

**MARSH LEYS FARM
KEMPSTON, BEDFORDSHIRE**

**ASSESSMENT OF POTENTIAL AND
UPDATED PROJECT DESIGN**

Document 2002/42
Projects MLF 544, 662 and 756

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Old Road Securities plc and Gazeley Properties Limited

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Preface

Every effort has been made in the preparation of this document to provide as complete an assessment as possible, within the terms of the specification and project design. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

Acknowledgements

This report has been prepared by Mike Luke (Project Officer), Ian Beswick (Project Supervisor), Jackie Wells (Artefacts Officer), Mark Maltby (bone specialist), along with Jenny Robinson and Layla Renshan (ecofact specialists for Area 1 and 2 respectively working under the direction of Mark Robinson). Joan Lightning (CAD Technician) undertook digitisation of site plans and produced all illustrations in this report. All BCAS projects are under the overall management of Drew Shotliff (Projects Manager).

All stages of this project were undertaken under the management of Mike Luke. Ian Beswick supervised both open area excavations, with assistance from Tracy Preece (Assistant Supervisor on Area 2). Onsite investigation and recording for Area 1 was undertaken by Kate Bain, Vivien Bray, Caroline Clarke, Sally Dicks, Ed Frost, Pat Kent, Tracy Preece, Amy Rushton, Jeremy Stone and Julian Watters. The following undertook the same tasks on Area 2: Kate Chapman, Steve Clarke, Caroline Clarke, Catherine Grindley, Keeley Hale, Richard Jones, Mark Littlewood, Helen Parslow, Peter Sprenger, Chris Thatcher, Steve Thorpe and Adrian Woolmer. Trial excavation was supervised by Rob Edwards assisted by Sally Dicks, Matt Edgeworth, James Pixley, Jerry Stone and Julian Watters. Field Artefact Collection was undertaken by Ian Beswick, Sally Dicks, Rob Edwards, Craig Halsey, Joan Lightning and Christiane Meckseper. Processing of artefacts was undertaken by Jackie Wells, and of ecofact samples by Jerry Stone. Joan Lightning and Martin Edwards (Mouchels) undertook site survey including the earthwork survey. Fieldwork was assisted by metal detectorists from the St. Neots Club (notably Alan Bartlett) and Iain Metcalfe.

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Structure of report

After the introductory Section 1, this report presents the original research objectives (Section 2). Section 3 provides a provisional summary of the results. In the subsequent section the various types of evidence (data) are discussed individually (Section 4). The potential of the data to address the original and new research objectives is discussed in Section 5 prior to the presentation of the updated project design (Section 6).

Appendices at the back of the report presents detailed method statements for analysis, publication and archiving (Appendix 1), the project team (Appendix 2) and a summary of all tasks (Appendix 3).

NOTE. Key terms used throughout this report are described overleaf



Key terms

Albion	Albion Archaeology
BCAS	Bedfordshire County Archaeology Service (now known as Albion)
BCC	Bedfordshire County Council
Brief	Document: <i>Brief for the Management of the Archaeological Resource at Marsh Leys Farm, Kempston, Bedfordshire</i>
CAO	County Archaeological Officer of BCC
Client (Area 1)	Old Road Securities plc
Client (Area 2)	Gazeley Properties Limited
Evaluation reports	Documents: <i>Archaeological Field Evaluation: Stages 1, 2 and 3</i> <i>Archaeological Field Evaluation: Stage 4 Trial Excavation and Synthesis of Results</i>
LPA	Local Planning Authority
WSARM	Documents: <i>Written scheme for archaeological resource management</i> (Phase 1 and 2)



Non-Technical Summary

This report presents an assessment of archaeological investigations (both evaluation and the two areas of open area excavation) undertaken in advance of industrial development, centred on Marsh Leys Farm, Kempston, Bedfordshire (TL 0263 4570). All archaeological work was undertaken between 1998 and 2001 by Albion Archaeology (formerly Bedfordshire County Archaeology Service). The investigations were undertaken as a condition of planning permission for the development in accordance with Planning Policy Guidance Note 16 and Bedford Borough Council Local Plan Policies. Archaeological work was carried out in accordance with the Project Brief (issued by the County Archaeological Officer of Bedfordshire County Council), Written Schemes of Archaeological Resource Management (produced by Albion Archaeology) and the guidelines provided by English Heritage in 'Management of Archaeological Projects'.

Although the discovery of flint artefacts suggests limited earlier prehistoric (Stone Age) activity, the first firm evidence of human activity came in the early-middle Iron Age (2500 years ago). A ditched enclosure was dug possibly associated with the utilisation of the pastures along the Elstow Brook for animal grazing.

Approximately 100 years before the Roman invasion of AD43 (2000 years ago) two unenclosed farmsteads were established approximately 350m apart within the development area. Cremation burials were associated with both farmsteads and one may have contained a building which functioned as a shrine. During the first two centuries of the Roman period a regular layout of fields and enclosures, defined by ditches, was established centred on the original farmsteads. Although the two systems were similar they did not join and were clearly associated with different farmsteads. Within the smaller enclosures buildings, water pits / wells, pits and burials were identified. Several concentrations of domestic debris were located within the enclosure system to the SW suggesting there may have been more than one family utilising this area.

The animal bone recovered from the Roman deposits was mainly from cattle and sheep, which along with the charred spelt wheat suggests mixed agriculture was practised. This is supported by the recovery of quernstones, lead spindlewhorls/weights, a steelyard and a plough coulter. In addition there is evidence for ironworking although it is unclear if this was purely to meet the needs of the inhabitants of the farmsteads. The presence of large number of quarry pits dug during the Roman period may be associated or could indicate a continual need to raise the level of the ground in certain areas (the area is very low-lying and has recently been subject to flooding). The most common evidence for everyday life was in the form of huge quantities of pottery (180kg), much locally produced but some imported from France. Metal objects of personal use included bronze coins, hairpins, bracelet and brooches. Despite these the farmsteads can be classified as being of fairly low status.

The transition from Iron Age to Roman and low status rural settlement have been proposed as important research topics by English Heritage and the Council for British Archaeology for a number of years. The analysis and publication of the results of the investigations at Marsh Leys will contribute to these under-represented areas of our archaeological knowledge.

There is very little evidence for medieval and post-medieval activity. These will, therefore, not be aspects of the site that are examined in detail.

The methodologies and resources required to complete the project are detailed in this document. The end product will be the publication of the results as a monograph and the deposition of all data with Bedford Museum. Both are likely to be examined by interested local people, students and academics.





1. INTRODUCTION

1.1 *Planning Background*

In 1998 Bedford Borough Council (the LPA) granted outline planning permission (98/00992/OUT) for industrial development centred on Marsh Leys Farm, on the outskirts of Bedford (Figure 1). A condition (no. 22) of the planning permission required the investigation and recording of archaeological remains on the site in advance of development. This was in line with Planning Policy Guidance Note 16 *Archaeology and Planning* and in accordance with Bedford Borough Council Local Plan Policies.

1.2 *Site Location (Figure 1)*

The site is located on the southern edge of Kempston on the western outskirts of Bedford centred on TL 0263 4570. The application area was 59 ha in extent and comprised four arable fields, bounded by roads to the north, west and south, and the Bedford-Bletchley railway line to the east.

Topographically the site is within the Marston Vale, a clay vale lying to the south of Bedford. It is situated within the upper reaches of the Elstow Brook, a tributary of the River Great Ouse, which until re-alignments in the 1980s flowed through the application area. The land is fairly flat at 30m AOD, but there is a gentle drop from the NE to the SW.

The geology of the area is Oxford Clay, overlain by gravel and with alluvial deposits associated with the Elstow Brook occurring to the east.

1.3 *Archaeological Background*

Prior to the investigation reported on here the only known archaeological remains within the application area were recorded in Bedfordshire County Council's (BCC) catalogue of archaeological sites, the Historic Environment Record (HER) (Figure 1). This appeared to show one extensive area of archaeological remains indicated by cropmarks on aerial photographs centred on Marsh Leys Farm (HER 9600). Similar cropmarks were observed on aerial photographs to the east of the application area, beyond the Bedford to Bletchley railway line (HER 16323). Substantial quantities of Roman pottery, found during clay digging to the N, are probably associated (HER 265).

A number of other sites were known in the vicinity, all medieval or post-medieval in date. A moated enclosure (HER 303) on the edge of Kempston Hardwick is adjacent to a partially sunken lane, which at one time formed the Kempston parish boundary (HER 11532). This lane is associated with Hardwick Bridge, which was first recorded as "Herwykbrigg" in AD1430 (HER 4442). It connects to the "Portway" (HER 11535) to the NW. Another bridge, "Fulbekbrigg", of medieval origin was located to the N (11687).

1.4 *Nature of the Archaeological Investigations*

Prior to determination of outline planning permission the County Archaeological Officer (CAO) of BCC advised that the area under



consideration was archaeologically sensitive and that any development was likely to have a significant impact on any surviving archaeological deposits.

An evaluation was therefore recommended to identify, locate, date and determine the nature of any archaeological remains within the proposed development area.

The evaluation comprised four stages of work (Table 1 and Figure 2). These were undertaken by Bedfordshire County Archaeology Service (BCAS, now known as Albion Archaeology) in two main episodes (non-intrusive and intrusive).

Non-intrusive¹	Undertaken November and December 1998
Aerial photograph analysis	105ha
Field artefact collection	41ha
Geophysical survey	59ha
Intrusive²	Undertaken March and April 1999
Trial excavation	59ha

Table 1: The stages of archaeological evaluation

The evaluation revealed significant archaeological remains and therefore the CAO identified four zones of archaeological significance³ (Table 2 and Figure 3).

Zones A and B	Extensive late Iron Age/Roman settlement	5.8ha
Zone C	Peripheral areas to the settlements	3.8ha
Zone D	Earthworks of probable medieval date	1.4ha

Table 2: Zones of archaeological significance

The CAO issued a Brief³ requiring the formulation of a mitigation strategy for each Zone. The strategy had to be approved and implemented before construction could proceed.

On the 25th May 2000 the Client dealing with the entirety of Zone A and part of Zone C (hereafter referred to as Areas 1a and 1c) commissioned Albion Archaeology to produce a Written Scheme of Archaeological Resource Management (WSARM). This⁴ was approved by the CAO on 15th June 2000, with fieldwork commencing on the 24th July and finishing on the 20th December 2000 (Figure 4).

Zones B and D, along with the remainder of Zone C (hereafter referred to as Areas 2b, 2c and 2d) were the subject of a different WSARM⁵ produced on 26th March 2001 for a separate Client. This WSARM was approved by the

¹ BCAS, 1999. Marsh Leys Farm: Archaeological Field Evaluation Stages 1, 2 and 3 (Report 99/01)

² BCAS, 1999. Marsh Leys Farm: Archaeological Field Evaluation Stage 4; Trial Excavation and Synthesis of Results (Report 99/23)

³ BCC, 1999. Brief for the Management of the Archaeological Resource at Marsh Leys Farm, Kempston, Bedfordshire

⁴ BCAS, 2000. Marsh Leys Farm Industrial Development Kempston, Bedfordshire, Phase 1: Written Scheme for Archaeological Resource Management (Report 00/33)

⁵ BCAS, 2001. Marsh Leys Farm Industrial Development Kempston, Bedfordshire, Phase 2: Written Scheme for Archaeological Resource Management (Report 01/18)



CAO on 26th April 2001, with fieldwork commencing on the 21st May 2001 and finishing on 23rd November 2001 (Figure 5).

1.5 Purpose of this Report

This report presents an assessment of the results derived from all stages of archaeological investigation (both evaluation and mitigation). An updated project design is included listing all tasks that will be required to analyse and publish the results.





2. ORIGINAL AIMS AND OBJECTIVES OF THE INVESTIGATION

2.1 Introduction

The results of the evaluation suggested that a low status but extensive late Iron Age/Roman settlement, probably comprising discrete farmsteads, was present within the development area. To ensure that the investigations of these remains, undertaken as part of a mitigation strategy, was appropriately targeted the Brief³ (section 8.3) required that objectives be established, in advance, for each WSARM^{4 and 5}. The established objectives made reference to regional and national research priorities for the Iron Age and Roman periods.

2.2 Overall Project Aims

The overall aim of the investigations was to “preserve” the archaeological remains by record. Through analysis of these, along with the recovered artefacts and ecofacts, it should be possible to establish the main phases of activity and to elucidate the types of activity undertaken. The results will ultimately be disseminated in a published report.

2.3 National Research Frameworks

Priorities for the Iron Age and Roman periods have been formalised by English Heritage in *Exploring our Past*⁶ and more recently updated in the Archaeology Division’s *Research Agenda*⁷. Standard period surveys have been produced by Haselgrove⁸, Hingley⁹ (both 1989) and Millet¹⁰ (1990). Broad themes thought to be of particular importance to the Marsh Leys investigations included the transition from Briton to Roman and Empire into Kingdom, along with themed issues such as settlement hierarchies/ interaction and the study of rural settlement. Hingley and others have emphasised how poorly understood farmsteads are, especially when compared to higher status villas and urban settlements.

2.4 Regional Research Frameworks

The archaeological resources of the East Anglian region were assessed in 1997¹¹ and a regional research agenda and strategy was produced in 2000¹².

Research objectives that were identified for both the Iron Age and Roman periods and that were considered relevant to Marsh Leys included:

⁶ English Heritage 1991 *Exploring our past: strategies for the archaeology of England*

⁷ English Heritage Archaeology Division 1997 *Research Agenda* (unpub.)

⁸ Haselgrove, C, 1989 “The later Iron Age in southern Britain and beyond”, in Todd (ed) *Research on Roman Britain 1960-89, Britannia Monograph 11.*,

⁹ Hingley, R, 1989 *Rural Settlement in Roman Britain*

¹⁰ Millet, M, 1990 *The Romanisation of Britain*

¹¹ Brown, N and Glazebrook, J, 2000, *Research and Archaeology: A framework for the Eastern Counties, 2. research agenda and strategy*

¹² Glazebrook, J., ‘Research and Archaeology: A Framework for the Eastern Counties – 1 Resource Assessment



- the nature and distribution of rural (non-villa) settlement;
- the nature of agricultural production;
- the nature of religion and ritual, including burial;
- the chronological development of the landscape;
- the Iron Age to Roman transition.

2.5 Specific Objectives for the Area 1 and 2 Investigations

Specific objectives proposed in the WSARM were divided into a number of major themes such as chronology, and these are repeated in full below:

Objective 1: Chronology

The establishment of a chronological framework for the farmstead (especially the origins and sequence of development) will be a priority for the investigation. Once the framework is established, it will provide the basis for which all other objectives are examined. It will be essential that any chronological framework established for Phase 2 is sufficiently accurate that it can be compared with the Phase 1 farmstead.

Objective 2: The form and development of the farmsteads

The establishment of a ground plan and sequence of land use development within the farmsteads would enable spatial and chronological variation to be identified. This might comprise changes over time, for example in building style, burial practices, agricultural practices etc. These were seen as potentially relevant to a number of research issues such as 'Romanisation', agricultural intensification etc. Evaluation had suggested a number of domestic foci existed. Do these represent a chronological shift, perhaps from the Late Iron Age, or are they an effect of sub-dividing the original farm? Was the farmstead in continuous use until the late Roman period or was there episodic abandonment?

More specific questions include:

- A. The drop off in features within the evaluation trenches suggests the farmstead will be entirely contained within the excavation. It should therefore be possible to ascertain the complete ground plan. How extensive is the ditched enclosure system? (see Stage 4 evaluation report Fig 13).*
- B. The results of the evaluation suggested that only minor alterations to the enclosure system had taken place. Does excavation confirm this? Do the minor alterations and sub-divisions suggest a continuous small-scale development within an established framework? Or does the excavated evidence indicate episodes of more wholesale re-organisation?*
- C. Concentrations of domestic features and debris were located within the evaluation trenches. Do these represent different domestic foci within the farmstead? Can different zones of specific activity within the farmstead and periphery be identified? Can other specific activity areas be defined (e.g. yards, crop-processing or craft areas) and how was movement through the settlement organised and controlled?*



- D. *Can the pattern of artefact/ecofact disposal across the farmstead be reconstructed? Does this help in our understanding of spatial organisation, for example specific areas of middening activity? (see objective 3c)*
- E. *Apart from the continuation of the SW to NE major boundary the evaluation produced only limited evidence for activity beyond the enclosure system. Is this correct or is there evidence for low intensity peripheral activity, perhaps of agricultural, industrial or burial nature, within Area C?*
- F. *Do key assemblages, e.g. from features with critical stratigraphic positions, buildings etc., contain suitable dating evidence? If not do these features contain suitable material for radiocarbon or archaeomagnetic dating?*
- G. *Is there any evidence for an earlier Iron Age origin for the farmstead?*

Objective 3: Society and economy

- A. *Do deposits survive to reconstruct the economy of the farmsteads? What was the mix between arable and stock, and did this change over time, perhaps associated with “Romanisation”? Did butchery practices change over time and do they display any evidence of “Romanisation”? Are other economic activities represented? Is it possible to identify activities representative of subsistence or market-driven production?*
- B. *Do artefacts indicate economic or social contacts with groups at a local, regional, national or international level? In particular, how long-lasting were native Iron Age (British) traditions into the Roman period and can Romanising influence be identified?*
- C. *Does evidence survive for the structured deposition of artefacts or ecofacts? Waite¹³ and more recently Hill¹⁴ have demonstrated how the deposition of artefacts in ditches and pits might be the result of structured social behaviour rather than opportunistic dumping.*
- D. *Although only a single burial was identified during evaluation, the likelihood of individual graves or cemeteries is high. Is there any evidence for burial and did the practices change over time? The identification of a cemetery will provide important information on the pathology and burial rites of the inhabitants of one individual farmstead. If present what is the significance of their location? For example Bevan¹⁵ has suggested burials were often placed near trackways so the dead could travel along this route to the other world.*

Objective 4: Environment

- A. *Do deposits contain evidence to indicate the local ecology and environment of the site?*
- B. *The evaluation identified only a limited quantity of carbonised material within feature fills. These are likely to provide the best indicator to any cereal crops grown and other wild plants. What evidence is there for*

¹³ Wait, G, 1985, *Ritual and religion in Iron Age Britain*

¹⁴ Hill, JD, 1995, *Ritual and rubbish in the Iron Age of Wessex*

¹⁵ Bevan, B (ed.), 1999, *Northern exposure*



the economy of the farmstead? Animal bone species will also provide a valuable indicator of the pastoral economy, and possibly the utilisation of wild animals.

- C. No waterlogged deposits were located with the evaluation. However, given the low-lying location of the farmstead, these may survive within deeper features such as pits and wells. If so they are likely to provide additional information on the local environment and possibly the economy of the farmstead.*

Objective 5: Methodological development

- A. What is the range of post-depositional processes that have acted on the site and how have these combined to affect the preservation of archaeological remains and interpretations of those remains?*
- B. Can sampling strategies be developed to better target areas with high potential? Should some areas of the site be more fully excavated than others?*
- C. How does the resultant ground plan compare with that suggested by evaluation? Are certain feature types more or less likely to be located by evaluation? With the benefit of hindsight could the trial trenches have been better located?*
- D. Can the pottery assemblage improve the ceramic type series for the region? The preponderance of locally produced coarse wares using local raw material in the Iron Age makes precise dating difficult.*
- E. Although the artefact recovery rate from the evaluation was relatively low, full excavation and systematic metal detecting will increase the potential of artefact recovery. Comparison with the nearby farmsteads investigated on the Biddenham Loop and the Southern Bypass (Albion in prep.) should go some way to contributing to identifying an artefact profile for farmsteads. This will enable them to be placed within the wider context of the more widely investigated villa and urban forms.*



3. PROVISIONAL SUMMARY OF RESULTS

At total of 3915 contexts (recording units) were identified during the investigations (1548 within Area 1 and 2367 within Area 2). These represent components of individual features, for example a ditch “cut” and its “fills” (Figure 6, Figure 7 and Figure 8).

A rapid scan of these records has allowed the contexts to be provisionally grouped and phased. The phases have been assigned to broad chronological periods from the earlier prehistoric to the post-medieval period, which provide the framework for the following discussion (Table 3). **Note.** For ease of reference the text for each phase starts on a new page.

Phase	Chronological Period	Activity Type	Area
1	Earlier prehistoric	Unspecific	1 and 2
2	Early Iron Age	Unspecific	1
3	Late Iron Age/Early Roman	Farmsteads with occasional isolated enclosures	1 and 2
4	Earlier Roman	Farmsteads within extensive enclosure system	1 and 2
5	Later Roman	Farmsteads within individual enclosures	2
6	Medieval	Field system	1 and 2
7	Post-medieval	Quarrying	2

Table 3: Summary of provisional phasing



3.1 Phase 1: Earlier prehistoric

No features were assigned to this phase. Only eight flint artefacts were recovered (3 pieces from Area 1 and 5 pieces from Area 2), all within features containing later pottery. In addition 43 pieces of worked flint were recovered from field artefact collection, although their distribution, again, exhibited no obvious concentration. The majority of the flint comprised late Neolithic/early Bronze Age pieces, with only a small quantity of early Neolithic material. Overall the dispersed distribution of flint artefacts suggests that there was no permanent settlement during this period.



3.2 Phase 2: Early-middle Iron Age (Figure 9)

Although small quantities of pottery of this period were recovered from both Areas 1A and 2B, the only firm evidence for human activity comprised a ditched enclosure in Area 1A.

3.2.1 Area 1 (Figure 10)

In addition to the ditched enclosure G4, one additional feature may have been dug during this period. The latter contained a single sherd of early-middle Iron Age pottery unassociated with any later material. Only six other sherds of this period were recovered, all clearly residual in later features. The small quantity of features and domestic debris from this phase is not suggestive of domestic activity during this period.

3.2.1.1 Ditched enclosure G4

Ditches defining three sides of a large field/enclosure G4 were located towards the SW of the excavation area. The ditch was under 0.8m wide with an asymmetrical concave profile only *c.* 0.2m deep. A number of breaks existed in its length, some of which were clearly the result of later truncation, but others, for example to the NE appear to be genuine. Its full extent is not known but it was at least *c.* 72m by 43m. Although no datable pottery was recovered from the enclosure's fills, it had been truncated by late Iron Age/early Roman features and is, therefore, earlier than these in date. The fills of the ditches were distinctively much lighter in colour than the later darker fills. Only 17 fragments of animal bone were recovered, along with a small quantity of charcoal (environmental samples 17 and 48). The absence of any other domestic debris suggests this enclosure was not associated with settlement.



3.3 Phase 3: Late Iron Age/early Roman (Figure 11)

Individual settlements occurred within both excavation areas during this phase. They were similar in nature and appeared to represent small farmsteads. Both consisted of a single ditched enclosure, buildings and water pits. On the periphery of both were a small number of cremation burials. While there was no evidence for activity within the enclosure in Area 2, that in Area 1 appeared to contain a small square building, which has been tentatively identified as a shrine.

3.3.1 Area 1 (Figure 12)

Approximately 28% of the pottery assemblage from this area was dated to this period. When the distribution of domestic debris is combined with the distribution of features the small extent of domestic activity during this phase is clear. Located in the eastern part of the domestic focus was ditched enclosure G9/10, which contained a square building G1. Adjacent to this were two roundhouses G2 and G3, the latter contained very little domestic debris and its function is uncertain. Other activity is indicated by the presence of indeterminate structural evidence G24, a small cremation cemetery G16/17 and “special” deposit G25. Although there is evidence for religion (the shrine G1), ritual (the “special” deposit G25) and burials (cremation cemetery G16/17), the artefactual and ecofactual assemblages were generally unexceptional and typical of a farmstead.

3.3.1.1 Ditched enclosure G9/G10 containing square building G1

A continuous gully G1, enclosing a square area *c.* 7m wide, is presumed to have been dug for drainage around a square building. The gully was *c.* 0.35m wide and 0.2m deep with asymmetrical sides and a concave base. Although later activity had disturbed much of the interior, two postholes survived which could be foundations for this building. In addition, two short slots may also have served a structural purpose, although their apparent association with the gully makes this uncertain. Material recovered from the gully comprised eight pottery sherds, 17 pieces of fired clay and one fragment of animal bone. The occurrence of square buildings during this period is relatively unusual and the known examples are frequently interpreted as shrines or temples.

The square building is located within a sub-square enclosure, the ditches of which were repeatedly redug. In its original form G10 it was *c.* 25m in diameter with a *c.* 4m gap between its western ditch and the square building. However, the later enclosure G9 was much smaller *c.* 18m in diameter, resulting in the gully around the building draining directly into the enclosure ditch. The ditches on the western side of the enclosure were usually narrowest, giving the impression that the entrance was located on this side. However, an alignment of four small postholes G7 to the south is of some interest because it appears to correspond to a gap in one of the early ditches and its length is restricted to the length of the square building. They are *c.* 0.6m in diameter and 0.3m deep with asymmetrical profiles, steep sides and flat bases.



Approximately 140 pottery sherds (weighing *c.* 2.2kg) were recovered from the enclosure ditch fills. Although many of the fabric types are consistent with those found in the square building, the upper fills contained later Roman pottery. The presence of these is likely to reflect the fact that part of the enclosure was incorporated into the Roman ditched system G22 (Phase 4). Over 100 fragments of fired clay (weighing *c.* 3.2kg) were recovered, the vast majority, like the pottery from segments excavated in the NE of the enclosure (away from the entrance). Fifty-six fragments of animal bone were also recovered. Three iron nails and three unidentified iron fragments (RAs 26, 30 and 53) and a quernstone (RA 39) were also recovered. Environmental sample 14 contained scarce charcoal and unidentifiable grain.

3.3.1.2 “Special” deposit G25

A small feature G25, originally interpreted as a posthole on the basis of its profile and dimensions, had some unusual contents. It appears that the partial remains of two chickens were buried in the hole along with two Roman coins (RA 24 and 25), one dated to the 1st century AD. Four undiagnostic sherds of Roman pottery were also present. The presence of the remains of the chickens, presumably killed during sacrifice, is especially significant given their location only *c.* 3m NW of the enclosure G9/10 which contained the possible shrine.

At Wavendon Gate, Milton Keynes a partial cockerel skeleton was found in a similar feature and considered to be an offering made prior to the erection of a cult-post¹⁶.

3.3.1.3 Roundhouses G2 and G3

Pennanular gully G3 had 45 degree sides and a flat base under 0.4m deep and is presumed to have defined a roundhouse with a diameter of *c.* 9m. A gap of 1m in the gully on the W side was associated with two small interrupting postholes and probably represents the entranceway. W-facing entrances are relatively rare during this period. The gully truncated the earlier enclosure ditch G4 (Phase 2) and only the NW half survived, the remainder being truncated by a modern drainage ditch. The 59 pottery sherds (weighing *c.* 900g) recovered from the gully are consistently late Iron Age in date, with the majority derived from the southern-most segment. In addition, 50 fragments of animal bone and 47 fragments of fired clay were recovered. Other than the latter, and the intercutting postholes, no evidence for the structural elements of the building survived. Environmental samples 18 and 19 contained small quantities of charcoal and scarce, unidentifiable grains.

The circuit of the gully defining roundhouse G2 *c.* 74m to the SE was complete and would suggest a building of comparable diameter to roundhouse G1. The gully itself was *c.* 0.3m wide and *c.* 0.15m deep with asymmetrical sides and a flattish base. Gaps were identified to the N (4m wide) and S (2.8m) indicating possible entrances. However, the gully was very shallow in the vicinity of the northern gap, so that the apparent entrance may merely be the

¹⁶ Williams, R J, Hart, P J and Williams, A T L, 1996, *Wavendon Gate: A Late Iron Age and Roman settlement in Milton Keynes*.



result of severe plough truncation. Although only 0.1m deep, the terminals of the gully to the S are more abrupt and, therefore, more convincing as part of an entrance. A small number of postholes within the interior may be associated but form no obvious pattern.

Two deposits were identified within the gully, including a thin primary fill. Substantial fragments of a human skull appear to have been deliberately placed within the partially infilled gully *c.* 1m E of the southern entrance. Five sherds of late Iron Age/early Roman pottery were recovered from the vicinity of the skull, the only pottery recovered from the gully. Environmental sample 60 contained some charcoal and a few unidentifiable grains. Three postholes within the interior may be evidence for the roundhouse's structure.

3.3.1.4 Structural slots G24

Two lengths of curving slots are suggestive of structural features associated with a roundhouse. They were both 0.3 wide with steep sides and a flat base, 0.4m deep. Their association with a linear slot with a similar profile is uncertain. They contained 20 sherds of pottery (weighing *c.* 0.5kg) and six fragments of animal bone.

3.3.1.5 Cremation cemetery G16 and G17

A small cremation cemetery was situated 20m NE of enclosure G9/10 and comprised two groups of burials. Five graves were present in G16 containing between 8g and 373g of human bone. Greater quantities of human bone (*c.* 450g) survived in the two graves G17 *c.* 12m to the SE. The graves were only *c.* 0.15m deep but the surviving bone was in good condition.

It is likely that at least two of the G16 burials were placed in urns. Although significant quantities of pottery were found in two other graves, it is uncertain at this stage (due to severe truncation) whether or not these represent urns. The presence of urns has not been conclusively demonstrated for either of the two graves in G17. However, one contained a miniature hand made jar, presumably placed as a grave good. One grave contained an iron nail, presumably derived from pyre debris. The rarity of charcoal within environmental samples 49, 50, 53, 54, 55, 56, 58, 59 and 73 (G16) and 41-47 (G17) suggests that the bone had been carefully picked from the pyre debris.

3.3.2 Area 2 (Figure 13)

Approximately 18% of the pottery assemblage from this area was dated to this phase. The distribution of domestic debris and features indicates that settlement was concentrated in the NE part of this area, possibly centred on enclosure G56. No evidence for activity was located within the interior of the latter, although pit G63 was situated adjacent to its southern entrance. The purpose of ditch lengths G62 are uncertain, although it is possible they indicate the presence of additional enclosures. Adjacent to enclosure G56 on the N and S are a number of short structural features G59/76/65, which may indicate the location of buildings. A large water pit G33 is located on the western edge of the domestic focus. Dispersed pits G77 (with pit G57 at the western extremity of the group within Area 2C) and an isolated cremation



burial G57 occurred outside the domestic focus. The artefactual and ecofactual assemblages were generally unexceptional and typical of a farmstead, although small quantities of iron working residues were recovered.

3.3.2.1 Ditched enclosure G56

A sub-square pennanular ditch defined an enclosure G56 *c.* 19m wide. It had been truncated by later activity to the N and E. The surviving ditches were *c.* 1m wide with concave profiles *c.* 0.6m deep. A gap of 4m on the SE side appears to represent the only entrance. There was no evidence for internal activity. The fills contained 58 pottery sherds (weighing 352g), 97 fragments of animal bone, one coin (RA163) and small amounts of slag (568g) and vitrified clay (RA 219).

3.3.2.2 Pit G63

Situated *c.* 3.5m SE of the entrance into enclosure G56 were two large intercutting pits G63. Although between *c.* 3 and 5m in diameter, they were only *c.* 0.4m deep with steep sides and a flat base. They contained *c.* 100 pottery sherds (weighing 866g), 45 fragments of animal bone, along with a small quantity of slag (246g) and vitrified clay (RA 228), a very similar assemblage to the adjacent ditch fills.

3.3.2.3 Ditches G62

The purpose and relationship of W-E ditches G62 with enclosure G56 is uncertain due to extensive later activity. They were *c.* 1.2m wide, with a concave profile and *c.* 0.3m deep. A gap of 9m defined by abrupt terminals probably represents an entranceway. The ditch contained two distinct fills, the lower one noticeably light in colour with very little domestic debris. This included 81 pottery sherds (weighing 1.5kg), 57 fragments of animal bone, along with a small quantity of fired and vitrified clay. In addition, 98 hobnails (RA 199) suggest discarded shoes, while quern fragment (RA225) and two unidentified iron objects (RA 201 and 203) were also recovered. Environmental samples 93 and 118 contained moderate quantities of charcoal along with cereal grain and weed seeds.

3.3.2.4 Curved linear slots G59 and G76.

Two curved “eyebrow” slots G59 were located *c.* 25m NW of enclosure G56. Some 4m apart, they were comparable in nature to slots G24 on Area 1 (between 0.3m and 0.7m wide with asymmetrical but steep sides, with a slightly concave base between 0.3 and 0.6m deep). Both were *c.* 6m long with abrupt terminals suggestive of a structural function. Each had a single homogenous fill and in total they contained 27 pottery sherds and 62 fragments of animal bone.

G76 was an almost identical slot situated *c.* 65m to the SE on the other side of enclosure G56. It contained 14 pottery sherds and 16 fragments of animal bone. Other than being structural in function, the exact purpose of these slots is uncertain. Given the abrupt terminals it seems unlikely that their extent is the result of plough truncation. It is possible they held timbers providing some kind of windbreak around unspecified activity.



3.3.2.5 Linear slots G65.

G65 consisted of three linear slots each *c.* 7m long, 0.4m wide and 0.15m deep. Their sides were quite steep with a slightly concave base. Two were parallel with the third lying perpendicular. Each had a single homogenous fill, which contained 7 pottery sherds, 13 fragments of animal bone and 60 fragments of CBM.

The only possibly associated features were two small postholes and a small pit (excavated in Trial Trench 2). The slots would appear to have served a structural function. There is insufficient evidence to suggest that they were definitely part of a building. However, this remains a possibility.

3.3.2.6 Large water pit G33

A very large, ovoid pit was situated *c.* 30m SW of enclosure G56. It was *c.* 11m in diameter, with sides sloping at 45 degrees and over 1.2m deep. The upper fills contained the majority of the 34 pottery sherds and 52 animal bone fragments. The lower fills were darker and more humic presumably the result of anaerobic conditions.

3.3.2.7 Dispersed pits G74 and G77

Five sub-circular pits G74 occur within *c.* 8m of each other, *c.* 10m E of enclosure G56. Several were truncated by ditch G62 suggesting that they are earlier. They varied between *c.* 1m and *c.* 4m in diameter and were all under 0.5m deep. They contained 21 pottery sherds, 50 fragments of animal bone and fragments of slag (282g). Environmental samples 113 and 115 contained scarce charcoal, along with moderate quantities of cereal grain, chaff and weed seeds.

G77 represents a dispersed N-S band of eight pits of a variety of shapes and sizes, apparently aligned on enclosure G56. They are therefore assigned to this phase, although they produced no datable pottery or other domestic debris.

3.3.2.8 Isolated pit G57

The most westerly feature within Area 2 was an isolated, ovoid pit in Zone 2C. The pit was 3.6m by 2.5m with sides sloping gently to a fairly flat base at a depth of 0.6m. Unlike the dispersed pits G77 to the E, it contained 17 pottery sherds, 40 fragments of animal bone and 4 fragments of fired clay.

3.3.2.9 Isolated cremation burial G73

A small circular grave 0.4m in diameter and 0.09m deep was located towards the S of the excavation area isolated from contemporary activity. Although the grave had been heavily truncated, *c.* 350g of human bone was survived. It is likely that the 42 pottery sherds (weighing 304g) recovered from the grave were originally part of the urn. The large quantity of charcoal within the grave fill is suggestive of the burial of pyre material. Environmental samples 102, 106 and 107 contained frequent charcoal, along with cereal grain, chaff and weed seeds.



3.4 Phase 4: earlier Roman (Figure 14)

In both excavation areas the dispersed Phase 3 farmsteads were replaced by a system of rectangular enclosures. Both systems had a similar layout and appear to have incorporated elements of the earlier settlements. Although both systems included a major SW-NE boundary, aerial photographic and geophysical evidence suggests that, although on the same alignment, these are not actually part of the same boundary. Sufficient evidence was recovered, in terms of the distribution of features and domestic debris to suggest which enclosures contained domestic foci. Features associated with these comprised structural elements (assumed to be foundations for buildings), water pits and other pits of uncertain function. Peripheral to the domestic foci were burials. The artefactual and ecofactual assemblages were again typical of farmsteads, although there is evidence of gravel quarrying and ironworking in Area 2.

3.4.1 Area 1 (Figure 15)

The majority of the pottery assemblage (68%) from Area 1 is dated to this phase. An extensive enclosure system G22 extended over the entire excavation area and incorporated part of the earlier enclosure G9/10 (Phase 3) in its layout. The majority of the enclosures were attached to the S side of the major SW-NE boundary G21. When the distributions of domestic debris and smaller features (such as pits and postholes) are combined, it is possible to suggest that the smaller enclosures in the main area of 1A contained a domestic focus, covering an area of c. 0.2ha.

No obvious buildings were identified, although structural features G6 and G23 are likely to be associated and thus indicate their probable location.

Pits/postholes G5 and pits G18-20, along with water pits G11, G12, G13 and G26 were located within and to the periphery of the domestic focus along with inhumations G14 and G15.

3.4.1.1 Major boundary ditches G21

The major SW-NE boundary had been redug on a number of occasions and was an integral part of the enclosure system. It extended for over 240m continuing beyond the limit of excavation in both directions. The ditches were c. 1.7m wide with concave profiles and were under 0.5m deep. Their fills contained 354 pottery sherds (weighing 7.5kg) and 102 fragments of animal bone, the majority of which derived from segments excavated within the domestic focus. One ditch segment [5551] alone contained over 1kg of pottery. Environmental sample 83 did not contain any charred plant remains.

3.4.1.2 The enclosure system G22 and G30

Enclosure system G22 lay predominately to the S of the major SW-NE boundary G21. Ditches were dug perpendicular and parallel to this boundary creating square and rectangular enclosures. Generally the smaller enclosures (c. 25m by 20m) were located adjacent to the major boundary and the larger ones (c. 60m wide) on the periphery of the system, sometimes continuing beyond the limit of excavation. Surprisingly few entrances into enclosures were identified.



The enclosure ditches were generally *c.* 1.2m wide with concave profiles and 0.5m deep. Slightly narrower ditches appear to define enclosures within the domestic focus, although the significance of this is uncertain. Nearly 1500 pottery sherds (weighing *c.* 26kg), 731 fragments of animal bones, 144 fragments of fired clay and 15 pieces of CBM were recovered from the ditch fills. It is striking that 95% of this material derived from excavated segments within the domestic focus. One segment [6008] alone contained over 1kg of pottery. Other artefacts recovered included 11 nails, a hobnail (RA 59), a single coin (RA 50), an unidentified iron fragment (RA 57) and a fragment of vessel glass (RA 40). Environmental samples 10, 13, 15, 16, 20, 26, 27, 31, 35, 51, 52, 61, 63, 65 and 68 contained variable quantities of charcoal, grain, chaff and weed seeds, some clearly derived from crop processing.

The two parallel ditches assigned to G30 are very different to those within G22 in that they are only 0.5m wide and 0.4m deep. However, they are aligned parallel to the main enclosure system suggesting they are in some way associated. It is possible they represent an earlier enclosure system, which has largely been destroyed by the wider enclosure ditches of G22. They contained 15 pottery sherds and 146 fragments of animal bone. One segment contained a tiny fragment of unburnt, human bone. Environmental sample 75 did not contain any charred plant remains.

3.4.1.3 Structural elements G6 and G23

Very few structural elements, for example postholes and slots, were identified and where present they did not form obvious buildings. However, it is significant that the two structural groups currently identified did occur within the domestic focus. G6 comprised eight postholes situated in the corner of an enclosure. All were under 0.5m in diameter and *c.* 0.3m deep with steep sides and a flattish base. Several contained limestone packing material. No significance could be attached to their layout. Despite the fact they were all half-sectioned they contained only one tiny fragment of pottery and animal bone. Environmental samples 32 and 33 contained moderate quantities of charcoal, but scarce grain and chaff.

At least six linear, structural slots G23 were identified, all within *c.* 8m of one another. They were all under 8m in length, *c.* 0.2m wide with vertical sides and flat bases *c.* 0.15m deep. Although they appear to be designed to hold timber beams, presumably as part of a building, their arrangement does not indicate its layout. Only two sherds of pottery were recovered from their fills.

3.4.1.4 Gravel surface G29

A small area of redeposited gravel, with associated less stoney deposits was located over an area *c.* 5m by 2m. It contained 175 pottery sherds (weighing *c.* 3.8kg), 148 fragments of animal bone and four pieces of CBM. The metal artefacts included 11 iron nails and three unidentifiable iron fragments (RA 16, RA 17 and RA 43), along with a piece of vessel glass (RA 8). This surface could either represent a floor within a building or an external yard.



3.4.1.5 Water pits G11, G12, G13, G26 and G28

Five large pits, all *c.* 3m in diameter with steep sides over *c.* 1m deep are interpreted as water pits. They were located within different enclosures over the SW part of the excavation area (not just within the domestic focus).

G11 lay outside the domestic focus and appeared to truncate one of the enclosure ditches G22. It was pear-shaped *c.* 4m long and just over 1m deep. The lower fills contained a lot of gravel and little domestic debris, suggesting they derived from the weathering of the sides. However, the upper dark fills contained 17 sherds of pottery (weighing 0.5kg), 131 animal bone fragments and a bronze pin (RA 42) suggesting that the pit was infilled with domestic debris.

Also outside the domestic focus, water pit G12 was situated within one of the larger enclosures/fields *c.* 10m from the nearest boundary. It was circular in plan, *c.* 3.5m in diameter with in places slightly stepped sides *c.* 1m deep. The lower fills exhibited a sequence of grey silts interleaved with gravel, possibly representing episodes of silting followed by weathering of the sides. Only nine pottery sherds and 11 fragments of animal bone were recovered, mainly from the upper fills. Environmental sample 78 did not contain any charred plant remains.

The third, water pit/well G13 was situated inside one of the smaller enclosures within the domestic focus. An oval pit, *c.* 3m in diameter, was dug to a depth of *c.* 2.3m. Within this an unmortared, stone-lined shaft (with an internal diameter of 0.65m) was constructed. Fairly pure, firm, grey clay was deposited behind the stone shaft. The lower fills of the shaft were dark silty deposits containing little domestic debris. The upper fills contained 81 pottery sherds (weighing 1.6kg) and 20 fragments of animal bone. Environmental sample 76 contained no charred plant remains but was waterlogged and contained evidence for a range of plant species and insects.

Water pit G26 was situated on the periphery of the domestic focus in the corner of a small enclosure. It was unusual in that it was sub-rectangular in shape *c.* 3.5m by 3m. Its infilling followed a similar pattern to the others with domestic debris concentrated in the upper fills. The assemblage included 26 pottery sherds (weighing 0.5kg), 103 fragments of animal bone and 10 fragments of fired clay.

Water pit G28 was also located within the domestic focus. However, at *c.* 5.2m it was the largest of all the water pits. It was located outside the Area of Archaeological Significance and was, therefore, only partially investigated. Unusually, it contained no domestic debris.

3.4.1.6 Other pits G5 and G8

An alignment of four pits G5 within the domestic focus was aligned parallel to, and adjacent to, the enclosure ditch. They were all oval in plan *c.* 1.5m in length, with concave profile and *c.* 0.5m deep. Two of the pits contained domestic debris in the form of 16 pottery sherds (weighing 0.5kg), 12



fragments of animal bone and 11 pieces of fired clay. Environmental samples 21-24 from separate pits contained scarce charcoal, but were relatively rich in grain and chaff fragments.

Up to six intercutting pits G8 were assigned to the same group because they were similar in nature (all sub-circular with steep sides under *c.* 0.4m deep). They contained only four pottery sherds, two fragments of animal bone and two pieces of fired clay.

3.4.1.7 *Peripheral pits and postholes G18, G19 and G20*

A small group of pits and postholes G18, G19 and G20 lay *c.* 90m to the NE of the domestic focus. They varied in size and shape, but were generally under *c.* 0.5m in diameter and *c.* 0.3m deep. In total they contained 60 pottery sherds (weighing 666g), the low average sherd weight (13g) reinforces the peripheral nature of activity in this area. Other domestic debris included 12 tiny fragments of animal bone, a single nail, a fragment of a bronze bracelet (RA 51) and 8 pieces of fired clay. Environmental samples 79 and 80 contained some charcoal, but were relatively rich in seeds, chaff and weed fragments.

3.4.1.8 *Inhumation burials G14 and G15*

Two graves were located only 20m from the earlier cremation cemetery G16 and G17 (Phase 3) on the NE periphery of the domestic focus. They were *c.* 6m apart, on different alignments and appear to have been within separate enclosures.

The skeleton within grave G15 was in very poor condition having been subject to considerable disturbance. The grave was aligned SW-NE and was only 0.05m deep. Only the right leg and the right side of the crushed pelvis remained. One tiny sherd of pottery was recovered from the grave fill. Environmental samples 37 and 57 contained no charred plant remains.

NW-SE grave G14 was more substantial, 1.8m long and 0.2m deep. The skeleton, therefore, survived in a better condition. The body had been laid out in a prone position with the head at the SE end facing NE. Placed near the left hand were six substantial sherds from a narrow necked jar, which given its relationship to the skeleton, appeared to have been smashed on deposition within the grave. This may have been an accident, although the ritual 'killing' of objects is relatively common practice in the earlier Roman period.¹⁷ Seventy-nine other pottery sherds were also recovered, although given these are all in different fabrics they are unlikely to have been grave goods. Three groups of hobnails (approximately forty-seven in total) were identified from the area of the skull, presumably indicating shoes deposited as grave goods. Environmental samples 49, 50, 53-56, 58, 59 and 73 contained no charred plant remains.

¹⁷ Philpott, R., 1991, *Burial Practices in Roman Britain*, BAR British Series 219.



3.4.1.9 Horse burial G27

An articulated, adult horse skeleton was found in a shallow pit *c.* 2.5m N of major boundary ditch G21. Although only small parts of the skull survived and some of the limb extremities were missing, the animal is believed to have been buried complete. No artefacts were recovered from the grave fill, although its orientation, parallel to the boundary ditch suggests the burial took place during this period.

3.4.2 Area 2 (Figure 16)

The vast majority of the pottery assemblage (80%) recovered from this area dates to this phase. An extensive enclosure system was established over the entire excavation area, partly incorporating the earlier enclosure G56 (Phase 3) in its layout. The majority were attached to the major boundary ditches G41 (the larger enclosures G42 and G44) and G48 (the small enclosures G49/51/52/53/72). All of the latter enclosures were attached to the E side of major boundary G48, which appears to represent the western limit of the settlement. When the distribution of domestic debris is combined with the distribution of smaller features, such as pits and postholes, it is possible to suggest the existence of at least two domestic foci.

No conclusive evidence for buildings was found. The enclosures contained scatters of postholes G58, pits G53/64, water pits G32/34/35/37/66, extensive areas of quarrying G60/67/67/70/71 and two inhumations G31/75.

3.4.2.1 Major boundary ditches G41/G40 and G48

The entire enclosure system articulated around major boundary ditches G41/40 and G48.

NE-SW ditch G41 extended for *c.* 150m continuing to the NE beyond the limit of excavation Area 2B. However, its continuation G79, was located within Area 2C transects *c.* 50m to the NE. Ditch G41 turned at the SW onto a NW-SE alignment (G40), which was very different in nature (*see* below). The original alignment of ditch G41 incorporated the NW side of earlier enclosure G56 (Phase 3) possibly suggesting the continued use of this enclosure. Its alignment also appears to bend slightly to respect earlier water pit G33 (where there is a noticeable kink in the alignment).

Ditch G41 was redug on many occasions probably over short lengths rather than in its entirety. These were all between *c.* 1.5 and 3m wide with asymmetrical profiles and concave base up to 1.2m in depth. The pattern and nature of filling was similar. The lower fills contained a lot of gravel and little domestic debris in contrast to the upper ones. Nearly 250 pottery sherds (weighing 2.8kg) were recovered, along with 115 fragments of animal bone, vitrified clay, fired clay, slag (272g) and 4 nails. Metallic objects recovered included a coin (RA 71), a bronze disc (RA 70), a bronze pin (RA 72) and unidentified bronze and iron artefacts (RA 74, 77 and 103). There was a marked reduction in the quantity of debris away from the domestic foci and especially towards the edge of the excavation area. In contrast, only 15 pottery



sherds and two fragments of animal bone were recovered from the fills of ditch G79, the continuation to the NE within Area 2C.

Ditch G41 changes direction at the SW and follows a NW-SE alignment as G40. Although its width (*c.* 1.2m wide) and profile (asymmetrical) were similar to G41, it was only *c.* 0.3m deep and did not appear to have been redug. The lower fills contained a lot of gravel and very little domestic debris. The upper fills contained five pottery sherds (weighing 200g) and two fragments of slag (400g). Seven coins (RAs 121, 122, 123, 124, 130, 168, 169) were recovered within 0.5m of each other, adjacent to, but not at, the change in alignment. The same area also produced two bronze fragments (RA 125 and 131).

Ditch G48 was perpendicular to and joined ditch G41 adjacent to, but not exactly at, its change in alignment. It extended for *c.* 190m on a NW-SE alignment continuing beyond the limit of excavation. Like G41 it had been redug on many occasions (several lengths of which were quite short) possibly at the time of enclosure ditch renewal. Generally the ditches were between *c.* 1 and 2m wide with concave profiles and under 0.8m deep. The ditches shallowed considerably to *c.* 0.1m at the S, probably a reflection of severe plough truncation in this area. The fills contained 235 pottery sherds (weighing 2.5kg), 303 fragments of animal bone and 11 fragments of CBM. The vast majority of this material, including one deposit containing three semi-complete vessels, derived from the northern half of the ditch length. Metal objects were restricted to four hobnails, (RA 272), two ordinary nails and an iron strip (RA 280). Environmental samples 96-99 and 101 contained no charred plant remains.

3.4.2.2 Large enclosures G42 and G44

The land to the N of major ditch G41 was divided into at least three enclosures. The enclosure defined by G40 and G42 was *c.* 50m wide and continued beyond the limit of excavation to the N. It contained no internal features, although it is noticeable that the majority of the pottery recovered from its southern boundary G41 occurred towards its SE corner. It was bounded to the E by two parallel ditches G42 *c.* 0.7m wide and 0.2m deep with asymmetrical profile with concave profiles. These contained 36 sherds of pottery (weighing 400g), 60 fragments of animal bone, six pieces of CBM and 15 fragments of human bone. The majority of this material derived from segments excavated adjacent to pits G32 and G60 (see below).

Ditch G44 formed the E side of a second smaller enclosure which contained one of the domestic foci (see below). It was *c.* 1.2m wide with an asymmetrical profile concave base and *c.* 0.4m deep. Its fills were very similar in character to those within G42. They contained 305 pottery sherds (weighing 3.9kg). The vast majority (2.5kg) of this derived from a single undiagnostic grog-tempered vessel, recovered from a central segment within the ditch length. In addition, 83 animal bones, 39 fragments of CBM and a tiny quantity of human bone were recovered. Environmental samples 142 and 143 contained no charred plant remains.



3.4.2.3 *Smaller enclosures G49, G51, G52 and G53*

An arrangement of at least six enclosures was attached to the E side of major NW-SE ditch G48. Although there is no conclusive stratigraphical evidence, the nature and arrangement of the enclosures suggests that they were not dug at the same time as the boundary ditch. The majority of the enclosures are under 16m wide (SW-NE), but their length varies considerably.

The arrangements of the eastern ditches G49 and G51 at the N of the system suggest that they may have bounded two separate enclosures. It is, therefore, likely that the southern boundary between the two is obscured by later enclosure G50 (Phase 5). Ditch G49 was attached but perpendicular to major boundary G41 and extended S for *c.* 42m. It had an asymmetrical profile *c.* 0.7m wide with a concave profile *c.* 0.40m deep. At the S it terminated in a butt-end *c.* 0.5m deep. There is no evidence for internal activity in the form of contemporary features. The ditch contained 16 pottery sherds and 38 animal bone fragments. Metal objects derived from the ditch included two coins (RA 101 and 120) and an iron plough coulter (RA 126). The latter derived from the terminal.

The next enclosure to the S was bounded by ditch G51 to the E and G52 to the S. At *c.* 17m it was slightly wider, but once again contained no evidence for internal activity. The eastern boundary had been redug on a number of occasions, possibly corresponding to recuts in ditch G48 to the W. Generally the ditches were under 0.7m wide with concave profiles 0.4m deep. The ditch contained 115 pottery sherds (weighing 1.8kg), 110 fragments of animal bone and 7 fragments of CBM, all distributed fairly evenly along its length. It is, however, noticeable that a concentration of pottery derived from ditch G48 adjacent to the postulated NW corner of the enclosure.

Ditch G52 may be a later addition to create a small enclosure bounded by G48 and G51. These enclosed an area of only *c.* 15m adjacent to a “funnel” arrangement of ditches to the S. The fills of G52 contained 11 pottery sherds and 46 animal bone fragments.

Ditches G53 to the S of this small enclosure appeared to form a “funnel”-type arrangement being *c.* 15m apart to the E and narrowing to only *c.* 3m at the W. The ditches had been redug on a number of occasions. They were generally under *c.* 0.7m wide, with concave profiles 0.35m deep. Their fills contained 110 pottery sherds (weighing 1.1kg), 56 fragments of animal bone, two fragments of CBM, three hobnails (RA 183) and an unidentified iron object (RA 193). The majority of the pottery occurred centrally within the southern ditch length of the funnel arrangement and appeared to contain a number of complete or semi-complete vessels.

The southern-most enclosure in this series, constructed against major ditch G48, was *c.* 17m wide and over 80m in length. The ditch to the E got progressively shallower to the S and finally disappeared. The majority of the enclosure was devoted to quarrying G71 and the linear arrangement of this demonstrates that an eastern boundary had once existed.



3.4.2.4 Additional ditched enclosures G72

Several additional enclosures were identified in the apex of major boundary ditches G41 and G48/49. These were broadly perpendicular to the main arrangement, but had elements that distinguished them from the enclosures described above. For example, they were located largely within a domestic focus, they were defined by small ditches (under 0.6m wide and 0.6m deep), several were independent of the major boundary ditches and they contained several breaks/entrances.

Their fills contained 152 pottery sherds (weighing 1.7kg), 100 fragments of animal bone and 20 fragments of CBM. In terms of metal artefacts they contained three coins (RA 75, RA 138 and RA 140), a button (RA 76) and two nails. The vast majority of the pottery and two of the coins derived from ditch segments in-between pits G55 and G64. Although the enclosures contained no internal features, the quantity of domestic debris and proximity of pits G55 and G64 suggest this was an area of habitation.

3.4.2.5 Pits G55

Two large pits within the domestic focus are discussed together due to their proximity (within 2.5m of each other) and similarities in plan. However, there are also a number of significant differences between the two pits, most noticeably the ceramic assemblage.

The eastern pit was sub-circular in plan with steep sides and a pointed base *c.* 0.9m deep. Although it produced a vast assemblage of pottery (approximately 328 sherds weighing 8kg), only four fragments of animal bone were present. In addition, 49 fragments of CBM and a socketed iron knife (RA 243) were also recovered.

The western pit was circular with more convex sides and a concave base *c.* 0.7m deep. It contained only 35 pottery sherds (weighing 460kg), seven fragments of animal bone and no CBM.

3.4.2.6 Pits G64

A group of ten intercutting pits G64 appears to have been deliberately located just to the S of enclosures G72 within one of the domestic foci. They include a variety of pit forms with the deepest being 0.8m. Like pits G55 to the E they contained a vast quantity of ceramic material, including 825 pottery sherds (weighing 22.5kg) and 50 fragments of CBM. However, in contrast to pits G55 they also contained a large animal bone assemblage comprising 693 fragments (weighing 14.5kg), along with a small quantity of slag.

3.4.2.7 Pits G60

Group of at least seven pits, three intercutting, arranged parallel to enclosure ditch G42. They are situated between the ditch and pit/posthole cluster G58. The pits vary between 1.5m and 3.5m in diameter and have slightly irregular profiles under 0.5m deep. They contained 57 pottery sherds (weighing 700g), 17 fragments of animal bone, slag (97g), a nail and two pieces of iron fragments (RA 244 and RA 267).



3.4.2.8 Small pit / posthole cluster G58

The enclosure defined by ditches G42 and G44 contained a domestic focus. Along with large quantities of domestic debris it also contained settlement-type features, mainly to the N, adjacent to water pit G32 (*see* below). Their proximity to Phase 3 structural slots G59 may suggest continuation of the same kind of activity in this area.

The features formed no obvious pattern, although they were restricted to a 15sqm area. They comprised a variety of forms and sizes although the fills were generally similar. Two of the postholes showed some evidence of packing and were *c.* 0.35m deep whilst others were very shallow. They contained only 11 pottery sherds, 17 fragments of animal bone, 7 fragments of fired and vitrified clay. Samples 126 and 127 contained frequent charcoal and moderate quantities of cereal grain.

3.4.2.9 Water pits G32, G34, G35 and G37

Four large pits, all *c.* 4m in diameter with steep sides over *c.* 1m deep are interpreted as water pits. They were located mainly to the N of the excavation area. Generally they exhibit a similar filling sequence with dark silty inclusion-free deposits towards the base, sealed by lighter more mixed material containing domestic debris.

G32 within the northern domestic focus was a large (*c.* 4m in diameter), irregular, pear-shaped pit situated adjacent to settlement-type features G58 and ditch G42. It was over 0.9m deep, steep sided to the W, but with a gradual slope from the E. It contained only four pottery sherds and nine fragments of animal bone.

Water pit G34 was located on the eastern periphery of the domestic foci within one of the G72 enclosures. It was of a more ovoid shape *c.* 4m by 2.5m, with steep sides and a flattish base, 0.8m in depth. It contained 23 pottery sherds (weighing 253g) and 16 fragments of animal bone.

G35 represents two large, intercutting pits on the western periphery of a domestic focus. It was situated in the vicinity of pits G55, just outside one of the G49 enclosures. They were *c.* 4m in diameter with steep sides to a concave base *c.* 1.3m deep. They contained 197 pottery sherds (3.9kg), 108 fragments of animal bone, along with nine fragments of CBM. Environmental samples 123 and 139 contained no charcoal but moderate quantities of grain, chaff and weed seeds.

Water pit G37 was situated in a fairly isolated location away from the enclosures and domestic foci on the northern edge of quarrying G70. It was ovoid in shape *c.* 3.7m, with concave sides *c.* 1m deep. It contained six pottery sherds and one fragment of animal bone.

3.4.2.10 Isolated burials G31/75

Both burials were inhumations and situated in isolated locations. Both had been disturbed by ploughing.



G31 was identified within one of the enclosures G72 to the N of a domestic focus. It had been heavily truncated. The grave was aligned SW-NE parallel to major boundary G41 which was *c.* 15m to the N. The body had been interred in the supine position with the head to the SW, resting on a pillow stone. The arms were extended with the hands over the pelvis. The legs were straight and quite close together with further stones apparently placed under the knees. Only fragments of the skull survived; the lower legs and feet were missing. No datable material was recovered. Environmental samples 87-89 contained no charcoal, but small quantities of grain and chaff.

Inhumation G75 was situated *c.* 12m W of major boundary ditch G48, well away from any settlement-type evidence. It was identified during the evaluation and to prevent the possibility of further damage was fully excavated at the time. The grave was aligned NW-SE with the body interred in the supine position with the left arm to the side of the torso and the right arm bent over the pelvis. The skull was slightly raised and had, therefore, suffered the greatest damage. A near complete, fine, greyware vessel had been placed adjacent to the left hand clearly as a grave good. It is uncertain if the same status can be attached to the unidentifiable bronze fragment (RA 1).

Approximately 194g of cremated human bone was found within quarry pits G81 (Area C) (*see below*).

3.4.2.11 Quarrying G67, G68, G70 and G71

Irregular shallow pits occurred in several distinct areas across the enclosure system. They have been interpreted as quarry pits. Very few of the pits were deep enough to reach the underlying clay and, therefore, it is clear that the majority were dug to extract gravel. Four discrete areas of extensive quarrying were identified G67, G68, G70 and G71, and these will be discussed in turn. Although pits in several of these areas appear to “intercut” this is likely to be a reflection of the pits being left open and the upper parts of adjacent pits eroding into each other.

The discrete area of quarrying towards the NE G67 was situated to the S of major boundary ditch G41 and E of another discrete area of quarrying G68. It clearly continued beyond the limit of excavation and pits G81 (Area 2C) were very similar. No quarry pits were located within the transects opened further to the E giving a maximum SW-NE extent of *c.* 90m. A number of the pits to the W and E of this group were isolated but close to the limit of excavation there was an arrangement of intercutting pits. All the pits were under 0.3m deep with irregular forms. They contained only five pottery sherds and nine fragments of animal bone. Pits G81 (Area 2C) contained cremated human bone, although these do not appear to be part of a formal burial.

One of the excavated pits within G66, the more isolated quarry pits just north of G67 was very different to the norm. At *c.* 0.7m deep it was deeper and it also had a more regular oval shape. It was dug into dark blue/grey clay and appeared to have had stepped sides. The filling deposits contained more clay



and a greater amount of domestic debris. The latter included 75 pottery sherds (weighing 1.5kg), 40 fragments of animal bone, iron nails and a quantity of slag (539g). Environmental samples 110 and 112 contained some charcoal, no grain or chaff, but relatively high quantities of weed seeds.

A band of “intercutting” quarry pits G68 was aligned NW-SE. It was over *c.* 120m in length (continuing to the N and S of the excavation) and *c.* 15m wide. Although only ditch G44 was clearly identified as bounding the quarry pits, their arrangement suggests boundaries existed on both sides. On the surface it was impossible to differentiate between pits. Therefore, a 1.5m wide segment, 9m in length was excavated by hand, locating at least 10 pits. Generally the pits were all oval in plan, *c.* 2m in diameter and 0.3m deep. This segment suggests that several hundred individual pits were dug to form G68. Together all these pits (not just the hand excavated ones) produced 142 pottery sherds (weighing 2.5kg), 66 fragments of animal bone, eight fragments of CBM, slag (1314g) and shell. Coin (RA 167) and stylus (RA 166) were recovered from the surface of different quarry pits. Environmental samples 121 and 122 contained scarce charcoal, moderate quantities of grain and chaff, but relatively large quantities of weed seeds.

G70 and G71 were discrete areas of quarry pits to the S of the excavation area. It is clear that G71 was originally confined to the enclosures formed by G48 and G53. A gap of *c.* 10m separated this area from G70, which must have been contained by some boundaries. Hand excavated segments and boxes demonstrated that there were a large number of “intercutting” pits. These were again oval in shape, under 2m in diameter and under 0.3m deep. Their fills were lighter in colour than those filling the northern quarry pits. G70 contained 264 pottery sherds (4.8kg), 54 fragments of animal bone and 40 fragments of CBM. In terms of metal artefacts they contained iron fragments (RAs 3, 247, 250 and 251), an iron hook (RA 252) and five nails. G71 contained 51 pottery sherds, 20 fragments of animal bone and two fragments of CBM. The vast majority of the domestic assemblage derived from only one or two pits, which appear to have become a focus for rubbish dumping. Environmental sample 146 contained no charred plant remains.

3.4.2.12 Enclosures to NE G80

The arrangement of ditches G80 within Area 1C suggests that an isolated enclosure may have been attached to the S side of the major SW-NE boundary G41/79. Contained four pottery sherds and the general absence of domestic debris suggests this was not associated with settlement activity.



3.5 Phase 5: Later Roman (Figure 17)

Later Roman activity has been identified mainly on stratigraphical grounds rather than significant variations in the datable artefact assemblage. The most substantive activity during this phase was in Area 2 where a single large enclosure and two smaller ones were dug. The quantity of domestic debris recovered suggests that settlement continued in this area, although other than the enclosure ditches very few features were assigned to this phase. Several large pits/ponds were dug in Area 1, but these produced no significant quantities of domestic debris.

3.5.1 Area 1 (Figure 15)

Two large pits/ponds G84 truncated the Phase 4 major SW-NE boundary ditch G21 and were truncated by medieval furrows. Therefore, they have therefore been assigned to this phase. Both were oval and aligned SW to NE although they were very different in dimensions. The largest was *c.* 26 by 10m and the smallest *c.* 10 by 4m, both under *c.* 0.5m deep. Neither produced domestic debris and it is possible they were quarries or natural ponds.

3.5.2 Area 2 (Figure 19)

Thirty-seven percent of the recovered pottery from this area derived from features assigned to this phase. A substantial enclosure defined by G45/46 was established on a different alignment to the earlier Phase 4 enclosure system. However, elements of the latter may have survived because some of the ditch lengths were incorporated into two new smaller enclosures G50 and G54. In addition, four new water pits G38, G39, G36 and G78 were dug and limited quarrying G61 continued. The distribution of domestic debris and smaller features suggests that four domestic foci were present.

3.5.2.1 Enclosure G45/G46

A large, rectangular enclosure, aligned NW-SE, was constructed and truncated the earlier major boundary ditch G41. It was defined by a continuous ditch G45 on its NE side and by a ditch G46 with entranceways on its SE side, which also partially formed an incomplete (or truncated) SW side. The ditches continued beyond the limit of the excavation to the NW. Thus, the enclosure was over 120m in length and *c.* 60m wide.

The NE boundary of ditch G45/46 was generally *c.* 2m wide decreasing slightly in width to the S. It had asymmetrical sides and a narrow concave base *c.* 0.8m deep. The fills of the northern length G45 were distinct in being generally quite dark in colour, with frequent charcoal and burnt stones. Recovered from these were 42 pieces of slag (weighing 11.6kg), 7 large pieces of vitrified clay (weighing 4.2kg) and over 30 pieces of fired clay. A large quantity of iron unidentified fragments were identified (RA 162, 177-182, 222-224, 231-238, 258- 264, 266 and 269) along with a casting gate (RA 240). The vast majority of the iron fragments were derived from the same area from which most of the slag was recovered. In this area several large blocks of unworked limestone were present within the ditch. A second less dense concentration occurred where the ditch truncated the Phase 4 major boundary



ditch G41. This would suggest the presence of industrial activity in the vicinity although no structural evidence has survived. Domestic debris included 168 pottery sherds (weighing 2.8kg), 113 fragments of animal bone, two fragments of CBM, 13 nails and a coin (RA 165). Environmental samples 94, 95, 104, 125 and 129 contained frequent charcoal, moderate quantities of grain and chaff, along with relatively large quantities of weed seeds.

The southern length and return of the ditch G46 was generally between 1.8 and 1.5m wide with a concave profile and under 0.4m deep. Parallel with the NE length of this ditch was a row of small postholes *c.* 20m in length. These may have functioned as a fenceline associated with the boundary. The SW length was much less substantial being 0.4m wide and under 0.3m deep decreasing to the N suggestive of truncation. Along the southern arm of the enclosure there were two entrances *c.* 40m apart, both *c.* 2.5m wide. The ditch fills contained 177 pottery sherds (weighing 4.4kg), 216 fragments of animal bone and 16 fragments of CBM. Metal artefacts included a brooch (RA 158) and two coins (RA 152 and 155). The terminal of the SE entrance contained the majority of the slag, vitrified and fired clay recovered from this ditch length.

Environmental samples 86 and 116 contained scarce charcoal, moderate quantities of grain and relatively large quantities of chaff and weed seeds.

3.5.2.2 Ditch G43

Ditch G43 was situated *c.* 9m NE and parallel to enclosure ditch G45. It was *c.* 0.6m wide with a concave profile and under 0.5m deep getting increasingly shallow to the SE where it eventually petered out. It had clearly been substantially redug on at least one occasion. The ditch fills contained 320 pottery sherds (weighing 4.4kg) of which 131 (weighing 1.2kg) derived from five discrete pottery deposits. A number of these appear to represent deliberate dumping of semi-complete or complete pottery vessels. In addition, the domestic debris included 189 fragments of animal bone, a rotary quern fragment (RA 229) and a whetstone (RA 226). The nine pieces of fired clay, ten pieces of hearth lining and fourteen lumps of slag (3.3kg) were recovered from the ditch length adjacent to a similar assemblage found in ditch G45. Metallic artefacts include two coins (RA 159 and RA 174), iron fragments (RA 173, RA 211 and RA 217) and unidentified copper fragment (RA 210). Environmental sample 43 contained no charred remains.

3.5.2.3 Sub-square enclosure G50

This sub-square enclosure appears to have utilised the earlier Phase 4 major boundary ditch G48 as its SW boundary. The ditch was *c.* 1m wide with an asymmetrical profile and *c.* 0.6m deep. There was some evidence that, at least, the N side had been redug on at least one occasion. Prior to redigging an entrance had existed to the N, but there was no evidence for its location in the redug ditch length. The lower fills contained a lot of clay derived from weathering of the sides (natural clay occurred at a shallower depth in this area). There was limited evidence for internal activity in the form of three large pits, two small pits and two slots. Domestic debris from these and the ditch comprised 292 pottery sherds (weighing 3.7kg) and 135 fragments of animal bone. Metallic artefacts included a coin (RA 129) and an almost



complete iron plough coulter (RA 126). Environmental sample 109 contained only small quantities of weed seeds.

3.5.2.4 Rectangular enclosure G54

The eastern side of this enclosure utilised the earlier boundary of a Phase 4 enclosure. The N side was *c.* 40m in contrast to the S, which was *c.* 32m long. Generally it was *c.* 1.4m wide (narrower to the W) with an asymmetrical profile *c.* 0.8m deep (shallower to W). The arrangement of two ditches to the W makes it likely that it was extended westwards by *c.* 4m. The only entrance identified was located centrally on the E side. The lower fills appear to have been partly waterlogged leading to the preservation of wood. Domestic debris included 579 pottery sherds (weighing *c.* 9kg), 238 fragments of animal bone and 25 pieces of CBM. Metallic artefacts included a coin (RA 141), 39 hobnails (RA 192, RA 194 and RA 196) and three unidentified lead and iron fragments (RA 135, RA 195 and RA 268). A small amount of slag (1253g) and 9 pieces of fired clay were recovered. The vast majority of the finds assemblage derived from the E side (but away from the entrance). Environmental samples 104, 108 and 114 contained no charred plant remains.

3.5.2.5 Water pits G36, G38, G39 and G78

Four large pits, all over *c.* 1m deep are interpreted as water pits. They were distributed over the southern half of the excavation area and two, G36 and G78, were located on the periphery of the same domestic focus and were constructed within field ditch G46.

Well G36 appears to have been dug into the backfilled terminal of field G46. It was circular in shape *c.* 1.5m in diameter, with vertical sides and a flat base 1.3m deep. The lowest fills may have derived naturally but the majority of the fills appear to represent deliberate dumping within a convenient hole. A large number of limestone slabs (*c.* 0.7m by 0.4m) were recovered from the central fills and it is possible these are evidence for the original lining of the well. This feature is comparable with G13 (Phase 4) on Area 1. The domestic assemblage recovered comprised 30 pottery sherds (700g), 8 fragments of animal bone and 3 pieces of CBM. Environmental samples 100 and 141 contained scarce charcoal, some grain, no chaff, but relatively large quantities of weed seeds.

Water pit G38 was dug into the earlier Phase 4 major boundary ditch G48. It was oval *c.* 4.5m in diameter, with gently sloping irregular sides leading to a concave base *c.* 1m deep. The fine texture of its fill and the limited quantity of domestic debris (27 pottery sherds and 48 fragments of animal bone) would suggest that the feature had been allowed to infill naturally over time.

G39 was a large circular pit *c.* 4.5m in diameter with near vertical sides and a flat base *c.* 1.40m deep. It was located to the E of the domestic focus within enclosure G54 just S of the entranceway. The lower fills were similar to the soils into which it had been dug and contained little domestic debris, suggesting they were derived from natural weathering of the sides. The upper fills contained the majority of the domestic debris including 362 pottery sherds



(weighing 7.4kg), 108 animal bones, 87 pieces of CBM and 11 iron nails. Environmental sample 140 contained moderate quantities of charcoal, some grain, relatively large quantities of weed seeds and an exceptional quantity of chaff.

Large elongated pit G78 *c.* 4m by 2m was dug into ditch G46. It had very steep convex sides with a concave base 1.2m deep. It contained deposits suggestive of both natural weathering and deliberate dumping. These contained 179 pottery sherds (weighing 3.9kg), 215 animal bones and 10 pieces of CBM. Other objects included three coins (RA 206, RA 208 and RA 209), three iron nails and a bone hairpin (RA 204). Environmental sample 117 contained no charred plant remains.

3.5.2.6 Quarry pits G61

Two large ovoid pits G61 were located within the domestic focus adjacent to field ditch G45. One truncated the Phase 4 boundary ditch G42. Each was under *c.* 4m in diameter, with steep sides and a flattish base *c.* 0.5m deep. Although dug through the gravel, they stopped on the top of the clay. Their upper fills contained 48 pottery sherds (weighing 483g) and 26 fragments of animal bone. Like the adjacent and contemporary ditch G45 they contained three pieces of slag (1228g), hearth lining and vitrified clay. In addition, they also contained a small iron pin (RA 79) and a fragment of unidentifiable iron.



3.6 Phase 6: Medieval (Figure 20)

Only nine sherds of medieval pottery were recovered from the entire investigation (seven from field artefact collection and two from Area). Furrows (regularly spaced shallow linear gullies) were identified within both excavation areas and within Area 2d a similar pattern of furrows with corresponding ridges were identified as earthworks. It is, therefore, clear that the entire area around Marsh Leys Farm was under arable cultivation (the furrows indicative of strip ploughing) during this period.

3.6.1 Area 1

The regular system of NW-SE furrows G82 *c.* 8.5m apart was identified within Areas 1a and 1c. They exhibited no dislocation on either side of the major present field boundary suggesting they were all originally part of one large field. Apart from land drains they truncated all other identified features. In total, only three sherds of pottery, one of which was of Roman date, were recovered from the furrows.

3.6.2 Area 2

A comparable system of NW-SE furrows G83 generally *c.* 9.5m apart was identified in Areas 2b and 2c. They were considerably more erratic in their layout, resulting in an incomplete plan, perhaps reflecting the extent of latter plough truncation. Towards the S of Area 2b there was a clear dislocation in the furrows and this reflects the presence of a headland (end of plough strip). This was also identified during the earthwork survey in Area 2d to the NE. The furrows truncated all other identified features, although there was no clear relationship with Phase 7 features (*see below*). Three fragments of animal bone were recovered from the fills of furrows.

3.6.3 Zone D (Figure 21)

The results of the earthwork survey were reported on in a separate document¹⁸. The linear earthworks represent the survival of a system of “ridges and furrows”. It was originally believed that their northern terminals were not real and merely reflected later dumping within the hollows. However, they would correspond with the location of the headland observed within the Area 2 excavation (*see above*) and would therefore appear to be genuine. The creation of “ridge and furrow” earthworks is the result of the strip system of ploughing in operation during the medieval period.

The remaining earthworks appear to represent more recent activity (post-dating the “ridge and furrow” system). Two linear earthworks correspond with hedged boundaries. Terracing to the E is associated with the tennis court and the irregular undulations to the W were probably produced by dumping of material from the adjacent pond.

¹⁸ Albion, 2001, Marsh Leys Farm: Earthwork Survey Interim Summary of Results



3.7 Phase 7: Post-medieval (Figure 22)

Eighty-eight sherds of post-medieval pottery were recovered from the entire investigation (85 from field artefact collection, 3 from Area 2). The vast majority of the ceramic material recovered from field artefact collection was of this period. None of this material showed any obvious concentrations and it is, therefore, assumed to have derived from manuring of the fields. The main evidence for onsite activity during this period was a boundary ditch, an area of quarrying (Area 2b) and a NW-SE aligned series of ditches (located in the trial trenches). A map of 1848 is the first to show Marsh Leys Farm.

3.7.1 Area 2 (Figure 23)

NW-SE aligned boundary ditch G47 corresponded to the alignment of the furrows, but truncated all other features (except land drains). It was *c.* 0.9m wide with an asymmetrical profile and was *c.* 0.4m deep. Its fill was a light brown silty sand, very similar to those within the furrows and very different to the darker fills of the earlier features. The ditch fills contained one sherd of Roman pottery and a post-medieval bronze button (RA 128).

Respecting the alignment of ditch G47 and almost entirely occurring to the NE was an arrangement of pits G69. These extended over an area *c.* 58m by *c.* 45m continuing beyond the limit of excavation. They comprised closely spaced square or rectangular pits, in some places giving the impression of “intercutting”. Where identifiable, individual pits ranged from *c.* 1.4m by *c.* 0.8m to *c.* 2.5m by *c.* 1.4m. All those excavated were quite shallow and were only dug through the gravel (not the underlying clay). The fills of the quarry pits were markedly lighter in colour than the fills of Roman features, a number of which were truncated by the post-medieval features. Curiously, the quarry pits seem to respect the Phase 5 (late Roman) ditch G46. The quarry pits contained 33 pottery sherds (mixed late Iron Age and Roman), 40 fragments of animal bone, five iron nails, two post-medieval bronze buttons (RA 148 and RA 149) and a Roman coin (RA 139).





4. DATA QUANTIFICATION

4.1 Introduction

For the following discussion the data-sets recovered during the investigations have been divided into three main classes: structural, artefactual and ecofactual.

Structural data relate to the identification of individual events such as the digging of a ditch, primary infilling etc. These have been recorded as context records during trial and open area excavation. All contexts will have a detailed record sheet and many will have a plan and section drawing along with photographs. In addition to excavated data, the aerial photograph analysis, along with geophysical and earthwork surveys have also produced structural information.

Artefactual data comprise human-made objects recovered during trial and open area excavation. These have been divided for ease of discussion into pottery, ceramic building material and other artefacts (including registered artefacts and bulk finds, such as industrial residues).

Ecofactual data comprise natural materials found within excavated deposits. These are able to yield information on the nature of past human activity and its environmental setting. They include animal bones, human bones and information obtained from environmental samples (for example, charred plant remains).

In the following sections contextual data is discussed first as this has provided the framework for the summary of results and the subsequent data-set discussions. The methodological approach taken with each data-set is discussed, followed by sections dealing with quantification, provenance (spatially and chronologically) and also condition. All these factors are important in deciding the potential of the material for analysis.

Much of the data-set discussion is organised with the contextual phase and group assignment. Because it was not necessary to assign all contexts to groups to assess the overall potential of the data, there is also a discussion of key contexts that have not been grouped.



4.2 Structural data

4.2.1 Quantity of records

Table 4 presents a breakdown of the total quantity and type of structural records. These comprise the written description/interpretation of a deposit/feature (context sheets), a map-like drawing showing the location and inter-relationship between features (a plan), a profile drawing through a feature and its fills (section) and photographs.

Area	1A	1C	2C	2B	Total
Contexts	1430	118	260	2107	3915
Plan Sheets	50	2	2	52	106
Sections	385		15	441	974
Photos	112		6	127	245
Geophysical anomalies	80	10	10	120	220
Cropmarks	25	14	27	31	97

Table 4: Quantity of site structural records

4.2.2 Methodological approach to assessing contexts

The structural data was rapidly assessed in order to establish whether it would provide a coherent spatial and chronological framework. The decision over whether to assign contexts to groups was based on a rapid scan of the structural data and the following criteria were applied:

- Do the contexts form a coherent spatial unit e.g. ditch length, pit group etc?
- Do the contexts represent key positions within the stratigraphic sequence?
- Do the contexts contain suitable dating material?

Over sixty percent of the total number of contexts were assigned to “temporary” groups, e.g. a boundary ditch, building, pit group, water pit etc. (see Table 5 and Table 6).

Groups were assigned to a number of episodes (phases) of human activity based on stratigraphy (vertical and “horizontal”). The phases were then assigned to broad, chronological divisions, e.g. late Iron Age/early Roman, medieval etc, based on their artefactual assemblage (*see* Table 3).

Much of the discussion in Section 3 and the following data-set discussions is based on the phase and group assignments.



Phase	Group	Description	No. contexts
2	4	Incomplete ditched enclosure	25
3	1	Square building defined by drainage gully, within enclosure G9/10	15
3	2	Roundhouse defined by a drainage gully with internal features to SE	34
3	3	Roundhouse defined by a drainage gully to NE	67
3	7	Posthole alignment possibly associated with enclosure G9/10	12
3	9	Redigging of ditches G10 defining enclosure containing square building G1	22
3	10	Original ditches defining enclosure containing square building G1	26
3	16	Cremation burial cemetery (five graves) to E	21
3	17	Cremation burial cemetery (two graves) to SE	12
3	24	Structural slots possibly part of a roundhouse to N of enclosure G9/10	11
3	25	Special deposit containing partial skeletons from two chickens and two coins	3
4	5	Short alignment of pits within and parallel to G22 enclosures	18
4	6	Cluster of postholes in corner of one of the G22 enclosures	21
4	8	Intercutting pits adjacent to water pit G12	15
4	11	Water pit "truncating" enclosure system G22	7
4	12	Water pit to S of pits G8	6
4	13	Stone-lined well/water pit	6
4	14	Inhumation burial with grave goods	8
4	15	Inhumation burial	3
4	18	Pit cluster (Area 1C)	11
4	19	Posthole cluster (Area 1C)	14
4	20	Pit cluster (Area 1C)	8
4	21	Major SW –NE boundary ditches (Area 1a and 1c)	88
4	22	Ditched enclosure system	315
4	23	Structural slots	8
4	26	Water pit in corner of enclosure within the G22 system	5
4	27	Horse burial	3
4	28	Water pit at W edge of Area 1a	2
4	29	Gravel surface (mainly within Trial Trench 17)	7
4	30	Parallel SW-NE ditches within field enclosures G22	30
5	84	Ponds	3
6	82	Furrows (Area 1a and 1c)	68
Total			894

Table 5: Area 1 Group descriptions (ordered by phase) with count of assigned contexts



Phase	Group	Description	No. contexts
3	33	Large water pit	8
3	56	Sub-rectangular enclosure with entrance to SE	41
3	57	Isolated pit to W (Area 2C)	2
3	59	Pair of short “eyebrow” shaped structural slots	14
3	62	E-W ditches	18
3	63	Pit adjacent to entrance to enclosure G56	6
3	65	Linear structural slots	27
3	73	Isolated cremation burial	8
3	74	Pit group	20
3	76	Short “eyebrow” shaped structural slot	12
3	77	Dispersed pit cluster	10
4	31	Isolated inhumation burial	7
4	32	Water pit adjacent to enclosure ditch G42	8
4	34	Water pit within enclosure G72	6
4	35	Water pit adjacent to pits G55	13
4	37	Isolated water pit on edge of quarrying G70	3
4	40	Small boundary NW-SE ditch continuing major boundary ditch G41	18
4	41	Major boundary NW-SE ditch continuing as G79 to the NW	70
4	42	NW-SE enclosure boundary NE-SW ditch perpendicular to G41	19
4	44	NW-SE enclosure boundary ditch perpendicular to G41 bordering quarries G68	17
4	48	Major boundary NW-SE ditches forming limit of activity	127
4	49	NW/SE enclosure attached to G48	10
4	51	NW-SE enclosure ditch attached to G48, adjacent to G49	44
4	52	NW-SE enclosure ditch attached to G48, adjacent to G53	27
4	53	NW-SE enclosure ditch attached to G48	20
4	55	Two adjacent pits containing a large assemblage of domestic debris	19
4	58	Small pit/posthole cluster, within enclosure G42/G44	40
4	60	Pits adjacent to enclosure ditch G42	28
4	64	Inter-cutting pits containing large assemblage of domestic debris	56
4	66	Isolated pits adjacent to quarry pits G67	19
4	67	Area of quarrying in to NE	4
4	68	Linear band of quarrying	54
4	70	Area of quarrying to SE	35
4	71	Area of quarrying within enclosure G53	29
4	72	Ditched enclosures not attached to major ditched boundaries	92
4	75	Isolated inhumation burial to W of G48	6
4	79	Continuation of major boundary ditch G41 (Area 2C)	45
4	80	NW-SE enclosure ditches (Area 2C)	19
4	81	Area of quarrying (Area 2C)	26
5	36	Water pit truncating terminal of enclosure ditch G46	6
5	38	Water pit in-between enclosures G50 and G54	4
5	39	Water pit within enclosure G54	11
5	43	NW-SE ditch parallel to G41 containing finds deposits	37
5	45	Northern part of ditch G46, distinguished due to high slag content	39
5	46	Large enclosure/field	110
5	50	Sub-square enclosure	69
5	54	Rectangular enclosure (Area 2b and 2c)	124
5	61	Large pits adjacent to G45	16
5	78	Water pit truncating enclosure ditch G46	10
6	83	Furrows on Area 2b and 2c	31
7	47	Boundary ditch	6
7	69	Area of quarrying respecting ditch G47	27
			1517

Table 6: Area 2 Group descriptions (ordered by phase) with count of assigned contexts



4.2.3 Contexts currently unassigned

A total of 1794 contexts were unassigned during the assessment. However, 288 of these occurred in trial trenches outside the Zones of Archaeological Significance identified by the CAO. Although the majority of contexts from the main excavation areas (1a and 2b) were assigned to Phase/Group, the percentage is much lower for the peripheral areas (1c and 2c).

Area	No. of contexts	% of total
1a	585	40%
2b	702	34%
1c	69	58%
2c	150	57%
Remainder	288	
Total	1794	

Table 7: Numbers of unassigned contexts by Areas

When examined in greater detail, it is likely that the large number of contexts from ditches, pits and structural features will prove to have analytical value.

Area	Ditch	External Dump	Furrow	Hearth	Layer	Pit rubbish	Pit unspec.	Water pit	Structural	Quarry
1a	236	6	0	0	2	0	118	0	182	0
1c	23	0	0	0	0	0	15	0	18	0
2b	271	0	24	0	1	15	258	7	94	33
2c	0	0	0	0	0	79	14	0	2	5
Remainder	82	0	26	3	0	0	23	0	18	0
Total	612	6	50	3	3	94	428	7	314	38

Note. natural/modern features and layers, along with topsoil contexts not included

Table 8: Unassigned contexts by feature type

4.2.4 Survival and condition of features

The survival of archaeological features is dependent on the nature and intensity of previous land use, especially ploughing. Larger features such as ditches and pits (which are in the majority from this site) often survive the most intensive farming regime. Ploughing often totally destroys floor layers/surfaces and this appears to be the case in both areas, for example no layers were associated with roundhouse G2 and G3 (Area 1a). However, some smaller features did survive, e.g. structural slots G24 (Area 1a), G6, G23, G59 and G76 (Area 2b), stone surfaces G29, “special” deposits G25 (Area 1a) and burials G15, G16, G17 (Area 1a), G31, G73 and G75 (Area 2b), suggesting truncation had not been excessive.



4.3 Pottery

4.3.1 Methodology

For each context, pottery was recorded by fabric type in accordance with the Bedfordshire Ceramic Type Series, and quantified by minimum sherd count and weight. Unless otherwise stated all quantitative statements are based on sherd count. Pottery was also spotdated by individual fabric type and the date of the latest sherd used in the provision of an overall context spotdate. The latter has been used to assist in the establishment of the provisional phasing structure.

4.3.2 Quantification

4.3.2.1 Area 1

A total of 3326 sherds, weighing 56.6kg was recorded, the majority (3303 sherds) deriving from features within Area 1A. While the bulk of the assemblage was hand-collected, one hundred and eleven sherds (287g) were recovered from the residues of sieved environmental samples.

4.3.2.2 Area 2

A total of 7253 sherds, weighing 125.6kg was recorded, the majority (7201 sherds) deriving from features in Area 2B. Ninety-two sherds (225g) were recovered from the residues of sieved environmental samples.

4.3.2.3 Field artefact collection

A total of 167 sherds was recovered from field artefact collection, including forty-five sherds (286g) of Roman and seven sherds (71g) of late Belgic Iron Age date. The majority of these derived from the vicinity of Area 1A. Post-Roman pottery included seven sherds of medieval and eighty-five of post-medieval date, but these did not occur in significant concentrations. Twenty-three sherds were undiagnostic and could not be assigned a date.

4.3.3 Range and variety: the pottery type series

Fabrics are listed below (Table 9) in chronological order, using common names and type codes in accordance with the Bedfordshire Ceramic Type Series. No new fabric types were identified. Bracketed figures represent total sherd number for each period, and bracketed italics denote vessels of regional (*r*) and continental (*c*) origin. An asterisk denotes fabrics identified from both excavation and field artefact collection.



Fabric Type	Common name	Sherd No.		Total	% Total
		Area 1	Area 2		
Pre-Belgic Iron Age (11)					
Type F28	Fine sand	2	-	2	<1.0
Type F03	Grog and sand	6	3	9	<1.0
Late Iron Age/early Roman (2221)					
Type F05*	Grog and shell	100	103	203	2.2
Type F06A	Fine Grog	6	69	75	<1.0
Type F06B	Medium Grog	48	503	551	6.0
Type F06C	Coarse Grog	101	172	273	3.0
Type F07	Shell	403	373	776	8.4
Type F09*	Sand and Grog	219	80	299	3.3
Type F34	Sandy	36	2	38	<1.0
Type F	Non-specific Iron Age	3	3	6	<1.0
Roman (7928)					
Type R	Non-specific Roman	30	59	89	1.0
Type R01 (c)*	Samian ware	47	85	132	1.4
Type R01D	Romano-British samian ware	1	-	1	<1.0
Type R02	Mica-gilded	15	20	35	<1.0
Type R03	Whiteware (source unknown)	-	16	16	<1.0
Type R03A (r)	Verulamium region whiteware	24	80	104	1.1
Type R03B (r)	Gritty whiteware	49	7	56	<1.0
Type R03C	Smooth whiteware	6	29	35	<1.0
Type R03E	Fine whiteware	-	5	5	<1.0
Type R04A	Rhenish ware	-	2	2	<1.0
Type R05A*	Orange sandy	48	162	210	2.3
Type R05B	Fine orange	2	14	16	<1.0
Type R06	Greyware (general)	-	32	32	<1.0
Type R06A (r)	Nene Valley greyware	-	3	3	<1.0
Type R06B*	Coarse greyware	296	362	658	7.2
Type R06C*	Fine greyware	575	1030	1605	17.5
Type R06D	Micaceous greyware	39	199	238	2.6
Type R06E	Calcareous greyware	58	179	237	2.6
Type R06G	Silty greyware	-	5	5	<1.0
Type R06H	White slipped greyware	-	4	4	<1.0
Type R07A (r)	Black burnished ware	-	42	42	<1.0
Type R07B*	Sandy blackware	91	311	402	4.4
Type R07C	Gritty blackware	57	7	64	<1.0
Type R08	Black micaceous	27	267	294	3.2
Type R09A (r)	Pink grogged	1	4	5	<1.0
Type R10A	Buff gritty	6	67	73	<1.0
Type R10B	Fine buff gritty	-	24	24	<1.0
Type R10D	Buff micaceous	-	12	12	<1.0
Type R13*	Shell	820	2539	3359	36.6
Type R14	Sandy (red-brown harsh)	44	42	86	1.0
Type R17	Smooth orange ware	8	-	8	<1.0
Type R18*	Pink gritty	2	25	27	<1.0
Type R19 (r)	Amphorae (source unknown)	-	4	4	<1.0
Type R21	mortaria (source unknown)	8	1	9	<1.0
Type R23	Roughcast colour coat	-	2	2	<1.0
Type R32A	Lead glazed ware	-	1	1	<1.0
Type R33 (r)	Verulamium region mortaria	5	17	22	<1.0
Type R38 (r)	Colour coat (source unknown)	1	2	3	<1.0
Late Roman (298)					
Type R11 (r)	Oxford oxidised wares	29	32	61	<1.0
Type R11D (r)	Oxford colour coat	2	15	17	<1.0
Type R11E (r)	Oxford mortaria (white)	5	16	21	<1.0
Type R11F (r)	Oxford mortaria (red)	-	3	3	<1.0
Type R12A (r)	Nene Valley mortaria	1	9	10	<1.0
Type R12B (r)	Nene Valley colour coat	70	90	160	1.7
Type R22A (r)	Hadham oxidised ware	1	22	23	<1.0
Type R22B (r)	Hadham reduced ware	-	3	3	<1.0
Medieval (2)					
B07	Shell	1	-	1	<1.0
C	Non-specific medieval	1	-	1	<1.0
Post-medieval (3)					
P01*	Glazed red earthenware	1	-	1	<1.0
P03*	Black-glazed earthenware	2	-	2	<1.0
Miscellaneous (23)	Unidentified/undatable ware	21	2	23	<1.0

Table 9: Pottery Type Series

4.3.3.1 Chronological summary by pottery date

Pottery from Areas 1 and 2 is comparable, dating predominantly to the late Belgic Iron Age/early Roman period, with a small proportion of late Roman material (Table 10). Negligible quantities of pre-Belgic Iron Age and post-



Roman pottery were also identified. Little variation was noted between fabric types or diagnostic vessel forms from Areas 1 and 2, although the latter produced a small quantity of less commonly occurring pottery types such as *amphorae*, lead-glazed ware and a whiteware costrel (see 4.3.3.1.3). Vessels recovered from all periods are indicative of a domestic assemblage, comprising tablewares, cooking pots and storage jars, and representing an accumulation of settlement debris.

Pottery Date	% Total	
	Area 1	Area 2
Pre-Belgic Iron Age	<1.0	<1.0
Late Belgic Iron Age	28.0	17.9
Roman	67.0	78.0
Late Roman	3.2	2.6
Post-Roman	<1.0	<1.0
Miscellaneous	1.0	<1.0

Table 10: Assemblage total by Area and pottery date

4.3.3.1.1 Early-middle Iron Age

Vessels of pre-Belgic date are largely undiagnostic and occur in a limited range of sand or grog/sand tempered fabrics, characteristic of the region. Recognisable elements comprise a single lid-seated bowl. The incidence of pre-Belgic material is restricted to Areas 1A and 2B, where most sherds are residual within features of later date. One Area 1A feature exclusively contained a single sherd (34g) of pre-Belgic date, which may suggest sporadic activity in the vicinity during the early-middle Iron Age period.

4.3.3.1.2 Late Iron Age/early Roman

Approximately 54% of this assemblage comprises grog-tempered vessels in the Belgic tradition, characteristic of Thompson's Zones 7 and 8.¹⁹ Shell/grog or shell tempered vessels constitute 44% of the material and quartz tempered types the remainder. The shelly vessels are likely to derive from one of a number of kiln sites known in the vicinity, such as Bromham or Stagsden. Sources for the grog and quartz tempered types are unknown, although are likely to be local.

Although the majority of the Belgic assemblage is wheel-thrown, there is a proportion (35%) of hand-made vessels. Most of the latter are shelly lid-seated jars. Other forms include storage, cordoned, necked, everted and roll rim jars, platters, lid-seated bowls, butt beakers and single examples of a pedestal urn, and probable lid. Decoration is rare and includes horizontal combing, cordons, incised and impressed motifs. Four vessels have been modified by the addition of post-firing holes to body and base sherds.

The majority of the late Belgic Iron Age pottery was recovered from Areas 1A and 2B, with only two sherds (14g) and twenty sherds (142g) deriving from Areas 1C and 2C respectively. Fourteen features in Area 1A and twenty-seven in Area 2B contained exclusively late Iron Age material, while the remainder

¹⁹ Thompson, I., 1982, *Grog Tempered 'Belgic' Pottery of South-Eastern England*, BAR 108 (i), 15-16.
 Marsh Leys Farm, Kempston, Bedfordshire
 Assessment of Potential and Updated Project Design



yielded either mixed late Iron Age/Roman types, or pottery solely of Roman date.

4.3.3.1.3 Roman

The Roman assemblage comprises a comparable range of wares to those recovered from the contemporary settlement at Kempston, situated approximately 2.5km to the NE of Marsh Leys Farm, and generally reflects the composition of Romano-British rural sites in the Great Ouse Valley. The greatest concentration of ceramics falls within the early Roman period, although the most numerous sherds are reduced sandy wares and shelly vessels, which span the entire Roman period. These comprise 30% (2747 sherds) and 36% (3359 sherds) of the Roman assemblage respectively. Coarsewares are also represented by a standard range of local oxidised sand tempered types and blackwares.

Forms include lid-seated and roll rim jars and bowls, flanged, plain rim and rectangular rim bowls, jars with triangular, reed, undercut, bead, and everted rims, carinated jars, necked jars, storage jars, ring-necked and plain necked flagons, platters, poppy-head, folded and funnel beakers, plain and cornice rim beakers, dog dishes, cordoned jars, reed-rim, bead, triangular rim, carinated and cordoned bowls, *mortaria*, *amphorae*, lids, strainers, Castor boxes and single examples of an unguent jar, miniature vessel, and a costrel, the latter being very rare. Decoration comprises rouletting, rilling, incised wavy lines, horizontal and vertical combing, rustication, burnishing, slipping, barbotine and stamped motifs. Several base sherds bear potters marks and some vessels have been modified by the addition of post-firing holes to body and base sherds. One damaged flagon neck has been crudely repaired using a pitch-like substance.

Regional and continental imports constitute 8% and 2% of the assemblage respectively. Regional imports include Black Burnished Ware, early Roman products of the Verulamium region industries and pink grogged vessels likely to derive from Caldecotte, Bucks. Later Roman regional imports include vessels from Oxfordshire, Hertfordshire and the Nene Valley. With the exception of the samian ware vessels and *amphorae*, no other continental imports were noted, although the single sherd of lead-glazed ware may be of either continental or regional origin. Samian ware includes plain, decorated and stamped (illegible) sherds of probable central or south Gaulish origin. A single sherd of possible Romano-British samian was also identified. Forms are mainly dishes, cups and bowls: one of the latter has a lead plug/repair *in situ*, and one undiagnostic vessel has traces of a resin repair on the broken edge.

The majority of the Roman pottery was recovered from Areas 1A and 2B, with only twenty sherds (291g) and twenty-eight sherds (199g) deriving from Areas 1C and 2C respectively.



4.3.3.1.4 Post-Roman

Post-Roman material comprises a shell tempered strap handle of early medieval date and three undiagnostic sherds of glazed earthenware dating from the seventeenth to eighteenth centuries, deriving from post-Roman agricultural features in Area 1A.

4.3.3.1.5 Miscellaneous

Twenty-three undiagnostic sherds (129g), mainly deriving from soil sample residues, are too fragmentary to be classified and assigned a date range. Although these will be more closely examined during analysis, assessment suggests it may prove impossible to gain further information from the material.

4.3.4 Provenance

4.3.4.1 Occurrence within phase and excavation area (Table 11 and Table 13)

Over 64% of the total assemblage from Areas 1 and 2 derived from Phase 4 features, while Phase 3 features yielded approximately 10%. Pottery assigned to late Roman Phase 5 constituted 25% of the total assemblage and was restricted to Area 2. A negligible quantity of post-Roman pottery was associated with Area 1 features assigned to medieval Phase 6 and post-medieval Area 2 features assigned to Phase 7.

Phase	Area 1		Area 2	
	Sherd No.	% Total	Sherd No.	% Total
3	416	15.8	405	6.8
4	2216	84.1	3282	55.6
5	-	-	2182	37.0
6	3	0.1	-	-
7	-	-	34	0.6
Total	2635	100.0	5903	100.0

Table 11: Sherd count by Phase and Area

4.3.4.1.1 Area 1

The recovery of sizeable sherds from Area 1A (average sherd weight 17g), many of which derive from single vessels, suggests much of the assemblage is primary in nature and has not been subject to post-depositional disturbance. Only forty-four features (22%) contained single sherds, while thirteen features yielded in excess of 1.0kg pottery. In particular, two Area 1A ditch segments ([5551] within G21 and [6008] within G22) contained over 5.0kg material. The lower average sherd weight (13g) of pottery from Area 1C reinforces the peripheral nature of this part of the settlement when compared to Area 1A.



Phase	Group	Description	Sherd No:Wgt (g)
3	1	Square building	8:107
	2	Roundhouse to E	5:20
	3	Roundhouse to W	59:907
	7	Posthole alignment within E side of enclosure G9/10	1:5
	9	Latest phase of enclosure ditch containing square building G1	109:1821
	10	Earlier phase of enclosure ditch containing square building G1	29:481
	16	Cremation cemetery	179:757
	17	Cremations cemetery	2:45
	24	Structural slots: possible roundhouse	20:451
	25	"Special" deposit	4:18
4	5	Short alignment of pits	16:486
	6	Group of postholes	1:6
	8	Intercutting pit cluster N of water pit G12	4:22
	11	Water pit to the S of Area 1A	17:480
	12	Water pit S of pit cluster G8	9:182
	13	Stone-lined well	81:1611
	14	Inhumation	8:136
	15	Inhumation	1:1
	18	Pit cluster to the NE of Area 1C	42:410
	19	Postholes to the NE in Area 1C	11:154
	20	Small pit cluster to the NE in Area 1C	6:73
	21	Major NE/SW boundary ditches	354:7422
	22	Enclosure system	1448:25988
	23	Linear structural features	2:10
	26	Water pit	26:556
	29	Gravel surface/underlying pit	175:3829
	30	NE/SW Ditches within field enclosures G22	15:420
6	82	Furrows (Areas 1A and 1C)	3:67
			2635:46465

Table 12: Area 1 quantity of pottery by Phase and Group

4.3.4.1.2 Area 2

The composition of the Area 2B assemblage is directly comparable with that from Area 1A, comprising sizeable sherds, many deriving from single vessels. The average sherd weight (17g) is the same as that noted for sherds recovered from Area 1A. Fifty-five features (16% of contexts with pottery) contained single sherds (each weighing less than 100g). Thirty-five features (10%) yielded in excess of 1.0kg pottery. The greatest concentrations derive from pits [8473] and [8580], within G64, which contained 8.5kg and 7.2kg pottery respectively. Pottery from Area 2C has a markedly lower average sherd weight (7g) than that from Area 2A. As observed for Area 1C, this lower weight indicates the peripheral nature of Area 2C in contrast to Area 2B.



Phase	Group	Description	Sherd No:Wgt (g)
3	33	Water pit	34:320
	56	Ditched enclosure	58:352
	57	Isolated pit in Area 2C	17:61
	59	Curved structural slots S of G58	27:237
	62	E-W aligned ditches	81:1548
	63	Pit adjacent to enclosure G56	104:866
	65	Linear slots	7:123
	73	Isolated cremation burial	42:304
	74	Pit group	21:60
	76	Curved structural slots	14:89
4	32	Water pit at NW edge of excavation	4:43
	34	Water pit adjacent to enclosures G72	23:253
	35	Water pit adjacent to pits G55	197:3936
	37	Isolated water pit	6:490
	40	Continuation of G41 major boundary ditch	5:201
	41	Major NE/SW boundary ditches	249:2824
	42	Large enclosure ditch	36:404
	44	Large enclosure ditch	305:3900
	48	Major NW/SE boundary ditches	235:2535
	49	Small enclosure ditch	16:87
	51	Small enclosure ditch	115:1849
	52	Small enclosure ditch	11:86
	53	Small enclosure/"funnel" arrangement	110:1176
	55	Pits	363:8536
	58	Small pit/posthole cluster	11:18
	60	Pits adjacent to enclosure ditch G42	57:711
	64	Intercutting pits	825:22579
	66	Group of pits south of possible entrance G62 within area of quarrying	75:1529
	67	Quarrying in NE of Area 2B	5:81
	68	Linear quarrying NE of Area 2B	142:2556
	70	Quarrying SE side of Area 2B	264:4814
	71	Quarrying S end of Area 2B	51:740
	72	Additional ditched enclosures	152:1788
	75	Inhumation	6:320
	79	Continuation of G41	15:107
	80	Enclosures in Area 2C	4:31
5	36	Water pit	30:700
	38	Water pit	27:336
	39	Water pit within enclosure G54	362:7415
	43	Ditch parallel to G45	320:4492
	45	Field enclosure boundary ditch	168:2897
	46	Field enclosure boundary ditch	177:4486
	50	Sub-square enclosure	292:3794
	54	Rectangular enclosure	579:9085
	61	Pit group	48:483
	78	Water pit	179:3968
7	47	Boundary ditch	1:99
	69	Quarrying to E of G47	33:391
			5903:103700

Table 13: Area 2 quantity of pottery by Phase and Group

4.3.4.2 Finds Deposits

Nine contexts were interpreted as Finds Deposits during fieldwork, four associated with funerary deposits and the remainder deriving from the fills of four ditches and a pit. The pottery assemblage from each deposit is considered below.



4.3.4.2.1 Finds Deposits associated with human remains (Table 14)

All pottery associated with human remains is of Romano-British date.

- **Cremation burials G16 (Phase 3):** contained five fragmentary vessels from four (of the five) graves. The 118 sherds (716g), included 39 sherds (192g) of a fine greyware (R06C) jar and 28 sherds (216g) of a coarse greyware (R06B) vessel, both likely to have been used as the urn. The status of the other vessels has not yet been determined.
- **Cremation burials G17 (Phase 3):** one of the two graves contained a complete miniature whiteware (R03A) vessel (41g), almost certainly a grave good.
- **Cremation burial G73 (Phase 3):** the grave contained 35 sherds (204g) of a white-slipped sand tempered (R05A) vessel, probably remains of the urn.
- **Inhumation burial G14 (Phase 4):** contained six sherds (134g) of a narrow necked greyware (R06E) jar, probably a grave good.
- **Inhumation G75 (Phase 4):** contained six sherds (320g) from a near complete fine greyware (R06C) vessel deposited as a grave good.

Phase	Deposit	Area	Feature	Context	Fabric Type	Vessel No.	Sherd No.	Wgt (g)
3	G16	1A	5948	5946	R08	1	22	103
			5848	5944	R05A	1	12	53
			6200	5940	R06C	1	39	192
			5832	5833	R06B	1	28	216
			6202	5942	R06C	1	17	152
3	G17	1A	6174	6178	R03A	1	1	41
3	G73	2B	7549	7600	R05A	1	38	204
4	G14	1A	5982	5986	R06E	1	2	41
			5982	5985	R06E	0*	4	93
4	G75	2B	3702	3703	R06C	1	6	320

Note: * Cross-context with (5986)

Table 14: Pottery from Finds Deposits associated with human remains

4.3.4.2.2 Finds Deposits unassociated with human remains (Table 15)

- **Large enclosure ditch G44 (Phase 4):** one deposit contained over 3.0kg pottery, including 202 sherds (2.5kg) from a single undiagnostic grog tempered vessel which may have been “placed” into the ditch in a semi-complete or complete condition.
- **Major ditched boundary G48 (Phase 4):** one segment contained a deposit with 22 sherds from three individual vessels (978g). These comprised a carinated greyware bowl, a rounded blackware jar, and a complete base from a shell tempered vessel. These may have been “placed” into the ditch in a semi-complete or complete condition.
- **Smaller enclosure ditch G53 (Phase 4):** contained 919g pottery representing seven vessels (80sherds), including two rectangular rim jars and an everted rim jar.
- **Ditch G43 (Phase 4):** Five discrete areas along the upper fill of the ditch produced 1.2kg pottery representing 12 vessels (131sherds), including substantial portions of a poppy head beaker, a cordoned jar, an everted rim



jar and a folded beaker. They may have been “placed” into the ditch in a semi-complete or complete condition.

Phase	Deposit	Area	Segment	Context	Fabric Type	Vessel No.	Sherd No.	Wgt (g)
4	G44	2B	8824	8826	F06B	1	202	2546
				8826	F06C	2	4	144
				8826	F06C	1	9	400
4	G48	2B	7351	7355	R13	1	3	271
				7357	R08	1	17	529
				7359	R06C	1	2	178
4	G53	2B	7533	7534	R13	1	22	227
				7534	R01	1	1	8
				7534	R13	1	45	251
				7534	R07A	1	2	11
				7534	R13	1	3	113
				7534	R06C	1	2	8
				7534	R13	1	5	301
5	G43	2B	7296	7298	R06E	1	1	100
				7298	R07B	10	10	133
				7298	R23	1	2	12
				7299	R06E	1	3	62
				7299	F07	1	1	2
				7299	R06B	1	19	218
				7299	R12A	1	1	61
				7300	R06E	1	1	34
				7300	R04A	1	2	8
				7300	R08	1	40	260
				7301	R06B	1	19	168
				7302	R08	1	32	230

Table 15: Pottery from Finds Deposits unassociated with human remains

4.3.4.3 Ungrouped Pottery (Table 16 and Table 17)

4.3.4.3.1 Area 1

Pottery deriving from ungrouped Area 1 features constitutes approximately 27% of the total assemblage. Sixty-seven features containing pottery are ungrouped (excluding unstratified material). The majority of the ungrouped assemblage derives from the disuse fills of cut features, predominantly ditches and pits. Most features contain less than 1.0kg pottery: only one (ditch [5516]) is notable for yielding 2.7kg. The pottery within most ungrouped features is broadly datable to the late Iron Age/early Roman period, and derives almost entirely from Area 1A. It is likely that most of these ungrouped features will be assigned to a phase during subsequent analysis.



Feature Type	Sherd No:Wgt (g)	
	Area 1	Area 2
Ditch	414:6106	292:5114
Ploughsoil	26:1106	38:1742
External Dump	80:1485	-
Furrow	-	3:24
Modern Intrusion	1:5	-
Layer	37:528	1:19
Pit (unspecified)	179:3754	721:11734
Quarry pit	-	12:89
Rubbish pit	-	251:2686
Water pit	-	12:437
Structural	82:781	20:80
Total	819:13765	1350:21925

Table 16: Ungrouped pottery by feature type

4.3.4.3.2 Area 2

Pottery deriving from ungrouped Area 2 features constitutes approximately 19% of the total assemblage. Ninety-four features containing pottery are ungrouped (excluding unstratified material). As with the Area 1 assemblage, the majority of the ungrouped pottery derives from the disuse fills of cut features, predominantly pits of unspecified function, rubbish pits and ditches. Eight of these features (seven pits and one ditch) contained assemblages weighing over 1.0kg, the greatest quantity (2.5kg) deriving from pit [8840]. Table 17 illustrates the number of features and how many pottery sherds they contained.

Sherd No.	Number of Features	
	Area 1	Area 2
1-4	40	53
5-9	16	13
10-19	6	15
20-29	5	3
30-39	1	4
40-49	1	1
50-59	1	3
60-69	0	0
70-79	0	2
80-89	0	1
90-99	0	1
100-109	0	1
110-119	0	0
120-129	0	1
150-199	1	0
Total	71	98

Table 17: Ungrouped pottery by number of features and Area



4.4 Ceramic building material (CBM)

4.4.1 Methodology

For each context, ceramic building material was recorded by fabric type in accordance with the Bedfordshire Ceramic Type Series, and quantified by minimum fragment count and weight. Where possible, the ceramic building material was also spotdated.

4.4.2 Quantification

4.4.2.1 Area 1

Thirty-one fragments of ceramic building material weighing 3.4kg were recovered exclusively in Area 1A. Fired clay/daub fragments weighing 11.2kg were recovered from Areas 1A and 1C.

4.4.2.2 Area 2

A total of 596 fragments of ceramic building material weighing 30.55kg derived from Area 2B. Fired clay/daub fragments weighing 407g were recovered from Areas 2B and 2C.

4.4.2.3 Field artefact collection

Three highly abraded Roman brick fragments were recovered from Area 1 along with 52 fragments of late medieval/post-medieval distributed over the entire application area.

4.4.3 Range and variety

Diagnostic Roman ceramic building material comprises shell and sand tempered *tegulae*, *imbrex*, box flue and brick fragments. Five sand tempered objects identified as possible *tesserae* were recovered from Area 2B. The recovery of Roman CBM suggests substantial buildings were located in the vicinity of the investigations. Area 2B also yielded a number of predominantly grog tempered slabs and brick fragments.

The majority of the fired clay assemblage occurs in a coarse sand/calcareous fabric, while fragments in a soapy organic fabric constitute the remainder. Many retain diagnostic features such as wattle impressions, surfaces and/or edges, suggesting their function as structural components. Although not located within pyrotechnic installations, many fragments may relate to domestic structures such as hearths or ovens.

4.4.4 Provenance

4.4.4.1 Occurrence within phase and excavation area

Over 45% of the total assemblage derived from Phase 4 features in Areas 1 and 2, while Phase 3 features yielded approximately 19% (Table 18). CBM assigned to late Roman Phase 5 constituted 35% of the total assemblage and was restricted to Area 2. Less than one percent of the CBM was associated



with Area 1 features assigned to early-middle Iron Age Phase 2 and post-medieval Area 2 features assigned to Phase 7.

Phase	Area 1		Area 2	
	Wgt (g)	% Total	Wgt (g)	% Total
2	14	0.1	-	-
3	4392	36.5	955	5.7
4	7630	63.4	5320	32.0
5	-	-	9918	59.7
7	-	-	429	2.6
Total	12036	100.0	16622	100.0

Table 18: CBM weight by Phase and Area

4.4.4.1.1 Area 1 (Table 19)

Enclosure ditch G9 (Phase 3), pit G26 and enclosure ditches G22 (Phase 4) each contained over 1.0kg of CBM.

Phase	Group	Description	Frag No:Wgt (g)
2	4	Ditched enclosure	1:14
3	1	Square building	17:683
	2	Roundhouse to E	1:4
	3	Roundhouse to W	47:408
	9	Latest phase of enclosure ditch containing square building G1	100:3236
	10	Earlier phase of enclosure ditch containing square building G1	5:49
	24	Structural slots: possible roundhouse	1:12
4	5	Short alignment of pits	11:155
	8	Intercutting pit cluster N of water pit G12	2:71
	11	Water pit to the S of Area 1A	1:165
	12	Water pit S of pit cluster G8	2:6
	13	Stone-lined well	3:331
	14	Inhumation	1:5
	18	Pit cluster to the NE of Area 1C	8:79
	21	Major NE/SW boundary ditches	5:357
	22	Enclosure system	159:4954
	26	Water pit	14:1342
	29	Gravel surface/underlying pit	4:165

Table 19: Area 1 quantity of CBM by Phase and Group

4.4.4.1.2 Area 2 (Table 20)

Over 1.0kg of CBM was recovered from water pit G39, enclosure G54 and pit G78 (all Phase 5).



Phase	Group	Description	Frag No:Wgt (g)
3	33	Water pit	1:27
	56	Ditched enclosure	8:14
	57	Isolated pit in Area 2C	4:4
	59	Curved structural slots S of G58	1:149
	62	E-W aligned ditches	3:9
	63	Pit adjacent to enclosure G56	36:623
	65	Linear slots	61:120
	73	Isolated cremation burial	1:1
	74	Pit group	4:8
4	34	Water pit adjacent to enclosures G72	2:913
	35	Water pit adjacent to pits G55	9:390
	41	Major NE/SW boundary ditches	9:59
	42	Large enclosure ditch	6:30
	44	Large enclosure ditch	39:147
	48	Major NW/SE boundary ditches	11:77
	49	Small enclosure ditch	1:51
	51	Small enclosure ditch	10:913
	53	Small enclosure/"funnel" arrangement	2:85
	55	Pits	49:759
	58	Small pit/posthole cluster	5:5
	60	Pits adjacent to enclosure ditch G42	2:8
	64	Intercutting pits	50:710
	68	Linear quarrying NE of Area 2B	11:395
	70	Quarrying SE side of Area 2B	42:648
	71	Quarrying S end of Area 2B	2:29
	72	Additional ditched enclosures	20:91
	75	Inhumation	2:10
5	36	Water pit	3:227
	38	Water pit	3:30
	39	Water pit within enclosure G54	107:4910
	43	Ditch parallel to G45	10:242
	45	Field enclosure boundary ditch	32:406
	46	Field enclosure boundary ditch	17:624
	50	Sub-square enclosure	7:122
	54	Rectangular enclosure	34:1950
	78	Water pit	10:1407
7	47	Boundary ditch	1:2
	69	Quarrying to E of G47	2:427

Table 20: Area 2 quantity of CBM by Phase and Group

4.4.4.2 Ungrouped CBM (Table 21)

CBM deriving from ungrouped features constitutes 37% of the total assemblage. Fifty features containing CBM are ungrouped (excluding unstratified material). The majority of the assemblage derives from the fills of Area 2 ditches and pits. Over 98% of the ungrouped fired clay (2056g) occurred in Area 1, while 96% of the ungrouped brick and tile (14.3kg) occurred in Area 2.



Feature Type	Frag No:Wgt (g)	
	Area 1	Area 2
Ditch	29:491	30:8294
Ploughsoil	2:68	13:4041
External Dump	9:230	-
Layer	5:59	-
Pit (unspecified)	65:1714	53:1804
Quarry pit	-	3:4
Rubbish pit	-	9:168
Structural	-	4:22
Total	110:2562	112:14333

Table 21: Ungrouped CBM by feature type



4.5 Other artefacts

4.5.1 Methodology

Each artefact was assigned a simple name in accordance with the Bedfordshire Artefact Typology, quantified by weight and, where possible, dated.

4.5.2 Quantification

4.5.2.1 Area 1

A total of forty-three registered artefacts (RA), thirty iron nails, 235g of ferrous slag and a window glass fragment were recovered. Processing and sorting of environmental samples produced six artefacts.

4.5.2.2 Area 2

A total of 208 registered artefacts (RA), 72 iron nails, 24.3kg ferrous slag, 6.0kg of vitrified clay hearth lining and three pieces of worked flint were recovered. Processing and sorting of environmental samples produced five artefacts.

4.5.2.3 Field artefact collection

A single glass bead and 21 fragments of ferrous slag were recovered from field artefact collection.

4.5.3 Range and Variety

Systematic metal detecting accounted for approximately 42% of the registered artefacts, and although improving the range of metal objects, this has undoubtedly biased the overall composition of the artefact assemblage in their favour (Table 22 and Table 23). The recovery of assemblages of 98 hobnails (RA 199) from ditches G62 (Phase 3), and 39 hobnails (RA 192) from enclosure ditches G54 (Phase 5) has also produced a bias towards metal objects. The presence of sizeable assemblages of ferrous slag and vitrified clay in Area 2 and the virtual absence of such material from Area 1 is of interest (*see 4.5.3.3*).

Material	Phase		Ungrouped	Total
	3	4		
Bone			1	1
Copper alloy	2	3	4	9
Iron	7	77	14	98
Flint	1	1		2
Glass		3	1	4
Stone	1		7	8
Ferrous slag		235g		235g

Table 22: Area 1: other artefacts by material and phase



Material	Phase				Ungrouped	Total
	3	4	5	7		
Bone			1			1
Copper alloy	1	22	14	5	35	77
Ceramic		1				1
Iron	101	30	106	2	38	277
Flint		3		1	1	5
Lead/lead alloy		2	2		13	17
Glass		1			5	6
Stone	1		2		3	6
Vitrified clay	72g	491g	4990g		482g	6035g
Ferrous slag	1096g	2954g	18103g	562g	1690g	24405g

Table 23: Area 2: other artefacts by material and phase

4.5.3.1 Registered artefacts

Registered artefacts from each area are summarised below (Table 24 and Table 25).

RA No.	Description	RA No.	Description
8	Vessel glass fragment*	39	Millstone grit quern fragment
9	Sandstone quern fragment	40	Vessel glass fragment
10	Sandstone quern fragment	42	Ca pin
11	Sandstone quern fragment	43	Fe unidentified object
12	Sandstone quern fragment	44	Fe unidentified object
13	Bone hairpin*	45	Fe unidentified object
14	Fe hobnail*	46	Ca unidentified object
15	Fe hobnail*	47	Fe hobnail*
16	Fe unidentified object	48	Fe hobnail*
17	Fe unidentified object	49	Fe hobnail*
20	Ca brooch*	50	Ca coin*
21	Ca pin	51	Ca bracelet (<i>Area C</i>)*
22	Stone spindlewhorl	53	Fe unidentified object
23	Fe unidentified object	54	Flint blade
24	Ca coin*	55	Flint unidentified object
25	Ca coin*	56	Fe unidentified object
26	Fe unidentified object	57	Fe unidentified object
27	Lava quern fragment	59	Fe hobnail*
28	Fe staple	60	Millstone grit quern fragment
30	Fe unidentified object	61	Fe hobnail*
37	Fe unidentified object	62	Fe hobnail*
38	Vessel glass fragment		

* = datable artefact

Table 24: Area 1: registered artefacts



RA No.	Description	RA No.	Description
63	Ca unidentified object	176	Flint scraper
64	Pba weight	177	Fe fragment
65	Ca coin*	178	Fe fragment
66	Ca coin*	179	Fe fragment
67	Ca coin*	180	Fe fragment
68	Ca coin*	181	Fe fragment
69	Ca coin*	182	Fe fragment
70	Ca disc	183	Fe hobnail (x 3)*
71	Ca coin*	184	Fe hobnail*
72	Ca pin	185	Fe hobnail*
73	Vessel glass fragment*	186	Fe hobnail*
74	Ca unidentified object	187	Fe hobnail*
75	Ca coin*	188	Fe hobnail (x 2)*
76	Ca button*	189	Unidentified Fe object
77	Fe unidentified object	190	Unidentified Fe object
78	Fe unidentified object	192	Fe hobnail (x 39)*
79	Fe pin	193	Unidentified Fe object
81	Pba disc	194	Fe hobnail*
82	Ca coin*	195	Fe fragment
83	Ca coin*	196	Fe hobnail*
84	Ca coin*	197	Ferrous slag
85	Ca ring	198	Ferrous slag
86	Pba disc	199	Fe hobnail (x 98)*
87	Pba weight	200	Ferrous slag
88	Ca coin*	201	Unidentified Fe object
89	Unidentified Ca object	202	Fe pruning hook
90	Ca fragment	203	Unidentified Fe object
91	Ca coin*	204	Bone pin*
92	Ca waste/runoff	205	Fe nail (x 2)*
93	Ca fragment	206	Ca coin*
94	Ca fragment	207	Unidentified Fe object
95	Ca fragment	208	Ca coin*
96	Ca fragment	209	Ca coin*
97	Ca fragment	210	Unidentified Ca object
98	Ca fragment	211	Unidentified Fe object
99	Ca fragment	212	Unidentified Fe object
100	Unidentified Fe object	213	Fe nail
101	Ca coin*	214	Fe nail
102	Fe nail	215	Fe nail
103	Unidentified Fe object	216	Fe nail
104	Unidentified Ca object	217	Unidentified Fe object
105	Fe nail	218	Fe nail
106	Pba came*	219	Vitrified clay hearth lining
107	Pba offcut	220	Fe nail
108	Unidentified Pba object	221	Ferrous slag
109	Pba fragment	222	Unidentified Fe object
110	Pba came*	223	Unidentified Fe object
111	Pba fragment	224	Unidentified Fe object
112	Pba fragment	225	Millstone grit quern fragment
113	Ca coin*	226	Whetstone fragment
120	Ca coin*	227	Herts puddingstone quern fragment
121	Ca coin*	228	Vitrified clay hearth lining
122	Ca coin*	229	Millstone grit quern fragment
123	Ca coin*	230	Fe hobnail (x 2)*
124	Ca coin*	231	Unidentified Fe object
125	Unidentified Ca object	232	Unidentified Fe object
126	Fe plough coulter*	233	Vessel glass fragment
127	Pba cloth seal*	234	Unidentified Fe object
128	Ca button*	235	Unidentified Fe object
129	Ca coin*	236	Unidentified Fe object
130	Ca coin*	237	Unidentified Fe object
131	Ca fragment	238	Unidentified Fe object
133	Unidentified Fe object	239	Fe nail



134	Fe horseshoe*	240	Unidentified Fe object
135	Pba fragment	241	Fe nail
136	Fe horseshoe*	242	Fe nail
137	Fe hobnail (x 2)*	243	Fe knife
138	Ca coin*	244	Unidentified Fe object
139	Ca coin*	245	Fe nail (x 2)
140	Ca coin*	246	Fe nail (x 2)
141	Ca coin*	247	Fe fragment
142	Ca coin (x 2)*	248	Ferrous slag
143	Ca coin*	249	Fe nail
144	Ca waste/runoff	250	Unidentified Fe object
145	Ca coin*	251	Fe fragment
146	Fe ring	252	Fe hook
147	Ca waste/runoff	253	Vessel glass fragment
148	Ca button*	254	Fe fragment
149	Ca button*	255	Ca coin*
150	Fe hobnail*	256	Fe tool handle
151	Unidentified Ca object	257	Flint knife
152	Ca coin*	258	Fe fragment
153	Fe staple	259	Fe fragment
154	Fe fragment	260	Fe fragment
155	Ca coin*	261	Fe fragment
156	Fe disc	262	Fe fragment
157	Pba spindlewhorl	263	Fe fragment
158	Ca brooch*	264	Fe fragment
159	Ca coin*	265	Fe fragment
160	Ca fragment	266	Fe fragment
161	Ca casting gate	267	Fe fragment
162	Unidentified Fe object	268	Fe fragment
163	Ca coin*	269	Fe fragment
165	Ca coin*	270	Unidentified Fe fragment
166	Ca steelyard	271	Unidentified Fe fragment
167	Ca coin*	272	Fe hobnail (x 2)*
168	Ca coin*	273	Vessel glass fragment
169	Ca coin*	274	Ca clasp
170	Ca coin*	275	Glass bead
171	Ca tack	276	Fe fragment
172	Pba came*	277	Pba vessel patch*
173	Fe fragment	278	Whetstone
174	Ca coin*	279	Unidentified Ca fragment
175	Pba spindlewhorl	280	Fe fragment

* = datable artefact

Table 25: Area 2: registered artefacts

4.5.3.2 Metal artefacts

The majority of metal artefacts reflect domestic activity, comprising predominantly timber nails, staples, two lead spindlewhorls, two lead weights and single examples of a lead vessel repair and balance arm or steelyard. Strip and sheet waste fragments in iron, copper alloy and lead also constitute a high proportion of the assemblage. It is possible that a proportion of the iron fragments may be associated with the large quantity of ferrous slag recovered from Area 2, although this cannot be conclusively demonstrated at this stage. The presence of a casting gate and small quantity of non-ferrous waste attest the working of copper alloy.

Personal items comprise copper alloy hair pins, a bracelet, three brooches, hobnails, a clasp and four post-medieval buttons.



Miscellaneous items include a pruning hook, knife blade, a plough coulter and post-Roman horseshoes and shoeing nails.

An assemblage of 48 copper alloy coins was also recovered. Twelve are unstratified; the remainder derive from cut features mainly within Area 2B. Preliminary assessment of the coins suggests most are of 3rd-4th century date.

The metal artefacts survive in fair condition; most are incomplete and their deposition is likely to be as a result of this.

It is proposed to submit 229 objects (169 of iron and 60 of copper alloy) for x-ray to assist in the clarification of form and function. It may subsequently be possible to reclassify some of the fifty-two objects provisionally classified as of unknown or uncertain function.

4.5.3.3 Iron working residues (Table 26)

Iron working residues were only recovered from Area 2. It comprised redeposited ferrous slag and vitrified clay fragments, the majority deriving from features assigned to Phase 5, notably ditch G45 which contained 11.6kg slag and 4.2kg vitrified clay (Table 26).

Although the ferrous slag is largely undiagnostic, it includes portions of five hearth bowls, and a small quantity of possible hammerscale, indicative of smithing. The presence of the latter suggests that smithing was being carried out close by, as hammerscale is more likely to remain in the vicinity of its source. A small proportion of the ferrous slag is notable for its low vesicularity, and this, coupled with the presence of a small quantity of tapslag, suggests that iron smelting may also have been undertaken.

Although the vitrified clay alone is not indicative of iron working, its recovery in direct association with metalworking debris suggest that at least some will have derived from furnaces. It is, however, also likely that some represents linings of domestic hearths.



Phase	Group	Group type	Ferrous slag (g)	Clay Hearth Lining (g)
3	56	Ditched enclosure	568	6
	62	E-W aligned ditches	-	25
	63	Pit adjacent to enclosure G56	246	41
	74	Pit group	282	
4	40	Continuation of G41 major boundary ditch	405	
	41	Major NE/SW boundary ditches	272	275
	55	Pits	6	
	58	Small pit/posthole cluster	-	4
	60	Pits adjacent to enclosure ditch G42	97	22
	64	Inter-cutting pits	489	
	66	Group of pits south of possible entrance	371	12
5	39	Water pit within enclosure G54	-	5
	43	Ditch parallel to G45	3375	674
	45	Field enclosure boundary ditch	11630	4205
	46	Field enclosure boundary ditch	1098	95
	54	Rectangular enclosure	1253	
	61	Pit group	1228	15
	68	Quarry pits	1314	178
-	Ungrouped		1690	482

Table 26: Iron working residues by Phase and Group (all Area 2)

The twenty-one fragments of ferrous slag recovered from field artefact collection are likely to have derived from smithing processes. They were recovered mainly to the N of Area 1, outside the Areas of Archaeological Significance. It is not possible to date this material independently of other artefacts.

4.5.3.4 Flint artefacts

The flint assemblage from the open area excavation comprised eight worked artefacts. All are residual, occurring in features containing late Iron Age and later material. The six objects from grouped deposits are summarised below (Table 27). A crested blade and incomplete plano-convex knife derived from ungrouped features in Areas 1A and 2B respectively.

Phase	Group	Group type	Artefact description	Area
3	10	Enclosure ditch	Blade (RA 54)	1A
4	12	Water feature	Unidentified worked flint (RA 55)	1A
4	49	Ditch	End scraper (RA 176)	2B
4	48	Boundary ditch	Flake	2B
4	51	Enclosure ditch	Flake	2B
5	50	Enclosure	Denticulate	2B

Table 27: Flint Artefacts

Forty-three pieces of worked flint were recovered during field artefact collection. The majority comprised debitage, including five cores. Core products include flakes, retouched flakes and possible core rejuvenation flakes. The presence of multi-platform cores and flakes struck with a hard hammer suggest a late Neolithic/early Bronze Age date for the majority of the assemblage. Tools are restricted to two end-and-side scrapers. Four blade fragments suggest a component of the assemblage is of earlier date. With such a low density of material no reliable concentrations were identified. However, a general clustering was noted to the N and S of the area¹.



4.5.3.5 All other artefacts

The remaining artefacts are largely associated with domestic activity. They comprise eight vessel glass fragments, eleven rotary quern fragments, a spindlewhorl, two primary whetstones, and a window glass fragment. Personal items comprise two incomplete bone hair pins and a glass bead. A second glass bead was recovered during field artefact collection.

4.5.4 Date range

Approximately 35% of the material is typologically datable, comprising mainly the coin assemblage, hobnails and some items of personal adornment and dress (brooches, bracelet and dress pins). At present, most objects are only broadly datable to the Roman or post-Roman periods, although this dating will be refined during analysis. In addition, it may be possible to suggest a chronological range for some artefacts by their association with pottery or other datable artefacts.

4.5.5 Provenance

4.5.5.1 Occurrence within Phase and Area

4.5.5.1.1 Area 1 (Table 28)

Over 51% of the assemblage derives from features assigned to Phase 4, the majority associated with enclosures G22 and cobbled surface/underlying pit G29. Fourteen percent are associated with Phase 3, while the remainder are ungrouped (*see 4.5.5.2*).

Phase	Group	Artefact Description*	Quantity	Weight
3	9	Nail:2, unid:2	4	
	10	Quern, blade, unid, nail	4	
	17	Nail	1	
	25	Coin:2	2	
4	11	Pin	1	235g
	12	Unid	1	
	14	Hobnail:49	49	
	19	Nail	1	
	20	Bracelet	1	
	22	Hobnail, slag:235g, unid, nail:10, coin, vessel, window glass	15	
	29	Nail:11, unid:3, hobnail, vessel	16	
Total			95	

* Single object unless otherwise stated

Table 28: Area 1 artefact quantity by Phase and Group

Area 2 (* Single object unless otherwise stated)

4.5.5.1.2 Table 29)

Twenty-eight percent of the assemblage derives from features assigned to Phase 5, the majority associated with ditch G45 and enclosure ditch G54. Twenty-four percent is associated with Phase 4, and fifteen percent with Phase 4. A small proportion (3%) derived from post-medieval features in Phase 7, while the remaining artefacts are ungrouped (*see 4.5.5.2*).



Phase	Group	Artefact Description*	Quantity	Weight
3	33	Nail	1	
	56	Coin, vitrified clay:6g, slag:568g	1	574g
	62	Hobnail:98, quern, unid:2, vitrified clay:25g,	101	25g
	63	Vitrified clay:41g, slag:246g		287g
	74	Slag:282g		282g
4	40	Coin:7, frag, nail, slag:405g, unid	10	405g
	41	Came, coin, disc, vitrified clay:275g, nail, pin, pruning hook, slag, 272g, unid:3, vessel	10	547g
	48	Flake, frag, hobnail:4, nail,	7	
	49	Coin:2, scraper	3	
	51	Came, flake, nail:2	4	
	53	Hobnail:3, nail, unid	5	
	55	Knife, slag:6g	1	6g
	58	Vitrified clay:4g		4g
	60	Frag, vitrified clay 22g, nail, slag:97g, unid	3	119g
	64	Slag:489g		489g
	66	Hobnail, vitrified clay:12g, slag:371g	1	383g
	68	Coin, steelyard, vitrified clay:178g, slag:1314g	2	1492g
	70	Frag:2, hook, horseshoe, nail:5, unid:2	11	
	72	Button, coin:3, nail:2	6	
	75	Unid	1	
5	39	Nail:16, vitrified clay:5g, unid	17	5g
	43	Coin:2, frag, vitrified clay:674g, hobnail, quern, slag:3375g, unid:3, whetstone	9	4049g
	45	Coin, frag:18, vitrified clay:4205g, hobnail:3, nail:13, slag:11734g, unid:11, waste	47	15939g
	46	Brooch, coin:2, disc, frag, vitrified clay:95g, nail:4, slag:1098g, staple, unid	11	1193g
	50	Cloth seal, coin, denticulate, nail:2, coulter, unid	7	
	54	Coin, frag:3, hobnail:41, nail:2, slag:1253g	47	1253g
	61	Nail:2, pin, unid, vitrified clay:15g, slag:1228g	4	1243g
	78	Coin:3, nail:3, pin	5	
7	69	Button:2, coin, hobnail, nail:5, slag:562g	9	562g
	47	Button, unid	2	
Total			325	26614g

* Single object unless otherwise stated

Table 29: Area 2 artefact quantity by Phase and Group

4.5.5.2 Ungrouped artefacts (Table 30 and Table 31)

Ungrouped artefacts include a number of objects for which a date range can be suggested, and it is likely that some ungrouped features may be assigned to a phase during subsequent analysis. Eleven Area 1 features contain between one and three objects of intrinsic interest, while for Area 2 the total rises to nineteen features.

Feature Type	Artefact Description*	Quantity
Ditch	Hobnail, nail, pin, quern:4, spindlewhorl, unid:3, vessel	12
Ploughsoil	Disc, horseshoe, quern, unid	4
External dump	Unid	1
Layer	Pin	1
Pit (unspecified)	Brooch, nail:3, quern, staple, unid	7
Structural cut	Hobnail:4, unid	5
Total		30

* Single object unless otherwise specified

Table 30: Area 1 ungrouped artefacts by feature type



Feature Type	Artefact Description*	Quantity	Weight
Ditch	Hobnail:2, nail:9, quern, slag:1078g, unid:3, offcut, vitrified clay:99g	16	1177g
Ploughsoil	Brooch, came, coin:12, disc:2, frag:12, nail:3, offcut, quern, ring, shoeing nail, spindlewhorl, tack, unid:4, vessel patch, waste, weight:2, whetstone	45	
Furrow	Hobnail:2, spindlewhorl	3	
Pit	Coin:5, frag, vitrified clay:372g, handle, hobnail:6, knife, nail:10, ring, slag:573g, unid:4, vessel:3, waste:2	34	945g
(unspecified)	frag, vitrified clay:11g, horseshoe, nail, unid:2	5	11g
Quarry pit	Nail, slag:39g, unid	2	39g
Rubbish pit	Bead, clasp, nail:4, vessel	7	
Structural cut	Unid	1	
Well			
Total		113	2172g

* Single object unless otherwise stated

Table 31: Area 2 ungrouped artefacts by feature type



4.6 Animal bone data

4.6.1 Methodology

The following assessment was made with the aim of evaluating the potential of the faunal assemblage to provide information about the diet of the inhabitants of the site, the exploitation of animals and the deposition of their remains throughout the different periods of occupation. All animal bones were scanned *i.e.* not fully quantified, and the following information recorded for each context:

- context number, cross referenced with additional contextual information
- assessment of the state of preservation (one of five grades ranging from good to poor)
- approximate number of fragments provisionally identified to each species
- approximate number of unidentified fragments
- approximate total number of fragments
- assessment of the state of bone preservation
- number of mandibles with surviving teeth
- approximate number of limb bones with epiphyseal fusion data
- number of measurable bones for each species
- other comments, including some measurements

Anatomical elements, fragmentation, gnawing, butchery marks, pathology and ageing data were not recorded. Fragments noted with modern breaks were counted only once. Information was recorded onto a database and spreadsheet, which are stored with the site archive. Bones from environmental samples were scanned but not recorded to the same level of detail as those that were hand collected. For the purposes of this report only the hand-collected material will be discussed in detail.

4.6.2 Quantification and preservation

In total 3,273 fragments were hand-collected from 476 contexts. (and Area 2 produced 2,176 fragments from 303 contexts). No analysis of skeletal part representation was undertaken as part of the assessment. The impression was that there was a bias towards denser elements, particularly in the sheep/goat and pig assemblages, indicating differential preservation.

4.6.2.1 Area 1

Animal bones were collected by hand from 173 contexts producing an approximate total of 1,097 fragments. Fragments noted with modern breaks were counted only once. The average assemblage per context is small (6.3).

Assemblages of over 50 fragments were recovered from only three contexts:

- deposit (1709) within posthole [1708], G29, Phase 4 (60 fragments),
- special deposit (5447) in posthole [5444], G25, Phase 3 (58 fragments)
- animal skeleton (5803) within animal grave G27, Phase 4 (*c.*100 fragments).



Counts in contexts 5447 and 5803 were inflated by the presence of partial skeletons of domestic fowl and horse respectively. Most bones were associated with deposits assigned to Phase 4 (Table 32).

Most of the assemblages from Area 1 were moderately preserved, indicating high levels of fragmentation, some gnawing but relatively little surface erosion. Although only three assemblages were designated as “poor” with heavy erosion, 56 assemblages fell into the quite poor category generally indicating a relatively high proportion of slightly eroded and heavily fragmented bones. None of the assemblages were preserved well enough to be classified as “good” but 15 fell in the “quite good” category, indicating little erosion and less gnawing damage than the moderately preserved assemblages (Table 32).

Phase	No. of contexts	No. of fragments	Preservation			
			Quite Good	Moderate	Quite Poor	Poor
Phase 2	3	6			3	
Phase 3	21	168	3	12	6	
Phase 4	96	741	7	54	32	3
Unassigned	53	182	5	33	15	
Total	173	1097	15	99	56	3

Table 32: Area 1: state of animal bone preservation

There were some variations in preservation of assemblages in different feature types. Although most contexts from ditches and pits in Area 1 produced moderately preserved assemblages, pits tended to produce relatively fewer poorly preserved assemblages.

4.6.2.2 Area 2

A larger sample of *c.* 2,176 fragments from 303 contexts was recovered from Area 2. These provided a slightly higher average assemblage size (7.2 bones per contexts) when compared to Area 1.

Four contexts produced over 50 fragments:

- deposit (8475) within pit [8473], G64, Phase 4 (120 fragments),
- deposit (8583) within pit [8580], G64, Phase 4 (56 fragments),
- deposit (8582) within pit [8580], G64, Phase 4 (72 fragments),
- deposit (7910) in pit [7908], currently unassigned (56 fragments).

In terms of preservation of bones “quite poor” assemblages outnumbered “moderate” ones and substantially more assemblages fell in the “poor” category than in Area 1. This trend was noted in all the comparable phases (Table 33). However, most of the poorly preserved groups tended to consist of small numbers of fragments. Most of the largest assemblages fell in the “quite good” or “moderate” categories.



Phase	No. of contexts	No. of fragments	Preservation			
			Quite Good	Moderate	Quite Poor	Poor
Phase 3	35	197		11	20	4
Phase 4	128	1,011	12	47	53	16
Phase 5	79	528		34	42	3
Phase 6	1	1				1
Phase 7	3	23	1		1	1
Unassigned	57	416	7	21	25	4
Total	303	2,176	20	113	141	29

Table 33: Area 2: state of animal bone preservation

There were some variations in preservation of assemblages in different feature types in Area 2. Deposits within quarry and ditches tended to produce less well preserved assemblages (including nearly all those classified as “poor”), than the water pits, rubbish and other pits, which included nearly all the best preserved groups.

4.6.3 Species present (Table 34)

Approximate counts of species represented indicated that 54% of the fragments were identifiable to species. The percentage of unidentified fragments is not unusual in moderately preserved assemblages such as this. It is noticeable that Area 1 included a higher percentage of provisionally identified bones (60%) than Area 2 (50%). This reflects the poorer preservation of bones in Area 2.

In order of frequency, cattle (38% of the identified fragments) outnumbered sheep/goat (26%) in Area 1. Cattle (54%) also dominated the assemblage from Area 2, compared with 28% sheep/goat.

4.6.3.1 Cattle

The higher percentage of cattle from Area 2 could reflect both poorer preservation conditions in this area and variations in the disposal of bones. In addition several groups of associated bones of other species in Area 1 depressed the overall percentage of cattle. Several fragmentary skulls of cattle were located in the same part of the enclosure system G22 (Area 1) suggesting discrete disposal areas may have existed.

4.6.3.2 Horse

The percentage of horse in Area 1 (21%) was largely inflated by the inclusion of the 100 bones from the skeleton in animal grave G27 (Phase 4). On Area 2 horse bones account for about 10% of the identified bones and this may be more representative.

In addition to the horse burial G27 a group of eight horse bones consisting of a fragmentary skull and mandible of an immature animal and six cervical vertebrae (one of which was butchered) was found in ditch [5676], G22 (Phase 4). Small groups of associated horse bones were also noted in Area 2. In addition to the groups noted above, five foot bones were found in ditch [7747], G48 (Phase 4).



4.6.3.3 *Bird*

Fifty-eight of the sixty-six bird bones from Area 1 were from the domestic fowl skeletons found in the “special” deposit G25 within posthole [5444] (Phase 3). In addition bird bones were found in eight other Area 1 contexts. Five belonged to domestic fowl, four of which were associated with Phase 4 contexts and one a Phase 3 context. In addition a bone of a rook/crow was found in ditch 5676, G22 (Phase 4), a bone of a goose was found in ditch [1711], G22 (Phase 4) and a bone of a unidentified smaller wild species of bird was found in (5566) (currently unassigned ditch).

From Area 2, 22 of the 27 bird bones were provisionally identified as domestic fowl. Fourteen of these were from the foot of one stocky galliform found in ditch [7829] (currently unassigned). Two domestic fowl bones were found in the Phase 7 post-medieval quarry pit G69; single finds were found in pit [7671] within G66 (Phase 4), pit [7892] within G78 (Phase 5) and pit 7908 (currently unassigned). Three domestic fowl bones were recorded in pit [8862] (currently unassigned). Three corvid bones were noted in pit [8862] (currently unassigned) and bones from an unidentified large species of bird were recorded in pit [7644] and ditch [7727] (currently unassigned).

Domestic fowl bones tend to be rarely found in British Iron Age contexts and where identified they tend to be from middle and later Iron Age sites, particularly in the SE of England²⁰.

4.6.3.4 *Pig and dog*

Bones of pig (4%) and dog (2%) were both poorly represented in Area 1. Pig was even less well represented (2%) in Area 2, suggesting the species played little part in the subsistence of the inhabitants. Canid bones were slightly better represented (4%) in Area 2, although this percentage is inflated by the discovery of nine bones scattered in three contexts of ditch [7580], G54 (Phase 5). These belonged to a small dog, or possibly a fox. The unusually good preservation of these bones could indicate that they are a more recent intrusion.

4.6.3.5 *Other species*

One bone, probably of a cat, was noted, as was one frog/toad bone, both from Area 1. A small number of frog/toad bones are present in sieved samples from Area 2. No bones of deer or fish from either Area 1 or 2 were identified during the scan (Table 34).

²⁰ Maltby, M. 1997. Domestic fowl on Romano-British sites: inter-site comparisons of abundance. *International Journal of Osteoarchaeology* 7, 402-14.



Area	Phase	Cow	Sheep/Goat	Pig	Horse	Dog	OM	Bird	F/T	Unid.	Total
1	2	2				1				3	6
1	3	18	17	7	5	6		59		56	168
1	4	183	128	13	123	2	1	6	1	284	741
1	Unassigned	45	27	5	10	1		1		93	182
Total		248	172	25	138	10	1	66	1	436	1,097
2	3	38	28	3	10	4				114	197
2	4	345	135	9	47	21		1		453	1,011
2	5	108	85	4	29	15		2		285	528
2	6	1									1
2	7	5			1			2		15	23
2	Unassigned	94	55	4	20	1		22		220	416
2 Total		591	303	20	107	41	0	27	0	1,087	2,176
1+2 Total		839	475	45	245	51	1	93	1	1,523	3,273

Table 34: Animal species by Area and Phase

4.6.4 Provenance

4.6.4.1 Occurrence within phase

Bone was present in deposits from all phases, although 39% is unidentifiable from Area 1 and 46% is unidentifiable from Area 2. The bulk of the phased faunal material is of Romano-British date with the majority coming from Phase 4 (later Romano-British) deposits on both areas of excavation (Table 34). The relative representation of species is not unusual for Romano-British rural settlements, which are usually dominated by sheep/goat and cattle, with pigs being relatively uncommon²¹. Horse bones tend to occur more commonly on rural sites than in urban settlements²² and the incidence of horse bones in this assemblage would fit that trend.

Evidence for chronological variation is indicated in an apparent increase in the number of cattle bones in Phase 4 deposits in both areas, although samples from Phase 3 are small.

4.6.4.2 Spatial occurrence

During the assessment a number of spatial patterns in the bone distribution were noted which may indicate preferred areas for such disposal. Several of the fragmentary skulls of cattle and horse in Area 1 were located in the same part of the enclosure system, some of the pits G64 (Phase 4) in Area 2 have evidence for the disposal of butchered cattle mandible and skull fragments and water pit G35 contained a group of cattle scapulae. Accordingly, some basic intra-site analysis of body parts is feasible, which may reveal different zones of deposition of different parts of cattle and horse carcasses.

²¹ King, A. 1999. Diet in the Roman world: a regional inter-site comparison of the animal bones. *Journal of Roman Archaeology* **12**, 168-202.

²² Maltby, M. 1994. The meat supply in Roman Dorchester and Winchester, pp. 85-102 in Hall, A.R. and Kenward, H.K. (eds.), *Urban-Rural Connexions: Perspectives from Environmental Archaeology*. Oxford: Oxbow Monograph 47.



4.6.4.3 “Special” deposits

Two “special” deposits were identified on the basis of animal bone and these are discussed below:

- **G25** (Phase 3, Area 1) of the 58 bird bones, wing and leg bones were clearly identifiable and suggest two skeletons were present, one belonging to a hen and the other probably to a cock.
- **G27** (Phase 4, Area 1) the 100 bones from a horse skeleton G27 belonged to an adult animal that was probably originally buried as a complete skeleton. Some truncation had occurred because only small parts of the skull survived and some of the limb extremities are missing.

4.6.4.4 Ungrouped animal bone

Of the ungrouped assemblages from Area 1 the most common deposits to yield bone were those within ditches (37 contexts yielded 116 bone fragments) (Table 35). Of this assemblage ditch segment [5516] was the largest with 27 fragments. Bone was also commonly recovered from pits (18 contexts yielded 45 fragments).

	Ditch	External Dump	Layer	Pit unspecified	Structural
Cow	28	2	1	14	
Sheep/Goat	17	4	0	6	
Horse	6	0	1	2	
Pig	3	1	0	1	
Dog	0	1	0	0	
Bird	1	0	0	0	
Deer	0	0	0	0	
Unidentified	61	6	3	22	1
Total count	116	14	5	45	1
No. of contexts	37	3	1	18	1

Note: excludes bone from topsoil and modern features

Table 35: Area 1 ungrouped animal bone fragment count by feature type

On Area 2 pits rather than ditches were the most common feature type to contain deposits with animal bone (Table 36). It is possible that this reflects the fact that the majority of ditches in Area 2 had been assigned. Unspecified pits [8043 and 8531], rubbish pits [7908, 8443 and 8862] produced over 50% of their respective feature type assemblages.

	Ditch	Furrows	Pit unspecified	Quarry pits	Rubbish pits	Structural	Water pits
Cow	8	1	41	1	35	1	8
Sheep/Goat	4		31	1	18		1
Horse	0		16	0	3		2
Pig	0		1	1	1	1	0
Dog	0		1	0	0		0
Bird	14		1	0	7		0
Unidentified	25		106	6	80	0	4
Total count	51	1	197	9	144	2	15
No. of contexts	14	1	27	3	6	2	2

Note: excludes bone from topsoil and modern features

Table 36: Area 2 ungrouped animal bone fragment count by feature type



4.6.5 Additional data

4.6.5.1 Tooth ageing data (Table 37)

A total of 126 mandibles survived with one or more molars *in situ* and these can provide evidence for the age of death. Most belonged to sheep/goat (57) and these can provide a fair indication of mortality rates, particularly in Phase 4. Area 2 provides a very interesting sample of 40 cattle mandibles, most of which appear to be from immature animals. This area contains significantly higher numbers of cattle mandibles than Area 1 from where only 12 specimens survived with teeth. Most samples of comparable Romano-British date, particularly from urban sites, have high percentages of adult cattle mandibles²² and, therefore, the assemblage from this site is particularly important.

Only five pig and four horse mandibles have surviving teeth and can provide only basic information about mortality patterns. Several maxillae, mainly of cattle and sheep/goat can also be used to supplement the ageing data.

Area 1	No. fragments	Mandibles with Teeth	Frgs. with fusion data	Measurable bones
Cattle	248	12	52	26
Sheep/Goat	172	23	18	10
Pig	25	2	2	2
Horse	138	1	65	12
Dog	10		8	3
Other Mammal	1		1	
Bird	66			19
Frog/Toad	1			
Total identified	661			
Unidentified	436			
Total	1,097	38	146	72
Area 2				
Cattle	591	40	121	54
Sheep/Goat	303	34	65	9
Pig	20	3	1	
Horse	107	3	63	39
Dog	41	8	13	9
Bird	27			11
Total identified	1,089			
Unidentified	1,087			
Total	2,176	88	263	122

Table 37: Additional data on animal bone from Areas 1 and 2

4.6.5.2 Epiphysial fusion data (Table 37)

A total of 409 bones have surviving fusion data (Table 37). However, 50 of these belonged to the same adult horse skeleton G27 (Area 1). A few of the other horse bones do attest to the presence of foals and other immature horses. The 173 cattle bones with fusion evidence can be used to compare with the tooth ageing data to provide an understanding of cattle mortality rates. Both adults and calves are represented. Only 83 sheep/goat bones have fusion evidence and it is likely that there will be a bias towards the survival of fused bones of older animals because of the preservation conditions. However, some



bones of neonatal sheep were noted in a few contexts. Epiphysial fusion evidence for pig is very limited and preliminary observations on the modest dog bone assemblage indicate puppies as well as adult animals are represented (Table 37).

4.6.5.3 Measurable bones (Table 37)

A total of 194 measurable bones were noted (Table 37). Eight of the 51 horse and 14 of the measurable bird bones were from the articulated skeletons from Area 1. These will provide a more detailed understanding of the stature of these individuals than can be obtained from isolated bones. A notable feature of the cattle assemblage was the number of large bones. Although not all of these are measurable, the 80 measurable cattle bones do include several of these large bones and indicate the presence of large stock and/or a bias towards male animals. Complete limb bones were found in some numbers for both cattle and horse, particularly in Area 2, allowing for estimations of shoulder heights. More limited metrical data are available for other species. Several large bones of sheep and were also noted, although the samples are small (Table 37).

4.6.5.4 Butchery evidence

No detailed search for butchery marks was undertaken during the scan but some notes were made of butchery marks on a few bones. Several of the cattle bones bore chop and blade marks, some of which have been found more commonly on Romano-British urban and military sites than on rural settlements. The presence of these marks may suggest the activities of butchers familiar with methods practised in towns, although at this stage it is uncertain whether there are any significant chronological or spatial variations in the distribution of these types of butchered bones.

4.6.5.5 Evidence for pathology and genetic variation

Again, no detailed records were made. However, several bones with pathological conditions were noted, particularly in the cattle and horse samples, and the impression was that there was a higher incidence of pathology than usually encountered in a sample of this size. Genetic variations included the presence of both horned (well G13, Phase 4, Area 1) and hornless sheep (unassigned pit [5509] and unassigned ditch segment [8537]), the latter type probably being introduced to Britain in the Roman period²².

4.7 Human bone

The incidence of human bone was restricted to Phases 3 and 4. The majority of the assemblage derived from graves (four inhumations and 10 cremation burials) (Table 38). Although only two of the skeletons were complete all the uncremated bone survived in good condition. The cremated bone included diagnostic fragments such as long bone, rib, tooth and skull fragments.



Phase	Group	Feature No.	Wgt (g)	Description	Area
3	16	5832	136	Cremated bone fragments	1A
		5936	69	Cremated bone fragments	
		5948	58	Cremated bone fragments	
		6200	373	Cremated bone fragments	
		6202	8	Cremated bone fragments	
3	17	6170	420	Cremated bone fragments	1A
		6174	482	Cremated bone fragments	
3	73	7527	347	Cremated bone fragments	2B
4	14	5982	Unweighed	Skeleton- largely complete	1A
4	15	5933	373	Skeleton: right leg (fragmentary)	1A
4	31	7227	1,309	Skeleton: incomplete	2B
4	75	3702	3,235	Skeleton- largely complete	2B
4	81	8676	169	Cremated bone fragments	2C
4	81	8677	25	Cremated bone fragments	2C

Table 38: Human Bone from funerary contexts

The human bone recovered from non-funerary contexts comprised both cremated and unburnt fragments (Table 39). Once again the bone was in good condition suggesting it had not been left exposed to weathering or, in the case of material recovered from ditches, not subject to repeated redeposition.

Phase	Group	Context No.	Deposit Type	Wgt (g)	Description	Area
3	2	6251	Ditch [6250]	171	Skull (cranium) fragments	1A
4	30	6298	Ditch [6296]	2	Rib fragment	1A
	42	7014	Ditch [7013]	66	Long bone fragments	2B
	44	8828	Ditch [8824]	1	Cremated bone fragments	2B
	81	8649	Quarry pit [8645]	14	Cremated bone fragments	2C

Table 39: Human bone from non-funerary contexts



4.8 Environmental samples

4.8.1 Methodology

Environmental samples were taken for the extraction of both charred and waterlogged plant remains. A total of 118 samples were taken (63 from Area 1 and 55 from Area 2). The standard sample volume was 10 litres (Area 1), but was increased to 20 litres on Area 2.

Samples were scanned under a binocular microscope at a magnification of x10 to x20. Any seeds, grain or chaff were noted and provisionally identified. An approximation of abundance was also made. In the samples of charred remains, charcoal was examined in transverse section. The assessment results for charred remains were entered into an Access database.

4.8.2 Discussion of charred plant remains by phase

Forty-eight samples (Area 1) and forty-five samples (Area 2) derived from deposits that had been grouped and assigned to phase and these are summarised in Table 40 and Table 41.

Phase	Group	Sample	Charcoal Q Id	Grain Q Id	Chaff Q Id	Weeds Q Id	Fruit/nut Q Id	Snails Q
2	4	17	1 <i>Al/Cor</i>	0	0	0	0	
2	4	48	1 Pom, <i>Q</i>	0	0	0	0	
3	1	28	1 <i>Q</i>	0	2 <i>T. spelt</i> , <i>T. hex</i>	1 <i>Rumex</i>	0	
3	1	29	1 <i>Q</i>	0	0	0	0	+
3	2	60	2 Pom, <i>Q</i>	2 indet	0	0	0	
3	3	18	1 <i>Q</i>	1 indet	0	0	0	
3	3	19	0	1 indet	0	0	0	
3	10	14	1 Pom	2 indet	0	0	0	
3	16	49	0	0	0	0	0	+++
3	16	50	0	0	0	0	0	
3	16	53	0	0	0	0	0	
3	16	54	0	0	0	0	0	
3	16	55	0	0	0	0	0	
3	16	56	0	0	0	0	0	
3	16	58	0	0	0	0	0	
3	16	59	0	0	0	0	0	
3	16	73	0	1 <i>Triticum</i>	0	0	0	
3	17	41	0	1 indet	0	0	0	
3	17	42	0	1 indet	0	0	0	
3	17	43	0	0	0	0	0	
3	17	44	0	0	0	0	0	
3	17	45	0	0	0	0	0	
3	17	46	0	2 indet	0	0	0	
3	17	47	0	0	0	0	0	
4	5	21	0	2 <i>T. dicoc/spelt</i> , indet	4 <i>T. spelt</i> , <i>T. dicoc/spelt</i>	6 <i>Mont</i> , oth	0	
4	5	22	1 <i>Q</i>	10 <i>T. dicoc/spelt</i> , indet	20 <i>T. spelt</i> , <i>T. dicoc/spelt</i>	4 <i>Bromus</i> , <i>Stel</i> , <i>Vic/Lath</i> , oth	0	
4	5	23	0	1 indet	0	0	0	
4	5	24	0	0	0	0	0	



4	6	32	3 <i>Q</i>	1 indet	1 <i>T. spelt</i>	0	0	
4	6	33	3 <i>Q</i>	1 <i>T. dicoc/spelt</i>	0	0	0	
4	12	78	0	0	0	0	0	
4	13	76	0	0	0	0	0	
4	14	38	0	0	0	0	0	
4	14	39	0	0	0	0	0	
4	14	40	0	0	0	0	0	
4	15	37	0	0	0	0	0	
4	15	57	0	0	0	0	0	
4	18	79	1 Pom, <i>Q</i>	20 <i>T. dicoc/spelt</i> , <i>T. free</i> , indet	0	20 <i>Carex</i> , <i>Vic/Lath</i> , <i>Gram</i> , oth	8 <i>Corylus</i>	
4	18	80	1 Pom	4 <i>T. dicoc/spelt</i> , indet	0	2 <i>Rumex</i> , <i>P.pers</i>	0	
4	21	83	0	0	0	0	0	
4	22	10	1 Pom	25 <i>T. spelt</i> , <i>T. dicoc/spelt</i> , <i>T. free</i> , indet	0	0	0	
4	22	13	0	0	0	0	0	
4	22	15	1 <i>Q</i>	0	0	0	0	
4	22	16	0	0	0	0	0	
4	22	20	1 Pom	3 indet	0	0	0	+
4	22	26	1 Prun	3 <i>Hord. hul</i> , indet	0	3 <i>Vic/Lath</i>	0	
4	22	27	2 Pom, <i>Q</i>	0	1 <i>T. spelt</i>	1 <i>Rumex</i>	0	
4	22	31	0	0	1 <i>T. dicoc/spelt</i>	0	0	+
4	22	35	1 <i>Q</i>	0	0	0	0	
4	22	51	1 <i>Q</i>	5 <i>T. dicoc/spelt</i> , indet	1 <i>T. dicoc/spelt</i>	4 <i>Vic/Lath</i> , oth	0	+
4	22	52	0	0	0	0	0	
4	22	61	0	1 indet	0	0	0	+
4	22	63	0	0	0	2 <i>Gram</i> , oth	0	+
4	22	65	1 <i>Q</i>	1 indet	4 <i>T. dicoc/spelt</i>	0	0	
4	22	68	2 <i>Prunus</i> , <i>Q</i>	0	10 <i>T. spelt</i> , <i>T. dicoc/spelt</i>	0	0	
4	27	11	0	0	0	0	0	
4	27	12	0	0	0	0	0	
4	30	75	0	0	0	0	0	

Quantification for charcoal: 0= absent, 1= scarce, 2= some, 3= plentiful, 4= very abundant

Quantification for snails: += scarce, ++= some, +++= many

Table 40: Ecofact assemblage from Area 1 by phase and group



Phase	Group	Sample	Charcoal Q ID	Cereal Q ID	Chaff Q ID	Weed Q ID	Fruit/nut Q ID	Snail Q
3	56	90	0	0	0	1 indet	0	+++
3	56	91	0	1 indet	1 <i>T.spelt</i> glume base	1 <i>Graminae</i>	0	+++
3	62	93	3 Pom?	5 <i>T.spelt</i> , indet	0	5 <i>Rumunculus?</i>	0	0
3	62	118	2 <i>Q</i>	0	0	0	0	+++
3	63	124	1 indet	20 <i>T.spelt</i> , <i>Hord.hul</i>	10 <i>T.spelt</i> glume base	50 <i>Vic/lath</i> , <i>Montia</i> , <i>Graminae</i>	0	+++
3	73	101	5 <i>Q</i>	0	5 <i>T.spelt</i>	30 <i>Vic/lath</i> , <i>Graminae</i> , <i>Rumex</i>	0	0
3	73	102	1 indet	4 <i>Hord.hul?</i> <i>Ave?</i> indet	6 <i>T.spelt</i> glume base	10 <i>Vic/lath</i> , <i>Graminae</i> , <i>Rumex</i>	0	+++
3	73	106	0	0	0	0	0	
3	73	107	0	0	0	0	0	+
3	74	113	1 indet	6 <i>T.spelt</i> , <i>Hord.hul</i> , indet	3 <i>T.spelt?</i>	20 <i>Vic/lath?</i> <i>Graminae</i> , <i>Montia</i>	0	++
3	74	115	0	0	0	0	0	
4	31	87	0	3 <i>Hord.hul</i> , indet	1 <i>T.free</i>	0	0	
4	31	88	0	0	0	0	0	
4	31	89	0	0	0	0	0	
4	35	123	0	4 <i>T.spelt</i> , indet	10 <i>T.spelt</i> glume base	10 <i>Rumex?</i> <i>Montia?</i> Indet	1 indet	
4	35	139	0	0	0	0	0	
4	44	142	0	0	0	0	0	
4	44	143	0	0	0	0	0	
4	48	96	0	0	0	0	0	
4	48	97	0	0	0	0	0	++
4	48	98	0	0	0	0	0	+
4	48	99	0	0	0	0	0	+
4	48	101	3 <i>Q</i>	0	0	0	0	
4	48	108	2 Pom	0	0	0	0	+++
4	58	126	2 <i>Q</i>	5 <i>Hord.hul</i> , indet	0	0	0	
4	58	127	4 <i>Q</i>	4 <i>Hord.hul</i> , <i>T.spelt</i>	0	0	0	
4	66	110	2 <i>Q</i> , <i>Pru?</i>	0	0	50 <i>Rumex</i> , indet	0	+++
4	66	112	1 Pom	0	0	5 <i>Anthemis cotula?</i> Indet	0	+++
4	68	121	1 indet	3 <i>T.spelt</i> , <i>Ave</i>	1 <i>T.spelt</i>	20 <i>Vic/lath</i> , <i>Graminae</i> , <i>Rumuculus</i> , <i>Achillea Millefol</i>	0	+++
4	68	122	0	4 <i>T.spelt</i> , <i>Ave</i>	1 <i>T.spelt</i>	3 <i>Vic/lath</i> , indet	0	+++
4	70	146						
4	81	131	1 indet	0	0	3 indet	0	
4	81	132	5 <i>Q</i> , <i>Pru?</i>	0	0	5 <i>Vic/lath</i> , indet	0	+
4	81	133	5 Pom	0	0	3 <i>Vic/lath</i> , indet	0	
4	81	134	4 <i>Q</i> , <i>Pru?</i>	2 indet	0	0	0	



4	81	135						
4	81	136	3 <i>Q</i>	0	1 T.spelt	2 indet	0	
4	81	137	5 <i>Q</i> , <i>Pru?</i>	1 Ave?	0	0	0	
4	81	138	3 <i>Q</i> , Pom?	2 Ave, indet	1 T.spelt	0	0	
4	81	145	2 Pom	13 T.spelt, Ave	0	2 <i>Rumex</i> , <i>Vic/lath</i>	0	+++
5	36	100	1 indet	3 T.spelt, indet	0	4 <i>Rumunculus</i> , indet, <i>Vic/lath</i>	0	+
5	36	141	1 indet	0	0	50 <i>Montia</i>	0	
5	39	140	3 indet	4 T.spelt, Hord.hul	200 T.spelt glume base	30 <i>Rumex</i> , <i>Vic/lath</i> , <i>Montia</i> , <i>Graminae</i>	0	+
5	43	92	0	0	0	0	0	+++
5	45	94	3 <i>Q</i>	1 Ave	1 T.spelt	10 <i>Vic/lath</i> , <i>Anthemis</i> <i>cotula?</i>	1 Hazelnut	++
5	45	95	0	7 Ave, T.spelt, Hord.hul	1 T.spelt	30 <i>Vic/lath</i> , <i>Graminae</i> , <i>Montia</i> , <i>Scirpus</i>	0	+
5	45	104	0	0	0	0	0	+++
5	45	125	5 <i>Q</i>	2 T.spelt	0	4 <i>Vic/lath</i> , indet	0	++
5	45	129	2 <i>Q</i>	2 T.spelt, Ave?	0	3 <i>Vic/lath</i> , indet	0	+++
5	46	86	0	0	0	0	0	+++
5	46	116	1 indet	6 T.spelt, Ave?	20 T.spelt	20 <i>Vic/lath</i> , <i>Graminae</i> , indet	0	+++
5	50	109	0	0	0	5 <i>Vic/lath</i> , indet	0	+
5	54	96	3 Pom?	0	0	0	0	+
5	54	104	0	0	0	0	0	
5	54	108	0	0	0	0	0	
5	54	114	0	0	0	0	0	
5	78	117	0	0	0	0	0	

Quantification for charcoal: 0= absent, 1= scarce, 2= some, 3= plentiful, 4= very abundant
Quantification for snails: += scarce, ++= some, +++= many

Table 41: Ecofact assemblage from Area 2 by phase and group

4.8.2.1 Phase 2 (early-middle Iron Age)

Samples 17 and 48 from ditched enclosure G4 (Area 1) contained only scarce quantities of charcoal. These were identified as *Quercus* sp. (oak) and cf. Pomoideae (hawthorn, apple etc) and *Alnus* / *Corylus* (alder / hazel). They contained no evidence for other charred plant remains

4.8.2.2 Phase 3 (late Iron Age/early Roman)

4.8.2.2.1 Area 1

Ten of the twenty-two samples from Area 1 contained charred plant remains and in all cases quantities were very low. The charcoal is mostly *Quercus* sp. (oak) (Samples 18, 28, 29 and 60) and cf. Pomoideae (hawthorn, apple etc) (Samples 14, 48 and 60). It was particularly surprising that charcoal was absent



from the samples taken from the cremation burials G16 and G17, which form the majority of the samples from this phase.

The quantities of charred seeds and chaff are extremely low. With the exception of *Triticum* sp. (rivet or bread-type wheat) within Sample 73, no cereal grains could be identified. Only sample 28 contained chaff, of *Triticum spelta* (spelt wheat). The same sample contained weed seeds of *Rumex* sp. (dock), a species which readily grows as arable weeds.

4.8.2.2.2 Area 2

Eight of the eleven samples from Area 2 contained charred plant remains. Sample 93 (from ditch G62) contained a moderate abundance of charcoal that appeared to be Pomoideae (hawthorn, apple etc.). It also contained some *Triticum spelta* (spelt wheat) grains and *Rununculus* cf. *repens* seeds. Samples 102 (cremation burial G73) and 113 (pits G74) both contained *Hordeum* sp. (hulled barley) and spelt glume bases, and a smaller abundance of charcoal. The main weed seeds present were *Vicia/Lathyrus* sp. (vetches or tares), Gramineae (grasses) and *Montia* sp. (blinks). The presence of *Montia* suggests cultivation under wet conditions, growing in persistent water-filled ruts or puddles. Sample 91 (lower fill of enclosure ditch G56) did not exhibit any waterlogged preservation, although it did contain a spelt glume base and one unidentified cereal grain. Sample 90 from the same ditch contained a high abundance of snails and a single weed seed.

4.8.2.3 Phase 4 (earlier Roman)

4.8.2.3.1 Area 1

Nineteen of the thirty-four samples contained charred plant remains. The charcoal is mostly *Quercus* sp. (oak) and cf. Pomoideae (hawthorn, apple etc), but cf. *Prunus* (sloe, plum etc) (Samples 26 and 68) was also present. The only two samples to contain very high concentrations of charcoal (Samples 32 and 33), both derived from posthole cluster G6. It is possible that the oak charcoal in them could be from a burnt structure.

The charred seeds and chaff mostly appear to have been derived from crop processing. The main cereal identified is *Triticum spelta* (spelt wheat), but there is also a little hulled *Hordeum* sp. (hulled barley) (Sample 26) and free-threshing *Triticum* sp. (rivet or bread-type wheat) (Samples 10 and 79). It is possible that some of the less-closely identified wheat includes *T. dicoccum* (emmer wheat). Samples 10 (ditch system G22), 22 (pits G5) and 79 (pits G18) were relatively rich in seeds and chaff fragments.

The weed seeds are very much from species which readily grow as arable weeds, such as *Vicia / Lathyrus* sp. (vetch / tare), *Rumex* sp. (dock) and *Bromus* sp. (brome grass).

The only other food plant remains are a few hazelnut shell fragments (*Corylus avellana*).



4.8.2.3.2 Area 2

Seventeen of the twenty-nine samples from this area contained charred plant remains. Sample 87 from grave G31 contained *Hordeum* sp. (hulled barley) but no carbonised wood. Samples 96, 97 and 98 from the major boundary ditch G48 contained some snails but no charred plant remains. Samples 101 and 108 from (G48) contained a large quantity of carbonised *Quercus* sp. (oak) and small quantities of Pomoideae (hawthorn, apple etc.) respectively. Group 66 was represented by samples 110 and 112 and contained very little carbonised material. Pits G68 were comparatively rich in carbonised remains including *Triticum spelta* (spelt), *Avena* (oats) and spelt chaff (samples 121 and 122). They also contained weed seeds including *Achillea millefolium* (yarrow) and *Rununculus cf. repens* (buttercup), typical of grasslands.

Of the samples from water pit G35, 123 contained a high abundance of carbonised *Quercus* (oak) and some *Triticum spelta* (spelt wheat). However, the majority of plant material from Sample 123 was uncarbonised and could be deteriorated waterlogged material. Samples 126 and 127 from postholes G58 contained a moderate abundance of *Quercus* sp. and *Hordeum* sp. (hulled barley). Of the samples from the quarry pits G81 containing cremated human bone samples, 131 to 137 contained a high abundance of carbonised *Quercus* sp. (oak) and possible *Prunus* sp.

4.8.2.4 Phase 5 (later Roman)

Ten of the 17 samples from Area 2 contained charred plant remains. Two of the five samples from ditch G45 were relatively rich. Sample 94 contained a moderate quantity of oak, one *Avena* sp. (oat) grain, and one hazelnut shell fragment. Sample 95 contains *Avena* sp., *Triticum spelta* sp. and *Hordeum* grains as well as *Vicia/Lathyrus* (vetches and tares). Ditch G46 contained a moderate quantity of spelt chaff, weeds but few grains. Sample 140 from water pit G39 contained a high concentration of spelt chaff, but only four grains. Weeds from samples 140 and 141 (another water pit G36) included *Montia* (blinks), *Rumex* (dock), *Vicia/Lathyrus* (vetches and tares) and Gramineae (grasses).

4.8.3 Discussion of waterlogged samples

Only Samples 76 (water pit G13, Phase 4, Area 1) and 105 (unassigned, Area 2) were sufficiently waterlogged for preservation. Waterlogged insects were sparse in Sample 105 but included the nettle-feeding bug *Heterogaster urticae*. A higher concentration was noted in Sample 76. Aquatic beetles likely to have lived in the archaeological feature such as *Helphorus* sp. were present but the majority of the beetles were terrestrial species. They included the dung beetle *Aphodius* sp. and ground beetles such as *Harpalus* sp.

4.8.4 Discussion of the molluscs

The snail-rich flots give a clear picture of the environment of the site. The terrestrial species, such as *Vallonia costata* and *V. excentrica*, suggest open, relatively dry conditions and occur in samples from both Phases 3 and 4. However, the occurrence of numerous examples of amphibious and slum aquatic species such as *Lymnaea truncatula* and *Anisus leucostoma* in some of the flots



from enclosure system G22 (Area 1) suggest the deeper ditches held temporary pools of stagnant water.

The hand-collected land snails are mostly *Cepaea* sp., which occurs in a wide range of terrestrial habitats. However, *Helix aspersa*, the large garden snail, was present only in Phase 4 deposits (especially common in ditch system G22). It is of significance because it is a Roman introduction to Britain.

The marine shells are all *Ostrea edulis* (oyster). They occur in Phase 3 but are far more common in Phase 4. They were clearly imported to the site.

4.8.5 Ungrouped samples

A total of 15 samples from Area 1 and 10 samples from Area 2 were taken from deposits that have not been assigned to group/phase as part of this assessment. These were examined and the results are summarised in Table 42 and Table 43.

Feature	Sample	Charcoal Q Id	Grain Q Id	Chaff Q Id	Weed Q Id	Fruit/nut Q Id	Snail Q
Ditch [6100]	25	1 <i>Pom</i>	2 <i>Hordeum</i> , indet	0	0	0	
Pit [5242]	30	2 <i>Q</i>	15 <i>T. dicoc</i> / <i>spelt</i> , <i>Triticum</i> , indet	15 <i>T. spelt</i> , <i>T. dicoc</i> / <i>spelt</i>	15 <i>Mont</i> , <i>Vic/Lath</i> , <i>Bromus</i> , other	0	
Pit [6015]	34	0	1 indet	1 <i>T. spelt</i>	1 <i>Gram</i>	0	
Pit [6019]	36	1 <i>Pom</i> , <i>Q</i>	0	0	0	0	
Ditch [6279]	62	1 <i>Q</i>	1 indet	0	0	0	
Ditch [6361]	64	1 <i>Pom</i> , <i>Q</i>	3 <i>T. dicoc</i> / <i>spelt</i> , indet	4 <i>T. dicoc</i> / <i>spelt</i>	0	0	
Ditch [6275]	66	1 <i>Q</i>	4 indet	3 <i>T. dicoc</i> / <i>spelt</i>	2 <i>Gram</i>	0	
Ditch [6215]	67	1 <i>Q</i>	3 <i>T. dicoc/spelt</i> , indet	15 <i>T. spelt</i> , <i>T. dicoc</i> / <i>spelt</i>	4 <i>Rumex</i> , oth	0	
Ditch [6210]	69	1 <i>Pom</i>	2 indet	20 <i>T. spelt</i> , <i>T. dicoc</i> / <i>spelt</i>	0	1 <i>Corylus</i>	
Pit [5842]	71	0	0	0	2 <i>Gram</i> , oth	0	
Structural [6206]	72	0	1 <i>Triticum</i>	0	0	0	
Pit [6402]	74	0	0	0	0	0	
Pit [6300]	77	0	0	0	0	0	
Ditch [6314]	81	0	1 <i>Triticum</i>	0	0	0	
Ditch [6446]	82	0	0	0	0	0	

Table 42: Ecofact assemblage from ungrouped deposits Area 1

Of these, the following samples contained significant assemblages:

- **Sample 30:** pit 5242 contained equal quantities of spelt wheat chaff, spelt-type grain and weed seeds.
- **Samples 67 and 69:** segments 6215 and 6210 of the same ditch length are dominated by spelt wheat chaff.



Feature	Sample	Charcoal Q ID	Cereal Q ID	Chaff Q ID	Weed Q ID	Fruit/nut Q ID	Snail Q
Ditch [7296]	85	0	2 indet	0	10 <i>Vic/lath</i>	0	+++
Pit [7649]	103	1 indet	6 <i>T.spelt</i> , indet	1 <i>T.spelt</i>	10 <i>Vic/lath</i> , <i>Graminae</i> , <i>Rumex</i> , indet	0	+++
Pit [7649]	105	WL	WL	WL	WL	WL	
Layer [7780]	111	0	1 indet	0	2 indet	0	
Ditch [7826]	115	0	1 indet	0	10 <i>Vic/lath</i> , <i>Montia</i> , <i>Rumuculus cf.repens</i>	0	+++
Structural [7822]	117	4 <i>Q</i> , Pom?	0	0	0	0	
Pit [8043]	119	1 Pru	2 <i>Triticum</i>	0	5 <i>Vic/lath</i> , <i>Graminae</i>	0	+++
Pit [8047]	120	2 Pru?	1 <i>T.spelt</i> ?	0	10 <i>Rumunculus</i> , indet, <i>Vic/lath?</i> <i>Chenopodium</i>	0	
Pit [8395]	128	2 <i>Q</i>	6 <i>T.spelt</i> , indet	0	2 <i>Vic/lath</i> , indet	1 <i>Prunus</i>	+++
Ditch [7833]	130	5 <i>Q</i>	0	0	3 <i>Vic/lath</i> , indet		
Pit [7908]	144	0	1 <i>Ave</i>	0	2 indet		

Table 43: Ecofact assemblage from ungrouped deposits Area 2

Of these, the following samples contained significant assemblages:

- **Sample 103:** pit 7649 contained *Rumex* (dock), *Vicia/Lathyrus* (vetches and tares) and *Graminae* (grasses) and six *Triticum spelta* grains. It may be noted that it appeared identical to Sample 102 from Phase 3.
- **Sample 105:** pit 7649 was waterlogged (see 4.8.3)
- **Sample 130:** ditch 7833 had a very high abundance of carbonised woods, mainly *Quercus* sp. (oak).

4.8.6 Summary of all “significant” samples

Overall relatively low concentrations of charcoal, grain, chaff and weed seeds were present in samples. Higher than usual quantities of ecofactual material were present in 28 samples (Table 44).

	Phase 2		Phase 3		Phase 4		Phase 5		Unphased	
	A1	A2	A1	A2	A1	A2	A1	A2	A1	A2
Charcoal	n/a	n/a	n/a	101*	32, 33	132, 133, 137	n/a	45*, 125		
Grain/chaff/weeds	n/a	n/a	n/a	101*, 102, 113, 124	10, 22, 51, 79	110, 121,	n/a	45*, 95, 116, 140	30, 67, 69	103, 105
Waterlogged	n/a	n/a			76					105

Table 44: Summary of significant ecofact assemblages (phased and unphased)





5. POTENTIAL OF DATA

5.1 Original research aims and objectives for the investigations

The original research aims, set out in the two WSARM⁴ and ⁵, made reference to regional and national research priorities for both the Iron Age and Roman periods (*see* section 2). Based on the assessment of the recovered data, the majority of the specific objectives established for the investigations (*see* Section 2) are still relevant (Table 45). The results of the investigations have not given rise to any substantially new research objectives.

No.	Original objectives for the investigations	Relevant
1	Chronology. Establish a chronological framework especially the origins and sequence of development.	YES
2	Form and development of the farmsteads. Establish a ground plan for the farmsteads and identify domestic foci. The significance of spatial and chronological changes should be assessed. The latter is particularly relevant to the issue of 'Romanisation' and agricultural intensification.	YES
3	Society and economy. Can the economy of the farmsteads be established, do artefacts indicate local, regional and wider contacts? Is there evidence for ritual and religion?	YES
4	Environment. Can the ecofactual evidence reconstruct the site and local environment? What influence might the environment have had on the human population and what impact did they have on it?	PARTLY

Table 45: Relevance of original objectives for the investigations

5.2 Revised Objectives

Since the production of the WSARM two “agendas” were published (during 2001) for the Iron Age²³ and Roman period²⁴ and these have assisted in revising the original objectives into six specific themes:

1. **Chronology**
2. **Form and development of past human activity**
3. **Society**
4. **Economy**
5. **Environment**
6. **Methodology**

The potential of the recovered data to contribute to these themes will now be discussed. Where relevant, and possible, the themes are sub-divided into chronological periods.

5.2.1 Chronology

The assessment has demonstrated that it will be possible to establish a chronological framework for the site extending from the early-middle Iron Age through the late Iron Age/Roman to the post-medieval periods. This will be based primarily on the **structural** data (specifically stratigraphic/spatial locations of features/deposits), assisted by the **pottery** assemblage. The latter

²³ IARS 2001 *Understanding The British Iron Age: An Agenda For Action*

²⁴ James, S, and Millett, M, 2001, *Britons and Romans: advancing an archaeological agenda*



has some potential through the relative proportions of differing pottery types for demonstrating ceramic continuity or hiatus between chronological periods.

The majority of the past human occupation (farmsteads) on the site took place during the late Iron Age/Roman period. The assessment has indicated that the **structural** data for this period can be divided into at least three phases. In particular it is clear from the **structural** data and **pottery** that two farmsteads flourished during the Iron Age-Roman transition, a period which English Heritage identified as a research priority²⁵ and which has recently been discussed by Creighton²⁶. Although further refinement of the phasing is possible, the preponderance of ubiquitous locally produced coarseware **pottery**, the use of which spans the entire Roman period, makes precise dating problematic. However, it is possible that changes in pottery form over time can be identified. Diagnostic **brick and tile** fragments can only be broadly assigned a Roman date. However, some of the **non-ceramic** artefacts, for example the coins, although small in number, will be closely dated and therefore will contribute to improved precision.

Although small, the quantity of late Roman **pottery** attests to the continuation of occupation into the 3rd and 4th centuries AD. The quantity of such material is significantly larger than that recovered from the nearby and contemporary farmstead off Luton Road, Wilstead²⁷.

Activity of post-Roman date is indicated mainly by stratigraphically later features rather than the presence of large quantities of later artefacts. It is therefore the **structural** data that continues the chronological sequence up to the present day.

5.2.2 Form and development of past human activity

The phasing of the site has demonstrated that it will be possible to establish both the origin of the settlements and how their layout changed over time. The spatial distribution of domestic debris, when combined with the distribution of smaller features such as pits and postholes, will indicate the location of domestic foci (one of the original objectives of the investigations).

Spatial concentrations of **ferrous slag** have been noted in Section 3 and it is possible that more detailed examination will identify areas of industrial/craft activity. The distribution of other artefacts and ecofacts may also prove to be significant. For example, the relatively large number of **iron fragments** (see 4.5.3.2) may also have an association with areas of industrial/craft activity. The assessment suggested that the disposal of cattle and horse carcasses might have occurred within specific areas of the site. The full quantification of all **artefacts** and the **animal bone** will permit detailed spatial analysis to be undertaken and the significance of the results to be assessed.

²⁵ English Heritage Archaeology Division 1997 *Research Agenda* (unpub.)

²⁶ Creighton J, 2001, 'The Iron Age-Roman Transition' in ²⁴

²⁷ Albion, 2002, Land off Luton Road, Wilstead: Assessment of Potential for Analysis and Updated Project Design



5.2.2.1 *Early-middle Iron Age*

The **structural** data indicates that limited activity took place during this period with the small **artefactual** assemblage suggesting it did not comprise settlement. The ditched enclosure may have been associated with the temporary utilisation of low-lying pastures along the Elstow Brook for animal grazing.

5.2.2.2 *Late Iron Age/Roman*

The **structural** and **artefactual** data demonstrate that the first settlement was established during the late Iron Age/early Roman period. It originally comprised two individual unenclosed farmsteads within the two excavation areas. The **structural** data suggests both farmsteads contained similar settlement elements, for example a single ditched enclosure, buildings, water pits, burials and other activity.

The establishment of a large-scale ditched enclosure system took place in the earlier Roman period at Marsh Leys and incorporated the earlier enclosures. The creation of comparable enclosure systems at other sites, for example East Stagsden (Dawson²⁸ Fig. 17) and Bancroft (Williams and Zeepvat²⁹, compare Fig. 23 with Fig. 30), appears to have taken place slightly earlier, during the late Iron Age/early Roman transition. However, comparable dates of origin are known at Wilstead, Beds.²⁷ and at Wavendon Gate, Milton Keynes¹⁶ (compare Fig. 8 with Fig. 12). It is possible their slightly later development is a reflection of more suitable land being exploited first before it was necessary to move onto more marginal land.

The **structural** assessment has indicated that it will be possible to identify spatial variations in activity within the enclosure system. Domestic foci, along with areas allocated for burial and quarrying have been identified. The examination of these will assist in determining whether the enclosure systems within each excavation area were associated with one, or more than one, farmstead.

It is clear that the enclosure systems within the two investigation areas were extensive and constructed on broadly the same alignment. Although the majority of the system was investigated within the excavation areas, the re-examination of the **geophysical survey** and **aerial photographic surveys** undertaken as part of the evaluation may indicate the full extent of the system. Examination of pottery from **field artefact collection** may also assist in clarifying the nature of peripheral activity.

5.2.2.3 *Post-Roman*

The assessment has indicated that **structural** data, in the form of furrows within the excavation areas and earthworks within Zone D, confirm the

²⁸ Dawson M., 2000, *Iron Age and Roman Settlement on the Stagsden Bypass*

²⁹ Williams RJ and Zeepvat RJ 1994 *Bancroft: a Late Bronze Age/Iron Age settlement, Roman villa and temple-mausoleum*



existence of open fields during the medieval period. Gravel quarrying occurred during the post-medieval period.

5.2.3 Society

5.2.3.1 Status/wealth

The **structural**, **artefactual** and **ecofactual** data for all periods is consistent with the presence of farming communities. Based on their **artefact** assemblages the assessment indicates that the farmsteads were of low to moderate status. However, their involvement in regional trade and commercial contacts is attested by the presence of a small quantity of regional and continental imports. **Pottery**, in particular, has been recently used by Evans to characterise the status of sites³⁰. At Marsh Leys only minor variations were observed in fabric types or diagnostic vessel forms between the farmsteads in the two excavation areas. For example Area 2 produced a small quantity of less commonly occurring pottery types such as *amphorae*, lead-glazed ware and a costrel. This may indicate difference in status (rather than function) between the two Areas. The **pottery** assemblages, when fully quantified, will have some potential to determine the status and cultural associations of the occupants.

Although the quantity of **non-ceramic artefacts** is not extensive, the presence or absence of objects can act as a relative indicator of status or wealth, and help to place the farmsteads within a broader socio-economic framework. The presence of **ceramic building material**, in particular flue tiles and putative *tesserae* (the latter only from Area 2), although not signifying the location of substantial buildings within the excavated areas, may indicate their presence in the vicinity. The very existence of such a building (with a tiled roof, heating system and mosaic floor(s)) may have had a direct impact on the degree of wealth and status attainable by the occupants of the farmsteads.

The assessment indicated that some of the **cattle bones** surprisingly bore chop and blade marks more commonly found on Roman urban and military sites. Their presence on a low status farmstead could have implications for the interpretation of Romano-British butchery practices more generally.

The marine **oyster shells** should be fully quantified and examined to identify their place of origin. This will contribute to the debate on the status of the farmsteads.

A number of individuals and organisations including English Heritage²⁵, Hingley³¹, Evans³⁰ and Taylor³² continue to argue that the examination of rural, especially low status, settlements should be a research priority. Evans has demonstrated that there has been an increase in the number of such sites investigated between 1969 and 1988, when compared to 1995 and 1998.

³⁰Evans, J, 2001, 'Material approaches to the identification of different Romano-British site types'²⁴

³¹Hingley, R, 1989 *Rural Settlement in Roman Britain*

³²Taylor, J, 2001 'Rural society in Roman Britain'²⁴



However, he points out that it is still disproportionate to the percentage of the Romano-British population that lived on 'basic-level rural sites' (perhaps as high as 90%).

5.2.3.2 *Ritual and religion*

An insight into the religious beliefs and practices of the occupants of the farmsteads is provided most directly by their treatment at death. The **structural** data contains evidence for four inhumation and ten cremation burials. Grave goods associated with these included **pottery** vessels (including a miniature vessel) and a **hobnailed shoe**. Examination of these may indicate whether new or old objects were placed in the graves. Analysis of the **charcoal** from the cremation burials will provide useful information on fuel used in the funeral pyres. In addition there are a small number of occurrences of isolated unburnt human bones. While it is possible these occur "accidentally" through the disturbance of formal burials, a number occur well away from known graves. These may therefore represent a distinct burial tradition involving only "token" parts of the deceased, a practice common in Iron Age Britain¹⁴.

The square building G1 is comparable to structures found at Biddenham Loop, Beds. (Albion in prep.), Westhampnett, West Sussex³³ and Stanstead, Essex³⁴ where they have been interpreted as shrines or mausolea. Like the Biddenham structure, but in contrast to those at Westhampnett and Stanstead, the Marsh Leys structure appears not to have been associated with human remains or special artefacts deposits. However, this can only be confirmed by full quantification of the **artefactual** and **ecofactual** assemblages from the square building and its enclosure.

More indirect evidence for religious practice is provided by a variety of "special" deposits. These include the two partial chicken skeletons and two Roman coins, the horse burial and the substantially complete pottery vessels apparently placed deliberately within boundary ditches especially G43 (Phase 4). Such events appear to be commonplace in the Iron Age¹⁴. However, they were also noted at Wilstead²⁷ during the Roman period and their occurrence may suggest the survival of earlier social customs possibly indicating "Romanisation" in this part of Bedfordshire was partial or slow. The detailed examination of the **artefactual** and **ecofactual** assemblages from these, and similar deposits, will provide valuable information regarding ritually significant behaviour by the occupants of the farmsteads.

5.2.4 *Economy*

Evidence for the agricultural economy of settlements often comes from the **animal bone** and **charred plant** assemblages. Assessment indicates a range of animal species typical of rural settlements of this period. These are usually

³³ Fitzpatrick AP 1997 Archaeological Excavations on the Route of the A27 Westhampnett Bypass, West Sussex, 1992. Volume 2: the Late Iron Age, Romano-British, and Anglo-Saxon cemeteries.

³⁴ Brooks H 1989, 'The Stanstead Temple' *Current Archaeology* 117, 322-325



dominated by sheep/goat and cattle with a low incidence of pigs³⁵ and tend to have horse occurring more commonly than on urban settlements³⁶. Although the **animal bone** assemblage is of relatively modest size and of moderate preservation, it does contain some interesting and unusual aspects making further analysis worthwhile.

There is, for example, scope for further investigation into possible chronological variations in species representation. The recording of pathological and metrical data for the **animal bones** in general will prove useful for comparative studies with other Roman assemblages. In particular, the recording of metrical data from the horse skeleton G27 will be a valuable addition to the relatively limited number of measured horse skeletons in Roman Britain.

Concentrations of **charred plant** remains were mostly low, especially in Phase 3 samples on Area 1, and were generally unexceptional. For this reason, the quantification of the entire assemblages is inappropriate. However, analysis of the richer samples within each phase (*see* Table 44) will reveal the range of taxa present and may provide useful information on the agricultural economy of the site. Sample 140 (G39, Phase 4, Area 2) contained a very large quantity of spelt chaff and analysis of this will provide information on the processing of spelt wheat on the site.

Industrial or craft activity cannot be inferred from the ceramics, and likewise, no evidence of pottery production was recovered. However, there was little evidence of repair, suggesting that a ready supply of new vessels was available. The presence of iron working residues, in the form of **ferrous slag**, **vitrified clay** fragments, portions of **hearth bowls** and **hammerscale**, is suggestive of both smelting and smithing. Until fully quantified and identified its significance is uncertain, although it is already clear that iron working was restricted to Area 2.

5.2.5 Environment

Analysis of the seeds and insects from the two **waterlogged** samples (76 and 105) has the potential to provide useful details on the site and wider environment. The results will complement those from the **charred remains**. The **snails** have already provided useful palaeoecological information and further analysis will not add to this. The results of the assessment will, however, be incorporated into the final publication.

5.2.6 Methodology

The evaluation was undertaken in two stages; initially a non-intrusive study, and secondly trial excavation. These achieved their objectives in terms of locating, dating and characterising the archaeological remains present within

³⁵ King AC. 1999. Diet in the Roman World: A Regional Inter-site Comparison of the Mammal Bones. *Journal of Roman Archaeology* 12: 168-202.

³⁶ Maltby M. 1994. The meat supply in Roman Dorchester and Winchester. In AR Hall and HK Kenward (eds.) *Urban-rural Connexions: Perspectives from Environmental Archaeology*. Oxbow/Symposia of the Association for Environmental Archaeology 12: 85-102. Oxford



the proposed development area. However, the evaluation results were not entirely compatible with the excavation results and the major differences would benefit from examination and possibly publication.

Cropmarks visible on aerial photographs indicated the presence of some ditched enclosures, but did not reflect the scale and complexity of the enclosure systems. Likewise the geophysical survey revealed a greater number of enclosures but did not locate the majority of the ditches let alone other features. Concentrations of artefacts recovered during field artefact collection over Area 1 indicated the location of the “domestic focus”. Unfortunately it was not possible to undertake field artefact collection over Area 2. Trial excavation provided a more accurate insight into the complexity and scale of the archaeological remains.

The **non-ceramic** artefact recovery rate from the site was relatively poor, despite a policy of systematic metal detecting. As with the **pottery** and **ecofactual** assemblages, consideration will be given to the suitability of the sampling strategy.





6. UPDATED PROJECT DESIGN

6.1 Introduction

On the basis of the assessment of the various archaeological data-sets generated by the fieldwork an Updated Project Design is proposed here.

6.2 Revised research objectives

The open area excavations have produced evidence for settlement from the early-middle Iron Age through to the post-medieval period. Table 46 provides a summary of the revised project aims.

Chronological framework
<ul style="list-style-type: none"> Review and fine tune the provisional chronological framework in particular through detailed examination of the stratigraphic relationships between features/deposits and by analysis of the dateable artefact assemblage.
Settlement morphology
<ul style="list-style-type: none"> Establish the morphology of the settlements within each chronological period through detailed examination of the features/deposits. It may be possible to determine the extent of the Roman enclosure system by re-analysis of the geophysical and aerial photograph surveys. Determine spatially different activity areas (domestic foci, industrial, burials, quarrying etc) through examination of the feature/deposits, along with artefacts and ecofacts. Investigate how these changed over time.
Society
<ul style="list-style-type: none"> Establish the status and cultural associations of the occupants of each domestic focus primarily through analysis of the artefact and ecofact assemblages. Examine the burial practices, including the occurrence of isolated uncremated human bone and establish how these changed over time. Identify the full range of “special” deposits and set them within a religious framework. Through detailed examination of the structural, artefactual and ecofactual data establish the function of the late Iron Age/early Roman square building and its enclosure.
Economy
<ul style="list-style-type: none"> Establish through detailed examination of the animal bone and suitable plant assemblages, the economic basis for the farmsteads. Investigate change over time, e.g. intensification / extensification. What is the nature of the iron working activity? Specifically, does it serve more than the needs of the inhabitants of the farmstead.
Environment
<ul style="list-style-type: none"> Analysis of the waterlogged samples has the potential to provide useful details on the site and wider environment.
Methodological yardstick
<ul style="list-style-type: none"> Did the evaluation strategy provide accurate information on the location, nature and extent of the archaeological remains? Was the open area excavation strategy sufficient to address the aims and objectives of the investigations?

Table 46: Revised research objectives

The archaeological evidence has good potential to contribute to a number of the research themes established at regional and national levels for late Iron Age and Roman settlement. It is therefore clear that analysis and publication of these are justifiable. The medieval and post-medieval evidence has only



limited potential to contribute to research themes for this period and will be treated accordingly.

6.3 Analysis

Albion operates a fully integrated computer-based system of analysis. All structural, artefactual and ecofactual information is entered onto an Access database. Feature/deposit, geophysical and cropmarks plans are digitised using AutoCAD and all section drawings will be scanned using an HP Scanjet. The databases and digital drawings are interfaced via a GIS system (Gsys) allowing all chronological, spatial and material groupings (and any combination thereof) to be viewed and manipulated. In addition all the site photographs are held in a digital format, allowing them to be viewed on screen with database and digital drawings.

The system enables rapid and flexible analysis of the project data-sets. It also facilitates the output of a series of text reports, supported by plan and other graphic forms. These will form the basis for the final publication report.

6.4 Publication

The results will be published as a single monograph within either the *Bedfordshire Archaeology* series, or if appropriate, an Albion Archaeology series. It is likely to be titled “*Marsh Leys Farm: a late Iron Age and Roman settlement on low-lying gravels at Bedford*”. The suggested format is set out below (Table 47).

<p>1.</p> <p>2.</p> <p>3.</p> <p>4.</p>	<p><i>Summary</i></p> <p>Introduction</p> <p>Site location and conditions</p> <p>Archaeological background</p> <p>The archaeological investigations</p> <p>Structure and terminology of the report</p> <p>Discussion</p> <p>Earlier prehistoric</p> <p>Early-middle Iron Age</p> <p>Late Iron Age/early Roman</p> <p>Earlier Roman</p> <p>Later Roman</p> <p>Medieval</p> <p>Post-medieval</p> <p>The evidence</p> <p>Period based (as above)</p> <p>Conclusions</p> <p><i>Acknowledgements</i></p> <p><i>References</i></p>	<p>Topics will address the revised research objectives, as appropriate:</p> <ul style="list-style-type: none"> • Wider settlement patterns • Settlement form and development • Religion and ritual • Economy • Status of the inhabitants • Methodology <p>Each section will be divided into the following, as appropriate:</p> <ul style="list-style-type: none"> • Integrated site narrative • The artefactual assemblage • The ecofactual assemblage
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Table 47: Provisional outline of the publication

The chronological phased development of the site (one of the original research objectives) will provide the basic structure for the entire publication. A



discussion of the results will be presented after the introduction as these are the two sections most likely to be read together. The evidence sections will inevitably contain a lot of detail and are likely to be “dipped” into as and when the reader requires more detail on a particular aspect of the information presented in the discussion. In addition, individual pieces of evidence are likely to be examined by structural, artefactual and ecofactual specialists, who may not necessarily need to read the discussion.

The discussion will concentrate on the revised research objectives and comparisons will be sought both regionally and nationally. The final section will address, with hindsight, the success of the various methods of archaeological investigation in achieving their objectives. The latter will be undertaken in consultation with the CAO.

The evidence section will be divided into each phase, with subsequent text organised by landscape and group, with artefactual and ecofactual information as appropriate. The pottery text will be the most substantial of the artefact sections. Of the other artefactual data only the flint and post-Roman material, which has no potential to address any of the research objectives, will not be analysed. With regard to the ecofact text, the results of the assessment will be incorporated into the results of new analysis. The outline (Table 47) of the publication should be considered a guideline and may be altered during the analysis and pre-publication stages, if the results warrant it.

6.5 Timetable

Following the acceptance by the Clients and CAO of the assessment and updated project design, Albion would like to proceed rapidly with the analysis and publication of the results. This will ensure project momentum is maintained.

Detailed method statements, with task numbers and resource levels, are provided in Appendix 1. Table 48 sets out the five key stages within the analysis and publication programme. An indication of maximum time required to reach the first four key stages is indicated and these could serve as appropriate monitoring points, if required.

Completion of	Description of tasks	Task no.	Time
Key stage 1	Analysis	up to task 22	8 months
Key stage 2	Report writing for data-sets and illustration	up to task 30	8 months
Key stage 3	Completion of 1 st draft followed by circulation to Clients, CAO and referees	up to task 33	6 months
Key stage 4	Completion of final draft and submission to <i>Bedfordshire Archaeology</i>	up to task 36	2 months
Key stage 5	Publication and archiving	up to task 39	*

*Publication, and therefore deposition of the archive with Bedford Museum, will be dependent on the length of time taken for the refereeing of the article (organised by the editor of *Bedfordshire Archaeology*).

Table 48: Provisional timetable to complete the project



6.6 Archiving

On publication of the final report the archive of materials (subject to the landowner's permission) and accompanying records will be deposited with Bedford Museum (Accession Number 2000/189).



7. APPENDIX 1: METHOD STATEMENTS FOR ANALYSIS, PUBLICATION AND ARCHIVING (BY EACH DATA-SET)

7.1 Analysis of the Structural Data

7.1.1 Analysis of Geophysical (Task 2.4), Aerial Photographs (Task 2.5) and HER (Task 2.6) data

The results of the geophysical survey will be re-examined in light of the excavation results. In particular, attention will focus on the re-analysis of survey areas F, J and K in an attempt to clarify the nature and full extent of the Roman enclosure system. Geophysical anomalies will be assigned to the following categories; archaeology, possible archaeology and ferrous (**Task 2.4**).

Aerial photographs examined during the evaluation will be re-examined in light of the excavation results. As with the geophysical survey the main objective will be to clarify the nature and full extent of the Roman enclosure system (**Task 2.5**). It will also include the examination of all cropmarks in the vicinity which will enable the enclosure systems to be placed within their local context.

The Historical Environment Records will be examined to provide background information on known Iron Age and Roman sites in the vicinity of Marsh Leys Farm (**Task 2.6**). In addition the HER will be examined specifically to identify comparable ground plans for the Roman enclosure systems.

7.1.2 Computerisation (Task 7.1 and 7.2)

The quantity of the data-set means it would benefit from computerisation. Albion operates a fully integrated computer-based system of structural analysis using databases (through Access) and a mini GIS (Gsys) for interrogation. Basic contextual information has been entered into a database table and has been successfully utilised within this report.

All section drawings will be scanned to enable their onscreen use during structural analysis.

All cropmarks and geophysical anomalies considered to be of archaeological or possible archaeological origin will be digitised (**Task 7.1**) and issued a context feature number (within discrete blocks of numbers to permit easy identification of the data type), described on pro-formae sheets and input into the context database table (**Task 7.2**).

The digitised all features drawing produced for the assessment will require checking and amending to ensure it is linked correctly with the context database table (**Task 7.1**). Once this is complete, the drawings are fully interrogatable and manipulable by any database table.

Once achieved, it will be possible to rapidly interrogate datasets within the Gsys programme. For example, it would be possible to plot the distribution of specific find types, or all features which are considered to be contemporary etc. This type of interrogation will greatly enhance the analysis of data and is, therefore, likely to assist in the interpretation of the archaeological remains. It also enables basic publication figures to be produced rapidly.

7.1.3 Sub-group and group analysis (Task 19.1)

All contexts will be processed to sub-group level. Much use will be made of contextual information specifically descriptive, stratigraphical and section drawings. An examination of artefactual and ecofactual information may be appropriate for isolated features.

Each context will be analysed using the above information and assigned to a single sub-group, consisting of one or more (usually several) contexts that are closely related both stratigraphically and interpretatively. For example, comparable cuts within a single ditch



length will be assigned to the same sub-group. However, where significant variations occur, for example in ditch profile/dimension or terminals, these will be kept separate by being assigned to a different sub-group to facilitate description. Primary, secondary and tertiary fills of ditches will also be kept separate at sub-group level.

Cuts/deposits will be classified as:

- ◆ Construction (postpacking, stone surfaces and default code for all cuts)
- ◆ Naturally derived infilling
- ◆ Deliberate infilling

The method of sub-group definition will rapidly identify those sub-groups, which have limited or no further analytical value (e.g. features/deposits of geological and modern origin, those that are undatable, those lacking artefactual or ecofactual data etc). These sub-groups will not be subject to any further analysis.

The sub-group allocation for each context will be entered into the contextual database table. A sub-group text will then be written directly into the sub-group database table so that it can be easily accessed. It will contain a factual, descriptive section as well as an interpretative section, setting out the rationale behind the definition of the sub-group. This text will be checked for both content, accuracy and spelling/grammar. It is not envisaged that sub-group plans will be routinely produced, but this information will be available via the relational database tables.

Sub-groups worthy of further analysis will be assigned to a single group representing a higher level of interpretation. It is likely that most groups will comprise multiple sub-groups. The assessment of the features/deposits identified at Marsh Leys suggests that the construction and primary fill sub-groups could be assigned to the following group types:

- Ditch lengths
- Fence lines
- Buildings
- Structures
- Pit groups
- Wells/water pits
- Individual graves
- Isolated feature

Other fill sub-groups i.e. secondary or tertiary, will be assigned to separate groups to reflect the likelihood that these may be considerably later in date than the construction/primary fill groups and will therefore need to be analysed separately. However, to ensure that their spatial location (for example within a specific ditch, building or pit group) is not lost, they will be issued a group number comprising a decimal point of the “containing” group for example G11.5 is a fill group of ditch G11, G11.1 is a terminal fill group of ditch 11 etc.

An essential part of identification of groups will be the examination of other data-sets (artefactual, ecofactual etc). The individual group type for deposits will comprise:

- Natural accumulation
- Significant occupation debris
- “Special” deposits

The group allocation for each sub-group will be entered into the sub-group database table. A group text will then be written directly into the group database table so that it can be easily accessed. It will contain a descriptive section as well as an interpretative section. This text will be checked for both content, accuracy and spelling/grammar. It will form the basis for any detail required in the site narrative section of the publication text. A plan will be produced for each group with the location of all relevant sub-groups marked. If appropriate a group matrix will be produced.



7.1.4 Landscape and phase analysis (Task 19.2)

Each group will be assigned to another, higher level of interpretation known as a landscape unit. The assessment of the Marsh Leys Farm data suggests that the construction and primary filling groups could be assigned to the following landscape unit types:

- Major boundary ditches
- Enclosure (and internal activity) associated with domestic activity
- Enclosure (and internal activity) not associated with domestic activity
- Cemetery (including individual graves)
- Unenclosed activity
- Field system

Groups representing secondary or tertiary fills may be considerably later in date than the construction/primary groups and to distinguish these at landscape level they will be assigned to a separate landscape number. However, to ensure that their spatial location, for example within a specific enclosed settlement is not lost they will be issued a landscape number comprising a decimal point of the “containing” landscape, for example L5.2 is a filling landscape of enclosed settlement L5.

The landscape allocation for each group will be entered into the group database table. A landscape text will then be written directly into the landscape database table so that it can be easily accessed. It will contain a descriptive section as well as an interpretative section. This text will be checked for both content, accuracy and spelling/grammar. It will form the basis for the site narrative section of the publication text. A plan will be produced for each landscape with the location of all relevant groups marked. If appropriate a landscape matrix will be produced.

Each landscape will be assigned to a farmstead. This will reflect the two separate open area excavations.

The final level of interpretation known as a phase. The assessment of the Marsh Leys Farm data suggests the following phasing units will be appropriate, although it is possible more detailed sub-divisions will be defined.

- Phase 1: Unspecific earlier prehistoric
- Phase 2: Early-middle Iron Age
- Phase 3: Late Iron Age/early Roman
- Phase 4: Earlier Roman
- Phase 5: Later Roman
- Phase 6: Medieval
- Phase 7: Post-medieval

The phase allocation for each landscape will be entered into the landscape database table. A phase text will be written directly into the phasing database table so that it can be easily accessed. It will contain a descriptive section as well as an interpretative section. This text will be checked for both content, accuracy and spelling/grammar. It will form the basis for the site narrative section of the publication text. A plan will be produced for each phase with the location of all relevant landscapes marked. If appropriate a phase matrix will be produced.

The completion of task 19.2 represents a key stage in the analytical programme and is the precursor to the production of publication text and illustrations.

◆KEY STAGE 1

7.1.5 Phasing/ publication liaison (Task 23)

Once the provisional final phasing has been determined a document detailing it will be circulated to all relevant specialists. This will be examined to ascertain whether the phasing



hierarchy is consistent with the evidence from the data-sets. This will in particular apply to the pottery and typologically dated non-ceramic artefacts.

A meeting will then be established with all specialist to discuss the phasing hierarchy, individual data-sets and the format of their publication text.

Following such a meeting a document detailing the final phasing hierarchy, along with guidance on the nature of the publication text required and a maximum number of words will be circulated to all specialists.

7.1.6 Site narrative (Task 24)

The site narrative will form the basis of the publication. It will be organised by phase, landscape and group, with only exceptional references to sub-group and feature.

7.1.7 Structural illustration (Task 30)

The digitised plan and section data will be interrogated via the relational database tables to produce mock-up publication illustrations. Plans can be produced to show features at any appropriate level from sub-group to phase. This data will then be transferred to Corel Draw 9 for illustration work. It is anticipated that 39 figures will be required: four location plans, five overall phase plans, ten area phase plans, ten landscape plans and ten pages of section drawings. The drawings will require checking, correcting and cross-referencing with the site narrative.

◆ KEY STAGE 2

Structural Analysis				
Task		Staff	Area 1 Days	Area 2 Days
2.4	Geophysical survey: re-analysis	WYAS	n/a	n/a
	Geophysical survey: re-analysis	Sup	2	2
2.5	Aerial photographs: re-analysis	Sup	2	2
2.6	Analysis of HER	Sup	1	1
7.1	Computerisation of drawings	C.Sup	10	10
7.2	Inputting of geophysical and cropmarks into context database		3	3
19.1	Sub-group & Group Analysis	Sup	45	65
	Assistance/checking	PO	6	8
19.2	Landscape and Phase Analysis	Sup	15	20
	Assistance/checking with Analysis	PO	3	5
◆	KEY STAGE 1			
23	Publication liaison	PO	3	5
	Publication liaison	Sup	2	3
24	Site narrative	Sup	20	30
	Assistance with site narrative	PO	5	8
30	Structural illustration	Illust	15	25
	Assistance/checking illustration	PO	3	5
◆	KEY STAGE 2			

Table 49: Summary of structural analysis tasks



7.2 Analysis of Ceramic Artefacts

7.2.1 Quantification and recording of pottery (Task 14.1) and CBM (14.2)

Pottery and ceramic building material will be laid out in context order. Pottery will be quantified by minimum vessel and sherd count, and weight, and ceramic building material (CBM) by fragment count and weight. Pottery and CBM fabrics have already been identified according to the Bedfordshire Ceramic Types Series, and these will be checked. All attributes such as decoration, evidence of function (sooting, wear marks etc.), and manufacturing techniques (firing characteristics etc.), will be recorded. Any complete or measurable dimensions of CBM fragments will be recorded. All quantified data will be entered onto the relevant table within the site database.

7.2.2 Production of technical text for pottery (Task 20.1) and CBM (20.2)

Detailed description of the pottery and CBM recovered, including fabric and form definitions. Selection of pottery vessels or CBM fragments for publication standard illustration will be made at this juncture. The criteria for the selection of illustrated pottery vessels will be as follows:

- all fabrics and forms previously unknown in the county and therefore unpublished
- better examples of those types already published
- vessels from specific features or groups of features
- vessels associated with specific structures
- vessels of intrinsic interest

◆KEY STAGE 1

7.2.3 Phasing/publication liaison (Task 23)

See Section 7.1.5.

7.2.4 Pottery publication text (Task 25.1)

A specialist text summarising the pottery assemblage within appropriate chronological periods by fabric type, forms, decoration and attribute. The text will refer to comparative assemblages (published or unpublished). In addition and where appropriate the pottery assemblage from elements of the structural hierarchy i.e. landscapes and groups will be discussed.

7.2.5 CBM publication text (Task 25.2)

A specialist text summarising the CBM assemblage by type/forms.

7.2.6 Illustration (Tasks 28.1 and 28.2)

Illustration of the material selected for inclusion in the technical text will be carried out by the Illustrator, in consultation with the artefact analyst.

◆KEY STAGE 2



Ceramic Analysis				
Task		Staff	Area 1	Area 2
			Days	Days
14.1	Quantification and recording (Pottery)	AO	15	27
14.2	Quantification and recording (CBM)	AO	2	5
20.1	Pottery technical text (type series)	AO	2	2
20.2	CBM technical text (type series)	AO	0.5	1
◆	KEY STAGE 1			
23	Phasing/publication Liaison	AO	2	3
25.1	Pottery publication text	AO	7	10
25.2	CBM publication text	AO	1	2
28.1	Pottery illustration	Illust	5	8
	Assistance with pottery illustration	AO	0.5	1.5
28.2	CBM illustration	Illust	1	4
	Assistance with CBM illustration	AO	0.25	0.5
◆	KEY STAGE 2			

Table 50: Summary of ceramic analysis tasks



7.3 Analysis of Non-Ceramic Artefacts

7.3.1 X-radiography (Task 6)

Includes packaging of artefacts and transportation costs to lab, actual x-radiography costs and conservator's initial report, liaison with conservator, and up dating of the site database following return of the objects from the lab.

7.3.2 Narrow Term Identification (Task 11 and 12)

Each object will be assigned a narrow term, and where applicable, a date range. Coins and slag will be examined by external specialists (Task 12). This information will be established by an examination of each object, noting;

- form
- method of manufacture
- material and source
- presence of diagnostic features
- condition
- selected parallels from comparable sites
- comparison with ceramic data from the site

7.3.3 Technical Catalogue (Task 21)

A selection of registered artefacts will be made for inclusion in the publication catalogue and a draft catalogue prepared. Selection of artefacts for publication-standard illustration will be made at this juncture.

◆KEY STAGE 1

7.3.4 Phasing/ publication liaison (Task 23)

See Section 7.1.5.

7.3.5 Non-Ceramic publication text (Task 26)

Following phasing confirmation, the artefact assemblage will be discussed in relation to both the temporal and spatial framework of the site.

7.3.6 Illustration (Task 29)

Illustration of the material selected for inclusion in the technical catalogue will be carried out by the Illustrator in consultation with the artefact analyst.

◆KEY STAGE 2



Non-Ceramic Analysis				
Task		Staff	Area 1 Days	Area 2 Days
6	X-radiography	EXT	n/a	n/a
11	Narrow term (internal)	AO	1	4
12	Narrow term: coins	EXT	n/a	n/a
	Narrow term: slag	EXT	n/a	n/a
21	Non-ceramic catalogue	AO	3	6
◆	KEY STAGE 1			
23	Phasing/publication liaison	AO	0.5	0.5
26	Non-ceramic publication text	AO	3	7
29	Illustration	Illust	2	5
	Assistance with illustration	AO	0.5	1
◆	KEY STAGE 2			

Table 51: Summary of non-ceramic analysis tasks



7.4 Analysis of Animal Bone

7.4.1 Quantification and recording (Task 22.1)

The animal bone from will be laid out in context order. It will be examined for the frequencies of species, skeleton representation, age at death, pathology, butchery and bone change, and individual measurements of bones and teeth. All quantified data will be entered onto the relevant table within the site database.

◆KEY STAGE 1

7.4.2 Phasing/publication liaison (Task 23)

See structural analysis section 7.1.5

7.4.3 Animal bone publication text (Task 27.1)

The final publication text will only be prepared on receipt of the final phasing structure. It will discuss the species present within each phase, along with other significant aspects such as mortality rates, metrical data, butchery etc. If significant assemblages of animal bone are recovered from individual Landscape or Groups, be they a “special” deposit or not, they will be discussed individually.

◆KEY STAGE 2

Animal Bone Analysis				
Task		Staff	Area 1 Days	Area 2 Days
22.1	Quantification and recording	EXT	10	20
◆	KEY STAGE 1			
23	Phasing/publication liaison	EXT	1	1
27.1	Publication text	EXT	3	5
◆	KEY STAGE 2			

Table 52: Summary of animal bone analysis tasks



7.5 Analysis of Human Bone

7.5.1 Quantification and recording (Task 22.2)

The uncremated human bone from will be laid out by grave and context order. It will be examined for the skeleton representation, age and sex estimation, pathology etc. All quantified data will be entered onto the relevant table within the site database. Cremated bone will be separated into anatomical elements from the cranium, axial and appendicular skeleton within each spit in order to understand the depositional sequence. It may be possible to estimate age and sex, although the palaeopathological information is likely to be limited. Examination of the cremated remains, especially the size and colour of bone, should be able to shed light on the cremation process.

◆KEY STAGE 1

7.5.2 Phasing/publication liaison (Task 23)

See structural analysis section 7.1.5

7.5.3 Human bone publication text (Task 27.2)

The final publication text will only be prepared on receipt of the final phasing structure. It will discuss both individual graves and groups of graves. Human bone found in non-funerary deposits will also be discussed.

◆KEY STAGE 2

Human Bone Analysis				
Task		Staff	Area 1 Days	Area 2 Days
22.2	Quantification and recording	EXT	n/a	n/a
◆	KEY STAGE 1			
23	Phasing/publication liaison	EXT	0.5	0.5
27.2	Publication text	EXT	n/a	n/a
◆	KEY STAGE 2			

Table 53: Summary of human bone analysis tasks



7.6 Analysis of Charred Plant Remains

7.6.1 Quantification and recording (Task 22.2)

Where suitable at least two samples from each phase and each area will be analysed for charred seeds/chaff/weeds and charcoal. Sorting of the two waterlogged deposits will also be undertaken. The remains will be quantified and identified with the data entered onto the relevant table within the site database. **Note.** Quantification will initially only be undertaken on samples from deposits assigned to assessment phase. Once the final phasing is complete (Task 23), the remaining samples will be quantified.

◆KEY STAGE 1

7.6.2 Phasing/publication liaison (Task 23)

See structural analysis section 7.1.5

7.6.3 Charred plant remains publication text (Task 27.2)

The final publication text will be prepared on receipt of the final phasing structure. It will detail the analysis of selected samples and incorporate the results of the assessment.

◆KEY STAGE 2

Charred Plant Analysis				
Task		Staff	Area 1 Days	Area 2 Days
22.3	Quantification: charred remains	EXT-LR	10	20
	Quantification: waterlogged remains	EXT-MR	2.5	2.5
◆	KEY STAGE 1			
23	Phasing/publication liaison	LR/MR	0.5	0.5
27.3	Publication text: charred remains	LR	3	8
	Publication text: waterlogged	MR	1.5	1.5
◆	KEY STAGE 2			

Table 54: Summary of charred plant remains analysis tasks



7.7 Overall Publication, Archiving and Project Management

7.7.1 Editing publication text including specialist reports (Task 31)

The entire publication will be read and edited to ensure a consistency in approach.

7.7.2 Production of synthesis (Task 32)

A synthetic text will be produced discussing the key elements of the site, probably within the major chronological periods. This will attempt to address the updated research objectives.

7.7.3 Amendments and queries resulting from the article editor (Task 33)

During the production of the synthesis it is likely that a number of questions will arise that the various specialists will need to address.

◆KEY STAGE 3

7.7.4 Albion refereeing process (Task 34)

Albion has a policy of circulating the first draft of articles intended for publication to clients, the CAO and any other interested parties. This task includes time for any required discussion with the referees.

7.7.5 Amendments resulting from referees comment to publication text and figures (Task 35)

Amendments to publication text and figures based on comments received from Albion's refereeing process, prior to the hand-over of the publication article to the editor of *Bedfordshire Archaeology*.

◆KEY STAGE 4

7.7.6 Printing and proof reading (Task 36)

The printing of the article will be arranged by the editor of *Bedfordshire Archaeology*, but proof reading will be necessary.

7.7.7 Archiving and accessioning (Tasks 37-38)

Upon completion of the report, the written and material archives will be prepared for accessioning to Bedford Museum (Task 37). The cost of transfer includes transport, liaison and storage charges at £14.00 per sq. ft.

7.7.8 Project management (Task 39)

All project tasks have been identified from Albion's generic task list menu. These have been entered onto the Albion's Time Recording System (TRS) so that expenditure and resources can be tracked throughout the life of the project. The management of the project includes monitoring the task budgets, programming tasks, checking timetables and liaising with all members of the project team.



Overall publication, archiving and project management				
Task		Staff	Area 1	Area 2
			Days	Days
◆	KEY STAGE 2			
31	Editing publication text	PO	10	19
32	Production of synthesis	PO	5	9
	Assistance with synthesis	PM	0.5	1
33	Amendments resulting from editors comments	AO	1	2
	Amendments resulting from editors comments	TBC	1	2
	Amendments resulting from editors comments	TBC	1	2
◆	KEY STAGE 3			
34	Albions refereeing process	PM	1	2
	Albions refereeing process	PO	3	5
35	Amendments resulting from referees comments	AO	1	2
	Amendments resulting from referees comments	Illust	2	4
	Amendments resulting from referees comments	PO	2	4
◆	KEY STAGE 4			
	Submission to <i>Bedfordshire Archaeology</i>			
36	Printing and proof reading	PO	1	1
37	Archive preparation (Structural)	Sup	2	5
	Archive preparation (Artefacts)	AO	2	5
38	Archive transfer (storage costs)			
	Archive transfer	Sup	1	1
39	Project management (Overall)	PO	5	10
	Project management (Artefacts)	AO	1.5	3
	Project management (Albion)	PM	1	2
◆	KEY STAGE 5			

Table 55: Overall publication, archiving and management tasks





8. APPENDIX 2: THE PROJECT TEAM

To ensure a consistency of approach the same specialists will be used who have been involved in the assessment stage of the project.

Task	Org./Int.	Title/Organisation	Name
Daily management	ALBION- PO	Project Officer	Mike Luke
Structural analysis	ALBION- Sup	Project Supervisor	TBC
Geophysical survey	EXT	West Yorkshire Archaeology	TBC
Digitisation	ALBION- CSup	CAD supervisor	Joan Lightning
Artefact analysis	ALBION- AO	Artefacts Officer	Jackie Wells
Illustration	ALBION- Ill	Illustrator	Cecily Marshal
Coins	EXT	Cardiff University	Pete Guest
Slag	EXT		Gerry McDonnell**
Animal bone	EXT	Bournemouth University	Ellen Hambleton*
Human bone	EXT	Wessex Archaeology	Jacqueline McKinley**
Charred plant remains	EXT	University Museum, Oxford	Layla Renshaw*
Waterlogged remains	EXT	University Museum, Oxford	Mark Robinson

* Working under the supervision of Mark Maltby and Mark Robinson (respectively)

** TBC

Note. Detailed staff CV's were presented in the Project Design, these are therefore not repeated here.

Table 56: The project team





9. APPENDIX 3: SUMMARY OF ALL TASKS

Task Code	Description	Staff
2.4	Geophysical survey: re-analysis	Sup
2.5	Aerial photographs: re-analysis	Sup
2.6	HER and historical maps	Sup
6	X-radiography	
7.1	Computerisation of drawings (incl. geophys and cropmarks)	Csup
7.2	Inputting of geophysical and cropmarks into context database	Csup
11	Narrow term identification	AO
12	Narrow term identification: coins and slag	PG/JM
14.1	Pottery quantification and recording	AO
14.2	CBM quantification and recording	AO
19.1	Subgroup and group analysis	Sup/AO
19.2	Landscape and phase analysis	Sup/AO
20.1	Pottery technical text	AO
20.2	CBM technical text	AO
21	Non-ceramic catalogue	AO
22.1	Animal bone quantification and recording	EH
22.2	Human bone quantification and recording	JM
22.3	Quantification and recording: charred plant remains	LR
22.3	Quantification and recording: waterlogged	MR
	Keystage 1: completion of analysis	
23	Phasing/publication liaison	ALL
24	Site narrative	Sup/PO
25.1	Pottery publication text	AO
25.2	CBM publication text	AO
26	Non-ceramic publication text	AO
27.1	Animal bone publication text	EH
27.2	Human bone publication text	JM
27.3	Charred plant publication text	LR
27.3	Waterlogged remains publication text	MR
28.1	Pottery illustration	ILL/AO
28.2	CBM illustration	ILL/AO
29	Non-ceramic illustration	ILL/AO
30	Structural illustration	ILL/PO
	Keystage 2: completion of all specialist text	
31	Editing publication text	PO
32	Production of synthesis	PO
32	Assistance with synthesis text	PM
33	Amendments from editor	ALL
	Keystage 3: completion of 1st Draft	
34	Albions refereeing process	
35	Amendments from referees comments	ALL
	Keystage 4: handover to editor of BA	
36	Printing and proof reading	
37	Archive preparation: structural and finds data	AO/SUP
38	Archive transfer	AO
39	Project management	
	Keystage 5: end of project	

Table 57: Summary of all tasks

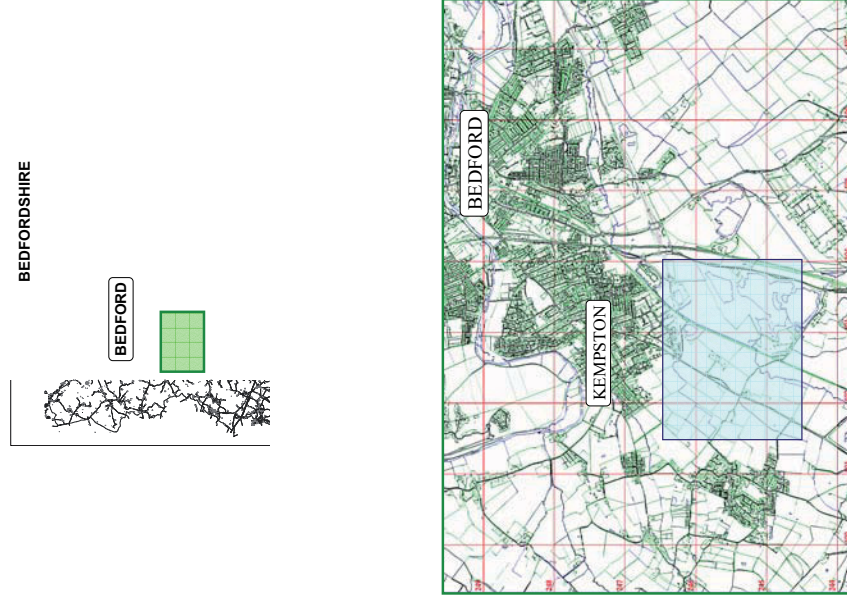


Figure 1: Study Area location plan and adjacent HER sites

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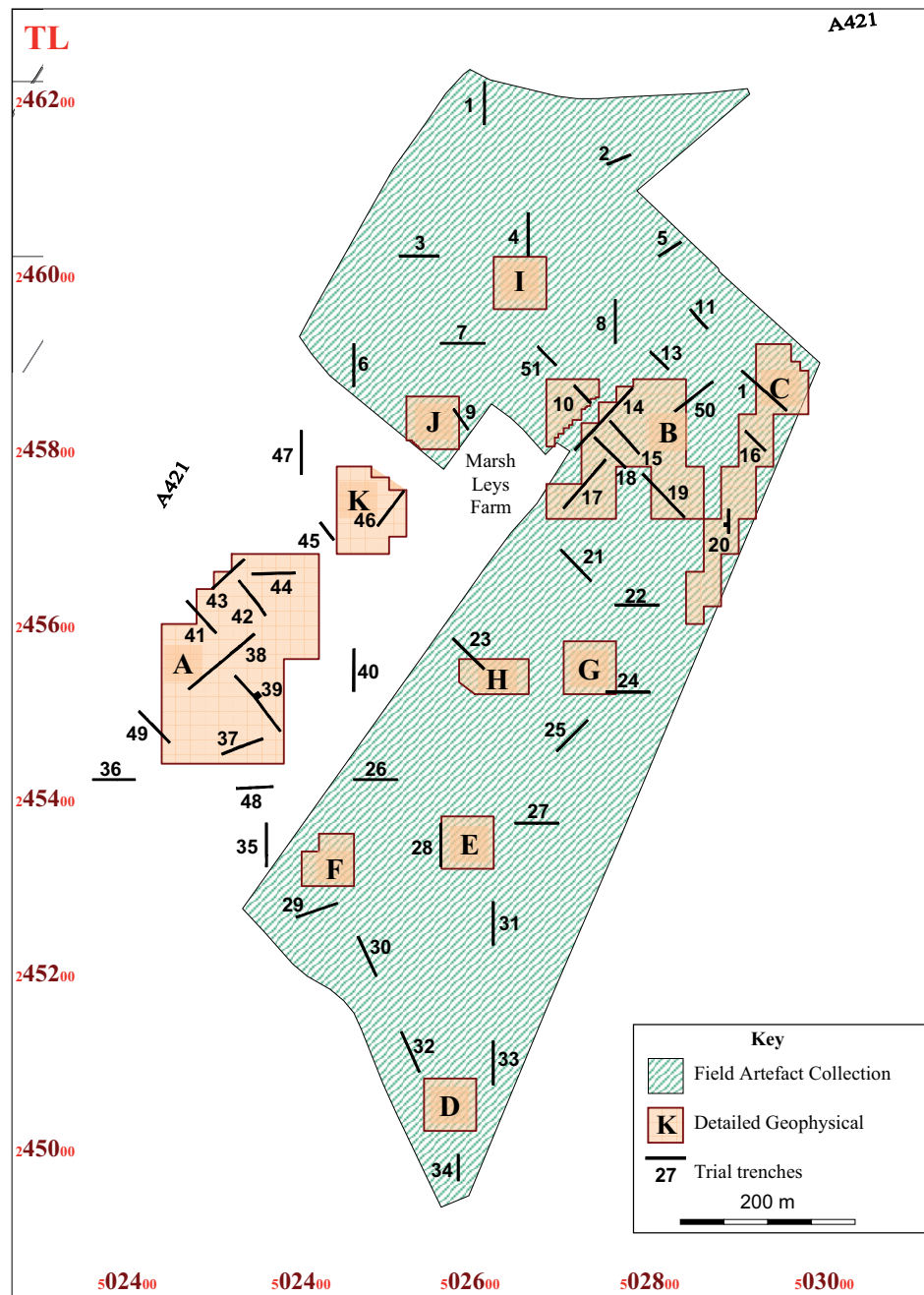


Figure 2: Location of various stages of evaluation
(entire area covered by Aerial Photograph analysis)

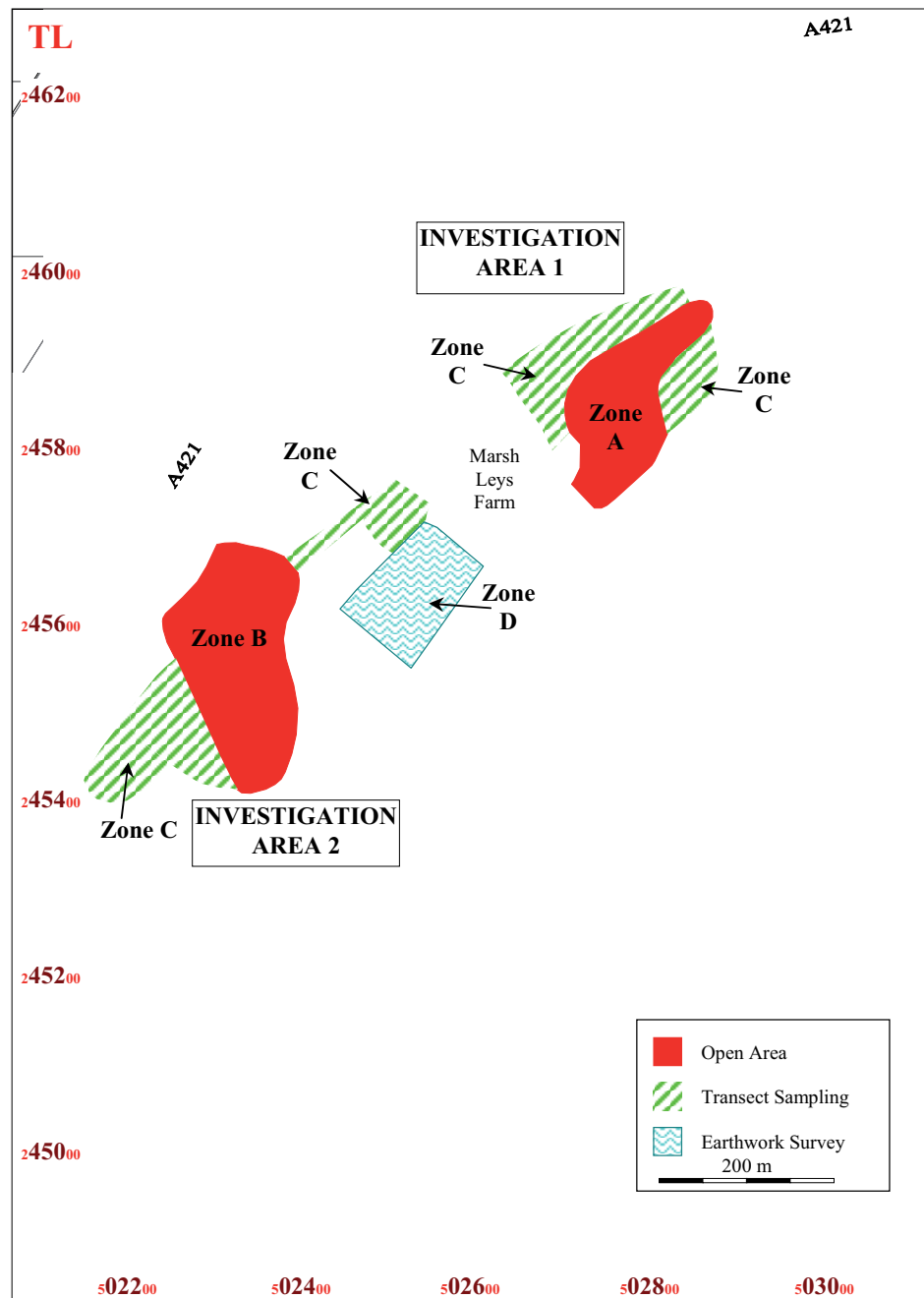


Figure 3: Zones requiring archaeological investigation

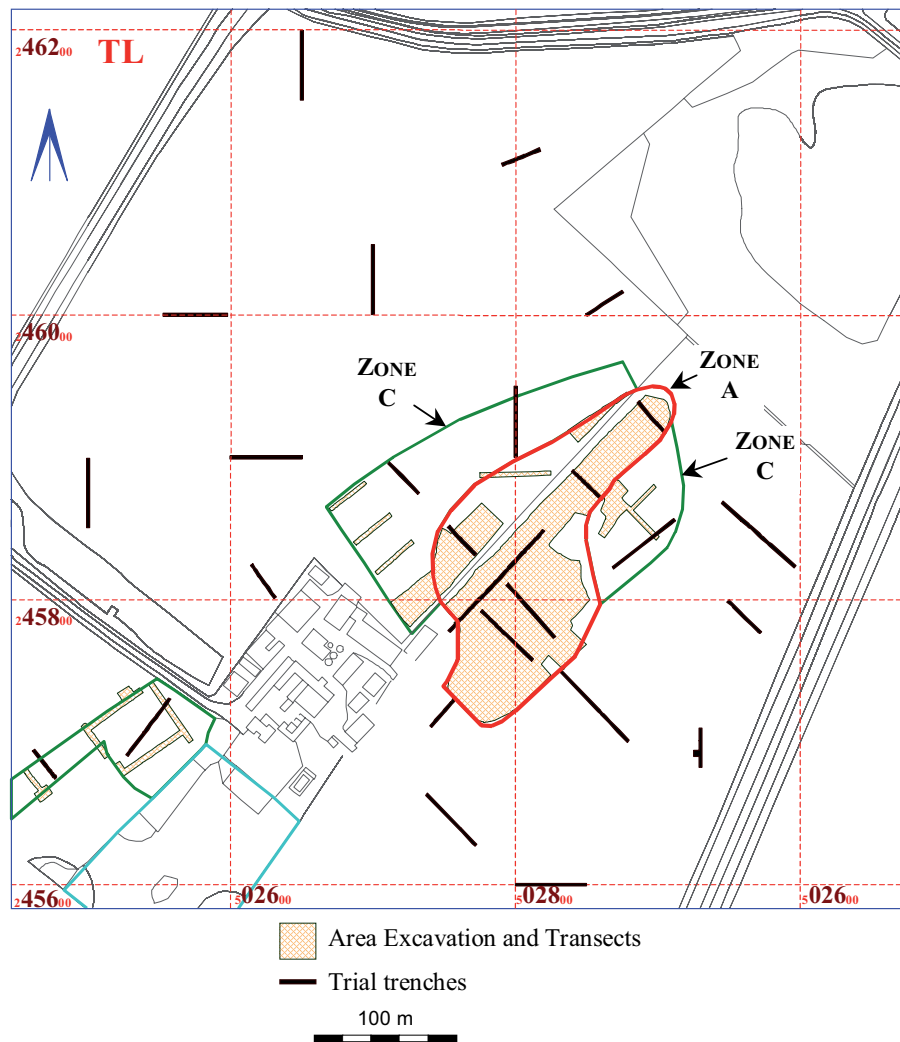


Figure 4: Investigation Area 1

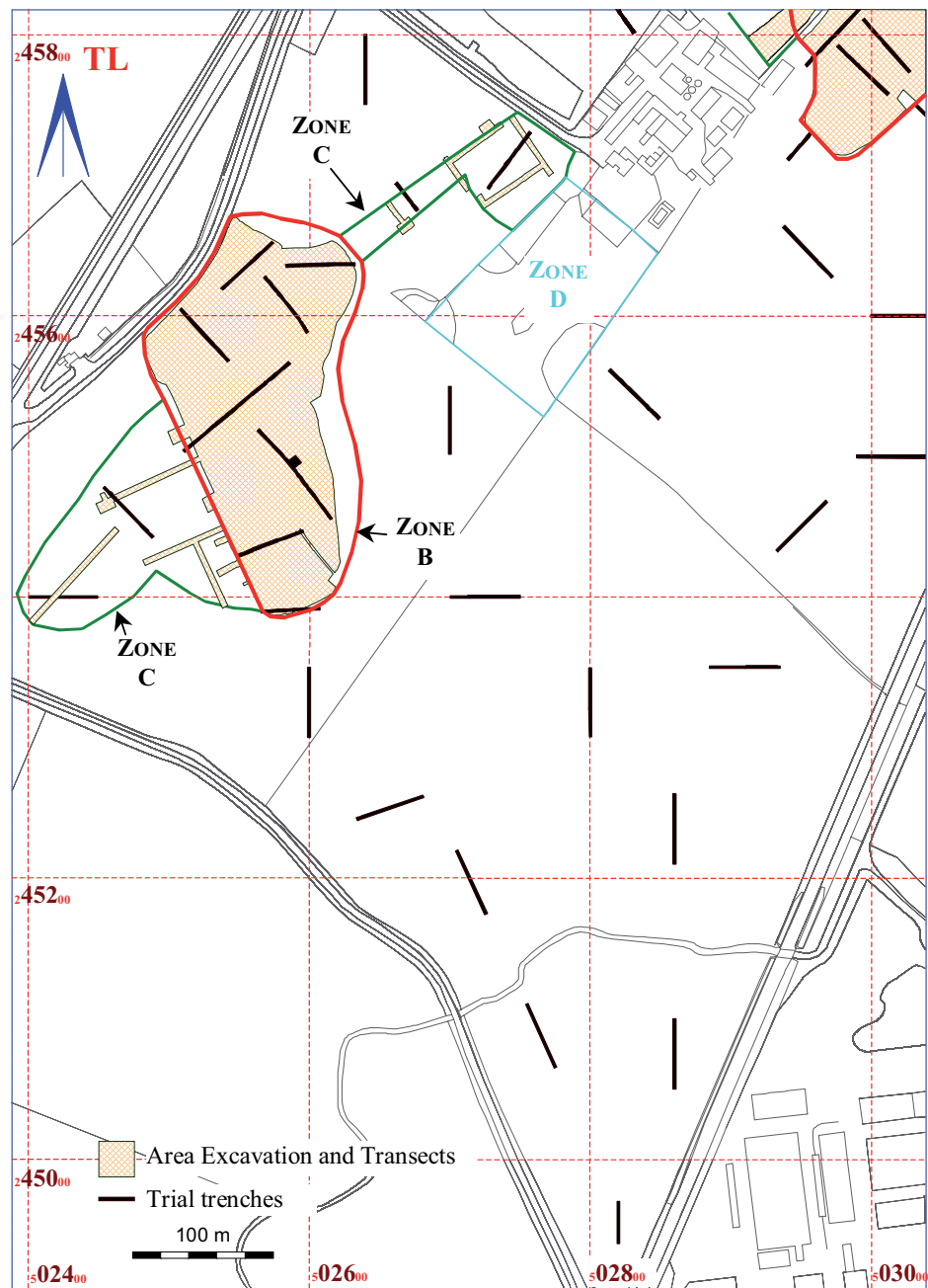


Figure 5: Investigation Area 2

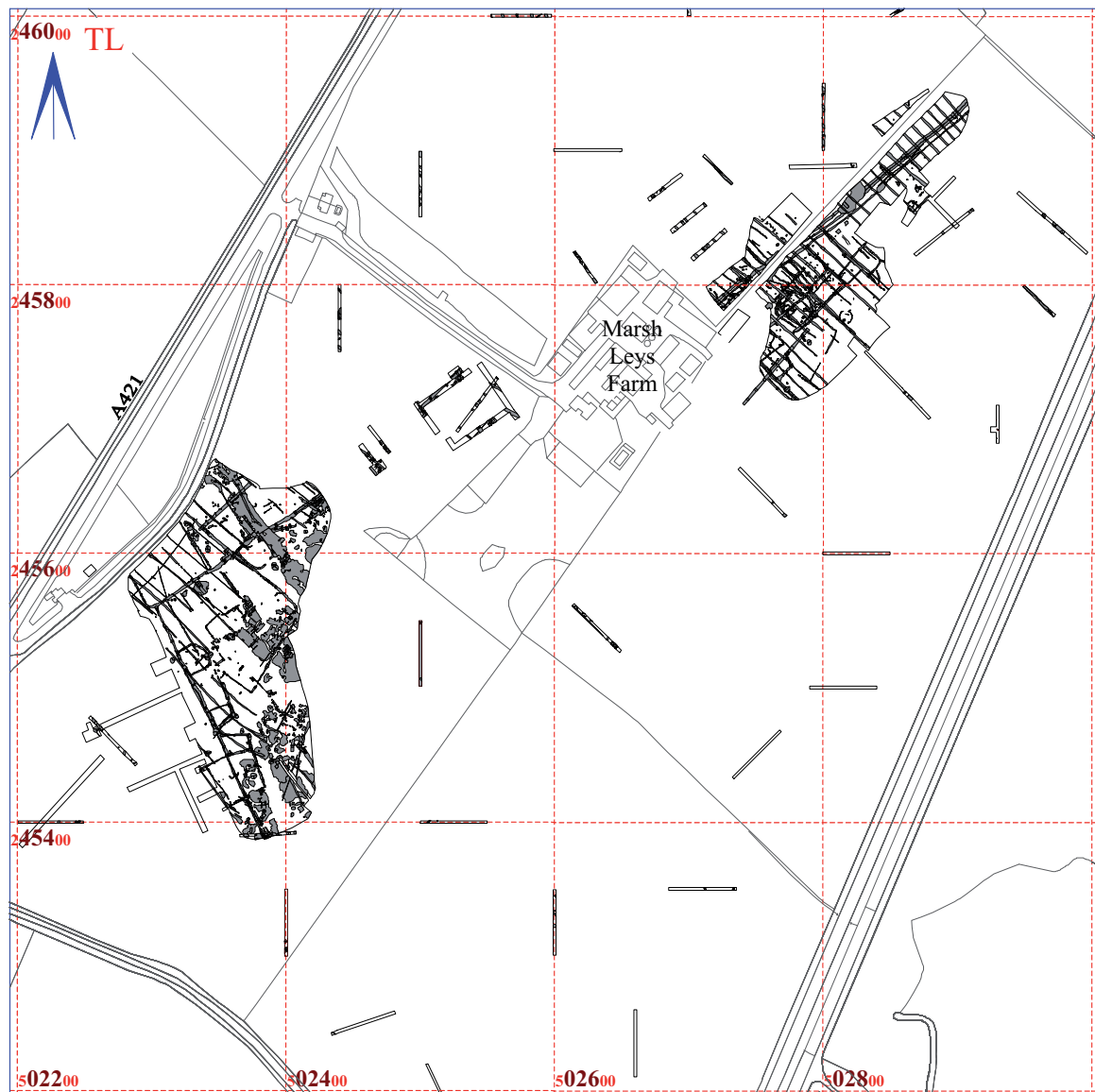


Figure 6: Plan showing all significant features

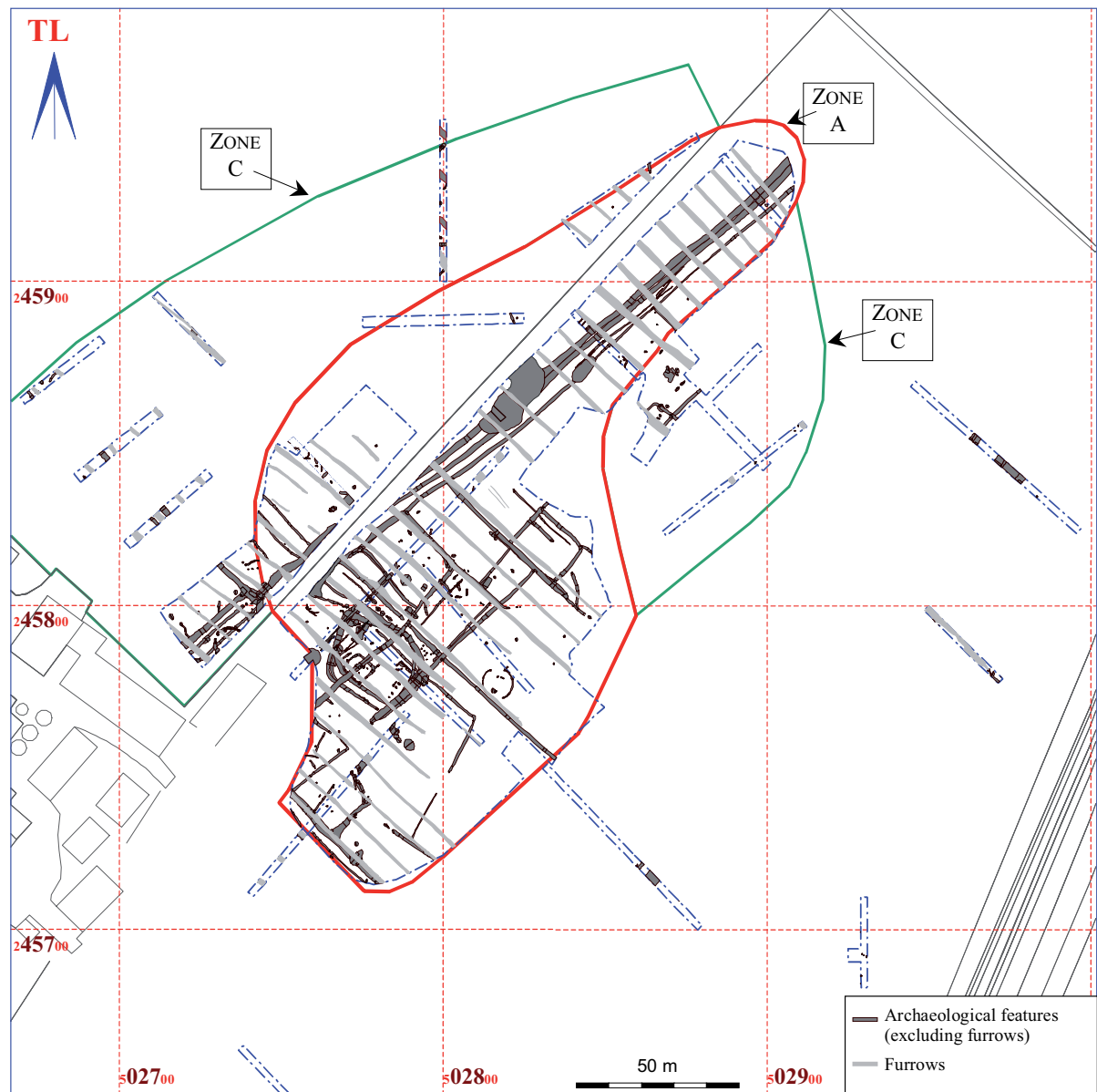


Figure 7: All significant features plan, Area 1

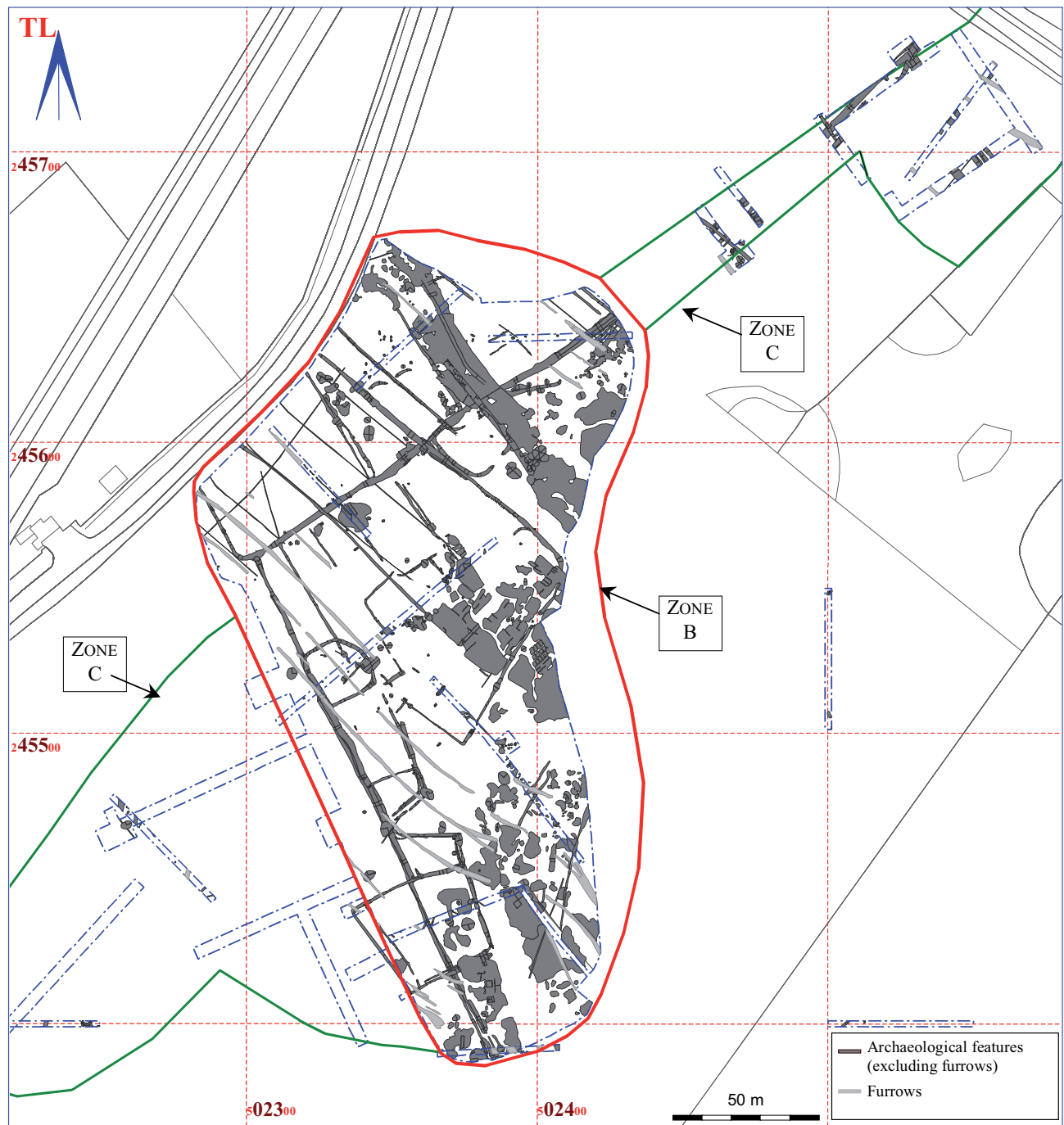
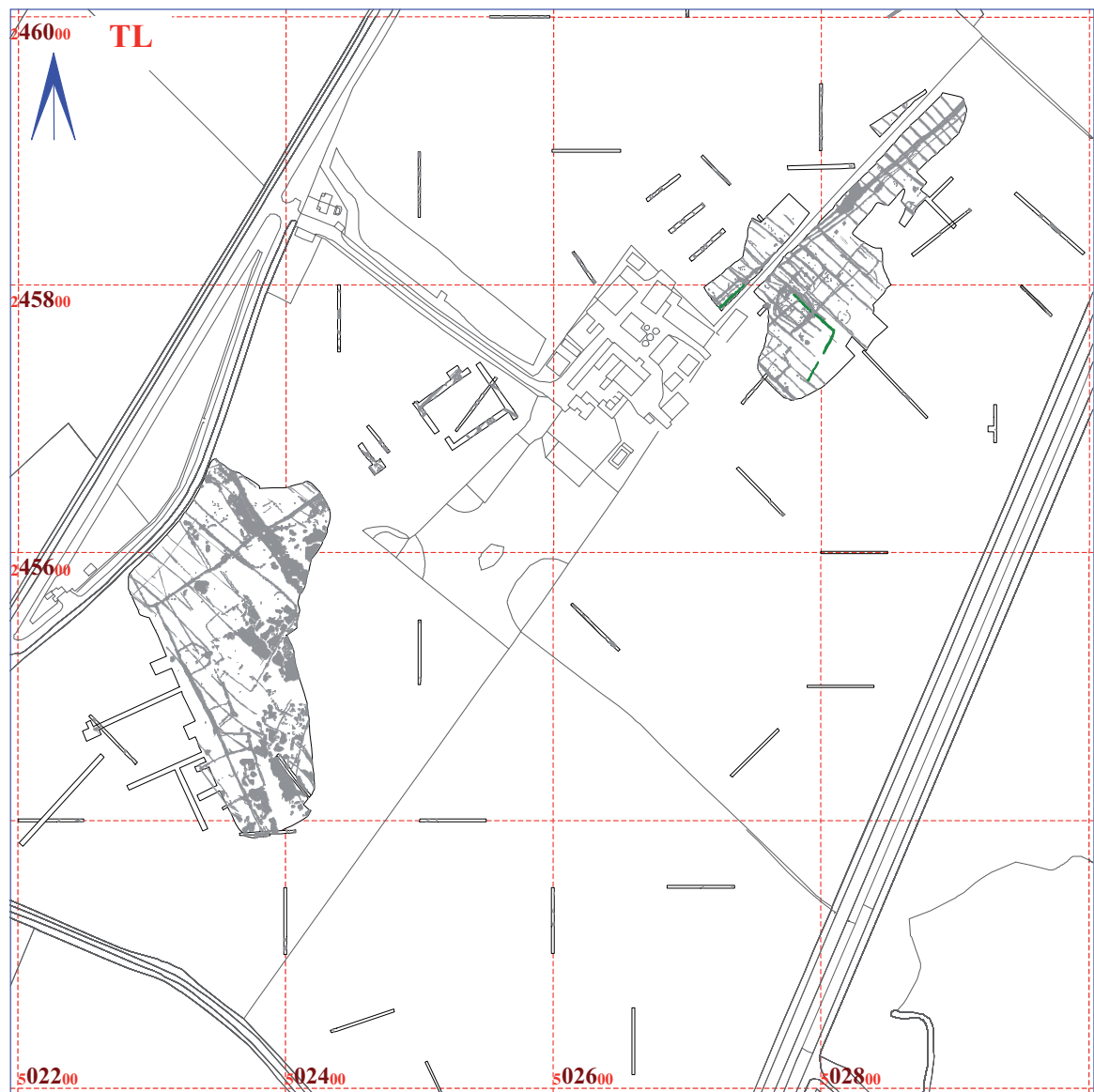


Figure 8: All significant features plan, Area 2



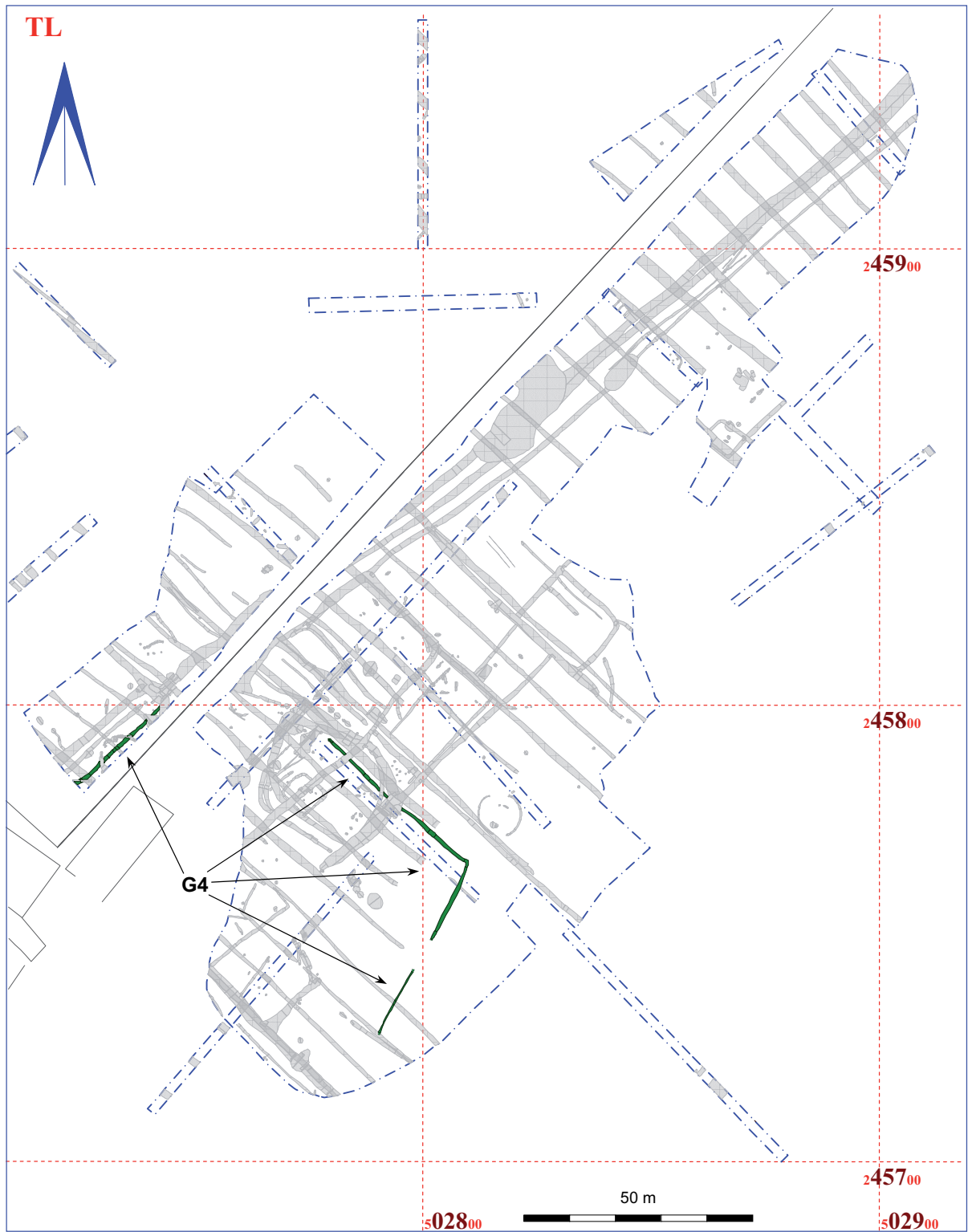
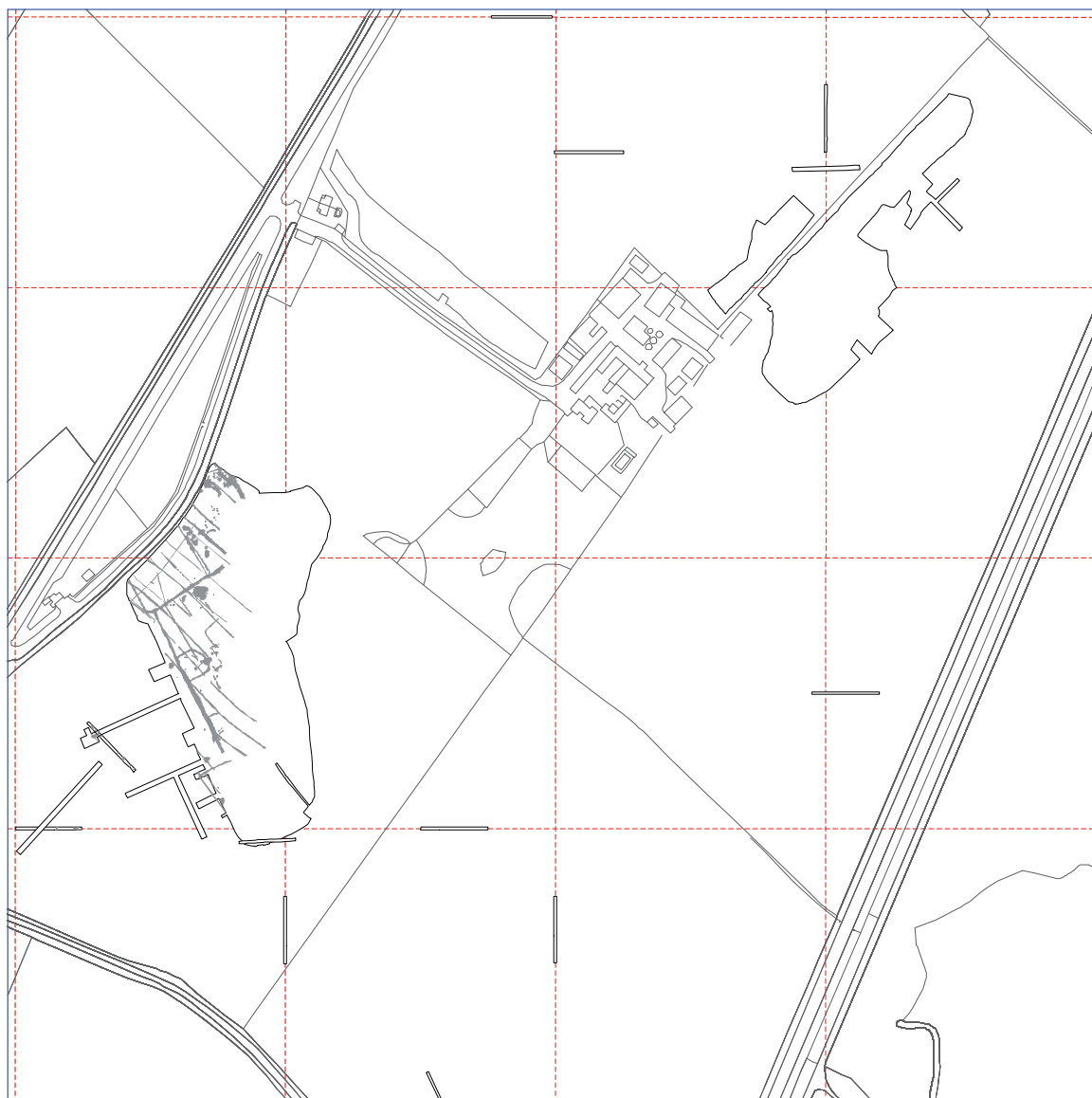


Figure 10: Phase 2; Early Iron Age, Area 1



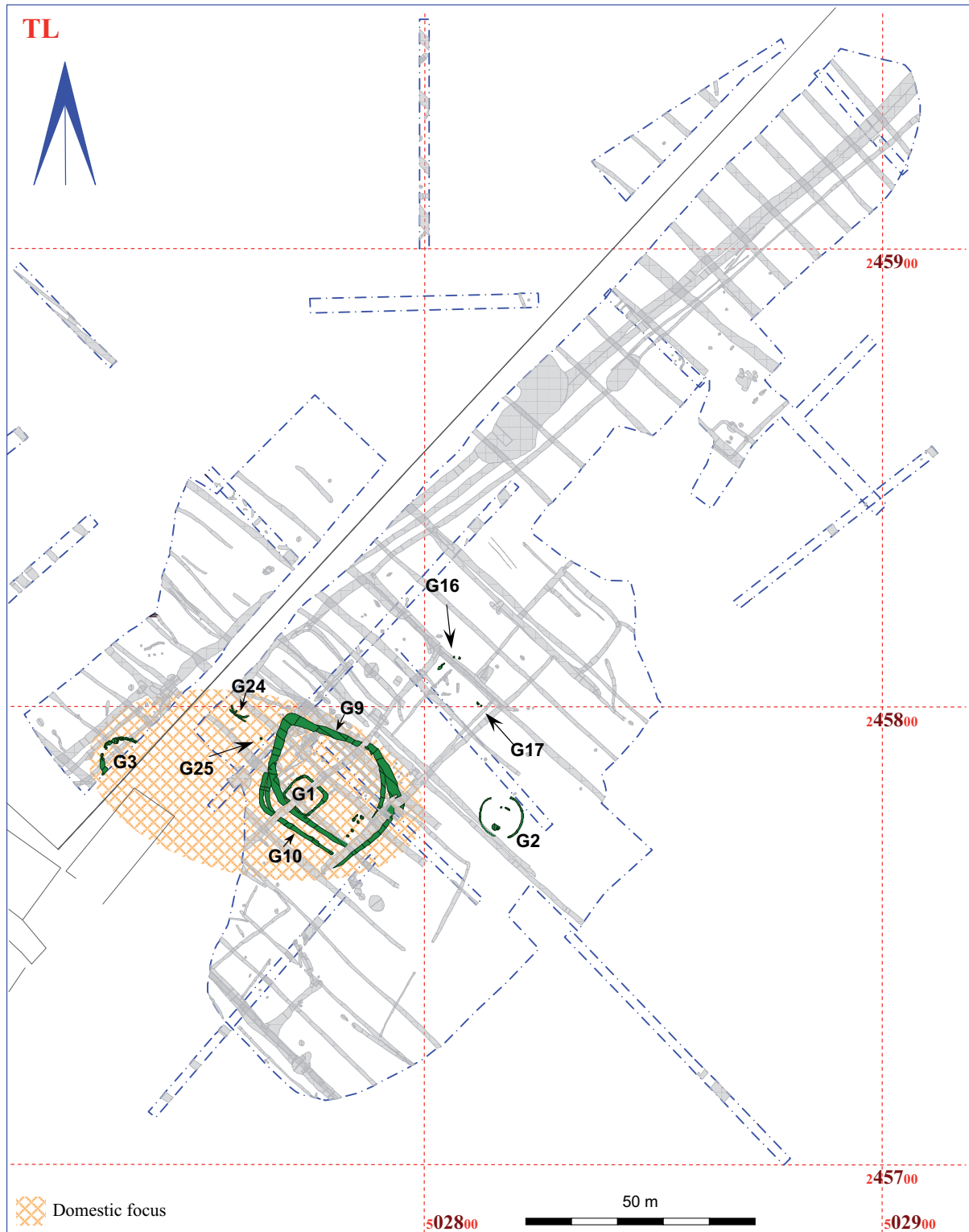


Figure 12: Phase 3; Late Iron Age/early Roman, Area 1

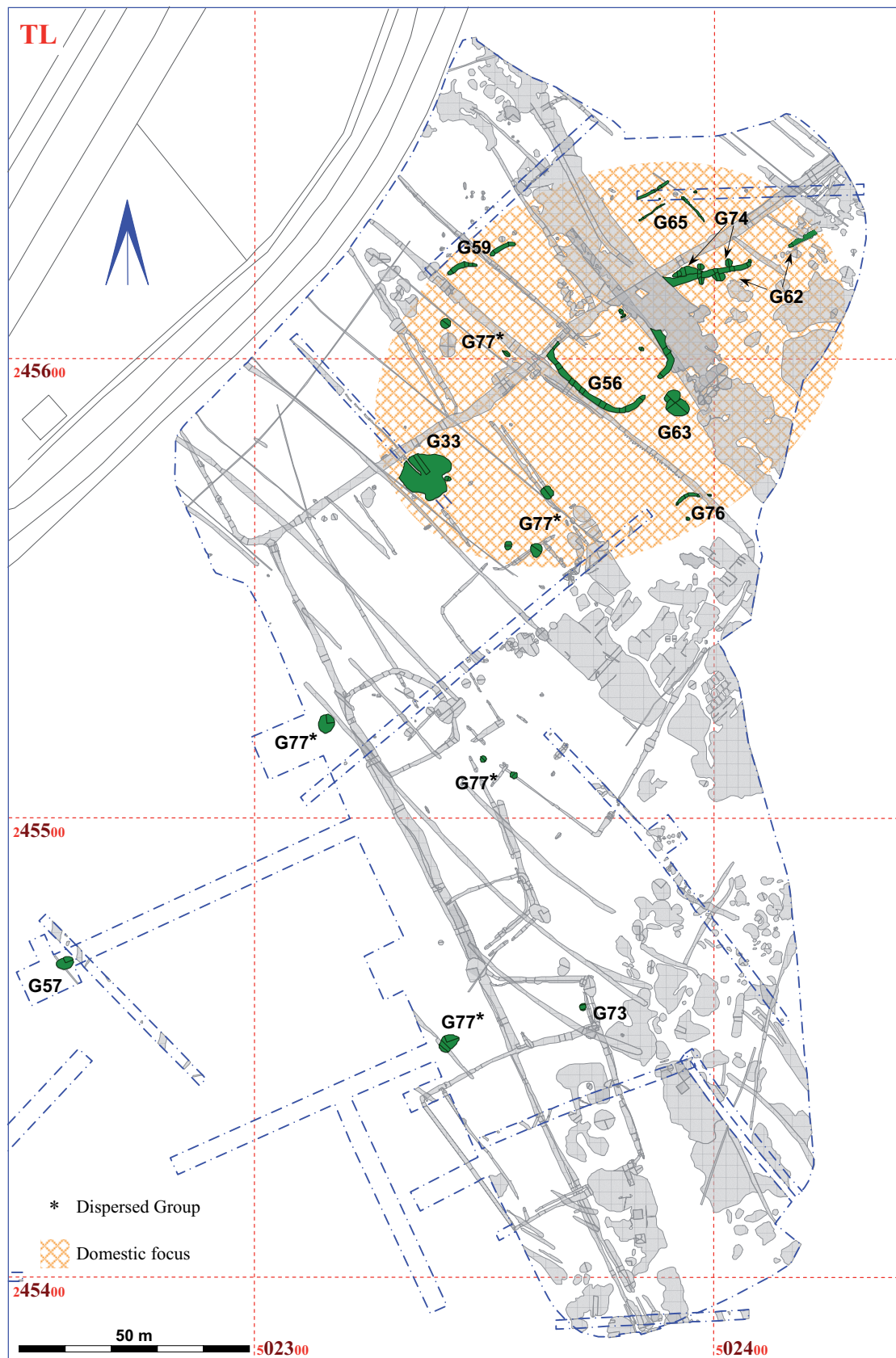


Figure 13: Phase 3; Late Iron Age/early Roman, Area 2

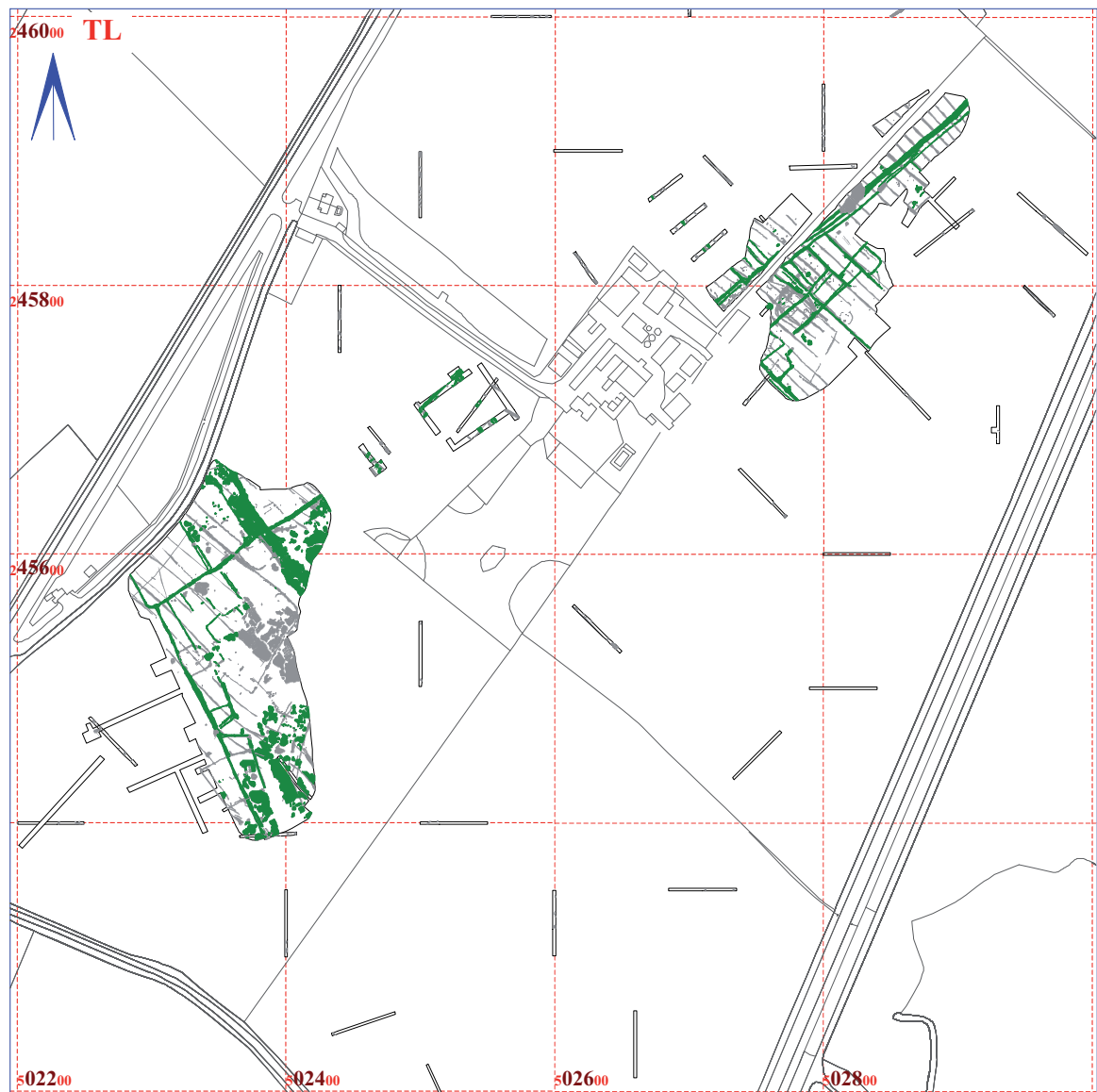


Figure 14: Phase 4; Earlier Roman, overall

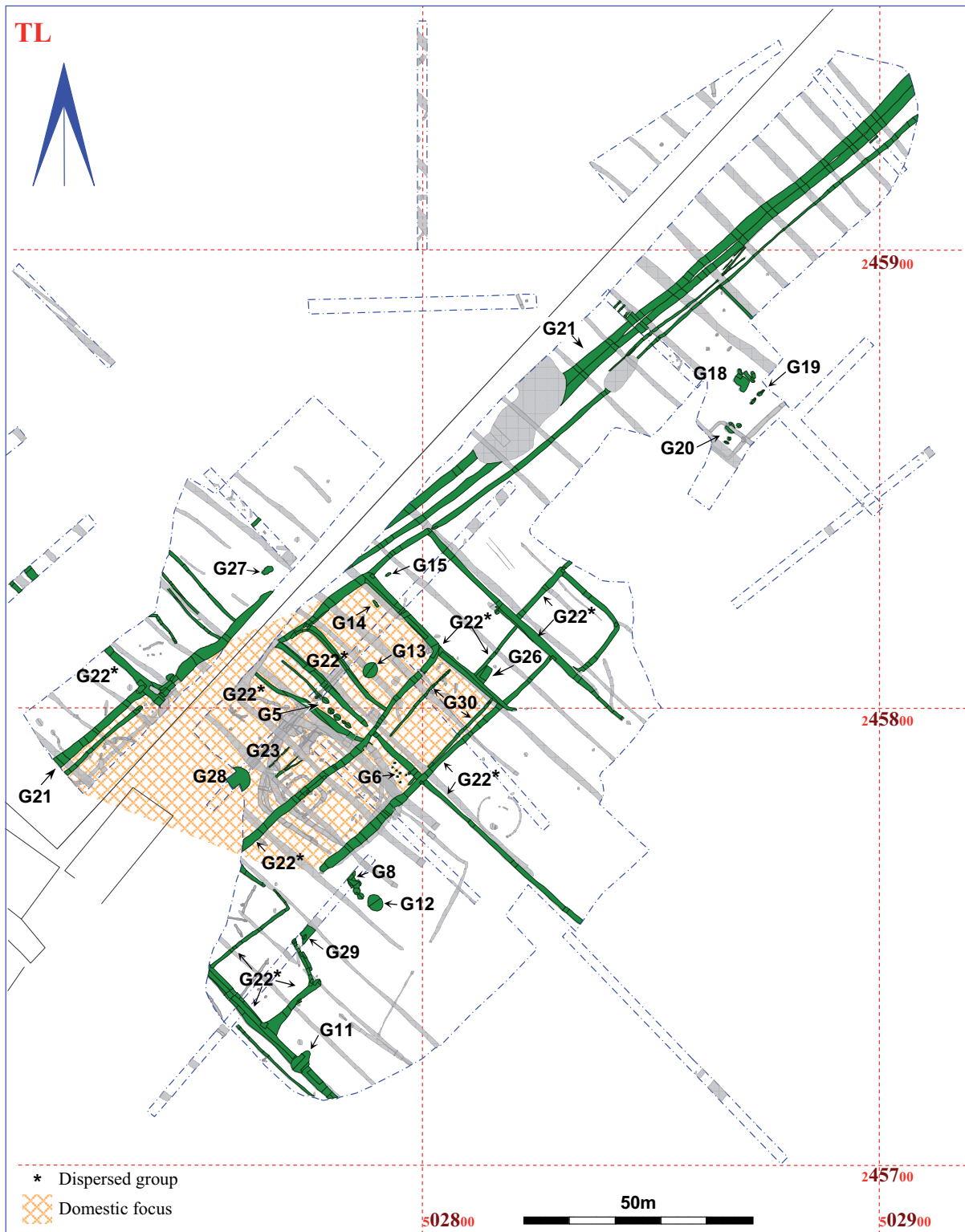


Figure 15: Phase 4; Earlier Roman, Area 1

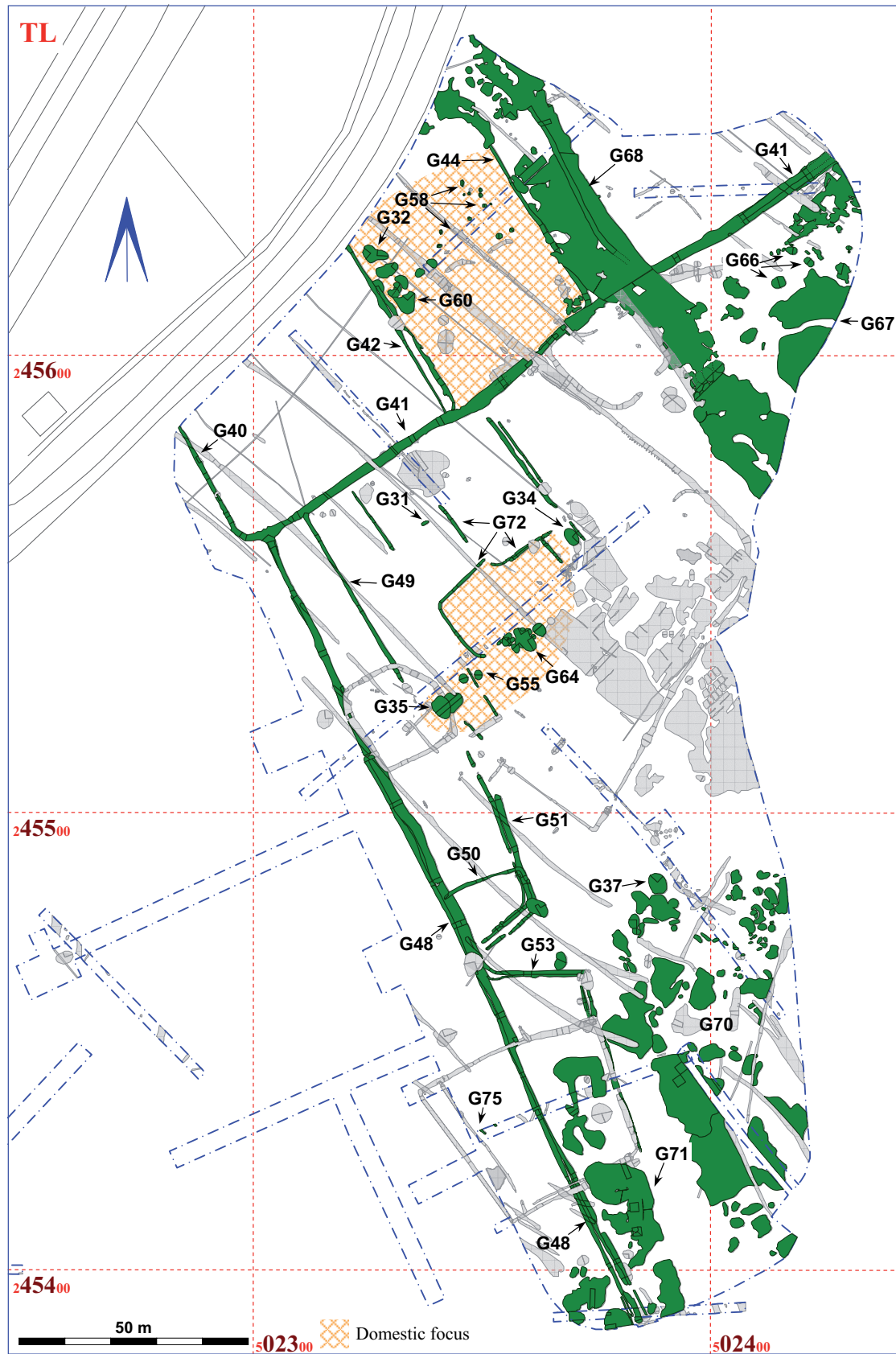


Figure 16: Phase 4; Earlier Roman, Area 2

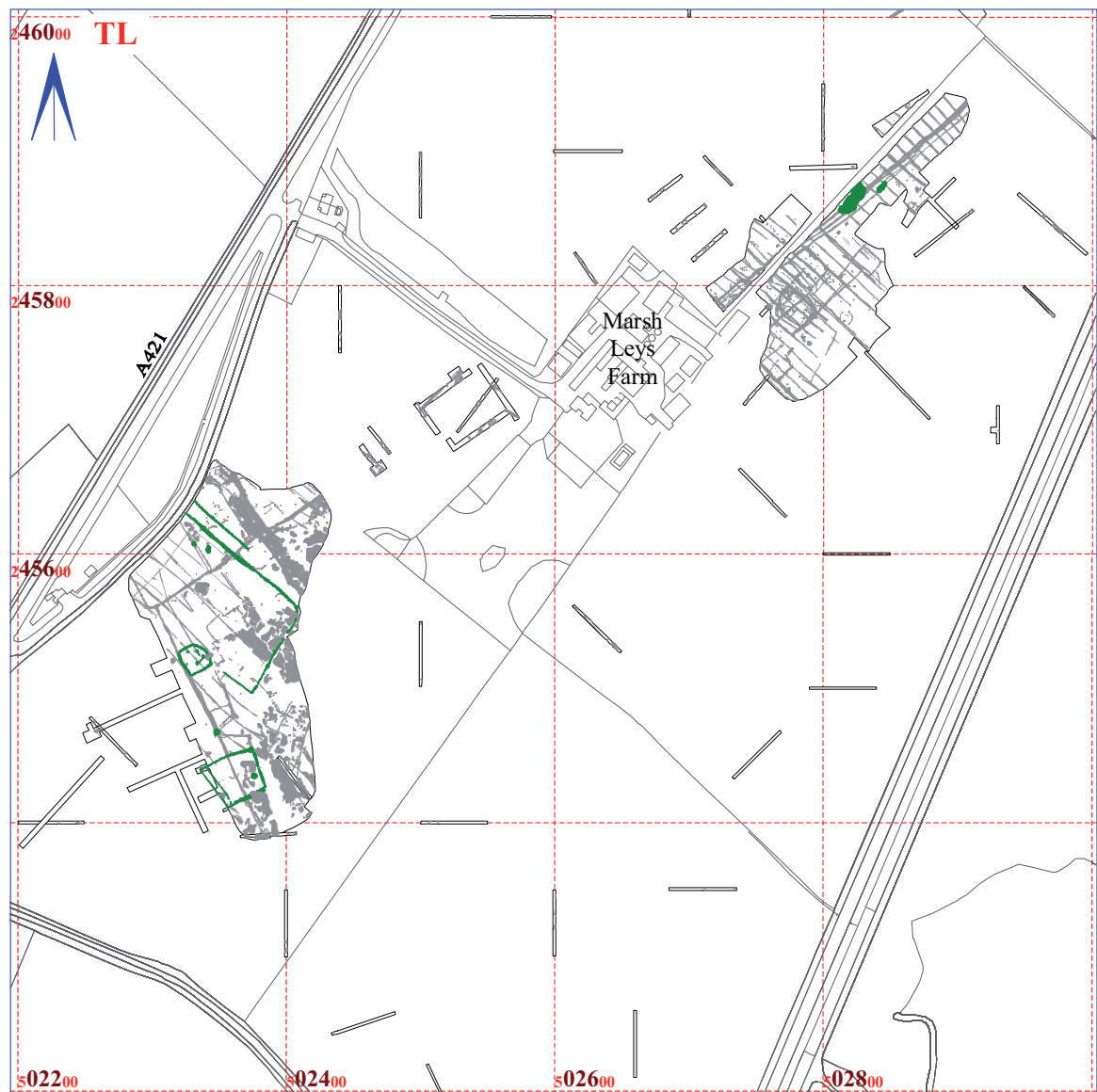


Figure 17: Phase 5; Later Roman, overall

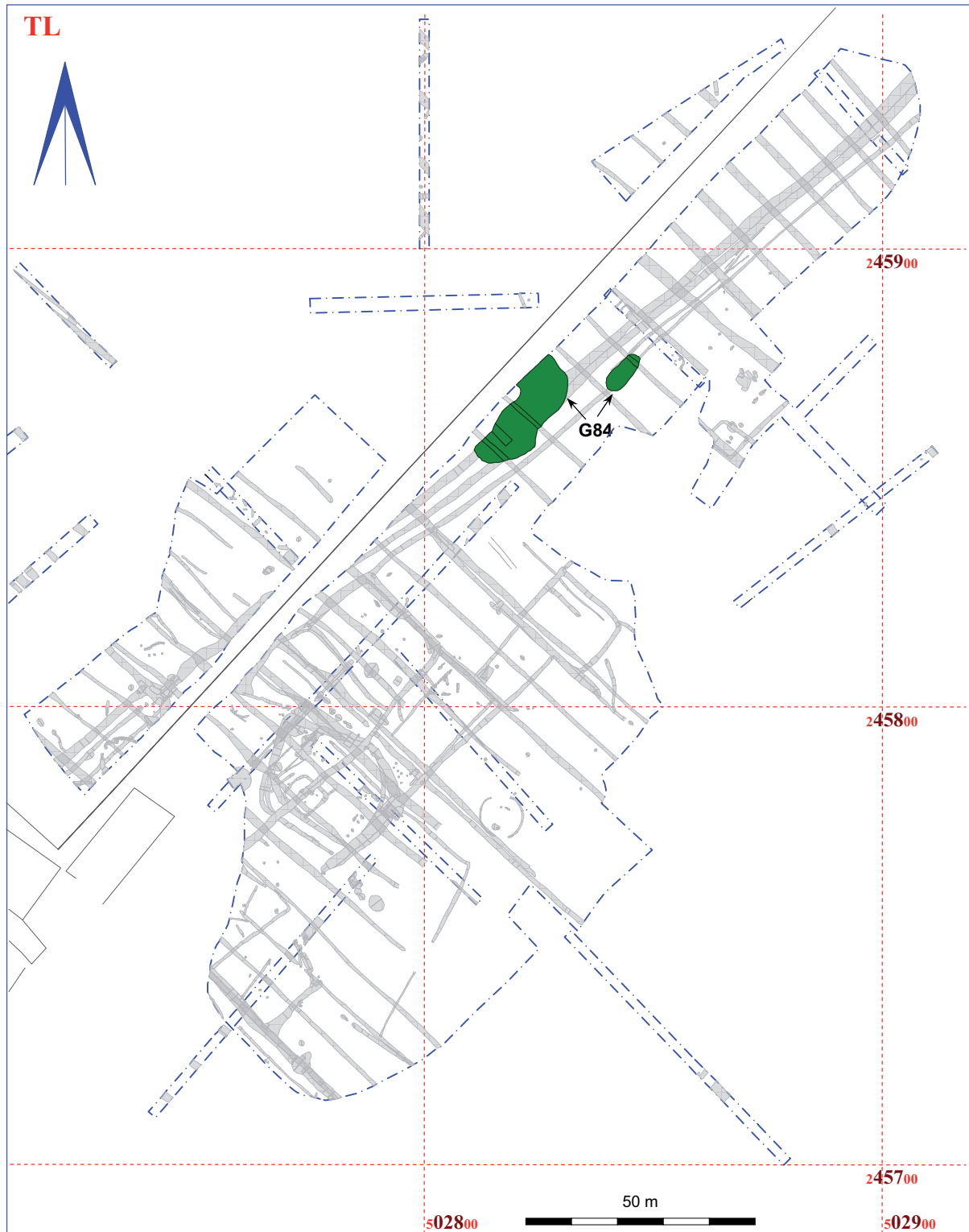


Figure 18: Phase 5; Later Roman, Area 1

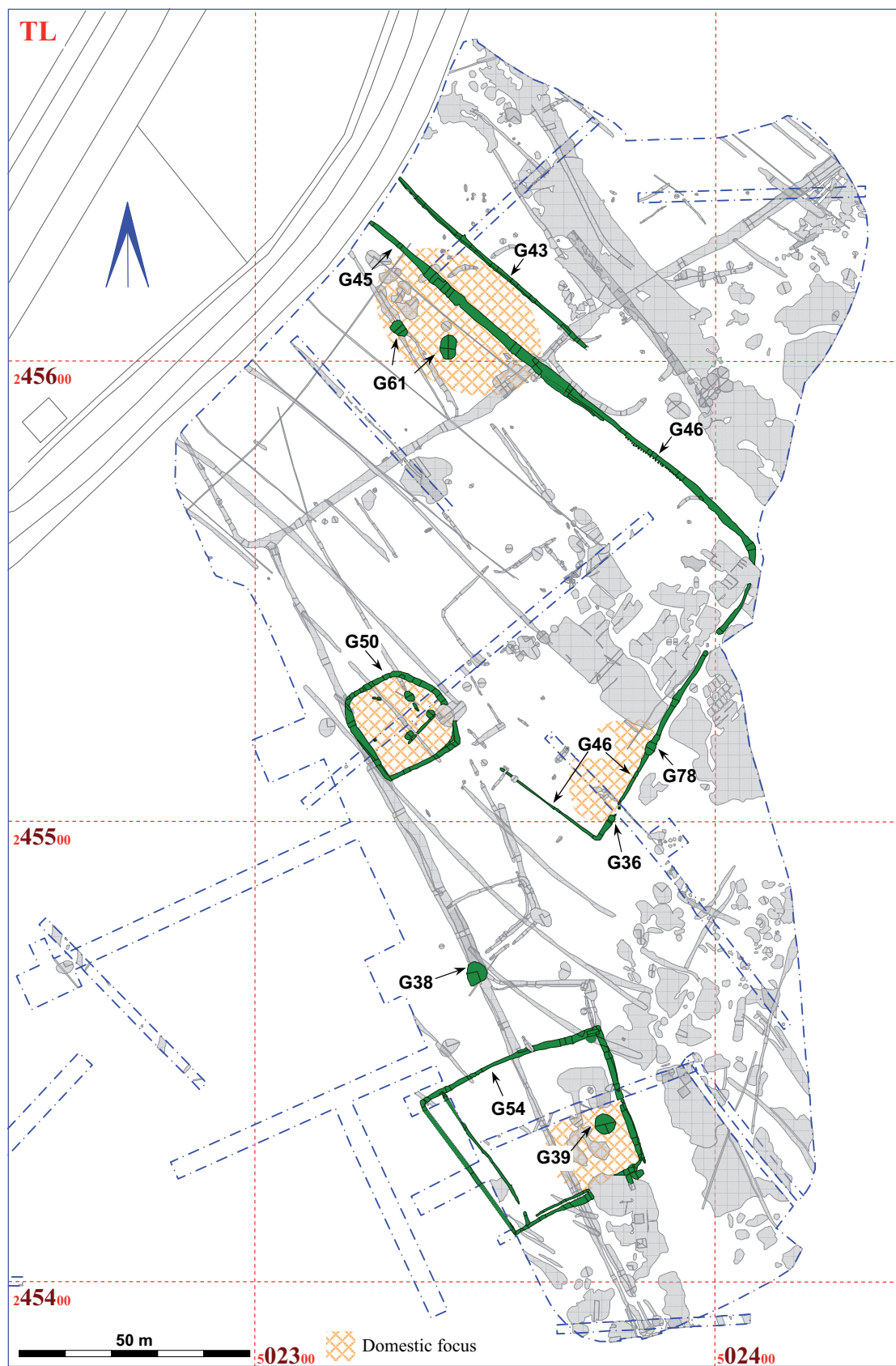


Figure 19: Phase 5; Later Roman, Area 2

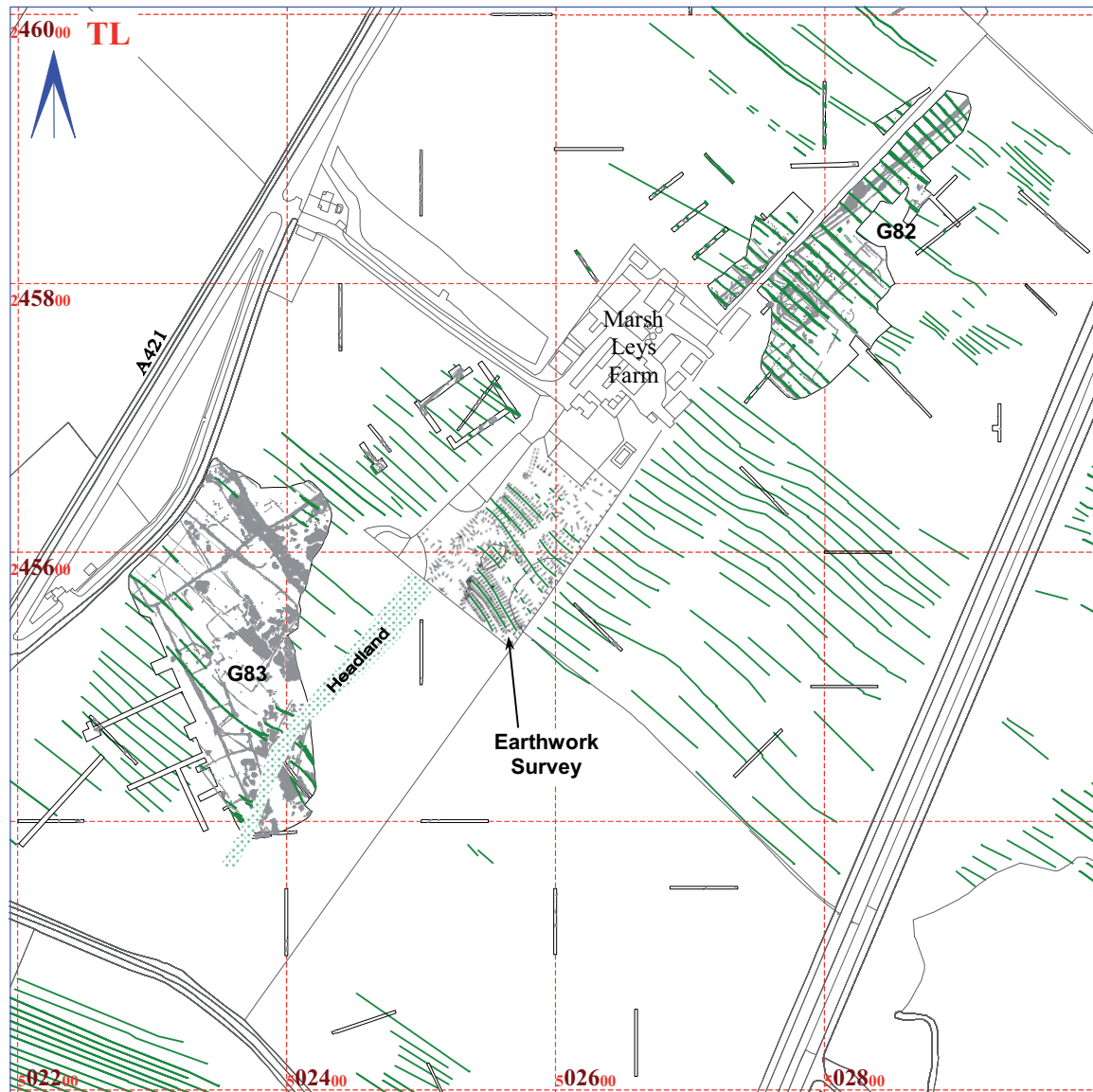


Figure 20: Phase 6; Medieval, overall (cropmarks, and earthwork survey shown)

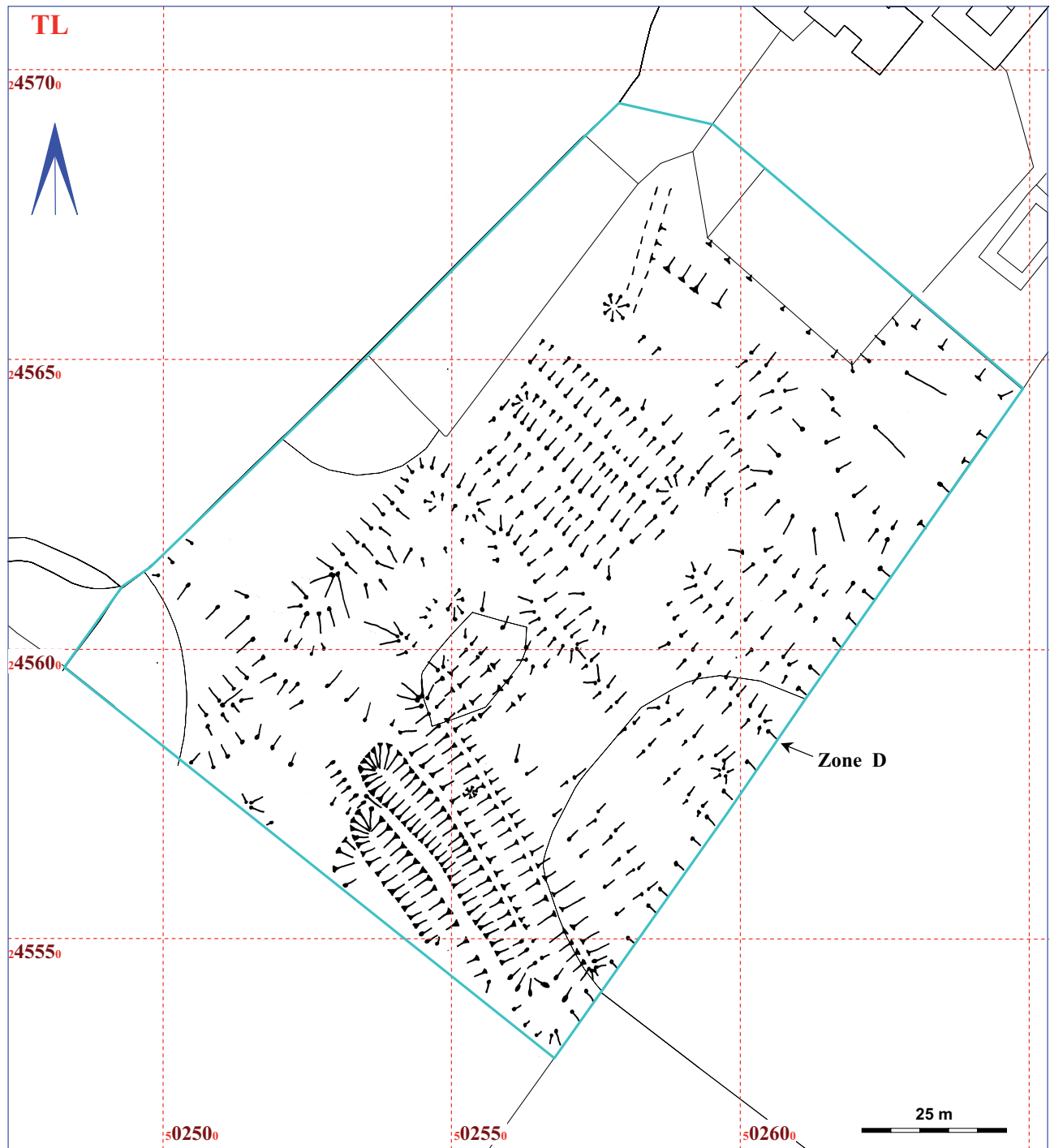
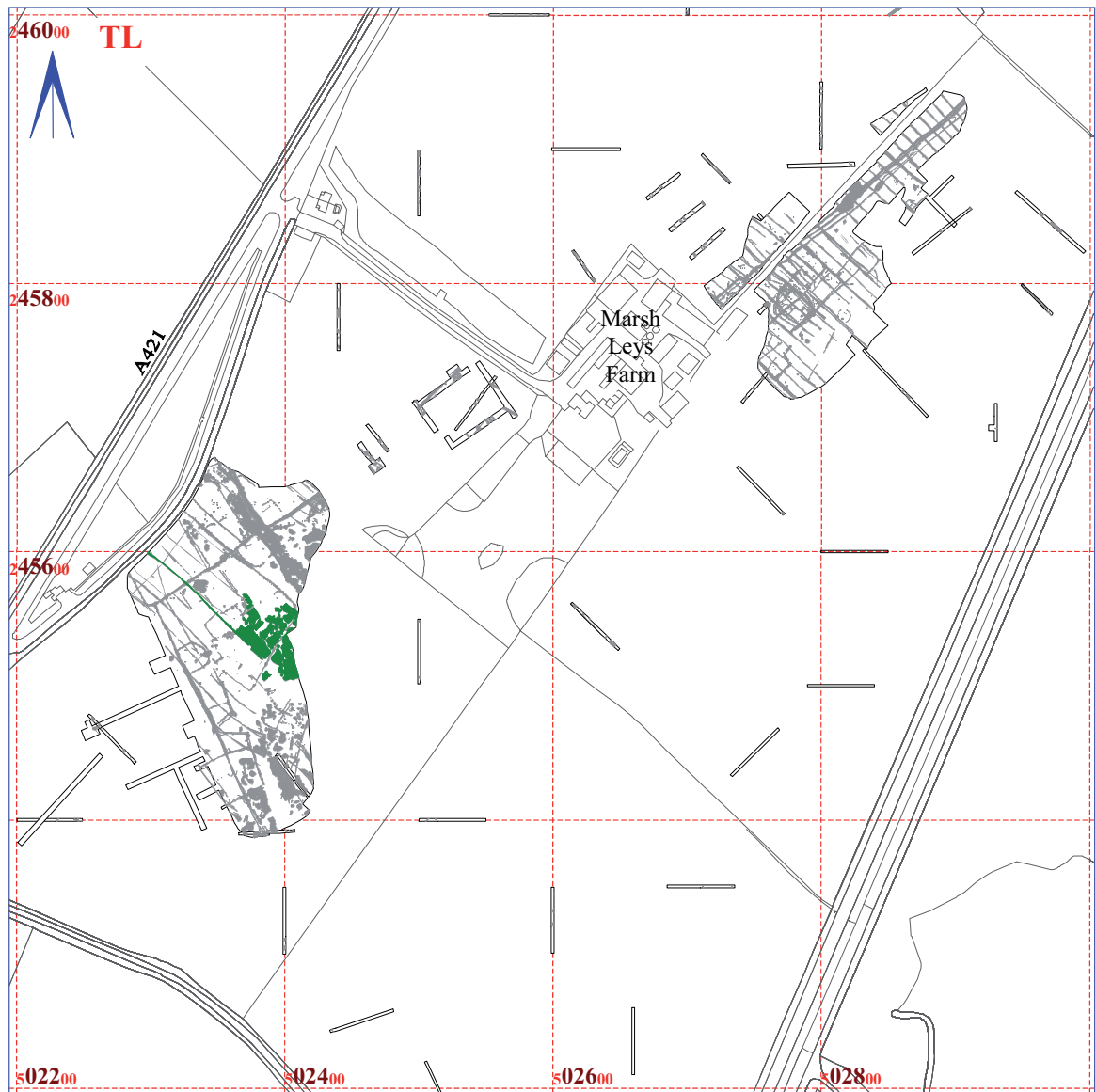


Figure 21: The Earthwork Survey



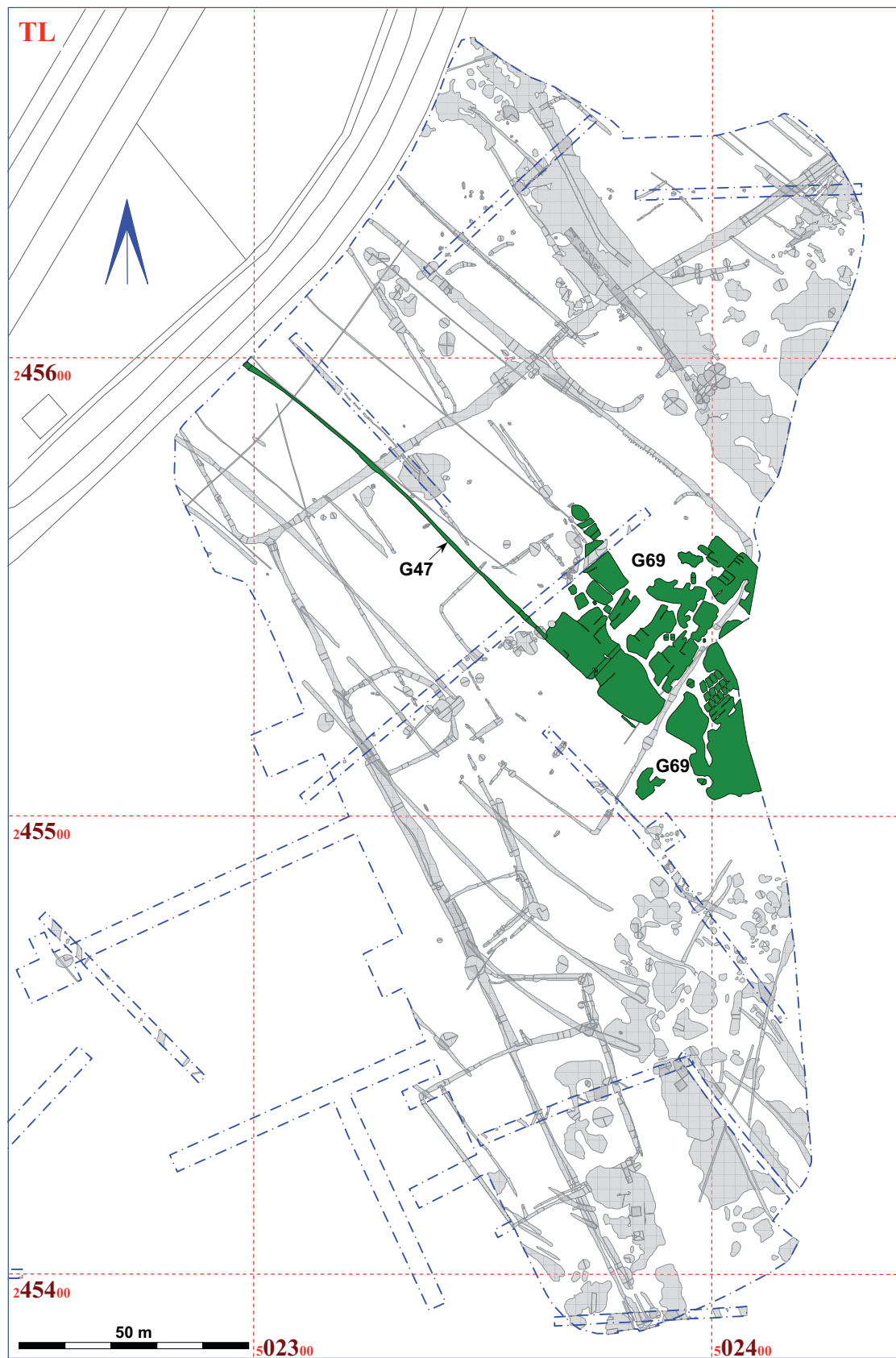


Figure 23: Phase 7; Post-medieval, Area 2