

Archaeological excavation at Swindon Farm, Cheltenham, Gloucestershire

Worcestershire Archaeology
for Orion Heritage

January 2023



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SWINDON FARM CHELTENHAM GLOUCESTERSHIRE

Archaeological excavation report



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SITE INFORMATION

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Archaeological excavation at Swindon Farm, Cheltenham, Gloucestershire

By Elspeth Iliff

With contributions by Laura Griffin, Elizabeth Pearson, and Alison Foster

Illustrations by Shona Robson-Glyde, Laura Templeton, and Elspeth Iliff

Summary

An archaeological excavation was undertaken at Swindon Farm, Cheltenham, Gloucestershire (NGR SO 93014 24834). It was commissioned by Orion Heritage on behalf of Persimmon Homes, in advance of a proposed residential development. Planning permission has been granted subject to a programme of archaeological works.

The site is located 3km north-west of Cheltenham near the River Swilgate, and a single excavation area was opened to investigate archaeological features identified by previous geophysical survey and evaluation trenching.

Excavation revealed a 1st to 3rd century AD Roman rural site, consisting of a relatively stable farmstead with limited phases of activity. The nature of the features indicates pastoral farming activities, with large stock enclosures and boundary ditches, along with possible domestic features. While the overall footprint of the site remained broadly consistent throughout its use, the large stock enclosures were frequently re-excavated, at times to subtly change their layout and scope, but likely also to clear out and re-establish the features, due to their silting. While there is no evidence of domestic structures from the first phase, it is considered likely that such features were present within the site, likely beyond the excavation area to the north-east. During the second phase two large ovoid ring-ditches were added next to the stock enclosures which may have enclosed roundhouses or other domestic structures. No internal features were present within either, but it is likely that shallower features have since been truncated.

The finds assemblage was consistent with that expected for a rural site, and pottery indicated the presence of domestic activity. The animal bone assemblage was identified as common domestic animals consistent with a small rural farmstead, and sheep breeding was indicated, which may have been a focus of activity at the site. It is possible that this may have related to the changing arrangement of stock enclosures, with the division of the enclosures being introduced to separate breeding and non-breeding livestock, perhaps connected with sheep breeding.

On abandonment, the site was absorbed back into the landscape and, eventually, was supplanted by fields and was most recently being farmed under a pastoral regime.

Report

1 Introduction

1.1 Background to the project

An archaeological excavation was undertaken by Worcestershire Archaeology (WA) from February to March 2022 at Swindon Farm, Cheltenham, Gloucestershire (NGR SO 93014 24834). The project was commissioned by Orion Heritage on behalf of Persimmon Homes, in advance of a proposed residential development. A planning application has been submitted to Cheltenham Borough Council, and a programme of archaeological excavation, post-excavation analysis and reporting was required to mitigate the impact of development.

The archaeological advisor to the local planning authority considered that the proposed development had the potential to impact upon possible heritage assets, in that geophysical survey had identified various linears with few discrete features, and subsequent evaluation (Cotswold Archaeology 2021) had confirmed Romano-British settlement.

No brief was provided but the project conforms to the generality of briefs previously issued. A WSI was prepared by Worcestershire Archaeology (WA 2022) and approved by the Curator, Rachel Foster, Archaeologist for Gloucestershire County Council. The excavation also conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for archaeological excavation* (CIfA 2014a).

1.2 Site location, topography and geology

The site is located c 3km north-west of Cheltenham. The site measures 8.9ha in area, and is bounded to the north-east by the River Swilgate, to the west by agricultural land, and to the east and south-east by Manor Road and industrial estates. It comprises agricultural fields currently in use as pasture. The ground level is variable across the site, with the field containing the excavation area sloping down towards north-east. The underlying geology comprises bedrock of Charmouth Mudstone formation (BGS 2022).

2 Archaeological and historical background

2.1 Introduction

Prior to fieldwork commencing, a search of the Gloucestershire HER was completed, covering a search area of 1km around the site. An heritage statement prepared as part of an earlier phase of work on this site was also consulted (Cotswold Archaeology 2020). A summary of the results of this research are presented below.

2.2 Prehistoric

Very limited prehistoric activity has been recorded within the vicinity of the site. Two sites comprising pits, field systems and enclosures were identified approximately 670m and 650m to the south-west. These sites have both been interpreted from aerial photographs of crop marks or from geophysical surveys. A small number of prehistoric findspots have also been recorded: an Iron Age silver coin immediately to the north of the site (HER 5384); and two Neolithic stone axe heads to the south-west.

2.3 Roman

A moderate amount of Roman activity has been identified near the site, and also within the site. A number of sites comprising small, rural field systems and enclosures have been identified in the vicinity. A Roman-British site was identified 670m to the west of the site from aerial photographs taken in 1976 (HER 5437), and pottery and coins have reportedly been recovered from the surface here. These remains are considered likely to relate to other Romano-British features identified by a

geophysical survey and evaluation conducted 250m west of the site (HER 27597). That evaluation confirmed the presence of Roman ditches and a number of undated features. A number of Roman findspots have also been identified near the site, including coins and an oil lamp.

2.4 Saxon and medieval to post-medieval

The nearby settlement of Elmstone Hardwicke is referred to in a document from AD 900 (in Swindon parish, historically part of the Cheltenham Hundred). There is also archaeological evidence for Saxon activity in the area, consisting of Saxon buildings and pits excavated approximately 780m south-west of the site. A bronze head was found close to the southern edge of the site, and was suggested to be of a 6th to 7th century date, but may instead be Iron Age. (HER 11021). Medieval settlement has been identified 440m to the south, and two moated sites have been identified 545m and 460m to the east. Evidence of medieval to post-medieval agricultural activity has been recorded both around and within the site, in the form of ridge and furrow earthworks (HER 50484).

A series of interconnecting post-medieval drainage ditches to the north of the site (HER 49023) can be observed on aerial photographs. A watching brief undertaken to the north-east of the site found the remains of a post-medieval well and two ditches (HER 52652). The route of the Tewkesbury turnpike passes within 500m of the site, and was established in 1726 (HER 48685). A possible corn mill, likely dating to the 13th century, has been recorded close to the north-east side of the site on the River Swilgate, based on early mapping and documentary sources (HER 5438). A number of listed buildings are also present near the site, including a number of houses and a 12th-century church (HER 35733; 35751; 35719; 5417).

2.5 Modern

Limited modern remains have been identified within the vicinity of the site. However, a Second World War camp and prisoner-of-war camp is recorded as having been housed at Swindon Hall, to the east of the site (HER 46634). A shadow factory also dating to the Second World War was also identified on aerial photographs to the south of the site (HER 48032).

2.6 Previous archaeological work on the site

Prior desk-based assessment, geophysical survey, and two evaluations have been carried out on the site. The desk-based assessment, completed in 2007 (Cotswold Archaeology 2008), suggested that the site had potential for Romano-British agricultural features, domestic settlement, and prehistoric features (HER 29706). The geophysical survey, undertaken by Pre-Construct Geophysics in 2009 (PCG 2009), identified the presence of a probable prehistoric or Romano-British settlement, and probable ditched trackways (HER 44804). Evaluation trenching was conducted on the site in 2017-18 (report not available), then a heritage statement (Cotswold Archaeology 2020) followed by further trenching in June 2021 (Cotswold Archaeology 2021), confirming the presence of a number of rectilinear and sub-circular enclosures as identified on the previous geophysical survey (HER 44923).

3 Project aims

The aims and scope of the project are to locate and sample archaeological deposits and record their nature, extent and date with the aim of preserving these assets by record to mitigate the effects of the proposed development.

In particular the project will have the following aims, as identified in *A Research Agenda for Archaeology in South West England* Somerset County Council (2007):-

- Research Aim 10: Address our lack of understanding of key transitional periods.
- Research Aim 21: Improve our understanding of the environmental aspects of farming.
- Research Aim 29: Improve our understanding of non-villa Roman rural settlement.
- Research Aim 34: Improve our understanding of early Roman urban settlement.

- Research Aim 41: Assess the impact of the Roman empire on farming.

4 Project methodology

A Written Scheme of Investigation (WSI) was prepared by Worcestershire Archaeology (WA 2022). Fieldwork was undertaken between 7 February and 25 March 2022. One area, amounting to 9018m² in area, were excavated over the 8.9ha site. The location of the excavation area is indicated in Figure 2.

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 GNSS device with an accuracy limit set at <0.04m. On completion of excavation, trenches were reinstated by replacing the excavated material.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural, artefactual and environmental 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 Cheltenham Art Gallery and Museum.

5 Archaeological results

5.1 Introduction

The features recorded in the excavation area are shown in Figures 2-11 and Plates 1-12. As the dating provided by finds was limited to a relatively short range, the activity of site has been split into only two distinct phases. Changes in features were seen within these phases, and will be discussed chronologically where possible, based on stratigraphic relationships. Larger features have been given Context Group (CG) numbers and will be referred to as such. A table detailing the feature numbers within each group can be found in Appendix 2.

5.2 Phasing

5.2.1 Natural deposits

The natural geological strata consisted of mixed light yellow and blue silty clay, consistent with the deposits recorded on geological mapping (BGS 2022). A small amount of earlier prehistoric pottery is viewed as a background scatter, as no structural remains of this date were defined.

5.2.2 Phase 1: mid-1st to mid-2nd century AD (Fig 3)

Enclosure ditches and associated features

The earliest activity likely began in the mid-1st century AD, consisting of a large, rectangular enclosure, with a handful of smaller associated features. The enclosure measured approximately 25m long by 15m wide internally, and consisted of a wide ditch around 0.6m deep (CG2; Fig 6; Plate 1). While the full extent of the ditch is not visible, it can be assumed that it followed the same footprint as the later iterations that truncated it. No internal features were found within the enclosure, and very few finds were recovered from the ditch fills. A smaller ditch was identified to the north-east of the enclosure measuring 0.36m deep (1004; Plate 3). Although this smaller ditch has been truncated and its south-west extent lost, it is likely that it continued up to the enclosure CG2. Three small gullies (CGs 15, 16 and 24) also thought to date to be part of the earliest activity were identified to the north-west of the enclosure ditch CG2. CGs 15 and 16 were similar in size, at about 0.10-0.12m deep.

These features appeared to form an entrance, approximately 4m wide. Around 6.7m to the north-west of CG16 was a third gully CG24 (Fig 8; associated in its upper infilling with large sherds, as shown in Plate 5), more substantial than CGs 15 and 16, measuring 0.59m deep and at least 1.1m wide. This ditch was relatively short, at only 12.5m long, and ran parallel with CG16, so may have defined a path of sorts, possibly connected with the entrance between CGs 15 and 16.

The large enclosure ditch CG2 was recut and replaced with CG4 (Figure 4; Plate 1). This ditch measured around 0.74m deep and appears to be a direct replacement for the earlier enclosure ditch. It follows the same footprint, to the extent of completely obscuring the earlier feature along the north-west side. As with the initial phase of this enclosure, no internal features were present, and few finds were recovered from the fills. The gullies to the north-west of the enclosure have also been replaced, likely broadly contemporary with the recutting of the enclosure. The entrance formed by these gullies appears to have been formalised, with two, new short gullies (CGs 17 and 18). As well as a change in orientation of these features from CGs 15 and 16, the entrance formed by these gullies has been widened to just under 7m. Later in the same period, a smaller, square enclosure (CG5; Fig 6; Plate 2) c 10m wide was added to the north-east end of the larger enclosure. While this feature does partially truncate the far north-west end of the larger enclosure ditch, it is likely that they were both open and in use at the same time. Unlike the larger enclosure, this feature has an entrance at its north-west corner.

Large rectangular enclosure ditch and associated features

Later on during this period, enclosures CG4 and CG5 appear to be amalgamated into a single large, rectangular enclosure to create a single area (CG6; for sections see Fig 6; Plates 1-2). The internal area of this enclosure measured 36m long by 13m wide, and as with the earlier iterations, it did not appear to contain any internal features. The entrance at the northern corner of CG5 was retained for this enclosure, at a width of 3.5m. One slot through this feature contained pottery dating more to Phase 2, suggesting that this feature was still open during the later phase of activity. A wide, shallow ditch (CG21; Fig 7) was added to the north-west side of and parallel with the enclosures, but it is not possible to link it to a more specific stage of activity within this phase. This feature likely related to the use of the enclosure, possibly relating to controlling movement and access. A small gully (1280) was also added coming off the north-west side of the enclosure running towards CG21, likely to section off the area externally on this side of the enclosure. While it is not possible to fit this feature into a specific point within this wider phase, it is likely that it is contemporary with CG21, and possibly with CG6.

Boundary ditch and internal features

Towards the end of this phase a large ditch measuring 0.48m deep and c 2m wide was excavated running across part of the site, aligned broadly north-west to south-east (CG7; Fig 9; Plate 6). This feature likely turned and continued to the north-east at its far north-west end, but appears to be completely truncated by a later recutting along this orientation. This feature continues into the internal space of the large rectangular enclosure CG6, but terminates within the enclosure. It is likely that this feature was extended to this point to provide a division within the enclosure, and while this ditch was seen in plan to truncate the north-west side of CG6, is it possible that the enclosure ditch may have been partially backfilled at this point. A short ditch, CG14 (Fig 7; Plate 7), was added on to the side of CG7, aligned towards the north-east and terminating only 7.5m from the larger linear CG7. This likely provided extra internal divisions, and appears to respect earlier entrance gullies CG17 and CG18, suggesting they were still open and in use. A gully was added truncating the end of CG16 (1214), on a similar alignment to CG21, likely continuing the narrow linear avenue alongside the larger enclosure. Towards the end of this phase two smaller gullies (CGs 9 and 13) were also added to the north-west side of enclosure forming either an extension to the existing enclosure, or a smaller enclosure added on to the side. An extension was later added on to CG9, curving round to the north-west. While no finds were recovered from this extension, it seemed likely to be integral with CG9.

5.2.3 Phase 2: late 2nd to 3rd century AD (Fig 4)

It is likely that some of the features established during Phase 1 were still open and in use during Phase 2, although some may have been modified to adapt to changes in the site use. For this reason Phase 1 features are also shown on the Phase 2 plan (Fig 4).

Later ditches associated with large enclosure

Phase 2 saw the addition of a number of smaller ditches and gullies around the large enclosure CG6. A ditch was added to the east of the enclosure, aligned north-east to south-west, then turning towards the north-west at the far north-east edge of the excavation area (CG1; Fig 11; Plate 3). A second, slightly smaller ditch was also added, running parallel to CG1, just under 5m to the south-east (CG23; Fig 11). These possibly form a pathway of sorts to control movement. CG23 is the furthest feature to the south-east, so this, along with CG1, may form part of the site boundary.

An apparent extension, CG12, was added to the north corner of the large rectangular enclosure, forming a smaller enclosure roughly 6m by 12m (Fig 11). This suggests that at least the northern part of CG6 remained in use into this period. Further small ditches were also added at the northern corner of the site, CGs 10 and 22 (Figs 10-11; the latter associated with large sherds of Severn Valley ware). These appear to have formed a small pen on the edge of the area, with a 5.7m gap between the two suggestive of an entrance. A small, curving gully, CG20 (Fig 10), was also seen c 10m to the north-west of CG12, which may have continued round to meet the corner of CG12. However, this gully was later truncated so its full extent was not clear. A small pit was identified near these features dating to the start of this phase (1085; Fig 11; Plate 11).

Ring-ditches and external boundary ditch

The biggest change seen on this site happened during this period, consisting of the addition of a large ring-ditch CG3 (Fig 10; Plate 8), truncating CG12 and the northern end of CG6; in size between c 1.4m to 2m in width, and c 0.65m deep, the internal area being 11m by 15m. No contemporary internal features were identified, although it is possible that this end of the site may have been heavily truncated so shallower features may have been lost. The position of this feature truncating the far northern end of the large enclosure CG6 suggests a change in the organisation or use of this site, possibly moving from stock management to domestic use. A similar feature was also identified 14m to the north of this ring-ditch, CG8 (Fig 10; Plate 9), although this extended beyond the edge of the excavation area so its full extent remains unknown; its ditch measured 0.5m deep, with an internal area of at least 11m wide. This feature appears to be similar to CG3 in form, size and date, suggesting that they may have shared the same purpose. This second ring-ditch also truncated an earlier division feature CG10, suggesting it was also part of a broader change of the site use. The complete ring-ditch CG3 was later truncated at its northern end by the small gully CG20, which appears to replace the existing CG19. The purpose of this feature remains unclear.

Stratigraphically, the latest feature seen on the site was a long ditch running north-east to south-west, forming the north-western most boundary of the main phases of activity on the site (CG11; Figure 9; Plate 10). It runs to the south-west for at least 40m beyond the main area of activity, and continues beyond the south-western most extent of the excavation area. At its north-east end it turns towards the east, and truncates the partial ring-ditch CG8. An earlier linear feature, CG7, is also truncated by this ditch but does not reappear the other side of it, possibly implying that CG11 is the re-establishment of this earlier major boundary ditch. Therefore the latter is the latest iteration of a boundary ditch along this side of the site. The fact that this linear truncated CG8 suggests that the ring-ditch may have been relatively short lived.

5.2.4 Phase 3: Modern

Across the excavation area the natural substrate was overlain by a subsoil deposit (c 0.16m deep) consisting of an orangey brown silty clay,. This was in turn overlain by a greyish brown clayey silt topsoil layer (c 0.3m deep). Ceramic land drains were present, crossing the site in multiple directions.

5.2.5 Undated (Fig 2)

A ditch was found in the far northern corner of the site, curving slightly on a broadly north-west to south-east alignment (1277). This feature did not contain any finds and did not interact with any other features and, therefore, has remained undated. However, its position on an alignment leading away from the extent of the Roman activity suggests it is not likely to be contemporary with those phases. This feature contained a single fill very similar to the subsoil and different to Roman dated fills seen across the rest of the site, suggesting that this feature has been infilled more recently and may, instead, be related to post-medieval or modern activity.

Two small pits were identified in the east corner of the excavation area, 1305 and 1307. These features were both small and shallow, with similar fills, and were only 6.5m apart. While they were found close to the large boundary ditch CG11, they sit away from the Roman activity and seemed, therefore, unrelated. No finds were recovered from either pit, so they remain undated.

Another isolated pit was found approximately 15m south of the large enclosure CG6 (1022). This feature (0.09m deep) was shallow and ovoid in shape. The single fill contained no finds, and considering its isolated position away from the Roman phases of activity, it is unlikely that it was related.

A small number of other discrete features were identified within the area of Roman activity that did not contain any dating evidence. They are considered likely to be contemporary due to their proximity to confirmed Roman features, and similarity of fills.

6 Artefactual evidence

By Laura Griffin

6.1 Introduction

The artefact report conforms to standards and guidance issued by the Chartered Institute for Archaeologists (CIfA 2014b), as well as further guidance on pottery analysis, archive creation and museum deposition created by various pottery study groups (PCRG/SGRP/MPRG 2016), the Archaeological Archives Forum (AAF 2011), and the Society of Museum Archaeologists (SMA 1993).

6.2 Methodology

6.2.1 Recovery policy

Artefacts were recovered according to standard Worcestershire Archaeology practice (WA 2012). The majority of artefacts collected in the field were recovered by hand, but a small quantity of further material was retrieved from environmental samples (see below).

6.2.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date was produced for each stratified context. This date was used for determining the broad date of phases defined for the site. All information was recorded on a Microsoft Access 2007 database, with tables generated using Microsoft Excel.

All sherds were examined under x20 magnification and recorded by fabric type and form (see Table 1). Where possible, fabrics were referenced to the Gloucester City fabric series (Ireland 1983; prefixed with 'TF'; Gloucester City Museum 2017), or given generic coding based on fabric composition and colour. Some prehistoric sherds were classified according to the Worcestershire fabric-type series (Hurst and Rees 1992; WAAS 2017). Diagnostic sherds were further classified by form type and dated using published typologies. The analysed assemblage contained a high enough number of diagnostic sherds to enable a measure of 'Estimated Vessel Equivalent' (EVE) using rim measurement.

Artefacts from environmental samples were examined and those worthy of comment are included below.

Where possible, the results from analysis of this assemblage have been compared to assemblages from other local and regional sites.

A selection of pottery, worked stone and metalwork is illustrated in Figures 12-13.

6.2.3 Discard policy

Artefacts from topsoil and subsoil and unstratified contexts will normally be noted but not retained, unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'). Large assemblages of post-medieval or modern material, unless there is some special reason to retain (such as local production), may be noted and not retained, or, if appropriate, a representative sample will be retained. Discard of finds from post-medieval and earlier deposits will only be instituted with reference to museum collection policy and/or with agreement of the local museum.

6.3 Results

The results below provide a summary of the finds and of their associated location or contexts by period and, where relevant, site phase. Where possible, dates have been allocated, and the importance of individual finds commented upon as necessary.

The artefactual assemblage totalled 1515 finds weighing 51.1kg. Material ranged from Bronze Age to post-medieval in date. Using pottery as an index of artefact condition, this was varied with some displaying surface abrasion and softening, whilst others were in good condition. Sherds of fine, oxidised fabrics were most affected, though this is probably to be put down to burial conditions, and therefore, does not reveal anything useful about site formation. Despite the surface abrasion, sherds were generally of a good size, as reflected in an average weight of 15.3g, therefore reflecting little disturbance since their original deposition.

period	material class	object specific type	total	weight (g)
Bronze Age	ceramic	pot	2	13
Late Iron Age/early Roman	ceramic	pot	86	470
Roman	ceramic	pot	1281	20518
Post-medieval	ceramic	pot	1	13
Late Iron Age/early Roman	ceramic	briquetage	21	132
Roman	ceramic	building material	16	1417
Late Iron Age/early Roman	ceramic	?loomweight	3	216
Roman	ceramic	fired clay	90	887
Roman	ceramic	oven superstructure	1	136
Roman	metal	iron	4	50
Roman	metal	copper alloy	2	21
Roman	metal	lead	2	21

Roman	slag	-	2	21
Roman	stone	objects	4	27231

Table 1: Quantification of site assemblage

6.4 Summary of artefacts by period

6.4.1 Bronze Age

Pottery

Two sherds were thought to be of later Bronze Age date were identified as residual within Roman ditch fills (CGs 3 and 5). Both were fragmentary and neither diagnostic. The first was in a shell and grog-tempered fabric (Worcestershire fabric 4.7) and the other was a quartz and limestone-tempered ware (Worcestershire fabric 5.7).

6.4.2 Late Iron Age/early Roman

Pottery

Sherds classed as late Iron Age/early Roman in date consisted primarily of locally produced handmade wares, commonly referred to as 'native' wares. A total of 86 sherds were identified, all were found alongside sherds of early Roman date and, therefore, it is unlikely that they represent a separate phase of Iron Age activity but represent the continuing production and use of 'native' forms into the early Roman period, making them 'transitional'.

Identifiable fabric types included Malvernian (TF18), palaeozoic limestone-tempered (TF30b), limestone and shale-tempered (TF31), limestone-tempered (TF33 and 216), calcite-tempered (TF34) and quartzite-tempered (TF217). Of these, the palaeozoic limestone-tempered ware formed the largest group, numbering 39 sherds. In addition, there were eight of sandstone-tempered ware (Worcestershire fabric 5.2).

All diagnostic sherds were from jar forms and, where observed, burnishing was the most common form of surface treatment. Just one sherd of Malvernian ware displayed further decoration in the form of pattern-burnished lines.

6.4.3 Roman

Pottery

Roman pottery formed the largest material group within the assemblage, amounting to 1281 sherds weighing 20.5kg and accounting for 85% of the artefactual assemblage. Dating of fabrics and diagnostic sherds indicated that the assemblage could be divided roughly into two main groups of activity: 1st–mid 2nd century and late 2nd–3rd century, with activity most likely beginning during the second half of the 1st century. The range of fabric types, dominated by locally produced wares and narrow range of forms present, was typical of a rural settlement and consistent with the type of features excavated.

Fabrics

The assemblage was dominated by wares of Severn Valley ware production. These included more standard Severn valley ware fabrics (fabrics TF11B, 11D, 11E, 17, 23 and 242), as well as a distinctive soft, red native ware, thought to be a further early Severn Valley ware variant (fabric TF215). Remaining fabrics were identified in smaller quantity and consistent with those retrieved from other Gloucestershire sites of similar date such as Kingscote (Timby 1998), Frocester (Price 2000), Uley (Woodward and Leach 1993) and Chestnut Park, Kingswood (Cornah 2020). Further parallels for the earlier Roman pottery could be made with the assemblage from Cirencester (Rigby 1982).

fabric code	fabric name	count	weight (g)
Worcs 4.7	shell and grog tempered ware	1	5
Worcs 5.2	sandstone tempered ware	8	61
Worcs 5.7	quartz and limestone tempered ware	1	8
11A	local micaceous ware	70	576
11A R	local micaceous ware (reduced)	8	18
11B	Severn Valley ware (oxidised)	311	5036
11B R	Severn Valley ware (reduced)	19	326
11D	early Severn Valley ware (oxidised)	159	2098
11D R	early Severn Valley ware (reduced)	30	390
11E	Limestone-tempered Severn Valley ware	2	2
12A	Oxfordshire colour-coated ware	1	4
15b	South-west slipped ware - red slipped	1	1
15v	South-west oxidised ware	19	202
17	Coarse Severn Valley ware variant	53	2286
17 R	Coarse Severn Valley ware variant (reduced)	3	456
18	Malvernian (native) ware	7	82
2	Grog-tempered ware	13	234
200	sandy grey ware	8	43
201	wheel-thrown 'Belgic' black-burnished ware	1	31
210	North Wiltshire fine oxidised ware	4	10
215	Soft red 'native' ware	121	1556
216	Limestone-tempered 'native' ware	4	3
217	Quartzite-tempered 'native' ware	1	9
23	Coarse Severn Valley ware	96	2809
23 R	Coarse Severn Valley ware (reduced)	2	173
231	Wiltshire oxidised ware	1	8
242	Severn valley ware variant	22	335
26	Fine sandy grey ware	1	4

2A	Grog-tempered ware A	8	22
2B	Grog-tempered ware B	2	30
2C	Grog-tempered ware C	3	12
2D	Grog-tempered ware D	1	3
2E	Grog-tempered ware E	22	87
30B	Native ware	39	199
31	Native ware	3	17
33	Native limestone-tempered ware	4	31
34	Native calcite-tempered ware	20	68
35	Coarse ware	5	105
39	Coarse sandy grey ware	5	79
3A	Local mica-coated ware	11	195
4	Dorset black-burnished ware	116	1022
5	micaceous grey ware	39	275
6	Savernake ware	36	691
8	Samian ware	1	3
8A	Central Gaulish samian	18	476
8B	South Gaulish samian	8	138
9AE	South-west mortaria	1	62
Cirencester 19	Cirencester fabric 19	1	198
125	Black-glazed earthenware (post-med)	1	13
0	unidentified wares	59	522

Table 2: Quantification of pottery assemblage by fabric (based on Gloucestershire type-fabric, 'TF', series, unless otherwise indicated)

Local/Regional wares

Severn Valley wares (fabrics TF11B, 11D, 11E, 17, 23 and 242)

Severn Valley wares totalled 687 sherds, accounting for 50% of the pottery assemblage. The most common type was of the standard oxidised fabric (TF11). However, there were also sherds of the earlier variants (fabrics TF11D and 17) more commonly associated with the 1st-early 2nd century, as well as a small number of reduced sherds. Despite the large number of sherds, only a relatively small proportion were diagnostic. Those forms which could be identified consisted of narrow-necked and early wide-mouthed jars, supplemented by upright to moderately splayed tankards and carinated cups. Just two bowls were identified, and more unusual forms included a colander and three lids.

Soft red 'native' ware (fabric TF215)

A total of 121 sherds were identified as being of this fabric type, distinctive for containing frequent red iron oxides and being highly micaceous. The range of forms identified were typical of those seen in early Severn Valley ware assemblages and included straight-sided tankards, carinated cups and early jar forms, including narrow-necked and necked and carinated jar/bowls (eg a large fragment of a Webster type 20 jar from ditch 1240, CG24; Plate 5). In addition, there was also a possible flagon rim.

Local micaceous ware (fabric 11A)

A total of 78 sherds were identified as being of this fabric. The vast majority were oxidised, with just eight reduced examples present. Identifiable forms were consistent with the early Roman date of this ware type and included a straight-sided tankard with grooved base, two carinated cups and a small jar/beaker with an out-turned flat-topped rim. Many sherds were nicely burnished, a characteristic of this fabric type.

Grog-tempered wares (fabric TF2 and variants)

A total of 49 sherds were of predominantly grog-tempered fabric types of 1st–2nd century date. The majority were handmade and of a distinctive brown, soapy fabric. A small number also contained organic inclusions. Although no production sites are currently known for these wares, distribution indicates a local origin, possibly related to the Savernake industry (Timby 2019, 38). Just two diagnostic sherds were present, both from jar forms.

Sandy reduced micaceous wares (fabric TF5)

A small quantity of just 39 sherds were identified as being of this fabric, a type usually commonly identified within local assemblages such as Frocester (Price 2000), Kingscote (Timby 1998) and Chestnut Park, Kingswood (Cornah 2020). The uncharacteristically low occurrence within this assemblage may well be due to the peak of activity on the site being predominantly 1st–2nd century and, therefore, earlier than the late 2nd–late 4th century production span of this ware type.

Wiltshire wares (fabrics TF6, TF15b, TF15v, TF201, TF210 and TF231)

Other local wares included a variety of fabric types which could be attributed to North Wiltshire production, including Savernake ware (TF6), south-west slipped and oxidised wares (TF15b and 15v), Wiltshire Black-burnished ware (TF201) and oxidised wares (TF210 and 231). These wares were notably smaller in number than those of Severn Valley origin, totalling just 62 sherds or 4.5% of the analysed assemblage. The majority of these fabrics appear to date from the 2nd century onwards. However, the Black-burnished fabric could be of earlier date, as it was noted in quantity at Cirencester (Rigby 1982, fabric 5), where forms indicated a Neronian to mid-2nd century date range.

Few sherds were diagnostic, but all identifiable forms were jars. In addition, there was a base with internal burnish, which would suggest an open form such as a bowl or dish.

South-west mortaria (fabric 9AE)

This was the only sherd of mortarium retrieved from the site which was dated to the 2nd century by associated sherds.

Other local wares

Remaining wares of local or regional production were only found in small quantity and included coarse reduced wares (TF35 and 39), local mica-coated ware (TF3A) and the rim of a ring-necked flagon similar in form and fabric to examples from Cirencester (Cirencester fabric 19; Rigby 1982).

Non-local/traded wares*Black-burnished ware type I (TF4)*

Although Dorset Black-burnished ware 1 (BB1) vessels formed the largest proportion of the non-local assemblage, it only amounted to 116 sherds or 8.5% of the pottery assemblage. As with the local

micaceous wares, this is likely a reflection of the 1st–2nd century peak in settlement activity, with locally produced ‘native;’ wares still available to fulfil the commonly accepted cooking role of BB1 vessels.

A large number of sherds were diagnostic and displayed a narrow range of forms, primarily jars, supplemented by a smaller number of bowl/dishes and a single beaker. All of commonly identified types (Seager-Smith and Davis 1993) and spanned the early 2nd to early 3rd centuries. It was notable that none of the typically 3rd–4th century forms such as drop-flanged bowls or jars with highly everted rims and obtuse lattice were present. A number of sherds displayed sooting and/or evidence of burning attesting to use of the vessels over a fire, presumably for cooking purposes.

Oxfordshire colour-coated ware (fabrics TF12A)

A small sherd from an Oxfordshire red/brown colour-coated ware bowl/dish was identified. It could be dated AD 240+, and is likely the latest datable sherd from the site.

Imported wares

Samian ware (fabrics 8, 8A and 8B)

A total of 27 sherds of samian ware were identified. Of these, 18 were of Central Gaulish production (TF8A) and eight South Gaulish (TF8B). Identifiable forms were all bowls or dishes of commonly identified types (Dragendorff 18, 18/31, 31 and 37). The two Dragendorf 37 forms displayed moulded decoration typical of the type, with an ovolo and panels. The most complete of these was interesting, not so much for the form or decoration, but because of the way in which it had been abraded post its deposition. Three large sherds of this vessel were retrieved, two of which were almost entirely unabraded with almost all of the slip surviving. In contrast, the third sherd was in really poor condition with heavy abrasion to not only the slip but also the moulded decoration itself, despite coming from the same ditch fill (context 1242; Fig 12).

Forms

In general, the range of forms present was as expected for a rural assemblage with jars dominating. However, the number of drinking vessels was notably high, even for an assemblage dominated by Severn Valley wares.

Functional composition of the assemblage

The rim sherds present amounted to an Estimated Vessel Equivalent (EVE) by Rim Equivalent (RE) total of 19.1 (Table 3). Ten main categories were identified and classified based on the accepted definitions (Millet 1979; Evans 1993). These were beaker, bowl, colander, cup, cup/tankard, dish, flagon, jar, lid and tankard.

This RE total is notably low compared to comparable rural assemblages. This could be a reflection of assemblage composition and preservation, with a lack of rim sherds and relatively high levels of surface abrasion.

Pot form type	EVE (RE)	% of group
beaker	0.49	3
bowl	2.74	14
colander	0.19	1
cup	0.43	2
cup/tankard	0.3	2

dish	0.64	3
flagon	1.49	8
jar	8.03	42
lid	1.27	7
tankard	3.52	18

Table 3: EVE (RE) by fabric and form type

Range of forms

The relative proportions of vessels of each form as established by EVE RE is presented in Table 3. From these figures, it can be clearly seen that the jar was the dominant vessel type present, accounting for 42% of diagnostic forms identified. This figure, along with the smaller proportion of bowl and dishes at just 17%, is consistent with the pattern frequently noted within assemblages from rural sites (Jeremy Evans, pers comm.). This high frequency of jar forms can be attributed to the versatile nature of the form serving a variety of functions including the storage, cooking and serving of foodstuffs.

Drinking vessels constituted 25% of EVE's by RE. This figure includes tankards, by far the most common type, beakers and the bowl/cup category described above. Although the site is situated in an area (Severn Valley) where a higher than usual proportion of drinking vessels has been suggested (Evans 2001), it is generally accepted that this rarely exceeds 20%, with most sites tending to be in the range of 10–20% (Griffin and Hurst forthcoming). Therefore, the figure for Swindon Farm is of particular note. Indeed, in the few cases where the proportion has exceeded 20%, a military or ritual interpretation has been favoured (Evans 1993, 100), although there is nothing to suggest that this site could be classified under either of these settlement types.

The lack of mortaria was also of note. Although in general, these vessels only form a small proportion of a typical assemblage, the occurrence of just one base sherd in an assemblage of this size is extremely unusual.

Vessel form in relation to fabric type

Analysis of diagnostic sherds within the assemblage revealed only a narrow range of forms, even in locally produced fabrics, although there was greater variety than seen in the traded wares. Forms of the most commonly identified fabric types, Severn Valley ware and Black-burnished ware, are discussed in more detail below.

Severn Valley ware

Vessel forms within these locally produced fabrics were identified according to the main groups identified by Webster (1976). Despite the large number of sherds recorded, only a relatively small proportion were diagnostic. Those forms which could be identified consisted of narrow-necked (types 1, 2, 5 and 7) and early wide-mouthed jars (types 19, 20 and 23), supplemented by upright to moderately splayed tankards (types 38, 40, 42 and 43) and carinated cups (types 59 and 60). Just two bowls were identified, and more unusual forms included an open-mouthed flagon, a colander and three lids. None of the identifiable forms were later than mid-3rd century in date.

Black-burnished ware 1

BB1 ware vessel forms were classified according to the main groups within the Wessex Archaeology (WA) form series (Seager Smith and Davies 1993). A proportionally large number of sherds of this ware type were diagnostic, but only a narrow range of forms were present, primarily jars (WA types 1 and 2), supplemented by a smaller number of bowl/dishes (WA types 20 and 22) and a single beaker (WA type 10). All were of commonly identified types and spanned the early 2nd-early 3rd centuries. It

was notable that none of the typically 3rd-4th century forms such as drop-flanged bowls (WA type 25) or jars (WA type 3) with highly everted rims and obtuse latices were present.

Pottery supply and use at Swindon Farm

As has been described above, the range of fabrics and forms is in most ways typical of rural sites in the region, with locally produced Severn Valley wares, and especially jars, dominating. The other notable features of the Severn Valley ware assemblage was the high proportion of drinking vessels and in particular, tankards. In total 35 individual vessels could be identified, and it is likely that there were more that went unrecognised within the undiagnostic assemblage. The standard functional interpretation of tankards is as drinking vessels, for obvious reasons. However, the recent discovery of graffiti in the form of a *modius* on a tankard sherd from the nearby site at Hindlip in Worcestershire may indicate that these vessels may also have been used for measuring corn or grain (Tomlin 2015).

As noted above, vessels of BB1 formed the largest group of non-local pottery with an overall occurrence of 8.5% and becoming the main cooking ware by phase 2. Comparison of sites from Worcestershire indicates that proportions of this ware vary greatly ranging from just 5.8% at Throckmorton (Griffin 2005) in comparison to 17% at Hoarstone Farm, Kidderminster (Hurst 1994) and the even greater proportion of 28.9% at nearby Hindlip (Griffin 2015). Previous analysis of Black-burnished ware figures from sites in the wider west Midlands region has led to the conclusion that the proportion typically varies from site to site, in part due to transportation routes but also influenced by site status, identity and exchange relationships (Willis 2012, 86; Allen and Fulford 1996). More recently, it has been asserted that rural sites in the south of the county have consistently low numbers of these vessels (Timby 2004; Griffin 2005; Griffin forthcoming), and according to the distribution plots presented by Allen and Fulford, this pattern continues over the border into North Gloucestershire, where the proportion of BB1 is generally between 5% and 10% (1996, fig 1), and the assemblage from Swindon Farm clearly fits well into this.

The lack of mortaria was significant, with just a single sherd identified. This is extremely low, even for the lowest order of rural settlement. The sherd was of local production, so supply is unlikely to have been an issue. Alternatively, it may suggest that the inhabitants were continuing to use less Romanised methods of food preparation during the 1st–2nd centuries AD. The levels of samian within the assemblage were also consistent with those of a lower order rural settlement, with just 27 sherds present. The only other fineware sherd was the single fragment of Oxfordshire red/brown colour-coated ware. Though the lack of further Oxfordshire and other late finewares can be attributed to settlement of the site having ceased around the middle of the 3rd century.

It can, therefore, be seen that the Late Iron Age/Roman pottery assemblage from Swindon Farm largely conformed to the standard pattern for rural farmstead sites in the area, with locally produced vessels dominating throughout occupation. The presence or absence of some fabrics appears to be largely explicable in terms of the relative short lifespan of the settlement and site status rather than supply.

Ceramic building material

A total of 16 fragments of ceramic building material weighing 1.417kg could be identified as Roman in date. All but one fragment came from phase 2 ditch fills (CGs 3, 7, 8, 11 and 22). The remaining fragment was from a Phase 1 pit (context 1260). Although the majority of pieces were abraded and undiagnostic, three pieces of tegula were identifiable (CGs 7, 11 and 22), all being flanged and one having a lower cutaway (context 1237).

?Ceramic loom weight

Three fragments of fired clay with oxidised surfaces and a black core were provisionally identified as coming from a triangular loom weight (CG7, Phase 1). All were clearly handmade and had definite surfaces, the most complete with partial perforations surviving.

Miscellaneous fired clay

A fairly substantial assemblage of 90 pieces of fired clay weighing 887g was retrieved, all of which is likely to be from a local source. Fragments were largely undiagnostic but a small number displayed evidence of having been subjected to high heat in the form of burning and/or vitrification which may indicate them to have been used as hearth/oven lining (CG22). It is possible that some very small fragments may be highly abraded pottery or ceramic building material.

Metalwork

Iron

A total of four pieces of highly corroded iron were retrieved, all from ditch fills (CG s 8 and 14, context 1200). All were so fragmentary, that none could be identified as specific objects, and were not regarded as worth radiography.

Copper alloy

A single brooch was the only copper alloy object retrieved from the site. As with the majority of finds from this site, it came from a ditch fill (CG5, Phase 1). The brooch was in two pieces but joined perfectly (Fig 12). It was identified as a Polden Hill type dating mid-late 1st century. The form was similar to examples recorded by Hattatt (1985, 82-85), with a distinctive catch-plate due to a triangular perforation with stepped cross-member. The bow is moulded at the centre with a wide V-groove and ribs on either side and diminishes to the foot so that the catch-plate is of bow thickness. The chord passes through a perforated lug and the wings are grooved.

Lead

The assemblage included two lead objects. Both were from the same ditch fill (CG22, Phase 2) and were identified as pot repair fragments.

Metalworking slag

Just two fragments of iron slag weighing 21g were retrieved, both from ditch fills (1286, CG14(P1) and 1153, CG3 (P2)). The former (1286) was thought to be smithing slag but the other was undiagnostic.

Stone

Quern

A fragment of saddle quern was retrieved from a Phase 1 ditch fill (CG6). The fragment was small and displayed a high level of use-wear with a deep hollow in the upper surface, and unusually, a relatively smooth underside. It was made from a quartz conglomerate, possibly local to the Forest of Dean.

Building material

Two deliberately shaped blocks of Blue Lias were retrieved. One from the same fill as the quern fragment (CG6) and other from a Phase 2 ditch fill (CG11). Both were most likely imported onto the site as building stone or paving.

Large block of worked limestone

A large, roughly cubed block of shelly limestone was recovered from a ditch fill (CG4; Fig 13). This was distinctive for having deep hollows in two of the faces. The hollows were roughly circular and smooth, as if deliberately formed. It is not clear what this stone was used for, but possible interpretations include use as a grinding/rubbing surface, similar to that of a quern, quarrying waste, or as successive pivot holes for a door (D Hurst, pers comm).

6.5 Discussion of the assemblage by phase

Phase 1: 1st–mid 2nd century

The majority of pottery (89%) from this phase was of local or regional production, with 52% of sherds being of Severn Valley ware fabrics. As expected, the early Severn Valley fabrics with organic temper

(TF11D and 17) formed a significant proportion of the group. Other typically early fabrics such as soft red native ware (TF215) and local micaceous ware (TF11A), well as the transitional wares (TF18, 30b, 33, 34, 126 and Worcestershire fabric 5.2) were also more common in this phase than Phase 2, suggesting low levels of residuality in the assemblage as a whole.

Although BB1 (TF4) was present in this phase, it amounted to just 29 sherds or 25% of the total BB1 assemblage. This low number can be partially attributed to the date of the phase, with the established date for expansion of the industry being AD 120. It may also be that the traditional local (transitional) wares were still the cooking vessels of choice during the earlier Roman period.

The majority of the samian ware assemblage (18 sherds) came from contexts of this phase. Of these, thirteen were of Central Gaulish and four were of South Gaulish production. Diagnostic sherds of the South Gaulish fabric were dated from the late 1st century onwards, which fits well with the general dating of this phase which suggests that activity most likely began during the second half of that century.

The range of forms present was as expected for a rural assemblage with EVE (RE) roughly following the same pattern as that seen for the pottery assemblage as a whole. The only notable difference being that the percentage of drinking vessels was lower and within more normal bounds at 14% as opposed to 25% (the overall site proportion of drinking vessels). Consistent with the 1st-mid 2nd century date range, the vast majority of carinated cup sherds were retrieved from contexts in this phase. All narrow-mouthed flagon sherds, although few in number, were also from this phase. Other identifiable forms included bowls, dishes, the single colander sherd and one lid.

Non-pottery finds from this phase largely consisted of fragments of undiagnostic fired clay (48 pieces). Other material of note was typical of the early Roman period and included the copper alloy brooch, the possible loomweight fragments and the briquetage. The vast majority of pottery (92%) and almost all non-pottery finds from this phase came from ditch fills (CGs 1, 2, 4, 5, 6, 7, 9, 13, 14, 15, 16, 18 and 24) suggesting use of these features for disposal of domestic refuse.

Phase 2: Late 2nd–3rd century

Although the proportion of non-local pottery was greater than seen in the preceding phase, the later assemblage was still predominantly locally produced (80% of group), and the range of non-local fabric types notably narrow. Severn Valley wares were still very much in evidence amongst the coarseware assemblage throughout this phase, amounting to 67% of the total local/regional wares. However, looking at the range of forms and dating, there would appear to be a relatively high level of residuality amongst the pottery from this phase. This is especially evident amongst the Severn Valley wares, where 37% of the group were of the typically early variants (TF11D and 17). Likewise, there was a high proportion of early tankard and carinated cup forms in the group. This phase also saw the first occurrence of the south-west wares (TF15v and 15b).

Non-local coarsewares consisted exclusively of BB1, although these sherds still only formed a small proportion of the assemblage at 13%. Diagnostic sherds indicated use from c AD 120 through to the end of site occupation around the middle 3rd century, with identifiable forms consisting entirely of mid-late 2nd century everted jar (WA types 2), and mid-2nd to early 3rd century bowl/dish forms (WA types 20 and 22).

Other non-local wares were found in small quantity and mainly comprised small amounts of South and Central Gaulish samian (TF8A and 8B) and a single sherd of Oxfordshire red/brown colour-coated ware (TF12A). The presence of this latter sherd confirms that activity continued into at least the mid-3rd century. However, the lack of typologically late BB1 forms, along with the absence of other typically late Roman fabrics or forms, would suggest that the settlement is unlikely to have continued beyond the 3rd century.

Once again, the range of forms as seen through EVE RE, largely followed the same rural pattern as seen for the assemblage as a whole, as well as the sherds from Phase 1. The one notable exception

was the very high proportion of drinking vessels which totalled 34%. However, as noted above, it seems likely that residual vessels of earlier date are skewing these results and giving an inaccurate picture of the proportion of tankards, cups and beakers actually being used during this later phase.

Remaining finds once again included a large number of fired clay fragments (48), including the pieces of probably hearth lining. In addition, the majority of tile also came from this phase, including the identifiable tegula fragments. Other finds of note were the lead pot-repairs and the fragment of oven superstructure, which is likely one the latest finds in the assemblage.

As with the previous phase, the majority of material came from ditch fills (96% of the pottery; CGs 3, 8, 10, 11, 12, 19, 20, 22 and 23), again suggesting discard of domestic waste. It was also noted that there was a high level of residuality amongst the sherds from these fills, with the *terminus post quem* dates being provided by a relatively small number of diagnostic pottery forms.

6.6 Recommendations

6.6.1 Discard/retention

Should discard be necessary, the priority should be to keep the integrity of the assemblage, so that the material retained provides a good representation of the complete assemblage. In order to enable this, the below approach is suggested:

- To identify contexts with a good number of diagnostic sherds, with a view to keeping all sherds from that context, including body sherds.
- To identify contexts from a spread of dates/phases.
- To include other sherds of note which don't come from the above contexts.

7 Environmental evidence

By Elizabeth Pearson

7.1 Introduction

The environmental project conforms to guidance by ClfA (2014b) on archaeological excavation, further guidance by English Heritage (2011) and the Association for Environmental Archaeology (1995).

The underlying soils consist of lime-rich loamy and clayey soils with impeded drainage of high fertility (Cranfield and Agrifood Institute 2022). The geology comprises bedrock of Charmouth Mudstone Formation - Mudstone (BGS 2022).

7.2 Methodology

7.2.1 Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (2012). A total of 13 samples (each of up to 40 litres) were taken from the site (Table 4).

7.2.2 Processing and analysis

The samples were processed by flotation using a Siraf tank. The flots were 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 residues were scanned 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 flots were 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 Stace (2010).

Context	Sample	Feature type	Fill of	Period	Phase	Sample volume (L)	Volume processed (L)	Residue assessed	Flot assessed
1030	2	Ditch	1028	Roman	1	10	10	Yes	Yes
1032	3	Ditch	1031	Roman	1	10	10	Yes	Yes
1033	1	Ditch	1031	Roman	1	10	10	Yes	Yes
1045	4	Ditch	1042	Roman	2	40	10	Yes	Yes
1051	5	Ditch	1049	Roman	1	20	10	Yes	Yes
1056	6	Pit	1055	Roman	Unphased	10	10	Yes	Yes
1067	7	Ditch	1065	Roman	1	10	10	Yes	Yes
1072	8	Ditch	1070	Roman	1	40	10	Yes	Yes
1084	9	Pit	1085	Roman	Unphased	10	10	Yes	Yes
1129	10	Ditch	1125	Roman	1	40	10	Yes	Yes
1192	11	Pit	1070	Roman	Unphased	20	10	Yes	Yes
1198	12	Ditch	1195	Roman	2	40	10	Yes	Yes
1244	13	Ditch	1243	Roman	2	40	10	Yes	Yes

Table 4: List of bulk samples

7.2.3 Discard policy

Remaining soil sample and residues (post scanning) will be discarded after a period of three months following submission of this report unless there is a specific request to retain them.

7.3 Results

7.3.1 Charred plant macrofossils and charcoal

The results are summarised in Tables 5–6.

Assessment shows that the environmental remains were poorly preserved. Assemblages consisted of only occasional charred cereal grains and charred seeds of fat hen (*Chenopodium album*), and small fragments of unidentified charcoal fragments. Consequently, no further work was carried out.

Uncharred remains, consisting of mainly root fragments and seed remains 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.

Context	Sample	Large mammal	Small mammal	Fish	Frog/td	Mollusc	Insect	Eggshell	Charcoal	Charred plant	Hammerscale	Artefacts	Comments
1030	2	occ	occ									mod fired clay.	
1032	3	occ						occ	occ			abt pot	
1033	1	occ							occ			mod pot.	
1044	4	occ	occ							occ		occ fired clay, pot	
1051	5	occ							occ	occ		abt fired clay, occ chert	
1056	6	occ	occ									abt fired clay, occ pot	
1067	7	mod	occ			occ		occ	occ	occ		occ fired clay	
1072	8	occ				occ			occ			occ fired clay, pot, Fe objects	
1084	9	occ	occ						occ	occ*		occ fired clay, coal, Fe objects	*= cereal & nutshell
1129	10	occ							occ	occ		occ fired clay, pot	
1192	11	occ							occ	occ		occ pot	
1198	12	occ	occ	occ	occ	occ	occ		occ	occ	occ	mod fired clay, occ pot	
1244	13	occ			occ					occ		occ coal, fired clay, pot, Fe object, Cu alloy slag	

Table 5: Summary of environmental remains; occ = occasional, mod = moderate, abt = abundant, * = probably modern and intrusive

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity
1030	2	ch	<i>Chenopodium album</i>	seed	+/low
1030	2	ch	unidentified wood fragments, unidentified	misc	+/low
1030	2	unch*	unidentified root fragments (herbaceous)	misc	++++/low
1030	2	unch*	<i>Atriplex</i> sp	seed	+/low
1032	3	ch	<i>Chenopodium album</i>	seed	+/low
1032	3	ch	unidentified wood fragments	misc	+/low
1032	3	unch*	<i>Chenopodium album</i> (fragment)	seed	+/low
1032	3	unch*	unidentified root fragments (herbaceous)	misc	++++/low
1033	1	ch	unidentified wood fragments	misc	+/low
1033	1	unch*	<i>Atriplex</i> sp, <i>Taraxacum</i> sp	seed	+/low
1033	1	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1045	4	ch	unidentified wood fragments, unidentified	misc	+/low
1045	4	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1045	4	unch*	unidentified seed, unidentified seed/spore	seed	+/low
1051	5	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1051	5	ch	unidentified seed	seed	+/low
1051	5	ch	unidentified wood fragments, unidentified herbaceous fragments, unidentified	misc	+/low
1051	5	unch*	<i>Chenopodium album</i> , <i>Chenopodium album</i> (fragment), <i>Atriplex</i> sp, unidentified seed	seed	+/low

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity
1056	6	ch	cf <i>Hordeum vulgare</i> grain (hulled), unidentified cereal grain/seed fragment	grain	+/low
1056	6	ch	<i>Triticum dicoccum/spelta</i> glume base	chaff	+/low
1056	6	ch	unidentified seed	seed	+/low
1056	6	ch	unidentified herbaceous fragments, unidentified	misc	+/low
1056	6	unch*	<i>Chenopodium album</i> , <i>Chenopodium album</i> (fragment), unidentified seed	seed	+/low
1056	6	unch*	unidentified root fragments (herbaceous)	misc	++++/low
1067	7	ch	unidentified seed	seed	+/low
1067	7	ch	unidentified wood fragments, unidentified	misc	+/low
1067	7	unch*	<i>Lemna</i> sp	seed	+/low
1067	7	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1072	8	ch	unidentified	misc	+/low
1072	8	unch*	<i>Lemna</i> sp	seed	+/low
1072	8	unch*	unidentified root fragments (herbaceous)	misc	++++/low
1084	9	ch	<i>Juncus effusus</i>	seed	+/low
1084	9	ch	unidentified seed	seed	+/low
1084	9	ch	unidentified wood fragments	misc	+/low
1084	9	unch*	<i>Chenopodium album</i> , <i>Chenopodium album</i> (fragment)	seed	+/low
1084	9	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1129	10	ch	<i>Carex</i> sp, unidentified seed, unidentified cereal grain/seed fragment	seed	+/low

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity
1129	10	ch	<i>Triticum</i> sp grain	grain	+/low
1129	10	ch	unidentified wood fragments, unidentified	misc	+/low
1129	10	unch*	<i>Rubus idaeus</i> , <i>Salix</i> sp (fruit), <i>Chenopodium glaucum/rubrum</i> , <i>Chenopodium album</i> , <i>Chenopodium album</i> (fragment), <i>Lemna</i> sp	seed	+/medium
1129	10	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1192	11	ch	unidentified seed/spore, unidentified cereal grain/seed fragment	seed	+/low
1192	11	ch	unidentified wood fragments, unidentified	misc	+/low
1192	11	unch*	<i>Chenopodium album</i>	seed	+/low
1192	11	unch*	unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1198	12	ch	<i>Rumex acetosella</i> , <i>Lemna</i> sp	seed	+/low
1198	12	ch	Cereal sp indet grain (fragment), Poaceae sp indet grain (small)	grain	+/low
1198	12	ch	unidentified wood fragments, unidentified	misc	+/low
1198	12	unch*	<i>Chenopodium album</i> , unidentified seed	seed	+/medium
1198	12	unch*	unidentified stem fragments, unidentified leaf fragments, unidentified root fragments (herbaceous), unidentified herbaceous fragments	misc	++++/low
1244	13	ch	unidentified seed, unidentified seed/spore	seed	+/low
1244	13	ch	unidentified wood fragments, unidentified	misc	+/low
1244	13	unch*	<i>Chenopodium album</i>	seed	+/low
1244	13	unch*	unidentified stem fragments, unidentified root fragments	misc	++++/low

Context	Sample	Preservation type	Species detail	Category remains	Quantity/diversity
			(herbaceous), unidentified herbaceous fragments		

Table 6: Plant remains from bulk samples

Key:

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

7.4 Animal bone by Alison Foster

7.4.1 Introduction

Hand-collected bone (weighing approximate 7.5 kg) and vertebrate remains from thirteen sediment samples were submitted for analysis. Dating of the phases of activity was broadly defined as follows: Phase 1 – 1st-mid 2nd century; Phase 2 – late 2nd to 3rd century.

Methods

Subjective records were made of the state of preservation, colour of the fragments, and the appearance of broken surfaces, with additional information recorded concerning the number of (refitted) fragments per bone, carnivore gnawing, burning, butchery and fragmentation (including fresh breakage), where appropriate. A bone ID number was allocated to one or more fragments representing individual identified skeletal elements. Data were recorded onto Excel sheets.

Fragments were identified to species or species group using the author's comparative reference collection and published works (e.g. Schmid 1972). Distinctions between sheep and goat bones were undertaken using comparative material, with reference to Prummel and Frisch (1986) and Zeder and Pilaar (2010). Equid remains were also examined with reference to Johnstone (2004; chapter 4) and Hanot and Bochaton (2018) and were differentiated where possible. Fragments that could not be identified to species were grouped into size categories: large mammal (assumed to be cattle, horse or large deer (cervid)); medium-sized mammal 1 (assumed to be sheep/goat (caprine), pig or small deer); medium-sized mammal 2 (from a cat or hare-sized mammal) and completely unidentifiable. Skeletal elements which could be identified to species were recorded using the diagnostic zones method described by Dobney and Rielly (1988).

Tooth wear stages for cattle and caprines were recorded using the scheme outlined by Grant (1982), and age categories follow those defined by O'Connor (2003). Age-at death derived from equid teeth were estimated using Hillson (2005). Where present, epiphyseal fusion data were recorded and ages estimated following Silver (1969). Mammal bones were described as 'juvenile' if the epiphyses were unfused and the associated shaft fragment appeared spongy and porous, and 'neonate' if the element was also tiny. Metrical data were collected where possible, following the systems established by von den Driesch (1976). Cattle withers height was calculated using the multipliers devised by Matolcsi (1970). Nomenclature for mammal and amphibian species from the sediment samples follows Harris and Yalden (2008) and Arnold and Ovenden (2004) respectively.

7.4.2 Results

The excavations produced approximately 7.5 kg of hand-collected vertebrate remains comprising 611 fragments which represented 435 bones after refitting. Most of the bone was derived from features dated from the 1st to mid-2nd century (Phase 1) with a smaller amount from the late 2nd to the 3rd

century (Phase 2). A further single calcined fragment from a sheep-sized mammal was recovered from the fill of a small pit [1305], but as this feature remains unphased and unassigned to a context group the fragment was not included in the data.

The assemblage is summarised in the following tables: Tables 7 and 8 present a summary of the hand-collected vertebrate remains identified to species (NISP – number of identified specimens) by Phases 1 and 2 respectively, further subdivided by Context Group; Table 9 quantifies the vertebrate remains by phase and context group, and gives information on preservation and taphonomic processes; Table 10 presents the metrical data, and tooth wear stages are recorded in Table 11. A small amount of bone was extracted from environmental sample residues and is quantified and identified in Table 12.

Phase 1 features produced the most bone (277 identifiable specimens, Table 7). Deposits assigned to CGs 2, 4 and 7 contained the most bone, with additional fragments from CGs 5, 6 and 14. Very little material was recovered from CGs 9, 16, 17 and 24. Phase 2 features yielded 158 bones, most of which were derived from the fills of a ring-ditch (CG3), with a few more from CGs 1, 8 and 22, and odd fragments from CGs 10, 11, 12 and 20. The condition of the bones throughout both phases was generally good to moderate, with better preservation in some context groups. However, as can be seen in Table 9, taphonomic processes before and during burial, and fresh breakage during recovery, have combined to produce a much-fragmented assemblage.

Cattle and caprine bones dominated the identified material, with some of the latter more closely identified as sheep. It is likely that the fragments categorised as large and medium-sized mammal are also derived from cattle and sheep. There was a significant component of equid bones, some of which displayed diagnostic features which have been identified as horse (*Equus caballus*) rather than donkey (*Equus asinus*) or the hybrid mule. Very few dogs and pig remains were present – the dearth of pig bones may be partly ascribed to early slaughter age and the disproportionate loss of fragile juvenile bones. With the exception of a common stoat (*Mustela erminea*) mandible from the fill of a ring-ditch, and an amphibian long bone from the lower fill of the ring-ditch, there was no evidence for any wild species and no bird bone in the hand-collected component.

Given the modest size of the assemblage and the degree of fragmentation, analytical methods would not yield meaningful results and this has not been attempted. However, the bones have been recorded as fully as possible to enable their availability for integration into any future analyses of Romano-British animal bone from the period and/or region and a bone-by-bone catalogue of the assemblage has been submitted as part of the archive. Notable characteristics of the assemblage are detailed below, by phase and context group.

Phase 1: (1st – mid 2nd century)

Enclosure (CG2)

Most of the bone was recovered from the lower ditch fill (1030) of [1028]. Preservation was mostly good but with frequent fresh breakage. Fifty four identified specimens were recovered: nine of these were freshly broken long bone shaft fragments which could not be refitted but were probably all parts of the same skeletally mature equid metacarpal. A 2nd phalanx was also recovered from this fill, from a different, larger equid than the metacarpal. The proximal articular surface of this phalanx had ankylosed to the distal end of the 1st phalanx with lumpy exostoses formed on the dorsal, medial and lateral aspects. These modifications are characteristic of a degenerative joint disease commonly known as 'ringbone' and seen more often in the forelimbs. There are several causes, including repetitive stress in the pastern region caused by overwork but the condition can simply develop with age. This horse would have lost flexibility in the pastern joint, above the coronet of the hoof, and the worsening lameness would have ended its useful life. Cattle bones included an astragalus with chop marks signifying jointing of the limb at the hock. Further butchery evidence was noted on a piece of cattle mandible which had been chopped, perhaps to extract the marrow. Caprine remains were limited to loose teeth (including one, unworn, deciduous premolar from a very young lamb/kid).

Environmental sample <2>, taken from (1030) also produced a deciduous caprine incisor (Table 12). Other fragments identified to species from this context group were a 4th metacarpal from a pig and a small piece of pelvis, possibly from a dog.

Enclosure (CG4)

Preservation of the material was, on the whole, good although some fragments from the lower fill (1030) of [1031] were encrusted with very hard grey concretions. Context (1048) contained an associated bone group which comprised the left radius and ulna, some carpals, the metacarpal and a 1st phalanx of a horse. The metrical data for the measurable elements are listed in Table 10. Unfortunately no long bones survived intact for calculating a withers height for this animal but the greatest length of the 1st phalanx GL was only one mm shorter than the corresponding element from a modern pony of 12.2 hh (approx. 124cm). Cattle were represented by isolated teeth and a 1st phalanx, while the caprine remains were similarly also mainly teeth, together with a few lower leg elements including a 1st phalanx, a calcaneus which was more closely identified as sheep and a very small metatarsal from a lamb or kid. An unfused pig 1st phalanx was also recovered.

Enclosure (CG5)

The condition of bone from this area of the enclosure ditch was mostly good with some fragments from the upper fill of [1057] showing more moderate preservation. However, severe fragmentation throughout meant that most of the material could only be categorised to size. The few identifications made included two cattle scapulae from top fill of [1075] (one with butchery marks to the neck) and a mandible fragment from an adult caprine. The hand-collected assemblage was supplemented by a fragment of dog maxilla from sample <7>, taken from Context (1067).

Enclosure (CG6)

Bone was generally well-preserved but, similar to CG4, material from the lower fill of [1070] was badly affected by hard, grey concretions. Two fragments of equid metapodial, possibly from the same element, were found in (1274). This deposit also contained a small piece of dog mandible from an adult individual with 3rd and 4th premolars and 1st molar *in situ*, all worn, particularly the molar. This, and the maxilla fragment from Sample <7> (CG 5) were the only securely identified dog remains from Phase 1. Cattle bones consisted of skull fragments and a single permanent upper premolar from an upper fill (1108), together a small piece of humerus and a chewed metatarsal from (1080), which also produced a fragment of pig mandible retaining a small canine (male).

Ditch (CG7)

Except for the lower fill (1127), preservation was largely good but much of the assemblage had been reduced to very small pieces with barely any zones recorded. Identifiable equid material included four metapodial fragments from (1222), probably all part of the same metacarpal, a small piece of distal radius from (1128) and a piece of skull from (1127) – a fill which also produced a few broken pig teeth. Further identifiable bones were restricted to fragments of cattle femur and metacarpal with a caprine loose molar and axis fragment from (1127), plus a broken cattle carpal and a piece of caprine metatarsal from (1129).

Ditch (CG9)

What was recovered was generally well-preserved but very fragmented and the only identification made was a cattle carpal which had been gnawed by a dog.

Ditch (CG14)

Although preservation in the fill of this small ditch was similar to most other features, being a mixture of good with some moderate, the bones were less fragmented and had perhaps been relatively undisturbed. Most were recovered from the upper fill (1286) with just a few from the terminus (1230) and one from the base (1287). Context (1286) contained several large cattle bones representing at least two individuals and including two tibiae (one representing a small animal with a withers height calculated at 99.5 cm), three pelvises, a femur and humerus. There were also five loose maxillary teeth

from same side comprising a 4th deciduous premolar, 1st molar (worn), 2nd molar (slightly worn), and unerupted 3rd and 4th premolars, which suggests that these might be the only surviving evidence for a more complete skull. A cattle calcaneus was found in the ditch terminus and two caprine metapodial shaft fragments were present in Context (1286).

Ditch (CG16)

Three identifiable fragments were found in the fill (1224) of slot [1223] comprising a lower molar identified as horse and a piece of equid pelvis with a cattle proximal radius moderately preserved which fragmented during recovery.

Ditch (CG17)

A caprine upper molar was found in the fill of Gully [1232].

Ditch (CG24)

Bone from this context group was well preserved and almost all was found in the ditch [1251] terminus. Only ten fragments were recovered, including a horse distal tibia with cuts to the edge of the articulatory surface on the lateral side, a cut to the lateral metaphysis, a further tiny cut to the posterior aspect of the metaphysis and a tiny cut to the anterior aspect of the distal shaft. Marks to the shaft may have been inflicted during skinning or as the tendons were severed, and those to the distal end could be the result of careful disarticulation, as the carcass was jointed for easier processing and/or disposal. The only other identified element from this fill was a caprine upper molar while a much-concreted caprine metatarsal was found in the basal fill (1241).

Ungrouped contexts

The single fill (1003) of Ditch [1004] produced two cattle teeth and a small piece of pig femur. Context (1260), the top fill of Pit [1263] contained just two fragments including a piece of cattle tibia shaft.

Species		Phase 1											Total
		2	4	5	6	7	9	14	16	17	24	0	
<i>Canis f. domestic</i>	dog	-	-	-	1	-	-	-	-	-	-	-	1
Cf. <i>Canis f. domestic</i>	?dog	1	-	-	-	-	-	-	-	-	-	-	1
<i>Equus f. caballus</i>	horse	-	1**	-	-	1	-	-	1	-	1	-	4
<i>Equus sp.</i>	equid	10*	-	-	2	5	-	-	1	-	-	-	18
<i>Sus f. domestic</i>	pig	1	1	-	1	2	-	-	-	-	-	1	6
<i>Bos f. domestic</i>	cattle	6	4	4	5	3	1	10	1	-	-	3	37
Caprine	sheep/ goat	4	8	3	1	3	-	2	-	1	2	-	24
<i>Ovis f. domestic</i>	sheep	-	2	-	1	-	-	-	-	-	-	-	3
Large mammal		12	10	12	6	17	1	3	-	-	3	5	69
Medium-sized mammal 1		-	8	3	1	1	4	-	-	-	3	3	23
Medium-sized mammal 2		-	-	-	-	-	-	-	-	-	-	-	-
Unidentified mammal		20	15	9	12	21	2	5	-	-	1	6	91
Total NISP		54	49	31	30	53	8	20	3	1	10	18	277

Table 7: Hand-collected vertebrate remains (NISP – number of identified specimens) from Phase 1 by Context Group. * Includes nine fragments of metacarpal, possibly all from the same element. ** ABG from (1048). 11 bones from left forelimb counted as one bone

Phase 2: (Late 2nd–3rd century)

Ditch (CG1)

The majority of the bones were recovered from the upper fill (1005) of Ditch [1007]. They were mainly well-preserved but very fragmented. Identifications included a piece of equid femur distal shaft, two cattle lower molars and a caprine upper molar. An equid astragalus from the secondary fill (1107) of Ditch [1105] was characterised by a slightly porous articular surface and may be from an immature individual.

Ring-ditch (CG3)

This feature produced the most bone recovered from Phase 2 with the richest contexts being (1043), (1045), 1113 and (1145). On the whole, the assemblage was quite fragmented but relatively well-preserved with a little more variability in an upper fill, Context (1113). A few small burnt fragments were found in (1043) and (1044). Evidence for all the main domestic mammals was present: the cattle remains represent an atlas, calcaneus, scapula, humerus and tibia, while the caprine bones comprise fragments of metacarpal, astragalus, radius, humerus, axis and an upper molar. The few pig elements – calcaneus, skull and pelvis fragments – were from juveniles. The remaining identified bones were an equid minor metapodial and a dog canine tooth with a very worn tip. Four of the bones showed signs of carnivore gnawing and two had been butchered. The mandible of a common stoat (*Mustela erminea*) was found in a lower fill (1045).

Ring-ditch (CG8)

Further bones were recovered from the fills of another ring-ditch [1195] to the north which was only partly within the site. The upper fill (1198) contained fragments of cattle ulna, metapodials and a fused femur head. Caprine remains were limited to a few loose teeth and a small fragment of proximal tibia.

Gully (CG10)

The terminus fill produced just two fragments: a piece of cattle pelvis and a caprine mandible with a near-complete tooth row, categorised as an older adult ('Adult 3' (O'Connor 2003)).

Ditch (CG11)

Just eight bones were recovered, scattered throughout the various fills of this large ditch. Cattle bones comprised a small piece of pelvis and a much fragmented distal humerus shaft. Caprine remains were limited to an isolated tooth and a fragment of metatarsal shaft.

Ditch (CG12)

Just two tiny indeterminate fragments (one calcined) were recovered from the lowest fill (1168) of this ditch.

Ditch (CG20)

Fill context (1111) contained a horse premaxilla (incisors lost), a small piece of cranium, and cheek teeth from both left and right sides. These may be the surviving fragments of a horse skull. No evidence was found of the mandibles or incisors. The existing cheek teeth were all erupted and in wear indicating an animal of at least three years and most likely over five years (Hillson 2005). Also present were two pieces of equid radius, almost certainly from the same bone, a fragment of cattle mandible and a broken cattle tibia. The cattle tibia could be closely refitted giving an estimated withers height of 109.5cm. The fill of the terminus (1083) contained a caprine mandible with fully adult dentition.

Ditch (CG22)

This contained a cattle tibia and humerus (from Context (1244)), largely complete but too damaged to be measured. Context (1252) produced further cattle remains comprising an isolated tooth, together with a fragment of cervical vertebra and the proximal end of a metacarpal both of which showed

butchery evidence, and a single caprine molar. Both of these deposits were interpreted as deliberate backfill.

Vertebrate remains from environmental samples

Identifiable bone from the sample residues was scarce (see Table 12). Mammals identified were restricted to vole (*Arvicola/Myodes* spp.) from Context (1030) (Phase 1) and wood mouse (*Apodemus sylvaticus*) from context (1198) (Phase 2): A few frog/toad and undistinguished amphibian bones were present in Context (1067) (Phase 1), and Contexts (1198) and (1244) (Phase 2), indicating these features provided a damp environment for at least part of the year. A concentration of burnt bone from a ten litre sample (Sample <7>, Context (1067), Phase 1) may indicate a dump of burnt material: the comminuted fragments also suggest a significant degree of attrition either before or after deposition. Tiny fragments of bird eggshell were also extracted from two sample residues. Microscopic examination revealed the shell wall of these to be slightly thinner than that of modern domestic fowl but this does not necessarily assist with identification. Chickens (*Gallus gallus domesticus*) of this period were significantly smaller than modern breeds (Foster 2018) and the eggs they laid would have been proportionally smaller too, possibly with thinner shell walls. All that can be concluded is the presence of avian egg shell from birds larger than pigeons and smaller than geese.

Species		Phase 2								Total
		1	3	8	10	11	12	20	22	
<i>Canis f. domestic</i>	dog	-	1	-	-	-	-	-	-	1
<i>Equus f. caballus</i>	horse	-	-	-	-	-	-	3	-	3
<i>Equus</i> sp.	equid	2	1	-	-	-	-	-	-	3
<i>Sus f. domestic</i>	pig	-	3	-	-	-	-	-	-	3
<i>Bos f. domestic</i>	cattle	2	6	4	1	2	-	2	5	22
Caprine	sheep/goat	1	7	5	1	2	-	1	1	18
<i>Mustela erminea</i>	stoat	-	1	-	-	-	-	-	-	1
Large mammal		3	15	3	1	3	-	-	4	29
Medium-sized mammal 1		1	12	6	1	-	1	-	2	23
Medium-sized mammal 2		1	-	-	-	-	-	-	1	2
<i>Rana/Bufo</i>	frog/toad	-	1	-	-	-	-	-	-	1
Unidentified mammal		-	49	-	-	1	1	-	1	52
Total NISP		10	96	18	4	8	2	6	14	158

Table 8: Hand-collected vertebrate remains (NISP – number of identified specimens) from Phase 2 by Context Group.

CG	No of bones	Fragment count	Fresh breaks %	Preservation	Gnawed	Burnt	Butchered
Phase 1							
2	54	68	24	Good preservation	-	-	2
4	49*	94**	18	Moderate to good preservation. Bone	1	-	2

CG	No of bones	Fragment count	Fresh breaks %	Preservation	Gnawed	Burnt	Butchered
				from (1032) highly concreted			
5	31	38	29	Moderate to good preservation	1	1	2
6	30	44	23	Mainly good preservation, some cracking and flaking surfaces on bone from (1080)	1	1	2
7	53	59	21	Moderate to good preservation	-	-	1
9	8	11	25	Moderate to good preservation	1	-	-
14	20	46	55	Moderate to good preservation. Very fragmented	-	1	4
16	3	13	33	Moderate to good preservation	-	-	-
17	1	1	0	Good preservation	-	-	-
24	10	16	30	Good preservation	1	-	1
No CG	18	19	22	Moderate to good preservation	-	-	-
Total	277	409			5	3	14
Phase 2							
1	10	13	30	Moderate to good preservation	-	-	-
3	96	103	11	Some variability, especially in (1044)	4	3	3
8	18	20	28	Moderate to good preservation	1	-	3
10	4	4	25	Good preservation	-	-	-
11	8	14	63	Good preservation	1	-	-
12	2	2	50	Moderate preservation	-	1	-
20	6	23	67	Good preservation	-	-	-
22	14	23	64	Good preservation	1	-	2

CG	No of bones	Fragment count	Fresh breaks %	Preservation	Gnawed	Burnt	Butchered
Total	158	202			7	4	8
Grand Total	435	611			12	7	22

Table 9: Hand-collected vertebrate remains – quantification, preservation and taphonomy by phase and context group/feature. Key: 'CG' = Context Group; 'Fresh Breaks %' = number of bones displaying fresh breaks as a percentage of total number of bones.

Element	Species	Phase	CG/Context	Bone ID	Bp	Bd	BFp	BFd	
<i>Radius</i>					Bp	Bd	BFp	BFd	
	Horse	1	4/1048	ABG	69.25	62.79			
	Horse	2	20/1111	137	76.69		71.13		
	Horse	2	20/1111	138		73.11		62.20	
	Sheep	1	6/1108	135	30.35				
<i>Metacarpal</i>					Bp	Dp	Bd		
	Horse	1	4/1048	ABG	43.11				
	Equid	1	2/1030	23	46.36	29.4	44.94		
	Equid	1	7/1222	224	48.26				
<i>Phalanx 1</i>					Bp	Bd	GL	SD	Glpe
	Horse	1	4/1048	ABG	48.09	40.21	72.77	29.13	
	Cattle	1	4/1032	40	26.72	24.52		21.85	50.37
	Sheep	1	4/1173	188	9.81	9.21		7.92	28.01
					Bd				
	Equid	1	2/1030	25	49.1				
<i>Femur</i>					DC				
	Cattle	1	14/1286	271	46.04				
<i>Astragalus</i>					Bd	GLm			
	Cattle	1	2/1030	21	36.2	57.17			
<i>Calcaneus</i>					GL	GB			
	Sheep	1	4/1034	53	45.16	17.14			
<i>Tibia</i>					GL	SD	DD		
	Horse	1	24/1249	247			39.45		
	Cattle	2	20/1111	136	319.00	33.64			
	Cattle	1	14/1286	268	290.00	29.82			
	Cattle	1	14/1286	269		33.91			
<i>Metatarsal</i>					Bd				
	Equid	1	6/1274	264	42.27				

Table 10: Hand-collected vertebrate remains. Metrical data (following von den Driesch 1976) for domestic mammals, by element. All measurements are in mm. Key: 'CG' = Context Group.

Phase	Species	Context	Bone ID	p4	P4	M1	M1/2	M2	M3	Notes	Age category	
1	Cattle	1003	1				c			loose tooth		
		1034	52				f			loose tooth		
	Caprine	1029	20	a							loose tooth	
		1127	155					g			loose tooth	
		1173	190					g			loose tooth	
		1173	189							g	loose tooth	Adult 3
		1178	200					g			loose tooth	
		1178	199			g			d		mandible fragment	
2	Caprine	1156	182				c			loose tooth		
		1160	185					g	e	mandible fragment	Adult 3	
		1183	202		h	g		g		mandible fragment	Adult	
		1197	206			g					loose tooth	
		1197	207					g			loose tooth	
		1198	216							b	loose tooth	Adult 1
		1252	255					g			loose tooth	

Table 11: Hand-collected vertebrate remains. Tooth wear stages for mandibles and loose teeth for cattle and caprines (Grant 1982), with age categories (O'Connor 2003) where possible, by phase.

Phase	CG	Context	Sample no	Sample vol (l)	Weight (g)	Count (sq)	MLD (mm)	Notes and identifications
1	2	1030*	2	10	3	3	18	Caprine: deciduous incisor Vole (<i>Arvicola/Myodes</i> spp.): femur Rare tiny calcined and charred fragments
	4	1033*	1	10	<1	1	10	Rare tiny, calcined fragments
		1032*	3	10	3	2	24	Indeterminate bone Bird eggshell (3 fragments)
	5	1067	7	10	28	4	40	Dog (<i>Canis</i> f. domestic): maxilla fragment Frog/toad (<i>Rana/Bufo</i> spp.): vertebra Frequent calcined and rare charred fragments Bird eggshell (1 fragment)
	6	1051	5	20	5	3	17	Frequent charred and occasional calcined fragments
		1072	8	40	1	1	16	Caprine: 2nd phalanx Rare, calcined fragments
	7	1129*	10	40	4	3	17	Rare, tiny calcined and charred fragments
2	3	1044*	4	40	1	2	20	Medium-sized mammal 1: 3x tooth enamel fragments Single tiny calcined fragment
	8	1198*	12	40	2	3	20	Caprine: deciduous incisor Medium-sized mammal 1: caudal vertebra

Phase	CG	Context	Sample no	Sample vol (l)	Weight (g)	Count (sq)	MLD (mm)	Notes and identifications
								Wood mouse (<i>Apodemus sylvaticus</i>): mandibular M1 Common toad (<i>Bufo bufo</i>): ilium Common frog (<i>Rana temporaria</i>): urostyle Rare calcined and charred fragments
	22	1244*	13	40	2	3	15	Rodent: lower incisor Frog/toad: long bone fragments Rare calcined and charred fragments
Unph		1056	6	10	3	3	12	All fragments burnt grey/calcined
		1084	9	10	2	3	18	Small mammal: caudal vertebra and vertebra fragment Occasional charred and occasional calcined fragments
		1192	11	20	1	2	7	Rare calcined and charred fragments

Table 12: Vertebrate remains and bird eggshell recovered from sample residues. Key: 'CG' = Context Group; 'Sample vol' = volume of processed sample in litres; '(g)' = grams; '(l)' = litres; 'sq' = semi-quantitative abundance score relating to bone fragments; '1' = rare (1-5); '2' = occasional (6-15); '3' = frequent (16-50); '4' = abundant (51-200); '5' = super-abundant (200+); 'MLD' = maximum linear dimension in mm; 'Unph' = unphased; '**' = hand-collected bone recovered from this context.

7.4.3 Discussion

Excavations at Swindon Farm produced a small assemblage of animal bone from features assigned to two phases spanning the 1st to the 3rd centuries, with most of the fragments recovered from the earlier period. Interpretation of the remains is restricted by the small amount of data obtained but some general observations and comments on interesting aspects of the assemblage can be made.

Hand-collected bones were identified almost solely as the remains of common domestic mammals, with cattle and caprines dominating the assemblage. A few of the caprine bones were identified more closely as sheep and, as the evidence for goats in Roman Britain is sparse and limited mainly to horncores associated with traded skins (Albarella and Pirnie 2019), it is reasonable to assume that most or all of the undistinguished caprine bones are also of sheep. Several of the equid bones and teeth displayed diagnostic features consistent with horse – unsurprising given the scarcity of confidently identified donkey and mule remains from this period. It is likely that all the equid bones are of small horses that today would be categorised as ponies. A few pig and dog bones were also present.

Although the condition of much of the material appeared to be of good or good to moderate preservation, the assemblage had suffered significant fragmentation, both pre-deposition and during recovery. Loss of more fragile elements due to taphonomic processes was strongly suggested by a survival bias towards more robust elements and the frequency of isolated teeth. Much of the evidence for animals which are routinely slaughtered at a young age, such as pigs, is likely to have been lost. Less well-preserved fragments were often found in the lower fills of features, and a number of these lower fills contained bone which was also severely affected by mineralised concretions, possibly due to a fluctuating water-table.

The age-at-death data from epiphyseal fusion and tooth wear are far too few for meaningful interpretation. There is a general lack of very young animals but their remains would have been more vulnerable to chemical and mechanical processes. A few juvenile caprine bones and deciduous teeth,

recovered by hand-collection and from sample residues, indicate sheep-breeding nearby during both phases. The fragment of common stoat mandible found in the Phase 2 ring-ditch may not be contemporary with when the structure was in use. These small carnivores typically live in burrows taken over from prey animals and the mandible may represent an individual colonising the area after abandonment. Alternatively, such a small fragment may have moved down through the deposit by the action of earthworms or other soil fauna.

Butchery marks were very scarce (Table 9), with no significant concentrations of affected bones. A few chop marks showed where carcasses had been jointed and some splitting of long bones suggested these had been further processed, perhaps for soup or marrow extraction. The heavy cleaver marks seen on cattle bone from urban and military sites in the Roman period are absent here, suggesting that careful disarticulation with knives may still have been a preferred technique. A horse tibia found in a Phase 1 ditch terminus [1251] also showed signs of butchery. Tiny cuts to the shaft and distal end suggest careful processing – perhaps skinning and the recovery of meat prior to disposal. It is unlikely that the meat was for human consumption but it may have been fed to dogs – a few gnawed bones attest to their presence on site.

Two small assemblages could arguably have been placed 'special' deposits, perhaps ritual rather than functional. The horse foreleg found in the Phase 1 ditch (1048, CG4) was recovered unarticulated but with no evidence of other equid remains in the same deposit which might indicate more of the carcass was originally interred. Comparison with modern reference material suggests an animal approximately 12.2 hh (127cm) at the withers – about the size of a modern Exmoor pony. Albarella *et al* (2008) calculated a mean withers height for Iron Age ponies of 12.2 hh, while the mean for Roman horses at the transitional period was higher at 13.2 hh (134cm) However, these data were from Elms Farm, Essex, and horse breeding further inland may not have had the same 'improvement' influences.

Fragments of a horse skull were found in a small Phase 2 ditch (CG20). There was no evidence for upper incisors or any mandibular bone or teeth among the material recovered. The rostral bone which surrounds the incisors is fragile and easily broken and incisors are lost at an early stage of decomposition if horse skulls are left exposed. Likewise, as the soft tissues decay the mandibles will fall away. These absences suggest the skull was probably skeletal when buried and so may represent a previously curated artefact.

7.4.4 Retention/disposal

The vertebrate remains should be retained as part of the physical archive of the site.

8 Discussion

The results of the excavation have identified a relatively short-lived but evolving sequence of Roman activity. This activity could be broadly separated into two phases based on stratigraphic and artefactual evidence. This activity likely started in the early Roman period (mid-1st to mid-2nd centuries AD) and continued into the mid Roman period (late-2nd to 3rd centuries AD). This activity appeared agrarian in character, with only limited evidence for settlement. The focus of activity occupied a relatively small footprint and appears to have continued down the slope towards the nearby River Swilgate. While a handful of undated features were also identified, no activity definitively dating to any other periods was identified, except for modern ceramic land drains.

8.1 Phase 1 (mid-1st century to mid-2nd century AD)

The earliest activity identified within this initial phase consisted of a large, rectangular ditched enclosure, with a small number of smaller associated ditches and gullies. These features contained few finds, suggesting agrarian activity. The enclosure (CG2) was likely in use as a stock enclosure to hold livestock, with the smaller gullies and ditches forming access routes and controlling the flow of activity outside of the enclosure. Early on in this phase the rectangular enclosure was re-excavated

(CG4), likely after having silted up. This replacement ditch maintained broadly the same footprint for the enclosure and was of a similar depth. The external gullies were also changed early on, possibly at a similar time as the re-excavation of the enclosure. An existing entrance between two small gullies appears to have been enhanced, with the addition of two short, parallel gullies, one on either side of the entrance. The most northerly of these (CG24) contained notably large sherds of pottery hinting that domestic occupation was present during this phase but more in this direction.

At some point after this re-excavation, a smaller square enclosure (CG5) was added immediately to the north-east of the original enclosure. This feature truncates the earlier enclosure ditches, suggesting they may have been partially infilled by the time this feature was added, but it is considered likely that the two enclosures were both in use concurrently. As well as being smaller and squarer than the earlier enclosure, this feature had an entrance at its northern corner. The addition of this second enclosure may indicate a change in the use of the site, perhaps with the two enclosures being used for sorting livestock, perhaps in relation to batching, inspection, confining and sorting. This would fit with patterns of agricultural activity observed throughout the prehistoric and beyond, to control and separate livestock (Pryor 1998).

Later these two enclosures were replaced by a single, large rectangular enclosure encompassing the combined footprint of the previous two features. This new enclosure had an entrance at its northern corner, in the same place as the smaller square enclosure before, and contained a shallow internal ditch that divided the enclosure broadly in two. New smaller ditches had also been added outside of the enclosure, immediately to its north-west, and were likely to control access and movement. This change in structure may represent a formalisation of the change seen previously, with the introduction of the second enclosure.

The enclosure system appeared to remain the same up until the end of this phase, with the addition of a large ditch (CG7) running across part of the site. It is considered likely that this feature turned, possibly in both directions, and followed the same path seen in the later ditch (CG11) from Phase 2. It is possible that this feature was an earlier version of the Phase 2 boundary ditch, but that the later recuts completely truncated this feature within the slots that were excavated. Around the same time, a small number of other features were added, including shallow pits and a possible extension to an earlier gully.

The latest structural activity identified in this phase consisted of less substantial features, including a possible small enclosure or pen added on to the side of the main stock enclosure. This feature (CG13) truncated the top of the boundary ditch, suggesting it was at least backfilled later, so may have continued in use into Phase 2.

8.2 Phase 2 (late-2nd to 3rd century AD)

While some more substantial changes were encountered later on in Phase 2, the start of this phase did not differ particularly from the end of the previous phase. The earliest activity of this new phase consisted of a number of gullies and small ditches, all of which were either added on to the existing structures, or respected them. A small, square area (CGs 1 and 12) was enclosed external to the northern corner of the large stock enclosure, and was likely also in use for livestock. This addition may represent a further change in the type of stock present, or in the methods used to organise existing stock.

The main change encountered in this phase consisted of the addition of a large ovoid ring-ditch (CG3) immediately to the north-east of the large enclosure, partly truncating its north-east side and completely truncating the small square enclosure added on at the start of this phase. No internal features were present within this feature. However, it is possible that the site has been truncated somewhat, partly suggested by the general paucity of discrete features found across the site, so it is very likely that any shallower internal features will have been lost. An increased quantity of domestic finds were recovered from the fills of this ring-ditch, which may indicate this as now a definite focus of domestic activity. This ring-ditch was fairly substantial and with no visible entrance, but was also quite

a bit smaller than the large stock enclosure. It seems unlikely that a sudden change to smaller ovoid enclosures would be seen after continued use of square and rectangular stock enclosures for a century or more. It is considered more likely that this feature contained a domestic structure, likely a roundhouse, but that any postholes or other features relating to it have since been truncated and lost. A similar feature (CG8) was also identified at the northern corner of the site, but was only partly visible as it continued beyond the extent of the excavation. From the visible part of this feature, it appeared to be around the same size as the complete ring-ditch, and of a similar form. This may represent a second domestic structure, but also shows that site activity continued to the north-east. Again the largest sherds of pottery were found on this side of the site (ie in ditch CG22). A principal question raised by these ring-ditch features would be that, if these represent domestic structures, had such structures also been present in the first phase, though too shallow to survive? It is suspected that they hint at the main settlement focus being to the north-east of the site, also due to an increased scale of finds in this direction within the site. However, it also remained unclear whether these substantial ring-ditches were entirely contemporary with each other.

The latest activity included the large boundary ditch (CG11) running along the north-west side of the site. However, this may not have been a new feature, but, rather, the re-establishment, on a bigger scale, of an earlier land boundary. This was the furthest feature in this direction that contained Roman material, and appeared to be an external boundary enclosing the settlement. This feature was also seen to truncate the ring-ditch at the northern site corner. There was also a suggestion, therefore, that this might have been accompanied by some changes in settlement arrangements. However, it might also represent the abandonment of all domestic features in favour of a field system with the final abandonment of the site.

8.3 Undated features

A small number of undated features were identified across the site, consisting of a ditch in the northern corner, and a number of pits (Fig 2). A few of these undated pits were identified within the Roman activity and likely related to one of the two phases. A few pits were also found outside of the main area, and may relate to later agricultural or transient activity. The ditch in the northern corner was considered likely to be of a later date, and may relate to medieval or post-medieval agricultural activity.

8.4 Artefactual and environmental evidence

The pottery assemblage was consistent with a rural assemblage and, as the majority of the sherds were identified from ditch fills, might suggest some deliberate discard of domestic waste, especially where associated with more noxious material, such as butchery waste. Other finds, including fragments of tegulae, a loom weight, and probable hearth lining material, would certainly seem to indicate the presence of domestic structures within the site. The environmental remains were poorly preserved with only occasional charred cereal grains recovered. Small fragments of eggshell recovered from two environmental samples may indicate the presence of domestic fowl, and are a rare find. The animal bone assemblage consisted primarily of horse, sheep/goat and cattle, which would be consistent with a small pastoral farmstead, while the focus on enclosures, with smaller satellite ones, might well lend itself to stock management especially for smaller animals, and perhaps, therefore, sheep in particular.

8.5 Research objectives

This site has the potential to contribute to a number of regional research agendas presented in *The Research Framework for the South West* (Holbrook 2007). In particular, this document discusses the need for a better understanding of agricultural, social and economic life for the Roman period. As a small, rural, agricultural settlement, this site contributes to our understanding of non-villa Roman rural settlements (Research Aim 29). Records for such sites are limited due to past work, focussing on more high status sites. Being a site of an earlier Romano-British date, this may also contribute to our

understanding of the impact of 'Romanisation' on farming, for example on plant and animal use, and farming methods.

9 Conclusions

This excavation has revealed a mid-1st to 3rd century AD Roman rural site, consisting of a relatively stable farmstead with limited phases of activity. The nature of the features indicate pastoral farming activities, with large stock enclosures and boundary ditches, along with possible domestic features. While the overall footprint of the site remained broadly consistent throughout its use, the large stock enclosures were frequently re-excavated, sometimes to subtly change their layout and scope, but likely also to clean out and re-establish the features. As the site was situated towards the bottom of a slope, near a brook, and on a clay natural, waterlogging, and its attendant silting, may have been an issue. While there is no evidence of domestic structures from the first phase, it is considered possible that such features had been present within the site, but been completely truncated. During the subsequent phase and next to the stock enclosures, two large ovoid ring-ditches were added which may well have enclosed roundhouses or other domestic structures. No internal features were present within either, but again, it is likely that shallower features have since been truncated.

The finds assemblage was consistent with that expected for a rural site, and pottery remains were sufficient to indicate the presence of domestic activity in the vicinity. The animal bone assemblage was identified as common domestic animals consistent with a small rural farmstead. This assemblage may indicate the presence of sheep breeding, which may have been conducted on this site. This would fit with site interpretation of features representing the changing arrangements of stock enclosures, where, for instance, breeding and non-breeding livestock were being separated.

The methods adopted allow a high degree of confidence that the aims of the project have been achieved. Conditions were suitable across the majority of the site to identify the presence or absence of archaeological features, and so it is considered that the nature, density and distribution of archaeological features provides an accurate characterisation of the development site as a whole. However, it is noted that the north-east corner of the site was subject to waterlogging during the excavation, due to the poor weather conditions.

10 Project personnel

The fieldwork was led by Elspeth Iliff, ACIfA, assisted by Peter Lovett, ACIfA, Graham Arnold, ACIfA, Hazel Whitefoot, PCIfA, John Jackson, PCIfA, Chris Crump, Jo Losh, Constance Mitchell, and Sophie Hobday.

The field project was managed by Tom Rogers, MCIfA, and the post-excavation by Derek Hurst Dip Archaeol FSA. The report was produced and collated by Elspeth Iliff. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

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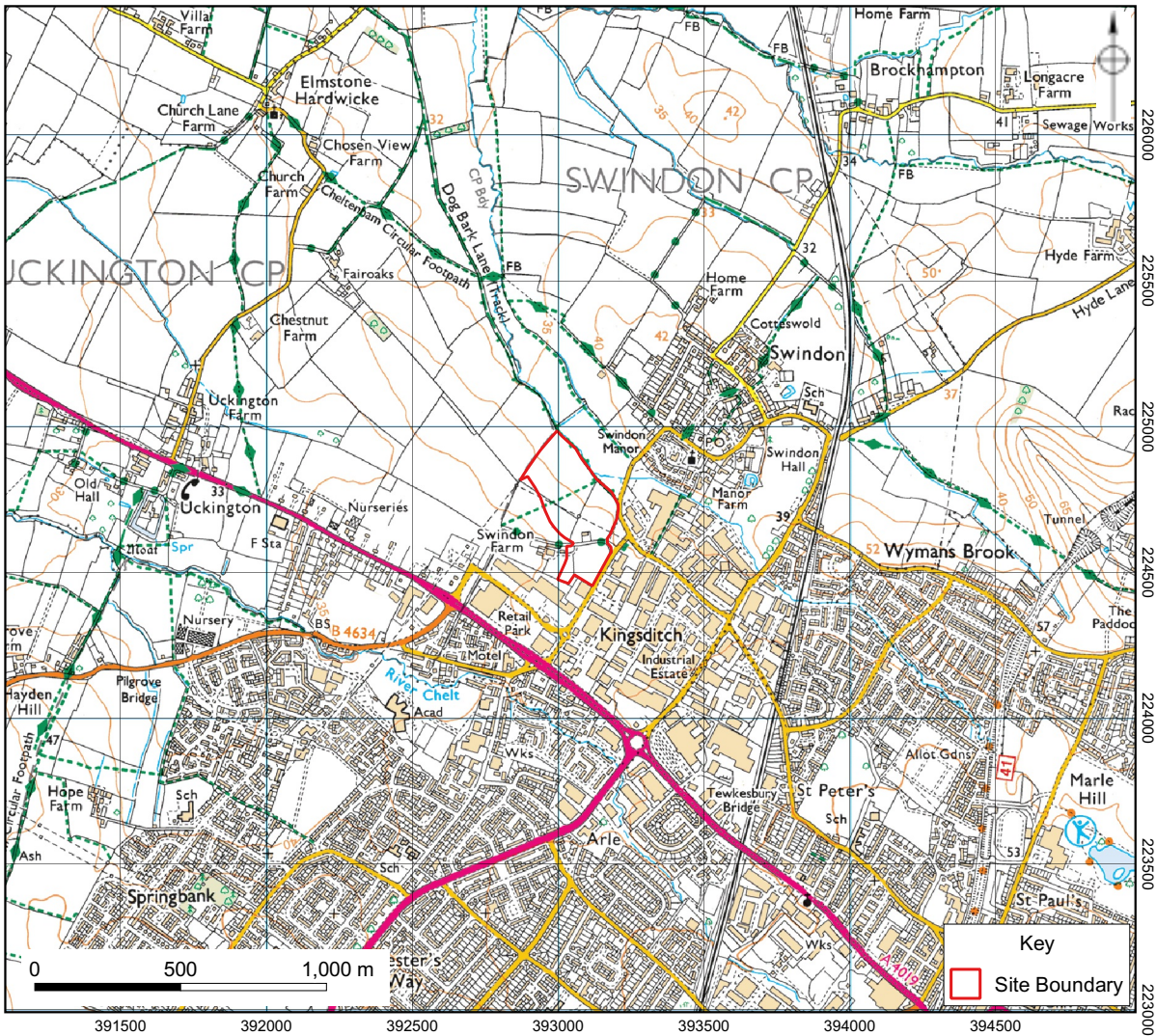
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Figures



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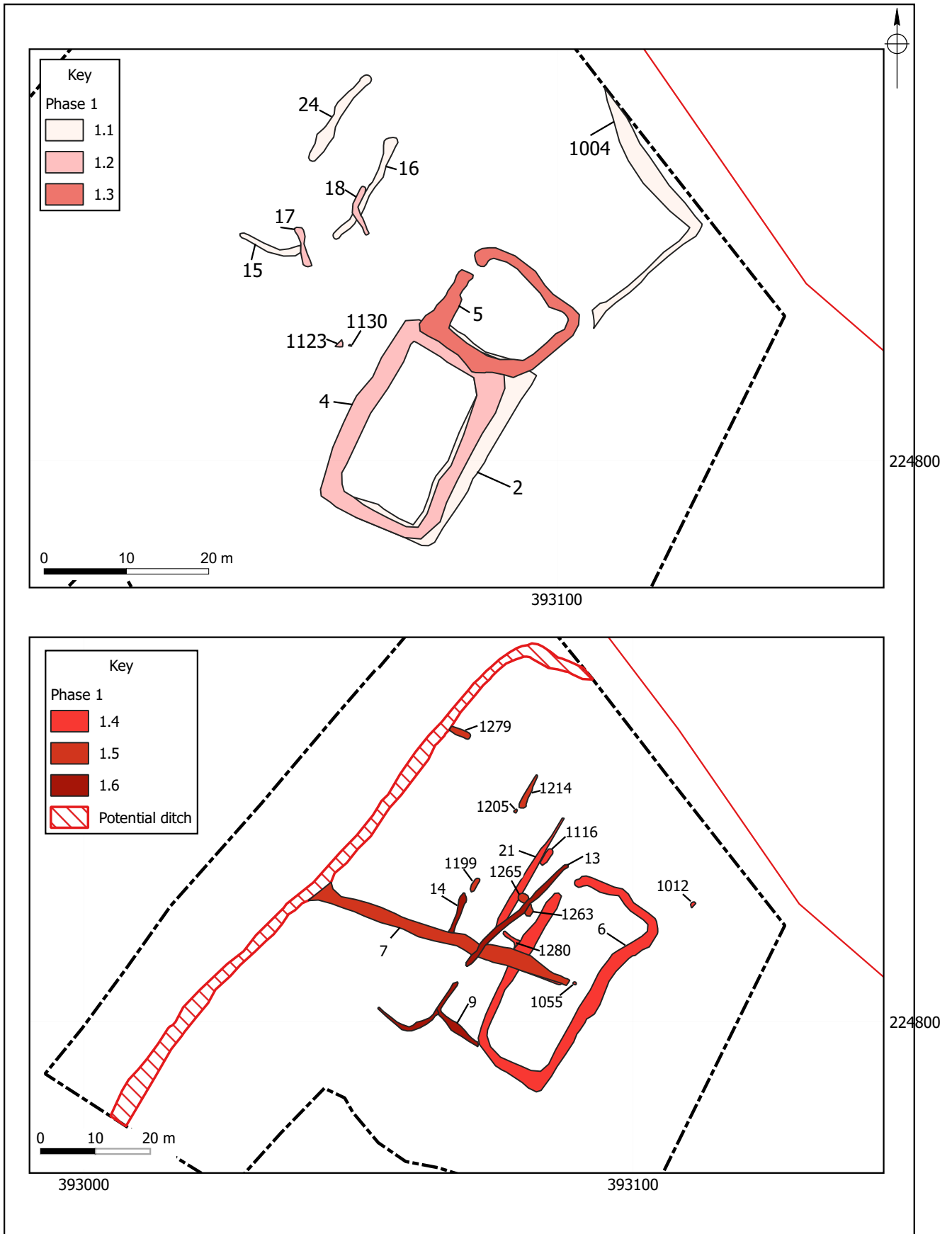
Location of the site

Figure 1



Excavation area with features shown by phase (Unphased features only labelled here)

Figure 2



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Phase 1 split into earlier activity at the top, and later activity below, with the possible route of the boundary ditch, with CG numbers, and cut numbers for ungrouped features

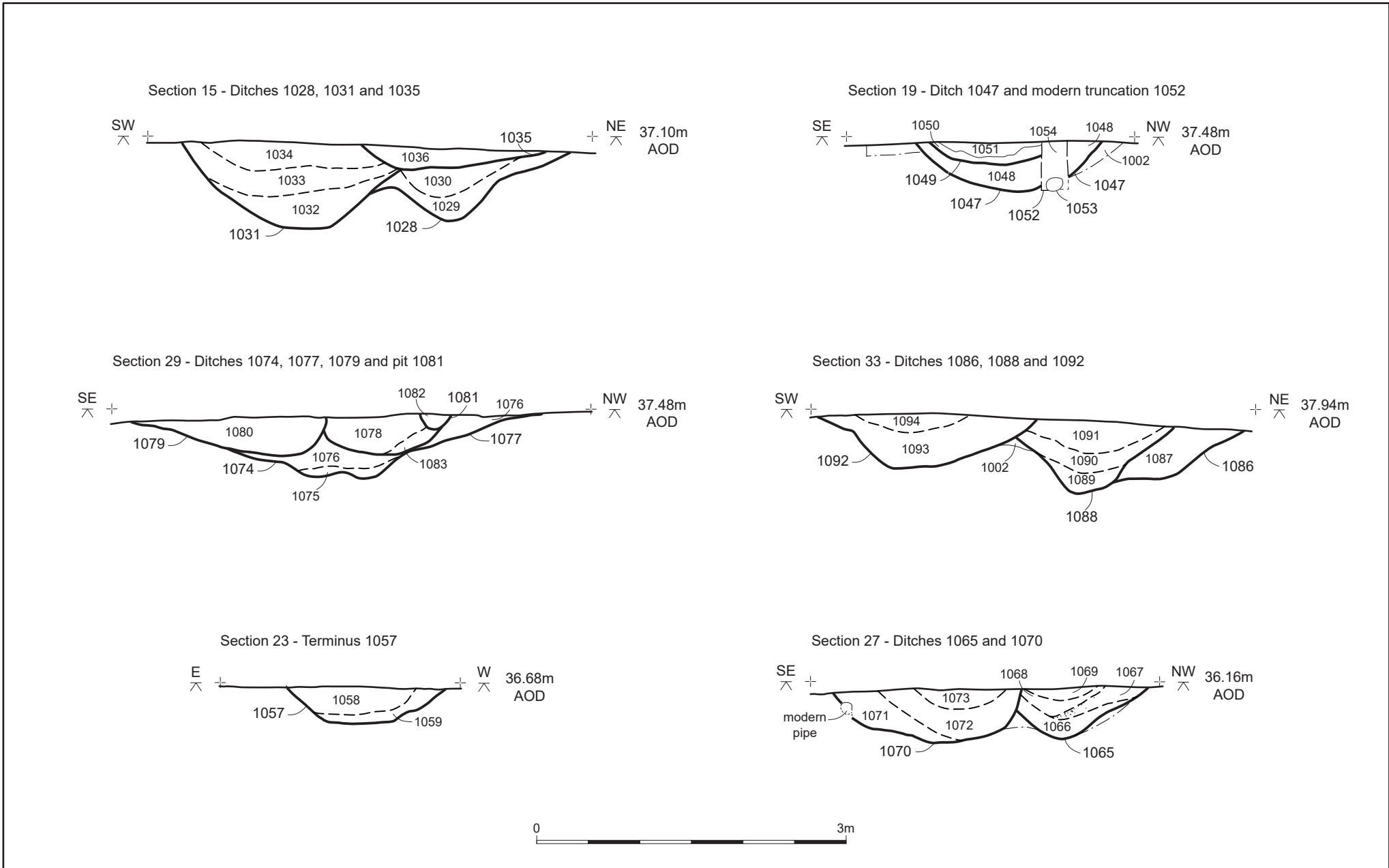
Figure 3



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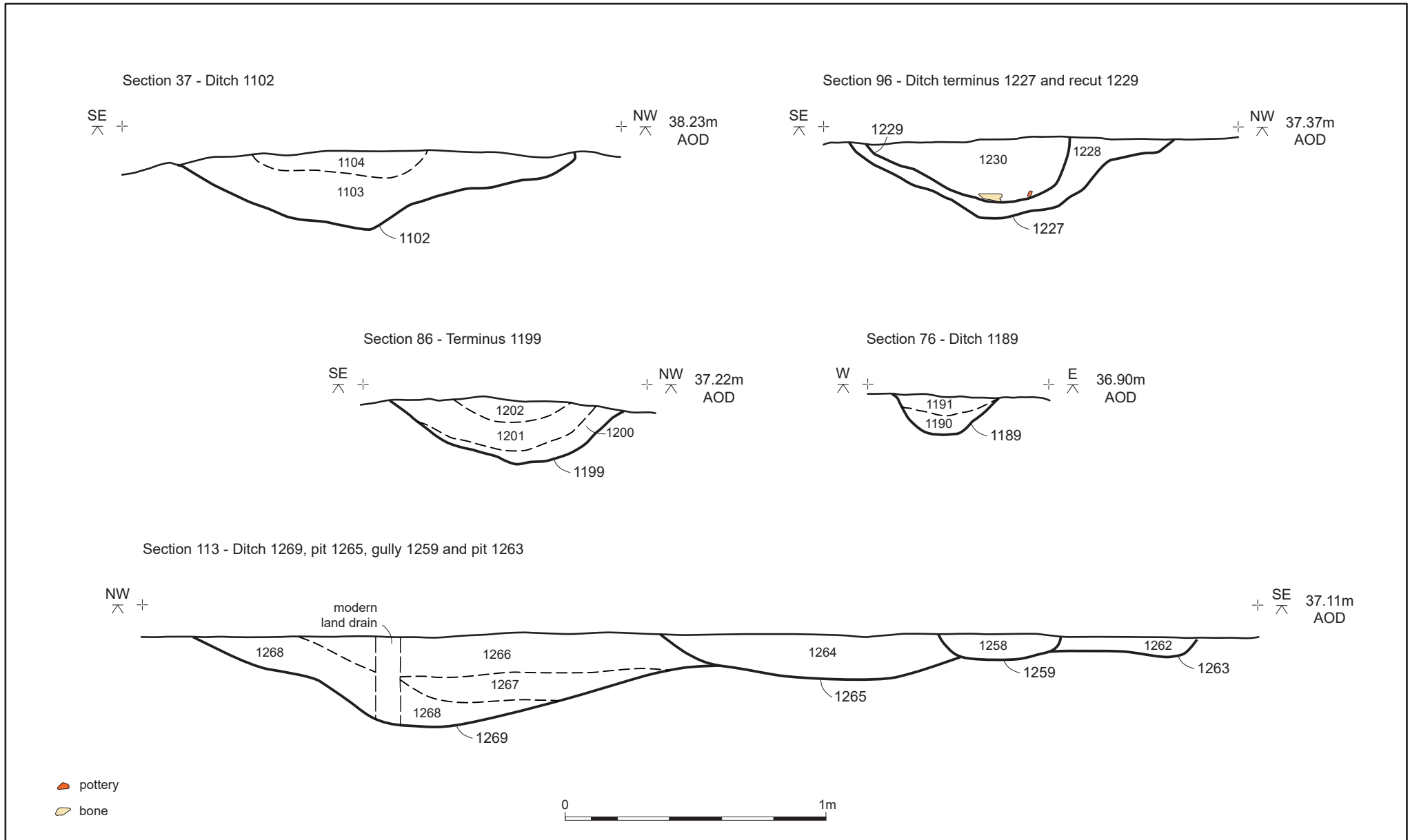
Phase 2: earliest features with later stages of phase 1 and the potential boundary ditch Figure 4 at the top, all of phase 2 features below, with CG numbers, and cut numbers for ungrouped features





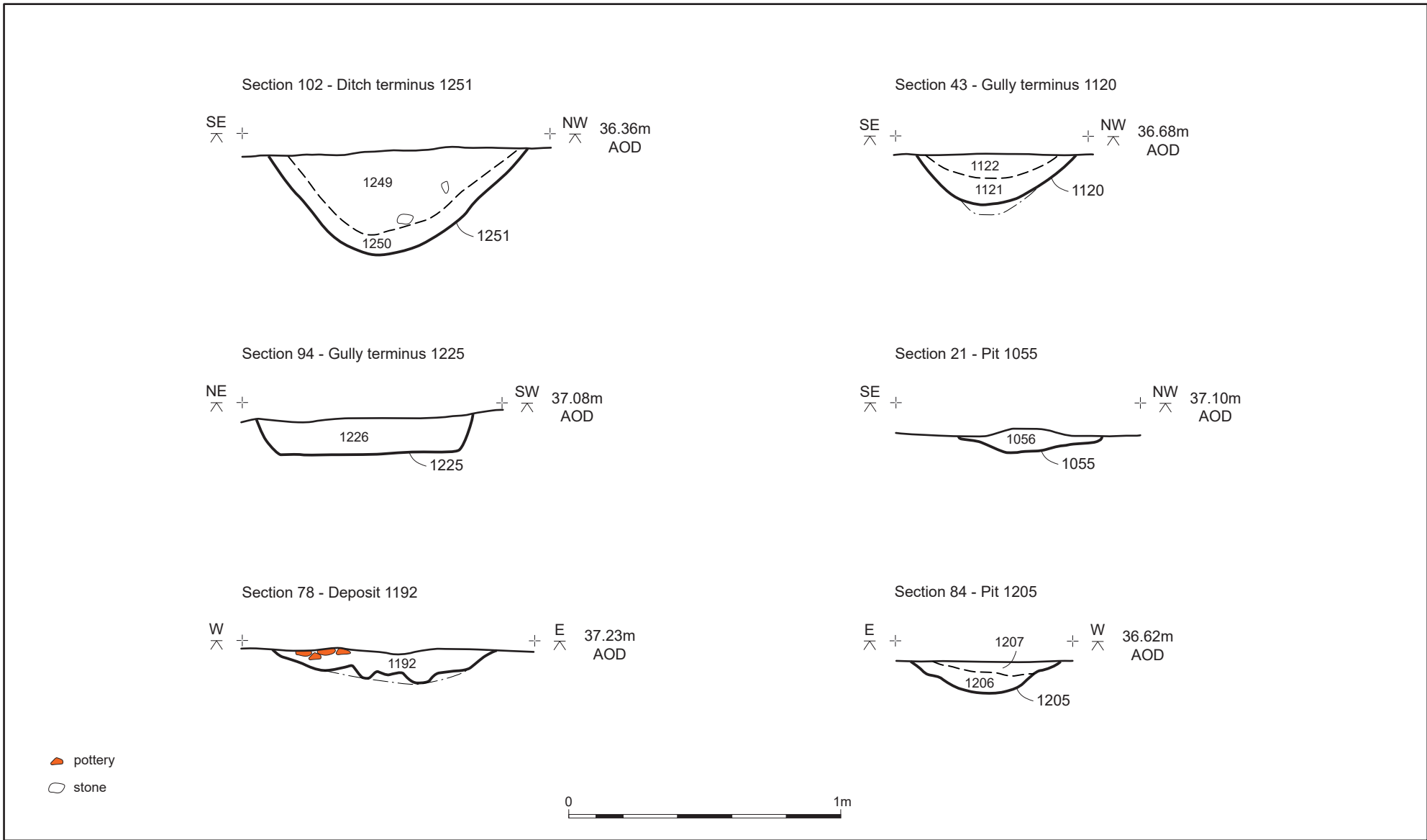
Sections of Phase 1 enclosure ditches in Context Groups 2, 4, 5 and 6

Figure 6



Sections of other ditches, gullies and pits in Phase 1

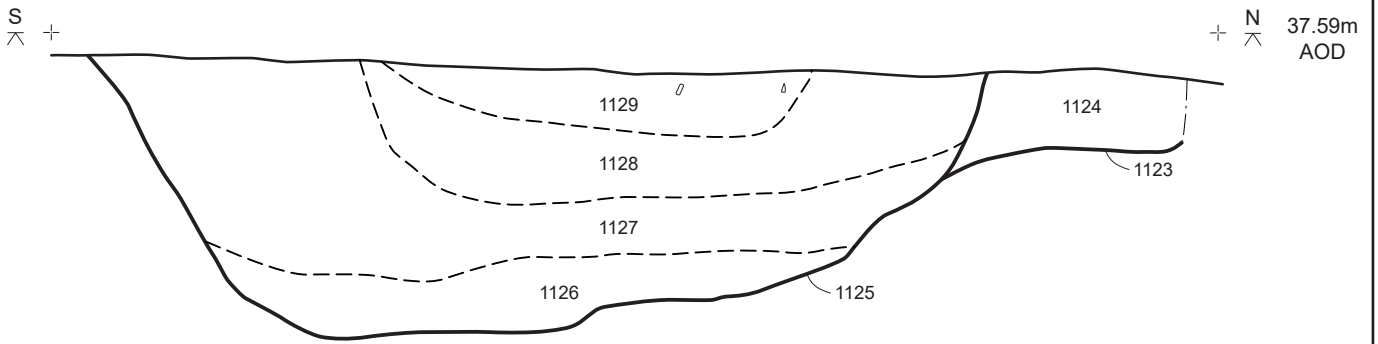
Figure 7



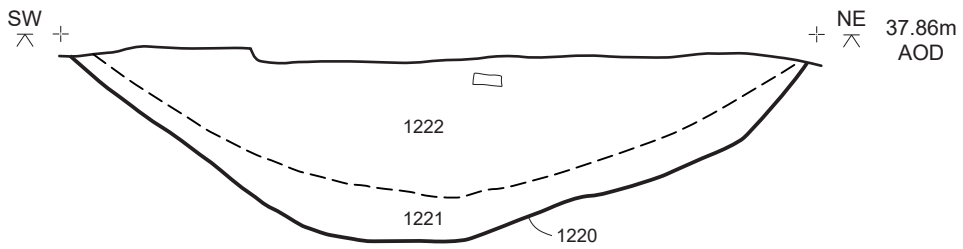
Sections of other ditches, gullies and pits in Phase 1

Figure 8

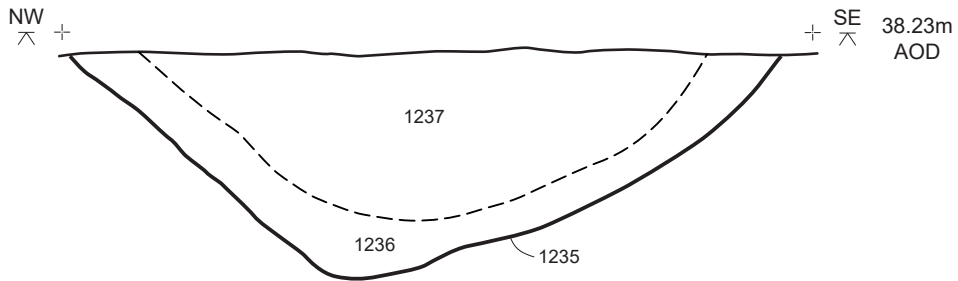
Section 49 - Ditch 1125 and pit 1123



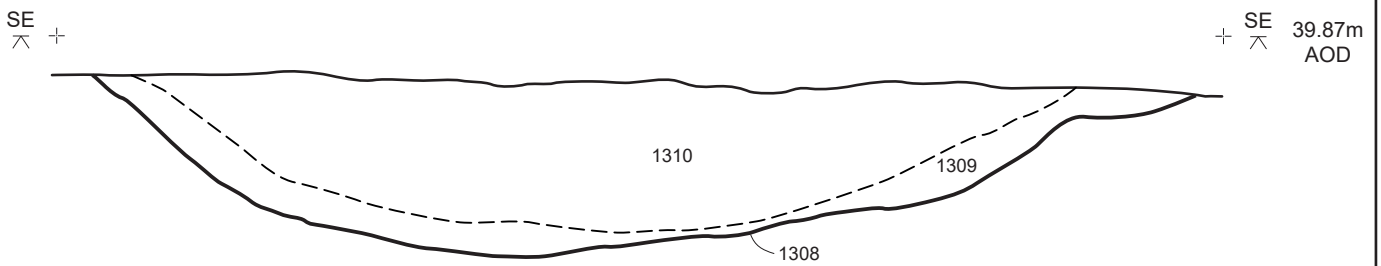
Section 92 - Ditch 1220



Section 100 - Gully terminus 1235



Section 136 - Ditch 1308



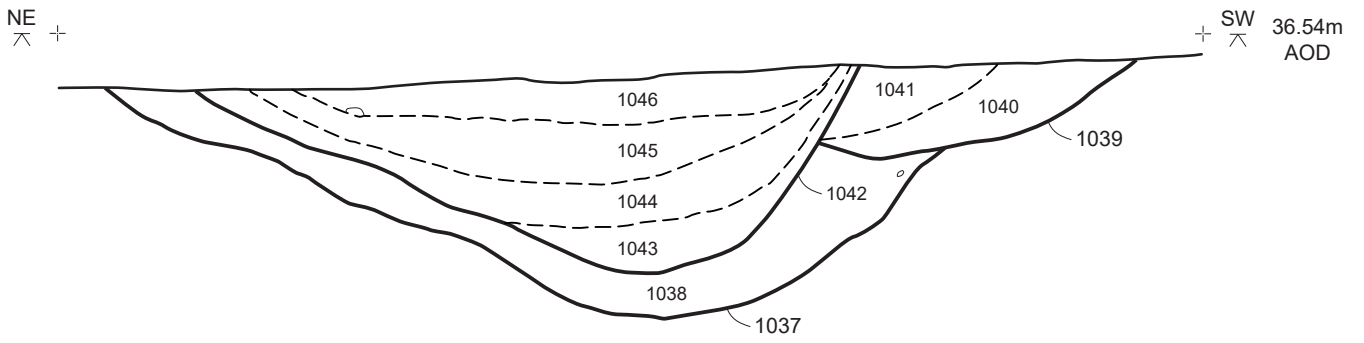
○ stone



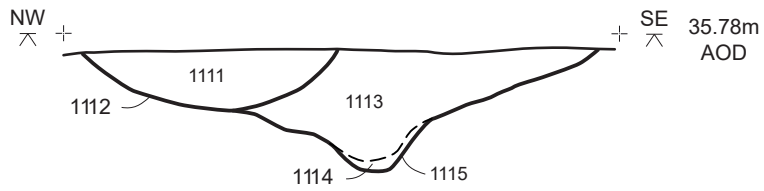
Sections of Phase 1 to 2 boundary ditches in Context Groups 7 and 11

Figure 9

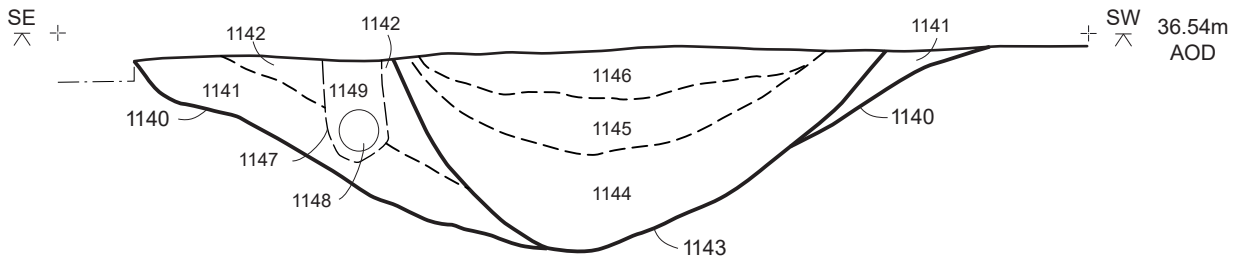
Section 17 - Ditches 1037, 1039 and 1042



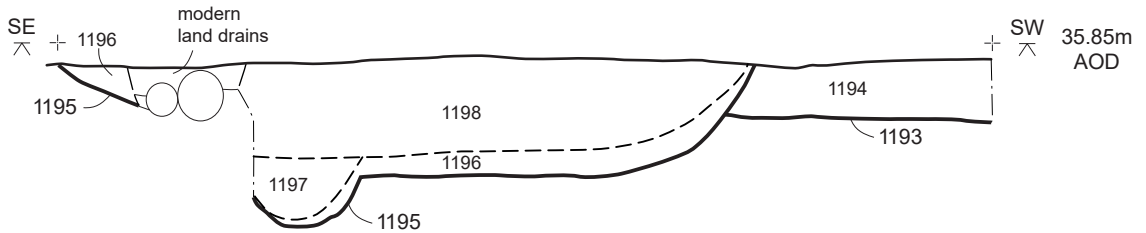
Section 41 - Ditches 1112 and 1115



Section 52 - Ditch 1140 with recut 1143 and modern truncation 1147



Section 80 - Gully 1193 and ditch 1195 cut by modern land drains

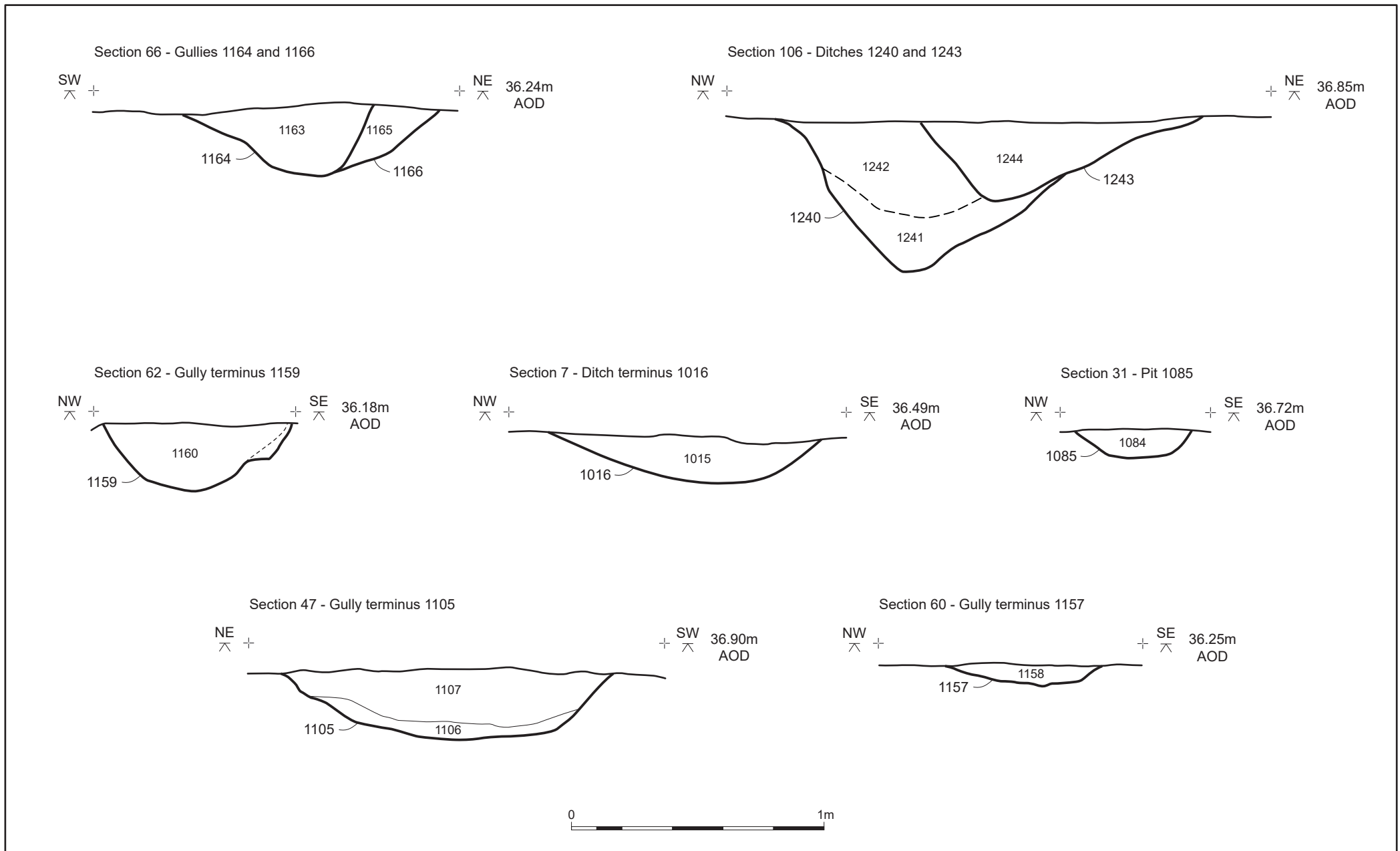


○ stone



Sections of Phase 2 ring ditches in Context Groups 3 and 8

Figure 10



Sections of other ditches, gullies and pits in Phase 2, except ditch 1240 (Phase 1)

Figure 11



Samian bowl and copper alloy brooch

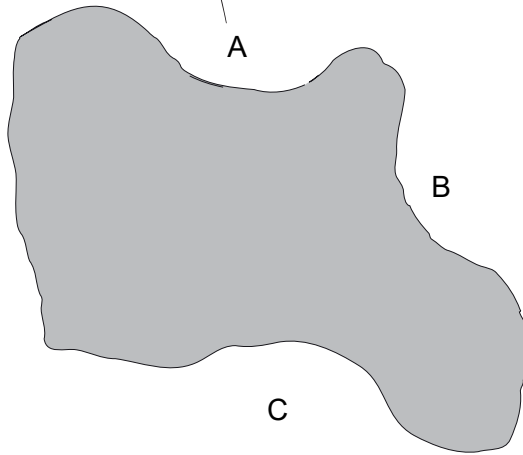
Figure 12



B

A

C



Stone object

Figure 13

Plates



Plate 1: Context Groups 2 and 4 (right), and 6 (left), at south-west end of enclosure, facing west (scales 1m)



Plate 2: Context Groups 5 (left) and 6 (right) at north-east corner of enclosure, facing north-west (scales 1m)



Plate 3: Ditch 1004 (left) and ditch CG1 (right), facing north-east (scale 1m)



Plate 4: Ditch CG24 with truncation by CG22 (right; visible as darker fill under white half of ranging pole), facing north-east (scale 1m)



Plate 5: In situ large fragment of Roman pot (TF215; rf2), found at bottom of upper fill 1242 of ditch 1240 (CG24; scale 0.3m)



Plate 6: CG7 ditch truncating pit 1123 on the right side, facing west (scales 1m)



Plate 7: CG14 ditch terminus, facing south-west (scale 1m)



Plate 8: Ring-ditch CG3 at south-east side, facing south-west (scales 1m)



Plate 9: South side of ring-ditch CG8, truncated by land drains, facing north-west (scales 1m)



Plate 10: CG11 large ditch, facing north-east (scale 1m)



Plate 11: Roman pit 1085, facing north-east (scale 0.3m)



Plate 12: Pit 1055, facing south-west (scale 0.4m)

Appendix 1: Summary of project archive

TYPE	DETAILS*
Artefacts and Environmental	Animal bones, Ceramics, Environmental (plant macro remains), Human bones, Leather, Metal,
Paper	Context sheet, Correspondence, Diary (Field progress form), Drawing, Photograph, Plan, Report, Section, Survey
Digital	Database, GIS, Images raster/digital photography, Spreadsheets, Survey, Text

**OASIS terminology*

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 Cheltenham Art Gallery and Museum.

Appendix 2: Context group summary

Group no	Feature Type	Cut No	Phase
1	Ditch	1007 1009 1018 1105	2
2	Ditch	1028 1074 1086	1
3	Ditch	1042 1115 1143 1152 1294	2
4	Ditch	1031 1047 1060 1077 1088 1171 1270	1
5	Ditch	1035 1057 1065 1095 1150 1175	1
6	Ditch	1049 1070 1079 1092 1099 1272 1298	1
7	Ditch	1023 1125/1132 1220	1

		1245 1290	
8	Ditch	1195 1303	2
9	Ditch	1062 1102 1133	1
10	Ditch	1159 1161 1193	2
11	Ditch	1154 1235 1247 1283 1301 1308	2
12	Ditch	1157 1167 1292 1296	2
13	Ditch	1120 1259	1
14	Gully	1229 1288	1
15	Gully	1233 1238	1
16	Gully	1203 1211 1223	1
17	Gully	1225 1231	1
18	Gully	1189 1217	1
19	Gully	1166 1184	2
20	Gully	1112 1164	2

		1182	
21	Gully	1118 1269	1
22	Ditch	1243 1254 1285	2
23	Gully	1014 1016	2
24	Gully	1240 1251 1257	1