

Roman landscape features at Manor Farm, Kempford, Gloucestershire

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for Aggregate Industries UK Ltd**

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Site Code MFK02/93

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Summary

Site name: Manor Farm, Kempsford, Gloucestershire

Grid reference: SU169 973

Site activity: Excavation

Date and duration of project:

Project manager: Steve Ford (TVAS) Simon Cox and Martin Watts (CA)

Site supervisor: Stephen Hammond, Tim Havard, Erlend Hindmarch, Andy Taylor

Site codes: MFK02/93, MFK03/18, MFK02

Area of site: 19 ha

Summary of results: Several phases of Roman landuse were defined. Dating is problematical but both early and late Roman elements can be identified and it is likely that some features on the site were pre-Roman. It is clear that a large parcel of landscape was divided up according to a single scheme, the basic elements of which (a ditched trackway and very large fields) lasted through several remodellings. Finds of all kinds were rare and environmental evidence sparse, but molluscan analysis suggests the area was water meadow throughout the period while animal bone is predominantly of cattle, which would be the most likely livestock kept in this environment.

Monuments identified: Field boundary ditches (?Iron Age and Roman)

Location and reference of archive: The complete archive is presently held at Thames Valley Archaeological Services, Reading and will be deposited at Corinium Museum in due course.

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Report 02/93c

Introduction

A programme of excavations was carried out by Cotswold Archaeology and Thames Valley Archaeological Services on land at Manor Farm, Kempford, Gloucestershire (SU 169 973) in advance of gravel extraction. The total area of extraction covers 50ha and was subdivided into smaller plots with a number of separate phases of archaeological work (Fig. 1). Areas 1 and 4–7 (11.3ha) were excavated by Tim Havard for Cotswold Archaeology (CA), between May and September 2002. Areas 2 and 3 (2.5ha) were excavated between April and July 2003 by Erlend Hindmarch, Andy Taylor and Stephen Hammond for Thames Valley Archaeological Services Ltd (TVAS) as were Areas 8 (5ha) (October to December 2002) and 9 (2.5ha), this last taking place in two stages: May–July 2003 and July 2004. (Fig. 2) Aggregate Industries commissioned the excavations in order to comply with an archaeological condition attached to planning permission granted by Gloucestershire County Council (CT. 6788/D and CT.6788/A). Weather conditions were generally fine for excavation except that a very high water table meant features had to be continuously baled during some phases of fieldwork.

The archives will be deposited with the Corinium Museum, Cirencester in due course. The site code is MFK02 for all of the CA areas, MFK02/93 for Areas 8 and 9, and MFK03/18 for Areas 2 and 3. Further work is currently in progress on a new phase of the quarry which will take several years to complete.

The site has an average elevation of 74.5m above Ordnance Datum, on first terrace gravel deposits. Brazen Church Hill rises to two small peaks each at 89m AOD, just to the south-east but otherwise the entire area is basically flat. The Thames flows past just 1km to the south, with the Coln around 1.5km to the north-east.

Archaeological background

Archaeological interest in the site arose from features identified on aerial photographs and subsequently evaluated (OAU 1991). Several more archaeological sites are known from cropmarks and from fieldwalking around the site. The cropmarks on the site itself included linear features on at least three alignments.

At Stubbs Farm, only around 100m to the south, (Fig. 1) the linear cropmarks of the field system with trackways continue and incorporate a further rectangular enclosure and a subcircular enclosure, which have been excavated. Publication of this site is imminent (Cromarty *et al.* nd), but from details currently available, it appears to consist of a complex double-ditched circular enclosure some 50m across, perhaps Iron Age but still in use until the early Roman period, and a Roman double-ditched quasi-rectangular enclosure of similar proportions to the south; an extension of this latter enclosure cut across the circular enclosure. Almost all the dating evidence here points to the 2nd century AD, the site almost certainly did not extend to the end of the Roman period. It is notable that the much smaller site at Stubbs Farm produced a much larger pottery assemblage than all phases of work at Manor Farm combined, and must therefore be taken to be closer to the focus of settlement. This was confirmed by further evaluation north-west of that area (i.e., west of the area reported below), with the presence there of at least two buildings, one with masonry foundations, representing a modest Romanized farmstead. Field systems associated with this farm have also been explored, and showed a familiar pattern of a late Iron Age field layout being replaced in the early 2nd century by a more regular network of tracks and fields. These field systems continue to the south and east.

Beyond the extraction area to the west and north of the village of Kempford further cropmarks have been recorded over an area of 12ha (OAU 1991, figs 3 and 4). Here further field boundaries and enclosures have been noted and fieldwalking has produced pottery from the Medieval and Roman periods. To the east of the quarry, cropmarks show further circular ditched enclosures. Fieldwalking of this area suggests these marks can be attributed to the Iron Age (information from Gloucestershire Sites and Monuments Record).

Work at nearby Horcott, 3km to the north of the site, in 2000–1 revealed enclosures and field systems dating from the Iron Age, and field systems, trackways, enclosures, burials, cremations and corn dryers all from the Roman period (Pine and Preston 2004). Evidence for Iron Age and Roman occupation has also been recorded in the wider area, at sites such as Bowmoor, Welford, Thornhill Farm and Claydon Pike (Boyle *et al.* 1998) and

results from a number of these sites are currently being brought together for publication (Booth *et al.* forthcoming).

Excluding the exceptional Claydon Pike site, whose revised chronology is not available at the time of writing, there is a remarkable chronological consensus among almost all of the sites mentioned above: few show very much pre-Roman occupation, occupation from the early years of the Roman period is also limited, and not much different from the Iron Age pattern where present. There is a dislocation, in the early to middle 2nd century followed by a brief *floruit*, and few sites continue much beyond the end of the 2nd or early part of the 3rd century AD. In this respect, Horcott seems to be an exception at both ends, although the 2nd century dislocation and *floruit* are observed. Of the sites mentioned, and again excepting Claydon Pike, only Whelford Bowmoor exhibits any strongly 'Romanizing' influence (Marshall *et al.* nd).

The archaeology of Claydon Pike is exceptional in many ways, and certainly not typical of the sites listed above, not least in that it appears to have been continuously occupied from the middle Iron Age to the late Roman period. It is not clear if initial interpretations of the site as (at least in part) a military establishment will be upheld in the final report, so speculation here would be unwise.

The evaluation

An evaluation was carried out in October 1991 (OAU 1991). Various enclosure ditches were discovered but most could not be dated. Only two pieces of stratified pottery were recovered dating from the 2nd and 19th centuries AD. A further 37 sherds of pottery obtained from the plough soil covered a range of dates from the middle Iron Age and Roman to post-medieval and modern periods, along with three struck flints. The evaluation concluded that the features formed part of a landscape of fields dating from the 2nd century AD.

Excavation Methodology

To meet the operational needs of the quarry, the area was sub-divided into nine working areas, all being fully excavated prior to extraction. Areas 1, 4, 5, 6 and 7 were excavated by CA while TVAS excavated Areas 2, 3, 8 and 9 (Fig. 2). A trench for an electricity cable around the western perimeter of Area 2 was excavated by CA (Fig. 2). A mechanical excavator fitted with a toothless bucket removed topsoil and overburden from each area in succession, under constant supervision, to a depth where the uppermost surface of archaeological deposits was exposed. The ploughsoil was in places only 200–250mm deep overlying the natural sand and gravels. Archaeological deposits included ditches, gullies and postholes. Numerous modern field drains have been omitted from the plans for clarity; in a few cases these had destroyed stratigraphic relationships, but the overall sequence is, by and large, clear enough. The significant features on the site were all ditches or gullies. The small number of pits excavated, and a rather larger number of tree boles which might have been pits, all contained no finds, or at most a single sherd of pottery, so that nothing of interest can be said about them.

All archaeological deposits were cleaned and excavated by hand. All discrete features were half sectioned as a minimum, postholes being fully excavated. A sample of 20% of linear features was intended to be excavated in slots: in practice the paucity of dating evidence in many cases led to more than this being excavated in a (usually fruitless) search for anything datable. All termini and intersections were examined. A full written, drawn and photographic record of the excavation was made according to the fieldwork manuals in operation in each practise at the time. A series of around 200 bulk soil samples was taken from a range of contexts from all phases of work across the site in order to provide environmental evidence and to enhance recovery of dating evidence. These were uniformly disappointing, except for the presence of molluscs in some.

Separately excavated segments of linear features were assigned a group number for ease of reference, and this group number will be referred to in the text of this report. Where several group numbers refer to one ditch, one has been selected at random for the report. The various phases of work unfortunately used independent (ie duplicated or triplicated) context number sequences, so that there are often three of each context number in the archive, under different site codes. Almost all the duplication affecting this report, however, occurs between contexts in Area 8 and those in Areas 2-3. This has been resolved by arbitrarily decreeing that all context numbers in Areas 8 and 9 start with a 2000-prefix for the purpose of this report (thus ditch 2000 appears in the original site archive as 1000, 2043 here is 1043 in the archive, the pit originally numbered 206 becomes 2206. None of the site areas has any (original) context numbers in the 2000s range.

Phase by phase summary

Finds of any sort were rare. Site phasing is based purely on stratigraphy. The assigning of dates to features and even whole phases based on the ceramic evidence is very tentative. For brevity, it has not been thought worth pointing this out repeatedly below; insecure dating is to be assumed for all the features described. However, all the sites have been phased according to a single (rather broad) scheme.

Phase 1: Earlier Prehistoric (limited to residual and stray finds)

Phase 2: Iron Age

Phase 3: Roman

Phase 4: Medieval

Phase 5: Post-medieval/modern

Only Phase 3 has been subdivided; this is based entirely on stratigraphy, since, although both early and late Roman ceramic components can be recognized, the dating evidence for individual features is insufficiently precise to allow ceramic dating within the period. Phase 5 features are not discussed here, except where they have destroyed or obscured important stratigraphic relationships, or where their dating is unclear. For most purposes, recuts of the same ditch have not been discussed separately, since usually neither the original nor the recut(s) can be dated, or only one can. Only where discrepancies arise have recuts been discussed below.

Phase 1 (earlier Prehistoric)

No features anywhere on the site can be dated earlier than the Roman period. Prehistoric activity is restricted to residual or stray struck flints. A possible Mesolithic core was retrieved from Area 9 Roman (or later) ditch 2040 (Fig. 5). Four blades or blade fragments, together with a fragmentary blade core from other areas, are probably Mesolithic in date. A barbed and tanged arrowhead was recovered from the surface of Area 9 adjacent to ditch 2041 (Fig 4). All sixteen pieces of worked flint from the other areas were also unstratified or from Roman features. A single tool, a knife of likely Late Neolithic or Earlier Bronze Age date was present in Area 6. The remaining pieces are undiagnostic but likely to relate to the Late Neolithic or Bronze Age periods.

Phase 2 (Iron Age?)

A handful of shallow and ephemeral gullies (1019, 1039, 2018) are thought to represent the first phase of activity (Fig. 3). Their ephemeral nature suggests that further ditches from this phase may not have survived later ploughing. Pottery from 1039 suggests a 2nd–3rd century AD date but it is unlikely that 1039 can be as late as this pottery, as then all the subsequent phases of land use would have to be squeezed into just two centuries or less. Two sherds of pottery found in irregular linear ditch 2018 could belong to the earlier or middle Iron Age periods. It appears that 2018 formed a discontinuous ditch made up from smaller individual components: intervening sections may have been lost to erosion, but the ditch may have been segmented originally, as some of the termini appear ‘real’. This feature was recut in parts (2034) and at both ends was cut by ditches of Field System 3.

Ditch 1038 was part of a large curving enclosure which continues beyond the limit of excavation (seen on aerial photographs). The south-eastern end had been subject to multiple recuts, evidence for recutting at the northern end was less clear cut (Fig. 6). It seems likely that ditch 1038 had Iron Age origins but the limited dating evidence recovered (a tiny scrap of samian, one small sherd of greyware and a *tegula* fragment) suggests a 2nd century (Roman) date, at least for the recut (1040). Ditch 1038 was cut across ditch 1039 and was itself cut by ditches of Field System 1, so an early date is preferred here, and the finds are not considered to date the feature. This ditch hints at a discontinuity of landscape usage between the Iron Age and Roman periods as its line is significantly different from all the other examples and the finds could merely reflect the last phases of use after numerous silting and re-digging episodes.

A penannular gully 5468 with a diameter of around 3m contained no finds, but morphologically resembles a mini-roundhouse gully. At the extreme eastern end of the site (Area 9) two rather larger semi-circular gullies (2042, 2045) look rather more convincingly like roundhouse gullies; again, neither is dated, and as both were located right up against the modern field boundary, some modern origin is just as likely.

A handful of sherds of Iron Age pottery were found in features of Roman or later dates.

Phase 3 (Roman)

The majority of the features encountered belong to the Roman period (Phase 3) and therefore the overview of Figure 2 is that of a Roman landscape pattern. The pottery assemblage suggests a broad 2nd–3rd century date

applies to the majority (if not all) the features within the excavation area, but no individual feature can be regarded as securely dated: no context yielded more than five sherds, most only one. Phasing on stratigraphic grounds can be applied to the major ditch features and by association to some other elements which appear to be parts of the same landscape. The site comprises four elements or sub-phases; field system 1 with a linear Trackway A (Fig. 3) running NW–SE; which is superseded by a major remodelling with field system 2 based on Trackway B running SW–NE, with huge fields and smaller subdivisions, and incorporating many recuts; followed by a third phase of field enclosure incorporating the ditches already in use with a different set of subdivisions.

Finally, there are a number of later ditches which also appear likely to be Roman but bear little relation to the previous boundaries: for sake of simplicity, these are called field system 4 but in fact they do not form a coherent system, and indeed are not necessarily associated at all (Fig. 5). Features other than the ditches cannot be placed securely within the sub-phases, but virtually all of the ditches can be assigned to one system or other.

Direct stratigraphic relationships were few but horizontal relationships provide further evidence of a sequence of development. Some of the main ditch elements were variously re-cut, indicating some longevity of the layout, although these features could have required cleaning out fairly frequently (Fig. 7). Dating these features from the artefacts they contain is therefore problematic as only the last phases of silting and re-digging would be represented in the pottery assemblage and residuality is almost certainly a problem in all cases.

Field system 1 (FS1) This first regular layout was confined to the western extreme of the site. Ditches 1020 and 1003 were cut parallel to each other on a NW–SE alignment and seem to form trackway A, approximately 25m wide. A gap was apparent towards the southern limit of ditch 1003 but this is thought to be due to either truncation by later plough action or an undulation in the depth of the gully rather than any deliberate action; the absence of a continuation of either 1003 or 1020 south into Area 1 is also probably a survival issue. Ditch 1003 was cut by ditches of field system 2 in several places.

Ditch 1024 was also aligned NW–SE, almost parallel to ditches 1020 and 1003, 65m to the west of 1020. It cut phase 2 ditches 1039 and 1038. It continued south into Areas 4–6 as 250 and was the earliest feature in the sequence there, where it was paralleled by 11 and 12. 1024 was one of the few ditches to produce pottery suggesting a 1st century AD date; but it also contained 2nd century (and later) pottery. The field between 1024 and 1020 was close to 70m wide, with a further 26m to 1003, the easternmost limit of this field system; the field between 12 and 250 was 57m wide.

Leading west from the line of 1024, three parallel ditches 1025, 1034 and 1343 presumably mark subdivisions of the westernmost field. Where 1034 joined 1024, there was evidence for re-cutting, as also was evident along the length of ditch 250. These subdivisions in the west left fields of 84m and 52m widths. If some precursor of ditch 33 (or 41) existed (Fig. 5), this would create a further southern field of again around 52m width. Ditches 1025, 1034, 1039, 1343 and 12 were all also visible in the electricity pipe trench, showing that this field system extends west off the site area.

As 1034 was parallel to the trackway of the next phase, it is likely that the redefinition of FS1 in the west was contemporary with FS2, but the elements of FS1 further north (1003, 1020) were over-ridden by elements of FS2; possibly the western layout of FS1 continued in use at least for the early part of FS2.

Field system 2 Marking the most major and long-lived episode of land division, FS2 attests to the imposition of a deliberate remodelling of the landscape on a grand scale (Fig. 5). Trackway B extended from the south-western tip of the site for some 650m to the north-east, although it petered out in Area 9. The trackway was defined by two recut ditches (33/2003/2019/2031 and 29/2001/2016/2446) which were 5m apart. These ditches were only intermittently apparent east of ditch 2021. There are no obvious landscape features on which this trackway might have been aligned, but conceivable it was designed to skirt the lower north slopes of Brazen Church Hill to the east, and head to a crossing of the Thames at Kempsford, thence on to join Ermin Street around 7km to the west.

North of the trackway, this system was formed of ditches 210, 392 and 2021 providing the main field boundaries, with 1043 probably a subdivision of the large field between 210 and 392 while 5361 subdivided the field between 392 to 2022. From west to east the fields thus created would have widths of (edge of site to 210) 112m; 210 to 392 (151m divided into 55m and 96m); 392 to 2022 (270m divided into 48m and 222m), all backing at least 260m from the trackway. At least in the western half of the site, the same boundary lines extended both north and south of the track, implying a very large-scale, planned landscape organization. These ditches were probably filling in the 2nd to 4th centuries AD. A major recut of ditch 392, visible throughout its length, may possibly be as late as post-medieval, and there are hints of a similarly late episode in ditch 210. It seems implausible that these ditches would still have been visible, even faintly, this late, so banks may be posited

as marking the same lines, allowing later redefinition. Some segments of ditch 210 appeared at one point to have been deliberately filled and cobbled over, the surface later slumping into the ditch again. These may have marked entrance causeways through the ditch.

Within these major divisions, smaller subdivisions seem to have been piecemeal and local (ditches 778, 919, 296 and 41, the latter possibly a widening of the trackway at its western end). At the northern end of the site, a system of smaller paddocks laid out off ditch 1043 is provided by 1026, 1031, 1114, 1146 and probably contemporary 1201.

Ditch 1000 with recut 1001 was parallel to 1007, aligned NNW–SSE. Together, these two mark the edges of Trackway C. The gap between them was approximately 21m. It was possibly a replacement for Trackway A, which it truncates, but implies a large remodelling of the landscape, with a reorientation of around 35°. East of this new droveway, gullies 1031, 1114, 1146 form part of ‘ladder’ type field system. These gullies were shallow, forming small paddocks within the field bounded by 1026 and 1008. Ditch 1031 (recut intermittently as 1043) appears to cut across this system, but is clearly part of the larger FS2 in general, so these small enclosures were only a brief episode in the large landscape predicated on FS2. The elaboration, and small areas enclosed, suggest that these were stock pens.

Extending FS1 south from the track were ditches 211, 2061 and 2060 while ditch 680 mirrored the line of the trackway itself, just slightly further south. As major, and probably long-lived, landscape markers, it is not surprising that these features accumulated ver

y mixed finds, but it is likely that these ditches were mainly filling in the middle Roman period. No southern fields associated with this field system seem to have existed east of ditch 2060, all the southerly ditches east of this line being set at different angles and all apparently later.

Slots through the main ditch lines produced occasional medieval and later pottery but this is unlikely to provide the dating for these features. All were recut, often several times.

Trackway B determined the whole of the rest of the landscape through all three associated field systems, although its relationship to field system 3 is less clear-cut than that with 2, which is certainly predicated upon it.

Field System 3 is confined entirely to the large field bounded by 392 (west), 2021 (east) and trackway B (south). The small gullies of this system (south to north: 5399, 5615, 5688, 2000, 2023) which irregularly subdivide this field, were cut oddly diagonal to the main layout, typically up to 0.45m wide by 0.25m deep. These gullies were more or less parallel and spaced at more or less uniform intervals of about 38m (36m, 32m, 38m, 39m, depending on quite where one measures). It is clear that their layout must have relied on the prior existence of main ditches 392, 2021 and 2003/2019, in that they all terminated just short of the junctions. These short gaps may have functioned as entrances as no other breaks in these gullies were recorded. Two post holes (2421 and 2408) were located near to the node at the south-east corner of the large field (where 2021 approaches trackway B and are considered as a sort of gate arrangement. These postholes were cut by ditch 2015 (FS4)(Fig. 4). All of the main ditch elements were variously recut, indicating some longevity of the layout, although these features could have required cleaning out fairly rapidly (Fig. 8). Dating is non-existent for these gullies, but their limits so clearly respect FS2 that they must be partly contemporary. Probably also associated with this system are ditches 2025 and 2033, whose alignment precisely on the junction of trackway B with ditch 2021 suggests they must be contemporary, but they are clearly not part of the original conception of FS2.

While fill profiles varied across the site, even within a single ditch line, it seems that almost all the ditch fills were natural silting; there is no convincing case anywhere of a bank being slighted into a ditch, or even of banks eroding. Nonetheless, the clear persistence of the main ditch lines over what may have been a very long period, suggests that banks should be assumed to have been the main markers in the landscape, and not the ditches themselves. Hedges could also have served the same purpose for some or all of the main ditches. A number of the larger Roman ditches, especially in Areas 6 and 7, were paralleled by minor shallow gullies, often with irregular bases; these were interpreted variously in the field but most often as hedge lines alongside the ditches and this seems reasonable. Their existence may in many cases have been obscured by later recutting of the main ditch. Hedges were recommended by the writer Columella (in the 1st century BC) as cheaper and more enduring than fencing; his instructions for planting a hedge suggest :

‘The place which you intend to hedge... should be banked around with two ditches three feet apart. It is quite enough to make them two feet deep. We let them remain empty over the winter while the seeds are got ready to sow in them’. (*Res rustica* XI, iii, 4-5: quoted in Rackham 1986, 184)

The ditches would presumably then be backfilled when the hedge was planted. Short-lived ditches could thus give rise to long-lived boundaries.

It is most likely that many or most of the undated features are also Roman, purely by association and a similarity in fill type. A post hole line 2039, at the south-easterly limit of the site, however, contributes little to any of the Roman field systems, and remains enigmatic. It is tempting to interpret the minor sub rectangular gullies 2042 and 2045 as potentially structural, but there is nothing to suggest they were.

Phase 4 (medieval)

Field System 4: Trackway D, marked by ditches 196 and 195 (recut as 5143, 5144) bore no relation to any previous system of land divisions on the site, indeed its line is close to the modern field boundary. These ditches were the latest in the sequence everywhere that a relationship was established. Ditch 999 is certainly to be associated with this trackway, and ditch 367 (2010) may be too. Ditch 367 closely mirrored trackway B ditch 33 for most of its length, but veered off at the eastern side of the site and cut across both FS2 and FS3 to form the final field system FS4. This was supplemented by a late recut of ditch 1043 and probably ditch 5360 which does not seem to belong to any other system. Although ditch 196 overall contained as much Roman pottery as any feature on the site (11 sherds, and a piece of tile), it is likely this system (if all the elements are indeed related) has no bearing on the Roman landscape and it may have been relatively recent (medieval or later). At best, Trackway D could be late Roman, marking a time when all the major field systems had passed out of use.

Otherwise, the medieval period is represented on the site by the discovery of just 19 sherds of medieval pottery. It is by no means clear that any features really date to this period, it is possible that just the occasional medieval item has found its way into earlier features, while some upper fills may really have been the remains of the overlying topsoil. Ditch 1474 (seen in the electricity cable trench, Fig 3) with its seven or eight sherds of medieval pottery would be the most convincingly medieval feature, but even this is in question, as it is almost certainly the same ditch as 1034, both of which are Roman.

Phase 5 (post medieval)

The top fill of ditch 2040 contained a handful of more modern (18th–19th century) finds, suggesting that this ditch was of no great age, despite the five sherds of Roman pottery it also contained. This ditch was 200m long, aligned approximately north–south, and continued beyond the area of excavation. At up to 4.9m wide, it was by far the widest of the ditches on site, but was only 0.5m deep; most slots contained several fills with no suggestion of recutting, and as its alignment is at odds with all the field systems, it seems likely to be recent. A single clay pipe stem from ditch 2043 is the only dating evidence from this ditch apart from some crumbs of probably Roman pottery; the likelihood is that the pipe does date this feature which is in any case on the line of a modern boundary. A number of other contexts including a large quarry hollow 5752 also contained post-medieval pottery.

Undated

Located within the north-eastern quadrant of the site was a small rectangular enclosure (2014) with a north to south axis. Only the north, east and south sides were seen during the excavation with the southern side terminating at its western end. It is not known if a fourth side to the enclosure existed to the west due to the large modern field boundary ditch, which cut it. Unfortunately, the best date that can be assigned to enclosure 2014 is 'no later than post-medieval'. Possibly associated with this enclosure was a large post hole (2129) just outside the south-eastern corner. No finds were recovered from either of these two features.

The Finds

Pottery by Jane Timby and E R McSloy

A small quantity of 252 sherds of pottery weighing 1.6kg was recovered during the archaeological work (138 sherds from Areas 1 and 4–7, 81 from Areas 2 and 3, 34 from Areas 8 and 9). The pottery includes material of diverse date ranging from the Iron Age through to the post-medieval/ modern period, although it is nearly all Roman (193 sherds). There are few featured diagnostic pieces present and generally the material is in quite poor condition with fairly worn sherds. Just five sherds are Iron Age, 20 are Medieval and 34 are later.

Iron Age

Four sherds of likely Iron Age date were recovered from two features in Area 8 (2018 and 2033). The two sherds from 2018 were Jurassic shell and limestone-tempered pieces typical of the earlier and middle Iron Age periods.

The two sherds from 2033 were extremely fragmentary, but are of a black sandy handmade fabric, which could be of middle or later Iron Age date. A single sherd of ?handmade grog-tempered pottery of probable Late Iron Age date was recovered from ditch 29.

Roman

All five sherds from Area 9 and all ten from Area 8 are local Wiltshire reduced wares. The only featured sherds are a flat rim bowl from 2011 (Area 8) and a handle fragment possibly from a tankard from 2016 (Area 8). The character of the material suggests a 2nd-century date for this group. Seventy-seven sherds (379g) of Roman pottery came from Areas 2 and 3, where not all the fabrics are of local Wiltshire origin. Regional wares include Dorset black burnished ware and Severn valley ware. Also noted were several examples of imported Central Gaulish samian. The character of the material again suggests a 2nd–3rd century date.

Roman pottery from Areas 1 and 4–7 amounts to 101 sherds (762g). Much of the Roman material consists of reduced or oxidized sandy wares, almost certainly North Wiltshire types. The remainder comprises small quantities of Gaulish samian, Southern Spanish (Baetican) amphora, Dorset Black-Burnished ware and Oxfordshire red slipped ware. Few featured sherds occur and identifiable coarseware forms are restricted to jars, and flanged or flat-topped rim bowls. Samian forms, often identifiable from small rim, base or sometimes body sherds include a Drag. 33 cup and two bowls of form Drag. 31.

Dating is hindered by the dominance of long-lived North Wiltshire coarseware fabrics, the dearth of diagnostic forms and the absence of larger groups. The range of fabrics, which includes both early and later Roman types indicates a mixed date range. Samian ware, almost certainly of the 2nd century AD is relatively well represented across the site as a whole, amounting to nineteen sherds (10% by sherd count; 8% by weight). Distinctly late Roman material (just eight sherds), occurs as single sherds of Oxfordshire red-slipped ware and greyware or Dorset Black-Burnished ware flanged bowl forms.

Medieval, Post-medieval

Twenty sherds of medieval pottery and eighteen of post-medieval date were recovered. A small quantity of 19th to 20th century china was recorded as dating evidence but not retained. Medieval fabrics consist mainly of Cotswold oolitic type and limestone/flint tempered Newbury B coarsewares, together with a single lead-glazed sherd (probably Brill/Boarstall ware). Identifiable forms are restricted to two everted rim jars. The Brill/Boarstall sherd features applied, painted vertical strip decoration and almost certainly comes from a jug. Seven medieval sherds, a mix of Cotswold oolitic and Newbury B fabrics, derive from a single feature, ditch 1474 in the cable trench. A 12th or 13th century date is likely for this material. The remainder of the medieval pottery occurs as single sherds apart from two from modern ditch 2004 (Area 8).

Post-medieval dated pottery consists mainly of glazed earthenwares, probably made at Ashton Keynes. Other fabrics include iron-glazed blackwares, a piece of post-medieval green ware and white salt-glazed stonewares. All probably date to the 17th and 18th centuries.

Faunal Remains identified by Sian Anthony and Lorrain Higbee

A total of 659 pieces of animal bone were identified from all phases of work, but this total is heavily skewed by the inclusion of modern contexts including remains of a complete ovicaprid and a minimum of four horses. Counting these as 1 per individual, the total is reduced to just 261 fragments, with no context yielding more than 20 fragments. The bones were rapidly scanned and assessed for information relating to preservation, species, age distribution and butchery practices. The majority was highly fragmented and in a state of poor preservation with cortical flaking and heavily root etched. Excluding the modern ovicaprid and the four modern horses, around half the bones derived from Roman contexts. Very few bones (15%) could be identified to species, although more (44%) could be assigned to general size categories ('cattle size' or large ungulate and 'sheep size' or small ungulate). The few additional recordable details are in the archive.

All the Roman bones were from large ungulates, either horse or cattle, although only one was positively identified as from a horse (a phalange from 622). Species identified in unphased contexts (most also likely to be Roman) include cattle, sheep/goat, horse and red deer.

Such small quantities of bone, in contexts so far removed from occupation deposits, can tell us little about the economy or diet of the inhabitants.

Human Remains by Joscelyn Davies

A single inhumation burial was recovered from Trackway B ditch 33. A Roman date is assumed, although no dating evidence was recovered in direct association with the burial. The skeleton was in a very fragmentary condition, with only approximately 20% present. The bones had suffered post-mortem damage, mainly through

root action, meaning that the state of preservation was poor. A sample of bone was found to contain insufficient collagen for radiocarbon dating. The pelvis was too fragmented and incomplete to be analysed, but judging from the morphology of the skull and mandible, which exhibit feminine traits, and the gracility of the bones in general, the skeleton was female. The individual had been at least 45 years of age at death, based on dental attrition (Brothwell 1972, 72). There were no complete long bones to give stature estimation. There was little evidence of pathology present, although the mandible and teeth indicated the presence of dental disease. There were four examples of interstitial caries, all of which were cited at the root margin, and two teeth with calculus. The second and third molars on the left side of the mandible had been lost ante-mortem, with remodelling of the bone suggesting that the teeth had been lost several years before death, probably as a result of primary dental or gum disease.

Struck Flint by Steve Ford and E R McSloy

A small collection comprising just 19 struck flints were recovered during the course of the excavations of all 9 areas and were all recovered as unstratified or residual finds in Roman features. Most of the pieces are patinated a creamy white and are all weathered to a greater or lesser extent with just one spall in a fresh condition (and therefore perhaps a modern accidental product). Three retouched pieces were recovered. One was a complete, well made, barbed and tanged arrowhead made from a brown flint from Area 9. It dates to the early Bronze Age. The second, recovered from Area 6 was a patinated flake knife with invasive retouch along one side of the dorsal surface only. It was backed by the remaining cortex along the opposite edge. The third was a flake with edge retouch, and was possibly a scraper.

Three of the flakes are blade-like in their proportions and along with one of the cores might indicate a Mesolithic or earlier Neolithic component of the collection whereas the remainder are likely to be of Neolithic or Bronze Age date.

These few flints point to some prehistoric use of the area which, in an area where abundant raw materials are not locally available is of minor note. Nevertheless, the small number of finds would appear to indicate diffuse use of the landscape with casual loss or discard of artefacts, without any proximity to intensively occupied areas.

Tile

One hundred and twenty-three fragments (just over 2kg) of ceramic building material were recovered. With the exception of a large fragment of tegula from ditch 41, which is of an unusual buff-firing fabric, the material is of a similar orange sandy fabric. Almost all of this material is considered to be of Roman date, based on form or through association with pottery; almost all came from contexts in field system 2. Forms include *tegula* and *imbrex*, which may indicate the presence of a tile-roofed building in the vicinity, and there were two *tesserae*. One piece of tegula had been re-shaped for use as a disc or stopper. Only ditches 1006 (13 fragments) and 1007 (16) yielded more than a tiny amount of tile. Although the quantities are tiny, there is noticeably more tile from the north of Areas 1 and 3, and the south-west of Areas 4 and to a lesser extent 6, than the rest of the site, suggesting that any buildings might be located north-west and south-west of the areas excavated.

Other finds

Thirty-three iron objects were recovered from the combined excavations. Nineteen of these were nails (most fairly complete). All the pieces are badly corroded. Eight horseshoes or fragments are all likely to be medieval or later. A single hobnail (presumed Roman) came from ditch 33, and there were two fragments (one with rivets in place) of what might be reaping hooks, both unstratified. The only other notable item is a barb spring padlock bolt, which could be Roman or more likely medieval. Other metal items were all unstratified and are likely to be modern.

A single fragment of whetstone came from ditch 29. The only glass from the site was two tiny fragments of vessel glass in ditches 29 and 210.

Six clay pipe stems were recovered from stratified deposits. A stem from 1001 is from the uppermost fill of a ditch re-cut which is thought to be the remains of a plough soil, another stem from ditch 210 is from a lower fill and may have been mis-labelled, whilst the other features are post-medieval or modern.

Environmental remains

A strategy of bulk soil sampling and sieving examined 213 samples of 15–40L each for environmental deposits. One sample from ditch 2033 (Area 8) contained a single carbonized pea. None contained more than trace amounts of charcoal and only one contained seeds; as it also contained fresh grass and a dead fly, this must be regarded as contaminated. Most of the samples contained mollusc shells (see below)

Molluscan remains by Keith Wilkinson and Alan Jacobs

33 bulk samples were analysed for molluscan remains: a 10 litre sub-sample from each was processed using the flotation technique, employing 250µm and 500µm mesh for the flot and residue respectively. The dried flots were then sent for further examination. Initially the flots were scanned under a low-power binocular microscope. It was soon realised that by far the largest category of bioarchaeological remains preserved were mollusc shells. As a result of this observation the following methodology was adopted:

The flots were passed through a nest of sieves; fractions retained on the 250µm and 500µm sieves were scanned for charred plant macro-remains; fractions retained on 4mm, 2mm and 1mm sieves were sorted and all mollusc shell fragments containing the shell apex were removed from the residue. Where particularly large quantities of shells were present a sub-sample of the flot was sorted and then all apical fragments were identified and quantified. Where distinctive shells were recovered species level identifications were made, but if such identifications could not be rapidly made the relevant shells were assigned to genera or family. Nomenclature and mollusc taxonomy follow Kerney (1999). It is recognized that the approach adopted biases results against species whose shells tend to fragment and which do not float.

The mollusc assemblages are of restricted diversity. Both terrestrial and freshwater species occur in all the samples suggesting that during the accumulation of the ditch, pit and tree bowl fills was at an ecotone between terrestrial and aquatic environments. The terrestrial species found in the samples are either of open country (e.g. *Pupilla muscorum*), catholic (*Cochlicopa* sp., *Trichia* sp.) or wetland (*Vallonia pulchella*, Succineidae) preference. There are no shade loving taxa present at all. These data suggest that the site was largely devoid of trees and shrubs, and was instead occupied by short grassland during the entire period of time represented by the samples. The fresh water molluscs found in the samples are from two of Sparks' (1961) habitat groups: catholic (*Lymnaea palustris*, *Lymnaea peregra*, *Planorbis planorbis*, *Anisus vortex* and *Planorbarius corneus*) and moving water (*Bithynia tentaculata*). Of these the catholic group predominates in the majority of samples and only in contexts 1059 (tree bowl, area 1), 5073 (Ditch 33, Area 6), 5173 (quarry, Area 6), 5438 (Ditch 392, Area 7) and 5478 (circular gully 5468) is *Bithynia tentaculata* common. This would suggest that in the other samples sediment accumulation was in an environment where low energy flooding caused the inundation of the site with shallow water. The margin of a river floodplain is the most likely environment in which such conditions might occur. The samples that contain relatively large numbers of *Bithynia tentaculata* are likely to have formed in environments where higher energy floodwaters were present, and are therefore probably located closer to the river channel. The combination of relatively large numbers of *Bithynia tentaculata* and *Planorbarius corneus* in context 5073 suggests that at the time this context was accumulating, ditch 33 must have contained relatively deep and still water. Nevertheless in making these interpretations it is notable that the five samples containing significant numbers of *Bithynia tentaculata* do not appear to have close spatial relationships and occur in three excavation areas (1, 6 and 7). In contrast to those samples containing *Bithynia tentaculata* it is notable that in the fills of tree bowl 1589 aquatic molluscs are almost entirely absent. It would therefore appear that this feature became infilled in a location beyond the reach of flood waters.

The problems of using flotation as a technique for recovering mollusc shell have already been highlighted (the samples assessed here were not *intended* for mollusc shell recovery, but rather for general palaeobiological examination), while the methodology adopted by the authors in carrying out the assessment has biased the record against taxa which have shells that are less than 1mm in size (e.g. *Carychium* sp., *Vertigo* sp.). Despite these caveats the assemblages that were examined are typical of those that have inhabited water meadows in southern England during the historic period. It is therefore postulated that the Roman enclosures that were investigated represent land divisions in a water meadow system. The lack of diversity of the freshwater molluscs and the absence of moving water species other than *Bithynia tentaculata* suggest that it was not the intention that the sampled ditches contain water all year round, but rather that they act either as seasonal drainage or simply to demark territory. Assuming this interpretation is correct it is likely that the economy of the site was based on cattle pasture. Sheep are liable to attack by liver flukes (which are also harmful to people) in such environments.

Too few artefacts were recovered from the site to enable high resolution dating of the ditches. It is not therefore possible to examine temporal variations in water meadow/wet grassland environments.

Discussion

The excavation has shown the presence of extensive and organized Roman field systems on the site, only parts of which were revealed by aerial photography and a reminder, if one is required, that even extensive aerial photographic data as for the Upper Thames, reveals only partial information at best. The major elements excavated (the curving enclosure ditch and several linear ditches) were visible from the air but some of the other

gullies and ditches (even major ones) were not. Dating evidence was extremely rare and the fieldwork strategy was modified to attempt to overcome this problem by excavating a greater proportion of undated features and extensive sieving to recover small datable objects. This latter strategy was largely unsuccessful (except to confirm that the lack of dating evidence was real) but fortunately the nature of the stratigraphic evidence, and the logic of the landscape organization, are such that the few dated features have significance for many other features on the site. The lack of substantial dating evidence may be due in part to the rapid silting up of ditches dug into gravel terraces. As a result the ditches are only open for a short period of time before being re-cut or moved, reducing the time available for cultural material (dating evidence) to enter the ditch. Indeed, if the hedging method attributed to Columella (above) was followed, the ditch may only be open for a couple of months over the winter. Even if this were not the case, subsequent re-cutting could also remove any deposits capable of dating the original ditch. This is in contrast to upland limestone or chalk landscapes where larger prehistoric ditches are still visible today. However, the boundaries (if not the ditches) must have had long lives; and hedges are posited as the mechanism for this. The paucity of dating evidence may also be attributed to the position of the site, being sufficiently far away from a settlement area for the rubbish not to be distributed in the features identified. Nevertheless, it is possible to date the majority of the site (if uncertainly) to the Roman period.

Some features could be dated to the pre-Roman Iron Age, but these are ephemeral, scattered, and if they contain dating evidence, at all, the suggestion is they ought to be later. The lack of certain Iron Age activity within the excavation area could be seen to be significant and emphasize the limits involved in the utilization of the land during this period, possibly raising further questions of whether the land was marginal. In marked contrast, the site at Horcott (Pine and Preston 2004) showed a number of superimposed Roman field systems in the same area as Iron Age land divisions, showing continued use and reorganization of the landscape over a long period. However, this question is muddied by the likelihood that Phase 1 here probably is Iron Age and suffers from just the odd intrusive Roman find.

The Roman phase of the site comprises wide trackways, and three or four successive field systems, both large rectangular fields, and smaller rectilinear enclosures, in 'ladder' formation. The paucity of finds and general absence of small features such as pits and postholes, despite the survival of small gullies forming the field system, suggest that the area of the site was not used for occupation at any stage. The greater elaboration and more frequent remodellings towards the south-west and north-west corners of the site suggests that occupation areas were off the site in those directions, as had already been implied by the adjacent Stubbs Farm excavation. As at Stubbs Farm, where occupation does not appear to extend to the end of the Roman period, the exploitation of the land at Manor Farm may have been relatively short-lived; little suggests extensive late Roman activity.

What is clear from the extensive area of observation provided by this project is the single minded laying out of a very large tract of land apparently unfettered by any previous land use constraints such as existing boundaries, occupation sites or woodland. Such a pattern is not a new observation, with regional level evidence of field systems in the upper Thames valley (Benson and Miles 1974) and elsewhere (Riley 1980; Bowden *et al.* 1993) which shows that in Roman times highly organized landscapes were laid out over wide areas often encompassing several square kilometres. Such a level of organization is not even a new concept introduced by Rome; extensive fields systems (reaves) on Dartmoor are of Bronze Age date (Fleming 1978) and pre-Roman fields are claimed in East Anglia (Williamson 1987, but see Peterson 1997) to name but a few. In other regions such as the chalk uplands of Wessex this complexity contains more specialized enclosures (Wainwright 1979; Coe *et al.* 1995). 'Ladder' or 'brickwork' patterns of fields, sometimes referred to as 'coaxial' fields, as their names imply, comprise very long parallel axes with subsequent subdivision into smaller fields, as on the Berkshire Downs and in Nottinghamshire (Bowden *et al.* 1993; Riley 1980). The pattern observed at Kempsford, by way of contrast, is of a more rectangular pattern from the outset, with, in the case of FS3, subdivision on an oblique axis.

In this immediate area, a number of large scale investigations have provided an unrivalled level of coverage stretching from Claydon Pike in the north-east to Eysey Manor towards the south-west. What is clear from these extensive exercises is that local priorities are everywhere paramount in the landscape and that even where large tracts of land are subject to some overall plan or layout, this are not part of a single regional scheme on the sort of scale seen elsewhere in the Roman empire, and even the grandest of schemes do not approach the classic pattern of centuriation. No two fields at Kempsford share identical dimensions and it has proven impossible to extract standard measurement units. As a contrast, in some areas containing Iron Age and Roman settlement, the extensive observations afforded by mineral extraction have failed to reveal any evidence of organized land division.

Chronology remains a problem for 'off-site' archaeology in general, which, here at least, even intensive large scale excavation has not resolved. It is thus not possible to test in detail models such as Fulford's (1992) suggestion that by the early 2nd century AD, rural sites on poorer, marginal land were being abandoned, and their lands combined into larger estates, with populations moving into the towns, or becoming tenant farmers.

The evidence presented here does nothing to refute this hypothesis, but too much depends on an uncertain chronology, the change from field system 1 to 2 simply being impossible to date closely within the Roman period. Nor is there anything to suggest smaller parcels of (arable) land are being opened up into larger pastures, since the fields are large from the start. Subdivision, if anything, comes later and is probably short-lived and functional rather than tenorial. On the limited evidence present, this site does appear to have been pastoral at all times. The sheer size of the fields, the lack of finds, which suggests the fields were not manured, and the very limited environmental evidence, all carry hints in this direction.

Once laid out, the early Roman field system underwent almost no change throughout its life, with field system 3 being only the subdivision of one field (possibly just for drainage), and the paddocks at the north-west also being only a minor rearrangement. This is in marked contrast to the picture emerging at other sites nearby such as Totterdown Lane, Horcott and Claydon Pike, where development seems to be almost continuous and often quite radical changes followed one another in rapid succession. Was the site at the margins of human activity and only utilized in periods of peak demand? The lack of development of the site may be due to a short-lived expansion into the area. Equally, pastoral use of the area need leave little trace. It could be that, as seen during the excavation, this land was prone to flooding and could be described as marginal with poor cultivation properties but would have been ideally suited for pasture.

Discontinuities come only at the very start and the end of the stratigraphic sequence. The curving enclosure 1038 may have been the remnant of the Iron Age landscape; possibly this bounded a wooded area. Nothing of this layout survived to influence later landscape use. What we have called field system 4, which may not all belong together at all, seems to be post-Roman, but it could include late Roman elements. It clearly requires the main land divisions to have been abandoned.

Rural settlement patterns, landscape organization, and the articulation of social relationships in the landscape are currently highlighted research topics (Taylor 2001). This site shows how sparse the evidence can be unless it is seen on a large enough scale. Even with the large area opened here, and a high sample fraction of each ditch excavated, much is still unclear, and a certain amount of faith is required to permit any sort of reasoned interpretation. The site does, nonetheless, offer further evidence to add to the substantial bodies of research seen in Gloucestershire and to explore the relationships between various types of landscape and the rural settlement pattern with the broad open landscape here contrasted to more complex organizations such as seen at Totterdown Lane and Claydon Pike, and that again of the richer villas. Further work currently in progress at Kempford will no doubt raise new questions.

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ancient draft!!

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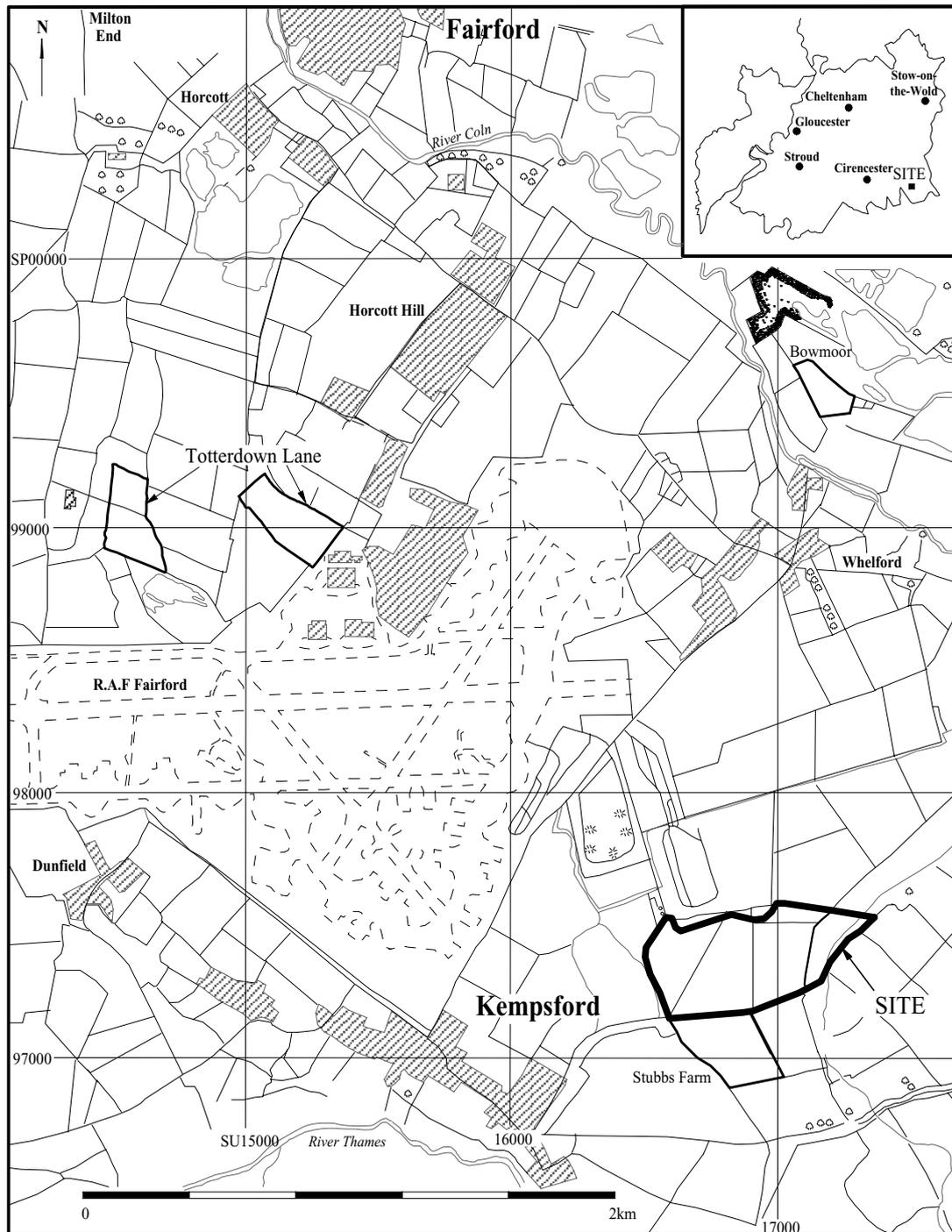


Figure 1. The site's location in Gloucestershire and local environs.

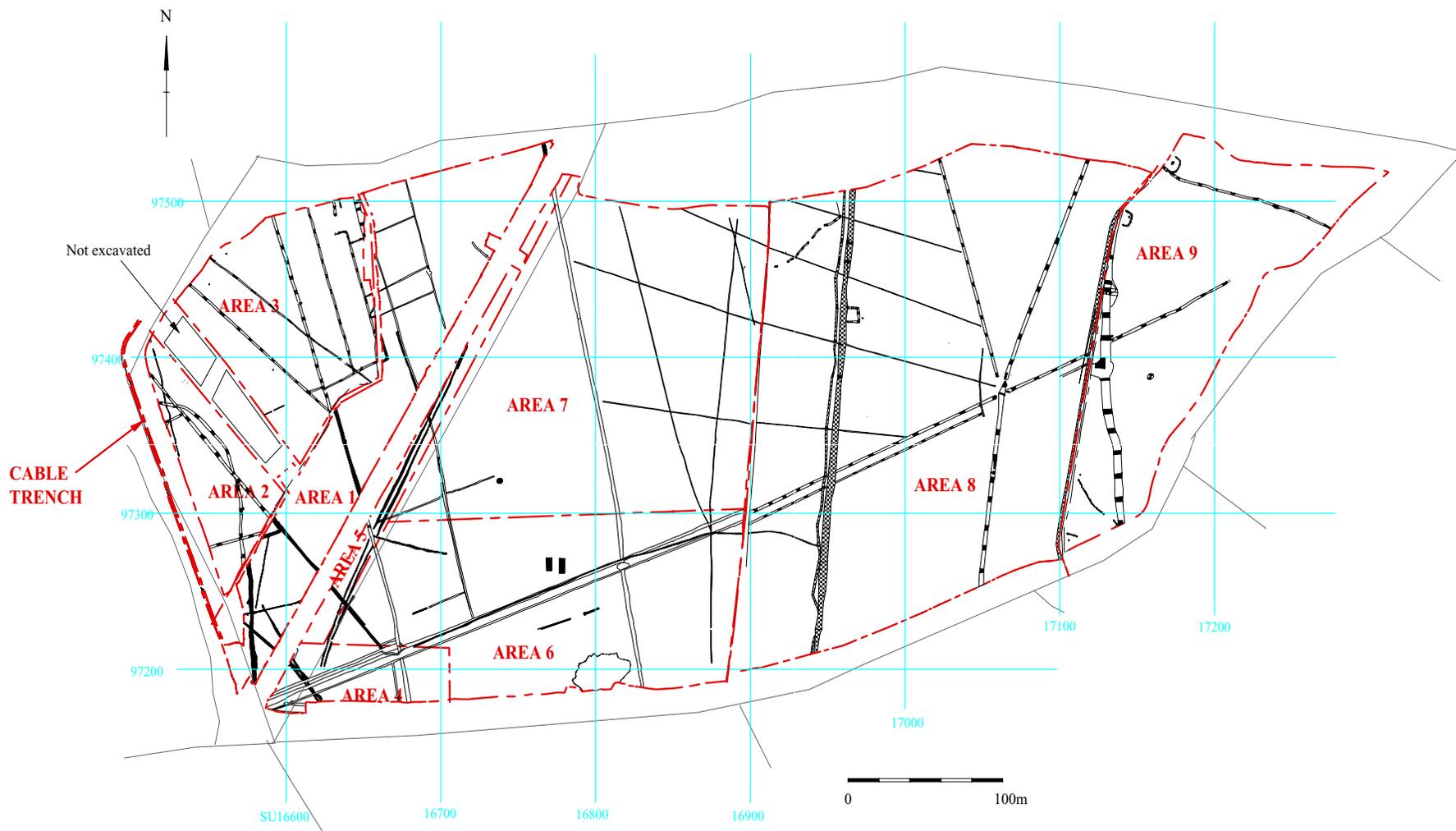
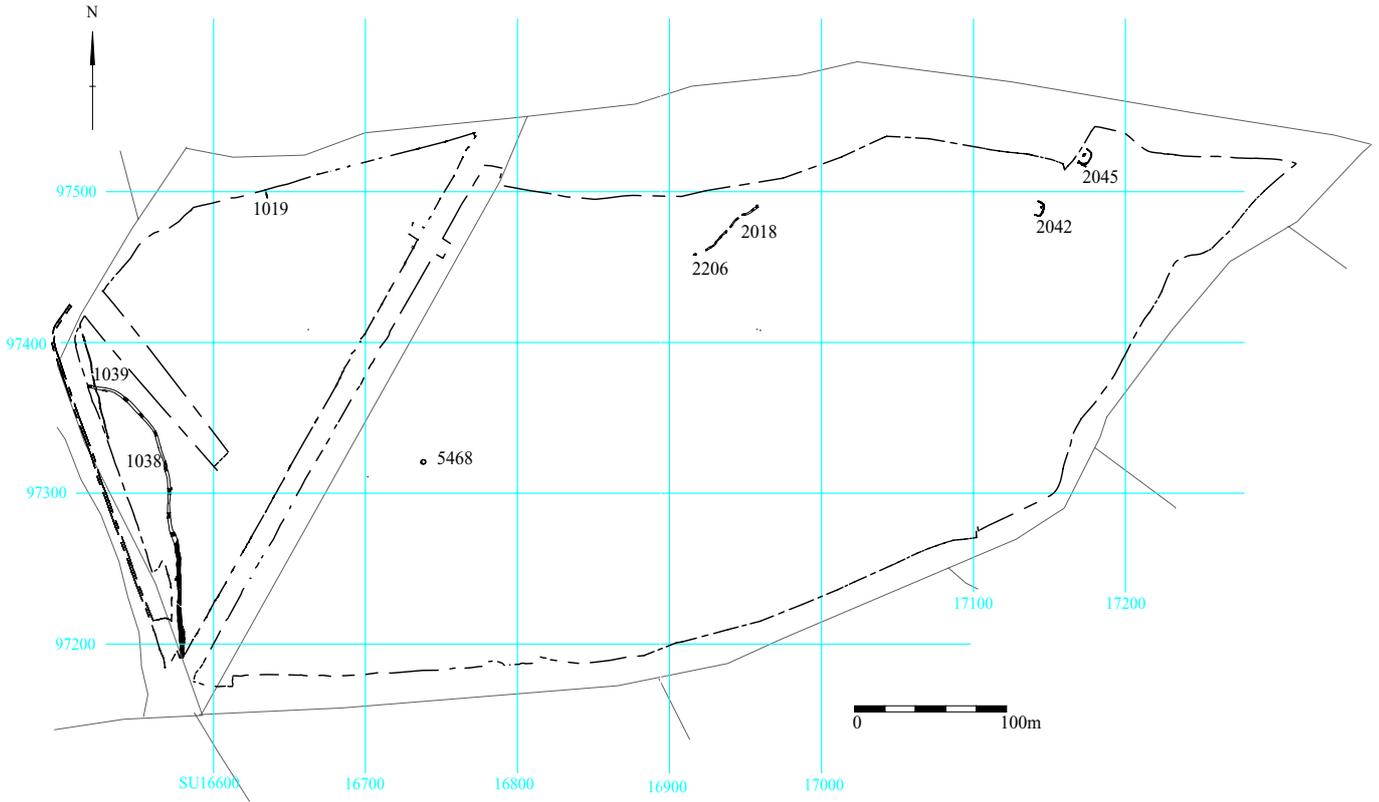


Figure 2: Excavated areas and all features

Phase 2



Phase 3, Field System 1

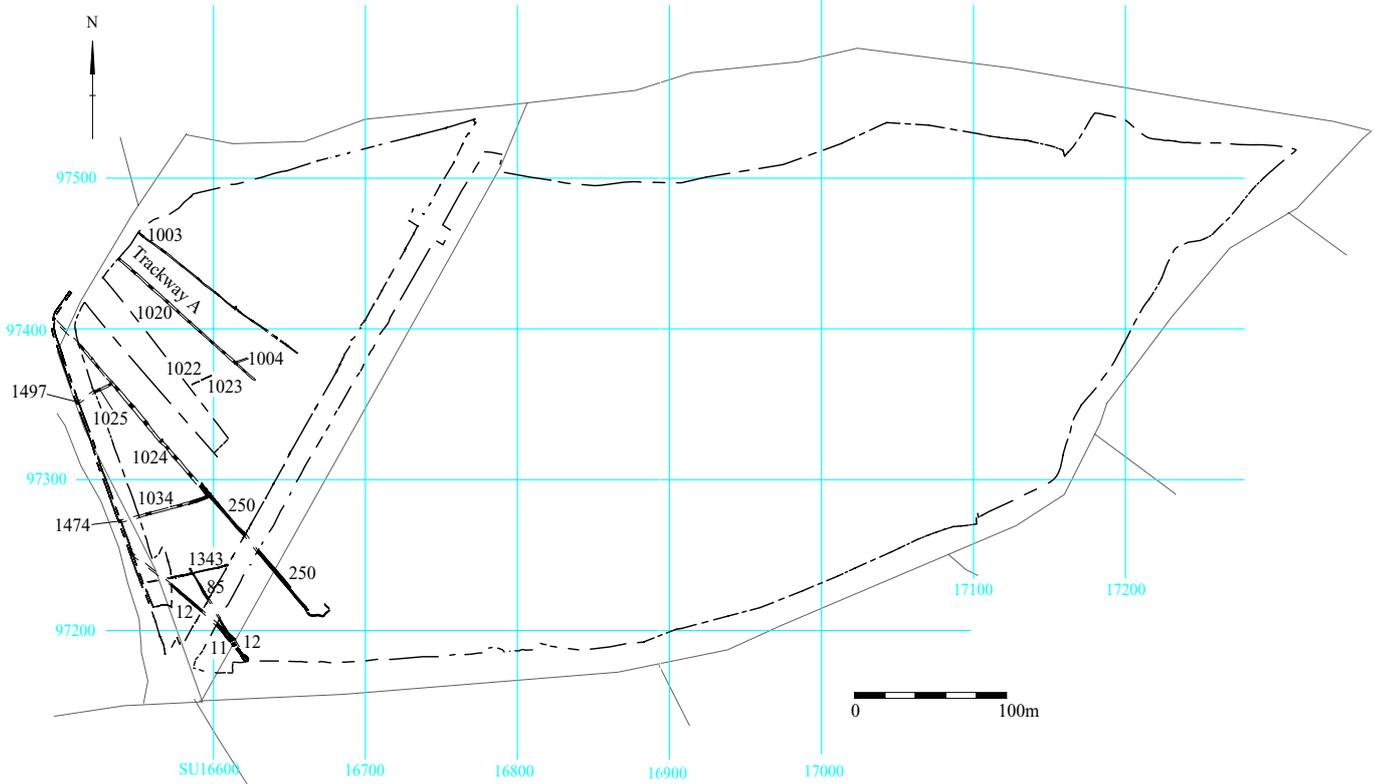
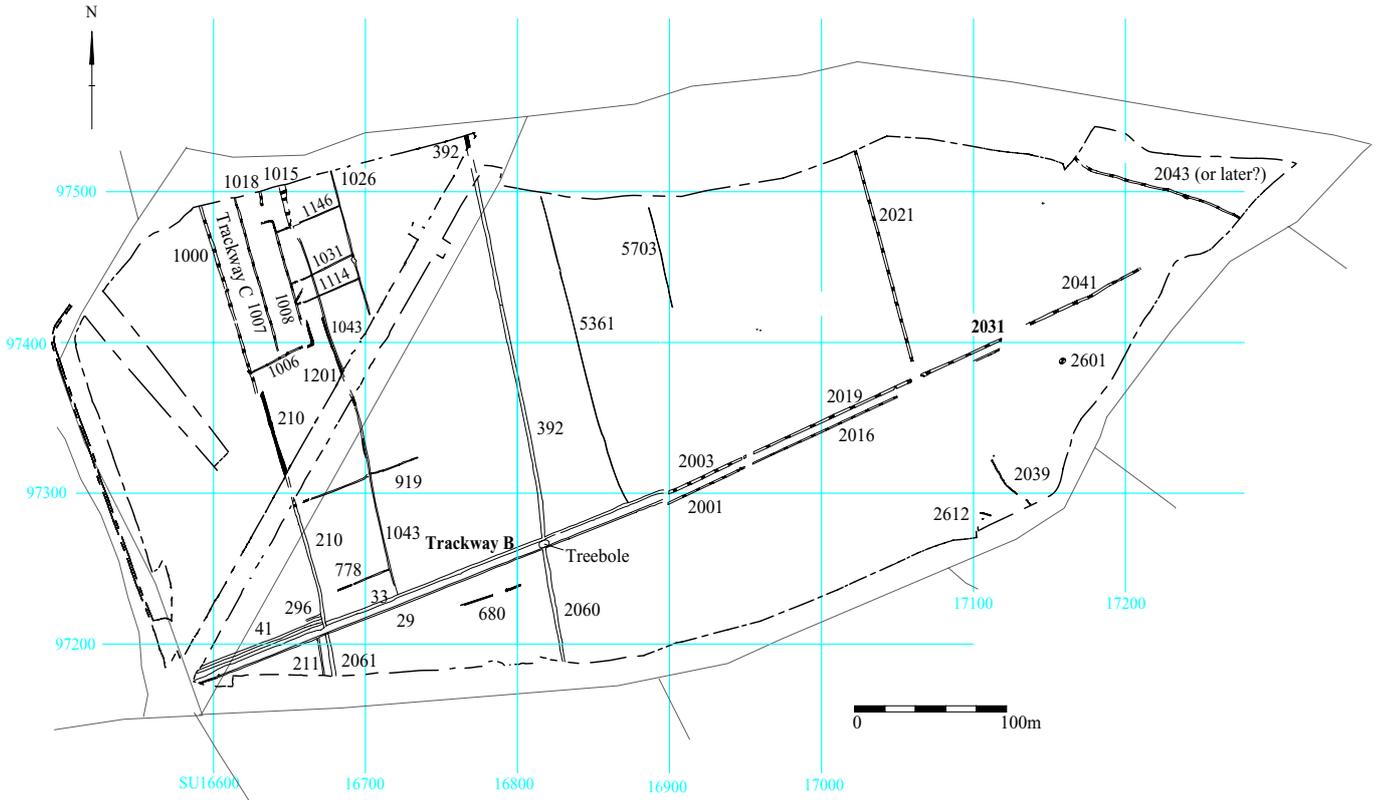


Figure 3: Phase 2 and Phase 3, Field System 1.

Phase 3, Field System 2



Phase 3, Field System 3

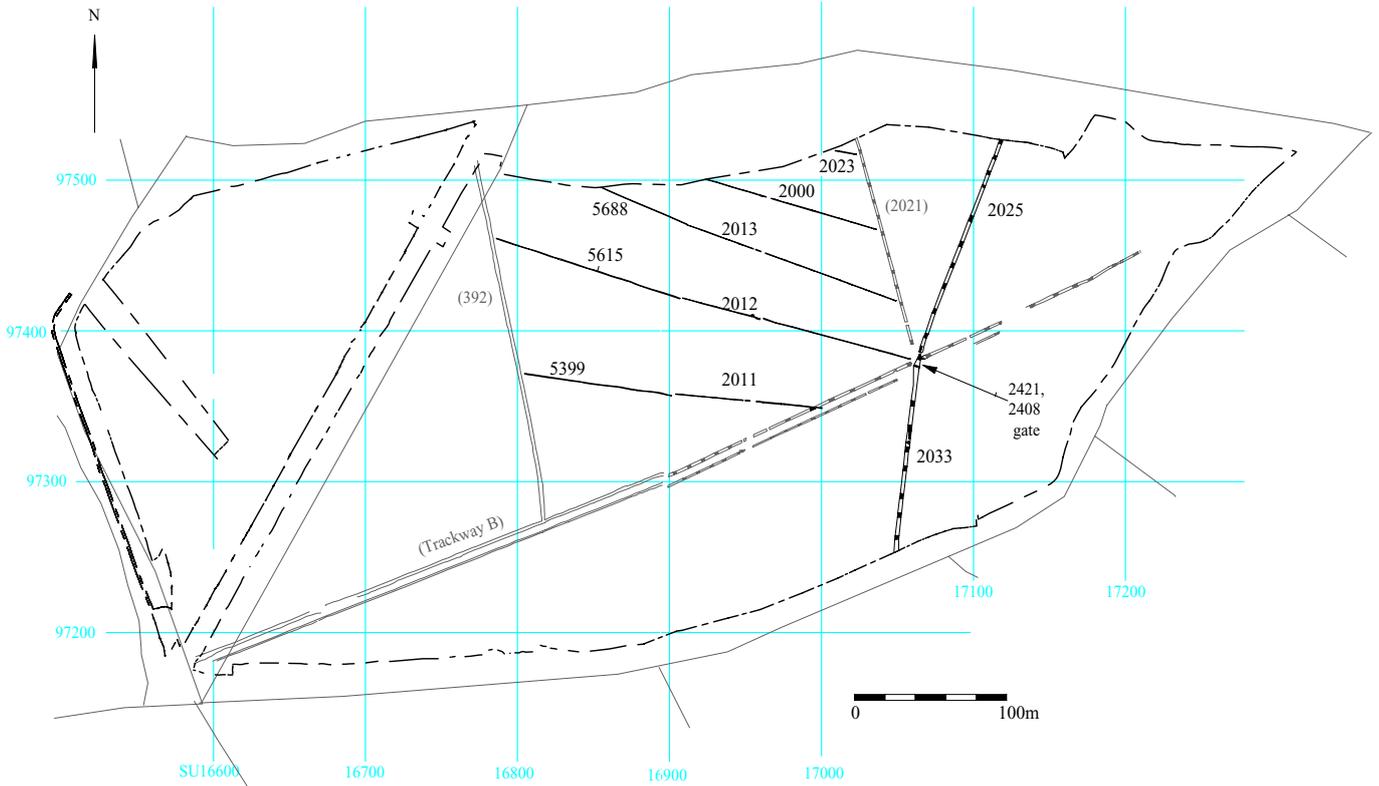
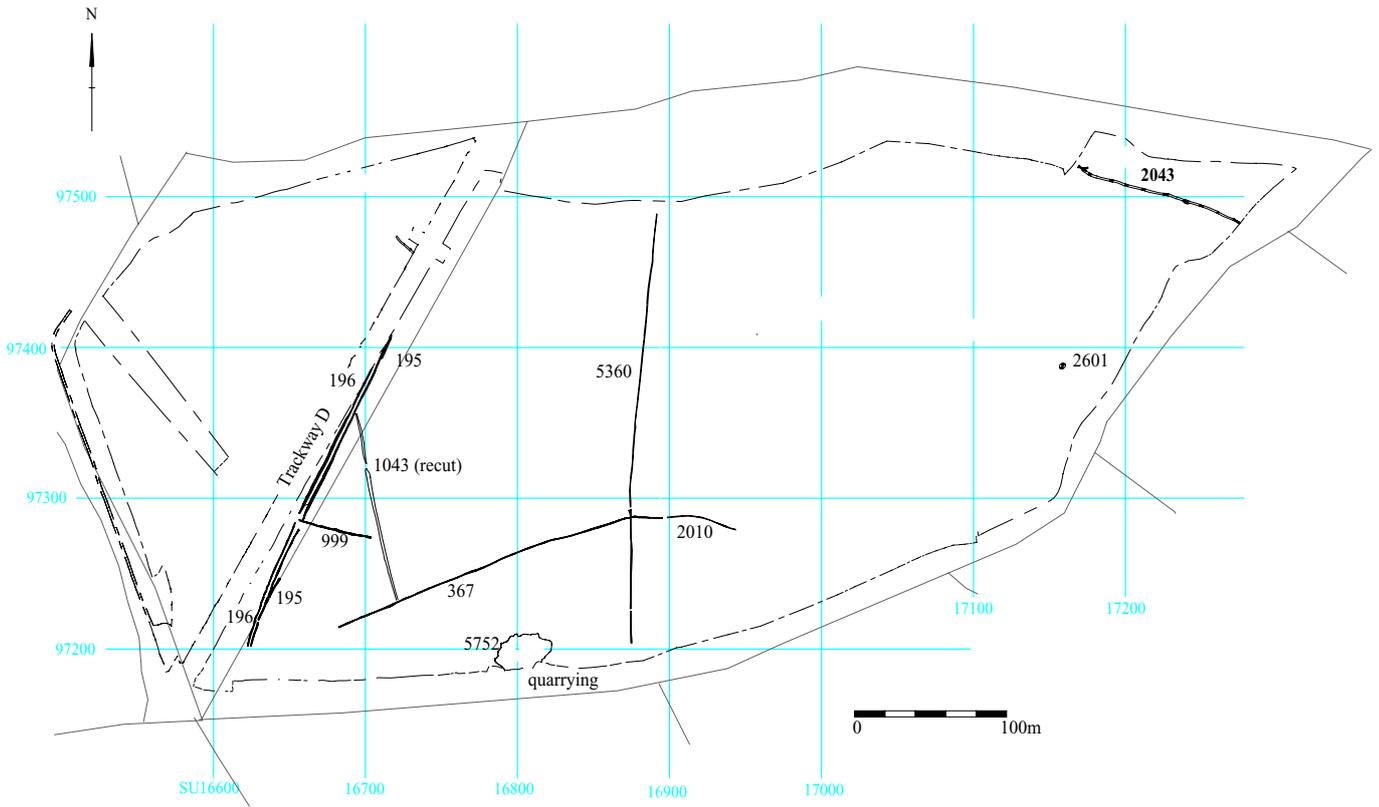


Figure 4: Phase3, Field Systems 2 and 3.

Phase 4



Phase 5

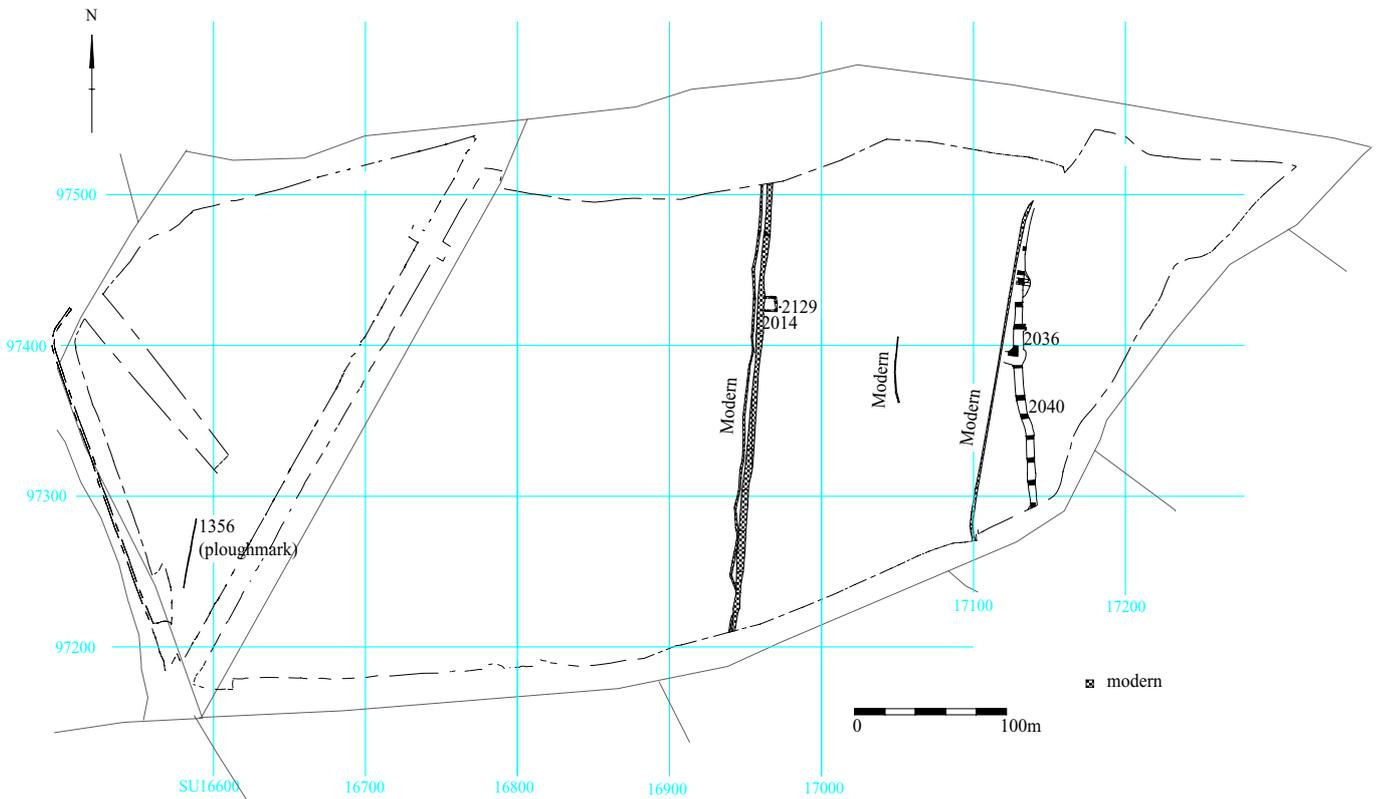


Figure 5: Phase 4 and 5

Manor Farm, Kempford, Gloucestershire

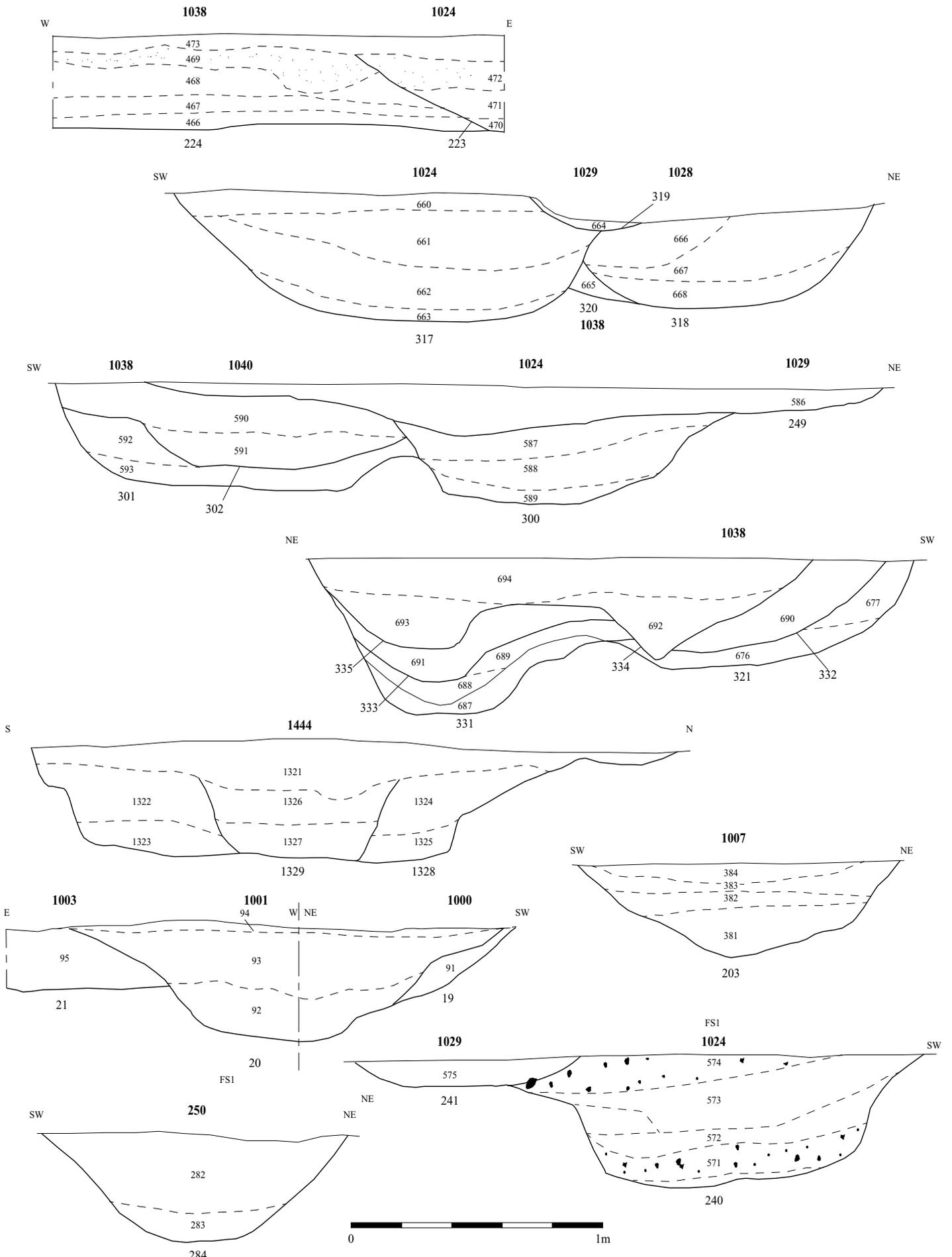


Figure 6: Sections of ditches of phase 2 enclosure 1038 and and phase 3 Field System 1

Manor Farm, Kempford, Gloucestershire

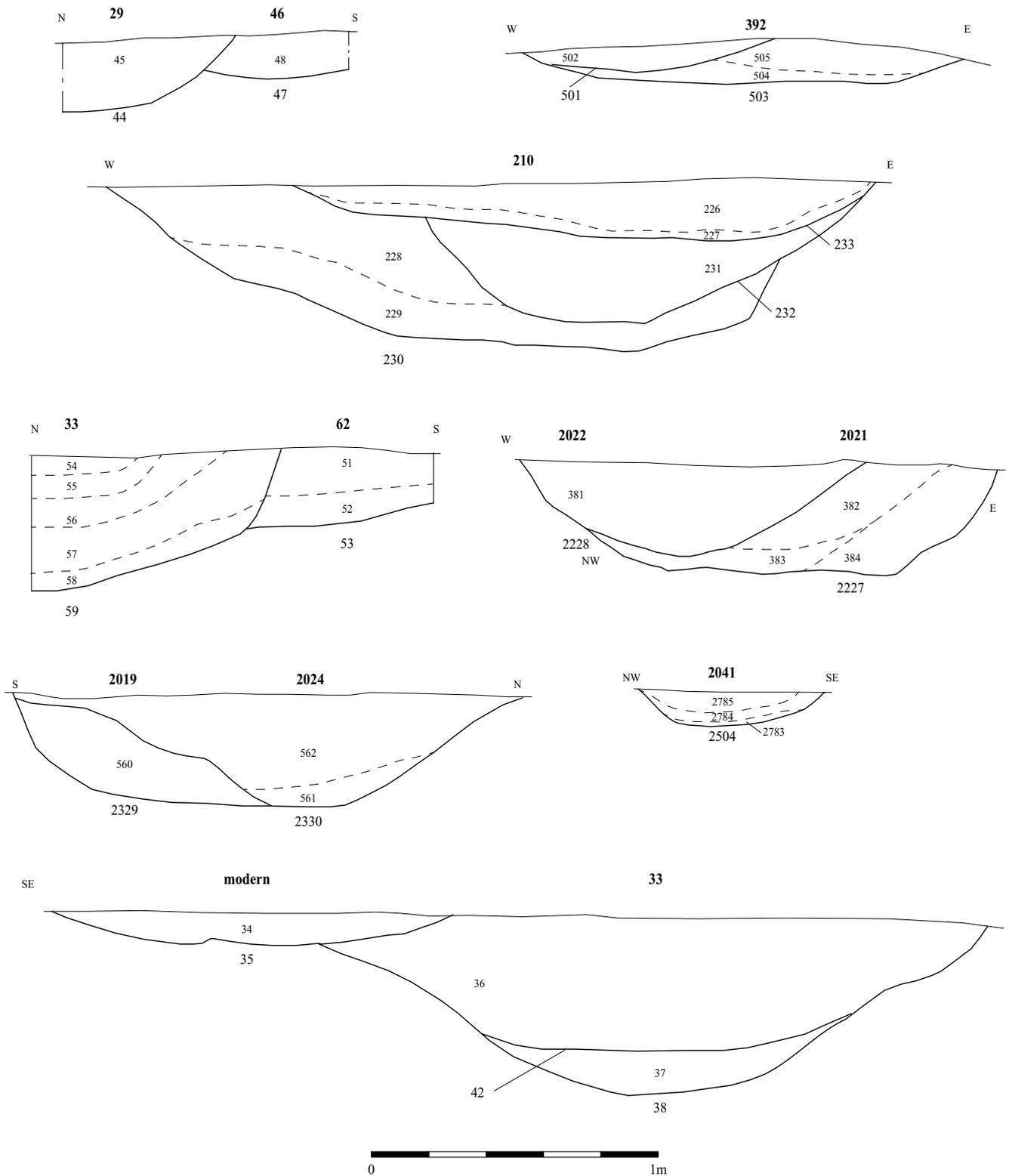


Figure 7: Sections of phase 3 trackway B and Field System 2.

Manor Farm, Kempsford, Gloucestershire

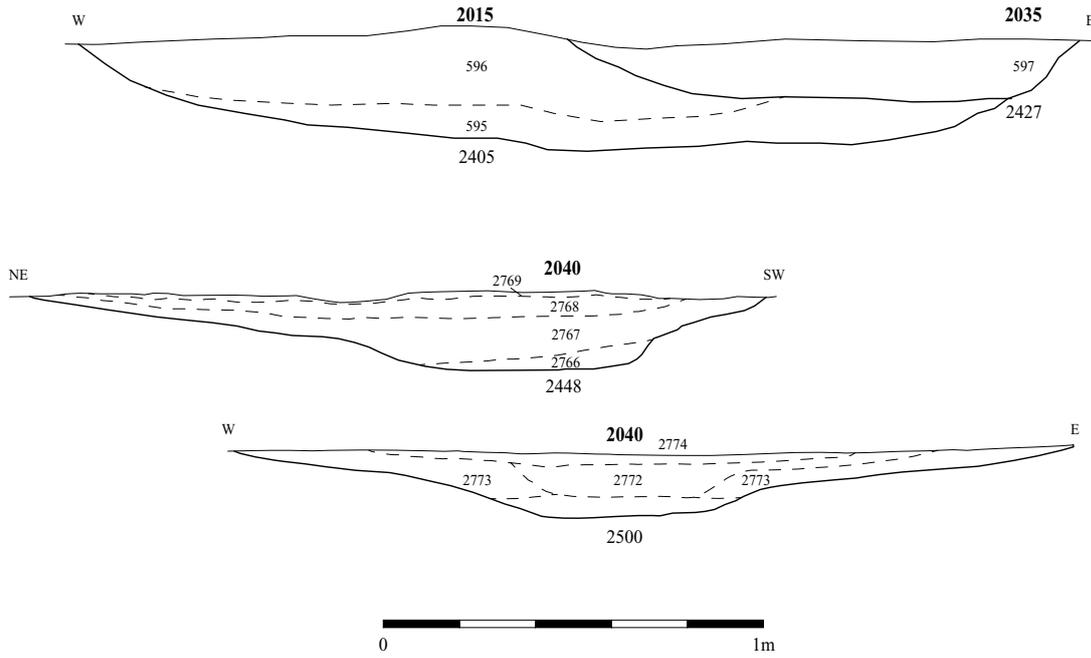


Figure 8: Sections of ditches of phase 3 field system 3 and later.