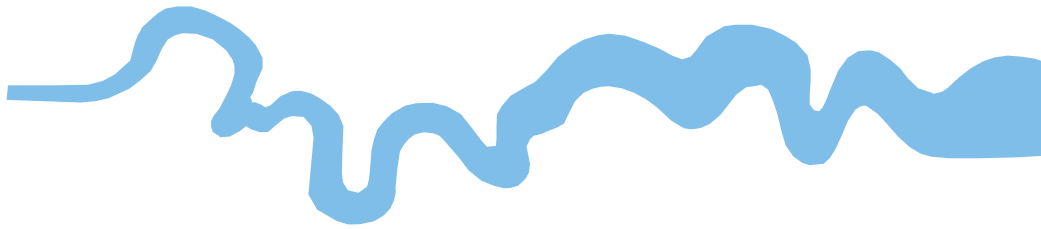


**T V A S**



**SOUTH WEST**

**A Middle Iron Age Enclosure,  
and a Second World War Heavy Anti-Aircraft Battery,  
at Pirton Fields, Churchdown,  
near Gloucester, Gloucestershire**

**Archaeological Excavation**

**by Nicholas Dawson and Richard Tabor**

**Site Code: SCI14/186exc**

**(SO 8649 2050)**

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a Second World War Heavy Anti-Aircraft Battery  
at Pirton Fields, Churchdown,  
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**Archaeological Excavation**

**Draft Publication Report**

**for Armour Heritage**

by Nicholas Dawson and Richard Tabor

Thames Valley Archaeological Services Ltd

Site Code SCI 14/186

**November 2019**

## Summary

**Site name:** Pirton Fields, Churchdown, near Gloucester, Gloucestershire

**Grid reference** SO 8649 2050

**Site activity:** Excavation

**Date and duration of project:** 22nd October 2018 to 5th March 2019

**Project manager:** Agata Socha-Paszkiewicz

**Site supervisor:** Nicholas Dawson

**Site code:** SCI 14/186

**Area of site:** c. 2ha excavated within overall site of 19.8ha

**Summary of results:** An evaluation and subsequent excavation revealed evidence of episodic use of the site, from the later Bronze Age through to the 20th century. The earliest activity comprised a few Bronze Age pits and linear features probably representing traces of occupation and a field system. This developed in the Iron Age with the inclusion of a ring gully house site and in turn was enhanced by construction of a discrete enclosure, which returned a radiocarbon date of 538-394 cal BC (UBA41461) and a new ring gully structure, which returned a date of 404-368 cal BC (UBA41462). The enclosure complex was further enhanced with internal subdivisions and a further date of 546-401 cal BC (UBA41460) was obtained for this. A moderate volume of pottery and animal bone was recovered but despite extensive sampling, no charred plant remains, suggesting that the subsistence economy was predominantly pastoral. The settlement is considered to have thrived in the 5th Century BC but had gone out of use before the onset of the Late Iron Age.

The site was farmed in Roman times with a few traces of a field system revealed, and again for certain during the Medieval or Post-Medieval periods as evidenced by widespread ridge and furrow. The final phase of use comprised the construction and use of a Second World War anti-aircraft battery, remains of which were extant at ground level.

**Location and reference of archive:** The archive is presently held at TVAS , Southwest, in Taunton and will be deposited at Gloucester Museum in due course.

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[www.tvas.co.uk/reports/reports.asp](http://www.tvas.co.uk/reports/reports.asp).*

Report edited/checked by:	Steve Ford ✓ 21.11.19
	Steve Preston ✓ 21.11.19

# **A Middle Iron Age Enclosure and a Second World War Heavy Anti-Aircraft Battery at Pirton Fields, Churchdown near Gloucester, Gloucestershire An Archaeological Excavation**

by Nicholas Dawson and Richard Tabor

**Report 14/186b**

## **Introduction**

This report documents the results of an archaeological excavation carried out on around 2ha of land at Pirton Fields, Churchdown, Gloucestershire (SO 8649 2050) (Fig 1). The work was commissioned by Ms Sue Farr, of Armour Heritage Ltd, Greystone Cottage, Trudoxhill, Frome, Somerset, BA11 5DP on behalf of Mactaggart and Mickel Ltd, 1 Atlantic Quay, 1 Robertson Street, Glasgow G28JB.

Planning permission Ref: 16/00738/OUT has been gained from Tewkesbury Borough Council to construct 465 new housing, public open space, landscaping, drainage, and other facilities on a c. 19.8ha parcel of land. In Accordance with the Department for Communities and Local Government's National Planning Policy Framework (NPPF 2012), and Tewkesbury Borough Council's policies on archaeology a programme of archaeological works was implemented, including a desk-based assessment (Sulikowska 2012), a geophysical survey (Fry 2014), evaluation trenching (Platt and Pine 2014) and monitoring of groundworks (Armour Chelu 2015) to excavate and record archaeological deposits which would be affected by the development. This excavation forms the latest phase of these archaeological works. The field investigation was carried out to a specification (Farr 2016) secured as a condition on the planning permission and approved by Tewkesbury Borough Council as advised by Mr. Charles Parry, Archaeologist, Gloucestershire County Council.

The project was funded by Mactaggart and Mickel Ltd and managed by Agata Socha-Paszkiwicz. The fieldwork was supervised by Nicholas Dawson assisted by Will Attard, Cosmo Bacon, Camila Carvalho, Luciano Cicu, Maisie Foster, Dominika Golebiowska, Daena Guest, Josh Hargreaves, Kayce Herrick, Kristian Magnus, Daniel Neal, Mariusz Paszkiewicz, Arkadiusz Piszcz, Tom Stewart, Beth Tucker, Jamie Williams, and Piotr Wróbel. The fieldwork took place between 22nd October 2018 to 5th March 2019.

The archive is presently held at Thames Valley Archaeological Services South West, Taunton and will be deposited with Gloucester Museum in due course.

## **Location, topography and geology**

The site is located 3.6km to the north-east of Gloucester and lies between the residential areas of Innsworth and Churchdown, within the latter parish (Fig. 1). The site comprises a sub-rectangular area of land of approximately 19.8ha most of which is made up of two arable fields. To the north is the location of a former sewage works and to the west of the internal boundary, an area of *c.* 0.1ha is occupied by the remains of a Second World War Heavy Anti-Aircraft (HAA) battery covered with overgrowth and brambles. The site's north-west and south-east boundaries are defined by ditches flowing north-westwards into Hatherly Brook, a tributary of the River Severn which meanders in oxbows 3.85km to the west. The site is set on the eastern slopes of the river's valley, falling from *c.* 20m above Ordnance Datum (aOD) in the east to 16m aOD in the west. The soils are a lime-rich loam and clay with impeded drainage (CSAI 2019). The underlying geology is Charmouth Mudstone Formation, sedimentary bedrock, with superficial deposits of alluvium over the lower half of the site (BGS 1988).

## **Archaeological background**

The archaeological potential of the site was considered in a desk-based assessment and confirmed by geophysical survey, evaluation trenching and archaeological monitoring. The desk-based assessment paid greatest heed to extant remains of a World War 2 heavy anti-aircraft battery but despite noting Palaeolithic findspots and Neolithic and Iron Age monuments and settlements to the east on the Cotswold Hills it concluded that rather than prehistoric features there might be 'agrarian features from the Roman period onwards within the Site' (Sulikowska 2012, 5, 12). A possible late Iron Age to Roman farmstead was noted 800m north-west of the site and it was deemed to fall within the hinterland of Roman military camp and the late 1st-century AD *colonia Nervia Glevensium*. Cropmarks suggestive of enclosures 'could potentially represent prehistoric features' (Sulikowska 2012, 6). There is no direct evidence of Saxon activity in Innsworth but place-name evidence suggests that scattered homesteads around Churchdown recorded in Domesday Book extended to within 1km of the site.

The first stage of field investigation comprised a geophysical (magnetometry) survey across the site. The results revealed extensive ridge and furrow and in the western area they were dominated by the World War 2 battery. It was considered that anomalies of varying strength in the eastern area were probably associated with the battery (Fry and Roseveare 2014, 4.33, DWG 04). However, subsequent evaluation trenching identified ditches, four of which were associated with pottery deemed to be late Iron Age, and substantial quantities of animal bone (Platt and Pine 2014, fig. 2). A review of the magnetometry data in the light of the excavation

shows that the survey had proved very effective in identifying anomalies corresponding with two Iron Age enclosures described below.

## **Objectives**

The general objectives of the project were to:

clarify the presence/absence and extent of any buried archaeological remains within the site that may be impacted by development, to ensure their preservation by record to the highest possible standard;

identify, within the constraints of the excavation areas, the date, character, condition and depth of any surviving remains within the site;

confirm and map the approximate extent of the remains and where possible their relationship with archaeology recorded during earlier phases of archaeological investigation;

assess the degree of existing impacts to sub-surface horizons and to document the extent of archaeological survival of buried deposits; and

to prepare an assessment report on the archaeological investigations.

Specific research objectives of this project were to:

Characterise the nature of the activity present within the Site, and where possible, place the Late Iron Age activity into context with the remains of this and later activity in the local area;

record the WWII remains in sufficient detail to ensure their preservation by record;

identify any topographical, geological or geographical influences on the layout and

development of the activity present within the Site and immediate area; and

relate (where appropriate) the archaeological results to their local, county and regional context in accordance with The South West Archaeological Research Framework (Webster 2008)

## **Excavation Methodology**

Three areas were selected for excavation based on the results of the prior investigations (Fig. 2). Area A (1.8ha) targetted the prehistoric features, while Areas B and C (0.42ha and 200sq m respectively) aimed to record the Second World War defences. (Once it was clear that Area B had no remains other than those of the Second World War defences, its area was reduced and Area A expanded compared to the original project design.) Topsoil and other overburden were removed by a 360° mechanical excavator fitted with a toothless bucket to expose the uppermost surface of archaeological deposits whilst under constant archaeological supervision. Machines and dumpers were not allowed to track over the stripped areas.

Following machine clearance, all investigation of archaeological levels was by hand. In Area A, all discrete features were half-sectioned as a minimum, with full excavation in selected cases. Enclosure ditches and linear features related to agricultural activity were excavated at a minimum of 20% of their length in 1-3m long slots. A range of context types across the site were sampled for environmental evidence, with disappointing results. A

full written, drawn and photographic record of excavation was made. After the discovery of asbestos, the Second World War remains in areas B and C were recorded *in situ* without being excavated. A watching brief will be conducted when these defences are due to be removed at the construction stage.

The archaeological features revealed on site (Pl. 1) were predominantly of the early middle to middle Iron Age and Second World War. The Iron Age features included two enclosure ditches with internal subdivision, set one within the other, two ring and a curvilinear gullies, and a handful of pits and or post holes. Some of the discrete features and a few linear ditches predate the enclosure, and there were traces of a later, possibly Roman, field system. The Second World War remains consisted of four gun emplacements and a command post, as well as four concrete surfaces related to the attached military camp.

Many of the features had been slighted by parallel north-north-west to south-south-east furrows and a few by modern land drains. All cut features and the deposits within them are listed in Appendix 1.

## **Phase Summary**

The analysis of the site stratigraphy revealed a clear-cut sequence of major features, although within that there were phases of refurbishment for which the precise sequence could not be determined. It has been possible to present a strong outline development of the site. Phases 1 and 2 comprise mainly linear features lacking direct dating evidence although the correspondence of features between phases 2 and 3 implies that linear features of the former were extant in the Early Iron Age. A penannular gully has also been allocated to phase 2. Phase 3 is associated with the initial construction of the outer enclosure ditch and a linear ditch which divides it into two areas. Radiocarbon assays show that this event occurred in the later 6th to 5th centuries BC (Table 10). Phase 4 is signified by refurbishing of the outer enclosure, the digging of an inner enclosure on either side of the central ditch. Structures associated with a ring gully and a curvilinear gully would fit in either or both phases. A carbon date from the upper fills of the ring gully centred on the opening quarter of the 4th century BC. Phase 5 is identified as local re-cutting of the outer and inner enclosures although more generally they had fallen out of use at least decades and possibly centuries beforehand. Phase 6 comprises surviving elements of a Roman rectilinear field system which cut the upper fills of enclosure ditches and which was slighted by Medieval or Post-medieval furrows. Phase 7 is characterized exclusively by the furrows and Phase 8 embraces modern features, principally those constructed during World War 2.

Most of prehistoric and Roman features were filled with homogenous grey clay with occasional gritty or gravelly inclusions indicating local moderately fast erosive in-filling. Rapid fills were observed only rarely.

## **Phase 1: Pre-earlier middle Iron Age (Fig. 4)**

Despite the absence of reliably datable finds such as flint artefacts or earlier prehistoric pottery a minimum of two phases pre-dating the middle Iron Age (Phase 3) have been identified based on stratigraphic relationships and orientation. They may be as early as late Bronze Age or early Iron Age, but dating evidence is very limited and it may be preferable to refer to these phases as simply 'earlier than Phase 3'. The clearest stratigraphy for the earliest phase is for a cluster of pits cut by a phase 2 ditch, itself cut by a phase 3 ditch; and for gully 1022 which predates phase 2 penannular gully 2014. Other linear features have been assigned to phase 1 based on the likelihood (not more) that they were part of the layout associated with gully 1022, and because they were also cut by phase 3 features.

Four cuts (118, 119, 129, 130) probably represent just three pits, which were probably dug in quick succession over a relatively short period (though this cannot be certain). Pit 129 was oval in plan with a maximum dimension exceeding 0.5m and depth of 0.15m (Fig. 5). Its fill, 289, was cut by pit 130 (Fig. 5) which with 119 formed a single pit of similar plan but with a maximum length of 1.50m, width of at least 0.90m and depth of 0.38m. The fills of both pits included charcoal flecks. The fill of pit 119/130 was cut by the latest pit in the sequence, 118, which was circular in plan with a diameter of 0.60m and depth of 0.25m. It was cut by gully 1023 (slot 117) (Fig. 5). No datable artefacts were recovered from the pits.

Gullies 1018, 1021 and 1022 were all parallel and all cut by phase 3 features. Ditch 1022 was also cut by phase 2 penannular gully 2014, and as all three share an alignment, all three have been placed in phase 1. Any of these (except 1022) could have survived to influence the phase 2 layout.

Gully 1018 probably defined a corner of a field while gullies 1021 and 1022 marked either side of a track or droveway. If ditch 1023 (see below) also belonged to this phase, the whole could have formed part of a larger linear ditch system of a type which became widespread during the Bronze Age.

Gullies 1021 and 1022 were both cut by Phase 3 ditch 1012 (at slots 120 and 115 respectively). At its southern end (slot 131) gully 1021 was also cut by middle Iron Age inner enclosure ditch 1013 (132). The width of gully 1021 was generally between 0.50m and 0.60m but there was notable variation in depth between its northern and southern ends from 0.26m to 0.43m. The central section of 1022 was entirely erased by phase 2 gully 1014 and its slot 111 was cut by slot 110 of 1014. Gully 1022 was 37m long and varied in width from 0.32m to 0.37m and in depth from 0.08m to 0.12m. The angled gully 1018 comprised a 16.5m long south to north section which continued for a further 29m westwards from the northern end. It was around 0.50m wide and varied in depth from 0.10m to 0.17m. At slot 408 it was cut by Roman gully 1009. Although not positively



established in section, there was no sign of gully 1018 in either of slots 217 and 218 of later ditches 1038 and 1040, hence it appears to have been cut by them.

A weakly curving ditch, 1023, may belong to the layout of either of Phases 1 or 2. As it cut the pit group it could have been assigned to phase 2, but it is almost certain it cannot be contemporary with Phase 2 penannular gully 1014, so it has been placed here. (The pits could then form an earlier phase, but as they contained no finds, this seems unnecessary). Ditch 1023 was 0.40m wide, 0.15m deep and at its west end was cut by phase 3 ditch 1012 (slot 124) (Pl. 2). Its relationship with curvilinear feature 1014 was not established but if the latter represents a structure, it seems unlikely they could be contemporary. Ditch 1023 contained pottery in likely LBA/EIA fabrics.

## **Phase 2: Earlier middle Iron Age (Fig. 4)**

Phase 2 comprises linear features 1020 and 1041 and penannular gully 1014. Both ditches 1020 and 1041 could be enhancements to the Phase 1 field system rather than a new layout. Only gully 1022 from the earlier phase need have been out of use, though as noted, ditch 1023 is also unlikely to have continued.

The west end of the 36m surviving length of 0.38m wide, 0.13m to 0.20m deep linear gully 1020 appears to terminate at the point where it is cut by Roman ditch 1009 (Fig. 5). However, it also appears to be related to a 0.34m deep ditch or gully represented by slots 435, with which it forms a junction, and 424, which was truncated by and subsumed into phase 3 ditch 1033. Slot 424 was cut by slot 425 of phase 3 Iron Age ditch 1012.

The penannular gully 1014 had an internal diameter of 14.80m and varied in width from a projected 0.60m to 0.70m and in depth from 0.17m to 0.40m (Pl. 3). The profile varied from 'U'- to truncated 'V'-form. There was a 7m wide break in the south-east of the circuit but no clear-cut termini survived and the original opening may have been narrower. The gully is a crucial feature in the site's stratigraphy, as, apart from cutting gully 1022 it is in turn cut by phase 3 ditches 1012 and 1013 (slots 127 and 107) (Pl. 2). The form of gully 1014 may best be interpreted as outlining a roundhouse. The diameter would be on the large side but not implausibly so, and emphasizes how capacious such structures could be. The apparent lack of evidence such as post holes for a superstructure is not in itself problematic. At Cadbury Castle, Somerset, a roundhouse outlined by multiple rings of stakes had been abandoned prior to the excavation of pits which produced later middle Iron Age pottery (Barrett *et al.* 2000, 162, figs. 82 and 167, BW6). Once plastered in daub or cob the circular structure would have been strong enough to support a roof. The stake holes survived only thanks to the suitability of the sandy geology for their detection and because the features were buried by deep deposits which had accumulated over a terrace into a slope. The presence in various slots through gully 1014 of 13 mainly large fired clay fragments

weighing 229g, and further pieces in nearby features, lends support to this interpretation. Three small fragments were in a fabric which is associated with tool production but the remainder are more probably associated with wall construction (See 'Fired Clay', below). Pottery from the gully comprised four small sherds in fabrics typical of the site's middle Iron Age phases, and four larger sherds in the potentially earlier Iron Age or even Bronze Age fabric L4.

The curvilinear ditch 1041 is set at the base of the stratigraphic sequence associated with phase 3 enclosure ditch 1044 (Pl. 4). It was identified over approximately 27m. Due to truncation its full width was not ascertained but in places it exceeded 0.90m (Fig. 6). Its depth varied from 0.33m to 0.50m. Its slots 244, 222, and 325 were cut by phase 4 ditch 1042 but the direct relationship with phase 3 enclosure ditch 1044 had been erased by truncation. It has been assumed that 1044 is later than 1041 because 1044 appears to be the principal object of re-cutting in phase 4.

### **Phase 3: Earlier middle Iron Age (Fig. 6)**

Phase 3 is characterized by the construction of a 112m by 112m sub-square enclosure with rounded corners comprising ditches 1044, 1011, 1046 and 1040 giving an enclosed space of around 1.1ha. Much of the original outline was lost in subsequent re-cutting. The enclosure was divided into northern (about 45% of the total) and southern areas, by a west to east oriented ditch 1012 extending for 95m from a 10m wide opening midway along the west side. This gap corresponded closely with the line of phase 2 ditch 1020, while the dividing ditch 1012 was on a similar orientation, suggesting that ditch 1020 might still have been in use. Just inside the western side of the enclosure, ditches 1036 and 424 could possibly also have been relict features from phase 2 which partly determined and were adapted to fit the new layout, but it seems simpler to assign them to the new layout from its conception. Either or both of ring gullies 1017/1016 and curvilinear gully 1015 may have been constructed during this phase but a radiocarbon date from the former suggests it belongs in the next phase. Any of four discrete pit/post holes (135, 136, 139, 247) might belong to this phase but none produced datable finds (posthole 136 contained most of a saddle quern) nor could they be linked stratigraphically. Postholes 135 and 136 (Pl. 5) conceivably could form the doorposts for an otherwise undetected roundhouse (cf Danebury, Cunliffe and Poole 1991, figs 4.6–4.8) but in the absence of any other indicators, this evidence is meagre.

Most of the eastern arm of the enclosure did not survive recutting, and the north side only in places below the wider phase 4 recut, so that the best evidence is found along the south (1044) and west (1044, 1040) sides, including at the western entrance represented by opposed terminals 308 (north) (Pl. 6) and 145 (south).

The width of ditch terminal 308 could not be determined due to truncation by phase 4 re-cut 1038 (307) but its lower part survived to a depth of 1.26m (Fig. 7). Beyond the entrance, ditch 1040 survived only sporadically as the north section of the enclosure's west boundary, and was only discernible as a deeper, truncated 'V'-profiled cut, interrupted by broad 'U'-profiled re-cutting in slots 224, 226 and 233 along the north side as 1046 where it became progressively shallower with a depth of only 0.62m at 233. The stratigraphy suggests that ditch 1011 is a continuation of 1046 visible on the outer edge of the enclosure's east boundary but the cuts are shallower still, ranging from 0.25m in slot 149 to 0.32 in slot 228. Further south slot 304 may have been a 0.23m deep continuation of 1011, now on the inside of the re-cut. As well as becoming shallow the eastern slots of 1046 and all of 1011 had an increasingly open 'U'-profile. The full width of the ditch was not preserved in any slot but the projected outline of 226 suggests that it was around 1.60m at the eastern end of 1046. On the east side there was no evidence for a southward continuation of the enclosure ditch beyond the east terminus of dividing ditch 1012, but given its shallowness where seen as 1011, it is not unreasonable to project its line here, completely removed by the later cut.

The west side of the southern enclosure ditch 1044 was interpreted as a single ditch during excavation but it certainly comprises two phases of ditch digging. The sections from the southern enclosure ditch 1044 (Fig. 7) show that as with the northern ditch it was most substantial towards the west where depths of slightly over 1m were typical and where the width varied between 2.5 and 3.2m. To the east it was no deeper than 0.72m shortly before it tailed-off into a terminus at 506. Although slot 311 may take in an unrecognized re-cut (Fig. 7) the width of the earlier ditch could not have exceeded 1.50m. Multiple fills and the profile outline of slot 145 suggest that there were subsequent re-cuts but the deposits were disturbed by a modern land drain, a furrow and to a lesser extent by the cutting of slot 144 of Roman ditch 1009. The profile of its southern neighbouring slot 202 clearly shows a break in slope of the 1m deep lower profile indicating that the middle and upper fills of a probably truncated 'V'-profiled ditch had been erased entirely by subsequent cutting with a total width of 3.18m to a depth of 0.75m. A second break of slope on the east side implies more than one episode of re-cutting. Both of the later cuts appear to have had open 'U'-profiles. There is a similar break in slope on the east side of 201.

The southern end of ditch 1044's western portion turns eastwards, a course which may have been determined by the survival in some form of the boundary represented by phase 2 ditch 1041. The profiles of two sections strongly imply at least two episodes of re-cutting. Despite multiple re-cuts on the corner itself no westward continuation equivalent to the early ditch (1041) can be shown but given a re-emergence in phase 4 it

is probable it has been erased. Charcoal from basal fill 388 in slot 201 of ditch 1044 provided a radiocarbon date of 538–394 cal BC (UBA 41461: Table 10), closely comparable with that from ditch 1012.

The section of ditch 1044 approaching its eastern terminus represented by slot 322 was cut on its internal side by a pit 320 which in turn was cut by a re-cut (321) of the ditch (Pl. 10). Beyond the pit, ditch 1044 turned sharply towards its terminus, 7m to the north-east. There is no evidence for the northward continuation of the ditch during this phase although the kink of the segment between the pit and the terminus has the appearance of an entrance-blocking ditch. It seems plausible that there was an entrance here in phase 3, blocked in phase 4, but the evidence is equivocal as there is no sure sign of a phase 3 continuation of the eastern side of the enclosure anywhere between this terminus and the east-west dividing ditch 1012. This has been projected on the plan, but it is possible that the southern part of the enclosure was actually open to its east.

Internal dividing ditch 1012 was 'V'-profiled, generally around 1.12m deep and up to 1.78m wide. Midway along it a gravelly fill indicated a rapid erosion deposit (767) on its south side. At its western end slot 403 included thinner gravelly deposits on both sides. Given that such deposits were rare elsewhere the erosion may have been due to de-stabilizing of the local land surface or upcast bank due to more intensive land use or trampling by domestic animals. The shape of terminus 308's east side implies that ditch 1012 did not form a junction with it. If ditch 1020 remained in use, the ditch or gully represented by 424 when paired with ditch 1036 would have formed a component in a system of races just inside the enclosure entrance on either side of ditch 1012. Ditch 1036 was 0.55m deep and over 1m wide and was re-cut as 1035 in the next phase (the later ditch may have extended further south but there was no clear southern terminus to 1036 so it is possible that original cut was also longer than shown on the plan). Charcoal from slot 124 in ditch 1012 provided a radiocarbon date of 546–401 cal BC (UBA41460: Table 10), with a negligibly small chance of being much earlier. The likeliest range coincides closely with the date from main enclosure ditch 1044, although it is somewhat later than the date suggested by the pottery from the same slot (124).

Three further features may belong in either of phases 3 and 4 but are discussed here. Two arcing gullies 1016 and 1017 together outline a causewayed ring with an internal diameter of 11.8m (Pl. 7). The openings on the west and east sides are respectively 7.6m and 5m wide. Seven slots along the northern arc, 1017, varied in width from 0.85m to 0.54m and in depth from 0.32m to 0.23m. Most slots had open 'U'-profiles although the eastern terminus, 215 (Pl. 8) had a pronounced truncated 'V'-profile. The fills throughout were of brownish grey, soft silty clay with occasional inclusions of limestone grits or gravels. Six slots along the southern arc, 1016, varied in width from 0.88m to 0.63m and in depth from 0.49m to 0.30m. Most slots had open 'U'-profiles

although breaks in the profiles of 330 and especially 314 implied re-cutting. The deep flat bottom of 314 would have been suited to a post-setting. The fills were of brownish grey, soft silty clay throughout. Slot 337 cut the fill of 6m long gully 1029 which had a terminus 332 at the approximate centre of the ring. The 'U'-profiled gully was consistently around 0.38m wide and 0.20m deep. A radiocarbon date of 403–368 cal BC (UBA41462: Table 10) suggests 1017 was later than the original enclosure ditch, but there is a possibility that the dates overlap.

The third feature was curvilinear gully 1015 with a total length exceeding 27m. Its northernmost slot, 421, cut the fill of a very short stretch of ditch, 1032 (not illustrated). Gully 1015 had a flat or slightly rounded base with a width, where it could be established, of between 0.70m to 0.74m and depth 0.30m to 0.20m. The fill was of brownish grey, firm silty clay throughout. The relationship between gully 1015 and ditch 1032 is of some importance as the latter produced substantial pottery sherds in a characteristically Iron Age fabric although none of those sherds nor smaller ones from gully 1015 had diagnostic morphological traits. No relationship was established between 1032 and gully 1019 but the latter contained a Roman jar sherd and is presumed later.

The ring gullies 1017/1016 are of a form and scale which might be interpreted as the outlining a large roundhouse equipped with a drainage gully, 1029. Although some of the fired clay recovered from the gullies is in fabrics which may be associated with a roundhouse wall a deposit in slot 314 is more probably from a hearth or oven. At least two fragments in a scattering of fragments in LQ1 are from a 'loomweight'. The pottery is dominated by Woolhope Hills fabrics C1 and the smoothed C2 which is consistent with a carbon date of 408–368 cal BC from the eastern terminus of gully 1017. The form and extent of curvilinear gully 1015 would be wholly inconsistent with interpretation as a dwelling but it may either have formed part of a sub-enclosure or have been associated with an agricultural outbuilding which also left no trace of a superstructure. No fired clay was recovered from the gully.

#### **Phase 4: Middle Iron Age (Fig. 11)**

Phase 4 is characterized by major re-cutting (1038) of the outer enclosure ditch (1011) and the excavation of an irregular, vaguely oval, inner enclosure 1013/1035 retaining the partial re-cut 1037 of ditch 1012 as its axial line around an area with maximum dimensions of 63m by 42m. Ditch recut 1038 can be traced with confidence at the southern end of the outer enclosure's east side, and less certainly on the north and the north part of the west side; the case for the southern length (1044) was less clear during excavation but in hindsight recuts can be seen in most slots here too. If there had been an entrance gap in the south-east corner in phase 3, this was now blocked. The renewed axial ditch 1037 terminated against the east end of the new inner enclosure, and extended slightly further west than the original cut, to meet the outer enclosure (1038) where both original ditches had previously

terminated. The new inner enclosure would have allowed the construction or retention of 1017/1016 8m to the south-east of its only access which is set 4m within the access to the outer enclosure. A minor gully (1030) parallel with the southern boundary of the inner enclosure is likely to be contemporary with it. Although it lacked pottery, substantial triangular 'loomweight' fragments were recovered from it. The exclusion of curving gully 1015 from the inner enclosure does not preclude contemporaneity, but it is unclear whether it belongs in phase 3 or 4.

The inner enclosure appears to have grown out of a development of the phase 3 ditches 1036 and 435/424. The re-cut of 1036, 1035 was 1.10m to 1.20m wide and the depth of the 'U'-profiled cut varied from 0.42m to 0.82m. The northern ditch survived to a depth of 0.27m in slot 339 as the north end of the west side of 1013, deepening to 0.37m as it turns eastwards. Elsewhere it was obliterated on the west side and truncated on the north side of the enclosure by phase 5 re-cuts 1033 and 1034 respectively. The original north and east ditches survived to depths ranging from 0.55m in slot 331 to 0.68m in slot 138 as a deeper, 'V'- or truncated 'V'-profiled cut below the level of the open 'U'-profiled re-cut 1034 (Pl. 9). The complete profile has not survived due to re-cutting but enough remains in slot 138 to suggest that the ditch was over 1m wide. On the south side the earlier ditch (1013) appears not to have undergone wholesale re-cutting as the ditch sides are straight.

Identification of the re-cutting of the outer enclosure ditch 1011 as 1038 is not straight-forward as there is significant variation in the ditch profiles (Fig. 12). In the north-west area slot 133 retains the truncated 'V'-profile characteristic of the phase 3 ditch, although a slight break in the slope of its north side would allow a recut. In contrast, no sign of the deeper earlier ditch was detected in the nearest slot to its east, 147, but its occurrence elsewhere implies that its absence is an issue of visibility. What has been recorded as a very short, narrow and shallow ditch (1045) cutting two slots of ditch 1011 seems unconvincing as a part of the recut enclosure (1038) and has been assigned to phase 5, below. Elsewhere, ditch 1038 was generally 'U'-profiled with a width of between 1.90m and 1.50m and depth ranging from 0.60m to 0.70m. Its south-east terminus 505 cut terminus 506 of phase 3 ditch 1044 (Fig. 7; Pl. 10), closing the gap that may have existed here. The discernible cutting of 1044 implies that it had filled up. There are sporadic traces of re-cuts along the southern and western sections of 1044 but little clear evidence excepting its south-west corner where slot 225 of 1042 cut it. Beyond the enclosure ditch 1042 followed the westwards course established by phase 2 ditch 1041.

## **Phase 5: Middle Iron Age to Roman**

Phase 5 mainly involved recutting of established ditches, and is dated by its place in the stratigraphic sequence and its orientation but very little pottery can be attributed to it (Fig. 13): it could fall anywhere in the last three centuries BC or the first AD, but probably followed closely on from phase 4. It comprises re-cutting as ditches 1033 and 1034 of the west and much of the north side of the inner enclosure and a further re-cutting, 1043, of the south-west corner of the outer enclosure and the ditch extending westwards from it. Some 32m north of enclosure ditch 1034, gully 1045 was parallel with it, allowing the possibility that these two ditches formed part of a larger system which has since been erased (it is also possible that 1045 was simply a much shallower part of the wholesale recutting of outer enclosure 1038).

The identified 15m length of ditch 1033 had a northern terminus or corner with 1034. It was approximately 1m wide, 0.46m deep and 'U'-profiled (Fig. 14), truncating much of the earlier ditch to an extent that the latter's middle section was erased almost entirely. Earlier cuts and probable cuts associated with phase 4 ditch 1013 and re-cut 1034 were more readily discernible and have been described above. Along its identified 50m length ditch 1034 was 'U'-profiled and from west to east varied in width from 0.78–1.28m and its depth was generally only 0.23–0.32m. Parallel ditch 1045 was 'U'-profiled, 15m long, up to 1.15m wide and 0.40m deep (Fig. 12).

The 18m arc of ditch 1043 extended westwards from slot 315, via slot 221, at both of which it cut the outer enclosure ditches, to slot 243 where it represented the surviving form of the phase 2 westward projecting ditch, 1041. Its greatest width and depth of 2.10m and 0.52m were at the east end but it was reduced respectively to 1.26m and 0.37m at the former location of the outer enclosure's corner (Fig. 5). Its relative proportions had increased to 1.40m and 0.50m in the westernmost slot 243. There is no evidence that the enclosures survived as more than segments in the wider system of boundaries between the middle Iron Age and the Roman period.

## **Phase 6: Roman/Post-Roman**

The rigorously linear gullies post-dating the Iron Age enclosures and pre-dating the furrows which cover the northern and central areas of the site are most probably traces of a Roman field system, although curiously they echo the Phase 1 (?Bronze Age) layout. Ditches 1009, 1024 and 1028 cut the middle Iron Age enclosure whilst 1019 included a Roman pottery sherd: it may have cut Phase 3 ditch 1032 but this was not clearly established.

Gully 1009 comprised a 79m long, north–south linear gully which at its south end turned west and continued for a further 11m. It was observed most clearly where its slot 306 cut the upper fills of the re-cut corner of the outer enclosure ditch (1012) (Fig. 7). It was 'U'-profiled, 0.52m wide and 0.44m deep (Figs 7, 14).

Its slot 144 also cut the northern terminal of ditch 1044 on the south side of the enclosure entrance (Fig. 7). Elsewhere it survived as a slighter feature with width and depth as little as 0.37m by 0.12m. As slots 448 and 407 it cut phase 2 gully 1020 (Fig. 5) and phase 1 gully 1018 (Fig. 14). Its fills included a very small late Roman pottery sherd which has been taken to date it, though a later date cannot be ruled out. No relationship was established at the junction of gullies 1009 and 1024 but slot 316 of the latter cut phase 4 ditch 1035. As gully 1024 did not continue beyond the point where it met 1009, this allows the possibility that 1024 was contemporary with 1009. At that point 14.5m long gully 1024 was 0.39m wide and 0.23m deep.

Gully 1019 survived to a length of 28m. Typically it was 'U'-profiled and up to 0.40m wide and 0.20m deep. In plan it appeared to cut enclosure ditch 1013, though this was not confirmed. Slot 235 of the 33m long isolated gully 1028 did cut the outer enclosure ditch 1011 (Fig. 12) and was close in orientation to 1009. It had an open 'U'-profile with a width of up to 0.82m and depth of 0.25m (Fig. 12).

### **Phase 7: Medieval/Post-Medieval**

Much of the stripped area was covered by in-filled furrows which show clearly as positive linear anomalies in the results of magnetometry data (Fry and Roseveare 2014, DWG 2). After stripping, at least nine north-north-west to south-south-east oriented in-filled furrows were observed to slight the north-west and central area of the outer enclosure and the features within it (Figs 3 and 17). In some instances the furrows encroached on the upper fills of earlier features to depths of between 0.10m and 0.15m but in general any damage to archaeological legibility was minimal. The geophysical data show that the furrows are part of a coherent field system which is probably of Medieval date. No other features of the period were identified. A World War 2 feature (surface 392 constituting group 1010) (Fig. 18) is discussed below. Land drains shown in the same figure were identified but recorded in most cases only in so far as they impinged on earlier excavated features.

### **Phase 8: World War 2 (Fig. 18)**

Structures identified as belonging to the Second World War period consisted of a command post 1000 (located at NGR SO 86520 20450) which sits on the western side of the field boundary that splits the site in half from north to south (Fig. 2). Four gun emplacements (1001, 1002, 1003, 1004) were positioned as a crescent around the south and west of the command post at a distance of on average 29m. Each has an associated rectangular structure some 5m off to one side (1005, 1006, 1007, 1008) and all are connected by a crush rock surface 153 which to the south of the battery turns to a Tarmac access road joining to Cheltenham Road East (B4063) that



runs along the southern edge of site from Gloucester to Cheltenham. These structures form the Heavy Anti-Aircraft (HAA) battery proper and a further four concrete surfaces: 392 located at NGR SO 86525 20540; 856 located at NGR SO 86305 20526; 857 located at NGR SO 86382 20444; and 6 located at NGR SO 86385 220410. These represent a small number of the HAA battery's auxiliary structures. Also found right across the site, though for the most part concentrated around the main battery, was a large number of iron angled fencing post of 0.91m in length, designed to carry barbed wire fencing, in and around the HAA battery and its associated camp. Other finds from around the HAA command post and emplacements include large amount of miscellaneous metal scraps, a spoon, a wrench, sections of telephone wire and glass fragments. All was observed and recorded but not retained.

### *The command post 1000 (Pl. 11)*

The command post exists as an irregular reinforced concrete structure which is 17.3m by 14m in width and consists of three sunken rooms connected by a ground level concrete surface (175). Each of the sunken rooms have external walls (166, 176 and 179) 0.28m thick with a further 0.02m of a rubberized bitumen damp proof coating on their outer faces. The existing external height of the walls from the natural geology is 1.12m whereas the interior height from the concrete floor of each sunken room to the top of the existing wall is 0.94m. At the time of excavation there was no clearance between the top of existing walls and ground level. No roof remained *in situ* though the large quantity of concrete rubble and the continuation of metal reinforcing from the top of remaining walls suggests at least an upper part of the wall and any roof present had been demolished.

The largest of the sunken rooms, making up the western half of the command post structure, consists of a short staircase (174) at its north-east end leading down from the external concrete surface (175). At the base of the stairs protecting the entrance is a concrete blast wall (173) 0.23m wide extending 0.88m into the room. The interior is further divided into three smaller rooms, two on the south-western side of 4m by 2.45m and one on the south eastern side of 4.22m by 2.6m. The construction of the interior walls (170), (169) and (167) were of single width 0.23m, hollow concrete block laid in a stretcher bond, each with a doorway leading into the main room. These walls survived to a height of one or two courses for the most part. A further interior wall (172) extends from the rooms north western edge 0.63m into the room of similar build but does not form a full room closed off space as with the previous.

The first of the smaller sunken rooms sits in the north corner of the command post with dimensions of 4.42m by 3m. The stairs (181) connecting it to the upper external surface sits in a short offshoot from the room's

south corner. The walls (179) of the room are for the most part missing with only a section in the north corner still standing and a visible join left on the concrete floor showing the former presence of a wall.

The sunken room on the east side of the command post has dimensions of 4.6m by 3.34m with its steps (178) to the external concrete surface in its northwest corner. Due to the observance of possible asbestos tiles within the room's fill it was not fully excavated.

The external concrete surface (175) covers an area of 10.22m by 6.9m and as previously mentioned connects the entrances to the three sunken rooms. Its construction appears to be rubble build up layer encased on the sides and top by 0.23m concrete. The concrete at the sides sits on a wider plinth of concrete that extrudes 0.25m away from the wall and is 0.23m deep. To the west of the northern sunken room a second 'L' shaped section of concrete (182) with dimensions of 4.53m by 3.41m sits leaving a rectangle of 2.8m wide with no in situ concrete, separating it from the main concrete surface. It is unclear if this is deliberate or relates to the missing west wall of the north sunken room. To the south of the command post a tarmac foot path 154, 1.66m wide and 14.61m appears to link the ground level surface to the access road (153) though the final 6m is missing.

Emanating from the north and west sides of the larger sunken room four reinforced communications lines run, (185), (186), (187) and (189) one each to the gun emplacements. Their construction consists of ceramic water or sewer pipe that would have carried telephone wires, then the pipe encased in concrete forming a structure 0.29m in width and height. All were originally situated below ground and accessed only by manhole chambers. One at each end of the communications encasement, with the manhole chambers at the command post end constructed of concrete 1.35m in diameter and the others a rectangular brick built structure 0.89m in diameter. In the case of the most southerly communication line (189) a third brick built manhole chamber was located half way along on the north side of the tarmac footpath.

### *3.7inch Gun emplacements 1001 & 1005 (Pls 12 and 13)*

This first gun emplacement sits to the south of the command post, consisting of a gun mount, a concrete surface (196) overlying the crushed road surface (153) and adjacent to that but not situated on top of (153), a rectangular building. Two manhole chambers (251 and 252) sit at the end of the communications encasement (189).

The mount is made up of a circular, slightly domed concrete base (157) housing a steel frame box or holdfast (156) with only its top face visible, flush with the concrete. The form of this face is a steel bar square 2.34m in diameter, with a fifth bar set diagonally from the north corner to the south, protruding slightly at either end. On top of the holdfast's frame are ten spigots to which the gun would have been attached. The end of the communication encasement connecting the emplacement to the command post is situated in one of the manhole

chambers on the north-west edge of the mount. A narrow gully through the concrete pad connects the final manhole chamber (252) to the centre of the holdfast. No sign of the any protective walls or embankments were visible around the gun mount.

Located 1.57m to the north-east of the gun mount sits a 10.48m long and 2.25m wide surface of rough concrete (196) on a north-west to south-east orientation. Sitting along the concrete surface east edge and on the same orientation, is a rectangular concrete building base (198), 11.7m long and 3.47m wide. Along the east and west edges of the main floor area are the remnants of a concrete lip (197) with impressions of corrugated material on the internal surface suggesting a Nissen hut structure. For the last 1.59m the floor level is slightly lower (199) than the main building and in the floor a 0.52m manhole chamber (250) is cut into the concrete, its concrete cover still *in situ*. The north end of the building is similar (193) but here it is only 1.32m wide, and a concrete block wall (192) is present on the west and north edges of the base, and again but inset by 0.61m, on the east side, surviving at its highest to three courses.

### *3.7inch Gun emplacement 1002 & 1006*

This gun emplacement consists of much of the same as the previous. The variation comes in the orientation of the gun mount which is north-east to south-west along the holdfast diagonal steel bar. The concrete surface (363) is this time to the south-west of the gun mount and large at 12.43m in length and 3.88m at its widest. Its north-eastern edge is concave in shape, respecting the circular pad containing the holdfast. Some 3.22m to the north of the gun pad a 3m by 1.65m concrete surface (152) is also orientated north-east to south-west.

Its associated building base (360) had dimensions of 9.2m long and 3m wide and concrete lip (362) with corrugated imprint along both long edges. A single-course brick dividing wall (361) ran north-east to south-west halfway along the building. Instead of the small lower floor section at both ends this time a brick and concrete wall (858) extension added 1.32m to the north-west end of the building. Its north-east edge was taken up by a smoothed concrete looking like a step or threshold.

### *3.7inch Gun emplacement 1003 & 1007 (Pl. 14)*

For gun emplacement 1003 the orientation along the holdfast's (160) diagonal is east to west. Its associated manhole chamber sits on its north edge (365) and here 2.19m along the communications encasement (186) back towards the command post a 3m long section of telecommunications wire is protruding. To the north-east some 2.4m from the concrete pad the lowest course of a curving 2m wall (370) still remains, at its north end the wall continues at right angles away from the gun mount for a further 0.5m. The curve of the wall respects and mirrors

that of the holdfast's concrete pad (161). The construction of the 2m section is of hollow concrete block and the shorter continuation of brick.

The concrete surface (367) for this emplacement is rectangular in shape and sits to the west of the gun mount with dimensions of 8.72m north–south and 2.12m east–west. The building base (364) sits directly to the west again and consists solely of the a single level concrete surface of 9.01m by 3.15m with again the concrete lips (366) along the long edges and again with imprints of corrugated sheets.

### *3.7inch Gun emplacement 1004 & 1008*

The fourth gun emplacement's holdfast (162) is orientated north-west to south-east. Its communications manhole (257) sits a little further away compared to the other emplacements, at 0.93m to the south. A further 2.6m to the south are foundations of a reverse 'L' shaped section of wall (368). The long section sits on a north-east to south-west orientation at 4.59m long and the short section on a north-west to south-east orientation and 2m long. Its construction is of hollow concrete blocks and brick.

The concrete surface (256) sits 2m to the north of gun mount and forms a trapezoid with its longest edge to the north at 5.8m long by 3.77m. The building surface (254) sits on an east nor east orientation at 9.04m long and 3.46m wide. At 3.3m from its east end dividing the building across its long axis was the bottom course of a hollow concrete wall (255). At its east end sits a slightly lower concrete surface (253), adding a 2.78m width and 1.9m to the length of the building. Within this lower surface a manhole access chamber is cut in the concrete.

### *Concrete surfaces*

During the excavations two rectangular concrete surfaces were identified. One of these (856) also having been revealed by the evaluation (Platt and Pine 2014) was specifically targeted by Area C of the excavation (Fig. 2) and remained as broken up concrete surface distributed around the area. The other (1010) was within Area A and was largely intact, missing only its north-west corner. It consisted of a single concrete surface (392) of 6.33m by 6.48m and 0.15m thick. No signs of structure(s) being built off the concrete slab were visible. Two similar structures were partially uncovered during the evaluation (Platt and Pine 2014). Surface 857 appeared larger and had a course of hollow concrete blocks set around the edge suggesting perhaps a more upright structure, whereas the final concrete surface (6) appeared as a circle of crushed stone (Fig. 2).

## **Finds**

### *Prehistoric pottery* by Richard Tabor

The prehistoric pottery assemblage comprised a total of 581 sherds weighing 2445.0g giving a low mean weight of 4.2g. The low mean weight in part reflects problems in the recovery from heavy clay which adhered to and fractured sherds so that it does not necessarily offer a true reflection of pre- and post-depositional taphonomic processes. The range of fabrics of the assemblage showed great coherence in terms of particle size of inclusions and the range of material used. Sherds with distinctive morphological traits were relatively few and generally small but were entirely consistent with the fabrics in demonstrating a single main period of prehistoric pottery loss during the middle Iron Age. Nine sherds were probably earlier and a few sherds might equally be of later middle Iron Age or late Iron Age date.

All sherds were allocated to fabric groups based on the material, size and sorting of the principal inclusions. Vessel forms were grouped by characteristic profiles or by rim or other diagnostic features, including surface treatments, in accordance with guidelines for the recording and analysis of prehistoric pottery (PCRG 2010).

#### Pre middle Iron Age

Two very small, formless, grog and quartz tempered sherds from ditch slots 400 and 437 are likely to be of earlier Bronze Age date but their association with Iron Age sherds demonstrates comprehensively that they are residual (Table 1). Four undiagnostic sherds from gully 1014 with an uncharacteristically high mean weight of 10g in a coarse limestone fabric L4 may be earlier than the material characterising the early to middle Iron Age phases. Four further sherds from the same gully included one which had lost calcareous inclusions and three sherds in early middle to middle Iron Age fabrics (Appendix 2). Three sherds from the basal deposit in ditch slot 145 which refitted to form the angle of an expanded base were also in a coarse limestone fabric, L3. The base form implies a late Bronze Age to early Iron Age date. Although the base was the only pottery from the initial fill, the fills above it included pottery in middle to later middle Iron Age fabrics.

#### Pre late Bronze Age

##### Grog

**G1** (Medium) Moderately hard, slightly soapy grey fabric with buff red to grey surfaces including sparse (<1mm), medium (<2mm) and medium coarse (<4mm) sub-rounded grog, rare to sparse fine (<0.5mm) to fine/medium (<1mm) sub-rounded quartz and sparse to moderate fine (<1mm) iron oxides.

#### Late Bronze Age

##### Limestone

**L3** (Coarse) Moderately hard grey fabric with buff red to grey surfaces including abundant finely crushed (<1mm), moderate medium (<2mm) and sparse to moderate coarse (<4mm) sub-rounded and sub-angular limestone.

**L4** (Coarse) Moderately hard grey fabric with buff orange to grey surfaces including abundant finely crushed (<1mm), moderate medium (<2mm) and sparse coarse (<4mm) and sparse very coarse (>4mm) sub-angular limestone, rare to sparse fine (<1mm) and medium (<2mm) crushed and rare plate shell and sparse fine (<1mm) to medium (<2mm) iron oxides. Rare to sparse irregular dark brown, iron-rich lumps (<6mm) may be from of iron stone (bog iron).

Table 1. Distribution by cut of pre middle Iron Age fabrics (weight in g)

Group	Cut	Deposit	G1		L3		L4		Total		mean
			no	wt	no	wt	no	wt	no	wt	
1013	437	776	1	0.5					1	0.5	0.5
1014	430	765					4	40.0	4	40.0	10.0
1016	400	680	1	0.5					1	0.5	0.5
1044	145	455			3	27.0			3	27.0	9.0
		Totals	2	1.0	3	27.0	4	40.0	9	68.0	7.6

#### Earlier middle to middle Iron Age

The middle to later middle Iron Age pottery amounted to 483 sherds (2334g) with a low mean weight of 4.8g. A catalogue by context is presented as Appendix 2. All were from ditches or gullies, including six sherds from ring gully 1014 and 58 from 1016/1017. The fabrics are biased strongly towards calcitic limestone fabrics C1 and C2, together amounting to 80.5% of the sherd count and 78.0% of the weight of pottery of the phase (Appendix 2). The fabrics equate to Peacock's (1969) Western England Palaeozoic Limestone group B1, which was thought to have been sourced in the Malvern area but is now thought more likely to originate from the Woolhope Hills, Herefordshire, well to the west of the Severn and some 23km from the site (Peacock 1969, 421-2; Morris 2005, 119; Jane Timby pers. comm.). At the time of his research Peacock found that the main distribution of such fabrics was to the west of the River Severn. The exception was Danes Camp, 20km north of Innsworth (Peacock 1969, fig. 2). Since then comparable fabrics have been recognized further from the source at Birdlip, 10km to the south-east and, most notably, as a large component of the later Iron Age assemblage at Uley, 25km to the south (Parry 1998, 68; Leach 1993, 220-2). The remaining limestone fabrics are likely to derive from local Lias geology with fabrics L1, L2, Sh1 and Sh2 potentially from similar fairly local geology to that of Fabric B at Birdlip (Parry 1998, 68). It is noteworthy that Oolitic limestone forms so small a component of the assemblage at only three sherds.

Fabric C2 is distinguishable from fabric C1 solely by the smoothing or burnishing of surfaces. The condition of the material is such that fabric C2 may be under-represented. The only other significant surface treatment was apparent underside-gritting of single small BS5.1 base sherds in C1 and C2 respectively from ditch slots 237 and 124, the latter part of group 1012. Such gritting is typical of later Bronze Age and early Iron Age pottery elsewhere in southern Britain but is rarely noted in middle Iron Age pottery.

## Middle to later Iron Age

### Limestone

- C1** (Medium) Moderately hard, grey fabric with buff red to black exterior to grey surfaces including abundant fine (<1mm), moderate to common medium (<2mm) and rare to sparse coarse (<4mm) sub-angular calcitic limestone.
- C2** (Medium) Moderately hard, grey fabric with buff red to black exterior to grey surfaces including abundant fine (<1mm), moderate to common medium (<2mm) and rare to sparse coarse (<4mm) sub-angular calcitic limestone. Smoothed or burnished surface.
- L1** (Medium) Moderately hard to friable, buff pink to grey fabric with buff pink to grey surfaces including common fine (<1mm), rare to sparse medium (<2mm) and rarely medium coarse (<4mm) or coarse (>4mm) mainly sub-angular limestone, rare to sparse brown iron oxides (<2mm) and rarely plate shell.
- L2** (Medium) Moderately hard grey fabric with buff red to grey surfaces including abundant finely crushed (<1mm) and rare to sparse medium (<2mm) or coarse (>2mm) sub-angular limestone.
- LQ1** (Medium) Moderately hard grey to buff pink fabric with buff pink surfaces including poorly-sorted common fine (<1mm) to sparse coarse (<4mm) sub-rounded and sub-angular limestone, sparse fine (<1mm) and medium (<2mm) quartz and rare to sparse iron oxides.
- OrL1** (Medium) Moderately hard grey fabric with brown to grey surfaces including poorly-sorted moderate to common fine (<1mm), sparse medium (<2mm) to rare coarse (<6mm) ovoid and linear voids left by organic material such as grain and chaff.
- O1** (Medium) Moderately hard grey, micaceous fabric with brown/grey surfaces including abundant finely crushed (<1mm), sparse to moderate medium (<2mm) and rarely coarse (<3mm) ooliths and rare fine (<1mm) to medium/coarse (<3mm) sub-angular limestone.
- V1** (Medium) Moderately soft, grey vesicular fabric with buff pink surfaces with abundant fine (<1mm), sparse to moderate medium (<2mm) and rare coarse (<4mm) sub-rounded voids formed by leaching of calcareous material, possibly ooliths and sparse fine (<1mm) iron oxides.
- Sh1** (Medium) Moderately hard to friable, grey fabric with buff pink to grey surfaces including moderate to common plate (<8mm) shell with sparse to moderate striated voids probably due to loss of organic material.
- Sh2** (Medium) Moderately hard, dark grey fabric with buff red to dark grey surfaces including common to abundant fine (<1mm) to sparse medium (<2mm) crushed shelly limestone

### Quartz

- Q1** (Medium) Moderately hard grey fabric with buff pink to grey surfaces including abundant fine (<0.5mm) to sparse fine/medium (<1mm) sub-rounded quartz and rarely iron oxides.
- Q2** (Medium) Hard grey fabric with buff pink to grey surfaces including abundant fine (<0.5mm) to sparse fine/medium (<1mm) sub-rounded quartz and rare fine (<1mm) to medium (<2mm) sub-angular flint or chalk. Possible South East Dorset product.
- LQ2** (Medium) Hard grey fabric with buff brown to grey surfaces including common fine (<0.5mm) to sparse fine/medium (<1mm) sub-rounded quartz and sparse fine (<1mm) to coarse (<6mm) sub-angular limestone.
- CQ1** (Medium) Hard grey fabric with grey surfaces including abundant fine (<0.5mm) to sparse fine/medium (<1mm) sub-rounded quartz, moderate to common fine (<1mm) and sparse medium (<2mm) calcitic limestone and rare fine (<1mm) iron oxides. Surfaces may be smoothed.

Although vessels forms in central and northern Gloucestershire have distinctive features it remains possible to relate them to the scheme applied elsewhere in southern Britain and it is applied here to enable wider contextualization. Morphological analysis has been limited by the small sherd sizes (Brown 2000; Woodward 2000). The relationship of types to fabric is shown in Table 2. There is no clear patterning in the distribution of forms across the site with the exception of the exclusive occurrence of PA1 jars in the fills of outer enclosure ditch 1044 (Table 3). The Danebury Environs Project's broad date ranges of 350–50BC for JC2 type round, high-shouldered (Fig. 20: 1-3) and JD3 globular 'S'-profiled (Fig. 20: 4 and 5) jars and 310–50BC for the more bucket-like PB1 type jars (Fig. 20: 9 and 10) are both acceptable. The very small fragment of probable South

West Decorated ware (Fig. 20: 6) fits comfortably within the span but with a later inception in the early to mid-3rd century BC. An earlier middle Iron Age date for the PA1 class (Fig. 20: 7 and 8) is more problematic (Brown 2000, 86-90). However, at Cadbury Castle, after a *floruit* in the late Bronze Age and early Iron Age, similar jar profiles re-emerged in the later Iron Age and examples occur in the Mingies Ditch middle Iron Age assemblage (Woodward 2000, 339; Wilson 1993, 74, fig. 34, 11).

Table 2. Frequency of identified forms by fabric

	L3	C1	C2	L1	L2
JC2.1		2	1		
JC2.2		2	2		
JC2.3		1			2
JC2.0		3	2		
JD3.1			1		
PA1				1	1
PB1		2			1
BS4			1		
BS5.1		2	2		
BS5.4		1	3		1
BS5.5	1				

Table 3. Distribution of identified forms by context

Phase	Group	Cut	Deposit	JC2.1	JC2.2	JC2.3	JC2.0	JD3.1	PA1	PB1	BS4	BS5.1	BS5.4	BS5.5
1	1012	124	282		1	1						1		
1	1012	124	283									1		
3	1012	125	284		2					2		1		
3	1012	307	567				1							
3	1012	307	569										1	
3	1012	441	481										1	
3	1016	337	666	1										
3	1016	344	673	1										
3	1017	215	465					1						
3	1044	145	455											1
3	1044	146	374			1								
3	1044	201	388						2					
3	1044	202	394						1					
3	1044	202	395										1	
3	1044	203	451						1					
3		308	570							1				
4	1013	103	264				1							
4	1013	109	262				1							
4	1013	109	263	1			1							
4	1013	138	354		1									
4	1013	205	399	1									1	
4	1037	442	782					1						
4	1038	237	497									1		
4	1038	305	574								1			
4	1042	242	552										1	

Despite the similarity of fabrics there is a marked difference between the Pirton Fields pottery and the late Iron Age assemblage from Uley in which typically rims were more strongly everted (Leach 1993, 221). Several badly damaged, slightly everted or upright rims are similar to jars in Peacock's fabric B1 (Peacock 1969, fig. 4: 10), although their conditions are too poor to warrant illustration. However, ovoid jars feature in his samples and to a lesser extent in Birdlip's middle Iron Age period 2 group (Peacock 1969, fig. 4: 11-14; Parry 1998, fig. 28: 24).



They are also represented in a survey of Iron Age pottery from the northern Cotswolds (Marshall 1978, figs 1: 3 and 3: 20). Rims from the same survey consistent with JC2 forms were a dominant element and featured significantly in Birdlip period 2 (Parry 1998, fig. 28: 32, 34, 40, 41; Marshall 1978, fig. 1: 1 and fig. 3: 2-10).

Decorative techniques were restricted to light and sharp linear incision, stabbing and one instance of fingertip impression immediately below the rim of a possible JC2-type jar (Fig. 20: 7). Incised decoration included slanting lines resting on a horizontal line of the upper shoulder of a jar (Fig. 20: 5) and sharply executed broad cross-hatching (not illustrated). Light horizontal lines bound a row of possible small articular bone impressions on a very small neck sherd (Fig. 20: 6) and a groove formed the neck of an upright, internally bevelled, flattened rim (not illustrated). Neatly executed, sub-circular stamps formed a row below the weakly incurved rim of a PB1 type jar (Fig. 20: 10). Similar stamps were a distinctive feature of ovoid jars in middle Iron Age phase B whilst analogously placed fingertip impressions occurred in phase C at Conderton Camp on Bredon Hill, Worcestershire, 17km north of this site (Morris 2005, 125, 127, figs 38, 40, 42: 1089, PO12, P047). An outwardly extruded rim from a straight sided vessel similar to S9 formed part of the same assemblage (Morris 2005, fig. 42). Two decorated sherds (Fig. 20: 6 and 7) were in fabric C2 but the other four gave disproportion representation to either limestone fabrics.

The lines incised on S5 are in a very similar pattern to a JC2-type jar from Croft Ambrey whilst stabbed decoration occurred at that site, Sutton Walls and Churchdown Hill (Peacock 1969, fig. 4: 8, 12, 14 and 16-8). Incised cross-hatching featured on three jars from The Knolls, Oxenton (Marshall 1978, fig. 3: 3, 14 and 16), although none of those vessels would be classed as type JD3. Finger-tipping below the rim occurs sparsely and was noted on fabrics other than those including Palaeozoic limestone amongst Peacock's examples on JC2, PA1 and PB1 forms (Peacock 1969, fig. 4: 19-22).

Overall the evidence suggests that the assemblage predates the late Iron Age, fitting within Cunliffe's Croft Ambrey-Bredon Hill style which he dates broadly to the 5th/4th to 1st centuries BC (Cunliffe 2005, 105-6 figs. 5.5 and A:19: 1-7). There is little to demonstrate change of fabric preference between the most prolific phases, 3 and 4, although some of the rims forms imply that the pottery may have had an inception which is a century or more later than that allowed by the dating of the broad style. The greatest part of the assemblage has traits most in common with middle Iron Age phases B and C at Conderton Camp. Whilst there were some inconsistencies in individual dates detailed analysis implied that the inception of phase B was 520-400 cal BC at 95% probability with a boundary between it and phase C most likely between 475-350 cal BC. Phase C is likely to have terminated within a span of 350-225 cal BC (Bayliss *et al.* 2005, 244-5).

### Illustrated later prehistoric pottery (Fig. 20)

- 1 [109] (263). C1. Rim, upright, rounded over short concave neck. Wall thickness: 7mm. Jar type JC2.1.
- 2 [125] (284). C1. Rim, upright, rounded. Wall thickness: 8mm. Jar type JC2.2.
- 3 [146] (374). C1. Rim, upright, rounded. Wall thickness: 7mm. Jar type JC2.3.
- 4 [442] (782). C2. Rim, everted, rounded, over concave short neck. Rim radius: 65mm. Wall thickness: 6mm. Jar type JD3.
- 5 [215] (465). LQ1. Shoulder. Wall thickness: 9mm. Possible jar type JD3.1. Row of slanting incised lines on upper shoulder bound by horizontal incised lines.
- 6 [149] (382). C2. Neck. Wall thickness: 6mm. Row of slanting oval impressions bound by single incised lines. Bowl type BD6?
- 7 [201] (388). GrLi1. Rim, incurved, rounded. Row of shallow fingertip impressions below it. Wall thickness: 8mm. Jar type PA1.1.
- 8 [202] (394). L2. Rim, upright, rounded. Wall thickness: 10mm. Jar type PA1.1.
- 9 [125] (284). C1. Rim, everted, flattened, outwardly expanded. Wall thickness: 8mm. Jar type PB1.1.
- 10 [308] (570). L2. Rim, incurved, rounded. Wall thickness: 8mm. Jar type PB1.1. Row of sub-circular impressions below rim.

### *Roman and post-Roman pottery by Jane Timby*

In addition to the prehistoric pottery the archaeological work recovered 10 small sherds of Roman date weighing 50g and 4 of post-Roman date (Appendix 4). The sherds were distributed across six separate features and were in a poor state of preservation. Some appear to be intrusive into much earlier features. Nine sherds are oxidized Severn Valley ware (SVW OX) (Tomber and Dore 1998, 149), a long-lived industry spanning the entire Roman period. The only featured sherd is a jar from gully 1019 which is not closely datable. A very small sherd from ditch 1009 with no surviving surfaces may be a sherd of Oxfordshire colour-coated ware (OXF RS) (Tomber and Dore 1998, 176) which would suggest a late Roman date. The sherds could be the result of field manuring or relate to a Roman settlement in the general area.

Four sherds of post-Roman date comprised two sherds of Herefordshire Border ware (Glos. Type fabrics (TF) 52 and TF 54) (Vince 1983); one sherd of glazed red earthenware; and one red earthenware.

### *Coins by Pierre-Damien Matisse*

Given its context, despite being really worn, the coin (1) from slot 306 of gully 1009 could be a late Roman Empire imitation. The coin is also very worn but may Roman (aes). It had been transformed into a button with three holes piercing it. Coin 2 cannot be identified.

Coin 1: [306] (566), cu alloy. Obverse: Illegible. Reverse: Illegible. 0.72g, 13.3mm -h.

Coin 2: Surface find, cu alloy. Obverse: Illegible. Reverse: Illegible. 7.65g, 26.6mm -h.

### *Worked Stone by David Williams FSA*

A small but nevertheless varied collection of worked stone was recovered from the site. Firstly, a single sharpening stone of indurated mudstone, which probably originally derived from the local Lias formations. To

account for its overall smoothness and likely roundness, this flake is probably part of a pebble which has been utilized as a honestone, perhaps obtained from the nearby River Severn gravels or its tributaries.

There are three quernstones present, two saddle querns and one rotary quern. Saddle querns were introduced in the Neolithic period and from then on the form had a long life, as there is evidence to suggest continued use into the Roman period, though on a much reduced scale and presumably for specialized grinding (Peacock 2013). It is interesting to note that the larger of the two saddle querns displays two deep sharpening grooves along one side, suggesting that a metal blade or blades were honed on the stone. However, it is not possible to say whether this was done during the lifetime of the quern or after it had broken and was no longer available for its original use. It is a reddish-brown sandstone and probably originates from among the Devonian Old Red Sandstone formations on the west side of the River Severn (Allen 1974), a similar source to the rotary quern below. In contrast, the smaller of the two saddle querns is made from a glauconitic sandstone and probably comes from the quarries at Lodsworth, West Sussex, which were operating from the Bronze Age through to the Roman period (Peacock 1987; Shaffrey and Roe 2011). No previous Lodsworth saddle querns have been found as far west as Gloucestershire (cf. Shaffrey and Roe 2011, Fig. 1), although Peacock does list a rotary quern from Hailes in this rock type (1987, 78 and Fig. 7). The remaining quernstone is a fragment of a rotary type and made from a quartz conglomerate from the Devonian upper Old Red Sandstone, probably from an origin on the west side of the River Severn, a common source for such quernstones in Gloucestershire during the Iron Age and Roman periods (Shaffrey 2006).

The final piece, possibly a paving tile or architectural feature, is a slab of sandy limestone/calcareous sandstone. Presumably this is Roman or later in date. It is difficult to suggest a likely source for this piece but perhaps it should be noted that thin alternations of sandy limestones do occur within the Lower and Middle Jurassic formations of the region (Green *et al.* 1992).

#### Catalogue of worked stone

<i>No</i>	<i>Group</i>	<i>Cut</i>	<i>Deposit</i>	<i>Description</i>
1	1014	108	261	Large flake from a sharpening stone of fine-grained indurated mudstone. The smooth outer surface displays numerous shallow grooves, including a set of deep and shallow horizontal ones along one edge. All these were undoubtedly caused by the sharpening of the edge of a metal tool against the surface of the stone. It is difficult to be certain, as the flake is comparatively small, but it is possible that it may have come from a large pebble that was conveniently utilized as a blade sharpener and hence, should perhaps, be differentiated from a deliberately shaped whetstone (Moore 1983).
2	1009	207	260	One end from a large broken reddish-brown saddle quern, quite shallow in depth and with the extant dished grinding surface displaying considerable wear (L: 188mm; W: 185mm; Th: 110-21mm). The underside is also smooth with wear, which gives the impression that at some stage this surface may also have been used for grinding. In addition, there are two deep and wide horizontal grooves on the unbroken side of the quern, suggesting that it had also a secondary use as a sharpening stone for a metal point.
3		136	296	Most of a small-sized saddle-quern, quite shallow in depth and broken at one end (L: 173mm; W: 115mm; Th: 55mm). The dished grinding surface displays considerable wear and the base area is domed-shaped, presumably for use positioned on the ground. The stone used is a glauconitic sandstone – a greensand and made of a hard, brownish-grey, cherty rock with fossil worm burrows

No	Group	Cut	Deposit	Description
				visible.
4	1038	307	569	Small part of a segment from the upper stone of a rotary quern, showing some evidence of burning (D: 105mm; Th: 58-32mm). The lower grinding surface has split off from the rest of the stone and is no longer present. The quern has been made from the Devonian Old Red sandstone (quartz conglomerate) rock.
5	1013	437	776	A broken slab of worked, fine-grained, white sandy limestone/calcareous sandstone, with a scatter of fossils visible., smooth on both sides, and showing evidence of the bedding planes in the core (L: 125mm; W: 95mm; Th: 20mm). Too well-formed to be a roofing tile, possibly part of a paving tile or architectural feature instead.

### *Fired clay by Richard Tabor*

The fired clay assemblage comprised a total of 199 fragments weighing 2619.0g giving a mean weight of 13.2g. It is likely that the most, if not all, of the fired clay is contemporary with the pottery, the great bulk of which is dated to the middle Iron Age. This has been borne out where fragments from identifiable object have been recovered. In contrast to the pottery the fired clay fabrics were all grog or quartz/sand fabrics or a combination of the two, although limestone was present in nearly half of the material with grog or quartz (Appendix 4). The limestone is likely to be locally sourced, contrasting with the Woolhope Hills limestone which dominated the pottery inclusions.

**fc-G1** (Medium) Moderately hard, slightly soapy grey fabric with buff red to grey surfaces including sparse (<1mm), medium (<2mm) and medium coarse (<4mm) sub-rounded grog, rare to sparse fine (<0.5mm) to fine/medium (<1mm) sub-rounded quartz and sparse to moderate fine (<1mm) iron oxides.

**fc-cG1** (Medium) Moderately hard grey, slightly micaceous sandy fabric with buff red to buff pink surfaces including moderate fine (<1mm), medium (<2mm) and sparse coarse (>2mm) sub-rounded grog abundant fine (<0.5mm), sparse fine (<0.5mm) sub-rounded quartz, rare fine to coarse (>0.3mm) calcite and rare to sparse iron oxides.

**fc-LG1** (Medium) Moderately hard grey, slightly micaceous sandy fabric with buff red to buff pink surfaces including sparse to moderate fine (<1mm), medium (<2mm) and sparse coarse (>2mm) sub-rounded grog, fine (<1mm) to coarse (<4mm) limestone, sparse fine (<0.5mm) sub-rounded quartz and rare to sparse iron oxides.

**fc-QG1** (Medium) Moderately hard grey, slightly micaceous sandy fabric with buff orange surfaces including abundant fine (<0.5mm) sub-rounded quartz, moderate fine (<1mm), medium (<2mm) and sparse coarse (>2mm) sub-rounded grog and rare to sparse iron oxides.

**fc-S1** (Medium) Moderately hard grey to buff pink, fine sandy fabric with buff pink surfaces including rare to sparse iron oxides and rarely (<1mm medium (<2mm) to medium/coarse (<3mm) limestone.

**fc-SO1** (Medium) Moderately hard grey, slightly micaceous sandy fabric with pale buff brown/grey surfaces including abundant crushed (<1mm), sparse to moderate medium (<2mm) to medium/coarse (<3mm) ooliths and rare fragments of coarse (>0.2mm) oolitic limestone.

**fc-LQ1** (Medium) Moderately hard grey fabric with buff orange surfaces including abundant (<0.5mm) to sparse fine/medium (<1mm) sub-rounded quartz, rare to sparse fine (<1mm) to coarse (<6mm) sub-angular limestone and sparse fine to coarse (<0.6mm) iron oxides.

**fc-LQ2** (Medium) Moderately hard grey fabric with buff orange surfaces including abundant fine/medium (<1mm) sub-rounded quartz, rare to sparse fine (<1mm) to coarse (<6mm) sub-angular limestone and sparse fine to coarse (<0.6mm) iron oxides.

Pre-firing perforations were noted from a minimum of five different objects (Table 4), four in fabric fc-LQ1, one in fabric SO1. The diameter of the perforation on the latter could not be determined but others were a uniform 15mm. Four fragments from slot 413 of group 1030 refitted to form a triangular 'loomweight' which would have had three perforations, conforming to Poole's type 1 (Fig. 20: 11). It is likely that the other perforated and

faceted fragments were from similar objects but it has been suggested that they are items of oven furniture rather than textile production (Poole 1991, 375-8 and 380; figs 7.44-5). It may be significant that an example of the type from Mingies Ditch was found in association with two copper-working crucibles but there was no cogent evidence for metalworking (Allen 1993, 78). The type occurred throughout the Iron Age sequence at Danebury, although more commonly in the middle to late Iron Age. In this instance, the pottery from elsewhere on site points strongly towards an earlier middle to middle Iron Age date. A tapering fragment retained a curving, 5mm-wide, groove which flared slightly at one end implying use-wear by twine or thread (Fig. 20: 12). Other fragments lacked diagnostic features but some with rough surfaces may have formed parts of oven walls or hearth bases. In general, with the exception of Fc-S1, there appears to be a division in use between fabrics in which sand and quartz are represented strongly, which may be associated with tools, and other grog-tempered fabrics which may have been used in cob or daub walls. The quartz/sand fabrics would have been better adapted to heat-shock which may have been required either to produce objects resistant to wear when in use or objects which were repeatedly exposed to high temperatures. Fragments in Fc-S1 retrieved from slot 314 of ring gully 1016 had rounded, convex surfaces and may derive from a discarded hearth base or oven structure.

Table 4. Fabrics of fired clay feature sherds (weight in g)

		fc-G1	fc-cG1	fc-LG1	fc-QG1	fc-S1	fc-SO1	fc-LQ1	fc-LQ2
Surfaces	convex round					1			
	concave round		1						
	facet x 1			1				1	
	facet x 2				1			1	
	facet x 3	1						1	
Edge	round			1	1				
Features	perforation						1	4	
Wear	groove							1	1

#### Illustrated fired clay (Fig. 20)

- 11 [413] (697). fc-LQ1. Triangular loomweight with two surviving 15mm diameter pre-firing perforations.  
 12 [305] (574). fc-LQ11. Rounded tapering fragment with curving, semi-circular in profile, 5mm diameter groove. Thickness: 7-16mm. Groove may result from use wear.

#### *Animal bones* by Matilda Holmes

A moderate assemblage of animal bone totalling nearly 1800 fragments was recovered from 113 contexts, largely of middle Iron Age date, which will be considered in detail. Smaller assemblages from late Iron Age to Roman features, will be summarized only.

Bones were identified using the author's reference collection. Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/ goat', unless a definite identification (Zeder and Lapham 2010; Zeder and Pilaar 2010) could be made. Bones that could not be identified to species were,

where possible, categorised according to the relative size of the animal represented (micro – rat/ vole size; small – cat/ rabbit size; medium – sheep/ pig/ dog size; or large – cattle/ horse size). Ribs were identified to size category where the head was present, vertebrae were recorded when the vertebral body was present, and maxilla, zygomatic arch and occipital areas of the skull were identified from skull fragments.

Tooth wear and eruption were recorded using guidelines from Grant (1982) and Payne (1973), as were bone fusion, metrical data (von den Driesch 1976), anatomy, side, zone (Serjeantson 1996) and any evidence of pathological changes, butchery (Lauwerier 1988) and working. The condition of bones was noted on a scale of 0-5, where 0 is fresh bone and 5, the bone is falling apart (Behrensmeyer in Lyman 1994, 355). Other taphonomic factors were also recorded, including the incidence of burning, gnawing, recent breakage and refitted fragments. All fragments were recorded, although articulated or associated fragments were entered as a count of 1, so they did not bias the relative frequency of species present. Details of Associated Bone Groups (ABGs) were recorded in a separate table. No bones were retrieved from the sieved samples, which may lead to a negative bias in the number and variety of micro- or small mammals, fish and bird bones recorded in the assemblage.

Bones were only included in analysis if they came from features that could be securely dated. Quantification of taxa used a count of all fragments (NISP – number of identified specimens), and that of anatomical elements a restricted count (Grant 1975). Mortality profiles were constructed based on tooth eruption and wear (Grant 1982; Jones and Sadler 2012) and bone fusion (O'Connor 2003). Pigs were sexed on the basis of the morphology of their canines (Schmid 1972).

#### Taphonomy and Condition

Bones were generally in good to fair condition (Table 5), though with a high proportion of fresh breaks and refitted fragments indicating that they were friable upon excavation. The relatively high number of loose teeth compared to those remaining in the mandible suggests that either bones were not buried immediately following discard but were exposed long enough for the soft tissues to break down and the teeth fall out of the mandibles, or that they were subject to post-burial disturbance. The low incidence of canid gnawing means that the latter is more likely, as if bones were left on the surface it would be expected that they would have been subject to a greater amount of scavenging. Relatively few butchery marks were observed, which is not surprising as middle Iron Age butchery relied on careful knife work to dismember the carcass of the main domesticates, which is less likely to mark the bones than chop or saw marks.

Butchery of cattle bones was most commonly recorded, with a few examples on horse, pig and sheep/ goat remains. The techniques relate to dismembering the carcass and removal of meat and sinews from the bones.

There were no obvious deposits of waste from butchery, skin-processing or craft-working, and it is likely that the animal bones come from general waste relating to the meat consumption of those living at the settlement. Only one associated bone group was observed, that of three horse tarsals (hock joint) from ditch 1042 (context 464) to indicate a primary context.

Table 5. Condition and taphonomic factors affecting the hand-collected assemblage identified to taxa and/ or element. Teeth included where stated

Condition	MIA1	MIA2	MIA3	MIA	MIA-RB	RB
Fresh						
Very good						
Good	40	14	95	13	2	
Fair	9	21	95	1	15	
Poor	2	10	28	1	1	
Very poor	1		1			
Total	52	45	219	15	18	0
Refit	4=12	17=44	62=167	1=2	3=13	
Fresh break	4	18	62	1	3	
Gnawed	11	8	31	1	4	
Loose mandibular teeth*	9	2	44	1	7	1
Teeth in mandibles*	12		30		2	
Butchery	3	4	14	1		
Burning						

\*deciduous and permanent 4th premolar and molars

### Middle Iron Age

Small assemblages were recorded for phases 1 and 2 (Table 6), but the phase 3 assemblage is considerably larger. Findings from all three phases, and from general middle Iron Age contexts is similar in nature and will be considered as a single assemblage. Data are given for separate phases where sample sizes are large enough.

Only the bones and teeth of domestic mammals were recovered (Table 6), which were dominated by cattle. Horse remains were next most common, followed by sheep/ goats. A few pig and canid (dog, fox or wolf) bones were also recorded. A dearth of wild taxa in this period is not unusual (Hambleton 2008, 33), particularly in relatively small domestic assemblages such as this, as the meat diet was almost exclusively from domestic animals. However, two bones from wild birds were recovered, a duck and marsh harrier. The fragmentary nature of the bird bones and their presence amongst more general refuse suggests that they may have been eaten.

Table 6. Species representation (NISP) of hand collected assemblage

Taxa	MIA1	MIA2	MIA3	MIA	All MIA	MIA-RB	RB
Cattle	35	31	179	19	264	12	1
sheep/ goat	22	3	76	2	103	15	1
Sheep			1		1		
Pig	7		8		15		
Equid	28	21	92*	8	149*	7	
Canid	3		4		7	2	
Duck				1	1		
Marsh harrier	1				1		
Total identified	95	55	360	29	539	36	2
Unidentified mammal			1				
Large mammal	164	198	626	48		53	



Medium mammal	28	11	49	2		9	1
Bird	1			1			
Total	288	264	1036	80		98	3

\* Associated bone groups included as a count of 1

The predominance of cattle is not uncommon on sites from Gloucestershire (Hambleton 2008, 44), but the high proportion (c.28%) of horse remains is unusual. In her review of data from Southern England, Hambleton (2008) only records one site (Bury Hill, Hampshire) where horses represent over 18% of the assemblage. At Pirton they were recovered as largely disarticulated remains alongside cattle, sheep/ goat and pigs, which, combined with the presence of butchery marks, makes it likely that these animals formed a significant part of the diet. However, the assemblage contained a high proportion of loose teeth, and if the Minimum Number of Individuals (MNI) is considered, it is likely that the importance of horses has been inflated by the presence of so many loose teeth (Table 7). The MNI suggest that the bones originated from at least seven cattle, five sheep/ goats but only two horses.

Table 7. Species representation by anatomical element (epiphysis count) for the most abundant taxa

<i>Element</i>	<i>Cattle</i>					<i>Sheep/ goat</i>	<i>Horse</i>	
	<i>MIA1</i>	<i>MIA2</i>	<i>MIA3</i>	<i>MIA</i>	<i>all MIA</i>	<i>all MIA</i>	<i>all MIA</i>	
Maxilla*			2		2			
Mandible*	1		5		6	12	1	
Loose teeth*	5	1	24	1	31	24	30	
2nd cervical vertebra			1		1			
Cervical vertebra			1		1			
Thoracic vertebra	1		2		3			
Lumber vertebra			4		4		1	
Scapula			1		1		1	
Humerus p						1		
Humerus d	1	1	2	1	5	1	1	
Radius p		2	10		12		4	
Radius d			4		4		3	
Pelvis		1	1	1	3	1	1	
Femur p		1	3		4			
Femur d	1		1		2		1	
Tibia p							1	
Tibia d	1	1	7	1	10	4	4	
Calcaneus	1	1			2			
Metacarpal p	2	1	3		6		4	
Metacarpal d	1				1		2	
Metatarsal p		2	8		10		3	
Metatarsal d	2				2		2	
1st phalanx			1		1			
2nd phalanx			2		2		1	
Total	16	11	82	4	113	43	60	
Minimum Number of Individuals						7 (tib)	5 (mand)	2 (rad)

\*deciduous 4th premolar and/ or molars included; horse= all premolars/ molars

Cattle and horse bones were recovered from all parts of the carcass (Table 7). The apparent over-abundance of early-fusing and dense elements (e.g. teeth, mandibles, proximal radius, pelvis, distal tibia and proximal metapodials) suggests that this was due to preservation bias, with the later-fusing elements subject to poor preservation and recovery. The sheep/ goat assemblage was dominated by mandibles and teeth, which gives the



higher MNI of five individuals, though only two are represented by post-cranial bones. Of the 12 sheep/ goat mandibles recovered, high concentrations came from the phase 3 ring ditch 1016/1017 (5 mandibles) and enclosure ditch 1013 (4 mandibles). This suggests that they were disposed of in the domestic setting, which is not unusual for the bones of smaller animals (Wilson 1996). However, it should be noted that a similar deposit came from Cleveveland Swales (Holmes 2018) where they were the sole bones recovered from a middle Iron Age roundhouse gully. There they were interpreted as representing butchery waste, or totems from the wall of the house. However, the latter is less likely at Pirton as they also came from an enclosure ditch and had been buried along with other bones in both features.

Cattle were culled as adult or elderly animals (Tables 8 and 9) suggesting that they were kept slightly longer than reaching maturity, which is the most cost-effective time to cull animals if they were used purely for meat. It implies that cattle were important for secondary products such as milk or traction, or as a status symbol. Several pathological cattle bones were recorded, all of which could be caused by age-related wear and tear, consistent with the age of many of the cattle in the assemblage. These included a metacarpal with exostosis at the proximal end, a femur with eburnation in the patellar region and a pelvis with eburnation of the acetabulum.

Horses would also have conveyed status and as all horse bones were fused, it is likely that they were kept alive as adults for transport, but also as a display of wealth. Sheep/ goats were culled at ages consistent with their importance for meat (Tables 8 and 9), with the potential to provide one or two clips of wool as they matured. A few older animals were also observed in the tooth wear data suggesting that wool or milk were also of importance. Data for pigs was scarce, but indicates that they, too were culled at ages consistent with meat production. A single canine was identified as coming from a female animal. Perinatal bones of sheep/ goat and cattle suggest that animals were bred in the area.

Table 8. Tooth wear stages for the major domesticates

Stage	Cattle				Sheep	Pig
	MIA1	MIA3	M-LIA	all MIA	all MIA	MIA1
A						
B						
C						
D						
E		1		1	1	2
F	1	2		3	3	
G	1	3	1	5	1	
H		2		2	2	
J		1		1		

Table 9. Fusion data for cattle and sheep/ goat

Cattle	MIA1		MIA2		MIA3		MIA		All MIA			Sheep/ goat	All MIA	
	U	F	U	F	U	F	U	F	U	F	%F		U	F
Neonatal												Neonatal		
Early		1		4		17		2		22	100	Early	1	1

Intermediate		2	1	2	1	9		1	2	13	87	Intermediate	2	2
Late		1		1	1	7			1	9	90	Late	1	
Final		1	1			6	8		7	9	56	Final		
Total		1	5	1	7	8	41		3	10	53	Total	4	3

### Roman

A few bones were recovered from Roman features (Table 6), coming from all the major domesticates. Teeth from cattle and sheep/ goat were recovered (Table 6).

### Summary

The animal bone assemblage suggests that those living and working at the settlement raised, culled and consumed their animals on site. The relatively high proportion of horses, and the keeping of cattle into maturity indicates that this may have been a settlement of some status. Sheep/ goats and pigs were largely raised for meat, although some sheep were kept as older animals, presumably for their wool and milk. There were no unusual deposits to imply structured deposition.

### *Other environmental data* by Richard Tabor

Despite the collection of soil 71 samples from the site no carbonized material, nor animal bone, was recovered during wet-sieving, except for the tiny amount of unidentified wood charcoal used for radiocarbon dating.

### *Radiocarbon dates*

Three samples of charcoal from the site were submitted to the 14Chrono Centre at Queen's University Belfast for radiocarbon dating by accelerated mass spectrometer (Table 10). Details of methodology and an assessment of the reliability of the results are held in archive. In summary, the lab considered all of the results to be reliable. The results have been calibrated using CALIB rev 7.0.1 (Reimer *et al.* 2013 with data from Stuiver and Reimer 1993) and the probability is expressed in the table as relative area under the curve at 2-sigma (95.4% reliability). The plot of the dates on the calibration curve resented as Chart 1 used OxCal 4.3.2 (Bronk Ramsey 2019: the differences in calibrated dates are negligible).

All of the radiocarbon dates were from features associated with phase 3, the initial phase of the outer enclosure. The strong overlapping of dates for middle deposits of the enclosure ditch 1044 and the initial deposits in the central sub-dividing ditch 1012 testify to active use of the enclosure during the first half of the 5th century BC. The date from the upper fill of the east terminal of 1017 could also overlap but is more likely to be half a century later.

Table 10. Radiocarbon dates

<i>Lab ID</i>	<i>Group</i>	<i>Context</i>	<i>Material</i>	<i>Radiocarbon Age (BP)</i>	<i>Calibrated Age</i>	<i>Probability</i>
UBA-41460	1012	124 (283)	Charcoal	2410 ± 29	735-689 BC	0.107
					662-648 BC	0.025
					<b>546-401 BC</b>	<b>0.868</b>
UBA-41461	1044	201 (388)	Charcoal	2378 ± 28	<b>538-394 BC</b>	<b>1.000</b>
UBA-41462	1017	215 (465)	Charcoal	2322 ± 24	<b>408-368 BC</b>	<b>1.000</b>

## Discussion

The fieldwork described above has examined a large parcel of land in the Severn Vale, around 3km east of the River Severn. Despite the large area, there appear to have been only two major phases of activity: a sustained episode from perhaps as early as the mid 6th century BC down to the late 4th century BC (Middle Iron Age) and a brief but intense episode at a time of crisis during World War 2. There are traces of a possibly late Bronze Age field system (Phase 1) which evolved in the Early Iron Age (Phase 2) but neither is firmly dated.

The linear features of phases 1 and 2 may in fact have formed one developing series of land divisions, fields laid out on either side of a trackway, and need not be very far apart in time. The penannular gully 1014 is presumed to be the site of a large roundhouse, the construction of which may have put one of the land divisions out of use. If gully 1014 was indeed a roundhouse it is distinctive for the lack of internal or nearby pits and the dearth of pottery and animal bone.

The animal bone assemblage from phase 1 is too small to draw any significant conclusions but it is interesting to note that the three species represented in gully 1022 are horse, pig and dog and that the cattle and sheep/goats of the middle Iron Age are entirely unrepresented. It is tempting to treat ditch 1023 as a feature of the transition to the second phase. It lay within the bounds of the possible roundhouse gully 1014.

What are presumed to be vestigial traces of land divisions of this kind are now commonly recorded for the middle to later Bronze Age and early Iron Age across southern England, the discontinuities usually assumed to reflect survival, although it may be that these boundaries only needed ‘token’ marking and that the layouts were never what we might regard as ‘complete’, even where the individual stretches of ditch might be of considerable size (eg Bath Road, Tetbury: Socha-Paszkievicz 2018, with examples). Here the features of the earliest phases are very slight and survival may be considered likely to be more of an issue, with both centuries of ploughing and the more obvious truncation by later features likely to have led to loss of more early features.

The linear features from phase 2 may have been a factor in deciding where to site a substantial, well-made ditch enclosing over 1ha of land which characterizes phase 3. The construction of the enclosure, strengthened by an upcast internal bank, and the digging of a dividing ditch, indicates a significant investment of resources.

However, it is noted that only a single ring gully house lay within suggesting that much of the enclosure interior was given over to other farm activities, probably animal husbandry in this instance. (Two undated post holes 20m to its east, one of which included daub-like fired clay, might represent post-settings for the door frame of a second building). The clearly defined western entrance to the enclosure and the linear features immediately within it appear to be designed for the sorting of domestic animals and are reminiscent of the arrangement of Bronze Age drafting gates and a race such as at Storey's Bar Road, Fengate which served holding pens within a wider field system (Pryor 1996, 318-9; figs 2 and 3) and elsewhere.

The middle Iron Age bone evidence has highlighted the importance of mature cattle and horse, both species well exploited for this period. Although the minimum number of individuals for the latter is only two the widespread distribution of the material suggests that they were well-represented. However, nothing about the structural aspects of the site or the other categories of finds imply that the enclosure had more than a work-a-day agricultural function and there is no evidence for the disposal of human remains which are commonly scattered across Iron Age settlements. At Pirton Fields, two stones imply sharpening but not the production of metal artefacts and rotary and saddle querns testify to the processing, but not production of grain, as the total absence of plant macrofossils also implies. At least one of the querns may have arrived on site for secondary use as a sharpener.

There is now a large corpus of Iron Age enclosure excavations with which to compare and contrast Pirton Fields (eg Cunliffe, 2005; Lambrick *et al.* 2009; Holbrook 2006; Moore 2006). Sites on the Wessex chalkland as at Winnall Down, Hampshire (Fasham 1985) or Upper Thames Valley as at Mingies Ditch, Hardwick (Allen and Robinson 1993) provide a marked contrast with evidence for dense activity revealing multiple-house sites, long-lived settlement and facilities to store large volumes of grain. However, closer comparison should be made with the sub-rectangular enclosures which are numerous in the Severn-Cotswold region (Moore 2006, 45ff). It should be noted that although we here retain the usage 'middle' Iron Age, Moore's revised chronology allows only for 'earlier' and 'later' divisions within the Iron Age and the dates would place this site in his 'earlier' Iron Age.

The location of the site in a locally low-lying area, on geology of mudstone in places overlain with alluvium from several streams that feed the Severn, suggests a propensity to flooding which raises the possibility that the site would only have been used seasonally, or for specific purposes. It needs to be added though that there is no unambiguous evidence for seasonal usage. If our interpretation of the site's function as primarily for stock management is correct, it reinforces a pattern of apparently 'specialized' uses of sites, as suggested by stock specialisms (sometimes with horse especially emphasized) at Claydon Pike (Miles *et al.* 2007), Watkins

Farm (Allen 1990) the already cited example of Mingies Ditch, or at Farmoor (Lambrick and Robinson 1979) contrasting with apparently dedicated grain storage sites as at Gravelly Guy (Lambrick and Allen 2004), Horcott (Hayden *et al.* 2017) or Faringdon (Weaver and Ford 2005) or some hillfort interiors; and again there are mixed agricultural regimes, as at Yarnnton (Hey *et al.* 2011) and elsewhere. The deeply-rooted idea that Iron Age farms were (on the whole) self-sufficient, mixed subsistence economies may need to be explored further. The Iron Age settlement pattern may be better envisaged as an interdependent network of different types of sites, whether engaged in complex exchange mechanisms, or, perhaps more simply, used by the same group for different purposes at different times of year.

One curious observation concerns the neat subdivision of the Pirton Fields enclosure into two halves. This is closely comparable to a site at Lidsey (West Sussex) where a rectilinear enclosure was also neatly subdivided (Wallis and Ford 2014, fig. 3).

The site had gone out of use and the ditches fully infilled well before Roman field boundaries were dug across the site. There is no clear suggestion from the pottery repertoire of any continued occupation of the site into the Late Iron Age and it is considered likely that the site had gone out of use by the late 4th century BC. Such abandonment broadly matches a pattern observed in the upper Thames valley region and also, if perhaps less clearly, in the Severn area, where continuity from the Middle Iron Age into the Late (in Moore's chronology from the 'earlier' to 'later') Iron Age, or beyond to the Roman period, is rare (Mingies Ditch and Watkins Farm again provide examples of this discontinuity, alongside now many others). Moore (2006, 214–5) sees the 4th century as marking 'a watershed in material and social change'.

### *Second World War*

The historic evidence for the site's World War 2 usage is that of a HAA Battery designated A15 and its associated encampment. It served as one of the eighteen gun positions that formed the Gloucester/Brockworth Gun Defended Area (GDA) established in early 1942 to protect the nearby Gloucestershire Aircraft Company, the associated RAF Staverton Airfield (now Gloucestershire Airport) and the River Severn valley. As of 1942 it is reported to consist of command post, emplacements for four 3.7inch static anti-aircraft guns, a GL Mark II radar, a searchlight battery, a sewage treatment works and 48 Nissen huts and other buildings providing accommodation, storage and other functions required in a military camp (Dobinson 1996; 2001).

Much of this information corresponds and is confirmed by the archaeological work. The concrete command post and four gun emplacements uncovered very much follow the standard design and layout with the four gun

emplacements forming a crescent around the central command post (CBA 1995) and is comparable to other HAA sites such as Pur Down, Bristol (Roberts 1981) and Stubb's Hill, Blunsdon, Swindon (Relph 2014). The concrete and brick gunpits with earth revetments noted in the historic record, that would have protected the 3.7inch guns have been largely removed and little evidence for their existence remains apart from the small sections of wall (368 and 370). Another variation from the standard and other examples of HAA Batteries is the close proximity of the rectangular corrugated steel structures to each of the emplacements. These likely served as shelter for gun crews and/or magazines for the ammunition; however, in other examples of HAA emplacements these facilities tended to be incorporated into the emplacements all around the gun mount (CBA 1995).

For the other concrete surfaces around the site the archaeology provides little evidence as to their purpose, except that the location of surface 392 within Area A corresponds to the location of the Mark II radar as derived from aerial photographs. The historic record also places searchlight batteries in the rough location of features 6 and 857, though this is less certain (Dobinson 1996).

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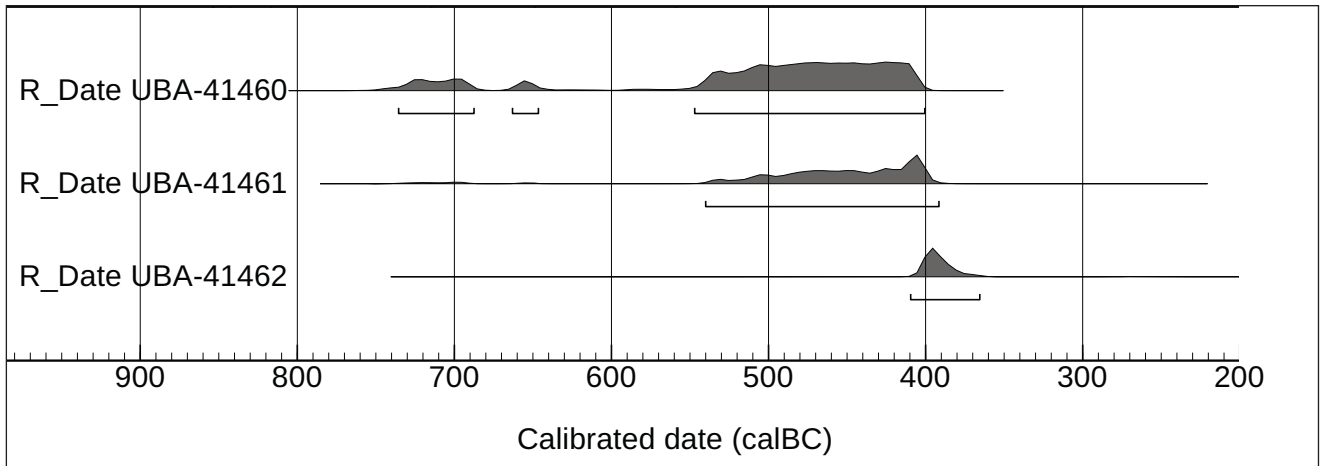
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**Pirton Fields, Churchdown,  
Near Gloucester, Gloucestershire  
Archaeological Excavation**

Chart 1. Plots of radiocarbon dates on the calibration curve.



## Appendix 1: Feature details with phasing

<i>Cut</i>	<i>Fill (s)</i>	<i>Group</i>	<i>Type</i>	<i>Phase</i>	<i>Dating evidence</i>
	150		Topsoil		
	151		Subsoil		
	153			P8: WWII	Documentary, form
	154			P8: WWII	Documentary, form
	155			P8: WWII	Documentary, form
	156			P8: WWII	Documentary, form
	157			P8: WWII	Documentary, form
	158			P8: WWII	Documentary, form
	159			P8: WWII	Documentary, form
	160			P8: WWII	Documentary, form
	161			P8: WWII	Documentary, form
	162			P8: WWII	Documentary, form
	163			P8: WWII	Documentary, form
	164			P8: WWII	Documentary, form
	184			P8: WWII	Documentary, form
	185			P8: WWII	Documentary, form
	186			P8: WWII	Documentary, form
	187			P8: WWII	Documentary, form
	188			P8: WWII	Documentary, form
	189			P8: WWII	Documentary, form
	190			P8: WWII	Documentary, form
	251			P8: WWII	Documentary, form
	252			P8: WWII	Documentary, form
	255			P8: WWII	Documentary, form
	256			P8: WWII	Documentary, form
	257			P8: WWII	Documentary, form
	368	1004	Wall	P8: WWII	Documentary, form
	369		Manhole	P8: WWII	Documentary, form
	370	1003	Wall	P8: WWII	Documentary, form
	854		Manhole	P8: WWII	Documentary, form
	855	1010	Levelling Material	P8: WWII	Documentary, form
101	165-83	1000	Command Bunker	P8: WWII	Documentary, form
102	192-9, 250	1005		P8: WWII	Documentary, form
103	152, 264	1013	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
104	253			P8: WWII	Documentary, form
104	254			P8: WWII	Documentary, form
105	191			P8: WWII	Documentary, form
106	258, 259	1013	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
107	260	1014	Ditch	P2: LBA-EIA	Stratigraphy
108	261	1014	Ditch	P2: LBA-EIA	Pottery, stratigraphy
109	262, 263	1013	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
110	265	1014	Ditch	P2: LBA-EIA	Stratigraphy
111	266	1022	Gully	P1: MBA-LBA	Pottery, stratigraphy
112	267, 268	1013	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
113	269	1014	Ditch	P2: LBA-EIA	Stratigraphy
114	270	1022	Gully Terminus	P1: MBA-LBA	Pottery, stratigraphy
115	271	1022	Gully	P1: MBA-LBA	Stratigraphy
116	272, 273	1012	Ditch	P3: EMIA	Stratigraphy, association
117	274	1023	Gully	P1: MBA-LBA	Stratigraphy, association
118	275		Pit	P1: Neo-BA	Stratigraphy
119	276		Pit	P1: Neo-BA	Stratigraphy
120	277	1021	Gully	P1: MBA-LBA	Stratigraphy, association
121	278	1012	Ditch	P3: EMIA	Stratigraphy, association
122	279	1021	Gully	P1: MBA-LBA	Pottery, association
123	280, 281	1013	Ditch	P4: EMIA-MIA	Pottery, association
124	282, 283, 288	1012	Ditch	P3: EMIA	UBA41460, 546-401 cal BC, pottery, stratigraphy
125	284	1037	Ditch	P4: EMIA-MIA	Pottery, association
126	285	1014	Ditch	P2: LBA-EIA	Pottery, stratigraphy
127	286	1023	Gully	P1: MBA-LBA	Stratigraphy
128	287	1020	Gully	P2: LBA-EIA	Association
129	2890		Pit	P1: Neo-BA	Stratigraphy
130	290		Pit	P1: Neo-BA	Stratigraphy
131	291, 293	1021	Ditch	P1: MBA-LBA	Stratigraphy, association
132	292	1013	Ditch	P4: EMIA-MIA	Stratigraphy, association
133	297-9	1011	Ditch	P3: EMIA	Association
134	294	1019	Gully	P6: Roman	Association
135	295		Pit		
136	296, 350		Posthole		

137	351	1022	Gully	P1: MBA-LBA	Pottery, association
138	354, 355	1013	Ditch	P4: EMIA-MIA	Pottery, association
139	352, 353		Posthole		
140	356	1030	Gully	P4: EMIA-MIA	Fired clay, stratigraphy
141	357	1019	Gully	P6: Roman	Association
142	358		Gully	P6: Roman	Association
143	359	1030	Gully	P4: EMIA-MIA	Stratigraphy, association
144	371	1009	Ditch	P6, Roman	Pottery, stratigraphy
145	372-3, 453-5	1044	Ditch Terminus	P3: EMIA	Pottery, stratigraphy
146	374, 375	1044	Ditch	P3: EMIA	Pottery, stratigraphy
147	376, 377	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
148	379-81	1045	Ditch	P5: MIA-Roman	Stratigraphy, association
149	382, 383, 389	1011	Ditch	P3: EMIA	Pottery, stratigraphy
200	385		Land drain	P8: Modern	Ceramic pipe
201	387-91	1044	Ditch	P3: EMIA	UBA41461, 538-394 cal BC, pottery, stratigraphy
202	393-5	1044	Ditch	P3: EMIA	Pottery, association
203	396, 451, 452	1044	Ditch	P3: EMIA	Pottery, association
204	397	1021	Ditch	P1: MBA-LBA	Association
205	398, 399, 450	1013	Ditch	P4: EMIA-MIA	Pottery, association
206	456	1009	Ditch	P6: Roman	Association
207	457	1009	Ditch	P6: Roman	Association
208	458	1027	Gully	Undated	
209	459	1026	Gully Terminus	P8: Modern	
210	460	1025	Gully	P8: Modern	
211	461	1025	Gully	P8: Modern	
212	462	1026	Gully	P8: Modern	
213	463	1027	Gully	Undated	
214	464	1042	Ditch	P4: EMIA-MIA	Stratigraphy, association
215	465, 564	1017	Ring Ditch	P3: EMIA	UBA41462, 408-368 cal BC, pottery
216	466	1017	Ring Ditch	P3: EMIA	Association
217	467, 468	1038	Ditch	P4: EMIA-MIA	
218	469	1040	Ditch	P3: EMIA	Stratigraphy, association
219	470	1040	Ditch	P3: EMIA	Stratigraphy, association
220	471	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
221	475	1043	Ditch	P5: MIA-Roman	Stratigraphy
222	476	1041	Ditch	P2: LBA-EIA	Stratigraphy, association
223	477		Ditch	Undated	Stratigraphy
224	473, 474	1011	Ditch	P3: EMIA	Stratigraphy, association
225	478	1042	Ditch	P4: EMIA-MIA	Stratigraphy, association
226	479, 480	1046	Ditch	P3: EMIA	Stratigraphy, association
227	481-3	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
228	484	1011	Ditch	P3: EMIA	Stratigraphy, association
229	485, 487	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
230	486	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
231	488	1044	Ditch	P3: EMIA	Association
232	489, 490	1046	Ditch	P3: EMIA	Association
233	491, 492	1046	Ditch	P3: EMIA	Stratigraphy, association
234	493	1028	Ditch	P6: Roman	Association
235	494	1028	Ditch	P6: Roman	Stratigraphy, association
236	495, 496	1011	Ditch	P3: EMIA	Stratigraphy, association
237	497	1011	Ditch	P3: EMIA	Pottery, association
238	498, 499	1044	Ditch	P3: EMIA	Association
239	550	1044	Ditch	P3: EMIA	Association
240	551	1044	Ditch	P3: EMIA	Association
241	771	1028	Gully	P6: Roman	Association
242	552	1042	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
243	553	1043	Ditch	P5: MIA-Roman	Stratigraphy, association
244	554	1041	Ditch	P2: LBA-EIA	Stratigraphy, association
245	555, 556	1038	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
246	557	1011	Ditch	P3: EMIA	Stratigraphy, association
247	558		Pit	Undated	
248	559	1041	Ditch	P2: LBA-EIA	Stratigraphy, association
249	560	1044	Ditch	P3: EMIA	Stratigraphy, association
300	561	1025	Gully	P8: Modern	
301	562	1012	Ditch	P3: EMIA	Association
302	563	1038	Ditch	P4: EMIA-MIA	Association
303	565	1020	Gully	P2: LBA-EIA	Association
304	573	1011	Ditch	P3: EMIA	Stratigraphy, association
305	574-7	1038	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
306	566	1009	Ditch	P6: Roman	Stratigraphy, association
307	567-9	1012	Ditch	P3: EMIA	Pottery, stratigraphy
308	570, 571	1040	Ditch Terminus	P3: EMIA	Pottery, stratigraphy

309	572	1017	Ring Ditch	P3: EMIA	Association
310	578	1017	Ring Ditch	P3: EMIA	Pottery, association
311	579, 580	1044	Ditch	P3: EMIA	Association
312	581	1012	Ditch	P3: EMIA	Pottery, stratigraphy
313	582	1037	Ditch	P4: EMIA-MIA	Stratigraphy, association
314	583, 584	1016	Ring Ditch	P3: EMIA	Pottery, association
315	585, 598	1042	Ditch	P4: EMIA-MIA	Stratigraphy, association
316	586	1024	Gully	P6: Roman	Stratigraphy, association
317	587-9	1013	Ditch	P4: EMIA-MIA	Stratigraphy, association
318	590, 591	1035	Ditch	P4: EMIA-MIA	Stratigraphy, association
319	592		Land Drain	P8: Modern	Ceramic pipe
320	593, 594		Pit	P4: EMIA-MIA	Stratigraphy
321	595		Ditch	P4: EMIA-MIA	Stratigraphy
322	596	1044	Ditch	P3: EMIA	Stratigraphy, association
323	597	1024	Gully Terminus	P6: Roman	Association
324	650	1044	Ditch Terminus	P3: EMIA	Stratigraphy, association
325	599	1041	Ditch	P2: LBA-EIA	Stratigraphy, association
326	651	1044	Ditch Terminus	P3: EMIA	Stratigraphy, association
327	652	1044	Ditch	P3: EMIA	Stratigraphy, association
328	653	1009	Ditch	P6: Roman	Association
329	654	1024	Gully	P6: Roman	Association
330	655, 656	1016	Ring Ditch	P3: EMIA	Pottery, association
331	659, 660	1013	Ditch	P4: EMIA-MIA	Stratigraphy, association
332	657	1029	Gully Terminus	P3: EMIA	Association
333	661	1012	Ditch	P3: EMIA	Stratigraphy, association
334	662	1037	Ditch	P4: EMIA-MIA	Stratigraphy, association
335	663	1035	Ditch Terminus	P4: EMIA-MIA	Pottery, association
336	664	1017	Ring Ditch	P3: EMIA	Stratigraphy, association
337	665, 666	1016	Ditch	P3: EMIA	Association
338	667	1029	Gully	P3: EMIA	Stratigraphy, association
339	668	1013	Ditch	P4: EMIA-MIA	Stratigraphy, association
340	669	1033	Ditch Terminus	P5: MIA-Roman	Stratigraphy, association
341	670	1034	Ditch Terminus	P5: MIA-Roman	Stratigraphy, association
342	671	1034	Ditch	P5: MIA-Roman	Stratigraphy, association
343	672	1013	Gully	P4: EMIA-MIA	Stratigraphy, association
344	673	1016	Ring Ditch Terminus	P3: EMIA	Pottery, association
345	674	1017	Ring Ditch	P3: EMIA	Association
346	675	1017	Ring Ditch Terminus	P3: EMIA	Association
347	676, 677	1035	Ditch	P4: EMIA-MIA	Pottery, association
348	678	1018	Gully	P1: M-LBA	Association
349	679	1018	Gully	P1: M-LBA	Association
400	680	1016	Ditch Terminus	P3: EMIA	Pottery, association
401	681	1018	Gully	P1: M-LBA	Association
402	688-92	1012	Ditch	P3: EMIA	Stratigraphy, association
403	693	1037	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
404	682	1033	Ditch	P5: MIA-Roman	Association
405	683		Gully	Undated	
406	684	1009	Gully	P6: Roman	Association
407	685	1009	Gully	P6: Roman	Stratigraphy, association
408	686	1018	Gully	P1: M-LBA	Stratigraphy, association
409	687	1018	Gully	P1: M-LBA	Stratigraphy, association
410	694	1018	Gully	P1: M-LBA	Stratigraphy, association
411	695	1009	Gully Terminus	P6: Roman	Stratigraphy, association
412	696		Land Drain	P8: Modern	Ceramic pipe
413	697	1030	Gully	P4: EMIA-MIA	Fired clay, association
414	698	1032	Ditch Terminus	P3: EMIA	Pottery, association
415	699	1019	Gully	P6: Roman	Pottery, association
416	750	1035	Ditch	P4: EMIA-MIA	Stratigraphy, association
417	751, 752	1036	Ditch	P3: EMIA	Pottery, stratigraphy
418	753	1014	Ring Ditch	P2: LBA-EIA	Association
419	754	1022	VOID	P1: MBA-LBA	
420	755	1014	Ring Ditch	P2: LBA-EIA	Stratigraphy, association
421	757	1015	Ditch Terminus	P3: EMIA	Stratigraphy, association
422	756	1032	Ditch	P3: EMIA	Pottery, stratigraphy
423	758	1015	Ditch	P3: EMIA	Association
424	759		Ditch	P3: EMIA	Stratigraphy, association
425	760	1012	Ditch	P3: EMIA	Stratigraphy, association
426	761	1037	Ditch	P4: EMIA-MIA	Stratigraphy, association
427	762	1013	Ditch	P4: EMIA-MIA	Stratigraphy, association
428	763	1015	Ditch	P3: EMIA	Pottery, stratigraphy
429	764	1015	Ditch	P3: EMIA	Pottery, stratigraphy
430	765, 772	1014	Ring Ditch Terminus	P2: LBA-EIA	Pottery, association

431	766-8	1012	Ditch	P3: EMIA	Pottery, stratigraphy
432	769	1037	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
433	770	1015	Ditch	P3: EMIA	Association
434	773	1020	Gully	P2: LBA-EIA	Association
435	774	1033	Ditch Terminus	P5: MIA-Roman	Association
436	780	1020	Gully	P2: LBA-EIA	Association
437	776	1013	Ditch	P4: EMIA-MIA	Pottery, association
438	777	1031	Gully	Undated	
439	778	1036	Ditch Terminus	P3: EMIA	Association
440	779	1023	Ditch	P1: MBA-LBA	Association
441	781	1012	Ditch	P3: EMIA	Pottery, stratigraphy
442	782	1037	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
443	783	1013	Ditch	P4: EMIA-MIA	Association
444	784	1012	Ditch	P3: EMIA	Association
445	785	1012	Ditch	P3: EMIA	Association
446	786	1037	Ditch Terminus	P4: EMIA-MIA	Association
447	787	1023	Gully	P1: MBA-LBA	Association
448	788	1009	Ditch	P6: Roman	Stratigraphy, association
449	789	1020	Gully Terminus	P2: LBA-EIA	Stratigraphy, association
500	791, 792	1012	Ditch	P3: EMIA	Pottery, association
501	790	1031	Ditch Terminus	Undated	
502	793	1009	Gully	P6: Roman	Association
503	796, 797	1036	Ditch Terminus	P3: EMIA	Pottery, stratigraphy
504	798	1035	Gully Terminus	P4: EMIA-MIA	Stratigraphy, association
505	794, 852, 853	1038	Ditch Terminus	P4: EMIA-MIA	Stratigraphy, association
506	795	1044	Ditch Terminus	P3: EMIA	Stratigraphy, association
507	799	1012	Ditch	P3: EMIA	Association
508	850, 851	1038	Ditch	P4: EMIA-MIA	Association
509	360-3, 365	1006		P8: WWII	Documentary, form
510	364, 366, 367	1007		P8: WWII	Documentary, form
511	658, 659	1034	Ditch	P5: MIA-Roman	Stratigraphy, association
512	382	1038	Ditch	P4: EMIA-MIA	Pottery, stratigraphy
513	392	1010	Concrete Base	P8: WWII	Documentary, form
514	473	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
515	483	1045	Gully	P5: MIA-Roman	Stratigraphy, association
516	479	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
517	492	1038	Ditch	P4: EMIA-MIA	Stratigraphy, association
518	399, 450	1034	Ditch	P5: MIA-Roman	Pottery, stratigraphy
519	598	1043	Ditch	P5: MIA-Roman	Stratigraphy, association

Appendix 2a. Distribution by cut of middle Iron Age fabrics (weight in g)

Group	Cut	Deposit	C1		C2		L1		L2		LQ1		OrL1		O1		V1	
			no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt
1012	124	282	18	117.0	8	27.0			2	16.0								
1012	124	283	4	36.0	10	56.0												
1012	307	567	3	12.0														
1012	307	569			1	5.0	6	18.0										
1012	312	581	1	4.0											1	0.5		
1012	431	766			2	5.0			3	9.0								
1012	431	768			2	4.0			14	29.0								
1012	441	481							19	130.0								
1012	500	791	1	0.5	3	4.0												
1012	500	792	20	8.5														
1013	103	152	2	22.0														
1013	103	264	6	32.0	3	15.0	1	16.0	1	3.0								
1013	106	258					2	16.0	2	21.0								
1013	106	259					1	6.0										
1013	109	262	26	71.0	2	6.0												
1013	109	263	4	22.0	65	32.0												
1013	112	267	2	5.0														
1013	112	268	6	25.0														
1013	123	281					4	12.0										
1013	138	354	7	60.0	1	4.0												
1013	205	399	3	11.0	2	10.0												
1013	437	776	9	60.0														
1014	108	261	2	7.0													1	6.0
1014	126	285																
1015	423	758	2	3.0														
1015	428	763	3	23.0														
1015	429	764	3	53.0														
1016	314	584	7	26.0	7	9.0												
1016	330	656	3	14.0														
1016	337	666	4	52.0	1	1.0												
1016	344	673							1	10.0								
1016	400	680	6	4.0														
1017	215	465	10	28.0	16	29.0					2	21.0						
1017	309	572	1	6.0														
1019	134	294													1	9.0		
1021	122	279					1	1.0										
1022	137	351					1	5.0										
1032	414	698	1	1.0														
1032	422	756	11	237.0														
1034	342	671	2	8.0														
1035	335	663	9	4.0														
1035	347	673							1	0.5								
1035	347	676	1	1.0														
1036	417	752			2	3.0												
1036	503	797	4	15.0														
1037	125	284	14	99.0	7	21.0									1	7.0		
1037	334	662																
1037	403	693	1	3.0	1	1.0												
1037	432	769	2	21.0														
1037	442	782			5	12.0												
1038	237	497	5	237.0														
1038	245	555																
1038	305	574			3	6.0												
1038	512	382	4	34.0	5	28.0					1	9.0						
1040	308	570	6	11.0					1	5.0								
1042	242	552			5	9.0												
1044	145	372	4	5.0														
1044	145	373			27	26.0												
1044	146	374	3	17.0	7	19.0												
1044	146	375	9	39.0														
1044	201	387									1	3.0						
1044	201	388	8	50.0	3	12.0			6	28.0			1	7.0				
1044	202	394							1	46.0								
1044	202	395			3	12.0			3	7.0								
1044	203	451					3	27.0										
1044	315	585			48	22.0												
		Totals	237	1484.0	239	378.0	19	101.0	54	304.5	4	33.0	1	7.0	3	16.5	1	6.0

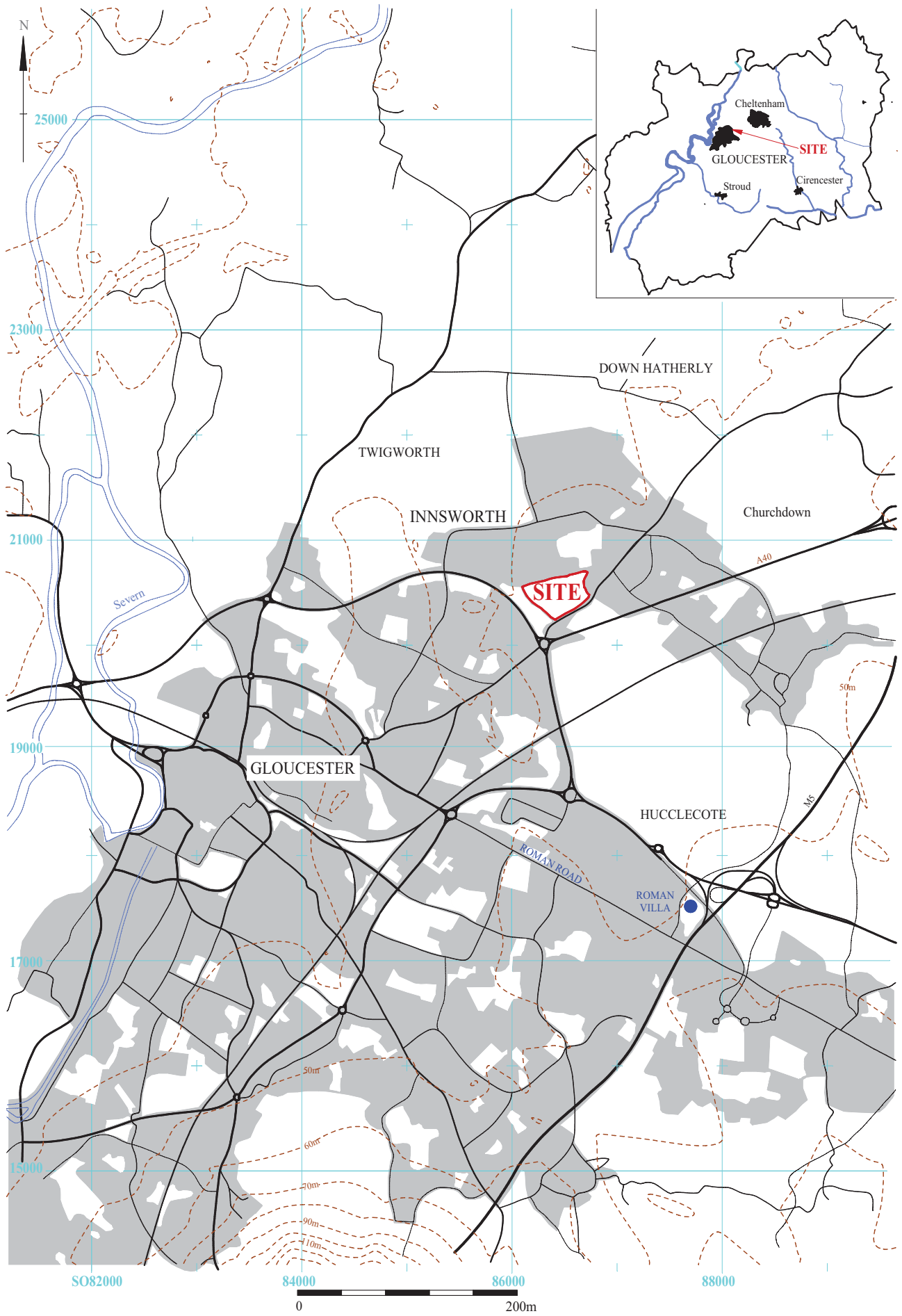
Appendix 2b. Distribution by cut of middle Iron Age fabrics, continued (weight in g)

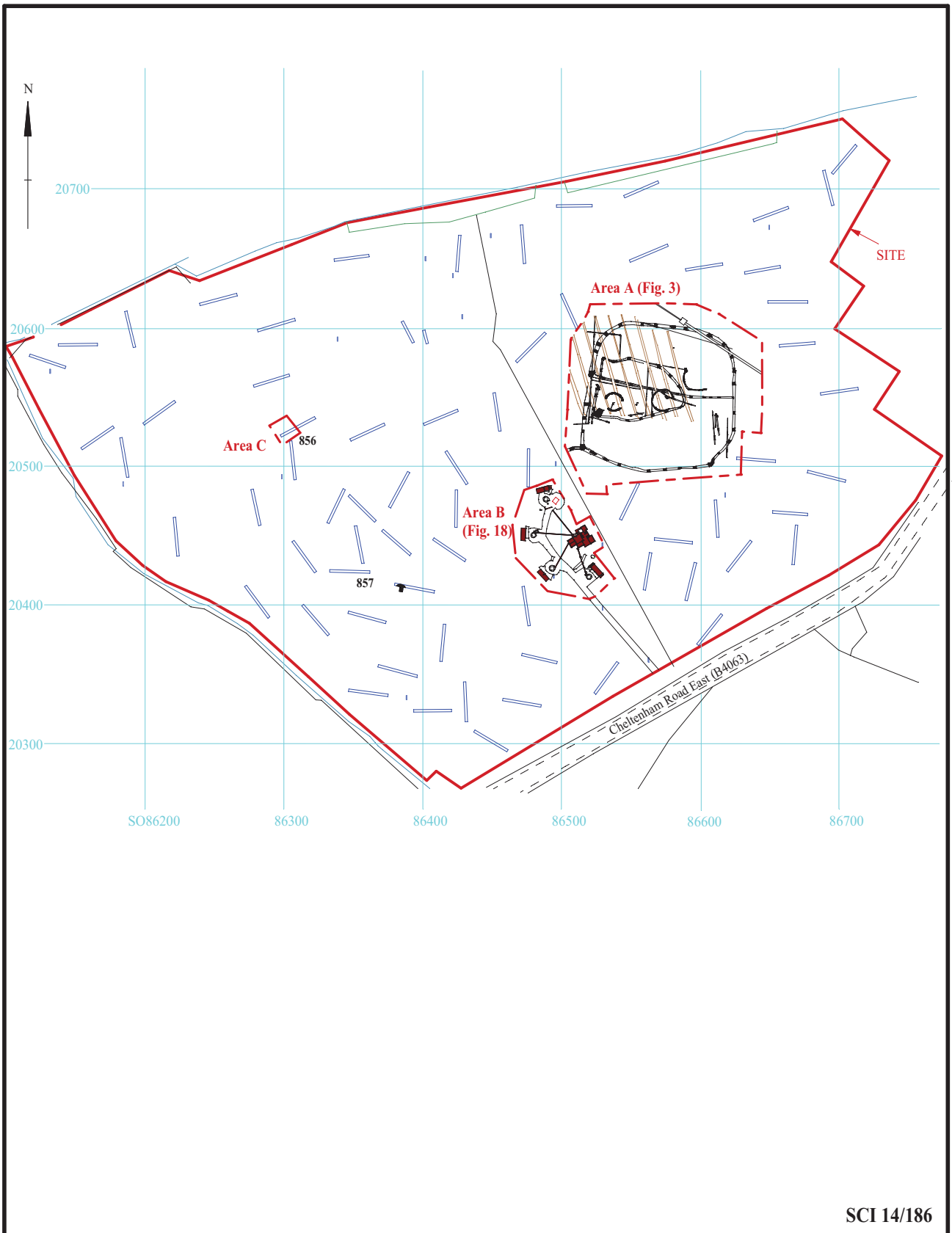
Group	Cut	Deposit	Sh1		Sh2		Q1		Q2		LQ2		CQ1		Total		mean
			no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	
1012	124	282													28	160.0	5.7
1012	124	283													14	92.0	6.6
1012	307	567													3	12.0	4.0
1012	307	569													7	23.0	3.3
1012	312	581													2	4.5	2.3
1012	431	766													5	14.0	2.8
1012	431	768													16	33.0	2.1
1012	441	481													19	130.0	6.8
1012	500	791													4	4.5	1.1
1012	500	792													20	8.5	0.4
1013	103	152													2	22.0	11.0
1013	103	264													11	66.0	6.0
1013	106	258													4	37.0	9.3
1013	106	259													1	6.0	6.0
1013	109	262	2	5.0											30	82.0	2.7
1013	109	263													69	54.0	0.8
1013	112	267													2	5.0	2.5
1013	112	268													6	25.0	4.2
1013	123	281					1	3.0							5	15.0	3.0
1013	138	354													8	64.0	8.0
1013	205	399													5	21.0	4.2
1013	437	776													9	60.0	6.7
1014	108	261													3	13.0	4.3
1014	126	285							1	7.0					1	7.0	7.0
1015	423	758											2	6.0	4	9.0	2.3
1015	428	763													3	23.0	7.7
1015	429	764													3	53.0	17.7
1016	314	584													14	35.0	2.5
1016	330	656													3	14.0	4.7
1016	337	666													5	53.0	10.6
1016	344	673													1	10.0	10.0
1016	400	680													6	4.0	0.7
1017	215	465													28	78.0	2.8
1017	309	572													1	6.0	6.0
1019	134	294													1	9.0	9.0
1021	122	279													1	1.0	1.0
1022	137	351													1	5.0	5.0
1032	414	698													1	1.0	1.0
1032	422	756													11	237.0	21.5
1034	342	671													2	8.0	4.0
1035	335	663													9	4.0	0.4
1035	347	673													1	0.5	0.5
1035	347	676													1	1.0	1.0
1036	417	752													2	3.0	1.5
1036	503	797													4	15.0	3.8
1037	125	284					1	2.0							23	129.0	5.6
1037	334	662									1	5.0	1	6.0	2	11.0	5.5
1037	403	693													2	4.0	2.0
1037	432	769													2	21.0	10.5
1037	442	782													5	12.0	2.4
1038	237	497													5	237.0	47.4
1038	245	555			2	7.0									2	7.0	3.5
1038	305	574													3	6.0	2.0
1038	512	382													10	71.0	7.1
1040	308	570													7	16.0	2.3
1042	242	552													5	9.0	1.8
1044	145	372													4	5.0	1.3
1044	145	373													27	26.0	1.0
1044	146	374													10	36.0	3.6
1044	146	375													9	39.0	4.3
1044	201	387													1	3.0	3.0
1044	201	388													18	97.0	5.4
1044	202	394									1	5.0			2	51.0	25.5
1044	202	395													6	19.0	3.2
1044	203	451													3	27.0	9.0
1044	315	585													48	22.0	0.5
		Totals	2	5.0	2	7.0	2	5.0	1	7.0	2	10.0	3	12.0	570	2376.0	4.2

Appendix 3. Distribution by cut of fired clay fabrics (weight in g)

Group	Cut	Deposit	Fc-G1		Fc-cG1		Fc-LG1		Fc-QG1		Fc-S1		Fc-SO1		Fc-LQ1		Fc-LQ2		Totals		mean
			no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt	
1012	125	284					3	21.0											3	21.0	7.0
1012	307	567												3	17.0				3	17.0	5.7
1012	312	581					3	4.0											3	4.0	1.3
1012	441	781	6	31.0															6	31.0	5.2
1012	500	791												2	40.0				2	40.0	20.0
1012	500	792								4	6.0								4	6.0	1.5
1013	103	264							1	31.0			8	125.0					9	156.0	17.3
1013	106	258												1	8.0				1	8.0	8.0
1013	106	259												1	7.0				1	7.0	7.0
1013	112	267	3	47.0															3	47.0	15.7
1013	138	354							29	413.0									29	413.0	14.2
1013	205	399												2	21.0				2	21.0	10.5
1013	427	762					2	38.0											2	38.0	19.0
1014	108	261	2	5.0	1	14.0													3	19.0	6.3
1014	108	262	2	171.0	4	14.0													6	185.0	30.8
1014	109	263												1	8.0				1	8.0	8.0
1014	127	286												2	7.0				2	7.0	3.5
1014	430	765								1	10.0								1	10.0	10.0
1016	314	584								42	359.0								42	359.0	8.5
1016	330	656												4	85.0				4	85.0	21.3
1016	337	666					2	17.0						1	9.0				3	26.0	8.7
1017	215	465	3	59.0										10	34.0				13	93.0	7.2
1017	310	578							1	5.0									1	5.0	5.0
1020	128	287					2	6.0											2	6.0	3.0
1022	114	270					4	8.0											4	8.0	2.0
1023	124	282			3	54.0								6	81.0				9	135.0	15.0
1030	413	697								1	38.0			4	410.0	1	94.0		6	542.0	90.3
1034	342	671					4	13.0											4	13.0	3.3
1035	347	676					1	15.0		1	3.0								2	18.0	9.0
1036	417	751	2	12.0															2	12.0	6.0
1037	334	662														1	27.0		1	27.0	27.0
1037	432	769												2	12.0				2	12.0	6.0
1037	442	782												2	1.0				2	1.0	0.5
1038	305	574												1	8.0				1	8.0	8.0
1040	308	570												2	5.0				2	5.0	2.5
1042	214	464												1	129.0				1	129.0	129.0
1044	145	372												1	3.0				1	3.0	3.0
1044	145	373												2	16.0				2	16.0	8.0
1044	146	375												2	26.0				2	26.0	13.0
1044	201	387					2	8.0											2	8.0	4.0
1044	201	388					3	17.0						2	15.0				5	32.0	6.4
1044	203	452					1	6.0											1	6.0	6.0
1044	324	650												1	1.0				1	1.0	1.0
PH	135	295	3	5.0															3	5.0	1.7
			21	330.0	8	82.0	27	153.0	31	449.0	49	416.0	8	125.0	53	943.0	2	121.0	199	2619.0	13.2



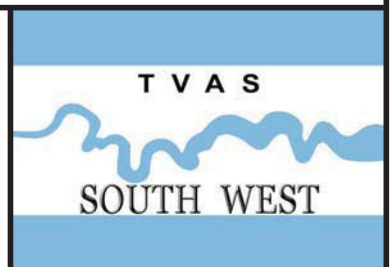


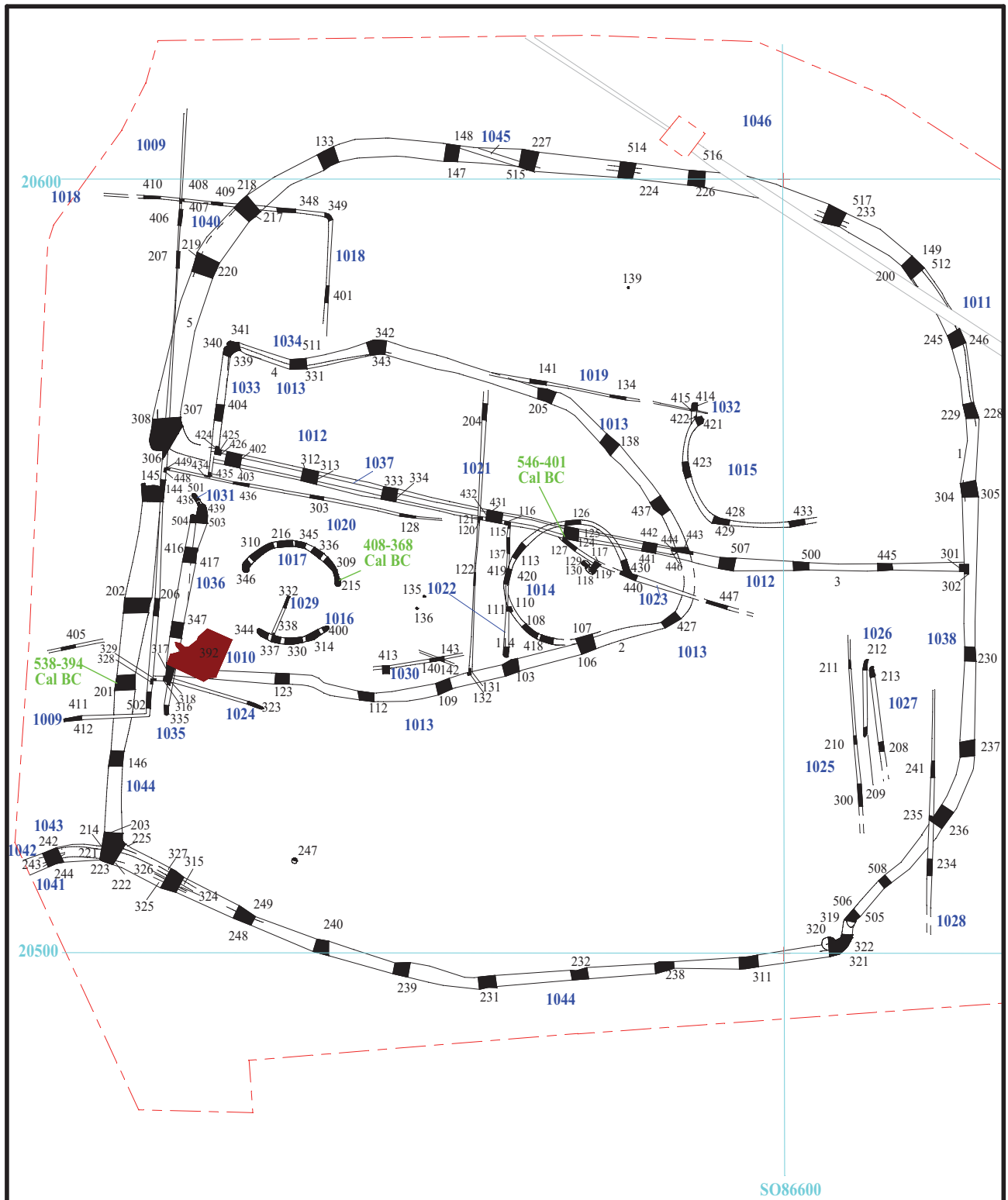


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**Pirton Fields, Churchdown  
Near Gloucester, Gloucestershire, 2019  
Archaeological Excavation**

Figure 2. Location of trenches (red), showing features.  
Geotechnical pits (blue).



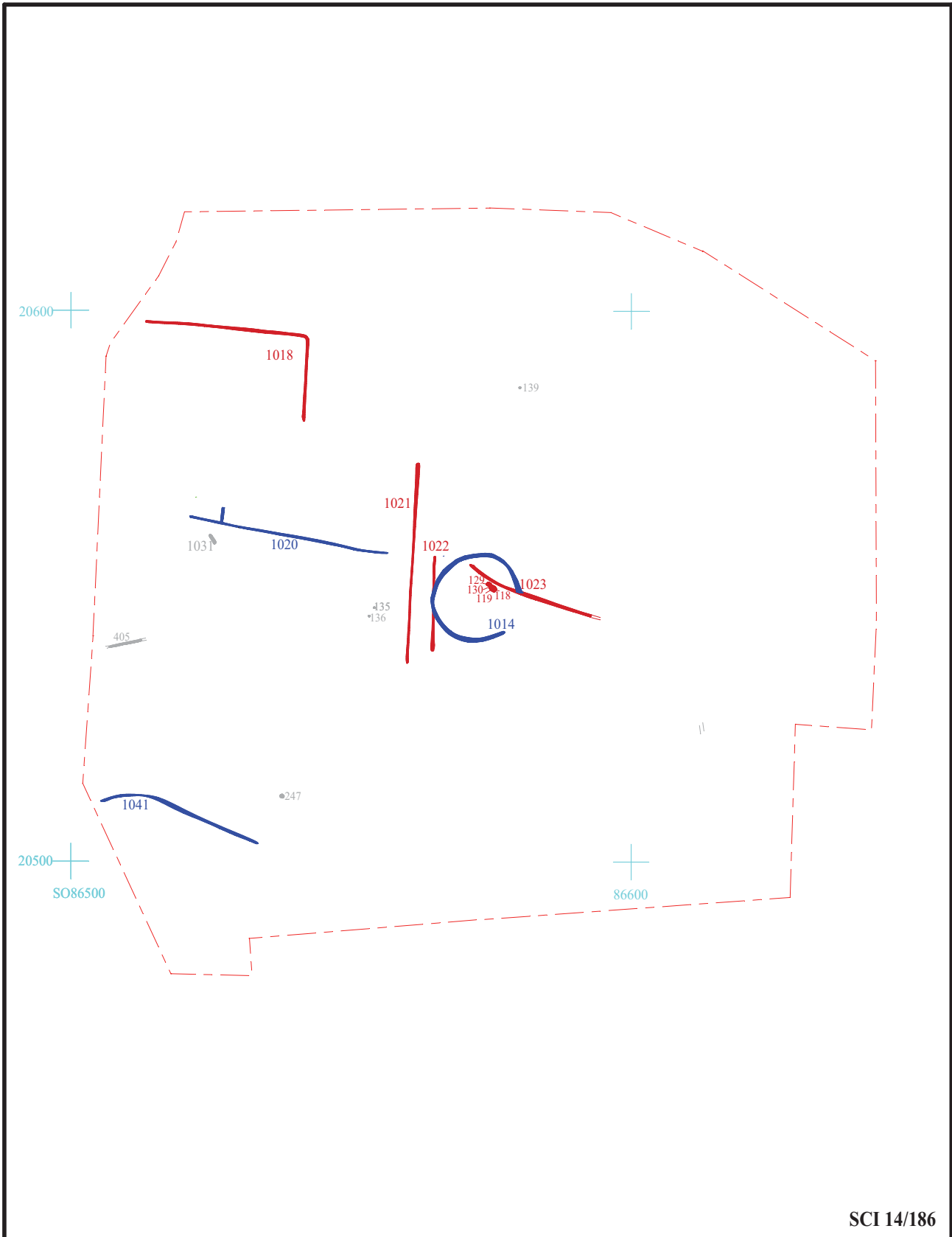


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Archaeological Excavation**

Figure 3. Plan of all excavated features, Area A.  
(furrows and evaluation trenches removed)

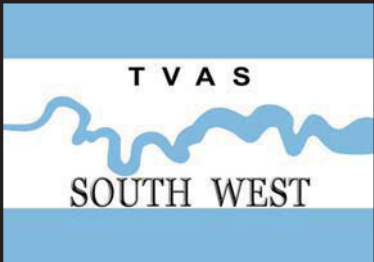




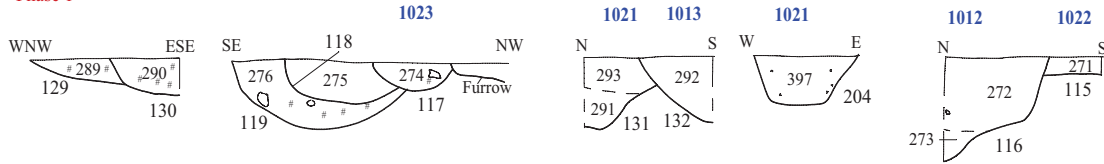
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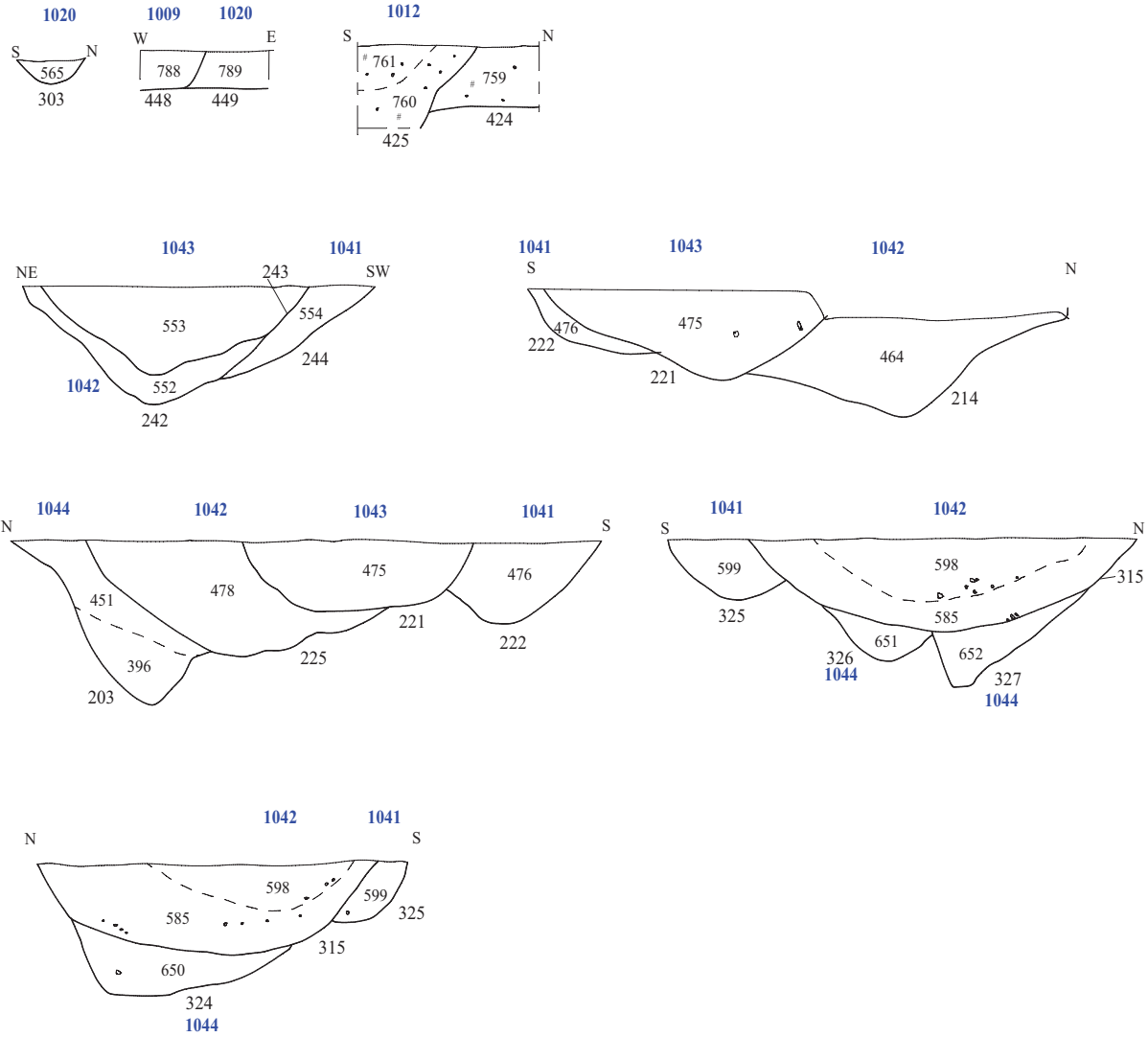
Figure 4. Phases 1 (red) and 2 (blue), pre- and/or earlier middle Iron Age features.



Phase 1



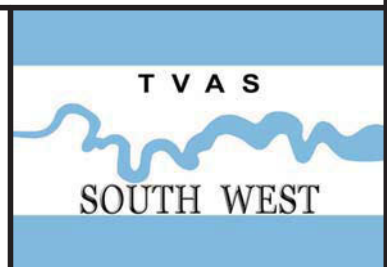
Phase 2

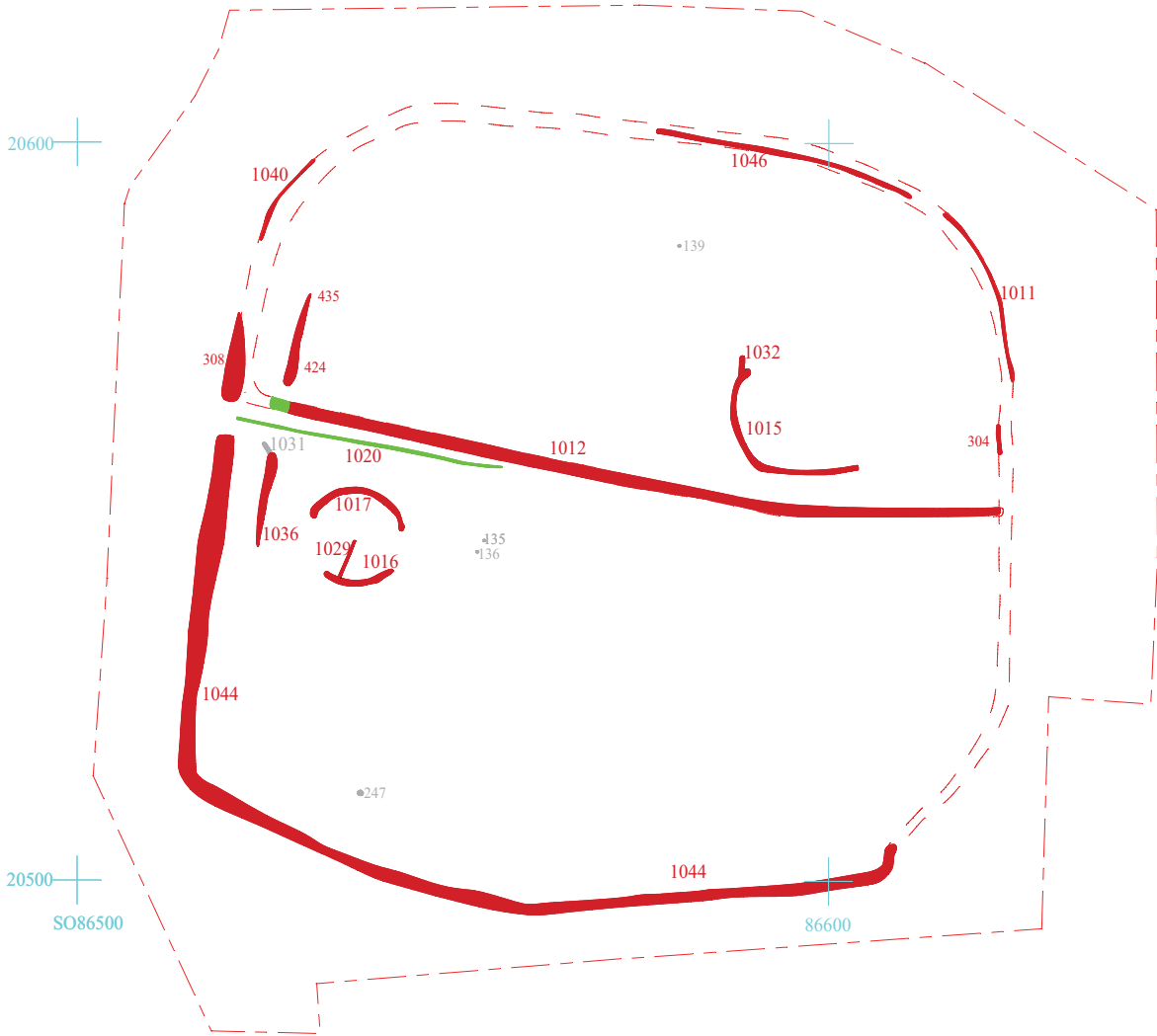


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Figure 5. Sections, phases 1 and 2.





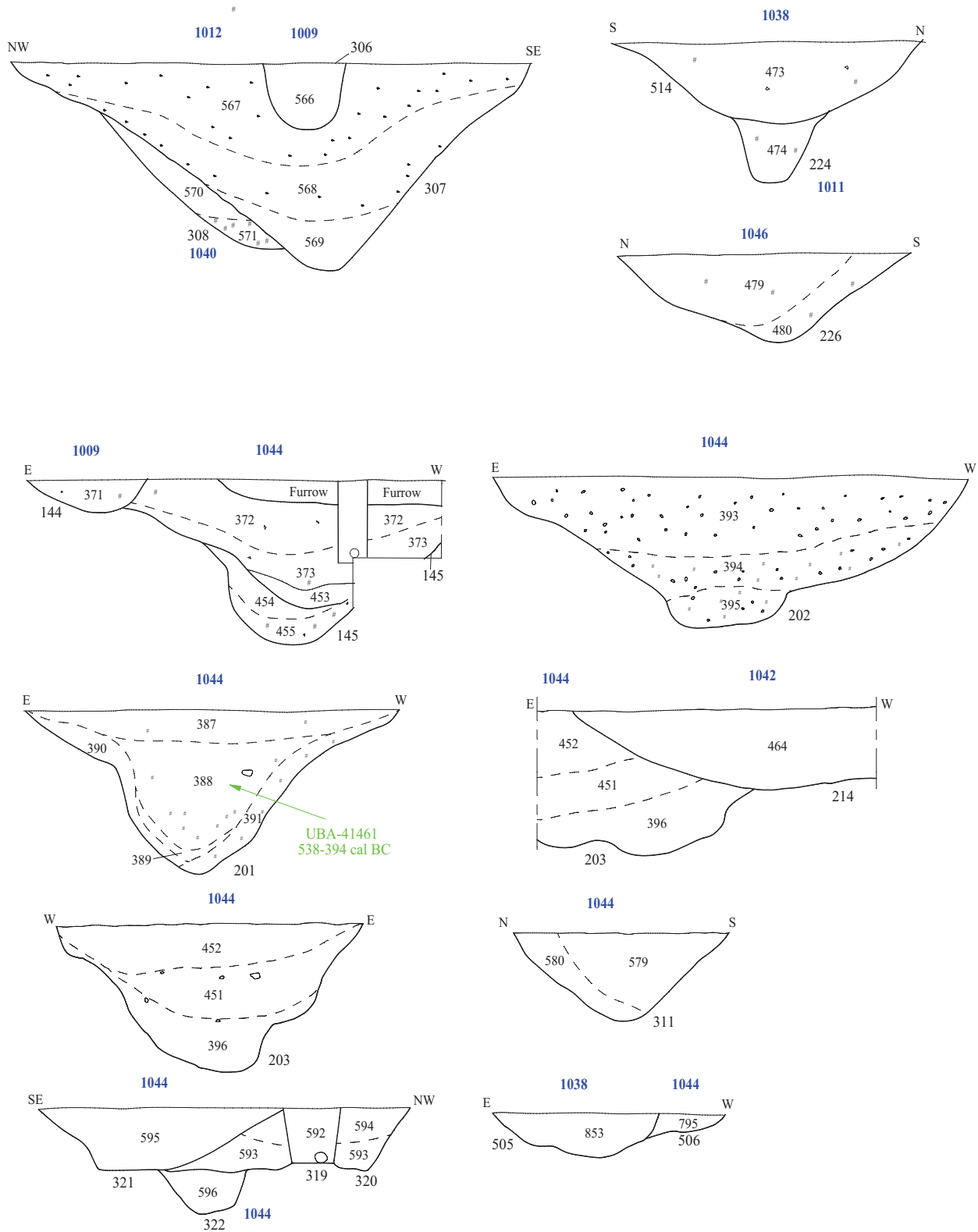
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Figure 6. Phase 3, middle Iron Age features.





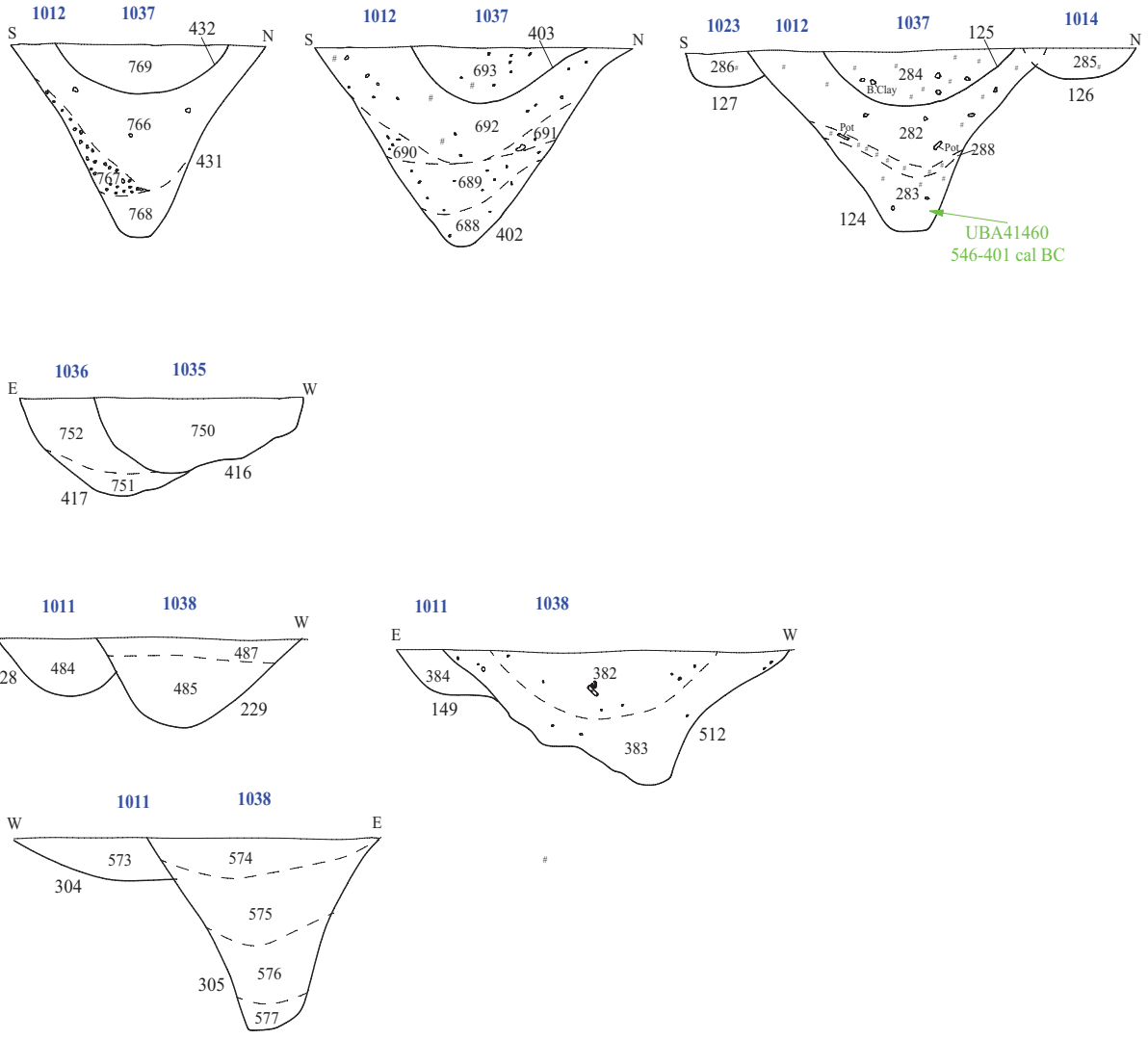
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Figure 7. Sections, phase 3.

0 1m

TVAS  
SOUTH WEST



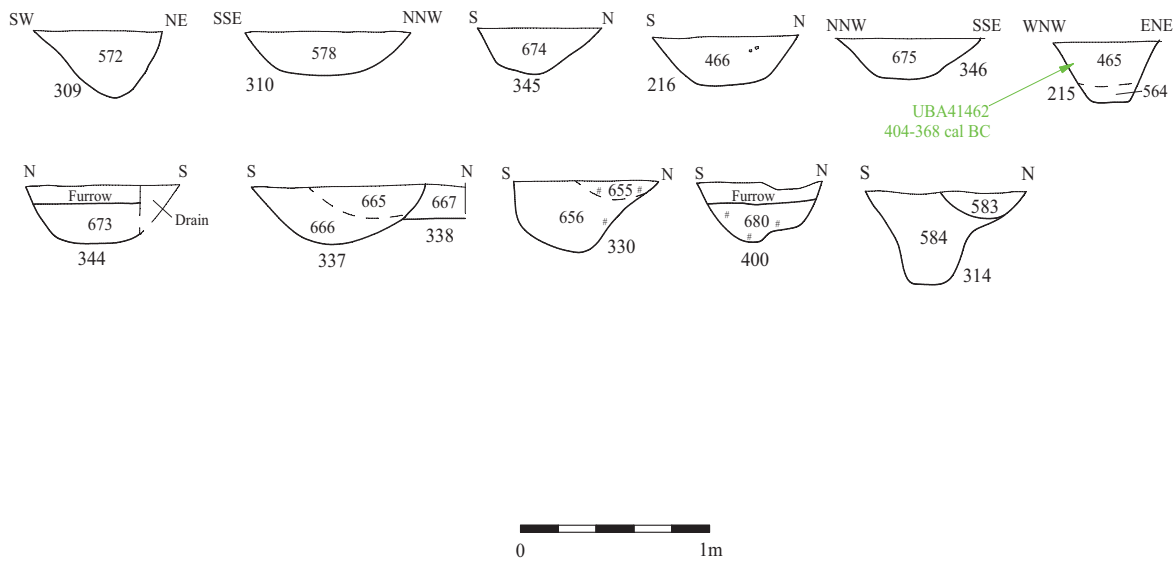
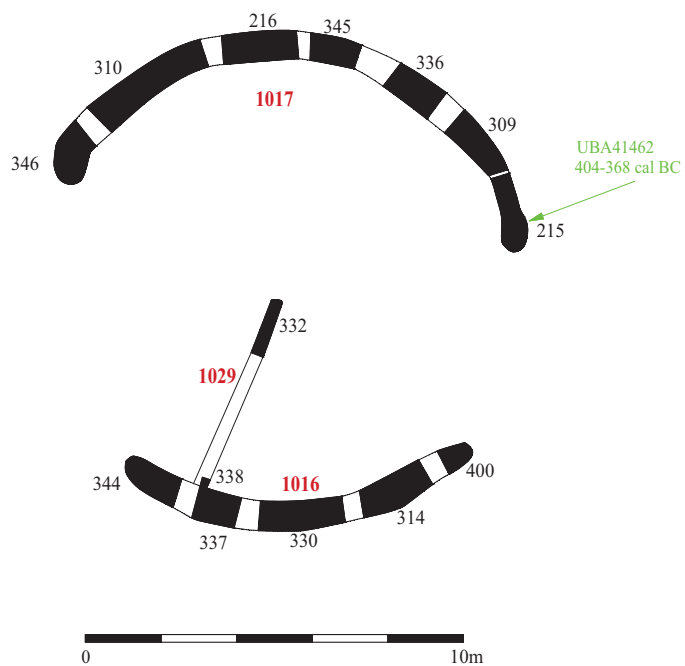
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**Pirton Fields, Churchdown,  
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Figure 8. Sections, phase 3.





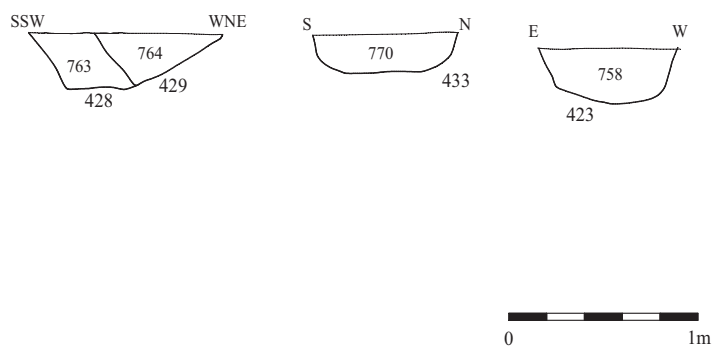
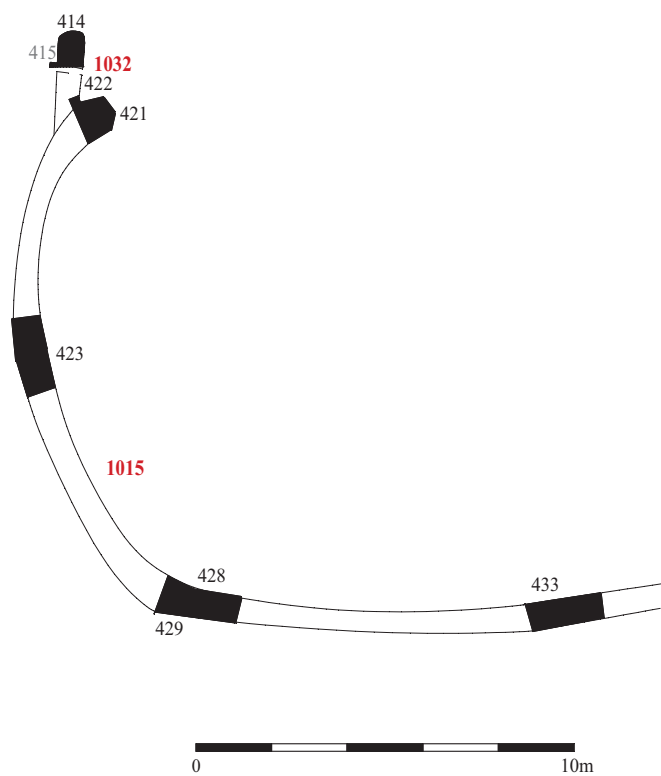


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Figure 9. Phase 3/4, RH1.



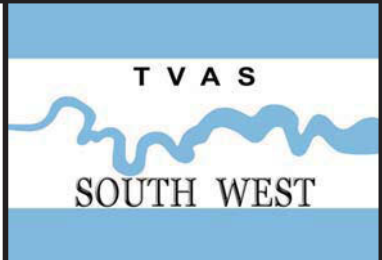


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Figure 10. Phase 3/4, middle curvilinear gully 1015.



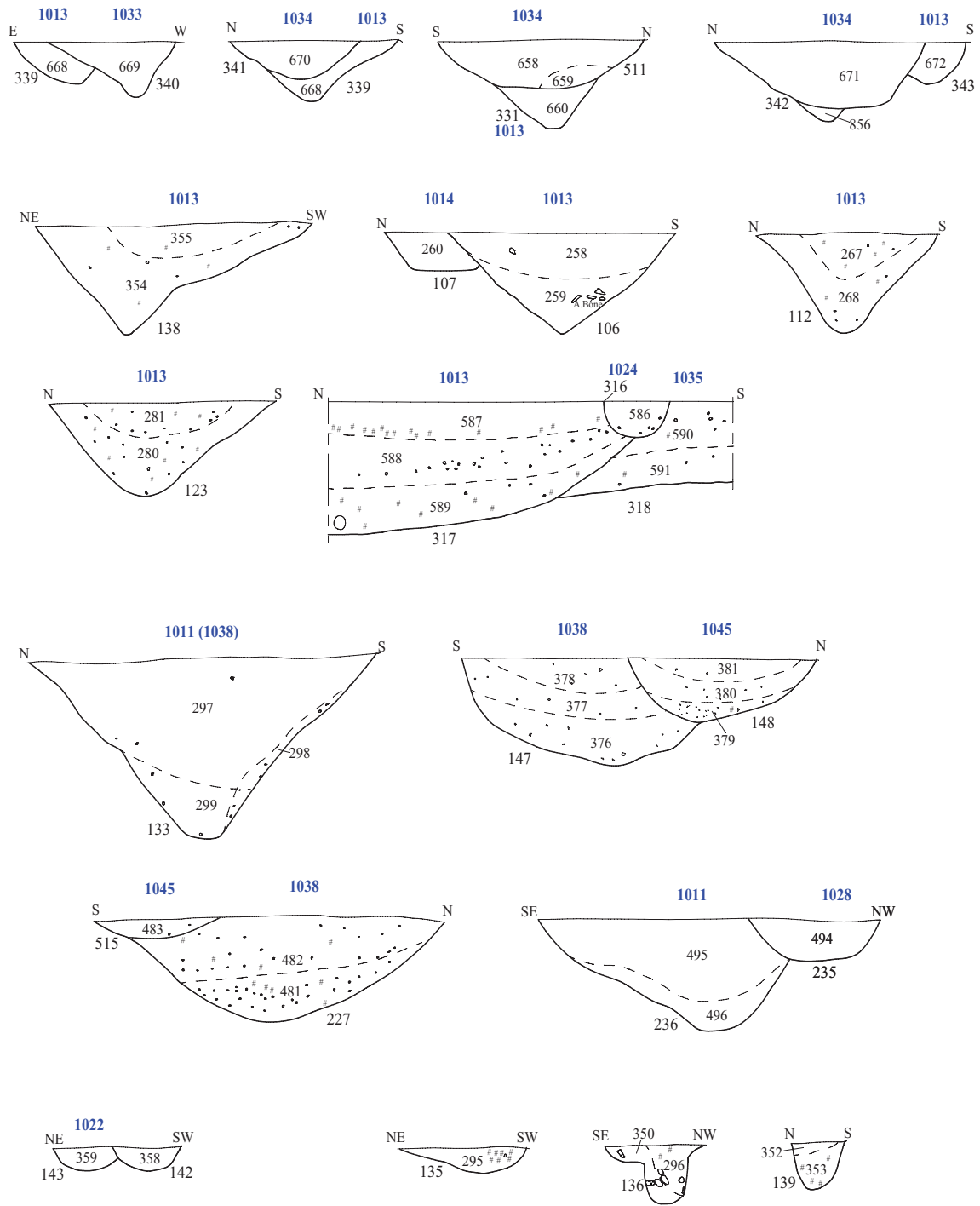


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Figure 11. Phase 4, middle Iron Age features.



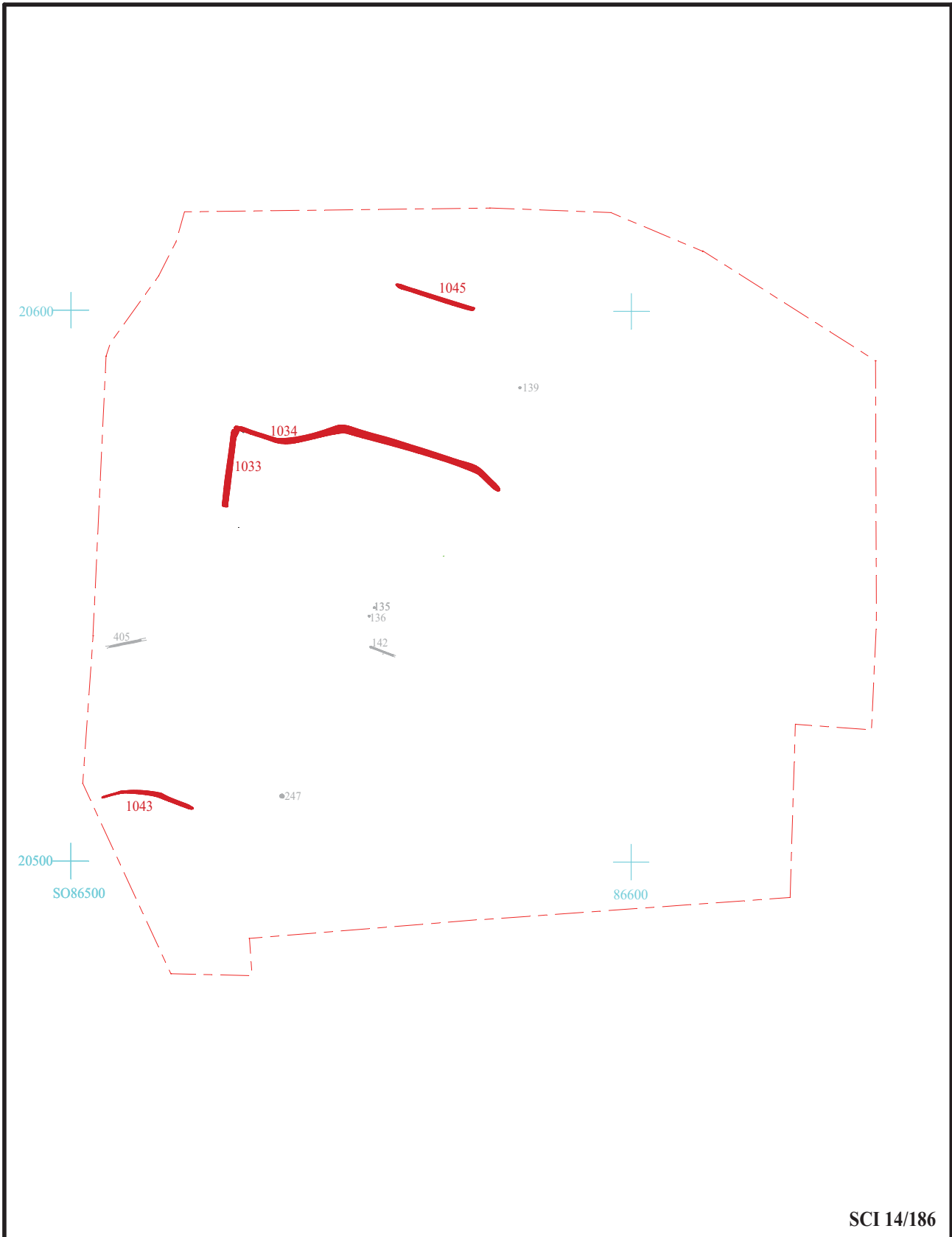


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Figure 12. Sections, phase 4.

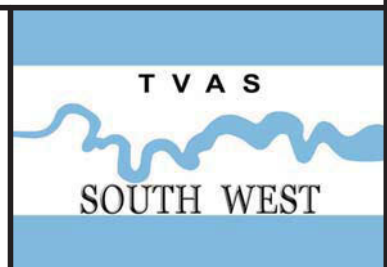


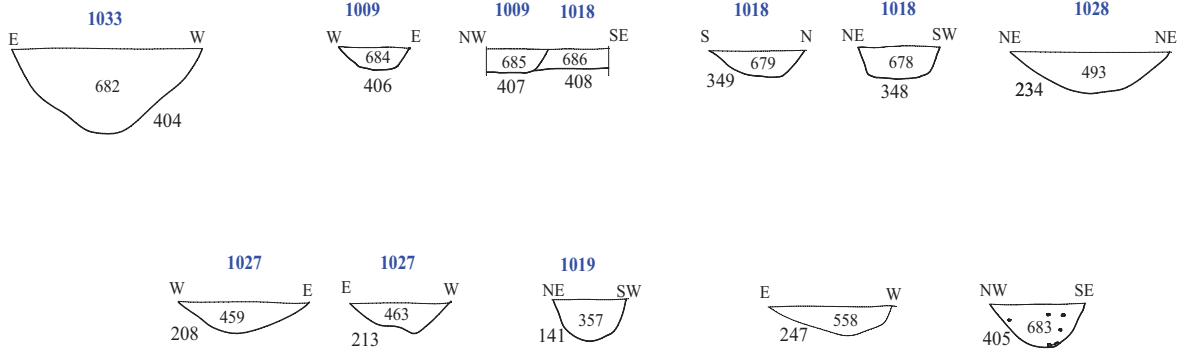


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Figure 11. Phase 5, middle Iron Age/Roman features.

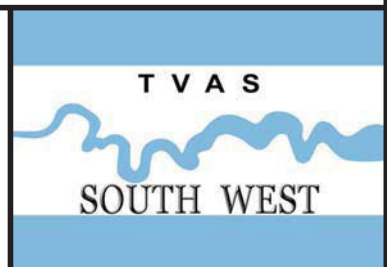


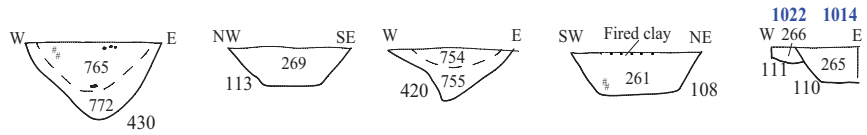
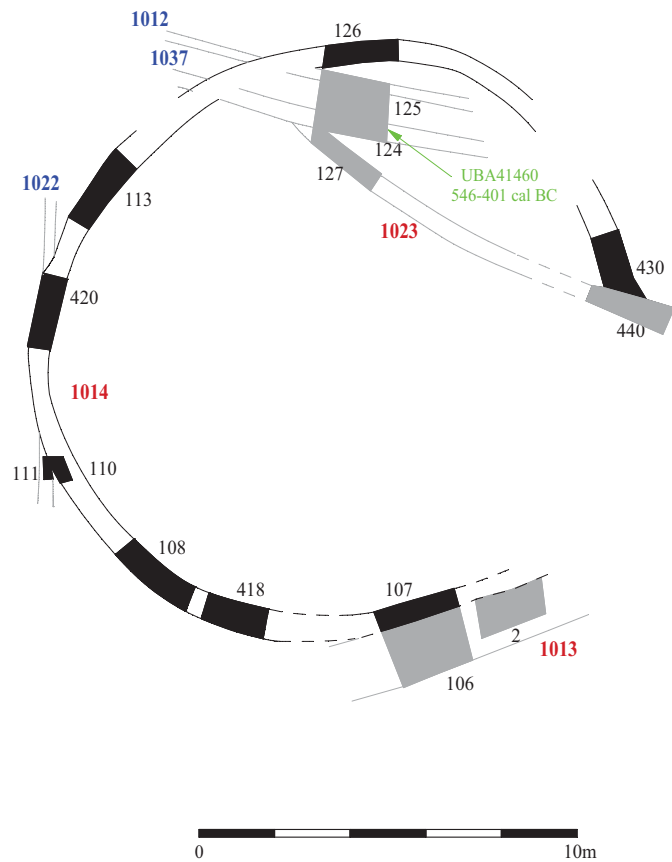


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Figure 14. Sections, phases 5, 6 and undated.



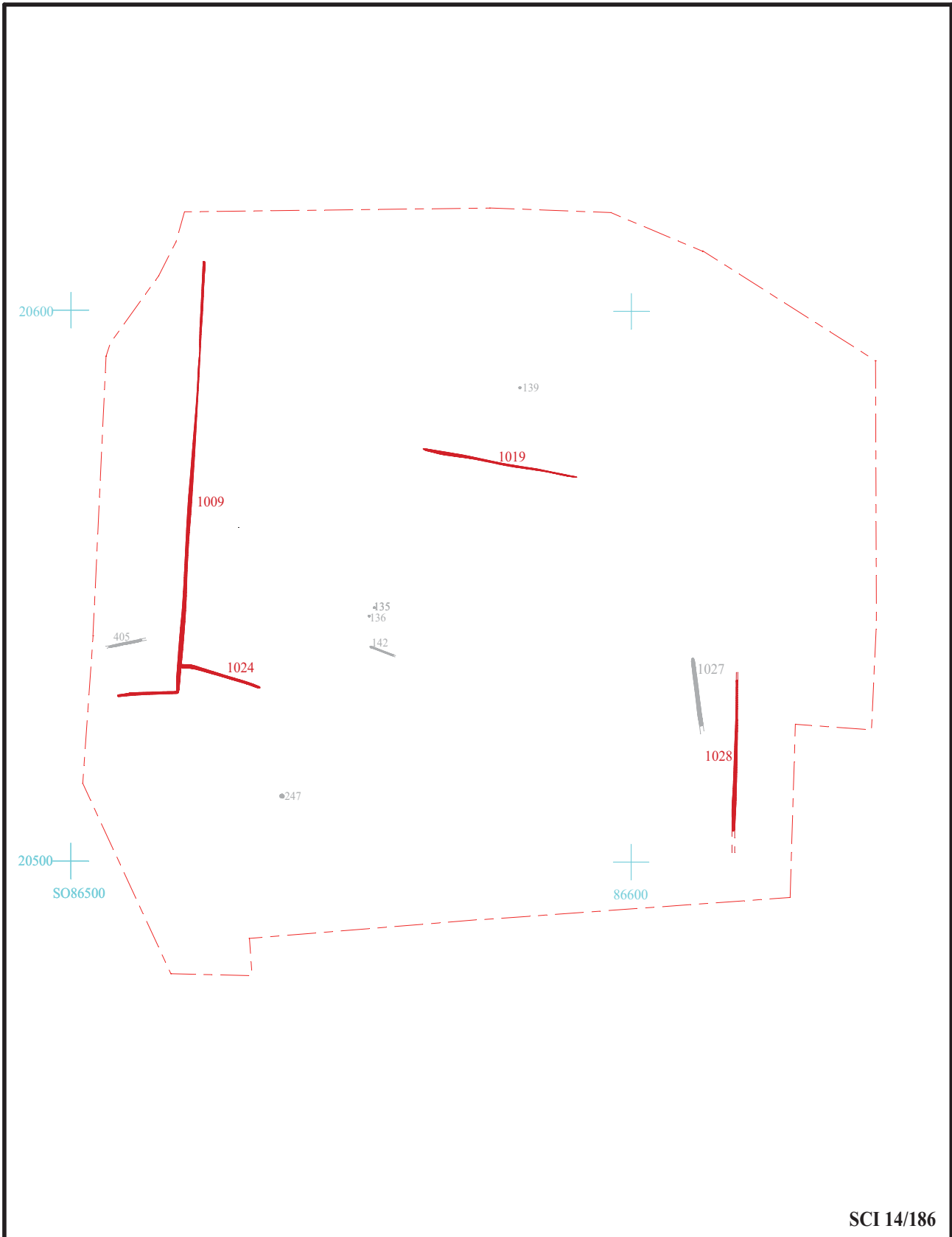


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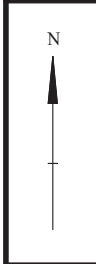
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Figure 15. Phase 5, curvilinear gully 1014.





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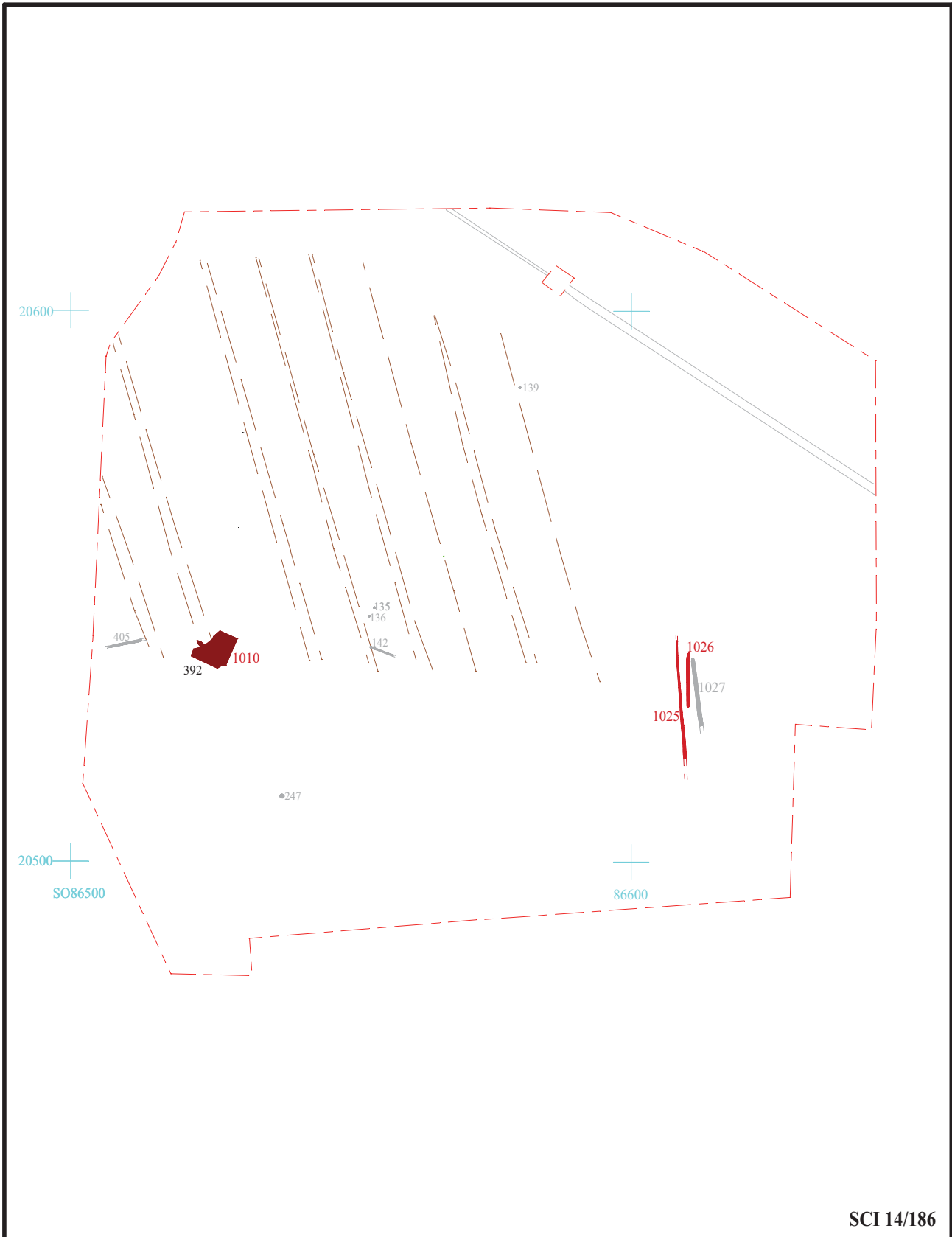


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Figure 16. Phase 6, Roman features.





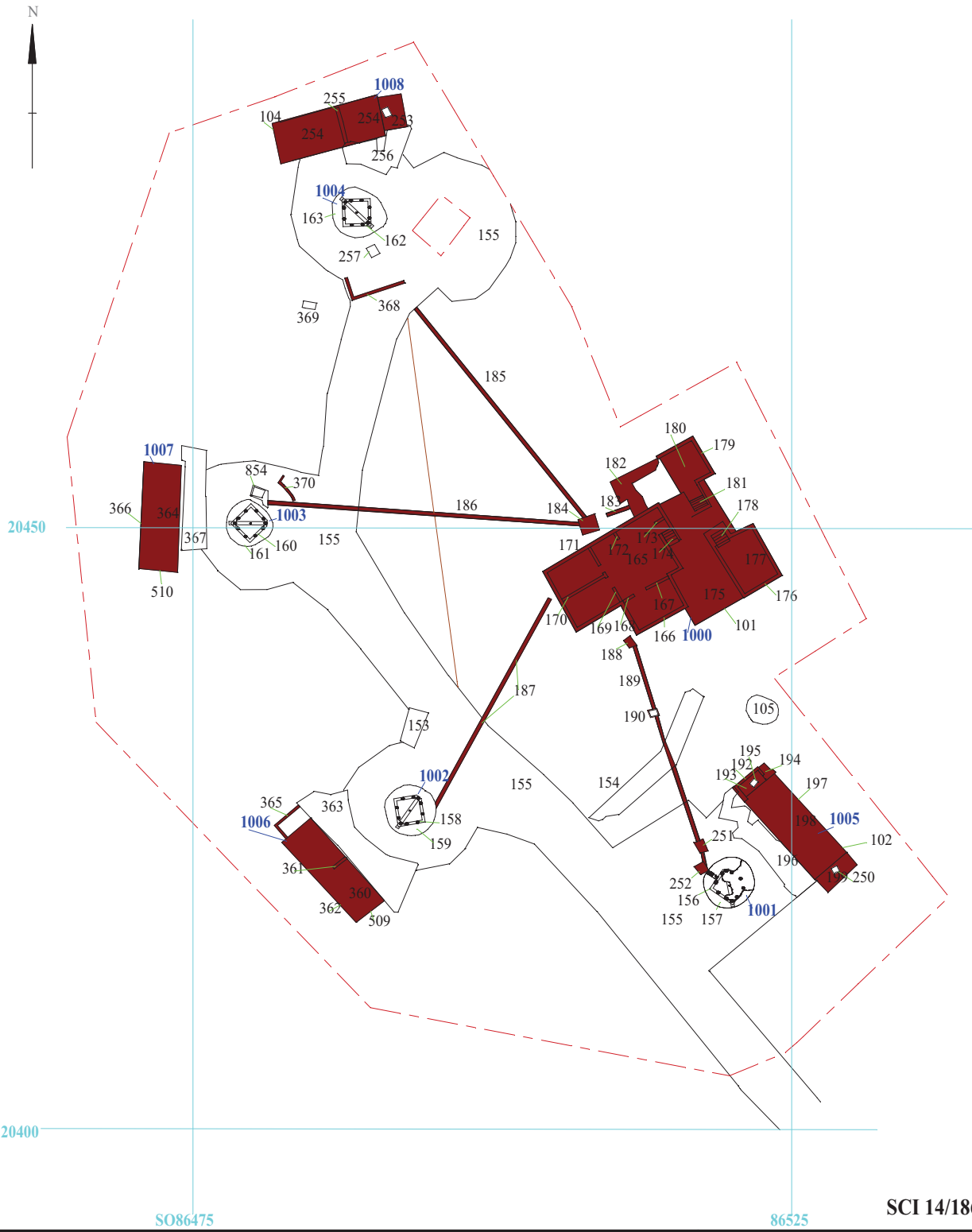


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Figure 17. Phases 7 and 8, Medieval/Post-medieval and modern features.



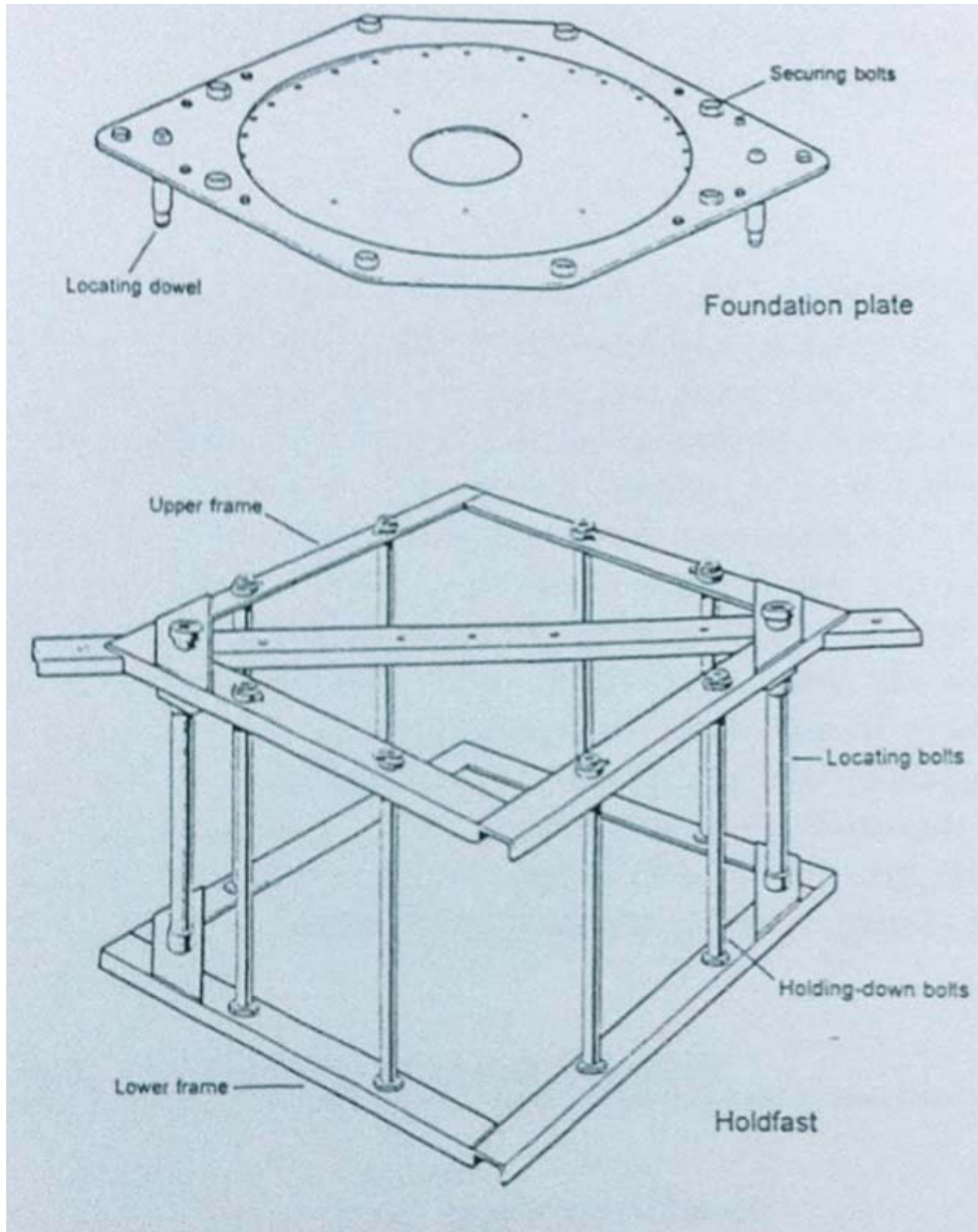


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Figure 18. Plan of Area B.



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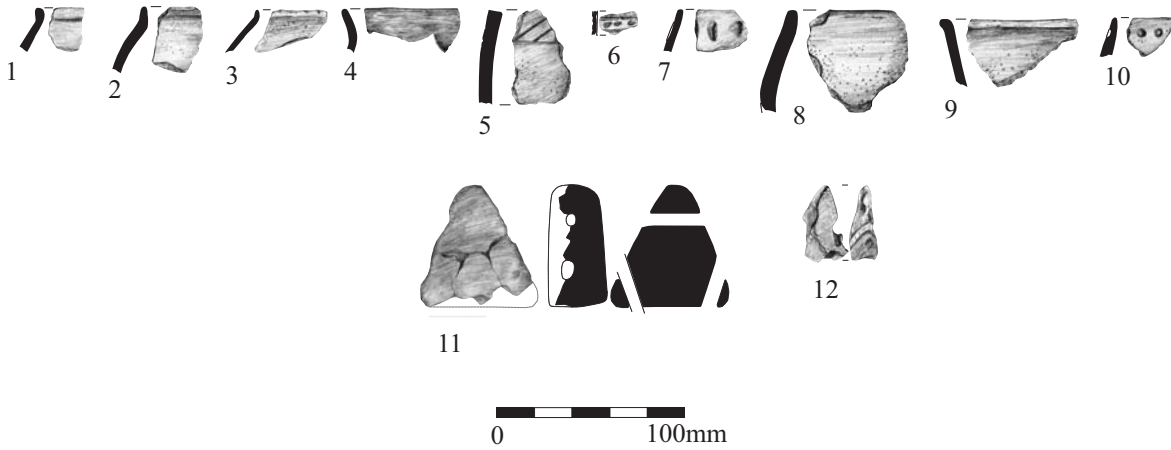
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Figure 19. Holdfast anti-aircraft Mounting no. 2, Mk II (after  
Dobinsn 2012, 1996).

T V A S

SOUTH WEST



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Figure 20. Selected pottery (1-10) and fired clay (11-12). See text for details.







Plate 1. General site shot.



Plate 2. Ditches 1012 and 1023 converge with ring gully 1014, looking west,  
Scales: horizontal 2m, vertical 1m, 0.2m and 0.1m.



Plate 3. Ditch 1013 (106) cutting gully 1014 (107), looking east, Scales: 2m and 0.5m.



Plate 4. Multiple ditch cuts at the corner of enclosure 1044, looking west,  
Scales: horizontal 2m, vertical 0.5m, 0.3m and 0.2m.



Plate 5. Posthole 136, looking south,  
Scales: 0.5m and 0.2m.



Plate 6. Ditch 1040 terminus 308 and ditches 1009 and 1012, looking north-east, Scales: 2m and 1m.

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Plates 1 - 6.**

**T V A S**  
  
**SOUTH WEST**





Plate 7. Ring gullies 1016, 1017, looking west, Scales: 2m and 1m.



Plate 8. Concentration of sheep/goat bone in gully 1017, terminus 215, east to top, Scales: 1m and 0.5m.



Plate 9. Ditches 1013 (339), 1033 (340) and 1034 (341), looking south, Scales: 1m and 0.3m.



Plate 10. Termini of ditches 1011 and 1044, and pit 320, looking west, Scales: 2m and 0.5m.

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Plates 7 - 10.

**T V A S**  
  
**SOUTH WEST**



Plate 11. Command post 1000, looking west,  
Scales: 2 x 2m and 0.5m.



Plate 12. Gun mount 1001, looking west, Scales: 2 x 2m.



Plate 13. Building 1005, looking west, Scales: 2 x 2m.



Plate 14. Gun emplacement 1003, looking south-west,  
Scales: 2 x 2m.

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Plates 11 - 14.

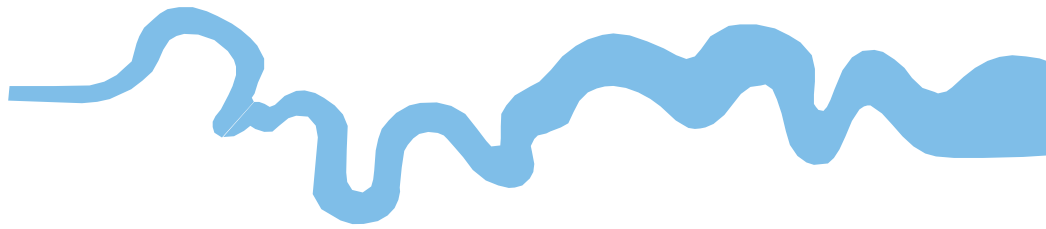
**T V A S**  
  
**SOUTH WEST**

## TIME CHART

	Calendar Years
Modern _____	AD 1901
Victorian _____	AD 1837
Post Medieval _____	AD 1500
Medieval _____	AD 1066
Saxon _____	AD 410
Roman _____	AD 43 AD 0 BC
Iron Age _____	750 BC
Bronze Age: Late _____	1300 BC
Bronze Age: Middle _____	1700 BC
Bronze Age: Early _____	2100 BC
Neolithic: Late .....	3300 BC
Neolithic: Early .....	4300 BC
Mesolithic: Late .....	6000 BC
Mesolithic: Early .....	10000 BC
Palaeolithic: Upper .....	30000 BC
Palaeolithic: Middle .....	70000 BC
Palaeolithic: Lower .....	2,000,000 BC







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Reading, Taunton, Stoke-on-Trent and Ennis (Ireland)*