Archaeological investigations of land east of Main Road, Kempsey, Worcestershire

Worcestershire Archaeology
Archive and Archaeology Service
The Hive, Sawmill Walk,
The Butts, Worcester
WR1 3PD

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Date:	22 October 2015
Author:	Pete Lovett, plovett@worcestershire.gov.uk
Contributors:	Laura Griffin, Rob Hedge, Elizabeth Pearson and Tom Vaughan
Illustrator:	Laura Templeton
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Pete Lovett

With contributions by Laura Griffin, Rob Hedge, Elizabeth Pearson and Tom Vaughan

Summary

An archaeological investigation as undertaken of land east of Main Road, Kempsey, Worcestershire (NGR SO 8553 4987). It was undertaken on behalf of Lioncourt Homes, in advance of housing development for which a planning application has been submitted.

An evaluation was conducted, comprising of 19 trenches. Following this an excavation was undertaken, targeting three areas of archaeological interest. On the western side of the site, Area 1 contained the north-eastern portion of a Romano-British enclosure, comprised of three concentric ditches. The activity was dated to between the 1st to early 3rd century AD, and contained no definite evidence for internal structures. A related droveway ran down the slope to the south-east. This droveway was also present in Area 2, on the eastern side of the site, along with a medieval field system, with post-medieval reworking. Area 3 was a small area in the south of the site, in which was discovered a number of shallow medieval and post-medieval pits and ditches.

Finds spanned the prehistoric through to the post-medieval. The worked flint assemblage, though small and residual, is consistent with late Neolithic to Early Bronze Age occupation and domestic activity in the vicinity of the site.

Both the Late Iron Age/Roman and medieval finds assemblages were consistent with rural settlement and/or land use. Excavation of a number of sites in the immediate vicinity of Worcester has shown that the City's hinterland was characterised by farmsteads and enclosures during the late Iron Age and Roman periods. It would appear that this site at Kempsey is another such settlement. Due to the lack of direct evidence for occupation however, is conjectured that the Roman enclosure, or at least the north-east corner of it, was a stock enclosure, with the associated droveway possibly connecting to the Roman road between Worcester and Gloucester to the east.

The survival of environmental remains appears to have been affected by acidic soil conditions. It is, therefore difficult to determine whether the low survival of charred cereal crop waste reflects a predominantly pastoral rather than arable landscape.

Report

1 Background

1.1 Reasons for the project

A series of archaeological investigations were undertaken on land off Main Road, Kempsey, Worcestershire (NGR SO 8553 4987; Fig 1). It was commissioned by Lioncourt Homes, who intend to develop houses for which a planning application has been submitted to Malvern Hills District Council (reference number MH/13/0417).

The proposed development site is considered to include heritage assets and potential heritage assets, the significance of which may be affected by the application (WSM 02212).

The project conforms to a brief prepared by Worcestershire County Council (WCC 2014) and for which two project proposals (including detailed specification) were produced (WA 2014, WA 2015).

The project also conforms to the *Standard and guidance: Archaeological field evaluation* (CIfA 2014); *Standard and guidance: Archaeological excavation* (CIfA 2014); and *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2010).

The event reference for this project, given by the HER is WSM 66267 (evaluation), WSM 66555, WSM 66556, and WSM 66561 (excavation areas).

2 Aims

For the evaluation stage

The aims of this evaluation were:

- to describe and assess the significance of the heritage asset with archaeological interest;
- to establish the nature, importance and extent of the archaeological site;
- to assess the impact of the application on the archaeological site.

For the excavation stage

The aims and scope of the project were to fully expose, sample and record the archaeological remains identified during the evaluation in three areas of the site, to create a permanent record in advance of development.

3 Methods

3.1 Personnel

The project was undertaken by Pete Lovett (BSc Archaeology); who joined Worcestershire Archaeology in 2012 and has been practicing archaeology since 2004. The project manager responsible for the quality of the project was Tom Vaughan (MA, ACIfA). Illustrations were prepared by Laura Templeton (BA; PG Cert; MCIfA). Laura Griffin (BA (hons.); PG Cert; ACIfA) and Rob Hedge (MA Cantab) contributed the finds report. The environmental analysis was completed by Elizabeth Pearson (MSc; ACIfA).

Fieldwork was undertaken by James Spry, Jamie Wilkins, Jess Wheeler, Michael Nicholson, Tim Cornah, Graham Arnold and Richard Bradley.

Aerial photography was undertaken by Aerial-Cam.

3.2 Documentary research

A desk-based assessment (DBA) has been written, in which the historic and archaeological background is given (Vaughan and Webster 2013). Additionally, a geophysical survey (Stratascan 2013) was undertaken.

3.3 Fieldwork strategy

Detailed specifications have been prepared by Worcestershire Archaeology (WA 2014; WA 2015).

Fieldwork was undertaken between 6 January and 6 March 2015. The site reference numbers and site codes are WSM 66267, WSM 66555, WSM 66556, and WSM 66561.

3.3.1 Evaluation Strategy

Initially an evaluation was undertaken to ascertain the potential of the site. This was enacted using the following strategy:

19 trenches, amounting to 2,800m² in area, were excavated over the site area of 7ha, representing a sample of 4% (Fig 2). Trenches 1, 2, 4, 5, 7, 8, and 11 were located to target features revealed from the geophysical survey (Stratascan 2013), whilst the remainder were distributed in an approximate grid array.

Deposits considered not to be significant were removed under archaeological supervision using a 360º tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012).

3.3.2 Excavation Strategy

Following this initial stage, it was clear that significant archaeology was present on site, and a strategy of open area excavation was required by the County Council Planning Officer:

The location and extent of excavation areas was carefully considered and agreed with the Client and Curator, based on current archaeological information, site constraints and the locations of ground disturbance associated with the development. The excavation areas are shown on Figure 2.

Area 1 was located around evaluation Trenches 4 and 5, where a perpendicular linear anomaly identified within the geophysical survey was determined to be a probable enclosure ditch of Late Iron Age or Romano-British date, along with additional ditches, gullies and a number of pits both within and outside the postulated enclosure. Area 1 covered an area of approximately 2,000m² (Fig 3).

Area 2 was located around evaluation Trenches 17 and 18, where linear features of Late Iron Age or Romano-British date were identified. It covered an area of approximately 4,700m² (Fig 4).

Area 3 was located over the footprint of the planned pumping station, shafts and tanks, adjacent to evaluation Trench 18. It covered an area of approximately 78m² (Fig 5).

3.4 Structural analysis

All fieldwork records were checked and cross-referenced. Analysis was effected through a combination of structural, artefactual and ecofactual evidence, allied to the information derived from other sources.

3.5 Artefact methodology, by Laura Griffin

3.5.1 Artefact recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012).

3.5.2 Method of analysis

All hand-retrieved finds were examined and a primary record was made on a Microsoft Access 2000 database. They were identified, quantified and dated to period. A *terminus post quem* date

was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on pro forma sheets.

The pottery and ceramic building material was examined under x20 magnification and recorded by fabric type and form according to the fabric reference series maintained by Worcestershire Archaeology (Hurst and Rees 1992; and www.worcestershireceramics.org).

Artefacts from environmental samples were examined, but none were worthy of comment, and so they have not been included below, nor included in the Table 1 quantification.

3.6 Environmental archaeology methodology, by Elizabeth Pearson

3.6.1 Sampling policy

Samples were taken according to standard Worcestershire Archaeology practice (2012). A total of 23 samples (each of up to 40 litres) were taken from the site (Table 8).

3.6.2 Processing and analysis

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

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

Hand-collected animal bone was collected on site. As the assemblage was small, the material was quantified by context, and comments made where the material was identifiable, but no further work was carried out (Table 9).

3.6.3 Discard policy

Unprocessed sample material and scanned residues will be discarded.

3.7 Statement of confidence in the methods and results

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

4 The application site

4.1 Topography, geology and archaeological context

Please refer to the DBA (Vaughan and Webster 2013) for a detailed contextual description of the application site.

4.2 Current land-use

The site has for many years been under plough, though immediately prior to the evaluation it has lain fallow.

5 Structural analysis

The trenches and features recorded are shown in Figs 3, 4, and 5. The results of the structural analysis for the evaluation are presented in Appendix 1. Please note that the evaluation and excavation phases are both described in this structural analysis.

5.1.1 Natural deposits

The majority of the natural deposits are red marl Mercian Mudstone, with occasional areas of sands and gravels, suggesting the site lies on the edge of the gravel terrace.

A natural geological feature that was originally thought to be a potential prehistoric linear was observed in the corner slot of the outer enclosure ditch in Area 1. It ran perpendicular to the Roman feature.

5.1.2 Phase 1: Roman deposits

AREA 1

This area lies on the western side of the site, on the high ground (Fig 3, Plates 1 and 2).

Internal features and outlying pits

There were a number of linears and pits within a series of enclosure ditches. Whilst these had no direct stratigraphic relationship with the enclosure, they were considered to be associated internal features. A narrow ditch, filled by humic material, 1221 ran north-west to south-east, and superseded a smaller gully 1222, on the same alignment. 1221 was cut by a small pit 1037, which contained an amount of burnt bone, originally within an underlying pit, 1039 (Fig 9, Plate 4). At the northern terminal end of ditch 1222 were a pair of small postholes, 1017 and 1019, which may have been associated with the linear.

To the north of these ditches were a number of small pits and postholes, some of which may have been natural or were heavily truncated and disturbed. North of ditch 1221 were three sub-square postholes in a rough north to south alignment, close to a smaller circular posthole (Fig 3).

Enclosure ditches and droveways

There were three ditches that ran north and returned west; the innermost of which, 1214, was the narrowest and shallowest (Figs 8 and 13). There was no direct relationship with any other feature, though a shallow posthole, 1088 (Fig 14), lay close on the outer side, suggesting the possibility of a palisade.

The middle linear, 1215 (Fig 7, 10, 11, Plates 6-11), was comprised of several reinstatements, the highest number identified being six, in the corner slot, whilst there were three visible in the southern end and four in the west. The corner slot had the uppermost ditch terminating on the turn (Fig 7). These were substantial features, over 1m deep.

This central enclosure ditch had no direct relationship with either of the ditches that ran parallel to it, though it did cut small gully 1219 that was also cut by the outer ditch 1216.

The outermost ditch had a more complex stratigraphy. 1216 ran parallel to 1214 and 1215, and had at most five identified iterations, though most of these are only apparent in the western slot (Fig 16, Plates 14-17). The corner and southern slots revealed one major ditch running through, cutting an earlier remnant in the corner (Fig 15). In the southern end, the small ditch1220 ran roughly parallel to 1216, on its inner side (Fig 12). The relationship between the two was unclear, but 1220 cut what was potential bank material for the larger ditch. It continued north but was lost in the meeting of several ditches. Similarly to the middle enclosure, the ditches making up the outer enclosure were substantial in size.

1216 truncated linear 1218, a ditch running west from a terminus in the east (Fig 18, Plate 5). Ditch 1217 was a linear running parallel to 1218 but cut both it and 1216 (Fig 17), before seeming to terminate in the top of 1216. It was not seen in section at the corner slot. To the east, it continued beyond the excavation area, with a small gully, 1085, emerging to the north when its course was no longer subsumed by the later feature. It is considered that these ditches formed the same droveway as those observed in Area 2. Just to the north was a small elongated pit.

AREA 2

This area (Fig 4, Plate 3) lies to the south-east of Area 1, further down the hill. It is split in to two parts, a north and a south, bisected by a modern service which was left in situ. The Roman remains comprised two parallel ditches, 2142 and 2143, spaced approximately 4.5m apart, forming a droveway, aligned west-north-west to east-south-east (Figs 21 and 23, Plates 12, 13 and 19).

Evaluation trenches

Trenches 16, 17 and 19 revealed probable Roman features. In Trench 16 there was a small north-west to south-east gully, next to a pit. In Trench 19 two parallel gullies ran north to south, and in fact may connect up to that seen in Trench 16. These ditches lay beneath a thick layer of probable colluvium. Trench 17 contained a continuation of the droveway seen in areas 1 and 2 (Fig 20). Trenches 16 and 19 lay outside of the areas of disturbance by the development so it was agreed with the Planning Archaeologist that no further work was required in these areas.

5.1.3 Phases 2 and 3: Medieval and post-medieval deposits

AREA 2

A field boundary, 2144, ran north before turning sharply east, being a replacement for an earlier version 2149, on the same alignment. These both cut 2147, an east to west aligned field boundary ditch with a break in the western half.

An east to west field boundary ditch, 2148, lay to the south, and may be a continuation of 2144. It faded out in the east due to truncation. To the east lay a north to south field boundary 2150 that truncated 2148. To the immediate east of this ran a third field boundary 2151, before it turned further east beyond the limit of excavation.

A number of large pits were dotted across the northern part of Area 2, all discrete (Fig 22, Plate 18). There were also several smaller pits and postholes, heavily truncated and often disturbed by rooting. None of the postholes formed alignments, and little artefactual remains were recovered. They are presumed to be medieval in date by association with the adjacent features.

AREA 3

This small area lay in the far south of the site (Fig 5). There were three discrete elongated shallow pits next to three small intercutting ditches in the west. A fourth ditch lay on its own to the south-east. The western section revealed a buried soil horizon overlying the aforementioned ditches, cut by a posthole and two small ditches that terminated just into the trench.

Evaluation trenches

A post-medieval field boundary, identified from the geophysical survey as a potential archaeological feature (Stratascan 2013, 5-6, fig 5), was revealed in evaluation Trenches 1, 2, and 8, to the north of Area 1. In discussion with the Planning Archaeologist it was not considered to be of significance, so no further investigation was undertaken.

5.1.4 Phase 4: modern deposits

The modern deposits consisted of a number of field drains, and in the far south of the site, a substantial dumped levelling deposit from the 1960s housing development adjacent. No material from these deposits was retrieved.

5.1.5 Undated deposits

To the north of the outer Roman enclosure ditch in Area 1 were three pits of unclear origin, all intrinsically undated (Fig 3).

5.2 Artefact analysis, by Laura Griffin and Rob Hedge

The artefactual assemblage recovered is summarised in Tables 1 and 2.

5.2.1 The artefact assemblage

A fairly substantial assemblage amounting to 514 artefacts was recovered and is summarised in Table 1. Material could be dated from the Late Iron Age onwards (see Table 1) with most identified as of Roman and medieval date. The level of preservation was good with the majority of material displaying only low levels of abrasion. The most abundant material type recovered was pottery.

material	total	weight (g)
pottery	439	5994
fired clay	12	30
loomweight	7	115
tile	23	837
brick	2	2552
brick/tile	5	4
stone building material	5	274
pot-boiler stone	5	131
flint	4	15
slag(Fe)	3	12
coal	9	12

Table 1: Quantification of the assemblage

5.2.2 The pottery

The pottery assemblage retrieved from the excavated area amounted to 439 sherds weighing 5994g. All sherds have been grouped and quantified according to fabric type (Table 2) and diagnostic form sherds dated accordingly, with the remaining sherds being dated by fabric type to their general period or production span.

The pottery fell into two discreet assemblages: Late Iron Age - earlier Roman date (Areas 1 and 2) and medieval (Area 3).

material	total	weight (g)
Late Iron Age pottery	2	61
Late Iron Age/Early Roman pottery	124	1074
Roman pottery	234	3979
Medieval pottery	77	784
Late medieval/early post-medieval pottery	2	58
Modern pottery	1	49

Table 2: Quantification of the pottery by period

5.2.3 Late Iron Age and Romano-British

Late Iron Age and Romano-British pottery formed the largest material group within the assemblage, amounting to 360 sherds weighing 5114g. Due to shallow stratigraphy and a large proportion of undiagnostic pottery in fabric types which bridge the Late Iron Age/early Roman period, it has not been possible to definitively date these sherds and so they have been grouped together. Typically for a rural site in Worcestershire, the group was dominated by locally produced Severn Valley ware (fabrics 12, 12.1, 12.2 and 12.3) and Malvernian ware (fabrics 3 and 19), which together formed 88% of the total Roman assemblage. Remaining fabrics were identified in smaller quantity and were of types commonly found in Roman rural assemblages from the county (Table 2).

Local/regional wares

Briquetage (fabrics 1 and 1.1)

A small assemblage of briquetage totalling seven sherds was identified. The group comprised two fabric types – sandy (fabric 1) and sandy marl tempered (fabric 1.1). As is often the case with briquetage vessels, no diagnostic sherds were identified within the group. Generally the marl-tempered fabric is considered to be of earlier date than the more commonly identified organic and sand tempered versions (D Hurst, pers comm).

Malvernian ware (fabric 3)

Vessels of Malvernian wares comprised 106 sherds of the handmade fabric (fabric 3). Diagnostic sherds came almost exclusively from 'tubby cooking pot' forms of 1st-2nd century AD (Fig 6, nos. 3 and 4). Remaining sherds included a small number from thick-walled vessels, presumably large storage jars, which were considered to be of similar date to the tubby cooking pot forms. The absence of sherds of the later wheel made Malvernian fabric (fabric 19) may be of particular significance for the dating of the site; i.e. that it does not extend into the 3rd century (see below).

Palaeozoic limestone tempered ware (fabric 4.1)

Five sherds of this fabric were present within the assemblage, all fragmentary and abraded. One sherd was diagnostic and could be identified as coming from a jar with well burnished surfaces (context 508; Fig 6, no.1). Jars of similar form have been identified at Blackstone, Worcestershire (Morris 2010, form TV7B) where they were dated 1st century BC-1st century AD. Remaining sherds were fragmentary and could not be more closely dated than generally to the Iron Age period.

Sand-tempered ware (fabric 5.1)

A total of 11 sherds of sand-tempered ware belonged to contexts of late Iron Age to early Roman date. Again, the majority of sherds were fragmentary and non-diagnostic. However, a single rim sherd was present (context 413; Fig 6, no. 2) and could be ascribed to a slack-shouldered jar form similar to one identified at Blackstone (*ibid.*, form TV1B) which was dated to the Late Iron Age.

Sandstone-tempered ware (fabric 5.2)

Eleven sherds of this fabric (contexts 412 and 504) were undiagnostic fragments but burnished and thought to have come from jar forms of Late Iron Age/early Roman date, similar to those seen in fabrics 3, 4.1 and 5.1.

Severn Valley wares (fabrics 12, 12.1, 12.2 and 12.3)

Oxidised fabrics (fabrics 12 and 12.2) of this ware formed the largest proportion of the local wares totalling 181 sherds, as opposed to just 17 of their reduced counterparts (fabric 12.1 and 12.3). A significant proportion of sherds was diagnostic and could, therefore, be dated. The range of forms was narrow, comprising only jar, tankard and carinated cup types, none of which dated to beyond the early 3rd century. The other Severn Valley wares dated as follows: the organic variants (fabric 12.2 and 12.3) to the mid 1st-2nd century, and the remaining sherds to the mid 1st–4th century.

Severn Valley mortarium (fabric 37)

Two sherds from a single hook-rimmed mortarium were identified as being of this fabric type (context 1159). The fabric was typical of the type but the trituration grits were notably large. The vessel could be dated mid 1st-2nd century AD.

Grog-tempered ware (fabric 16)

A single, undiagnostic sherd of grog-tempered ware was identified (context 1092). Vessels of similar fabric from previously analysed assemblages in Worcestershire have been dated to between the late 1st and early 3rd century AD, and it can be assumed that this sherd is of similar date.

Early micaceous wares (fabric 21.3)

Just four sherds of variant micaceous ware (fabric 21.3) were present within the assemblage. This fabric type was first identified on the New Police Station (Griffin 2002) and Magistrate's Court (Evans forthcoming) sites on Castle Street, Worcester. A single waster sherd was also identified within the assemblage from the latter (Jeremy Evans, pers comm.), although a specific source of production has not been ascertained. Identifiable forms from both of these sites were consistently of an early Roman date, with forms of 1st-2nd century predominating. This dating has been further reinforced by forms identified within the assemblages from George Lane, Wyre Piddle (Griffin 2012), Bath Road, Worcester (Griffin and Evans 2010) and from Wellington Quarry, Herefordshire (Griffin 2011).

Just one sherd was diagnostic and came from a carinated cup form similar to those seen in Severn Valley ware fabrics (context 1062; Fig 6, no.5), and a good example of an early Roman form.

West midlands mortaria (fabric 34)

A single body sherd was identified as being of this fabric type and of early-mid 2nd century date (context 1181).

Non-local/traded wares

Black-burnished ware type 1 (fabric 22)

Just five sherds of this ware were identified within the assemblage, with four coming from a single flanged bowl of mid-2nd–early 3rd century date (context 1075).

Miscellaneous unidentified sherds of note

Miscellaneous Roman wares (fabric 98)

Of the miscellaneous Roman wares, four mortarium sherds particularly stood out (contexts 541 and 542; Fig 6, no.6). The sherds were of a distinctive fabric with creamy white surfaces and a pink core. The sherds were all from the rim of the vessel of hooked form and with trituration grits being embedded into the surface.

fabric no.	total sherds	Weight (g)	% sherds
1	1	2	0.3
1.1	5	36	1.4
2	1	43	0.3
3	106	1303	29.4
4.1	5	10	1.4
5.1	11	100	3.1
5.2	11	13	3.1
12	123	1853	34.2
12.1	6	33	1.7
12.2	58	846	16.1
12.3	11	354	3.1
16	1	27	0.3
21.3	4	137	1.1
22	5	51	1.4

34	1	36	0.3
37	2	93	0.6
98	9	177	2.5

Table 3: Proportion of Late Iron Age and Roman pottery by fabric type

Dating and pottery supply to the site

The Late Iron Age/Roman pottery assemblage clearly indicates occupation of the site between the 1st century and early 3rd century AD. This assumption is based not only on the dating of diagnostic sherds present but can also be seen in the composition of the assemblage, and the presence/absence of certain fabric and form types. However, it should be noted that the presence of marl-tempered briquetage and the typically Late Iron Age jar forms seen in fabrics 4.1 and 5.1, may suggest earlier activity.

The assemblage is dominated by local/regional wares which account for 96% of all sherds. These include a number of typically early types such as handmade Malvernian ware, organically tempered Severn Valley wares, briquetage, palaeozoic limestone and sand-tempered wares. The absence of typically later Roman wares such as wheel made Malvernian ware (fabric 19) and Oxfordshire colour-coated wares (fabrics 29 and 30) further supports this dating.

Likewise, the very low occurrence of Black-burnished ware 1 (BB1), could be linked to this occupation date span. Although BB1 is one of the most commonly identified non-local ware in Roman assemblages across Worcestershire, the proportions found can vary widely from site to site. This is commonly thought to result from a variety of influences: access to transportation routes, site status, identity and exchange relationships (Willis 2000, 86; Allen and Fulford 1996). Assemblages from nearby sites in Worcester, such as Deansway (Bryant and Evans 2004) and Sidbury (Darlington and Evans 1992) certainly had similarly low levels of this ware in the 2nd century. At Deansway BB1 represented 3.5% by count of the Period 4 assemblage (dated broadly to *c* AD 120-240). Whilst at Sidbury, the occurrence of BB1 increased markedly from Phase 4 (*c* AD 140-170) to Phase 5.1 (early-mid 3rd century). Its low occurrence at Kempsey can, therefore, be taken to be a good indication of the site occupation date, especially as it lay close to a Roman road and so should have had access to regional wares whenever they were available. Its counterpart in locally made Malvernian ware may well have been preferred while it was available up to the end of the 2nd century.

The lack of samian ware is of note, particularly considering the early date of the assemblage. There is no obvious reason as to why this ware is absent, with sherds of this ware type being commonly identified on even lowest status rural settlements elsewhere in Worcestershire. As in the case of BB1, the location of this site alongside a major road would preclude lack of supply from being the reason. However, it should be noted that only the very edge of a potentially much larger settlement was uncovered during this excavation and, therefore, the assemblage retrieved many not be completely representative of the range of fabrics and wares utilised.

5.2.4 Medieval and early post-medieval

A total of 79 sherds weighing 842g were identified as being of medieval and early post-medieval date, accounting for 18% of the pottery assemblage (Table 4). Many of the sherds were highly abraded, suggesting that the material has been disturbed following deposition.

This assemblage was of a standard domestic nature with a relatively narrow range of forms and fabrics identified. The vast majority of the assemblage consisted of locally produced Worcester-type (fabrics 55 and 64.1) and Malvernian wares (fabrics 56 and 69). The only non-local sherd identified was that from a cooking pot of Newbury A fabric (fabric 157.1). Three sherds could not be identified and have been recorded as miscellaneous medieval wares (fabric 99). The dominance of unglazed cooking pot sherds within the assemblage is typical of rural assemblages of this date in Worcestershire.

fabric no.	total sherds	weight (g)	% sherds
55	12	132	15.2
56	43	359	54.4
64.1	4	46	5.1
69	16	278	20.3
99	3	21	3.8
157.1	1	6	1.3

Table 4: Proportion of medieval and early post-medieval pottery by fabric type

Locally produced wares

The medieval and early post-medieval pottery assemblage from this site was dominated by locally produced wares of Worcester-type and Malvernian fabrics. In total, 95% of this assemblage comprised four local fabric types: unglazed Worcester-type ware (fabric 55), unglazed Malvernian ware (fabric 56), sandy glazed Worcester-type ware (fabric 64.1) and oxidised glazed Malvernian ware (fabric 69). All of these fabric types have been described, dated and discussed at length by Hurst and Rees (1992) for Upwich, Droitwich, and by Bryant (2004) within the medieval pottery report for Deansway, Worcester. It can be seen that the assemblage from this site produced a standard range of forms within these fabric groups.

Unglazed wares from cooking pot forms dominated the group with sherds of Malvernian production being the most common (fabric 56). Diagnostic rim sherds were all of the short everted folded form and therefore of 13th-14 h century date (fig 6, nos. 7,8,10 and 11). Those of Worcester production (fabric 55) appeared to be of similar date but due to there being far fewer diagnostic sherds of this fabric; there is a possibility that some sherds may be of earlier date (Fig 6, no.9).

Sherds of oxidised glazed Malvernian ware (fabric 69) formed the largest proportion of the glazed wares, possibly due to its having the longest production span, with diagnostic sherds indicating a range of forms from 13th–16th century within this assemblage. Identifiable forms consisted of three jugs (Deansway form 69.2; contexts 3014 and 3021), a jar/pipkin (Deansway form 69.7; context 3021; Fig 6, no.12), and a dripping dish (Deansway form 69.5; context 3014).

Four sherds of glazed Worcester-type sandy ware (fabric 64.1; contexts 2014 and 3021) were identified, all undiagnostic and therefore not closely datable.

Non-local wares

A single sherd of Newbury ware A cooking pot (fabric 157.1; context 3014) was the only non-local ware identified within the assemblage. Although rarely seen in Worcestershire, vessels of this fabric were recently identified within an assemblage from St Johns, Worcester, and were dated to the 12th century (Griffin 2014).

Dating and supply of the medieval pottery

The medieval pottery assemblage was typical for a rural settlement in this location, with locally produced fabrics dominating and the vast majority of sherds being from cooking pots. Dating of this material indicated a peak in the 13th-14th century with very few sherds dating later than the 14 h century. The presence of Newbury ware A may indicate some 12th century activity and adds credence to some of the Worcester-type wares also being pre-13th century in date. It is possible that this decline in the use of pottery indicates a greater use of metal cooking vessels such as cauldrons which became more common from the mid-14th century onwards, coinciding with an increase in wealth in the general population at this time. This pattern can be see through documentary evidence which points to even the poorest households in Worcestershire being equipped with a brass cooking pot by the later 14th century (Bryant 2004, 335; Dyer 1982, 39).

5.2.5 Catalogue of the illustrated pottery (Fig 6)

1. Jar with burnished surfaces in palaeozoic limestone tempered ware (fabric 4.1), Late Iron Age, context 508
2. Jar with pattern burnish in sand-tempered ware (fabric 5.1), 1st century BC-1st century AD, context 413
3. Jar in Malvernian ware (fabric 3), late 1st – early 2nd century AD, context 504
4. Jar in Malvernian ware (fabric 3), late 1st –2nd century AD, context 505
5. Carinated cup/bowl in early micaceous ware (fabric 21.3), mid 1st-2nd century AD, context 1062
6. Hook-rimmed mortarium in unidentified fabric (fabric 98), ?early Roman, context 542
7. Cooking pot in unglazed Malvernian ware (fabric 56), 13th-14th century, context 3005
8. Cooking pot in unglazed Malvernian ware (fabric 56), 13th-14th century, context 3034
9. Cooking pot in unglazed Worcester-type ware (fabric 55), 13th century, context 3021
10. Cooking pot in unglazed Malvernian ware (fabric 56), 13th-14th century, context 3021
11. Cooking pot in unglazed Malvernian ware (fabric 56), 13th-14th century, context 3021
12. Jar/pipkin in oxidised glazed Malvernian ware (fabric 69), late 15th-16th century, context 3021

5.3 Ceramic building material

5.3.1 Roof tile

Roman

Ten highly abraded fragments of undiagnostic Roman tile were retrieved from the site (contexts 1061, 1073 and 2014). They were all of a fine, soft fabric typical of this period.

Medieval and early post-medieval

A total of 18 fragments of medieval and early post-medieval roof tile were in three fabric types, all of Worcester production: Worcester common sandy type (fabric 2a; contexts 1053, 1128 and 3011), Worcester coarse sandy type (fabric 2b; context 2009) and Worcester grog/pellet type (fabric 2c; context 2122). Tiles of fabrics 2a and 2b can be dated 13th-15th century, whilst those of 2c are later, being produce from the late 15th through to at least the mid-17th century. All examples were fragmentary and abraded, and only one was diagnostic, a ridge tile in fabric 2a (context 1053).

5.3.2 Brick

The assemblage included two bricks (contexts 1003 and 1004), both of later post-medieval/modern date and distinctive for displaying evidence of having been subjected to high temperatures (i.e. bloating).

5.4 Fired clay

There were 19 fragments of fired clay within the assemblage, all from contexts in Area 1 (contexts 1036, 1061 and 1196). Eleven of these fragments had surfaces and distinctive firing with areas of reduction characteristic of either a ceramic mould or possibly a loomweight, either being compatible with their dating being derived from associated Late Iron Age/early Roman pottery.

5.5 Flint, by Rob Hedge

Four pieces of prehistoric worked flint were recovered. All were residual or unstratified.

A) A small (<1g) unstratified flake removed from a well prepared blade or flake core, on mid grey medium-grained flint with white and blue-grey patination, exhibiting some post-depositional edge-damage.

B) A small (4g) fabricator was recovered from context (1143). Triangular in cross-section, the flake had been retouched at the proximal end and along the dorsal arris, presumably to facilitate hafting. The rounded distal end exhibits extensive signs of use-wear and abrasion, typical of this tool-type. It is fashioned from fine-grained dark grey translucent flint, with around 30% cortex covering on the dorsal surface. A Neolithic to early Bronze Age date is considered likely, although an earlier origin cannot be ruled out.

C) Context (2009) contained a small (2g) thumbnail scraper, made on dark grey fine-grained translucent flint with a narrow strip of cortex along one lateral margin and semi-abrupt retouch extended unbroken around the remaining 80% of the piece. These tools are generally techno-typologically dated to the Early Bronze Age.

D) An unusual combination tool, weighing 8g, was recovered from context (1000), made on mottled mid grey medium-grained flint flake with around 15% dorsal cortex remaining. It comprises a piercer fashioned on the truncated proximal end of the flake and a scraper edge at the distal end of one lateral margin, with a pronounced notch along the lateral margin in between the piercer and scraper. Combination tools of this form are not common, but generally occur in Late Neolithic to Early Bronze Age assemblages. On the ventral surface, close to the opposite lateral margin, four parallel grooves are evident, spaced roughly 1mm apart, with minute scars running along the margin-facing side of each groove. Under x20 magnification, it is clear that these do not represent radial fissures occurring during the knapping process, nor do they resemble post-depositional edge damage. Given that they run parallel and opposite to the retouched lateral margin, they appear to be marks left by a hafting process. Abrasion on the lateral margins is evident, but there are no corresponding marks or scars visible on the ventral surface. This pattern of abrasion is highly unusual and distinctive, and would merit further investigation.

The assemblage, though small and residual, is consistent with late Neolithic to Early Bronze Age occupation and domestic activity in the vicinity of the site.

5.6 Other finds

Other finds included five fragments of red sandstone, thought to be building material (context 3014), nine fragments of coal (context 1130), five pot-boilers of Late Iron Age/early Roman date (context 1061) and two pieces of undiagnostic iron slag (context 2009).

5.7 Discussion of the in situ finds by phase

5.7.1 Phase 1: Roman

Material from this phase amounted to 279 finds weighing 3885g. Almost all of the Late Iron Age and Roman pottery (230 sherds, 3318g) from the assemblage came from features within this phase, indicating a low level of residuality. Other finds included fragments of fired clay, ceramic building material, pot-boilers and the possible loomweight/mould fragments.

The vast majority of finds came from the enclosure ditches and droveway and dating of the material indicates a sequence for the construction of these. The earliest appears to be ditch (1093), which could be dated to the late 1st /early 2nd century, whilst the fills of the droveway are firmly 2nd century (contexts 1153, 1155, 1159, 1181).

material type	count	weight (g)
pot	230	3318
brick/tile	5	4
fired clay	12	30

loom weight	7	115
coal	9	12
pot-boiler	5	131

Table 5: Quantification of the material from phase 1

5.7.2 Phase 2: Medieval

Material from this phase amounted to 45 finds weighing 816g. This included residual Roman material in the form of a single sherd of pottery (context 3041). All remaining material was of medieval date, with pottery indicating dates of 13th - late 15th/16th century for the phase.

The medieval pottery (38 sherds) was almost exclusively of local production, with a single sherd of Newbury A ware being the only exception (fabric 157.1, context 3014). The latest datable pottery came from the same feature and consisted of two sherds from an oxidised glazed Malvernian ware dripping dish (fabric 69, context 3014).

Two roof tile fragments were consistent in date with the pottery (Worcester sandy fabric (fabric 2a) and of 13th -15th century date).

material type	count	weight (g)
pot	38	504
roof tile(flat)	2	38
sandstone	5	274

Table 6: Quantification of the material from phase 2

5.7.3 Phase 3: Medieval and post-medieval

The Phase 3 assemblage (62 finds weighing 3575g) displayed the highest levels of residuality on the site, with the pottery spanning all periods from Late Iron Age/early Roman through to modern. The two bricks and the two fragments of slag were also retrieved from contexts of this phase.

material type	count	weight (g)
brick	2	2552
pot	50	528
roof tile(flat)	1	133
tile	6	358
slag (Fe)	2	1
flint	1	3

Table 7: Quantification of the material from phase 3

5.8 Summary of the artefactual assemblage

The worked flint assemblage, though small and residual, is consistent with late Neolithic to Early Bronze Age occupation and domestic activity in the vicinity of the site.

Both the Late Iron Age/Roman and medieval assemblages excavated were consistent with rural settlement and/or land use. Excavation of a number of sites in the immediate vicinity of Worcester has shown that the City's hinterland was characterised by farmsteads and enclosures during the late Iron Age and Roman periods. It would appear that this site at Kempsey is another such settlement.

The medieval assemblage is comparatively small and consistent with activity limited to field systems and boundaries rather than actual settlement. The occurrence of pottery within features of

this period could have resulted from manuring. However, it is also possible that some of the pottery may have been used by agricultural workers preparing food on site during the working day.

5.9 Environmental analysis, by Elizabeth Pearson

The environmental evidence recovered is summarised in Tables 8 and 9.

Context	Sample	Feature type	Fill of	Position of fill	Phase	Sample vol (L)	Vol processed (L)
1011	14	Pit	1013	Secondary	3	40	10
1012	15	Pit	1013	Primary	3	2	2
1030	17	Posthole	1031	Primary	3	20	10
1036	18	Pit	1037	Primary	1	40	10
1038	19	Pit	1039	Primary	1	5	5
1040	20	Ditch	1041	Primary	1	40	10
1054	31	Ditch	1042	Other	1	40	10
1055	32	Ditch	1042	Other	1	40	10
1061	21	Ditch	1064	Other	1	40	10
1062	22	Ditch	1064	Secondary	1	40	10
1066	33	Ditch	1068	Secondary	1	40	10
1075	23	Gully	1076	Primary	1	40	10
1078	24	Ditch	1077	Other	1	10	10
1098	40	Ditch	1099	Primary	1	40	10
1117	30	Ditch	1123	Other	1	40	10
1119	29	Ditch	1123	Other	1	40	10
1129	35	Ditch	1135	Other	1	40	10
1130	36	Ditch	1135	Other	1	40	10
1153	27	Ditch	1158	Other	1	40	10
1160	28	Ditch	1163	Other	1	20	10
1180	39	Ditch	1182	Secondary	1	40	10
1205	41	Ditch	1213	Primary	1	30	10

Table 8: List of environmental samples

Phase 1 = Roman, Phase 2 = medieval, Phase 3 = medieval/post-medieval

5.10 Animal bone

A small assemblage of hand-collected animal bone (52 fragments, 84g) was recovered which consisted of mainly cattle tooth fragments, and a limited quantity from sample residues which was mostly unidentifiable.

context	material class	material subtype	count	weight(g)	Feature type	Phase
1053	bone	animal bone	1	18	Ditch	1
1061	bone	animal bone	10	32	Ditch	1
1062	bone	animal bone	4	1	Ditch	1
1115	bone	animal bone	31	21	Ditch	1
1116	bone	animal bone	6	12	Ditch	1
TOTAL			**52**	**84**		

Table 9: Hand-collected animal bone

5.11 Macrofossil remains

Results are summarised in Tables 10 and 11.

Initial assessment (scanning of residues and flots) showed only a very low concentration of environmental remains, consisting mainly of unidentifiable and finely fragmented charcoal. Identifiable charred cereal crop remains were present in a small number of samples. As little interpretation can be made of these remains, no further work was carried out, although as they corroborate the pottery dating the charred plant remains are presented in Table 11.

Occasional fragments of emmer or spelt wheat chaff (*Triticum dicoccum/spelta* glume bases) were found in pit and ditch fills 1036 and 1098 respectively, which are consistent with the Phase 1

Roman date, and also a charred common vetch seed and hulled barley (*Hordeum vulgare*) grain in ditch fill (1055) were recorded. Low to moderate levels of heat-cracked stone were consistently present in most Phase 1 Roman samples, and not present in Phase 3 samples. Fired clay was also recorded in contexts 1036, 1062 and 1153.

The survival of environmental remains appears to have been affected by acidic soil conditions as animal bone was dominated by tooth fragments and pottery fragments were largely small and abraded, both aspects being characteristic of sites on acidic soils. It is, therefore difficult to determine whether the low survival of charred cereal crop waste reflects a predominantly pastoral rather than arable landscape.

Context	Sample	large mammal	charcoal	charred plant	waterlogged plant	Comment
1011	14		occ		occ	
1012	15					No identifiable remains
1030	17		occ			
1036	18	occ	mod	occ		occ fired clay, fire-cracked stone
1038	19	occ	occ			occ heat-cracked
1040	20	occ	occ		occ	occ heat-cracked stone
1054	31	occ	occ			
1055	32	occ	occ	occ		occ heat-cracked stone
1061	21	occ	occ			
1062	22	occ	mod	occ	abt*	mod heat-cracked stone, occ pot, fired clay, Fe slag
1066	33		occ			
1075	23	occ	occ			occ heat-cracked stone
1078	24	occ	occ		mod - abt*	* = mostly unidentifiable
1098	40		occ	occ	mod*	occ pot
1117	30		occ			occ heat-cracked stone stone
1119	29		occ			
1129	35		occ		occ	mod coal
1130	36		occ			occ heat-cracked stone
1133	36		occ			occ heat-cracked stone
1143	38	occ	occ			occ pot, heat-cracked stone
1153	27		occ		occ	occ fired clay, ?window glass
1160	28		occ		occ - mod*	occ fire-cracked stone, *unidentifiable
1180	39		occ		occ	
1205	41	occ	mod	occ	occ*	*unidentified

Table 10: Summary of environmental remains: occ = occasional, mod = moderate, abt = abundant

Latin name	Family	Common name	Habitat	1036	1055	1062	1098	1153
Triticum dicoccum/spelta glume base	Poaceae	emmer/spelt wheat	F	+			+	
Hordeum vulgare grain (hulled)	Poaceae	barley	F		+			
Vicia sativa ssp *nigra*	Fabaceae	common vetch	AB		+			
Poaceae sp indet grain (1mm)	Poaceae	grass	AF			+		
Raphanus raphanistrum pod	Brassicaceae	Wild radish	ABF					+

Table 11: Plant remains from bulk samples

Key:

Habitat	Quantity
A= cultivated ground	+ = 1 - 10
B= disturbed ground	++ = 11- 50
C= woodlands, hedgerows, scrub etc	+++ = 51 - 100
D = grasslands, meadows and heathland	++++ = 101+
E = aquatic/wet habitats	* = fragments
F = cultivar	

6 Synthesis

6.1 Prehistoric

The only definite prehistoric evidence was the assemblage of four flints. These were all residual, but indicate late Neolithic to Early Bronze Age domestic activity in the vicinity of the site.

6.2 Roman

The settlement

The Roman enclosure system at Kempsey was only partially revealed, with just the north-east corner opened for excavation. It consisted of three concentric, probably rectilinear, ditches of varying sizes, with twin droveway linear ditches running downhill to the south-east (Fig 3). It sat on the brow of a slight hill just off the gravel terrace. The Roman landscape along the river valleys of Worcestershire is typified by enclosure systems, usually on the gravel terraces, though areas of heavy clay and clay with gravels also contain dense areas of settlement (Griffin, Griffin and Jackson 2005; Vaughan 2005). The enclosure can be dated to between the 1st century and early 3rd century AD, and lies about 200m west of the Roman road leading into Worcester.

No internal structures were present; a number of potential postholes, heavily truncated, were spread throughout the internal area of the enclosure, but they formed no pattern to suggest buildings, and were so disturbed by rooting that they may well have been natural features. No dating was recovered from any of them.

A small ditch, running north-west to south-east within the enclosure contained 1st to 2nd century pottery, and replaced a shorter such linear. The exact function of the ditch was unclear, but from its small size, was probably an internal division. This ditch was cut by a small pit, with residual burnt animal bone from an underlying pit within its fill, and was likely to be a small rubbish pit (Fig 9).

The innermost ditch, 1214, was the smallest of the rectilinears forming the enclosure, and yielded Late Iron Age to Early Romano-British pottery (Figs 8, 12 and 13). The ditch was up to 1m deep at its southern end, but reduced in both width and depth after it returned to the west, becoming only 0.1m deep. It is possible that the ditch may have been palisaded but only one small potential posthole was discovered with direct association with the ditches.

This ditch was the earliest of the three enclosures, and is additionally marked out by its relatively small size.

The middle enclosure ditch, 1215, consisted of several reinstatements, the latest of which ended in a terminus at the corner (Figs 7, 10 and 11). This terminus may have formed a new entrance, though only one terminus was discovered during excavation. If it was a change in entrance position, it was not reflected in the outer ditch 1216, which suggests that the two larger ditches were not contemporary. The pottery dated the enclosure to the 2nd century.

The outer ditch 1216 dated to the mid-1st to 2nd century (Figs 12, 15, 16). It truncated a part of droveway 1218, but was in turn truncated by the later droveway 1217. As with enclosure 1215, there were several reinstatements of this ditch throughout its relatively short lifespan.

The high number of recuts seen within the two larger ditches, preserving as they do the same morphology of the enclosure, suggests a motivation other than everyday maintenance. The existing ditches all seem to have been fully silted before the new version was cut into them; routine

cleaning would have maintained the enclosure as it silted, and would be difficult to spot in the archaeological record. Rather, the ditches must have been allowed to silt up, before new representations were created. This has been argued elsewhere be to enable a sense of ownership for new generations, giving tenure over the land through a physical act (Chadwick 1999, 2008).

The droveway ditches seen in Area 2 (group numbers 2145 and 2146) (Figs 4 and 20) showed no evidence of recutting, suggesting either a short life span or thorough cleaning. As the droveways reached the enclosure to the north-west, evidence of different phasing became apparent. The latest ditch, 1217, cut the outer enclosure ditch 1216, before seeming to terminate not long after. 1217 also cut a nearly parallel smaller ditch 1085 just to the east, before also truncating 1218, both of which are likely to be earlier versions of the droveway (Figs 17 and 18). This reworking of the droveway around the enclosure probably coincided with reworkings of the enclosure ditches themselves, whilst leaving the outlying reaches of the droveway untouched.

With the droveway cutting outer enclosure 1216, and the potential alteration of the entrance in 1215, it could be conjectured that these features are contemporary. Both have a 2nd century date, and the droveway would lead up to the proposed terminal entrance in the last phase of the enclosure ditch.

A small gully ran parallel to outer enclosure ditch 1216 before seeming to run into it and terminating. It is unclear as to its function, but it returned pottery dates of 2nd to 3rd century, potentially making it the latest feature of the Roman period. However, considering the overall dating of the site, it seems likely that ditch was open during the earlier part of the date range prescribed. It could have operated as one half of a droveway along the side of the enclosure, with 1215 being the opposing delineation. The distance between these two linears is about 5m, with the droveways in Area 2 being of a similar width apart. This is also concurrent with the droveways seen at the excavations at Three Springs Road, Pershore (Mann, Lovett and Rogers 2013). These linears, whilst displaying a greater amount of reworking than those observed at Main Road, were of comparable distance apart and often made use of an enclosure ditch as a parallel barrier.

The lack of internal structures does not in itself preclude the site from being occupied, as only a maximum of a quarter of the site is likely to have been revealed during this excavation. The majority of the enclosure would lie beneath what is now The Limes housing estate to the south and the houses off Main Road, the A38, to the west. Due to the depths of the enclosure ditches, preservation of these features is likely to be high within the gardens of The Limes, and potentially under the road also.

The wider landscape

The soil acidity was not conducive to good bone preservation, with only a few cattle teeth remaining in a state to enable analysis. Roman Britain saw a marked increase in cattle production (Albarella 2007), often accredited to a need to supply the Roman army, with the West Midlands being suggested as the main centre for the industry (Clearly 2011). Indeed, there is a an increasing body of evidence to suggest that within the river valleys of the West Midlands were sited a series of specialist livestock enclosures, beginning in the Iron Age and continuing through to at least the 3rd century (Webster forthcoming; Mann, Lovett and Rogers 2013; Walsh and Lovett 2014, Milward 2005). The settlement's proximity to the Roman road between Worcester and Gloucester would only enhance its position within this trade network.

An evaluation at Broomhall 1.1km to the north of the site revealed a relatively substantial Roman site, with evidence of stone buildings, stock enclosures, and metal working, and dating primarily to the 2nd to early 3rd century (Vaughan and Wainwright 2012). At Norton-Juxta-Kempsey, 4.3km to the north-east, a similarly dated Roman settlement was discovered (Jackson *et al* 1995). Here, metalled surfaces sat within an enclosure, along with evidence for rectangular timber buildings and extensive iron smithing.

Changes in the rural settlement pattern can be seen by an abandonment of sites existing from the Late Iron Age up to the early to mid 2nd century. At the same time, there were established a

number of new settlements, indicating a period of potential displacement and a reordering of the landscape (Griffin *et al* 2005). The apparent abandonment of the site in the early 3rd century correlates with a general pattern for the county as a whole, as a peak in rural settlement is reached in the late 2nd to mid 3rd centuries, before a decline and abandonment in the 4th century (Jackson and Dalwood 2007).

6.3 Medieval and post-medieval

The medieval linears appear to form field boundaries, and were often superseded by post-medieval reinstatements along the same lines. The pottery retrieved ranged from the 12th to 14th centuries, with occasional post-medieval ceramic building material present in the later recuts.

6.4 Evaluation trenches

The evaluation had targeted some specific geophysical anomalies, and was generally successful in locating them. The Roman enclosure ditches were easily located and interpreted, and a suitable area of excavation was then enabled (Area 1). Similarly, Area 2 to the east was based on successful interpretation of the evaluation results, whilst Area 3 was excavated due to a specific aspect of the construction work. The remaining areas of the site were found to have low potential for archaeology, in particular the northern side of the site. The trenches were generally between 0.3m and 0.6m deep, except in Trenches 15, 16 and 19, where the colluvial build-up meant the natural geology lay at up to 1.2m depth.

6.5 Research frameworks

The Roman remains to add to the research agenda outlined by Cleary (2011), with the West Midlands as a potential resource-procurement zone for the Roman army. The droveway may be part of a larger network to facilitate the movement of cattle.

7 Publication summary, by Pete Lovett and Tom Vaughan

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication.

Archaeological investigations were undertaken on behalf of Lioncourt Homes on land east of Main Road, Kempsey, Worcestershire (NGR SO 8553 4987; HER ref WSM 66267, 66555, 66556, and 66561).

An evaluation was conducted, comprising of 19 trenches. Following this an excavation was undertaken, targeting three areas of archaeological interest. On the western side of the site, Area 1 contained the north-eastern portion of a Romano-British enclosure, comprised of three concentric ditches. The activity was dated to between the 1st to early 3rd century AD, and contained no definite evidence for internal structures. A related droveway ran down the slope to the south-east. This droveway was also present in Area 2, on the eastern side of the site, along with a medieval field system, with post-medieval reworking. Area 3 was a small area in the south of the site, in which was discovered a number of shallow medieval and post-medieval pits and ditches.

Finds spanned the prehistoric through to the post-medieval. The worked flint assemblage, though small and residual, is consistent with late Neolithic to Early Bronze Age occupation and domestic activity in the vicinity of the site.

Both the Late Iron Age/Roman and medieval finds assemblages were consistent with rural settlement and/or land use. Excavation of a number of sites in the immediate vicinity of Worcester has shown that the City's hinterland was characterised by farmsteads and enclosures during the late Iron Age and Roman periods. It would appear that this site at Kempsey is another such settlement. Due to the lack of direct evidence for occupation however, is conjectured that the Roman enclosure, or at least the north-east corner of it, was a stock enclosure, with the associated droveway possibly connecting to the Roman road between Worcester and Gloucester to the east.

The survival of environmental remains appears to have been affected by acidic soil conditions. It is, therefore difficult to determine whether the low survival of charred cereal crop waste reflects a predominantly pastoral rather than arable landscape.

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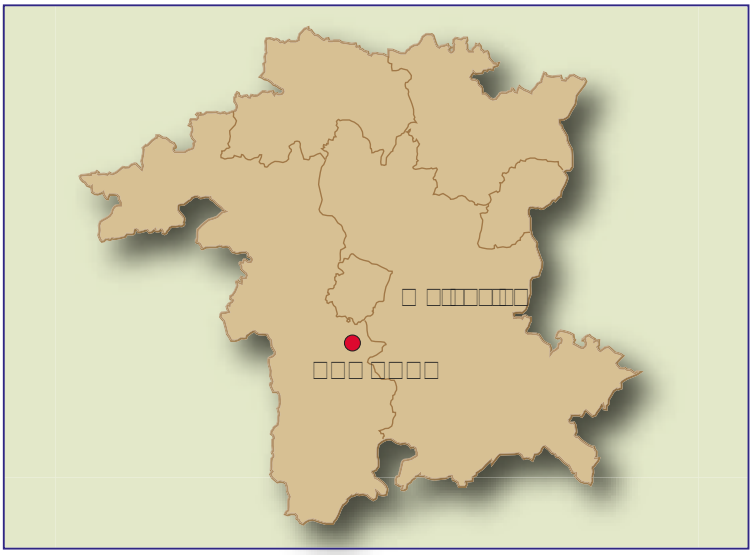
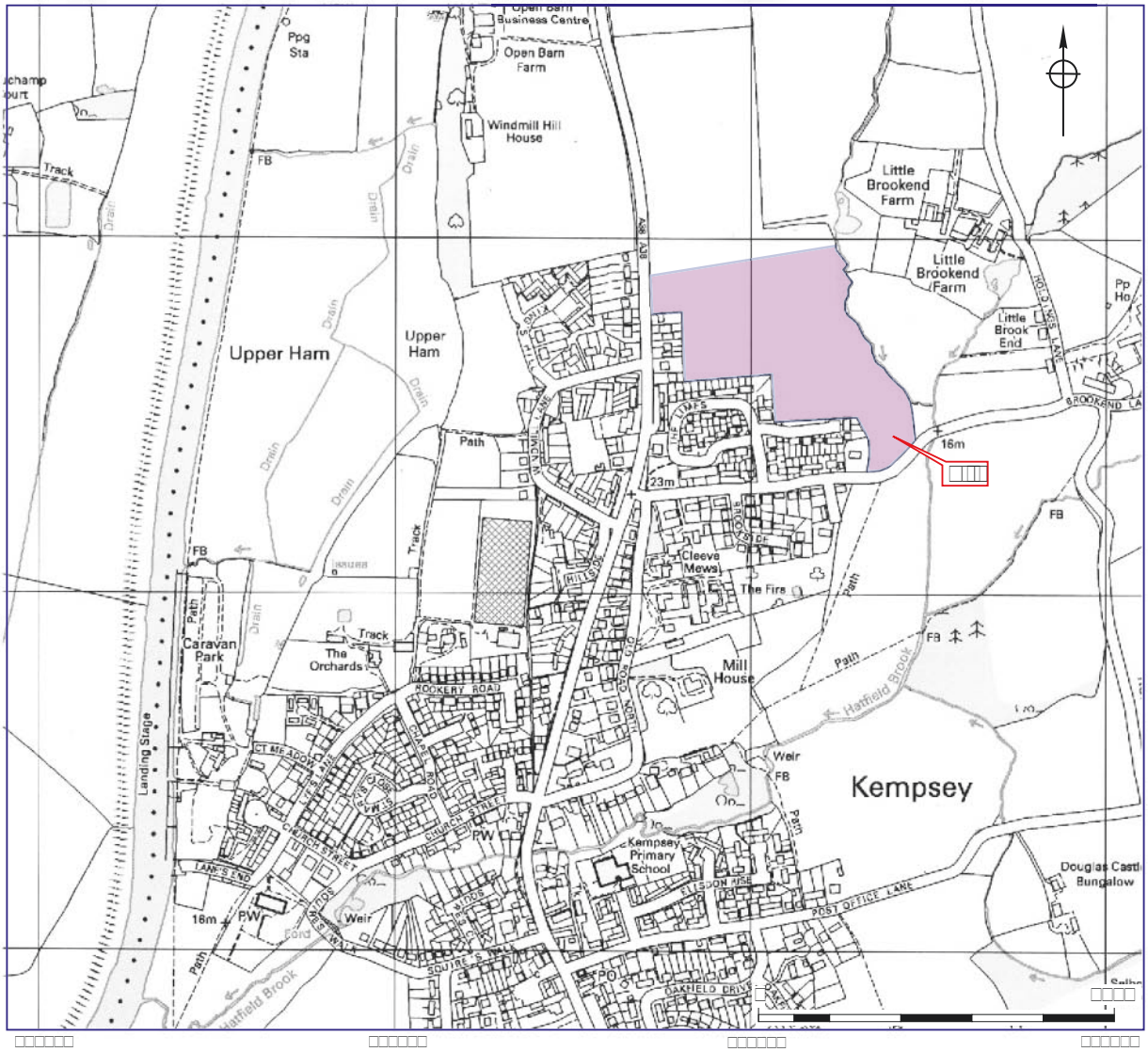
Figures

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Cleeve Mews
The Fire
Caravan Park
The Orchards
Mill House
Hatfield Brook
Weir
Kempsey
Kempsey Primary School
Landing Stage
ROOKERY ROAD
CHURCH STREET
LANE'S END
POST OFFICE LANE
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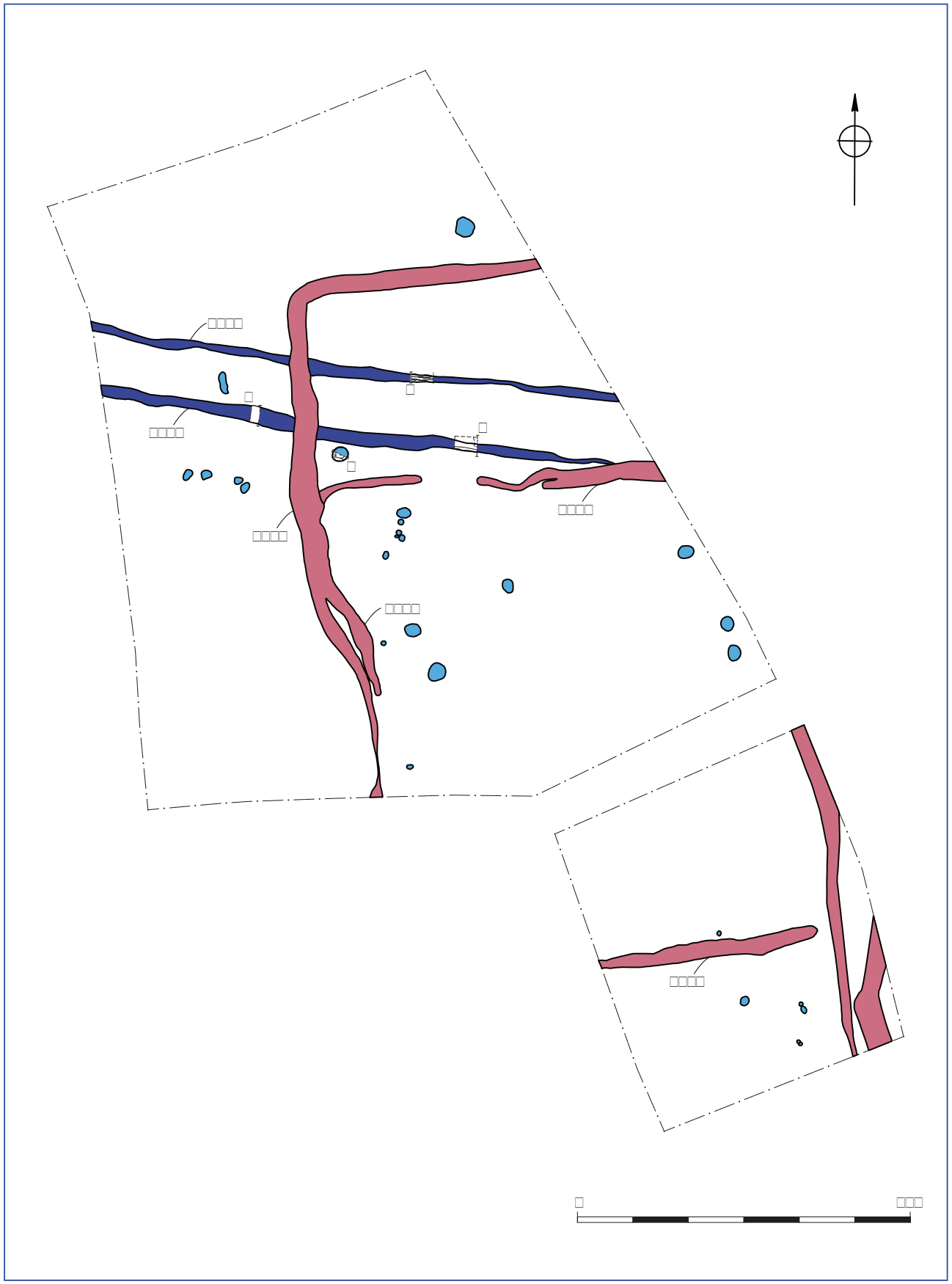

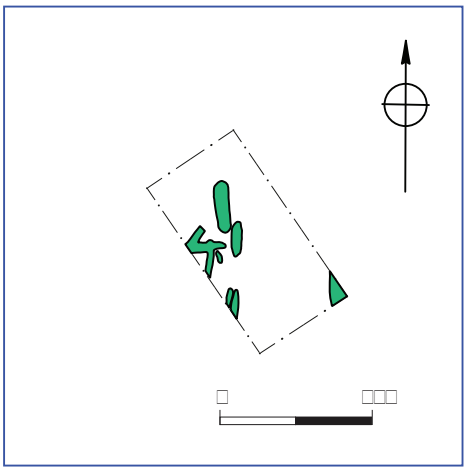

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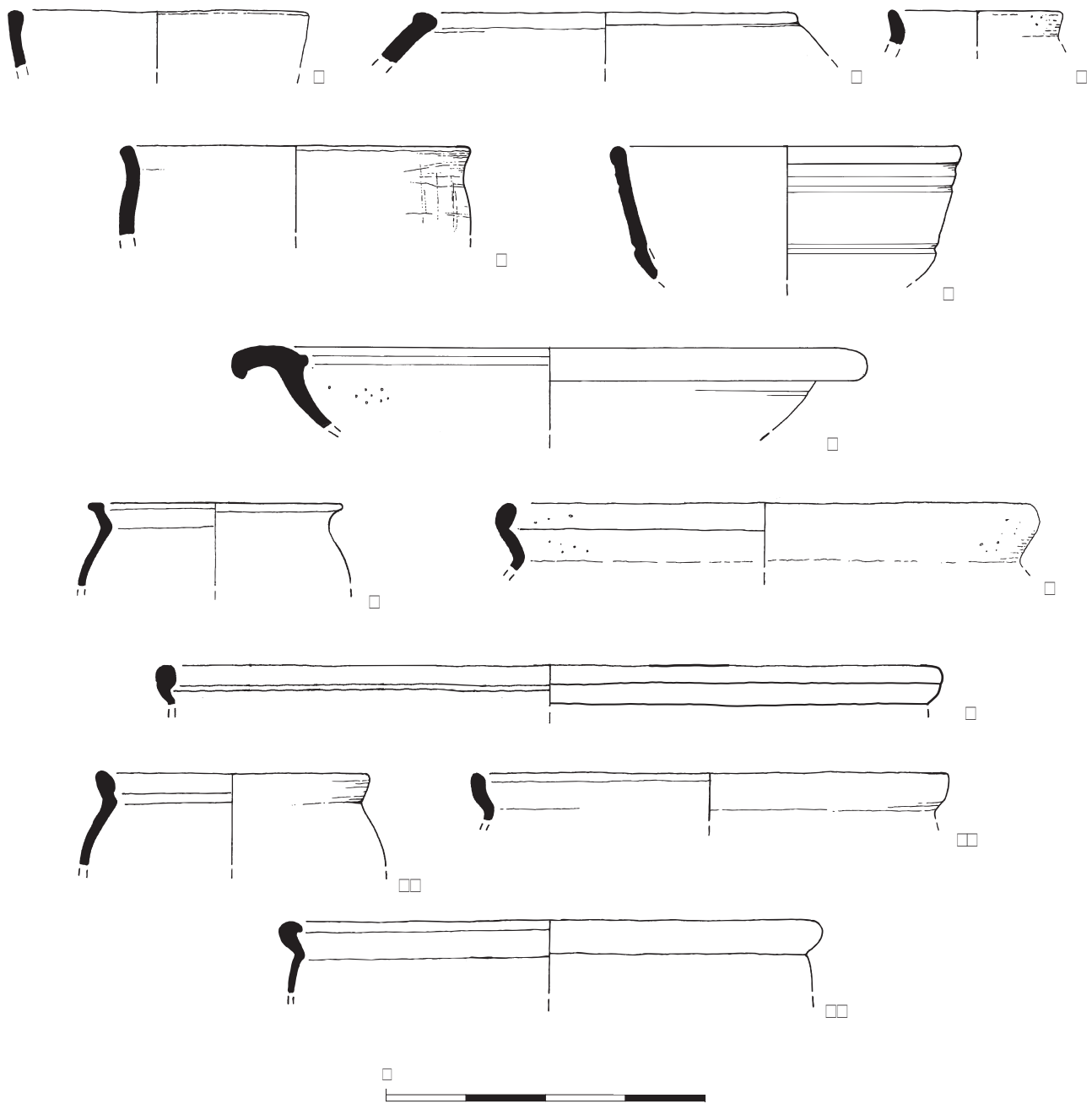

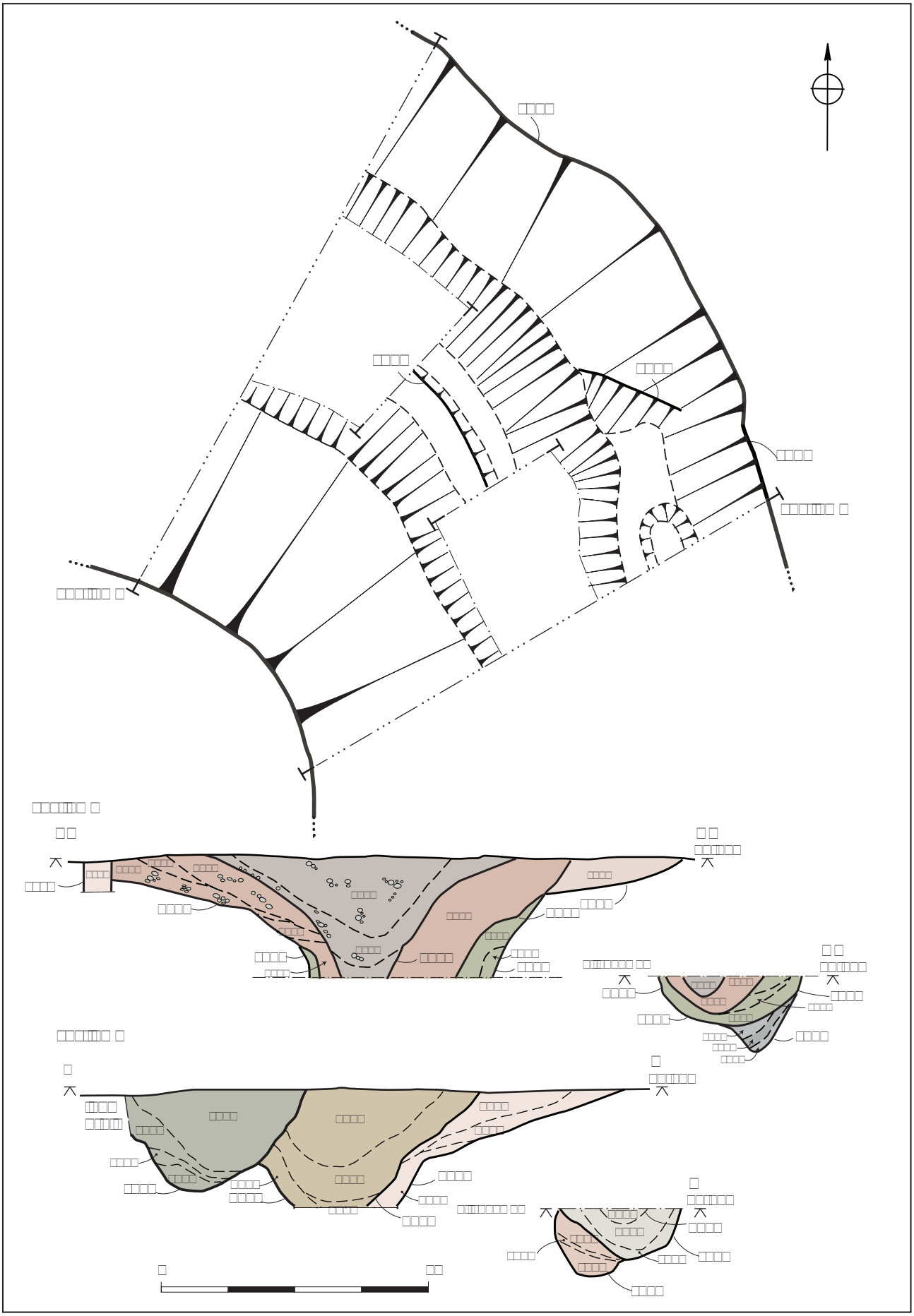

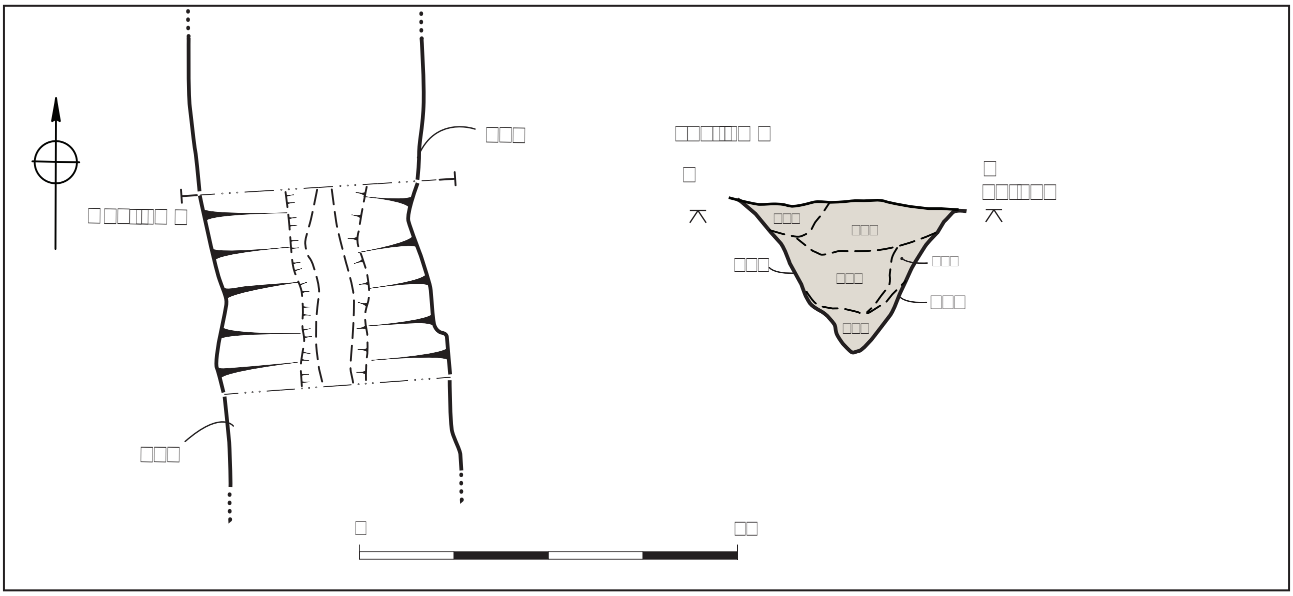

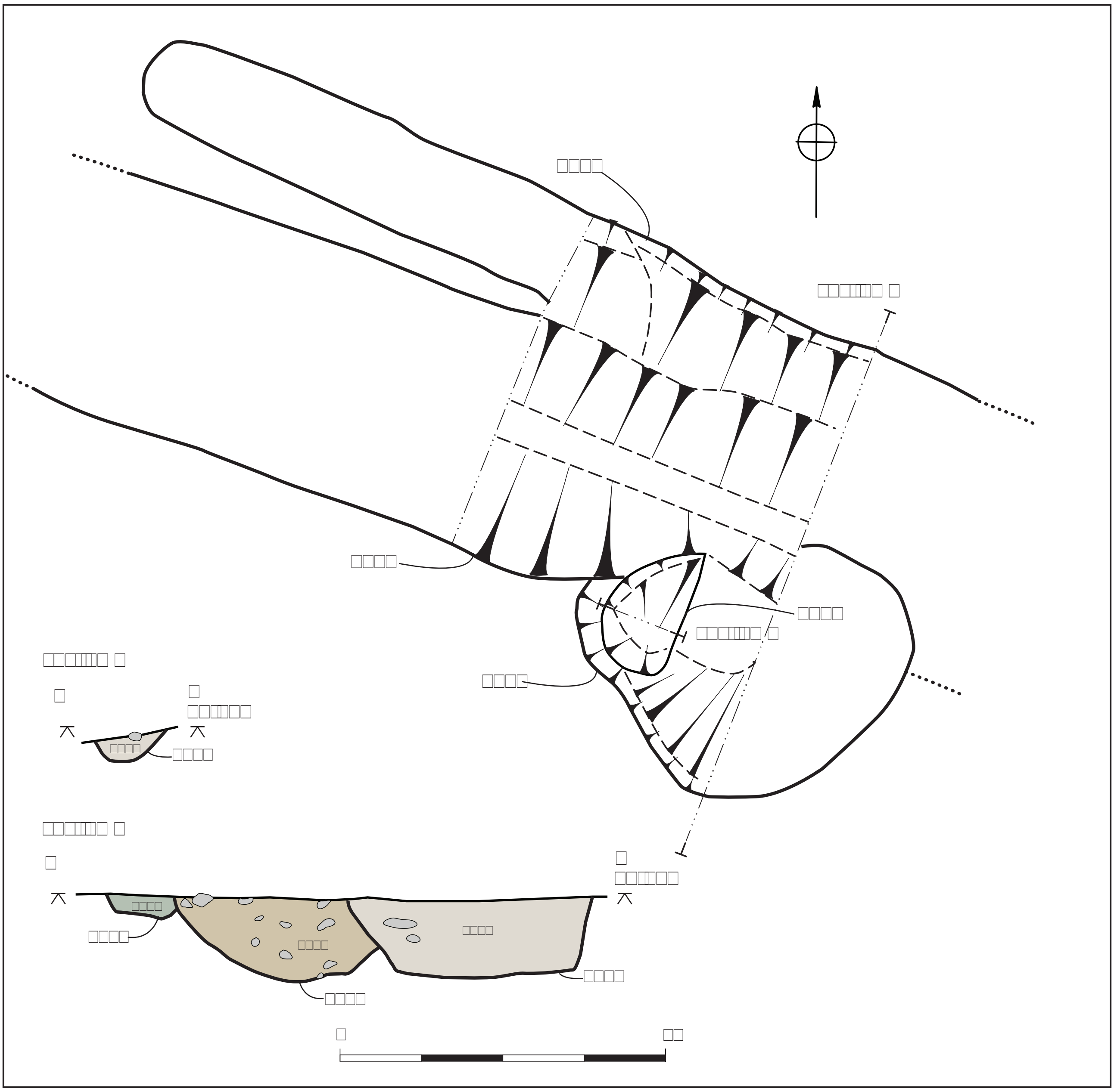

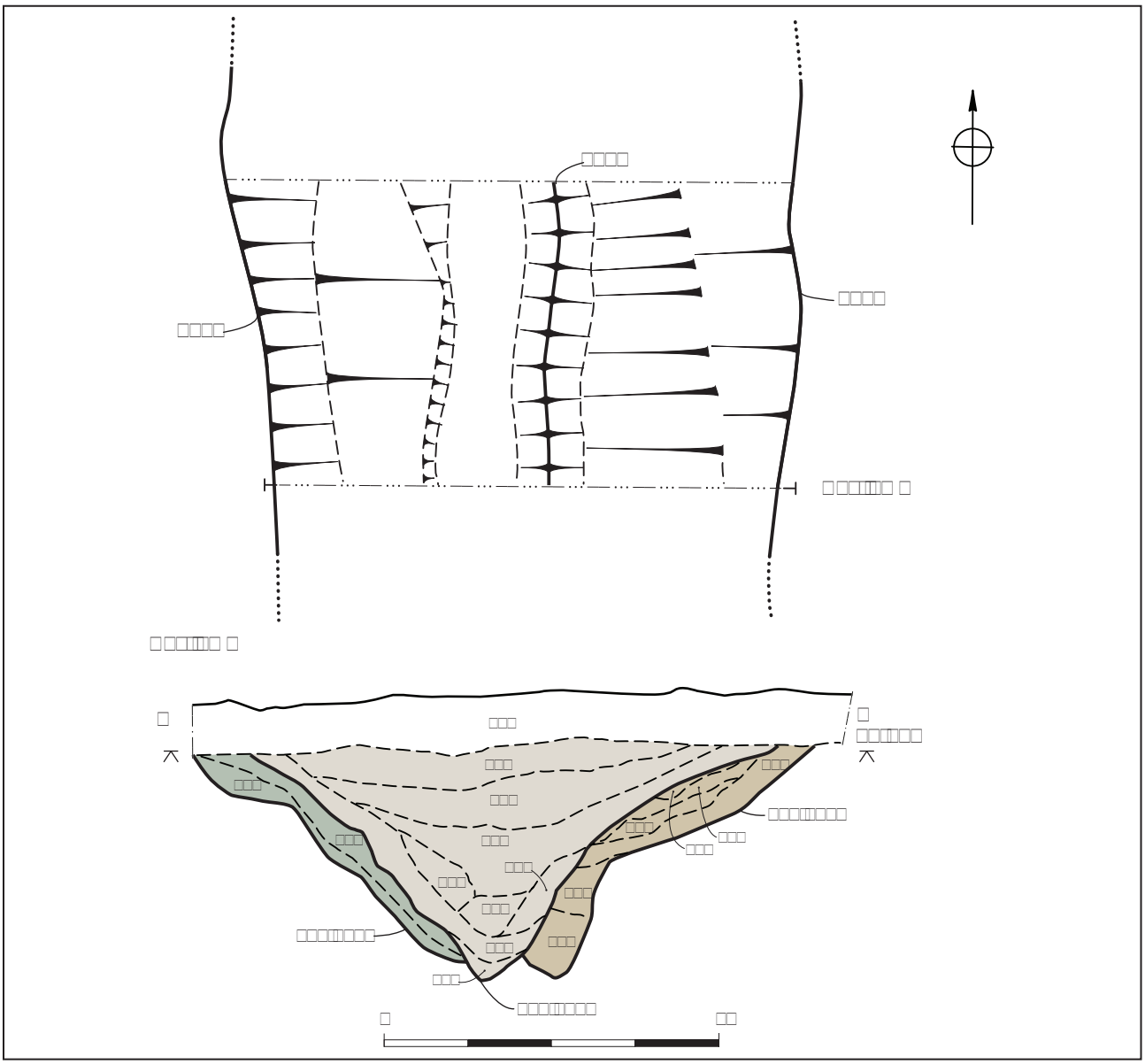

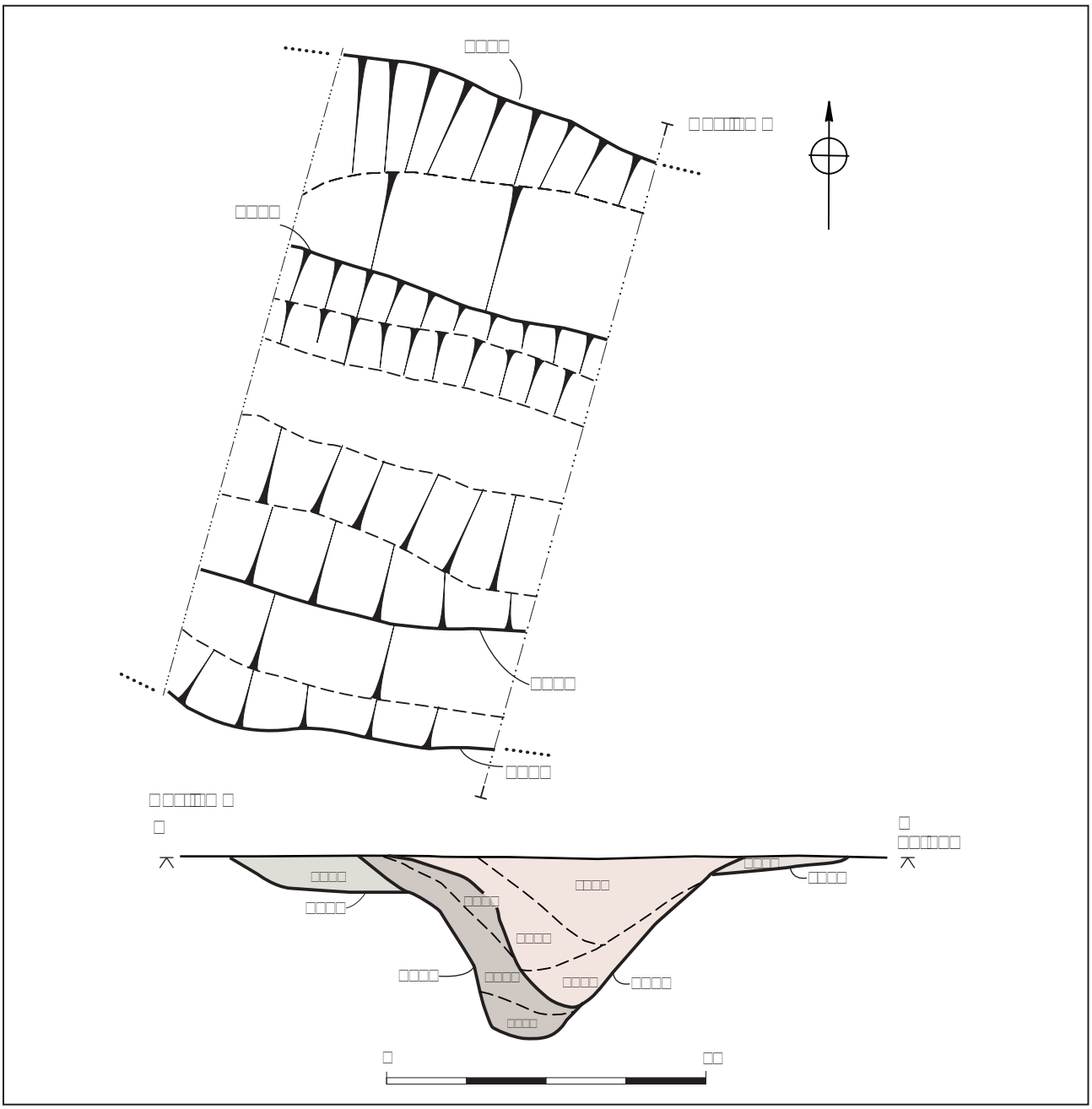

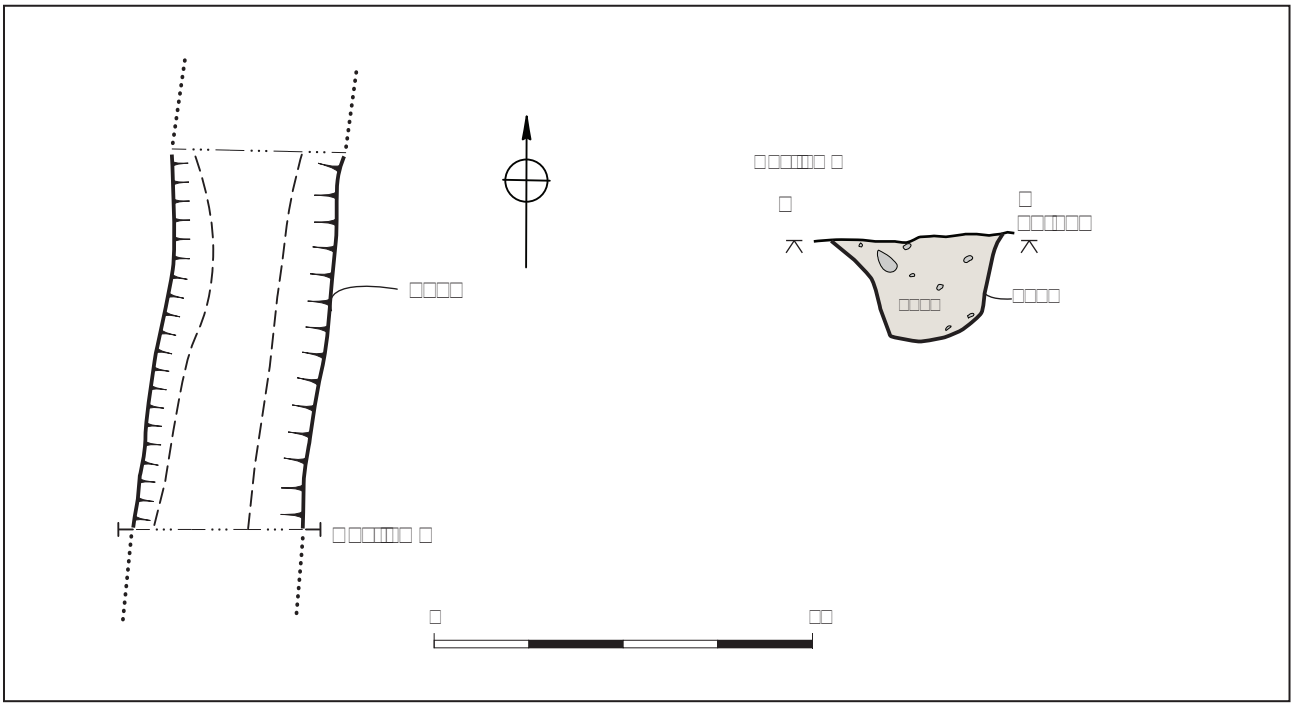

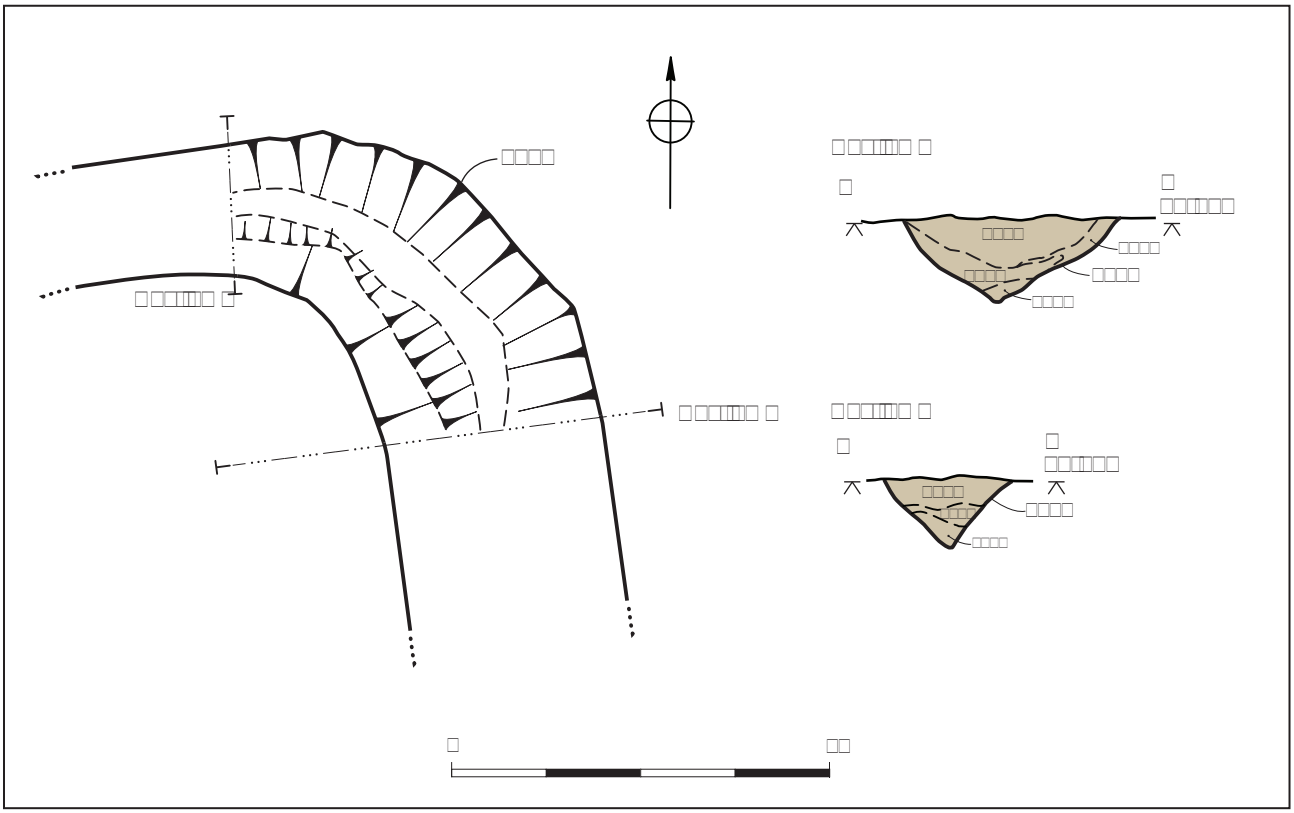

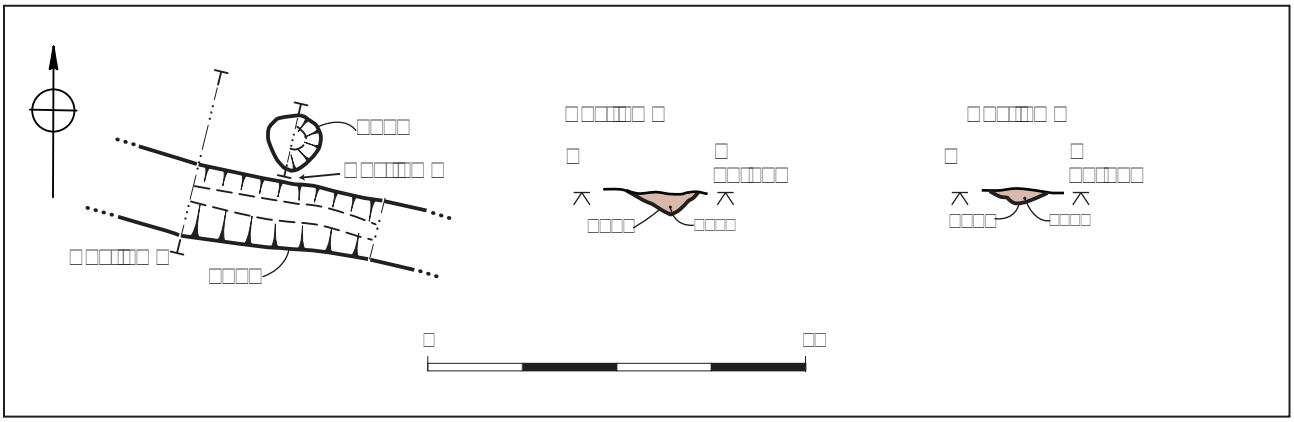

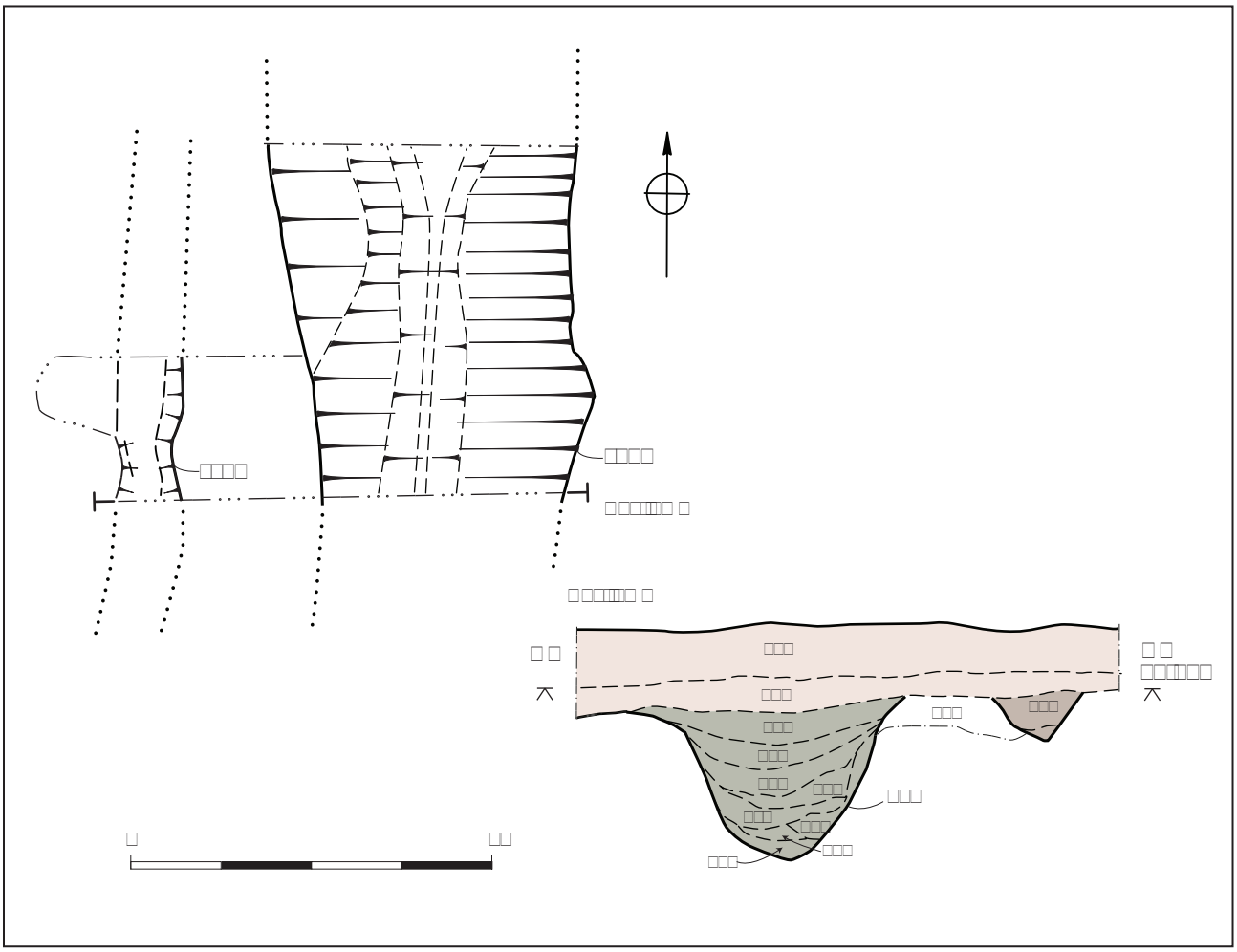

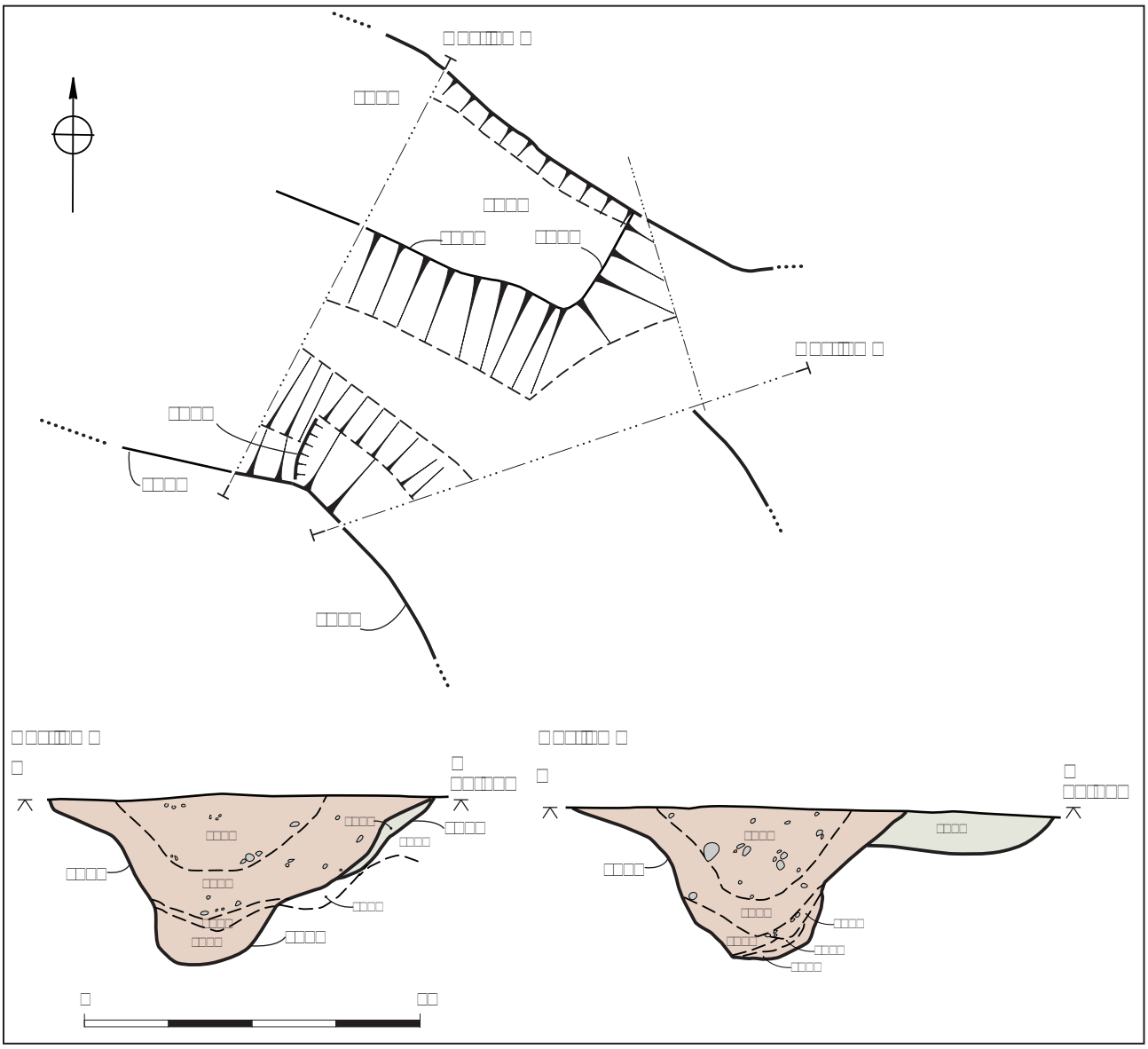

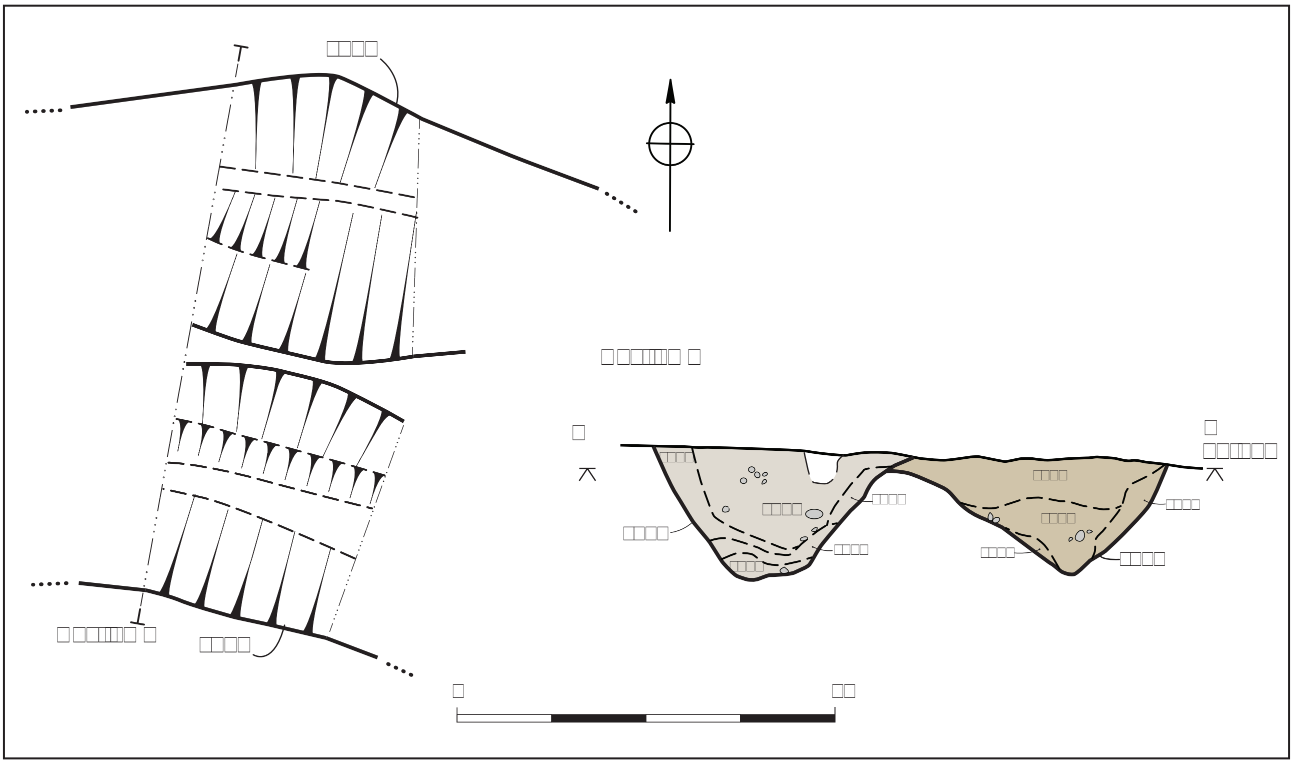

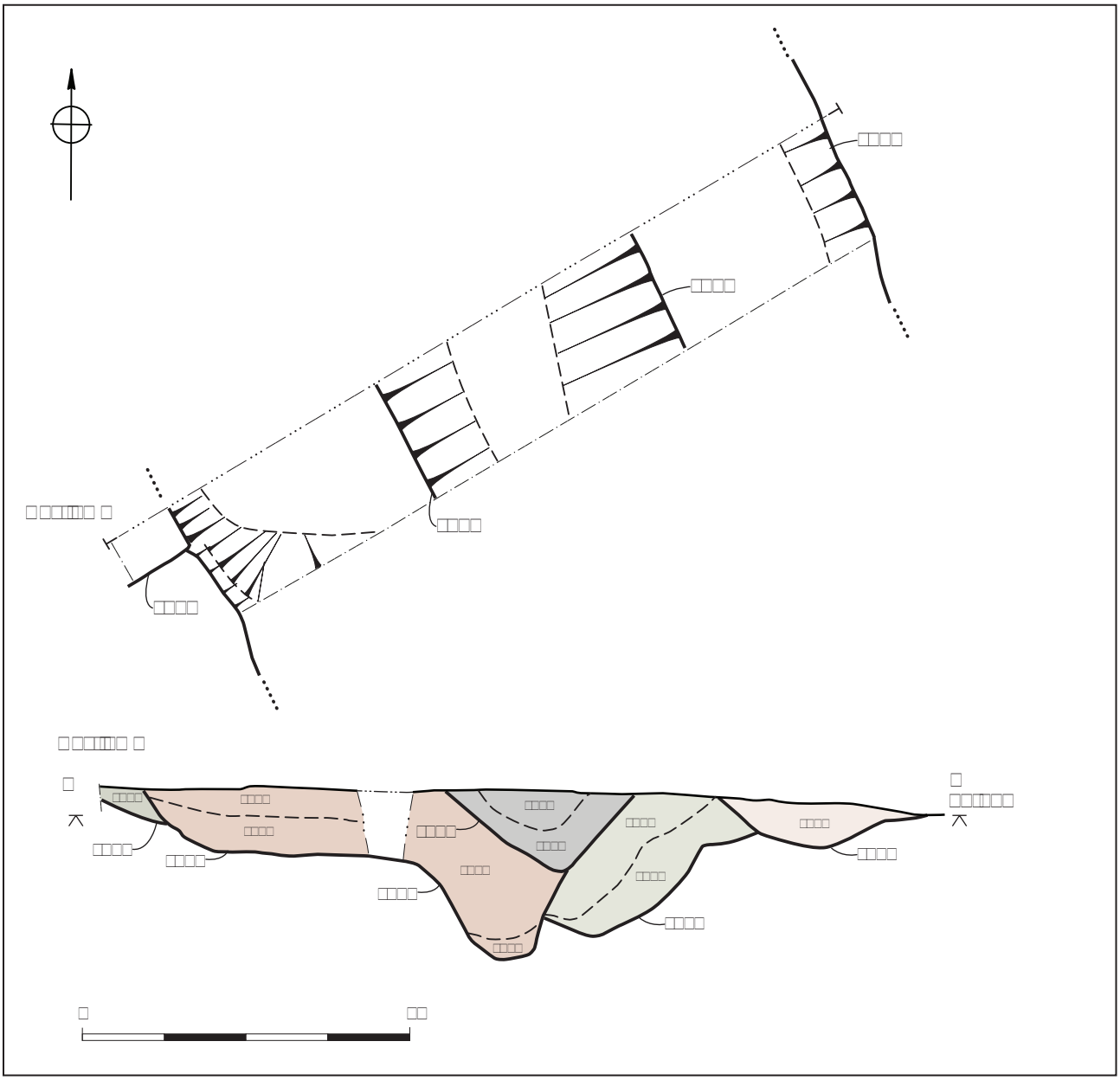

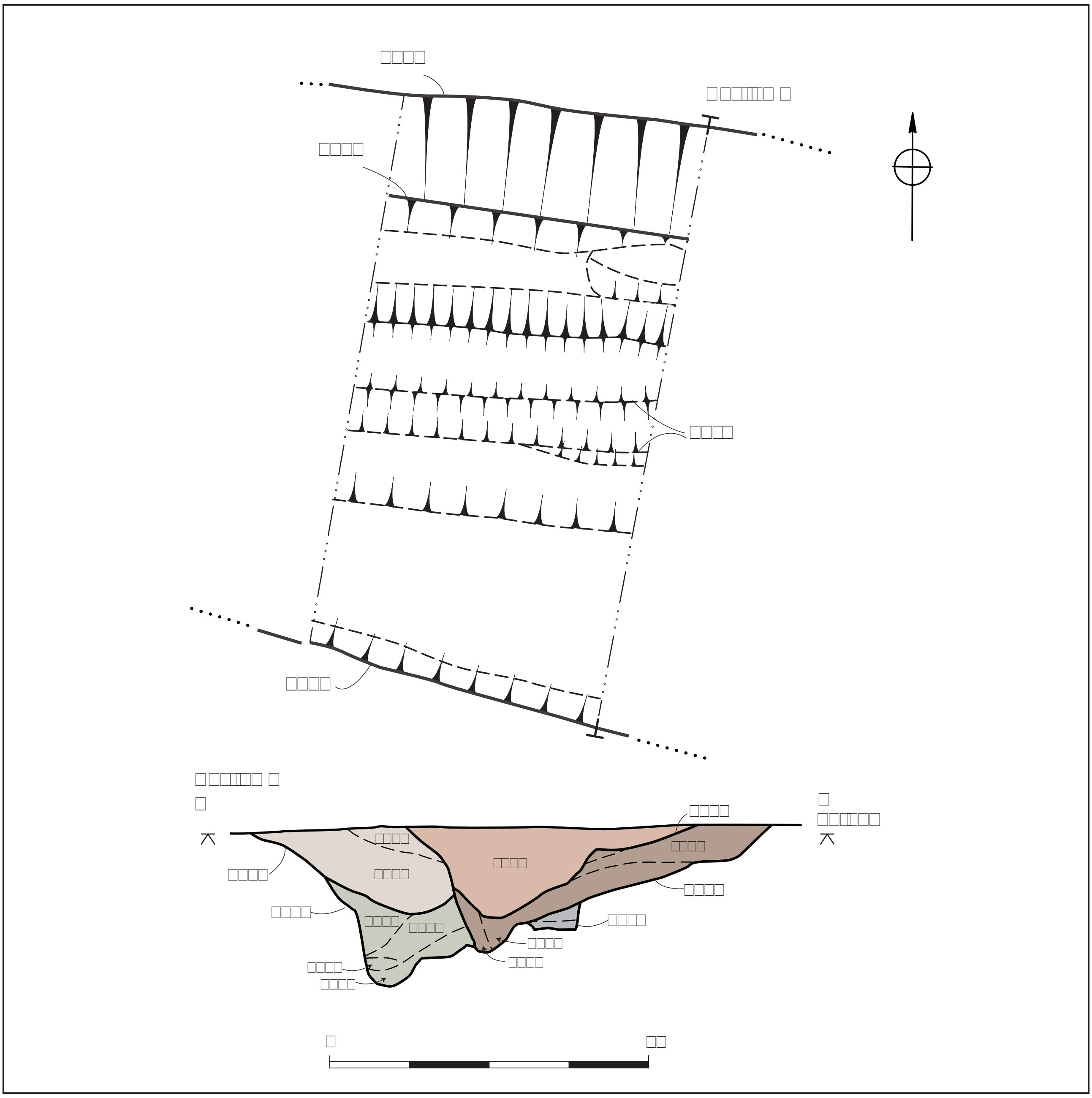

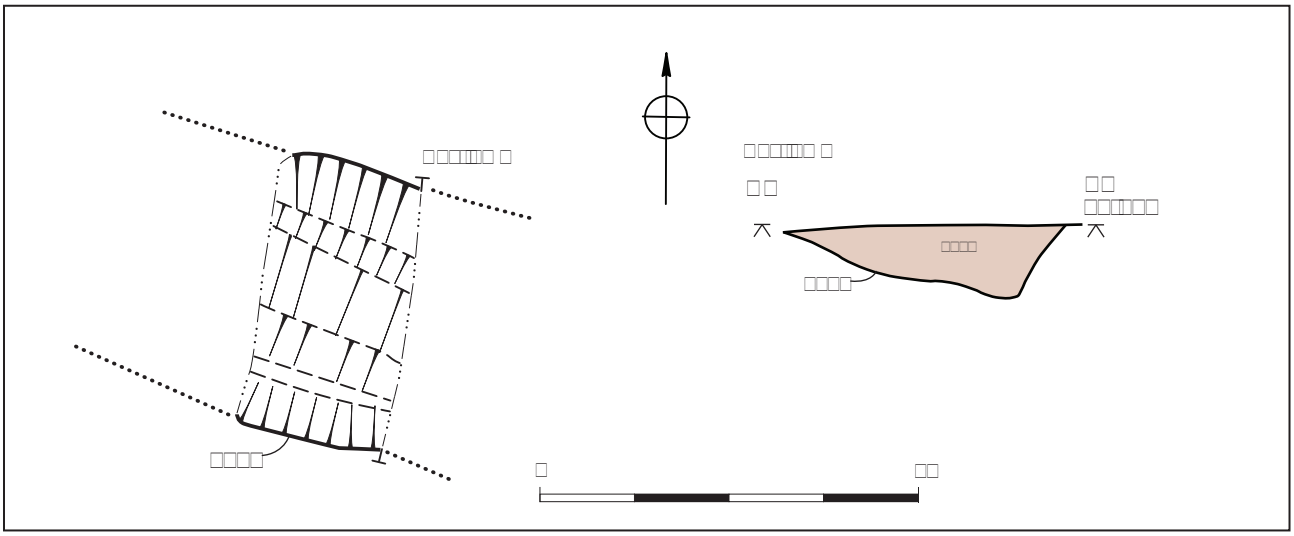

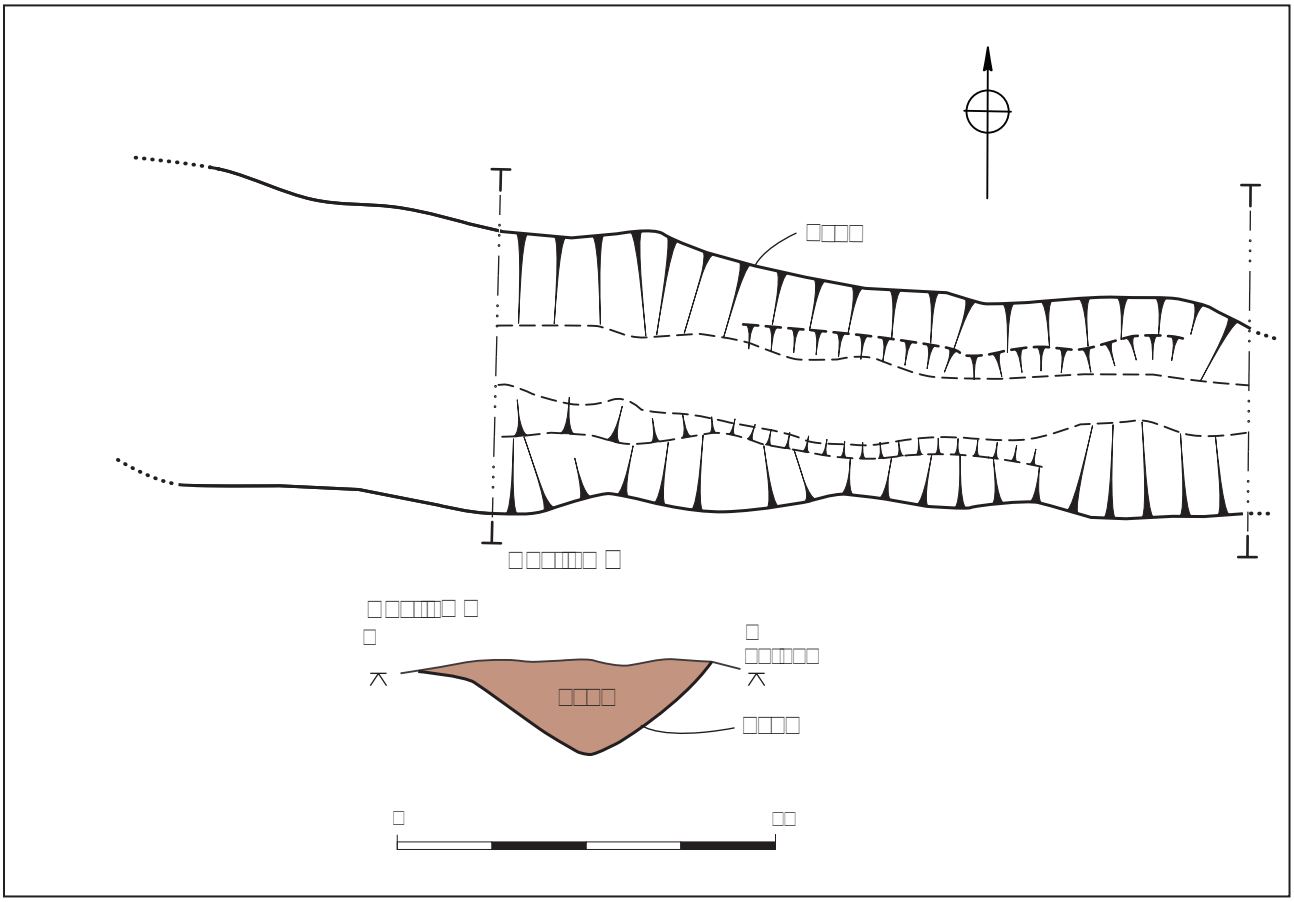

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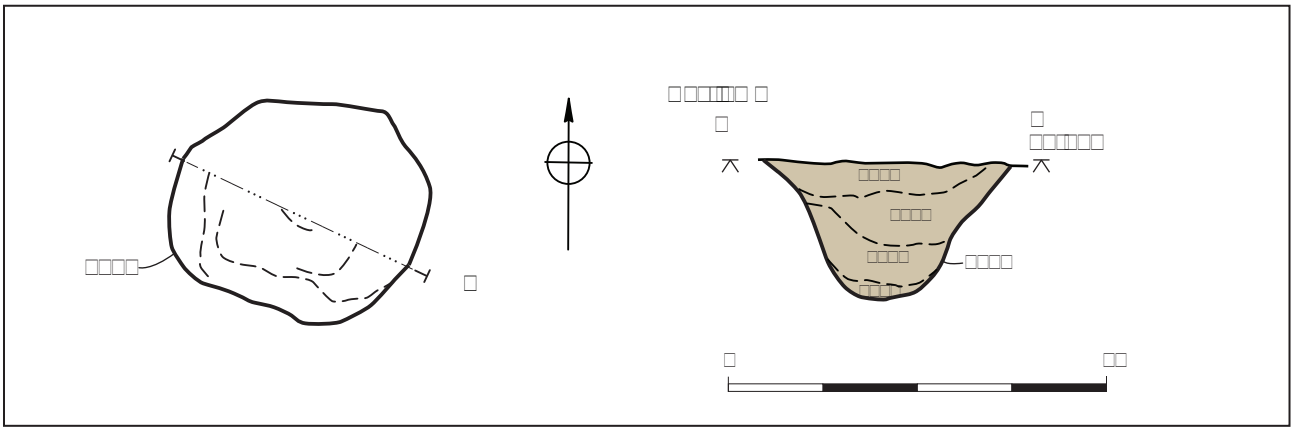

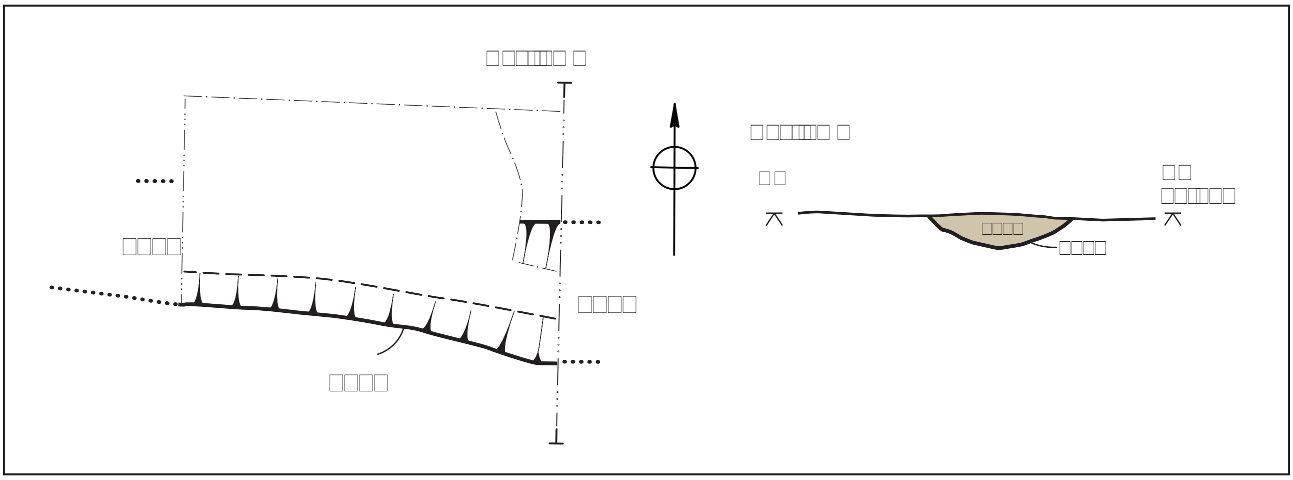

Plates

Plate 1 Area 1, looking south-west (courtesy of Aerial-Cam)

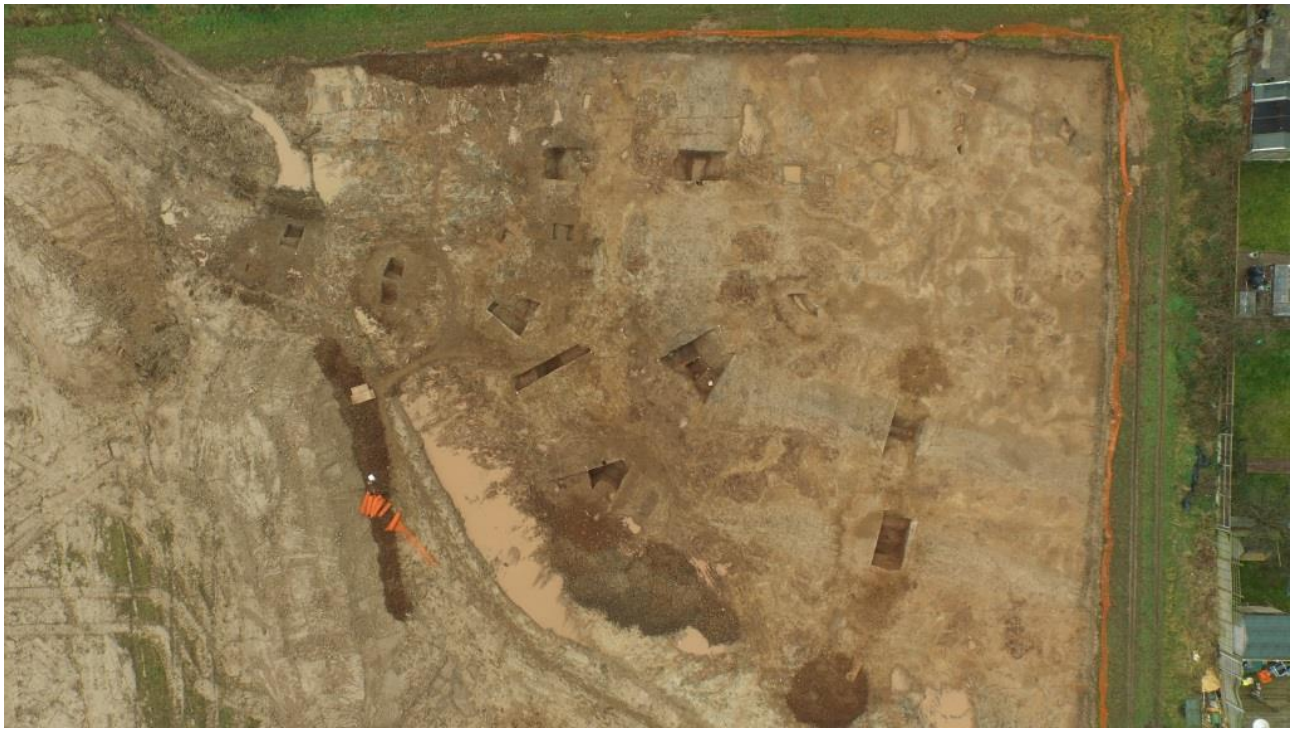

Plate 2 Area 1, from above (courtesy of Aerial-Cam)

Plate 3 Area 2 looking south

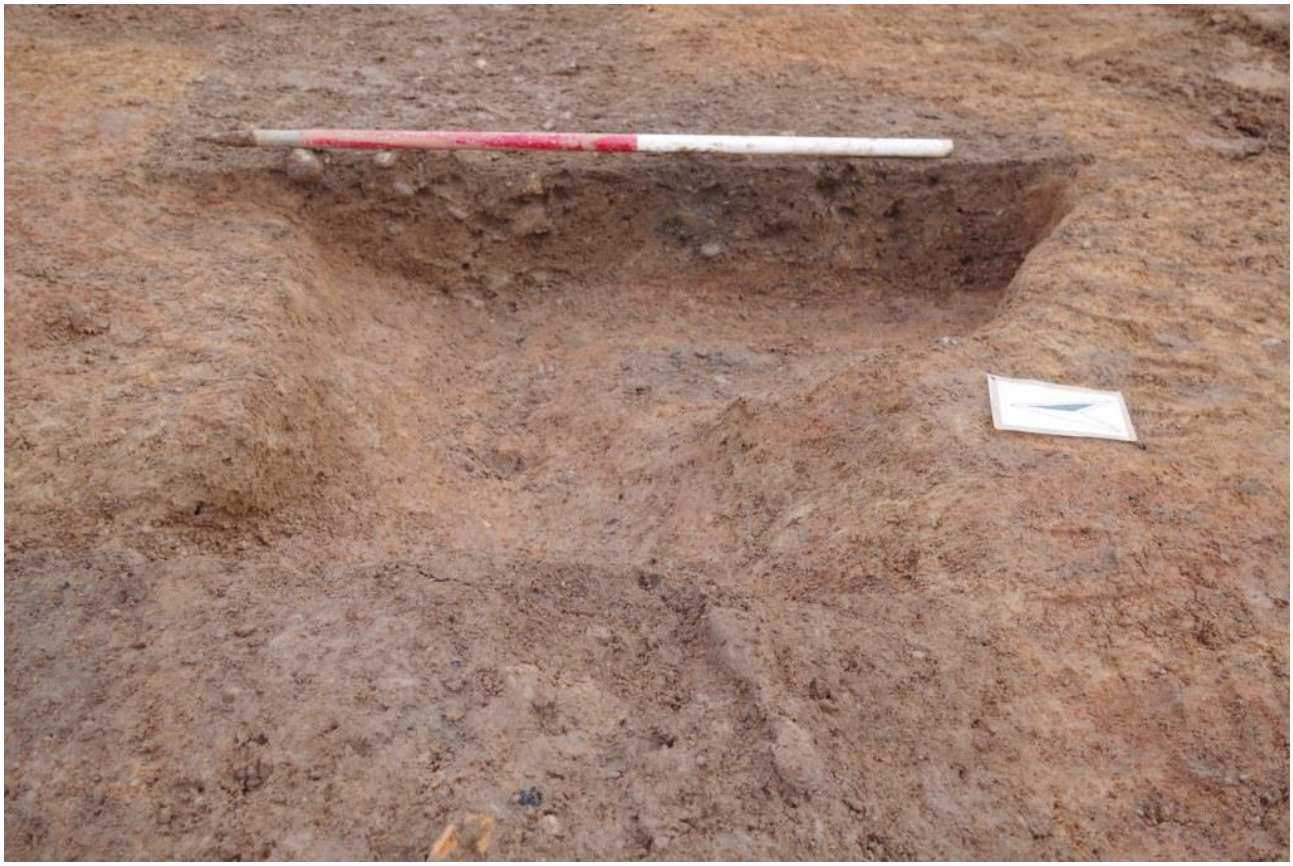

Plate 4 Ditch 1221 and Pit 1037, looking east

Plate 5 Droveway ditches 1217 and 1218, looking west

Plate 6 Middle enclosure ditches 1042, 1043, and 1044 (Group 1215), looking north

Plate 7 Middle enclosure ditches 1042, 1043, and 1044 (Group 1215), looking south

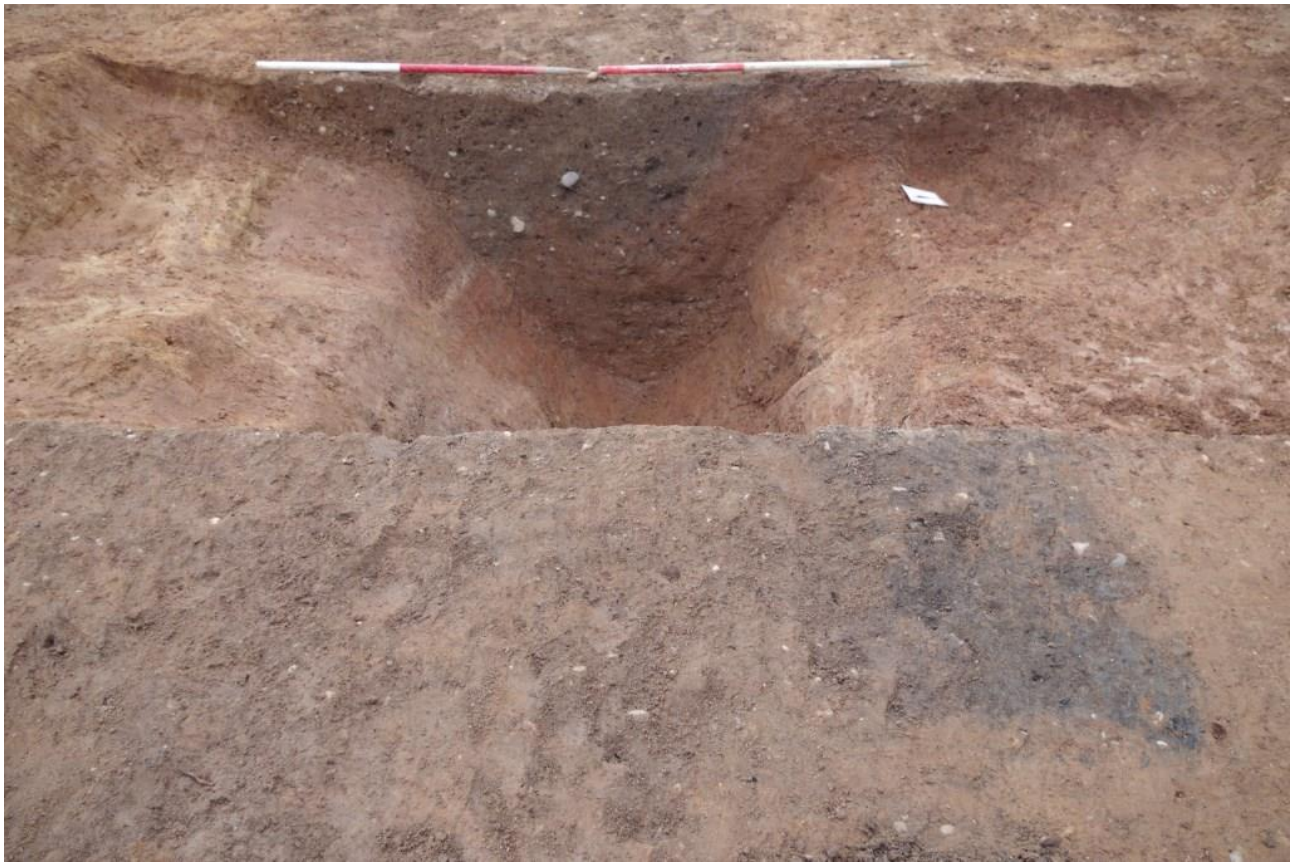

Plate 8 Middle enclosure ditches 1064 and 1069 (Group 1215), looking east

Plate 9 Middle enclosure ditches 1064 and 1069 (Group 1215), looking west

Plate 10 Middle enclosure ditches 1147, 1099, 1107, and 1109, (Group 1215), looking north-west

Plate 11 Middle enclosure ditches 1147, 1099, 1107, and 1109, (Group 1215), looking south-east

Plate 12 Northern droveway ditch, looking north-west

Plate 13 Northern droveway, looking north-west

Plate 14 Outer enclosure ditch 1135, (Group 1216), looking east

Plate 15 Outer enclosure ditch 1135, (Group 1216), looking west

Plate 16 Outer enclosure ditch 1216, looking north

Plate 17 Outer enclosure ditches 1200, 1210, 1211, 1212, and 1213 (Group 1216), looking east

Plate 18 Pit 2092, looking north-east

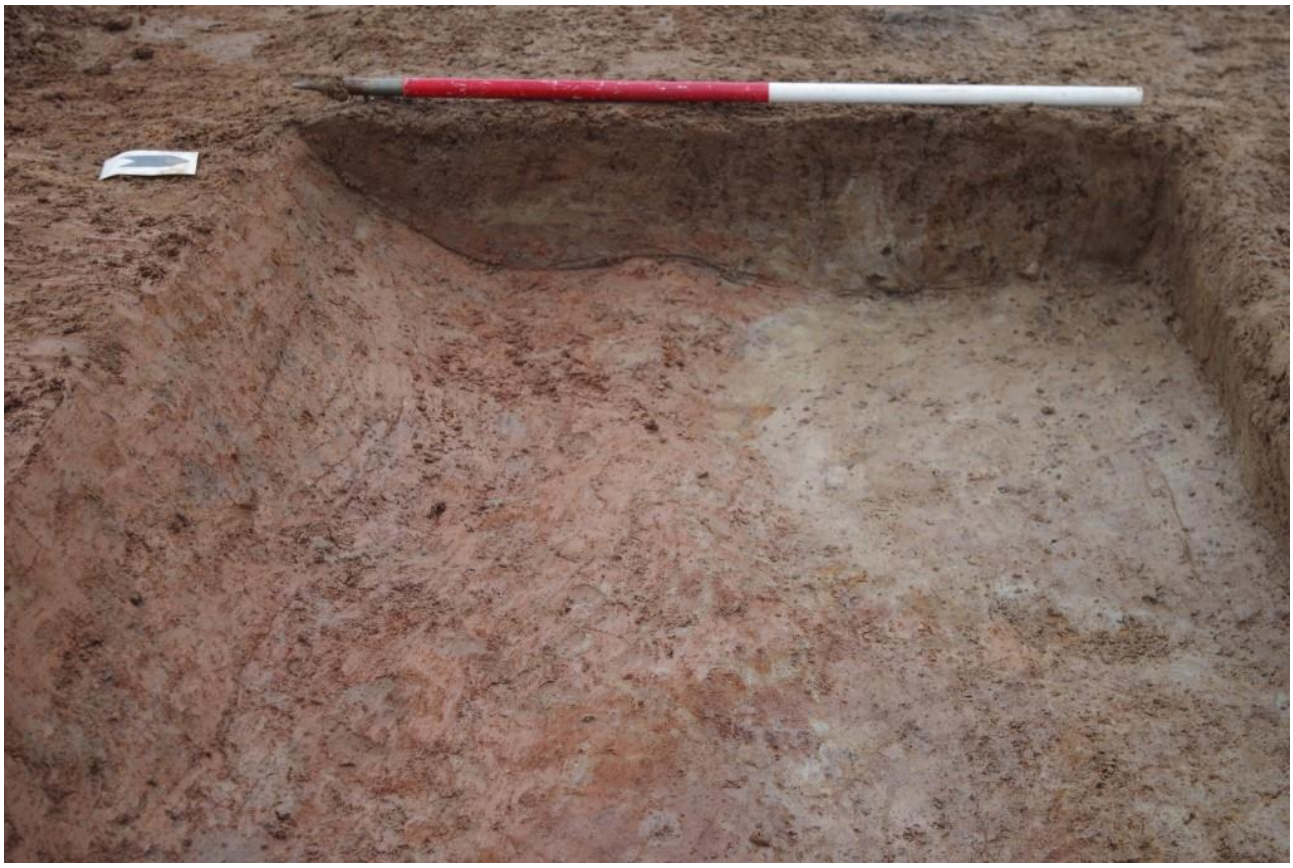

Plate 19 Southern droveway, looking east

Appendix 1 Trench descriptions –

Evaluation WSM 66267

Context summary:

Trench 1

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
100	Topsoil	Layer	Soft mid reddish brown sandy loam	0.45m	
101	Subsoil	Layer	Moderately Compact reddish brown sandy loam	0.10m +	
102	Natural	Layer	Compact mid red clay	0.70m +	Red marl, apart from last 9 meters in North end of the trench, which comprises of a red coarse sand.
103	Ditch	Fill	Compact mid reddish brown sandy clay	0.53m	Upper fill of ditch [107]. Possible deliberate backfill, darker and more organic than [104].
104	Ditch	Fill	Compact light reddish brown sandy clay	0.35m	Base fill of ditch [107]. Likely an initial gradual fill of the ditch after it has gone out of use, not a deliberate backfill. Contained one very abraded piece of brick,
105	Ditch	Fill	Compact light reddish brown sandy clay	0.13m	Deposit in northern side of ditch [107], likely an early natural fill into the ditch during its use. Possible interface between (104) and (106).
106	Ditch	Fill	Moderately Compact dark orangey brown loamy sand		Earliest fill on north side of ditch [107]. Likely a natural slip of material falling into the ditch during use. Possibly represents wash from the more sandy natural at this end of the eval trench.
107	Ditch	Cut			Cut of 19th cent ditch/ field boundary, Possibly traced in trenches 2 and 8. Sinlge phase cut.
108	Ditch	Fill	Compact mid reddish brown silty clay	0.21m	Single fill of ditch [109]. Possibly a deliberate backfill. Almost identical to (110). Small quantity of charcoal within.
109	Ditch	Cut		0.21m	Small ditch cut next to pit [112]. Uncertain of its date, function and relationship to [112].
110	Pit	Fill	Compact mid reddish brown silty clay	0.20m	Upper fill of pit [112], almost identical to (108) - possibly same backfill event. Some small charocal flecks within, no dating evidence.
111	Pit	Fill	Moderately Compact dark reddish brown sandy clay	0.10m	Lower fill of pit [112]. Slightly more gravely in texture than (110). Likely natural fill of the base of

					[112] over time.
112	Pit	Cut		0.30m	Possible pit cut though true form and function is uncertain. Possibly cuts through [108] though this relationship is uncertain.

Trench 2

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
201	Topsoil	Layer	Soft mid reddish brown clay loam	0.38m	
202	Subsoil	Layer	light orangey brown silty clay	0.48m	Appears to be an interface between the top soil and the natural, mixed with (206) in places.
203	Natural	Layer	Firm mid red clay		Red marl clay in the final 16m of the north end of the trench. The rest of the trench has (206) overlaying the clay.
204	Ditch	Fill	Compact mid reddish brown sandy clay	unknown	Unexcavated fill of ditch [205], presumably same ditch excavated in trench 1 [107].
205	Ditch	Cut		unknown	Unexcavated ditch. Runs in line with ditch [107] excavated in trench 1, therefore presumably part of the same structure.
206	Natural	Layer	Soft mid yellowish brown clayey sand	0.5m	Spread of material within slight dip in the landscape. Possible colluvial material. Contained slag fragments on surface. At least 0.5m thick.

Trench 3

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
301	Topsoil	Layer	Soft mid reddish brown clay loam	0.30m	
302	Subsoil	Layer	Moderately Compact light orangey brown silty clay	0.15m	A posisble interface between the natural and the subsoil, rather than a difinitive subsoil. Depth varies throughout trench.
303	Natural	Layer	Firm mid red clay		Red marl clay throughout the trench.

Trench 4

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
400	Topsoil	Layer	Soft dark brown silt loam	0.29m	Frequent root distrubance.
401	Subsoil	Layer	mid orangey brown sandy clay	0.15m	
402	Natural	Layer	Firm mid orangey red clay		Red marls with patches of gravels.
403	Ditch	Fill	Soft mid greyish brown silt loam	0.18m	Upper fill of enclosure ditch [408]. Contained Roman ceramic sherds, homogenous throughout. Naturally deposited, e.g. siltation.

404	Ditch	Fill	Soft mid greyish brown sandy silt	0.54m	Fill of enclosure ditch [408]. Homogenous throughout. Contained several pottery and CBM fragments, Roman in date. Accumulated naturally through air and water action.
405	Ditch	Fill	Moderately Compact light reddish brown silty sand	0.48m	Fill of enclosure ditch [408]. No finds, homogenous throughout. Most likely the result of weathering/ slumping of the northern slope into the
406	Ditch	Fill	Soft mid brown silty sand	0.60m	Fill of enclosure ditch [408]. Contained two shards of pottery, poor quality - locally made? Provisionally dated Roman. Most likely
407	Ditch	Fill	Moderately compact mid reddish brown sandy clay	0.48	Sterile fill of enclosure ditch
408	Ditch	Cut		1.04	Large Roman enclosure ditch
409	Ditch	Fill	Soft mid greyish brown silty sand	0.3	Sterile inwash fill of possible ditch
410	Ditch	Fill	Soft light reddish brown silty sand	0.38	Inwash basal fill
411	Ditch	Cut		0.5	E-W linear, possible earlier version of enclosure ditch
412	Ditch	Fill	Soft mid greyish brown sandy silt	0.52	Inwash fill of Roman ditch
413	Ditch	Fill	Soft mid greyish brown sandy silt	0.57	Homogenuous fill of Roman ditch
414	Ditch	Fill	Moderately compact dark reddish brown silty clay	0.5	Basal fill of Roman ditch. Natural silting
415	Ditch	Cut		0.96	Large E-W linear Roman enclosure ditch
416	Ditch	Fill	Soft light brown silty sand	0.08	Sterile upper fill of Roman ditch
417	Ditch	Fill	Soft light brown silty sand	0.24	Sterile fill of Roman ditch
418	Ditch	Fill	Soft mid brownish grey sand	0.24	Basal fill inwash of Roman ditch
419	Ditch	Cut		0.46	E-W linear enclosure ditch
420	Ditch	Fill	Compact mid orangey brown clay	0.1	Slumped natural down north side of ditch
421	Ditch	Fill	Firm mid pinky brown clay	0.36	Redeposited natural fill of ditch. Possibly deliberate ending of ditch
422	Ditch	Cut		1.22	Roman enclosure ditch
423	Ditch	Fill	Soft mid greyish brown silty sand	0.32	Low energy fill of small linear
424	Ditch	Cut		0.32	Small ditch truncated by larger enclosure. May have been earlier version of it
425	Ditch	Fill	Firm mid reddish brown sandy clay	0.2	Basal fill of Roman enclosure ditch. Slumping and inwash

Trench 5

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
501	Topsoil	Layer	Loose mid reddish brown silty clay	0.32	Topsoil
502	Subsoil	Layer	Moderately compact light yellowish grey silty clay	0.06	Subsoil
503	Natural	Layer			Natural, mid orangey brown sandy clay marl with areas of sands and gravels
504	Ditch	Fill	Firm mid reddish brown sandy clay	0.18	Low energy inwash fill of ditch
505	Ditch	Fill	Firm mid reddish brown sandy clay	0.08	Inwash clay basal fill of
506	Ditch	Cut		0.26	Small gully running parallel to larger enclosure ditch
507	Ditch	Fill	Firm mid greyish brown silty clay	0.18	Inwash fill of Roman enclosure ditch
508	Ditch	Fill	Firm mid greyish brown silty clay	0.15	Post-use fill of enclosure ditch
509	Ditch	Fill	Firm mid greyish brown silty clay	0.15	Low energy inwash fill of ditch
510	Ditch	Fill	Firm mid reddish brown silty clay	0.17	Inwash fill of ditch
511	Ditch	Fill	Firm mid reddish brown silty clay	0.17	Fill of enclosure ditch
512	Ditch	Fill	Firm mid brownish red silty clay	0.16	Large slumpiung event down west side of ditch
513	Ditch	Fill	Firm mid reddish brown silty clay	0.09	Humic fill of enclosure ditch
514	Ditch	Fill	Firm mid reddish brown silty clay	0.11	Basal fill of enclosure ditch
515	Ditch	Cut		0.82	Large Roman enclosure ditch, with bank on west side?
516	Pit	Fill	Loose mid greyish brown clayey sand	0.2	Sterile fill of possibe pit
517	Pit	Cut		0.2	Oval pit, or possibly natural feature
518	Ditch	Cut		1.42	Later Roman enclosure ditch
519	Ditch	Cut		1.26	Roman enclosure ditch, truncated
520	Ditch	Cut		1.42	Roman settlement enclosure ditch, truncated by later reinstatement
521	Pit	Fill	Moderately compact mid greyish brown silty sand	0.08	Sterile feel of possible pit
522	Pit	Cut		0.08	Runs into section, so may be ditch terminus rather than pit
523	Posthole	Fill	Moderately compact mid yellowish grey silty sand	0.16	Sterile fill of small pit/posthole
524	Posthole	Cut		0.16	Small posthole, under later pit
525	Gully	Fill	Loose mid greyish brown clayey sand	0.18	Dark fill of small gully in top of bigger ditch
526	Gully	Cut		0.18	Small gully in top of earlier ditch
527	Ditch	Fill	Moderately compact mid reddish brown clayey sand	0.27	Backfill of ditch
528	Ditch	Fill	Moderately compact mid reddish brown sandy clay	0.26	Mixed backfill of Roman ditch
529	Ditch	Fill	Firm mid reddish brown sandy clay	0.22	Slumping fill of ditch

530	Ditch	Fill	Firm mid reddish brown sandy clay	0.22	Sterile basal inwash fill of ditch
531	Ditch	Cut		0.8	Internal ditch within an enclosure
532	Ditch	Fill	Compact mid reddish brown silty sand	0.18	Fill of Roman enclosure ditch
533	Ditch	Fill	Compact mid brownish red silty sand	0.16	Low energy erosion of bank material
534	Ditch	Fill	Compact mid reddish brown silty clay	0.08	Clay slumping in ditch
535	Ditch	Fill	Compact mid brownish red silty clay	0.08	Clay slumping in dicth
536	Ditch	Fill	Firm light brownish red silty clay	0.09	Bank deposit slumped into ditch
537	Ditch	Fill	Compact mid brownish red silty sand	0.21	Humic fill of ditch
538	Ditch	Fill	Firm dark brownish red silty clay	0.31	Clay slumping into ditch, or possible spoilomg of
539	Ditch	Fill	Compact mid brownish grey silty sand	0.39	Basal fill of ditch
540	Ditch	Fill	Compact mid reddish brown silty sand	0.22	Upper fill of enclosure ditch. Humic and pottery recovered
541	Ditch	Fill	Compact mid greyish brown silty sand	0.32	Fill of ditch rich in domestic material
542	Ditch	Fill	Compact mid brownish grey silty sand	0.42	Low energy depositional fill of ditch
543	Ditch	Fill	Firm mid reddish brown silty clay	0.28	Slumped clay deposit
544	Ditch	Fill	Firm mid reddish brown silty clay	0.25	Slumped clay fill of ditch
545	Ditch	Fill	Compact mid brownish grey silty sand	0.28	Fill of ditch, from possible eastern bank
546	Ditch	Fill	Compact dark brownish grey silty sand	0.14	Basal fill of large encolosure ditch
547	Ditch	Fill	Compact dark brownish grey silt sand	0.24	Fill of ditch, with domestic waste present

Trench 6

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
600	Topsoil	Layer	Soft dark greyish brown clay loam	0.32	Topsoil in Trench 6
601	Natural	Layer			Natural marl in Trench 6

Trench 7

Length: 50m Width: 3m Orientation: North-east to south-

Context	Feature	Context	Description	Height/ depth	Interpretation
701	Topsoil	Layer	Moderately compact mid reddish brown clay loam	0.28	Topsoil in Trench 7
702	Subsoil	Layer	Firm light orangey brown sandy clay	0.07	Subsoil in Trench 7
703	Natural	Layer			Natural marl in Trench 7
704	Layer	Layer	Soft light yellowish brown sandy silt		Coluvial layer within trench. Unexcavated

Trench 8

Length: 50m Width: 3m Orientation: North-west to south-

Context	Feature	Context	Description	Height/ depth	Interpretation
801	Topsoil	Layer	Soft mid reddish brown clay loam	0.3	Topsoil in Trench 8
802	Natural	Layer			Natural red marl
803	Ditch	Fill	Soft mid greyish brown silty sand		Fill of field boundary. Unexcavated

804	Ditch	Cut			Field boundary. Unexcavated
805	Layer	Layer	Soft light yellowish brown sandy clay		Coluvial layer overlying natural

Trench 9

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
901	Topsoil	Layer	Soft mid orangey brown clay loam	0.26	Topsoil in Trench 9
902	Subsoil	Layer	Firm mid brownish red silty clay	0.13	Subsoil in Trench 9
903	Natural	Layer			Natural red marl in Trench

Trench 10

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
1000	Topsoil	Layer	Soft mid greyish brown sandy silt	0.28	Topsoil in Trench 10
1001	Natural	Layer			Natural red marl in Trench 10

Trench 11

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
1100	Topsoil	Layer	Soft mid greyish brown clay loam	0.3	Topsoil in Trench 11
1101	Layer	Layer	Moderately compact light yellowish grey silty sand		Colluvium layer overlying natural
1102	Natural	Layer			Natural re marl in Trench
1103	Ditch	Fill	Compact light greyish brown silty clay	0.42	Fill of field ditch
1104	Ditch	Cut		0.42	Field ditch

Trench 12

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
1200	Topsoil	Layer	Firm mid greyish brown clay loam	0.3	Topsoil in Trench 12
1201	Natural	Layer			Red marl natural in Trench 12

Trench 13

Length: 50m Width: 3m Orientation: North to south

Context	Feature	Context	Description	Height/ depth	Interpretation
1300	Topsoil	Layer	Firm mid greyish brown clay loam	0.27	Topsoil in Trench 13
1301	Subsoil	Layer	Compact mid yellowish orange clay silt	0.07	Patchy subsoil in Trench
1302	Natural	Layer			Red clay marl natural

Trench 14

Length: 50 Width: 3 Orientation: East to west

Context summary:

Context	Feature	Context	Description	Height/ depth	Interpretation
1400	Topsoil	Layer	Soft dark greyish brown clay loam	0.3	Topsoil in Trench 14
1401	Subsoil	Layer	Compact mid yellowish orange clay silt	0.14	Subsoil of varying
1402	Natural	Layer			Red marl natural

Trench 15

Length: 50m Width: 3m Orientation: North-west to south-

Context	Feature	Context	Description	Height/ depth	Interpretation
1501	Topsoil	Layer	Soft mid reddish brown clay loam	0.3	Topsoil in Trench 15
1502	Subsoil	Layer	Firm mid orangey red silty clay	0.15	Thin subsoil layer
1503	Layer	Layer	Soft light brownish yellow silty sand		Colluvial layer
1504	Natural	Layer			Soft blue and orange sand, possibly natural, though could be palaeochannel material

Trench 16

Length: 50m Width: 3m Orientation: North-west to south-

Context	Feature	Context	Description	Height/ depth	Interpretation
1601	Topsoil	Layer	Firm dark orangey brown silt loam	0.3	Topsoil in Trench 16
1602	Layer	Layer	Moderately compact mid greyish brown silty clay	0.17	Build up of material, probably a colluvial spread
1603	Subsoil	Layer	Firm light orangey brown silty clay	0.5	Thick subsoil layer
1604	Layer	Layer	Firm mid greyish brown silty clay	0.8	Similar to 1602, colluvial depsoit
1605	Natural	Layer			Natural sands
1606	Pit	Fill			Unexcavated pit fill
1607	Pit	Cut			Unexcavated pit, probably Roman
1608	Ditch	Fill	Moderately compact mid orangey grey silty sand	0.18	Gritty sandy fill of small ditch
1609	Ditch	Cut		0.18	Shallow ditch, probably Roman

Trench 17

Length: 50m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
1701	Topsoil	Layer	Firm light brownish grey silt loam	0.3	Topsoil in Trench 17
1702	Subsoil	Layer	Firm light greyish brown silty clay	0.3	Subsoil in Trench 17
1703	Natural	Layer			Red marl natural
1704	Ditch	Fill	Moderately compact light greyish orange silty sand	0.4	Washin fill of ditch
1705	Ditch	Cut		0.4	Linear Roman ditch, possible droveway
1706	Ditch	Fill	Moderately compact light greyish brown silty sand	0.55	Natural filling of ditch
1707	Ditch	Cut		0.55	Probable post-med field boundary

Trench 18

Length: 50m Width: 3m Orientation: North-east to south-

Context	Feature	Context	Description	Height/ depth	Interpretation
1800	Topsoil	Layer	Moderately compact dark greyish brown silt loam	0.3	Topsoil in Trench 18
1801	Subsoil	Layer	Firm mid reddish brown silty clay	0.15	Subsoil in Trench 18
1802	Layer	Layer	Soft mid yellowish grey silty sand	0.25	Colluvium layer
1803	Natural	Layer			Red marl natural
1804	Ditch	Fill	Soft mid greyish brown silty sand	0.32	Silted fill of ditch
1805	Ditch	Cut		0.32	Undated drainage ditch

Trench 19

Length: 25m Width: 3m Orientation: East to west

Context	Feature	Context	Description	Height/ depth	Interpretation
1901	Modern Layer	Layer	Soft mid orangey brown sandy clay	0.37	Mixed dump layer from 1960s
1902	Topsoil	Layer	Soft mid greyish brown sandy loam	0.15	Buried topsoil layer
1903	Subsoil	Layer	Firm mid orangey brown sandy silt	0.21	Subsoil layer
1904	Natural	Layer			Natural red marl
1905	Layer	Layer	Soft dark greyish black sandy silt	0.13	Seen only at east end of trench. Sealed by subsoil. Possible midden like deposit.
1906	Layer	Layer	Soft mid greyish brown silty sand	0.4	Colluvial layer the length of the trench. Seals two probable Roman gullys
1907	Ditch	Fill	Soft mid greyish brown sandy silt	0.11	Silted fill of small ditch
1908	Ditch	Cut		0.11	Probable Roman drainage ditch
1909	Ditch	Fill	Moderately compact mid greyish brown silty sand	0.2	Silted fill of small ditch
1910	Ditch	Cut		0.2	Probable Roman drainage ditch

Appendix 2 Technical information

The archive

The archive consists of:

Excavation site codes: WSM 66555, 66556 and 66561

408	Context records AS1 (more to be added with further grouping)
29	Field progress reports AS2
6	Photographic records AS3
499	Digital photographs
2	Drawing number catalogues AS4
154	Scale drawings
6	Context number catalogues AS5
27	Sample records AS17
1	Sample number catalogues AS18 (41 samples taken)
26	Flot records AS21
2	Box of finds (includes WSM 66267 evaluation finds)
1	CD-Rom/DVDs
1	Copy of this report (bound hard copy)

Evaluation site code: WSM 66267

91	Context records AS1 (more to be added with further grouping)
10	Field progress reports AS2
3	Photographic records AS3
172	Digital photographs
1	Drawing number catalogues AS4
19	Scale drawings
1	Context number catalogues AS5
27	Sample records AS17
1	Sample number catalogues AS18 (41 samples taken)
19	Trench record sheets AS41
0	Box of finds (included in WSM 66556 excavation finds)
1	CD-Rom/DVDs
1	Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcestershire County Museum
Museums Worcestershire
Hartlebury Castle
Hartlebury
Near Kidderminster
Worcestershire DY11 7XZ
Tel Hartlebury (01299) 250416

Summary of data for Worcestershire HER

material	total	weight (g)
pottery	439	5994
fired clay	12	30
loomweight	7	115
tile	23	837
brick	2	2552
brick/tile	5	4
stone building material	5	274
pot-boiler stone	5	131
flint	4	15
slag(Fe)	3	12
coal	9	12

Table 1: Quantification of the assemblage

material	total	weight (g)
Late Iron Age pottery	2	61
Late Iron Age/Early Roman pottery	124	1074
Roman pottery	234	3979
Medieval pottery	77	784
Late medieval/early post-medieval pottery	2	58
Modern pottery	1	49

Table 2: Quantification of the pottery by period

fabric no.	total sherds	Weight (g)	% sherds
1	1	2	0.3
1.1	5	36	1.4
2	1	43	0.3
3	106	1303	29.4
4.1	5	10	1.4
5.1	11	100	3.1
5.2	11	13	3.1
12	123	1853	34.2
12.1	6	33	1.7
12.2	58	846	16.1
12.3	11	354	3.1
16	1	27	0.3
21.3	4	137	1.1
22	5	51	1.4
34	1	36	0.3
37	2	93	0.6
98	9	177	2.5

Table 3: Proportion of Late Iron Age and Roman pottery by fabric type

fabric no.	total sherds	weight (g)	% sherds
55	12	132	15.2
56	43	359	54.4
64.1	4	46	5.1
69	16	278	20.3
99	3	21	3.8
157.1	1	6	1.3

Table 4: Proportion of medieval and early post-medieval pottery by fabric type

material type	count	weight (g)
pot	230	3318
brick/tile	5	4
fired clay	12	30
loom weight	7	115
coal	9	12
pot-boiler	5	131

Table 5: Quantification of the material from phase 1

material type	count	weight (g)
pot	38	504
roof tile(flat)	2	38
sandstone	5	274

Table 6: Quantification of the material from phase 2

material type	count	weight (g)
brick	2	2552
pot	50	528
roof tile(flat)	1	133
tile	6	358
slag (Fe)	2	1
flint	1	3

Table 7: Quantification of the material from phase 3

Context	Sample	Feature type	Fill of	Position of fill	Phase	Sample vol (L)	Vol processed (L)
1011	14	Pit	1013	Secondary	3	40	10
1012	15	Pit	1013	Primary	3	2	2
1030	17	Posthole	1031	Primary	3	20	10
1036	18	Pit	1037	Primary	1	40	10
1038	19	Pit	1039	Primary	1	5	5
1040	20	Ditch	1041	Primary	1	40	10
1054	31	Ditch	1042	Other	1	40	10
1055	32	Ditch	1042	Other	1	40	10
1061	21	Ditch	1064	Other	1	40	10
1062	22	Ditch	1064	Secondary	1	40	10
1066	33	Ditch	1068	Secondary	1	40	10
1075	23	Gully	1076	Primary	1	40	10
1078	24	Ditch	1077	Other	1	10	10
1098	40	Ditch	1099	Primary	1	40	10
1117	30	Ditch	1123	Other	1	40	10
1119	29	Ditch	1123	Other	1	40	10
1129	35	Ditch	1135	Other	1	40	10
1130	36	Ditch	1135	Other	1	40	10
1153	27	Ditch	1158	Other	1	40	10
1160	28	Ditch	1163	Other	1	20	10
1180	39	Ditch	1182	Secondary	1	40	10
1205	41	Ditch	1213	Primary	1	30	10

Env Table 8: List of environmental samples
Phase 1 = Roman, Phase 2 = medieval, Phase 3 = medieval/post-medieval

context	material class	material subtype	count	weight(g)	Feature type	Phase
1053	bone	animal bone	1	18	Ditch	1
1061	bone	animal bone	10	32	Ditch	1
1062	bone	animal bone	4	1	Ditch	1
1115	bone	animal bone	31	21	Ditch	1
1116	bone	animal bone	6	12	Ditch	1
TOTAL			**52**	**84**		

Table 9: Hand-collected animal bone

Context	Sample	large mammal	charcoal	charred plant	waterlogged plant	Comment
1011	14		occ		occ	
1012	15					No identifiable remains
1030	17		occ			
1036	18	occ	mod	occ		occ fired clay, fire-cracked stone
1038	19	occ	occ			occ heat-cracked
1040	20	occ	occ		occ	occ heat-cracked stone
1054	31	occ	occ			
1055	32	occ	occ	occ		occ heat-cracked stone
1061	21	occ	occ			
1062	22	occ	mod	occ	abt*	mod heat-cracked stone, occ pot, fired clay, Fe slag
1066	33		occ			
1075	23	occ	occ			occ heat-cracked stone
1078	24	occ	occ		mod - abt*	* = mostly unidentifiable
1098	40		occ	occ	mod*	occ pot
1117	30		occ			occ heat-cracked stone stone
1119	29		occ			
1129	35		occ		occ	mod coal
1130	36		occ			occ heat-cracked stone
1133	36		occ			occ heat-cracked stone
1143	38	occ	occ			occ pot, heat-cracked stone
1153	27		occ		occ	occ fired clay, ?window glass
1160	28		occ		occ - mod*	occ fire-cracked stone, *unidentifiable
1180	39		occ		occ	
1205	41	occ	mod	occ	occ*	*unidentified

Table 10: Summary of environmental remains: occ = occasional, mod = moderate, abt = abundant

Latin name	Family	Common name	Habitat	1036	1055	1062	1098	1153
Triticum dicoccum/spelta glume base	Poaceae	emmer/spelt wheat	F	+			+	
Hordeum vulgare grain (hulled)	Poaceae	barley	F		+			
Vicia sativa ssp *nigra*	Fabaceae	common vetch	AB		+			
Poaceae sp indet grain (1mm)	Poaceae	grass	AF			+		
Raphanus raphanistrum pod	Brassicaceae	Wild radish	ABF					+

Env Table 11: Plant remains from bulk samples

Key:

Habitat	Quantity
A= cultivated ground	+ = 1 - 10
B= disturbed ground	++ = 11- 50
C= woodlands, hedgerows, scrub etc	+++ = 51 - 100
D = grasslands, meadows and heathland	++++ = 101+
E = aquatic/wet habitats	* = fragments
F = cultivar	