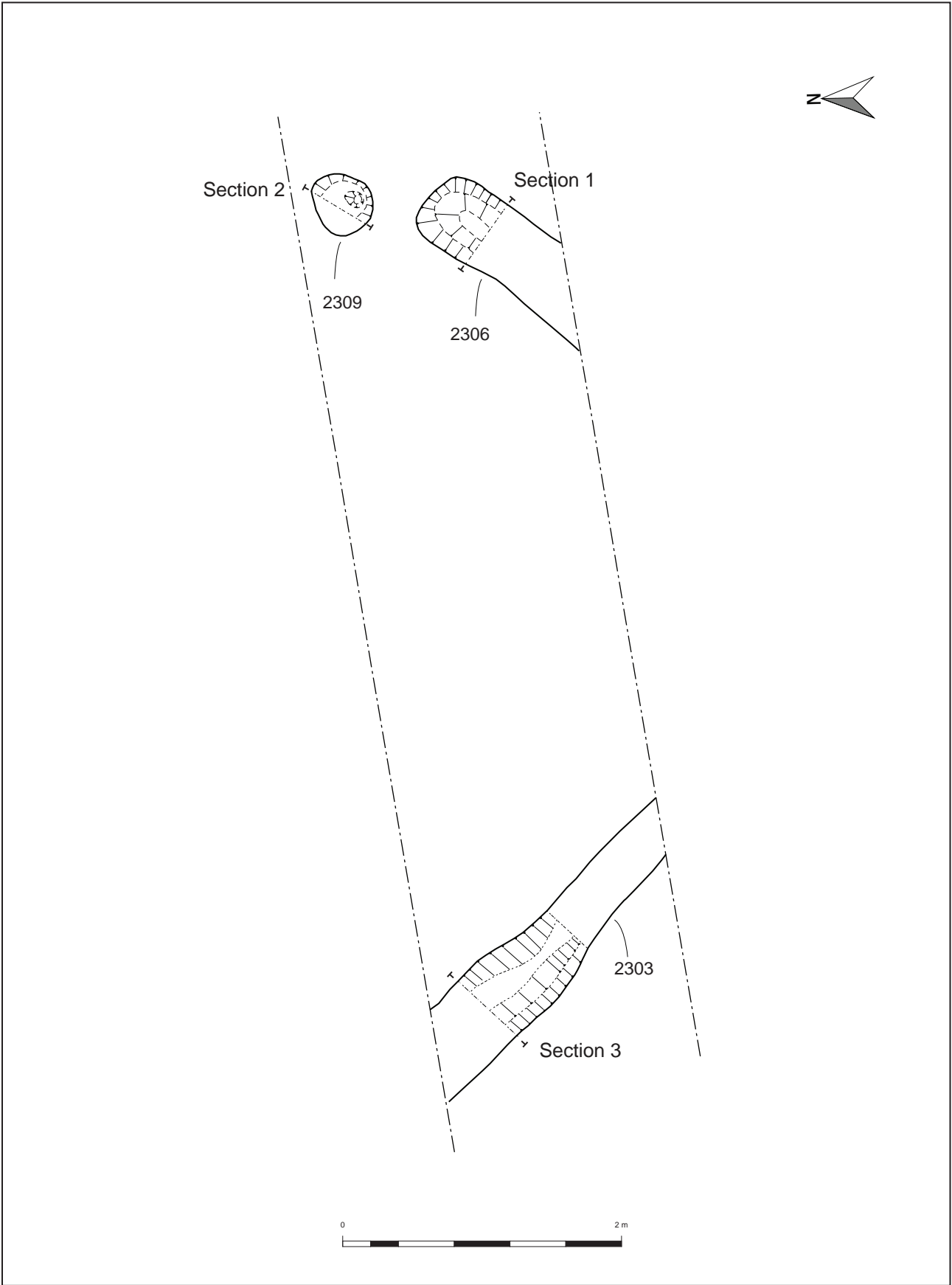
Location of the site

Figure 1



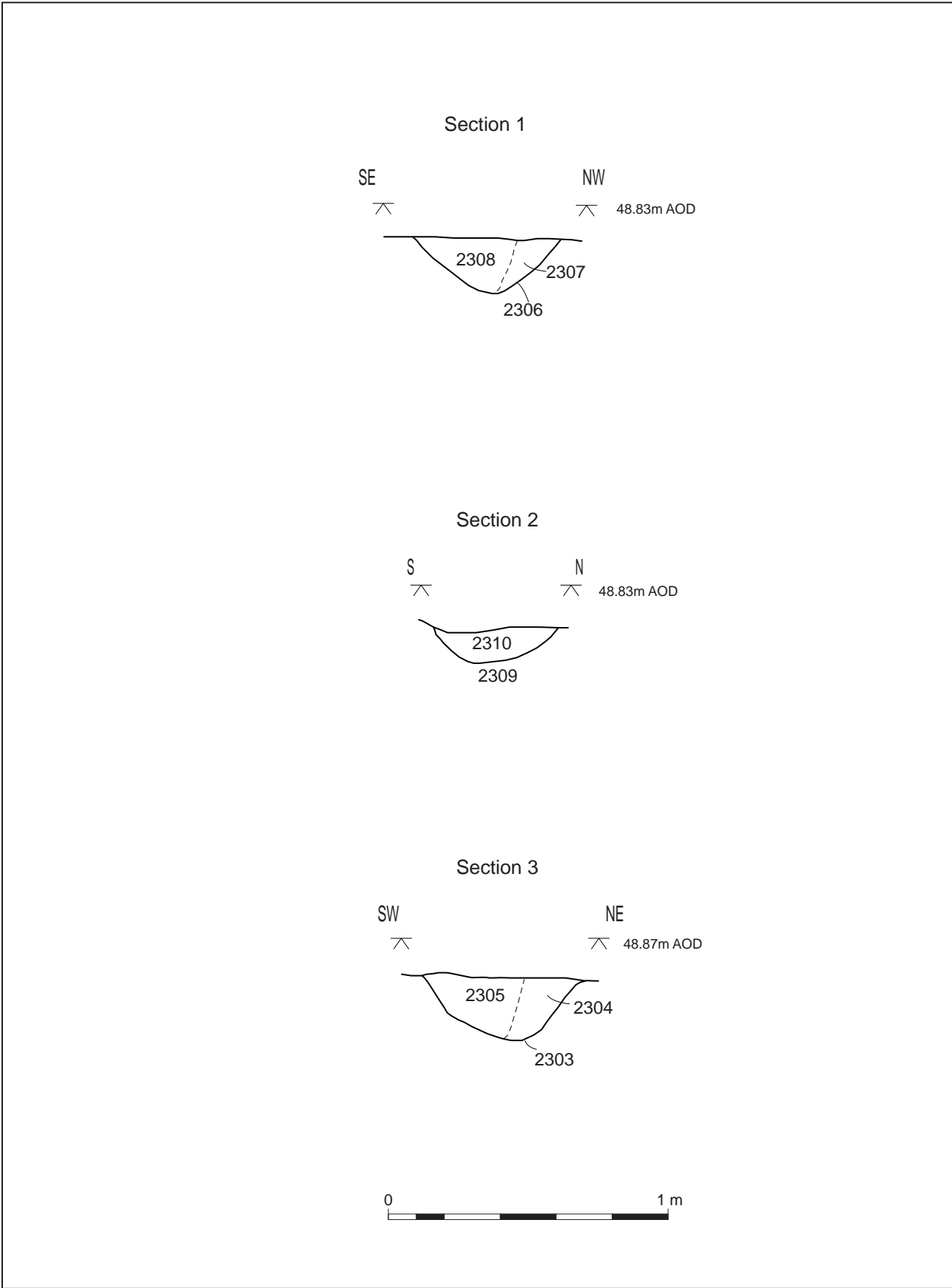
Trench location plan

Figure 2



Plan of feature 2303, 2306 and 2309 within trench 23

Figure 3



Sections of feature 2303, 2306 and 2309

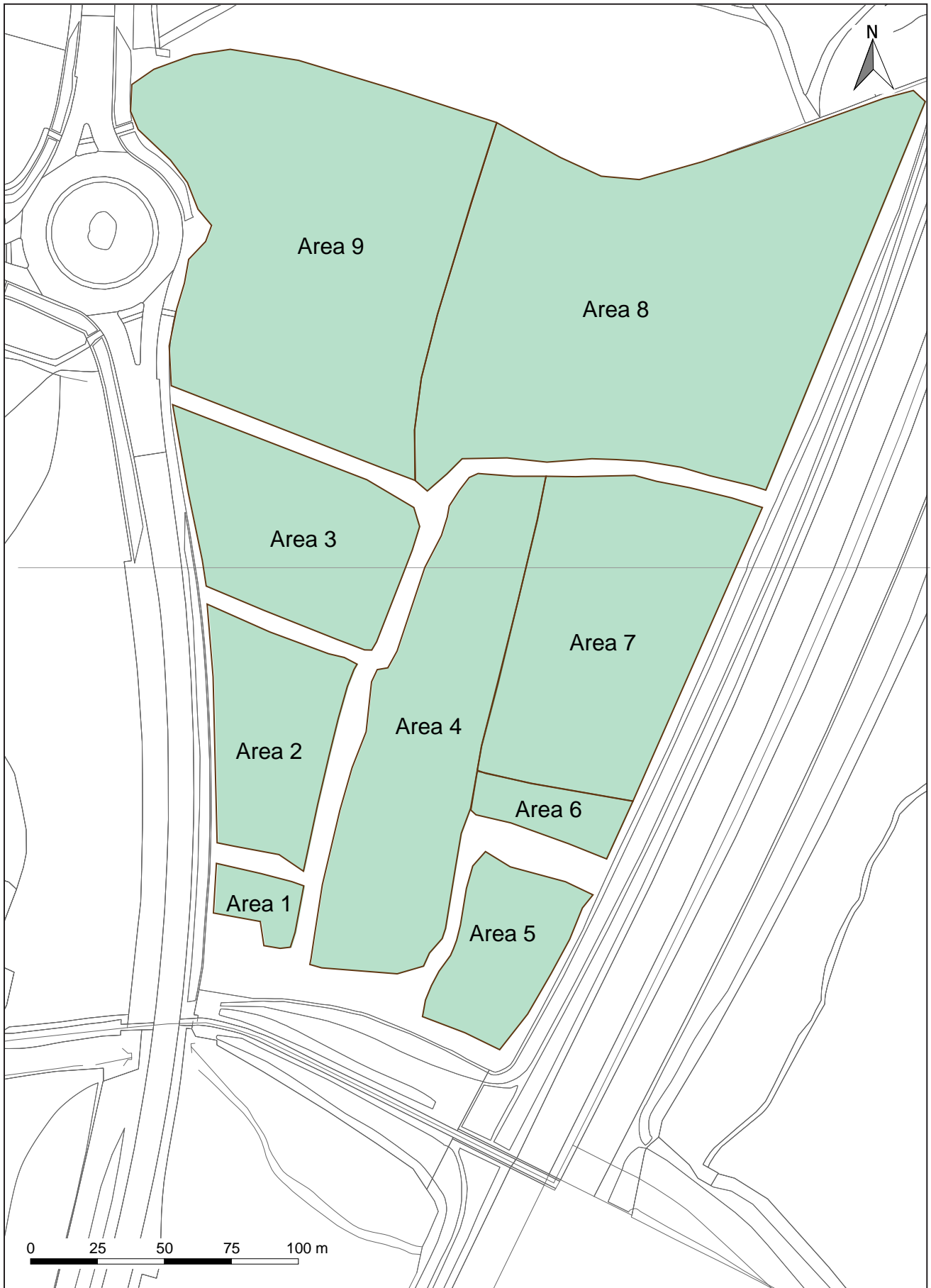
Figure 4



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LiDAR Survey showing ridge and furrow

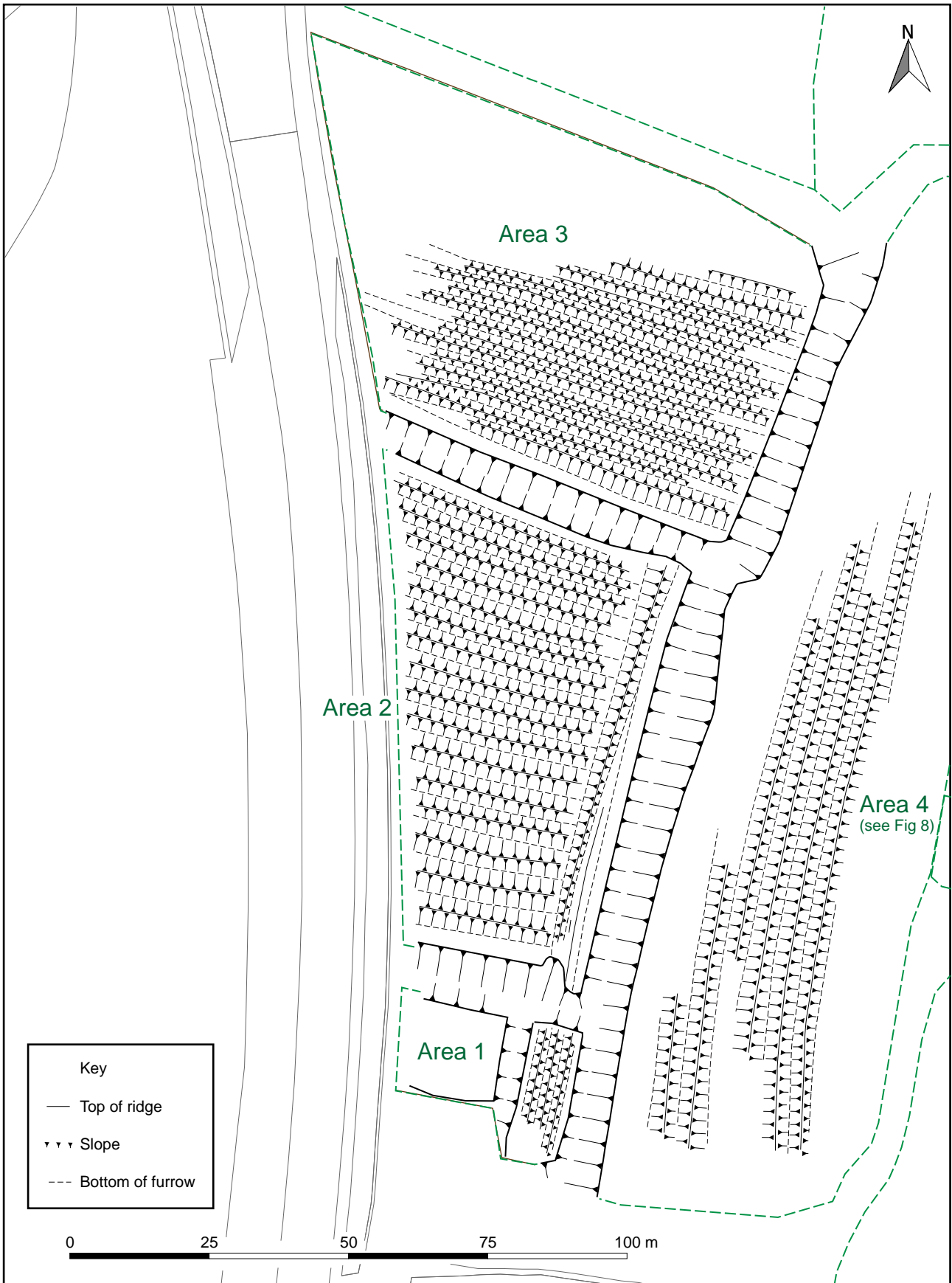
Figure 5



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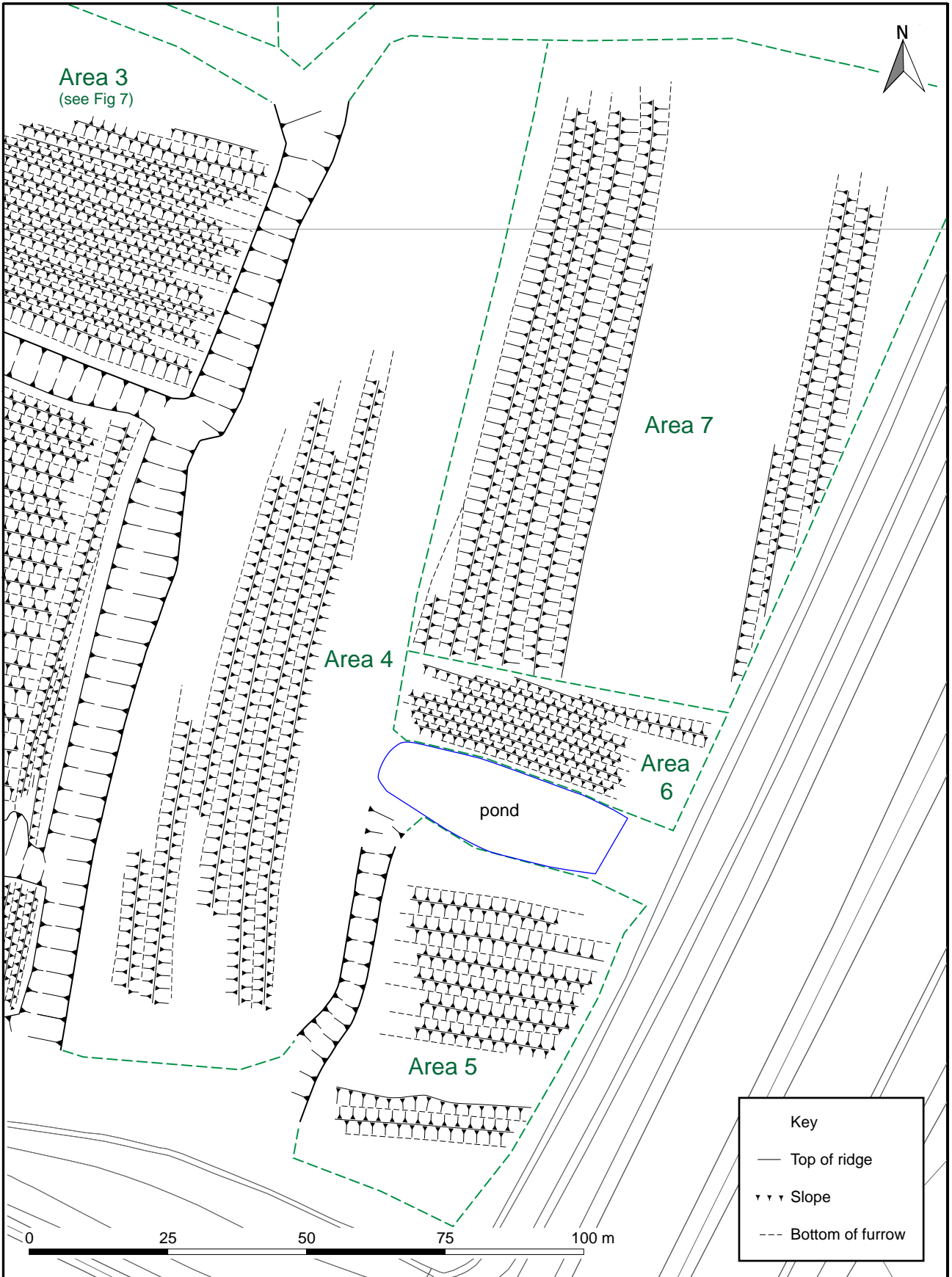
Location of Areas 1 to 9

Figure 6



Extent of Ridge and Furrow observed: Areas 1, 2 and 3

Figure 7



Extent of Ridge and Furrow observed: Areas 4, 5, 6 and 7

Figure 8

Plates



Plate 1: Tr 16, looking north, 1m scale



Plate 2: Tr 19, looking south-west, 2x1m scale



Plate 3 Tr 23 Elongated pit 2306, looking , scale 0.40m



Plate 4 Tr 23, Pit 230, looking , scale 0.40m



Plate 5 Tr 23, gully 230,3 scale 0.40m



Plate 6 Tr 22, furrow 2208, scale 1m



Plate 7 Tr 25, looking east, 2x1m scales



Plate 8 Tr 26, looking north-east, 2x1m scales



Plate 9 Tr 26, showing the visibility between the box grader tracks, looking west, no scales

Appendix 1: Trench descriptions

Context summaries

Trench 16

Length: 25 Width: 1.9 Orientation: N-S

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
1600	Layer	Layer	Topsoil	0.18	Firm Mode grey brown Clay silt
1601	Layer	Layer	Subsoil	0.09	Firm Mid orangey brown Clay silt
1602	Layer	Layer	Natural		Firm Red Clay marl

Trench 17

Length: 25 Width: 1.9 Orientation:

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
1700	Layer	Layer	Topsoil	0.20	Moderate to firm Mid grey brown Clay silt
1701	Layer	Layer	Subsoil	0.43	Firm Mid orangey brown Clay silt
1702	Layer	Layer	Natural		Compact Red Clay marl

Trench 18

Length: Width: 1.9 Orientation: N-S

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
1800	Layer	Layer	Topsoil	0.18	Moderate Mid grey brown Clay silt
1801	Layer	Layer	Subsoil	0.28	Compact Mid yellowish brown Clay silt
1802	Layer	Layer	Natural		Compact Red Clay marl

Trench 19

Length: 24.8 Width: 1.9 Orientation: NE-SW

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
1900	Layer	Layer	Topsoil	0.27	Firm moderate Mid grey brown Clayey silt
1901	Layer	Layer	Subsoil	0.10	Compact Mid orangey brown yellow Sandy clay and some gravel
1902	Natural	Layer	Natural		Firm compact Mid red marl with some gravelly patches

Trench 20

Length: 25.6 Width: 1.9 Orientation: NW-SE

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2000	Layer	Layer	Topsoil	0.24	Moderate Mid grey brown Clay silt
2001	Layer	Layer	Subsoil	0.06	Firm Mid orangey brown Silty clay
2002	Layer	Layer	Natural		Firm compact Mid red Clay marl

Trench 21

Length: 50 Width: 1.9 Orientation: NE-SW

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2100	Layer	Layer	Topsoil	0.19	Moderate Mid grey brown Clay silt
2101	Layer	Layer	Subsoil	0.21	Firm Mid yellowish brown Clay silt
2102	Layer	Layer	Natural		Firm Red Clay marl
2103		Fill	Fill of tree bole		
2104		Cut	Tree bole		
2105		Fill	Furrow fill		
2106		Cut	Furrow		

Trench 22

Length:50 Width:1.9 Orientation:

Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2200		Layer	Topsoil		
2201		Layer	Subsoil		
2202		Layer	Natural		
2203		Cut	Cut of furrow	0.09	
2204		Fill	Fill of furrow	0.09	Compact Mid orangey brown Silty clay
2205		Cut	Cut of furrow	0.08	
2206		Fill	Fill of furrow	0.08	Compact Mid orangey brown Silty clay
2207	Furrow	Fill	Fill of furrow	0.16	Firm Mid orangey brown Clay silt
2208	Furrow	Cut	Cut of furrow	0.16	

Trench 23

Length:	Width:	Orientation:			
Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2300		Layer	Topsoil		
2301		Layer	Subsoil		
2302		Layer	Natural		
2303		Cut	Cut of gully	0.22	
2304		Fill	Fill of gully	0.22	Compact Yellowy white Clay
2305		Fill	Fill of gully	0.22	Compact Reddish brown Clay
2306		Cut	Cut of pit?	0.20	
2307		Fill	Fill of pit ?	0.20	Compact Whitish yellow Clay
2308		Fill	Fill of pit	0.20	Compact Grey black Clay
2309		Cut	Cut of pit?	0.13	
2310		Fill	Fill of pit	0.13	Compact Mixed mid grey-red-brown Clay

Trench 24

Length: 25	Width: 1.9	Orientation: E-W			
Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2400		Layer	Topsoil	0.19	Firm Mid grey brown Silty clay
2401		Layer	Subsoil	0.15	Firm Mid orangey brown Silty clay
2402		Layer	Natural		Compact Red grey Clay marl

Trench 25

Length: 114	Width: 15	Orientation: E-W turning to run N-S			
Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2500		Layer	Topsoil	0.19	Firm Mid grey brown Silty clay
2501		Layer	Subsoil	0.15	Firm Mid orangey brown Silty clay
2502		Layer	Natural		Compact Red grey Clay

Trench 26

Length: 69	Width: 53				
Context	Feature type	Context type	Interpretation	Height/ depth	Deposit description
2600		Layer	Natural		Compact Red grey Clay

Trench 27

Length: 85

Width: 70

Context	Feature type	Context type	Interpretation
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2700	Layer		Topsoil
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Height/ depth	Deposit description
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0.10+	Firm Mid grey brown Silty clay
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Appendix 2: Summary of project archive (WCM102406, WCM102407 and WCM102421)

TYPE	DETAILS*
Artefacts and Environmental	Animal bones, Ceramics, Environmental, Glass, Human bones, Industrial, Leather, Metal, Textiles, Wood, Worked bone, Worked stone/lithics, other
Paper	Context sheet, Correspondence, Diary (Field progress form), Drawing, Matrices, Photograph, Plan, Report, Section, Survey
Digital	Database, GIS, Geophysics, Images raster/digital photography, Spreadsheets, Survey, Text

Appendix 3: Summary of data for HER (WCM102406, WCM102407 and WCM102421)

Context	Sample	Feature type	Fill of	Date	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
2308	1	Fill of pit	2306	undated	10	10	Yes	Yes

Env Table 1: List of bulk samples

context	sample	charcoal	unch*	artefacts
2308	1	mod	abt	occ fired clay

Env Table 2: Summary of environmental samples; occ = occasional, mod = moderate, abt = abundant, * = probably modern and intrusive

context	sample	preservation type	species detail	category remains	quantity/diversity
2308	1	unch*	unidentified root fragments (herbaceous)	misc	+++/low
2308	1	ch	unidentified wood fragments	misc	+/low

Env Table 3: Plant remains from bulk samples

Key:

preservation	quantity
ch = charred	+ = 1 - 10
unch* = uncharred	++ = 11- 50
	+++ = 51 - 100
	++++ = 101+
	* = probably modern and intrusive