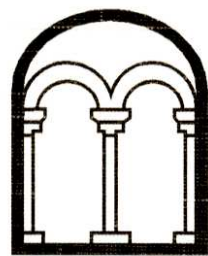


**SITE 17A GROVEBURY FARM
GROVEBURY ROAD
LEIGHTON BUZZARD
BEDFORDSHIRE**

**ASSESSMENT OF POTENTIAL AND
UPDATED PROJECT DESIGN**

Albion
archaeology



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Compiled by	Checked by	Approved by
Marcin Koziminski	Ben Barker	Drew Shotliff

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Produced for:
Persimmon Homes and
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Contents

1. INTRODUCTION	9
1.1 Project Background.....	9
1.2 Status and Purpose of this Document	9
1.3 Site Location, Topography and Geology.....	9
1.4 Archaeological Background.....	10
2. METHODOLOGY AND FIELDWORK AIMS AND OBJECTIVES	11
2.1 Introduction	11
2.2 Methodologies and Standards.....	11
2.3 National Research Frameworks	11
2.4 Regional and County-based Research Agendas	12
2.5 Project Research Objectives	12
3. PROVISIONAL CHRONOLOGICAL SUMMARY	14
3.1 Introduction	14
3.2 Assessment Phase 1: Late Bronze Age/early Iron Age	14
3.3 Assessment Phase 2: Early-middle Iron Age.....	14
3.4 Assessment Phase 3: Early Roman.....	16
3.5 Assessment Phase 4: Later Roman.....	17
3.6 Assessment Phase 5: Modern.....	18
3.7 Overview	18
4. DATA-SET SUMMARIES	19
4.1 Introduction	19
4.2 Contextual Data	19
4.3 Pottery.....	20
4.4 Other Artefacts	23
4.5 Animal Bone.....	24
4.6 Human Bone.....	25
4.7 Charred Plant Remains.....	26
4.8 Pollen.....	30
5. ASSESSMENT OF POTENTIAL	32
5.1 Introduction	32
5.2 Contextual Data	32
5.3 Artefactual Data.....	34
5.4 Ecofactual Data.....	35
5.5 Summary of Potential to Address the Original Research Objectives.....	37
6. RESEARCH OBJECTIVES FOR ANALYSIS	38
6.1 Introduction	38
6.2 Character and Development	38
6.3 Economy	40
6.4 Society and Culture	40
6.5 Environment.....	40
6.6 Ritual.....	41
6.7 Chronology.....	41
7. UPDATED PROJECT DESIGN	43
7.1 Introduction	43
7.2 Analysis of Contextual Data.....	43
7.3 Analysis of Pottery.....	46
7.4 Analysis of Other Artefacts.....	47
7.5 Analysis of Animal Bone	48
7.6 Analysis of Human Bone	48



7.7	Analysis of Ecofacts	48
7.8	Overall Publication, Archiving and Project Management	49
7.9	Publication.....	50
7.10	Archiving.....	51
7.11	Summary of All Tasks.....	51
7.12	The Project Team	53
7.13	Timetable.....	53
8.	BIBLIOGRAPHY	54
9.	APPENDIX 1: DETAILED PROVISIONAL STRUCTURAL HIERARCHY.....	57
9.1	Assessment Phase 1: Late Bronze Age / early Iron Age	57
9.2	Assessment Phase 2: Early-middle Iron Age.....	58
9.3	Assessment Phase 3: Early Roman.....	64
9.4	Assessment Phase 4: Later Roman.....	69
9.5	Assessment Phase 5: Modern.....	70
10.	APPENDIX 2: FIGURES	72



List of Figures

Figure 1: Site location plan

Figure 2: All features plan

Figure 3: Assessment Phases 1 – Late Bronze Age / early Iron Age

Figure 4: Assessment Phase 2 – Early-middle Iron Age

Figure 5: Assessment Phase 3 – Early Roman

Figure 6: Assessment Phase 4 – Later Roman

Figure 7: Assessment Phase 5 – Modern

The figures are bound at the back of the report

List of Tables

Table 4-1: Quantity of records	19
Table 4-2: Numbers of contexts by assessment phase	19
Table 4-3: Pottery quantification by phase	20
Table 4-4: Pottery type series	21
Table 4-5: Pottery quantification by landscape and group.....	22
Table 4-6: Other artefacts quantification by landscape and group	23
Table 4-7: Animal bone quantification by phase	24
Table 4-8: Animal bone quantification by landscape and group	25
Table 4-9: Flot assessment results.....	29
Table 4-10: Pollen samples available for pollen analysis	31
Table 5-1: Pollen samples proposed for further analysis.....	36
Table 5-2: Potential of recovered datasets to address the original research objectives	37
Table 6-1: Research objectives for analysis and potential of the datasets to address them	42
Table 7-1: Summary of structural analysis tasks	46
Table 7-2: Summary of pottery analysis tasks.....	47
Table 7-3: Summary of other artefacts analysis tasks	48
Table 7-4: Summary of charcoal analysis task	49
Table 7-5: Overall publication, archiving and management tasks.....	50
Table 7-6: Summary of all tasks.....	52
Table 7-7: The project team	53
Table 7-8: Provisional timetable to complete the project	53



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 brief 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.

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This assessment has been prepared by Ben Barker (Project Officer) and Marcin Koziminski (Archaeological Supervisor), with contributions by Holly Duncan (Artefacts Manager): other artefacts; Jackie Wells (Artefacts Officer): pottery, animal bone and ceramic building material; Corinne Duhig: human remains; John Giorgi: charred plant remains; and Gill Cruise: pollen. The plans were digitised by Joan Lightning (CAD Technician) and the figures created by Joan Lightning and Martin Koziminski. This document was approved by Drew Shotliff (Operations Manager).

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Structure of the Report

After an introduction (Section 1) detailing the planning and archaeological background, Section 2 presents the original research objectives of the project. Section 3 provides a provisional chronological summary of the results, whilst Section 4 details the scope of the available datasets. The potential of the data to address the original research objectives is discussed in Section 5, and new research objectives are given in Section 6. Section 7 provides an Updated Project Design, which includes detailed method statements for analysis, publication and archiving. Section 8 is a bibliography.

The Appendix contains details of the contextual hierarchy (Section 9) and the figures (Section 10), which illustrate the structural sequence.



Key Terms

CBCA	Central Bedfordshire Council Archaeologist
CBC	Central Bedfordshire Council
Client	Persimmon Homes/Taylor Wimpey South Midlands
DA	Development Area
HER	Central Bedfordshire's Historic Environment Record
IfA	Institute for Archaeologists
LPA	Local Planning Authority
Procedures Manual	<i>Procedures Manual Volume 1 Fieldwork</i> , 2nd edn, 2001 Albion Archaeology



Non-Technical Summary

Between June and July 2013 Albion Archaeology undertook an open area archaeological investigation at Site 17a Grovebury Farm, Leighton Buzzard, ahead of a residential development by Persimmon Homes and Taylor Wimpey South Midlands. The archaeological potential of the site had previously been identified by non-intrusive evaluation and trial trenching. An area of c. 2.35ha was investigated.

The site is situated in western Central Bedfordshire immediately north of the A4146 and south of Leighton Buzzard, centred on NGR SP 92590 23540. The underlying geology of the area is predominantly Gault Clay with pockets of boulder clay and glacial gravels. Prior to the investigations the land comprised rough grassland at an average height of 90–95m OD.

The earliest archaeological remains comprised residual flint artefacts dating to the late Neolithic to early Bronze Age, including an oblique arrowhead. The earliest phase of activity within the site dated to the late Bronze Age/early Iron Age. It comprised several irregular field boundaries and associated clusters of pits and postholes. It is suggested that the area of investigation was largely peripheral to a contemporary farmstead, located further north.

By the early-middle Iron Age the area of investigation was more heavily exploited and the site contained a greater number of ditches, pits and postholes, in addition to a water pit, an animal burial and two human graves. The recorded evidence represents traces of agricultural and limited domestic activity on the perimeter of a nearby farmstead

Evidence for activity dated to the early Roman period covered more than 90% of the excavation area and extended beyond its limits. It comprised eleven separate arrays (fields) of bedding trenches and associated features. All of the fields are likely to have been broadly contemporary and it is one of the largest areas of bedding trenches identified within Bedfordshire. The fields are likely to have been located some distance from a settlement focus as only four sherds (49g) of Roman pottery were recovered from this phase.

Evidence for activity in the later Roman period was very limited. It comprised a single cremation burial and two isolated ditches. It is likely that there was little significant activity within the site between the middle of the 2nd century AD and modern times, despite its proximity to the Theedway, an ancient routeway which bounds the northern limit of the site.

This document presents an assessment of the archaeological remains revealed during the investigations. The remains have the potential to address issues raised in a number of national and regional research agenda. Proposals are set out for further analysis and publication of the data, including the methodologies and resources required to complete the project. The end product will be the publication of the results in the county archaeological journal, Bedfordshire Archaeology, and the deposition of the project archive (Accession Number LUTNM 2011/87) with Luton Museum.



1. INTRODUCTION

1.1 **Project Background**

In December 2007 outline planning consent was granted (SB/06/00867/OUT) for a residential development on land at Site 17A, Grovebury Farm, Grovebury Road, Leighton Buzzard.

The scheme included the redevelopment of the Grovebury Farmhouse site and erection of up to 475 dwellings together with a local centre, associated play space, landscaping, parking and access roads.

A condition was attached to the planning permission requiring the implementation of a scheme of archaeological work. This was in accordance with national planning guidelines in the form of the *National Planning Policy Framework – Section 12: Conserving and enhancing the historic environment*, which was published on 27 March 2012¹ and replaces the previous *Planning Policy Statement 5: Planning for the Historic Environment*.

The condition was attached to the planning consent because of the results of a field evaluation that had been undertaken on the site. The evaluation revealed what was thought to be the remains of a late Bronze Age/early Iron Age field system and other archaeological remains (Albion Archaeology 2006).

A brief was first issued in October 2011 (CBC 2011) by the Central Bedfordshire Council Archaeologist (CBCA) setting out the requirements for the programme of archaeological works. An updated brief was issued in January 2013 (CBC 2013).

1.2 **Status and Purpose of this Document**

This report presents an assessment of the results of the investigations. An Updated Project Design is included, listing the tasks that will be required to analyse, publish and archive the results of the fieldwork.

1.3 **Site Location, Topography and Geology**

The development area (DA) is c. 4.57ha in size (Figure 1) and is situated immediately north of the A4146 and south of Leighton Buzzard, centred on NGR SP 92590 23540. The land is at an average height of 90–95m OD.

Prior to the investigations, the land comprised rough grassland bordering the remnants of the previously demolished Grovebury Farm complex to the west.

The underlying geology of the area is predominantly Gault Clay with pockets of boulder clay and glacial gravels.

¹ National Planning Policy Framework, published by the Department for Communities and Local Government (2012). Available at: <http://www.communities.gov.uk/publications/planningandbuilding/nppf>.



1.4 **Archaeological Background**

The development area is located in a landscape containing archaeological remains of various periods and has been the subject of previous archaeological investigations.

The results of a desk-based assessment of the site (Albion 2005) are summarised below. Roman pottery sherds (HER 1405) have been recovered within the development area and there have been several discoveries of Roman burial urns (HER 10725, 10727 and 10728) to the west. An ancient routeway, called the Theedway or Thiodweg (HER 10843), borders the northern edge of the development area. The first documentary evidence for this route dates to the 10th century, although it is possible that its origins are prehistoric. During the medieval period the Theedway was important for the transportation of produce from East Anglia and this route survives in various locations in southern Bedfordshire within parish boundaries and as footpaths. Remnants of medieval ridge and furrow field systems were known to exist within and around the development area.

An evaluation comprising geophysical survey and trial trenching was carried out on the development area in 2005 and 2006 (Albion 2006). The geophysical survey identified a series of magnetic anomalies indicative of agricultural marks and possible field boundaries, as well as two anomalies that were interpreted as possible archaeological features. The subsequent trial trenching strategy was designed to test both these anomalies and apparently 'blank' areas of the site.

The trial trenching confirmed that many of the geophysical survey anomalies represented archaeological features. They comprised well-preserved, sub-surface features that were interpreted as the remains of a Bronze Age/early Iron Age field system with associated pits and postholes. Field systems of this type and date are relatively rare within Bedfordshire, hence the remains were considered to be of regional significance. No evidence for a settlement, as such, was revealed but the presence of pottery sherds within the features did suggest such activity in the vicinity.



2. METHODOLOGY AND FIELDWORK AIMS AND OBJECTIVES

2.1 Introduction

The methodologies and research aims for the investigations were detailed in the WSI (Albion 2013a) and are, therefore, only summarised below.

2.2 Methodologies and Standards

The area designated for open area excavation was focussed on geophysical anomalies which had subsequently been tested by trial trenching. The site was stripped of topsoil and subsoil by mechanical excavator in June and July 2013, with archaeological investigations taking place at the same time. A c. 5m-wide and 130m-long stretch of soil was left in the north part of the investigation area due to the presence of an underground power cable.

All work was carried out in accordance with the following standards and guidance:

- IfA's *Codes of Conduct and Standard and Guidance for Archaeological Excavations*;
- *Standards for the Field Archaeology in the East of England* (Gurney 2003)
- English Heritage's *The MoRPHE Project Managers Guide* (2006);
- English Heritage Archaeology Guidelines and Standards²;
- Albion Archaeology *Procedures Manual: Volume 1 Fieldwork* (2001);
- Luton Culture *Procedure for preparing archives for deposition with Luton Culture* (2013)

Following an initial stage of site planning and characterisation, detailed excavation strategies were developed on site in consultation with the CBCA and Duncan Hawkins of CgMs Consulting Ltd.

As a result of the second monitoring meeting with the curator and consultant, the excavation strategy was reviewed and it was agreed that stripping of a total of c. 2.35ha of the development area was sufficient (Figure 2). In effect, the north-east corner of the area was not stripped.

2.3 National Research Frameworks

At a national level, English Heritage's criteria for prioritising archaeological 'sites' are evolving. Its funding criteria for rescue projects, as set out in *Exploring our past* (EH 1991), were similar to those it uses to define a 'site' as being of schedulable quality. These included period, rarity, group value, survival/condition, fragility/vulnerability and potential. More recently, a draft Research Agenda (EH 1997) built upon the earlier criteria, with the aim of developing an approach reflecting 'the greater determination to pursue research themes' and 'wider interests (e.g. in landscapes)'. These include goals such as advancing understanding of England's archaeology, supporting the development of national, regional and local research frameworks and promoting public appreciation and enjoyment of archaeology.

² English Heritage guidelines on a number of specialist fields and materials, including environmental archaeology, are available at: <http://www.english-heritage.org.uk/publications/guidelines-and-standards/>.



Although the Research Agenda was intended for projects seeking English Heritage resources, *i.e.* not those undertaken within the framework of developer-funded archaeology, its goals and objectives are relevant to the investigations at Site 17A Grovebury Farm.

2.4 **Regional and County-based Research Agendas**

A number of research frameworks have been devised for the region. The earliest comprises *Research and Archaeology: a Framework for the Eastern Counties 1. Resource assessment* (Glazebrook 1997). This was complemented by *Research and Archaeology: a Framework for the Eastern Counties 2. Research agenda and strategy* (eds Brown and Glazebrook 2000), which set out research priorities.

These documents were reviewed and revised in *Revision of the Regional Research Framework for the Eastern Region* (ed. Medlycott and Brown 2008). Finally, the regional research framework was again reviewed and augmented in *Research and Archaeology Revisited: a revised framework for the East of England* (ed. Medlycott 2011).

In addition to these regionally focussed documents, work has also specifically been done on the county of Bedfordshire: *Bedfordshire Archaeology. Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Oake *et al.* 2007).

These documents typically come in two parts: the first provides a comprehensive chronological review of the historic environment as investigated so far within Bedfordshire and the eastern counties; the second establishes a research agenda and strategy for future investigations and for consolidating and integrating current knowledge. They are therefore vital tools for the assessment of any heritage asset within its local, regional and national historic environment setting.

2.5 **Project Research Objectives**

Based on the results of the evaluation, it was anticipated that the DA would produce evidence for Bronze Age/early Iron Age activity. The remains were thought likely to take the form of boundary ditches of a field system together with associated pits and postholes. Also, at that stage of investigation, the existence of a settlement of the same date within the DA could not be ruled out.

Field systems of this date are relatively rare within Bedfordshire. Contemporary examples have been identified at Broom (Cooper and Edmonds 2007) and Biddenham (Albion 2010). The former site comprised ditches and posthole alignments and the latter, extensive settlement remains and alignments of pits, possibly set amongst an existing middle Bronze Age field system.

The study of early field systems and associated settlement evidence has been recognised as a primary research objective on a national level. Within the EH draft research agenda the chronological priority **P7 Late Bronze and Iron Age landscapes** is considered to be nationally relevant. This refers to a “*paucity of well-dated settlement sites, particularly from the early Iron Age*” (EH 1997, 47) and a lack of information regarding the development of field systems and boundaries in the Bronze Age and Iron Age.



This is echoed within the research agendas set on a regional and local level. Oake states that within Bedfordshire all examples of early field systems are imprecisely dated and none of the examples have been correlated with a contemporary settlement pattern (Oake *et al* 2007, 11). Medlycott, for the Eastern Counties, calls for more paleoenvironmental evidence to enable the recreation of past landscapes and economies within the framework of late Bronze Age/iron Age settlements and the establishment of permanent field systems (Medlycott 2011, 20).

A greater knowledge of the agricultural economy of the region had already been called for in the earlier research agenda of the Eastern Counties, as crucial in understanding the social, economic and cultural processes during the Iron Age (Brown and Glazebrook 2000, 14).

Based on the research agendas the following aims were established for the excavation:

1. What was the precise nature and layout of the late Bronze Age/early Iron Age field system?
2. Was there any settlement/occupational evidence associated with the field system, and of what nature was it?
3. Could a relationship between the field system and potential settlement be established?
4. Retrieve more precise dating evidence for the field system and potential settlement to put it into a chronological framework.
5. Was there any archaeological evidence for the Theedway along the northern boundary of the DA, and/or for any associated roadside activities?

The research aims were reviewed regularly throughout the project to ensure that:

- they were still relevant to the data being uncovered;
- methodologies were still appropriate.

A preliminary key review stage took place once the overburden had been removed. It was at this stage that all features were visible and, once planned, detailed strategies for their sample excavation were established.



3. PROVISIONAL CHRONOLOGICAL SUMMARY

3.1 Introduction

The contextual data was assessed in order to establish whether it would provide a coherent spatial and chronological framework. A total of 734 contexts (99%) were assigned to provisional Assessment Sub-groups (SG), which in turn were assigned to Assessment Groups (G). The remaining seven contexts related to features of natural origin that did not contain dating evidence. The allocation of individual contexts to specific SGs and Gs was made on the basis of whether they formed a coherent spatial unit, *e.g.* ditch length or pit group. The Assessment Groups were then assigned to Assessment Land-use areas or Landscapes (L) that, in turn, were assigned to Assessment Phases, representing broad chronological periods.

The following summary is based on the provisional phasing/contextual hierarchy, further details of which are provided in Appendix 1 (Section 9). Dating information has been inferred from the quantified pottery spot dates and from associations based on spatial distributions and/or feature typologies.

3.2 Assessment Phase 1: Late Bronze Age/early Iron Age

3.2.1 Overview

The earliest evidence for activity within the development area dates to the late Bronze Age/early Iron Age (LBA/EIA). This phase of activity comprises a field system in the north of the excavation area, consisting of a small number of boundary ditches or gullies and an associated group of postholes and dispersed pits. The phase was divided into: Assessment Land-use area L1, representing features associated with the field system; and L30 which comprised the more dispersed features. The remains are likely to represent peripheral activity on the edge of a contemporary farmstead, located further to the north or north-east. Assessment Phase 1 accounts for 7% of the identified contexts within the investigation area.

3.2.2 Assessment Phase 1 Structural assignments

Phase	L	Landscape Description	Group	Group Description	No. of Contexts
1	L1	Field System	G5	Field Boundary	6
			G6	Field Boundary	6
			G9	Field Boundary	6
			G12	Posthole Group	14
			G16	Isolated Pit	2
			G25	Field Boundary	10
	L30	Peripheral Activity	G48	Pit Group	7
Total					51

3.3 Assessment Phase 2: Early-middle Iron Age

3.3.1 Overview

Assessment Phase 2 consists of evidence for activity dated to the pre-Belgic Iron Age. This activity comprised a field system that redefined the layout established in Phase 1. The artefactual evidence recovered from both Assessment Phase 1 and 2 features was scarce and largely undiagnostic. As such, the division between the two phases was



based on spatial arrangements and a single stratigraphic relationship recorded during the trial trenching. In general, Assessment Phases 1 and 2 seem to have spanned a relatively short period of time and may contain contemporary elements.

Ditches dated to the early-middle Iron Age include two extensive boundaries that indicate that the Assessment Phase 1 field system L1 had expanded southwards. Other archaeological remains in Assessment Phase 2 include several dispersed areas of discrete features, including a large water pit and some burials. The major features were located in the immediate vicinity of the boundary ditches, suggesting that the interior areas were principally reserved for agricultural use.

The area covered by Assessment Phase 2 remains was much more extensive than it was for Assessment Phase 1. Phase 2 accounts for 30% of the identified contexts within the investigation. It is likely to represent traces of agricultural and limited domestic activity on the periphery of a contemporary farmstead. The domestic focus it likely to have been located to the west of the area of excavation and may have been lost to disturbance associated with the modern Grovebury Farm.

3.3.2 Phase 2 Structural assignments

Phase	L	Landscape Description	Group	Group Description	No. of Contexts
2	L4	Field System	G8	Field Boundary	8
			G21	Ditch	10
			G22	Field Boundary	6
			G26	Five Postholes	10
			G27	Isolated Pit	2
			G92	Field Boundary	4
			G93	Field Boundary	10
			G110	Isolated Pit	2
	L9	Activity Focus	G35	Two Postholes	4
			G36	Two Postholes	4
	L10	Activity Focus	G37	Pit	3
			G38	Three Postholes	7
			G39	Possible Human Burial	2
	L11	Burial Activity	G40	Animal Burial	3
			G41	Human Burial	4
	L12	Activity Focus	G42	Two Postholes	4
			G46	Isolated Pit	2
			G47	Posthole	2
	L13	Activity Focus	G43	Water Pit	4
			G45	Three Pits	6
			G49	Oval Pit	2
	L14	Boundary	G44	Ditch	11
	L15	Activity Focus	G50	Five Postholes	10
			G51	Three Pits	8
			G52	Two Pits	4
			G53	Two Pits	4
			G54	Two Intersecting Pits	6
			G55	Two Pits	4
			G57	Isolated Posthole	2
			G58	Two Pits	4
	L18	Dispersed Activity Focus	G68	Short Ditch	4
			G69	Isolated Pit	2



Phase	L	Landscape Description	Group	Group Description	No. of Contexts
	L19	Dispersed Activity Focus	G111	Isolated Pit	2
			G70	Pit	2
			G72	Isolated Pit	2
			G73	Isolated Pit	2
			G74	Tree-Throw	2
			G75	Isolated Pit	2
			G76	Isolated Posthole	2
			G85	Isolated Posthole	2
			G112	Posthole	2
	L22	Activity Focus	G84	Gully	4
			G86	Rectangular Pit	4
			G87	Three Small Pits	7
			G88	Posthole	2
			G89	Two Medium Pits	8
	L25	Activity Focus	G105	Two Pits	4
			G106	Two Pits	4
	L26	Activity Focus	G107	Rectangular Pit	6
			G108	Two Postholes	4
	L27	Peripheral Activity	G109	Tree-throws (8)	7
Total					226

3.4 Assessment Phase 3: Early Roman

3.4.1 Overview

Activity broadly dated to the early Roman period covered more than 90% of the excavation area (c. 2.2 ha) and extended beyond its limits. The evidence for activity within Assessment Phase 3 largely related to extensive agricultural exploitation and comprised eleven separate arrays (fields) of bedding trenches and associated features. All of the field are likely to have been broadly contemporary; however, they were not constructed in a single, planned event. They seem to have developed in a sequential order that generally started in the SE corner of the DA and expanded towards the NW. Some trenches appear to have been re-dug, which suggests they were maintained on a regular basis. The evidence suggests a high level of agricultural sophistication, presumably to supply a thriving local market economy. The agricultural remains, however, are likely to have been located some distance from any settlement focus. This view is supported by the recovery of only four sherds (49g) of Roman pottery from this phase; the majority of the finds recovered from Assessment Phase 3 features are likely to be residual material from the disturbance of earlier features. Assessment Phase 3 accounts for 58% of the identified contexts within the investigation area.

3.4.2 Assessment Phase 3 Structural assignments

Phase	Landscape	Landscape Description	Group	Group Description	No. of Contexts
3	L2	Field	G4	Bedding Trench	4
			G7	Bedding Trench	10
			G28	Bedding Trench	5
	L3	Field	G10	Bedding Trenches	11
			G11	Pit	2
			G13	Bedding Trench	8
	L5	Field	G15	Bedding Trenches	12
			G17	Bedding Trenches	10
			G18	Bedding Trenches	23



Phase	Landscape	Landscape Description	Group	Group Description	No. of Contexts
	L6	Field	G14	Bedding Trenches	6
			G29	Bedding Trenches	13
			G30	Bedding Trenches	53
			G31	Bedding Trenches	30
			G32	Bedding Trenches	9
			G33	Bedding Trenches	13
			G34	Bedding Trenches	8
			G56	Pit	2
	L7	Field	G23	Bedding Trenches	17
			G24	Bedding Trenches	7
	L8	Field	G19	Bedding Trench	4
			G20	Bedding Trench	4
	L16	Field	G90	Bedding Trenches	8
			G91	Bedding Trench & Re-cut	8
	L17	Field	G59	Bedding Trenches	10
			G60	Bedding Trenches	8
			G61	Bedding Trench	11
			G62	Bedding Trenches	8
			G63	Bedding Trench	5
			G64	Bedding Trenches	10
			G65	Bedding Trenches	7
			G66	Bedding Trench	4
	L121	Field	G77	Bedding Trench	2
			G78	Bedding Trench	4
			G79	Bedding Trenches	19
			G80	Bedding Trench	2
			G81	Bedding Trench	4
			G82	Bedding Trench	8
	L23	Field	G98	Bedding Trenches	4
			G99	Bedding Trenches	9
			G100	Pit	2
			G101	Three Postholes	6
	L24	Field	G94	Bedding Trenches	10
			G95	Bedding Trenches	6
			G96	Bedding Trench	8
			G97	Bedding Trench	2
			G102	Three Postholes	6
			G103	Three Postholes	6
			G104	Two Pits	4
Total					432

3.5 Assessment Phase 4: Later Roman

3.5.1 Overview

Evidence for activity in the later Roman period was very limited. It comprised dispersed remains — a cremation burial and two isolated ditches. They were located roughly within the area of Assessment Phase 3 field L17. They were peripheral to any possible settlement focus and represent activity within the fields after the bedding trenches had gone out of use. Phase 4 accounts for 2% of identified contexts within the investigation area.



3.5.2 Assessment Phase 4 Structural assignments

Phase	Landscape	Landscape Description	Group	Group Description	No. of Contexts
4	L20	Burial Activity	G71	Cremation Burial	5
	L28	Boundary Ditches	G67	Ditch	4
			G83	Ditch	4
<i>Total</i>					13

3.6 Assessment Phase 5: Modern

3.7 Overview

The most recent evidence for activity within the investigation area comprised a pond, a small pit and a ditch L29. All the features were located in the north-west corner of the site and were assigned to Assessment Phase 5 on the basis of the significant quantities of modern artefacts in their fills. Only ditch G5115 was investigated by hand in order to establish its date, and to confirm that it was not an earlier bedding trench. Assessment Phase 5 accounts for 2% of identified contexts within the investigation area.

3.7.1 Assessment Phase 5 Structural assignments

Phase	Landscape	Landscape Description	Group	Group Description	No. of Contexts
5	L29	Modern Activity	G113	Pond	2
			G114	Oval Pit	2
			G115	Ditch	2
			G116	Land Drains	6
Total					12



4. DATA-SET SUMMARIES

4.1 Introduction

For the following discussion, the datasets recovered during the investigations have been divided into three main classes: contextual, artefactual and ecofactual.

4.2 Contextual Data

Marcin Koziminski

4.2.1 Quantity of records

Table 4-1 presents a breakdown of the total quantity and type of contextual records. These comprise the written description/interpretation of a deposit/feature (context sheets), a drawing showing the location and inter-relationship between features (a plan), a profile drawing through a feature and its deposits (section), and photographs.

Contexts	Plan Sheets	Sections	Photographs
741	64	223	521

Table 4-1: Quantity of records

4.2.2 Survival and condition of archaeological remains

The site produced evidence for activity from the late Bronze Age to the modern period. The contextual data for each period is set out in Table 4-2.

Assessment Phase	No. of contexts	Percentage
1. Late Bronze Age / early Iron Age	51	7
2. Early-middle Iron Age	226	30
3. Early Roman	432	58
4. Later Roman	13	2
5. Modern	12	2
6. Unphased	7	1
Total	741	100

Table 4-2: Numbers of contexts by Assessment Phase

The development area comprised rough grassland that had not been subject to recent plough truncation. However, overburden was quite thin in the central and western parts of the DA and became more substantial lower down the slope towards the north-east and east. As a result, the level of preservation of negative features such as pits, ditches/trenches and postholes was better in areas of thicker overburden. Also, sub-surface remains tended to survive better on more gravely geological strata, rather than on the heavy blue clays that were present in the southern and south-eastern parts of the site.

Overall, the archaeological features, though plough-truncated, survived reasonably well. There was some truncation of earlier features by later features but the spatial development of the site is clearly legible in the archaeological record.



4.3 Pottery

Jackie Wells

4.3.1 Methodology

For each context, pottery was recorded by fabric type and quantified by minimum sherd count and weight. This information was entered on the Context Assemblage Table in the project database. Pottery was also dated by individual fabric and / or form type, and was the principal determinant in assigning contexts to chronological periods.

4.3.2 Quantification

The assemblage comprises 507 pottery sherds weighing 3.6kg, the majority deriving from features assigned to Phases 1 and 2 (Table 4-3).

Phase	Sherd No.	Weight (g)
1	225	1,781
2	197	1,596
3	75	226
4	9	54
6	1	5
Total	507	3,662

Table 4-3: Pottery quantification by phase

4.3.3 Pottery type series

Fabrics are listed below (Table 4-4) in chronological order, using common names and type codes in accordance with the Bedfordshire Ceramic Type Series. No new fabric types were identified.

Fabric Type	Common name	Sherd No.	Wt (g)
<i>Late Bronze Age / early Iron Age</i>			
F01A	Coarse flint	206	1,845
F01B	Fine flint	31	119
F01C	Quartz and flint	108	445
F02	Grog and flint	34	77
<i>Early to middle Iron Age</i>			
F03	Grog and sand	3	17
F16	Coarse shell	18	46
F16B	Fine shell	1	12
F17	Grog	2	8
F19	Sand and organic	1	2
F27	Shell and grog	9	18
F28	Fine sand	15	87
F29	Coarse sand	65	864
F35	Fine micaceous	2	16
<i>Roman</i>			
R01	Samian	1	29
R06B	Coarse grey ware	2	34
R06C	Fine grey ware	1	4
R07B	Sandy black ware	1	6
R13	Shell	2	8
R14	Sand (red-brown harsh)	1	9
R	Non-specific Roman		
UNID	Unidentifiable / undatable	2	7

**Table 4-4: Pottery type series****4.3.4 Provenance and date range**

The pottery ranges in date from the late Bronze Age to the Roman period, with a hiatus during the late Iron Age period. The bulk of the assemblage is of later prehistoric date, and generally survives in poor and abraded condition. Sixty features (91% of contexts producing pottery) contained less than 100g, and only one feature, representing a finds deposit, yielded in excess of 1kg. Single sherds were collected from 21 features (32%). Quantification by landscape and group (Table 4-5) demonstrates the fragmentary composition of the assemblage.

AP	Landscape	Group	No. sherds	Wt (g)
1	1	G12 – Post hole cluster	20	33
	1	G16 – Pit	26	211
	1	G25 – Ditch	2	5
	30	G48 – Pit	177	1,532
2	4	G22 – Bedding trench	20	39
	4	G26 – Post holes	1	2
	9	G35 – Post holes	3	29
	10	G37 – Pit	5	3
	10	G38 – Post holes	1	2
	11	G40 – Animal burial	2	4
	13	G43 – Water pit	15	87
	15	G50 – Post holes	6	10
	15	G51 – Pit with finds deposit	37	329
	15	G54 – Pit	3	9
	15	G55 – Pits	3	14
	18	G69 – Pit	7	3
	18	G111 – Pit	8	14
	19	G70 – Pit	1	4
	19	G74 – Treethrow	4	9
	19	G76 – Post hole	2	10
	22	G86 – Pit	17	394
	22	G87 – Pit	3	45
	22	G88 – post hole	1	3
	22	G89 – Pit	44	480
	25	G105 – Pits	2	5
	25	G106 – Pits	1	12
	26	G107 – Rectangular pit	7	77
	26	G108 – Post holes	1	3
	27	G109 – Treethrow	2	9
3	2	G4 – Bedding trench	1	9
	5	G15 – Bedding trenches	8	10
	5	G17 – Bedding trenches	4	7
	5	G18 – Bedding trenches	7	59
	6	G30 – Bedding trenches	10	27
	6	G31 – Bedding trenches	1	1
	6	G33 – Bedding trenches & post hole	2	6
	6	G34 – Bedding trenches	2	5
	7	G23 – Bedding trench	5	5
	16	G91 – Bedding trenches	2	4
	17	G60 – Bedding trench	6	11
	17	G61 – Bedding trench	1	1
	17	G64 – Bedding trenches	22	65
	21	G82 – Bedding trench	2	9



AP	Landscape	Group	No. sherds	Wt (g)
	23	G99 – Bedding trench	3	7
4	20	G71 – Cremation burial	3	4
	28	G71 – Ditch	6	50
6	31	G117 – Natural & geological	1	5
			507	3,662

Table 4-5: Pottery quantification by landscape and group

4.3.5 Assessment Phase 1: Late Bronze Age / early Iron Age

Features assigned to Phase 1 yielded 225 flint-tempered sherds (1.7kg), characteristic of the late Bronze Age and earlier Iron Age in south-east England. Thirty-six vessels are represented, with body sherds (mean weight 7g) comprising the majority of the assemblage. Feature sherds are rounded rim sherds and a flat base, deriving from a single vessel (1.4kg). The latter occurred as a placed deposit in the upper fill of the pit G48 (L30). Twelve sherds (161g) from a fine black-burnished ware vessel, recovered from the fill of pit G16 (L1), bear some affinity with pottery in the Darmsden-Linton style, datable to the 5th–3rd century BC (Cunliffe 1974, 39). The Grovebury example, however, is too fragmentary to permit positive classification.

An intrusive sand-tempered sherd (2g) of either Roman or medieval date was recovered from post hole G12 (L1).

4.3.6 Assessment Phase 2: Early-middle Iron Age

A total of 197 sherds, representing 71 vessels (1.5kg) derived from features associated with agricultural and peripheral domestic activity. The pottery spans the late Bronze Age and early Iron Age, and comprises hand-made sherds in a range of flint-, sand-, and grog-tempered fabrics. Some of the earliest wares, which are mainly flint-tempered, may be residual. The material is highly fragmented, with a mean sherd weight of 8g, and largely undiagnostic. Feature sherds are single examples of rounded, flattened and internally bevelled rims; and a complete flat base (diameter 105mm), with a finger impressed X on the interior. Several sherds have wiped or smoothed exteriors. The largest assemblages were collected from pits G86, G89 (L22); and pit G51 (L15), the latter containing 33 sherds (305g) from a deliberately placed pottery vessel.

4.3.7 Assessment Phase 3: Early Roman

Phase 3 bedding trenches yielded 75 sherds, representing 42 vessels (226g), the majority comprising residual late Bronze Age / early Iron Age wares. The assemblage is highly fragmentary, with a mean sherd weight of 3g, and the heaviest sherd weighing only 13g. Four early Roman sand-tempered coarse ware sherds (49g) derived from bedding trenches G4 (Field L2) and G17, G18 (Field L5). A triangular rim bowl is the only diagnostic vessel form.

4.3.8 Assessment Phase 4: Later Roman

Six abraded Roman sherds (50g) recovered from ditch G83 comprise undiagnostic sand- and shell-tempered coarse wares, and a form 33 (conical cup) samian sherd, the latter datable to the 2nd century. Environmental samples taken from the infill of cremation deposit G71 contained three residual late Bronze Age/early Iron Age body sherds (4g).



4.4 Other Artefacts

Jackie Wells

4.4.1 Methodology

Each object was assigned a preliminary identification and quantified by number and/or weight. This information was entered into the project database.

4.4.2 Quantification and variety

The assemblage comprises seven worked flints, two metal objects, a ceramic loom weight, a bone awl, and small quantities of fired clay (189g), natural burnt flint, and burnt stone (245g): (Table 4-6).

AP	L	Group	Material				
			Flint	Stone	Ceramic	Bone	Metal
1	1	G12 – Post hole cluster	Flake x1				
	1	G16 – Pit			Fired clay (149g)		
	30	G48 – Pit		Burnt (3g)			
2	10	G38 – Post holes		Burnt (43g)			
	13	G43 – Water pit	Burnt x1				
	14	G44 – Ditch	Flake x1	Burnt (10g)			
	15	G50 – Post holes			Loom weight		
	15	G52 – Pits	Burnt x2				
	15	G54 – Pit	Arrowhead				
	19	G70 – Pit					Iron nail
	22	G89 – Pit			Fired clay (40g)		
	27	G109 – Treethrow					Copper alloy ring
3	3	G13 – Bedding trench	Flake x1				
	5	G15 – Bedding trenches	Burnt x1			Awl?	
	5	G18 – Bedding trenches	Flake x1				
	6	G31 – Bedding trenches		Burnt (33g)			
	17	G60 – Bedding trench	Burnt x1				
	17	G61 – Bedding trench	Flake x1				
	17	G63 – Bedding trenches	Core x1				

Table 4-6: Other artefacts quantification by landscape and group

4.4.3 Provenance and date range

The earliest finds are seven residual worked flints, the majority deriving from Assessment Phase 3 bedding trenches. Debitage comprises a core fragment, three primary flakes, a tertiary flake, and a squat flake, the latter possibly used for nodule testing. Manufacturing traits suggest a late Neolithic to later Bronze Age date. An oblique arrowhead of late Neolithic or early Bronze Age date derived from Assessment Phase 2 pit G54 (L15). The object has retouch along one lateral edge and the concave base on one face; and on both lateral edges on the opposing face. The tip is missing, and the arrowhead appears to have been burnt.

Five undatable pieces of unmodified burnt flint (156g) and five burnt sandstone fragments (89g) derived mainly from Phase 2 features.

Nine sand-tempered pieces (51g), possibly representing part of a cylindrical loom weight, derived from Phase 2 post holes G50 (L15). Four fragments join, and one has a flat surface and curved edge, suggesting a diameter of approximately 100–120mm. The



fills of pits G16 (L1, Phase 1) and G89 (L22, Phase 2) yielded 22 amorphous sand-tempered fired clay fragments (189g).

Two metal finds were recovered from Assessment Phase 2 pit G70 (L19) and tree throw G109 (L27). The former contained an incomplete iron timber nail with a flat rounded rectangular head; and the latter, a cast copper alloy oval ring, whose dimensions and robust nature suggest it may be a modern nose ring for a bull.

A worked bone splinter, possibly deriving from an Iron Age awl was collected from Assessment Phase 3 bedding trenches G15 (Field L5). One end of the object tapers to a point; the mid-section swells; and the opposing end tapers to a chisel-like terminal. The latter may have broken and subsequently been modified, perhaps as a needle. The object, which measures 37mm in length, is smooth and worn through use. Comparable items have been recorded from Danebury, Hants., where Cunliffe and Poole's (1991) category of 'awls, splinters and points' contains a variety of forms, for example, fig. 7.33 no. 3.334, which although longer, is similar to the Grovebury Farm example.

4.5 Animal Bone

Jackie Wells

4.5.1 Methodology

For each context, animal bone was recorded by anatomical element, and quantified by minimum fragment count and weight. This information was entered on the Context Assemblage Table in the project database.

4.5.2 Quantification

The assemblage comprises 172 fragments (787g), the majority deriving from features assigned to Assessment Phase 2 (Table 4-7).

Phase	Frag. No.	Weight (g)
1	11	57
2	146	643
3	13	21
4	2	66
Total	172	787

Table 4-7: Animal bone quantification by phase

4.5.3 Provenance

Eighteen features yielded animal bone fragments, which survive in poor condition and are highly fragmented, with a mean fragment weight of only 4g. Single pieces were collected from eight features, and the largest deposit weighed only 269g. Much of the material derived from the sieved residues of environmental samples. Quantification by landscape and group (Table 4-8) demonstrates the fragmentary composition of the assemblage.

Phase	Landscape	Group	Frag. No.	Wt (g)
1	1	G12 – Post hole cluster	2	1
	1	G16 – Pit	9	56
2	4	G22 – Bedding trench	1	1
	10	G37 – Pit	4	10



Phase	Landscape	Group	Frag. No.	Wt (g)
	11	G40 – Animal burial	83	168
	13	G43 – Water pit	37	414
	14	G44 – Ditch	2	11
	15	G54 – Pit	1	1
	22	G86 – Pit	1	1
	22	G89 – Pit	16	36
	27	G109 – Treethrow	1	1
3	5	G15 – Bedding trenches	1	1
	5	G17 – Bedding trenches	4	3
	17	G60 – Bedding trench	1	1
	24	G103 – Bedding trench	7	16
4	28	G83 – Ditch	2	66
			172	787

Table 4-8: Animal bone quantification by landscape and group

Diagnostic bone elements are limb bones, rib, scapula, vertebra, foot bone (astragalus), horn core, skull and mandible fragments deriving from cattle and sheep.

Assessment Phase 2 animal burial G40 (L11) comprised a fragmentary articulated cattle skeleton, a large portion of which had been truncated by a bedding trench.

Burnt/calced fragments were recovered from post holes G12 (L1), pit G89 (L22) and bedding trenches G15, G17 (Field L5), although this may have occurred accidentally.

The assemblage is too small to provide reliable information concerning the faunal currency of the site.

4.6 Human Bone

Corinne Duhig

4.6.1 Methodology

Inhumation recording follows the methods of Cho et al., Iscan & Kennedy, Steele & Bramblett Stewart and Ubelaker (Cho et al. 1996; Iscan & Kennedy 1994; Steele & Bramblett 1988; Stewart 1979; Ubelaker 1989). Cremation recording is based on the methods of Mayne Correia (1997), Mays (1998) and McKinley (1989).

4.6.2 Inhumation burial G41 (Assessment Phase 2, L11, contexts 95–97)

Context (95) was examined first, and contained a badly fragmented and eroded skeleton represented by much of the skull, one minute piece of neck vertebra, some portions of the shoulder girdle, arms and hands and the lower legs and feet. The third molars are erupted, unworn and with nearly-complete roots, giving a mean age of 16.5 years \pm 3 years, and the skeleton appears to be adult, suggesting an age around 18 years. Sex determination is based on only three features and is probably male, albeit this is a rather gracile skeleton. The individual had a metopic suture (a heritable feature of the skull), misshapen third molars, a possible supernumerary premolar and the condition cribra orbitalia in the eye orbit, indicating iron-deficiency anaemia.

Contexts (96) and (97) contained complementary bones to the previous context: two relatively gracile femora, one molar which fits the previous dentition and is of similar wear pattern, a tiny vertebral fragment, part of the sacrum and four finger bones. It is clear that the grave contained only one individual, a young adult, possibly male though gracile, buried face down with knees folded tightly beneath the body just as the arms



were folded beneath the torso with hands up to the face; the pelvis and spine, being uppermost in the grave, have been almost totally destroyed.

4.6.3 Possible human burial G39 (Assessment Phase 2, L10, context 216)

This context was defined as a cremation grave on site, but the 16 heavily eroded bone fragments are unburnt. Their colour is due to the erosion which has exposed the spongy cancellous bone, which has become filled with the beige-grey clay matrix. The bones are probably but not certainly human.

4.6.4 Cremation burial G71 (Assessment Phase 4, L20 contexts 400–404)

The spits were examined side-by-side in order to assess similarities/differences in terms of content, but it was found that all contained a mixture of fragments from the major zones of the skeleton, including skull vault, face, lower jaw, one tooth root, a tiny fragment of thoracic vertebra and another of rib, a large section of humeral shaft and two finger bones. There is no duplication and there is no reason to believe this deposit represents more than one individual (including the outlier (404)) though the total weight of 47g is extremely low.

Apart from the presence of an adult tooth, there are no indications of age, or of sex. Two small nodules of new bone on the tibial shaft suggest some inflammation, but it was apparently very slight.

The samples contain small fragments, with variation in colour from (in order of frequency) white, grey, grey-black, black, blue-grey; grey and black were found mostly in the trabeculae of long bones and the diploë of the skull where they would have been protected from burning by the thickness of the outer layer. Overall, the colour variation shows that removal of the organic content of the bone by burning was variable, but there was no correlation between body areas and colour. This all suggests that the pyre was poorly maintained and at a relatively early stage some areas were extinguished (through collapse and consequent loss of oxygen, loss of fuel or broken portions of the skeleton dropping away from the fire) while other areas continued to burn to complete destruction of the organic component.

4.7 Charred Plant Remains

John A Giorgi

4.7.1 Introduction

Environmental bulk soil samples were collected from deposits dating from the late Bronze Age to the late Roman period for the potential recovery of biological remains. The following report is concerned with the assessment of the charred macro-plant remains from the site, which may provide information on crop-husbandry and processing and other human activities taking place across the settlement and possible differences between periods. The samples were also assessed for the presence of identifiable charcoal fragments for potential information on woodland resources and management and fuel selection for domestic, economic and ritual use.

4.7.2 Sampling, recovery and identification methods

Seventeen environmental samples were collected during the excavations from the following feature types; cremation deposits (six samples), grave fills (two samples),



trench/ditch fills (four samples), pit fills (three samples) and single samples from the fills of a post-hole and animal burial. The sampled features were from four phases: late Bronze Age/early Iron Age (Assessment Phase 1, four samples); early-middle Iron Age (Assessment Phase 2, six samples); early Roman (Assessment Phase 3, three samples) and late Roman (Assessment Phase 4, four samples).

The size of the samples ranged from 2–30 litres with the smaller samples being from the cremation deposits. The samples were processed using a Siraf-style type flotation tank with mesh sizes of 0.25mm and 0.5mm for the recovery of the flot and residue respectively; all the soil from nine samples was entirely processed while eight were part processed with 10–20 litres of soil being retained from these samples. A total of 142 litres of soil was processed.

The dried flots (ranging in size from 1–22ml) were divided into fractions using a stack of sieves for ease of assessment and scanned using a stereo-binocular microscope with a magnification of up to x40. The presence and relative abundance of any identifiable charred plant remains was recorded, along with the frequency of charcoal fragments larger and smaller than 2mm, the larger pieces being potentially identifiable and thus suitable for analysis. Other biological remains (un-charred plant material, bones, snails and insect fragments) in the flots were also noted.

The item frequency of the charred plant and other environmental remains was scored using the following scale: + = <5 items; ++ = 5-25 items; +++ = 26-100 items; ++++ = 101-300 items; +++++ = >300 items. Provisional identification of the charred botanical remains was carried out during assessment although without direct comparison to reference material and seed reference manuals. Nomenclature used for these identifications followed Stace (2005).

4.7.3 Results

The flot assessment results are listed by phase in Table 4-9, which shows the frequency of different biological remains in the individual flots and comments on each assemblage, including provisional identifications of any botanical material.



P	L	G	SG	Sample	Deposit type	proc. soil vol (l)	unproc soil (l)	flot vol (ml)	charcoal >/<2mm	chd grain	chd seeds	unchd seeds	mollsc	bone	insect	Comments
1	1	12	37	1	Posthole fill	9	0	22	+++ / +++ ++	+	+	+			+	OCC CPR/MOD NOS ID'BLE CHARCOAL FRAGMENTS; <i>Hordeum vulgare</i> (hulled) (1), <i>H. vulgare</i> (indet) (2), cf. <i>Hordeum</i> (1), indet grain (3), indet grain frags (<2mm) (+), cf. <i>Bromus</i> frag (1); > roots; un-charred seeds (<i>Chenopodium</i>); occ earthworm egg cases
1	1	16	50	2	Pit backfill	10	20	5	++ / +++++	+		+			+	V OCC CPR/OCC ID'BLE CHARCOAL FRAGMENTS; indet grain (1), indet grain frags (<2mm) (+), virtually all roots; un-charred seeds (<i>Atriplex</i>); occ earthworm egg cases
1	1	25	112	15	Ditch fill	10	20	3	- / +++			+			++	NO CPR/NO ID'BLE CHARCOAL; virtually all roots; un-charred seeds (<i>Chenopodium</i> / <i>Atriplex</i>); occ earthworm egg cases
1	30	48	242	6	Pit fill	10	20	3	+++ / +++ +	+		+				OCC CPR/MOD NOS ID'BLE CHARCOAL FRAGMENTS; <i>Hordeum vulgare</i> (hulled) (1), indet grain frags (<2mm) (+), > roots; un-charred seeds (<i>Carduus/Cirsium</i> , <i>Atriplex</i>)
2	4	22	89	16	Ditch fill	10	20	4	- / ++	+					+	OCC CPR (cf <i>Hordeum</i> (1); NO ID'BLE CHARCOAL; virtually all roots; occ earthworm egg cases
2	10	39	217	8	Cremation deposit	2	0	<1	+ / ++							NO CPR/ONE POSS ID'BLE CHARCOAL FRAGMENT; virtually all roots
2	11	40	218	3	Animal burial	10	0	3	+ / +			+		+		NO CPR/ONE ID'BLE CHARCOAL FRAGMENT; virtually all roots; un-charred seeds (<i>Chenopodium</i>); flecks bone
2	11	40	218	4	Grave backfill	10	10	2	- / +			+		+		NO CPR/NO ID'BLE CHARCOAL FRAGMENT; virtually all roots; un-charred seeds (<i>Cyperaceae</i> , <i>Chenopodium</i>); flecks bone
2	11	41	220	5	Grave backfill	24	0	10	+++ / +++ +	+				+	+	TRACES CPR/MOD NOS ID'BLE CHARCOAL FRAGMENTS; indet grain frags (<2mm) (+), > roots; occ earthworm egg cases; bone flecks
2	13	43	224	9	Water pit fill	9	20	1	+ / +++				+			NO CPR/OCC ID'BLE CHARCOAL FRAGMENTS; roots; occ snails
3	7	23	92	17	Bedding trench fill	10	20	3	- / ++							NO CPR/NO ID'BLE CHARCOAL; virtually all roots
3	17	60	298	18	Bedding trench fill	10	20	2	- / ++							NO CPR/NO ID'BLE CHARCOAL; virtually all roots
3	17	61	302	14	Bedding trench fill	2.5	0	2	+ / +++							NO CPR/OCC ID'BLE CHARCOAL FRAGMENTS; virtually all roots
4	20	71	341	10	Cremation deposit	8	0	3	- / ++							NO CPR/NO ID'BLE CHARCOAL; virtually all roots
4	20	71	341	11	Cremation deposit	2.5	0	2	- / ++			+	+			NO CPR/NO ID'BLE CHARCOAL; virtually all roots; un-charred seeds (<i>Chenopodium</i>); occ snails



P	L	G	SG	Sample	Deposit type	proc. soil vol (l)	unproc soil (l)	flot vol (ml)	charcoal >/<2mm	chd grain	chd seeds	unchd seeds	mollsc	bone	insct	Comments
4	20	71	341	12	Cremation deposit	2.5	0	1	+ / +++			+	+			NO CPR/OCC ID'BLE CHARCOAL FRAGMENTS; virtually all roots; un-charred seeds (<i>Chenopodium</i>); occ snails
4	20	71	341	13	Cremation deposit	2.5	0	2	++ / +++			+		++		NO CPR/OCC ID'BLE CHARCOAL FRAGMENTS; virtually all roots; un-charred seeds (<i>Chenopodium</i>); flecks burnt bone

Key: + =1-5 items; ++ =5-25 items; +++ = 26-100; ++++ = 101-300; +++++=>300items
Moll=molluscs; ins=insect fragments; chd=charred; occ=occasional; mod=moderate amounts; id'ble=identifiable

Table 4-9: Flot assessment results



4.7.3.1 Charred plant remains

Identifiable charred plant remains were present in five of the 17 assessed flots, consisting, however, of only occasional cereal grains and a weed seed in one sample. The cereal grains were poorly preserved and fragmentary, although a few were identified as hulled barley (*Hordeum vulgare*) in a late Bronze Age/early Iron Age post hole fill [59] (sample 1) (L1, G12) and pit fill [192] (sample 6) (L30, G48). A possible barley grain was recovered from an early-middle Iron Age ditch fill [166] (sample 16) ((L4, G22). An indeterminate cereal grain and fragments were present in two other samples, from another late Bronze Age/early Iron Age pit fill [73] (sample 2) (L1, G16) and an early-middle Iron Age grave backfill [97] (sample 5) (L11, G41). The only identifiable weed seed was tentatively identified as *Bromus* (brome) from the same late Bronze Age/early Iron Age post-hole fill [59] which contained a few barley grains.

4.7.3.2 Wood charcoal

Variable amounts of wood charcoal were present in all the assessed flots with potentially identifiable fragments (greater than 2mm) in eight samples; only three flots, however, contained moderate amounts of identifiable fragments, from the late Bronze Age/early Iron Age post-hole fill [59] and pit fill [192] and the early-middle Iron Age grave backfill [97].

4.7.3.3 Un-charred seeds

Traces of un-charred seeds were noted in nine flots mainly belonging to *Atriplex/Chenopodium* (oraches/goosefoots etc) with single seeds of *Carduus/Cirsium* (thistles) and Cyperaceae (sedges etc.). These seeds, however, are probably intrusive given the presence of large amounts of roots/rootlets (dominating virtually all the flots) and the absence of 'waterlogged' conditions on the site.

4.7.3.4 Other biological remains in the flots

There was very little other environmental material in the flots. Occasional snails were present in three flots from an early-middle Iron Age water pit fill [337] and late Roman cremation deposits [401] and [402]. There were a few un-diagnostic flecks of bone in three early-middle Iron Age grave fills [83], [84] and [97]. Occasional earthworm egg cases in five samples are probably intrusive.

4.8 Pollen

Gill Cruise

4.8.1 Introduction

The site lies on a gently sloping area about 0.75 km to the east of the River Ouzel within an area of gault clay. The soils are mapped as slowly permeable calcareous clayey and fine loamy over clayey soils with some seasonal waterlogging (Mackney et al., 1983). The site and feature deposits were assessed for their potential to preserve pollen that would provide palynological information on the crops grown within the Assessment Phase 3 bedding trenches and wider information on the earlier late Bronze Age/early Iron Age environment.



4.8.2 Deposit evaluation

Phase 2 water pit G43 contained at least 1.2m of fill, containing mainly minerogenic clay, silt and gravel sediments with frequent mottling. It is possible that iron staining may have picked out some relict organic matter. Sections through several of the bedding trenches were also examined and found to contain mainly mottled clay soils with gravel, and in places becoming more mixed and loamy.

Column samples were collected from three of the bedding trenches/ field boundaries trenches that appeared to contain more organic matter. These samples are detailed in Table 4-10 below. In addition, water pit G43 was sampled by Albion Archaeology staff at a later date.

Phase	L	Landscape description	Group	Group description	Context	Sample number	Depth from top of section
1	1	Field System	G48	Pit Group	90	19	0.02-53cm
1	1	Field System	G48	Pit Group	90	20	0.41-0.90cm
3	3	Field	G13	Bedding Trench	77	77a	0-8cm
3	3	Field	G13	Bedding Trench	77	77b	9-17cm
3	5	Field	G17	Bedding Trenches	355	355	0-21cm
3	7	Field	G24	Bedding Trenches	501	501a	0-15cm
3	7	Field	G24	Bedding Trenches	501	501b	14-22cm

Table 4-10: Pollen samples available for pollen analysis



5. ASSESSMENT OF POTENTIAL

5.1 Introduction

For the following discussion, the datasets recovered during the investigations have been divided into three main classes: contextual, artefactual and ecofactual.

- **Contextual** data relate to the identification of individual events such as the digging of a ditch/trench, its primary and main infilling as well as its final disuse. All context records have a detailed record sheet, while many have a plan, section drawing and photographs.
- **Artefactual** data comprise objects recovered during the investigations. These have been divided for ease of discussion into pottery, ceramic building material, flint and other artefacts (including registered artefacts and bulk artefacts, 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 bone and information obtained from environmental samples (e.g. plant remains and pollen).

Contextual data are discussed first in the following sections, as they have provided the framework for the preceding summary of results and the subsequent dataset discussions. Sections 5.2.1 to 5.2.3 describe the analytical potential of each dataset to address the original research objectives. Updated research objectives based on the potential of each dataset for further analysis are described in Section 6.

5.2 Contextual Data

5.2.1 Assessment Phases 1 and 2 – early prehistoric

Contextual evidence from Assessment Phases 1 and 2 will be further analysed in combination. This is due to its largely similar characteristics and the fact that the distinction between the phases was based on the spatial arrangement of archaeological features. Sub-surface remains from both phases contained a mixture of dating evidence ranging from the late Bronze Age to the early-middle Iron Age.

The Assessment Phases 1 and 2 features consisted of a number of boundary ditches/gullies with several dispersed groups of discrete features in a form of postholes and pits, including a large water pit and some burials. The remains seem to be associated with land division/management that had shifted over time from the north-east corner of the site (Assessment Phase 1) towards the south and south-west (Assessment Phase 2). The evidence indicates a moderate level of agricultural and domestic activity. The field systems were probably close to a prehistoric settlement focus, which was most likely located to the north (Assessment Phase 1) and west of the investigation area (Assessment Phase 2). No evidence for settlement in the form of buildings, structures or positive features – such as hearths, surfaces or occupational layers – was revealed within the site.



The Assessment Phases 1 and 2 remains are of regional significance and have moderate potential to contribute to the original research objectives related to:

- the development of field systems and boundaries in the late Bronze Age and Iron Age;
- precise dating, nature and layout of early field systems, particularly within Bedfordshire;
- evidence for occupation activity within the site;
- correlation of the prehistoric field system with a potential contemporary settlement.

5.2.2 Assessment Phase 3 – early Roman

The results of the open area investigation indicate that the extensive sets of parallel ditches, identified during the evaluation, are not part of a prehistoric field system but relate to early Roman cultivation. Approximately 60% of the recorded contexts relate to this phase, with the bedding trenches covering the majority of the investigation area. Over 75% of the overall quantity of recovered dating evidence from Assessment Phase 3 features (by weight) appear to be residual and derived from disturbance of late Bronze Age and Iron Age deposits. Animal bone was similarly scarce. This paucity of finds may indicate that manuring from a nearby settlement area was not a major feature of the agricultural regime.

Evidence for horticultural activity took the form of parallel bedding trenches within the fields, together with some associated posthole structures and pits. The bedding trench arrays appear to be broadly contemporary but probably developed sequentially, over a short period of time, from the south-east corner of the site (field L24) towards the north-west (field L3). The development of the fields may have been associated with expansion from heavier clay soils onto better drained soils associated with gravelly strata in the centre, western and northern extents of the site.

Trenches within fields were evenly distributed, *c.* 5–7.5m apart. They mostly shared similar profiles that were concave to near vertical-sided and flat-based, often disturbed by root penetration. Some trenches also showed evidence for re-cutting, which indicates prolonged maintenance. A wide trackway on a NW-SE axis facilitated access to the fields.

Remains with similar spatial patterning, though varied in size and arrangement of fields, have been found on a number of archaeological sites in the region, including: Wollaston, Northants. (Brown *et al* 2001); Ampthill (Northamptonshire Archaeology 2010); Cranfield (Albion 2011) and land west of Kempston, Beds. (Albion 2010); Caldecote, Cambs. (Kenney 2007); Hatfield (Albion 2013b) and Cokenach, Herts. (Oxford Archaeology East 2009). The most extensive set of cultivation trenches was revealed at Wollaston. They featured postholes, dug alongside trenches through the fills, as well as root balls spaced 1.5m apart. In addition, pollen from Grape Vine (*Vitis vinifera*) was retrieved from pollen samples, which led to the conclusion that trenches formed a vineyard and the posts were supporting the vines. In the absence of pollen evidence on other sites, it has been suggested that such fields may represent a cultivation method for specialised crop growing, *e.g.* for asparagus or orchard fruit. The spatial layout of the fields in the form of long rows separated by wide gaps is thought to have been designed to maximise the quantity and quality of crops. This system



provided sufficient light (and avoided shade), facilitated accessibility and improved air flow (White 1970, 230–231).

The fields at Grovebury Farm incorporated a small number of postholes and pits. Three sets of small three-post structures probably formed right-angled platforms for storing crops during harvest. Few postholes were identified within the bedding trenches, suggesting they may have held self-supporting plants.

Notwithstanding the high level of horticultural activity within the site, it does seem to have been located some distance from any settlement focus. However, it does represent one of the more substantial sets of bedding trenches found in this part of the country. The early Roman period did not form part of the original research objectives, but the recovered evidence has moderate potential to address regional research objectives relating to:

- Specialist agricultural practices in the Roman period;
- The relationship between field morphology and agricultural regime;
- Rural settlements and landscapes.

5.2.3 Assessment Phase 4 – later Roman

The ‘later’ Roman period shows a rapid decrease in the quantity of recorded contextual evidence, which is restricted to two isolated ditches and a single cremation burial that was placed deliberately in one of the Phase 4 bedding trenches.

Phase 4 evidence has little potential to address regional research objectives. The cremation burial provides an example of Roman funerary practice but is otherwise of limited potential.

5.2.4 Assessment Phase 5 – modern

No evidence for the Theedway (HER 10843) was found within the investigation area. The routeway runs along the northern boundary of the site and is possibly of prehistoric origin. It cannot be ruled out that the extensive Roman fields were deliberately laid out in this area to take advantage of the proximity of this routeway. However, in the absence of any contextual evidence, this original research objective cannot be taken forward.

The small amount of contextual data relating to modern activity in the area has no potential for further analysis.

5.3 Artefactual Data

The pottery assemblage, weighing 3.6kg, is essentially too small to provide detailed information at a site level. It is also unlikely to be able to greatly assist in the clarification and/or refinement of the dating for later prehistoric pottery types in the region. Study of the range of wares may, however, yield limited information relating to the sources, movement and distribution of types. Further value for the material lies in the information it can provide as ‘supporting evidence’ at regional level. The assemblage represents a new find spot for pottery of this period, thus augmenting the current state of knowledge of later Bronze Age-early Iron Age activity in the locality. The assemblage can also be usefully compared with the known contemporary sites in the region.



The non-ceramic assemblage comprises a small and fairly disparate group of artefacts, most of which are either residual or not closely datable, and which consequently have low potential to address the project objectives. The most interesting finds are the ceramic loom weight and bone awl, both of which are likely to be Iron Age in date, and suggest domestic or craft activity in the vicinity of the site.

5.4 Ecofactual Data

5.4.1 Animal bone

The assemblage has low potential to contribute to the project research objectives. It is too fragmentary to provide reliable information concerning the faunal currency of the site. Individual pieces are small, with a mean weight of 4g and most survive in poor condition, displaying a high incidence of abrasion. This includes the Assessment Phase 2 animal burial — a cattle skeleton which had been heavily truncated by a bedding trench.

This poor state of preservation may have resulted in the loss of data relating to butchery or gnawing, and reduces the potential to obtain meaningful metrical data. No further analysis of the material is recommended.

5.4.2 Human bone

One inhumation burial and two cremation burials were identified during the investigations, although assessment has cast doubt on the status of one of the cremation burials. None has potential for further skeletal analysis, although the application of radiocarbon dating would greatly assist in determining the absolute date of the remains themselves and would contribute to the wider site phasing.

Due to the low numbers of graves, and their poor preservation, the burial practices evidenced by the inhumation burial and cremation burials phased to the early-middle Iron Age and later Roman period have low potential to contribute to understanding of the social/cultural basis of the activity within the investigation area and to the wider study of burial and ritual in Bedfordshire.

5.4.3 Plant remains

The assessment results show the presence of only occasional identifiable charred plant remains in five samples — a few cereal grains, including hulled barley and a possible *Bromus* seed. The hulled barley grains were found in two late Bronze Age/early Iron Age features (one of which also contained the *Bromus* seed) with a possible barley in an early/middle Iron Age ditch fill.

These limited remains cannot provide any significant information on either crop husbandry or processing activities other than to show the presence of hulled barley on the site which may have been used either for human food and/or animal fodder. The grains may have been accidentally burnt during the latter stages of processing and/or during food preparation. Current archaeo-botanical evidence shows that hulled barley is one of the main cereals (together with hulled wheat) cultivated during the late Bronze Age and Iron Age periods in southern England (Greig 1991, 302, 306) including numerous sites in Bedfordshire, for example in late Bronze Age/early Iron Age and



middle Iron Age deposits from the Biddenham Loop near Bedford (Giorgi 2011). *Bromus* is frequently found as a cereal weed, often in grain deposits because being of a similar size to grains makes it difficult to separate other than by hand-sorting.

The few charred cereal grains were distributed across the site — the late Bronze Age/early Iron Age grains in the far north and along the central eastern boundary and the productive early-middle Iron Age samples from features to the north-east. The paucity of grains in these samples, however, means that the activities producing these remains may have taken place at some distance from the sampled features.

No further analysis of this material is required.

5.4.4 Charcoal

Identifiable charcoal was only present in moderate amounts in two late Bronze Age/early Iron Age features (posthole fill [59] and pit fill [192]) and an early-middle Iron Age grave backfill [97]. The small number of samples and limited amount of material mean that they cannot provide significant information on the character of the local woodland environment during these periods. No further analysis of the material will be carried out.

5.4.5 Other biological remains

The other biological material in the flots has very limited potential because of the paucity of remains and the difficulty of identification with regard to the very fragmented bone. The few insect remains are likely to be intrusive and they too require no further analysis.

5.4.6 Pollen

In general the soils within the features were minerogenic, offering little potential for pollen analysis. It has been found elsewhere, however, for example at Wixams, Bedfordshire (Cruise 2008), that iron staining within clay soils can pick out relict organic matter within which countable pollen may be preserved if the water table is fairly high. For this reason, subject to further assessment, limited pollen analysis may be worth undertaking, as highlighted in Table 5-1 below:

Phase	L	G	Context	Sample number	Depth from top of section	Proposed samples for assessment /analysis
1	1	G48	90	20	0.41-0.90cm	55cm, 62cm, 70cm, 94cm
3	3	G13	77	77a	0-8cm	2cm, 6cm
3	7	G24	501	501a	0-15cm	4cm, 8cm

Table 5-1: Pollen samples proposed for further analysis



5.5 Summary of Potential to Address the Original Research Objectives

The potential of the recovered data-sets to address the original research objectives is set out in Table 5-2 below:

Objective		Contextual	Pottery	CBM & Fired Clay	Other Artefacts	Animal Bone	CPR	Pollen	Human Bone
i.	What was the precise nature and layout of the late Bronze Age/early Iron Age field system?	Low	Low	-	-	-	-	-	-
ii.	Was there any settlement/occupational evidence associated with the field system, and of what nature was it?	Low	Low	-	Low	Low	Low	-	Low
iii.	Could a relationship between the field system and potential settlement be established?	Low	Low	-	Low	-	-	-	-
iv.	Retrieve more precise dating evidence for the field system and potential settlement to put it into a chronological framework.	Low	Low	-	Low	-	-	-	-
v.	Was there any archaeological evidence for the Theedway along the northern boundary of the DA, and/or for any associated roadside activities?	-	-	-	-	-	-	-	-

Table 5-2: Potential of recovered datasets to address the original research objectives

Key

High	Data-set contains high quality, significant material, which can expand knowledge in this area.
Medium	Data-set contains moderately significant data, which is relatively standard for this chronological period and region.
Low	Data-set is of only minor relevance to the research objective or may help to add to a database of 'less significant evidence' which, when combined, is useful in recognising patterns, <i>e.g.</i> pottery assemblages, settlement types <i>etc.</i>
-	Data-set has no potential to provide useful information on this subject.



6. RESEARCH OBJECTIVES FOR ANALYSIS

6.1 Introduction

Following assessment of the various datasets, it has been possible to revise the original research objectives (see Section 5.5 above) and produce an updated set of objectives (Table 6-1) that are more relevant to the recovered data. The ways in which these new research objectives will be addressed are listed below, with reference to national and regional research frameworks.

Table 6-1 summarises the potential of each dataset to contribute to the revised research objectives for analysis.

6.2 Character and Development

6.2.1 What is the character of the late Bronze Age/early-middle Iron Age field system and occupation activity? Is any chronological development discernable? How does the evidence compare with other farmsteads locally and regionally?

Oake states that within Bedfordshire all examples of early field systems are imprecisely dated and none of the examples have been correlated with a contemporary settlement pattern (Oake *et al* 2007, 11). Medlycott, for the Eastern Counties, calls for more paleoenvironmental evidence to enable the recreation of past landscapes and economies within the framework of late Bronze Age/Iron Age settlements and the establishment of permanent field systems (Medlycott 2011, 20).

Early Iron Age settlement patterns may include open agglomerated settlements in some areas, perhaps on hill tops or higher on hill sides than in the late Bronze Age and middle Iron Age. Medlycott states that there is clear evidence for some parts of the region for complex 'off-site' activities including isolated pits, postholes and waterholes. Understanding more about these settlement patterns and use of the landscape is a key question (Medlycott 2011, 29-30).

Contextual evidence for this period consists principally of ditches, with a limited number of discrete features and possible structural elements. The relevant datasets will be used to characterise the site in terms of the form of settlement and nature of activities, and to provide information on its economy and environment.

Chronological development across the site will be investigated using the artefactual assemblage, although the scope of this work will be limited, given the paucity of the datasets. The pottery assemblage will be compared to recently published material within the locality, *e.g.* Broom (Cooper and Edmonds 2007) and Biddenham (Albion 2010), in connection with the date range of the site. The possibility of radiocarbon dating is examined as a separate objective (Section 6.7.1).



6.2.2 What is the character of the early Roman agricultural activity? How does the site compare to local and regional parallel sites? How does the site relate to the contemporary landscape and settlement pattern? When and why did the Roman fields go out of use?

Remains of bedding trenches have been found on a number of archaeological sites in the region. This has provided valuable insights the crops cultivated and the agricultural regimes practised. It has allowed the identification of a possible intensification of agricultural production from the late Iron Age into the Roman period, as well as evidence for changing agricultural practice through the Roman period (Medlycott 2011, 36).

There is still need to understand the Roman agricultural ‘norm’, against which evidence from individual sites can be compared. Also, more work has to be done, both in collating the available data and in addressing specific research topics, such as the relation between available infrastructure and location of farming practices as well as how far the size and shape of fields can be related to the agricultural regimes identified (Medlycott 2011, 46–47).

The excavated remains at Grovebury Farm represent one of the more extensive datasets revealed when compared to contemporary sites in the region. Characterisation of the site will include consideration of the development of the field system. However, this analysis may be limited by the small size and quality of the artefactual assemblage and by the fact the full extent of the field system is unknown. The location and nature of the settlement / farmstead associated with the field system are also unknown.

The dated artefactual assemblage does not extend beyond the 2nd century AD, which may indicate failure of the horticultural venture. Consideration of the artefactual, contextual and environmental evidence will attempt to define when and why the site was abandoned. In addition, it will examine whether any relationship with known settlement evidence in the vicinity can be established. The desk-based assessment (Albion 2005) noted that Roman pottery (HER 1405) had been recovered c. 250m to the east of the site and that there had been several discoveries of Roman burial urns (HER 10725, 10727 and 10728), c. 700m to the west. Additionally, a Roman well (HER 20) was identified in Page’s Park, c. 700m to the north.

Consideration will also be given to the presence of the ancient routeway, The Theedway (HER 10843) on the northern boundary of the site. The first documentary evidence for this route dates to the 10th century AD, although it is possible that its origins are prehistoric and it may, therefore, have had some influence on the layout of the fields in the early Roman period.

Further evidence of Roman period activity comes from the evaluation (Albion 2006). Some 150m to the south of find spot HER 1405 was a deposit comprising 100+ small and abraded sherds of early Roman pottery, recovered from a layer in Trench 15. This deposit probably formed within a natural hollow/depression in the geological strata. Its significance is uncertain, as no archaeological features of Roman origin were recorded in this field. It remains unclear whether it was the result of natural agency or



deliberate human activity. However, the presence of two separate find spots within this one field may suggest some nearby settlement activity.

6.3 Economy

6.3.1 What was the economic basis, in terms of agriculture or craft production, for the various phases of occupation/activity? Is it possible to determine changes through time?

Given the overall paucity of the datasets, this will not be a major aspect of the analysis. However, the results of the assessment will allow some consideration of these issues. Small assemblages of faunal evidence from the late Bronze Age to later Roman phases were recovered. The results of the assessment will, where possible, be used to examine the role of animals at the site (diet and possible husbandry practices, with particular consideration of animal skeleton recovered). Similarly, the assessment of the charred plant remains provides limited information on crop husbandry and foodstuffs.

The overall character of the material will be compared with other period assemblages from the same site, and with contemporary assemblages from other sites in the region, with particular regard of the early Roman contextual evidence from the site. In addition, late Bronze Age/early-middle Iron Age artefacts will be examined for evidence of craft activity and other aspects of the site's economy during these periods.

6.4 Society and Culture

6.4.1 Are there any indications of cultural associations or trading links with other sites, either locally or more widely?

Analysis of the ceramic and other-artefact assemblages will assist in consideration of the site's cultural associations and trading links, particularly in the late Bronze Age / early-middle Iron Age. The significance for trading links of the site's proximity to the Theedway will also be considered.

6.4.2 What is the social significance of the horticultural activity in this area in the early Roman period?

The contextual and pottery assemblages will be examined for indications of what cultural or economic changes took place at this time. These datasets will also be used to assist in consideration of the significance of the presence of the extensive bedding trench system. Datasets will be compared with other assemblages and their associations both locally and regionally.

6.5 Environment

6.5.1 What was the environment of the site during the different phases of activity or occupation?

The limited ecofact assemblages will be used, where possible, to examine the nature of the local environment, and to investigate changes during the use of the site.



6.6 Ritual

6.6.1 What indicators survive for burial ritual, and how does the evidence relate to national and regional patterns?

Assessment has indicated limited potential in the human bone and contextual datasets for consideration of burial practices in the late prehistoric and early Roman periods. Comparisons with other sites at a local and regional level can be made (Oake *et al.* 2007, 62 and 74).

6.6.2 Is there any evidence of non-funerary ritual activity, for example placed deposits?

Examples of two probable placed deposits have been identified from late Bronze Age / early-middle Iron Age pits G48 and G16. These features will be examined in more detail in order to consider further the status of the deposits.

6.7 Chronology

6.7.1 Can scientific dating be used to refine the chronological sequence of the site?

Articulated animal bones found in late Bronze Age/early Iron Age pit G40 will be selected for radiocarbon dating along with samples of human bone recovered from cremation and inhumation burials. Pit G40, inhumation burial G41 and cremation burial G71 all have significant stratigraphic relationships with the early Roman cultivation trenches, which form a major part of the site narrative but which contain little contemporary artefactual dating evidence.

6.7.2 Can the development of local late Bronze Age / early Middle Iron Age ceramics be refined or augmented?

In Bedfordshire, some relatively large pottery assemblages from this period have been excavated and published in recent years. Comparison with this material will show how the pottery assemblage from Grovebury Farm relates to these other assemblages.



Category	Objective	Contextual	Other Artefacts	Flint	Pottery	CBM	Human Bone	Animal Bone	CPR	Pollen	
1	Character and development	What is the character of the late Bronze Age – early-middle Iron Age field system and occupation activity? Is any chronological development discernable? How does the evidence compare with other farmsteads locally and regionally?	Moderate	Low	Low	Low	-	Low	-	Low	Low
		What is the character of the early Roman agricultural activity? How does the site compare to local and regional parallel sites? How does the site relate to the contemporary landscape and settlement pattern? When and why did the Roman fields go out of use?	Moderate	-	-	Low	-	-	-	-	Low
2	Economy	What was the economic basis, in terms of agriculture or craft production, for the various phases of occupation/activity? Is it possible to determine changes through time?	Moderate	Low	-	Low	-	-	Low	Low	Low
3	Society and culture	Are there any indications of cultural associations or trading links with other sites, either locally or more widely?	-	-	-	Low	-	-	-	-	-
		What is the social significance of the horticultural activity in this area in the early Roman period?	Low	-	-	Low	-	-	-	-	-
4	Environment	What was the environment of the site during the different phases of activity or occupation?	-	-	-	-	-	-	-	-	Low
5	Ritual	What indicators survive for burial ritual, and how does the evidence relate to national and regional patterns?	Low	-	-	-	-	Low	-	-	-
		Is there any evidence of non-funerary ritual activity, for example structured or placed deposits?	Low	-	-	Low	-	-	Low	-	-
6	Chronology	Can scientific dating be used to refine the chronological sequence of the site?	Low	-	-	-	-	Moderate	Moderate	-	-
		Can the development of local LBA/EMIA ceramics be refined or augmented?	-	-	-	Low	-	-	-	-	-

High	Dataset is able to contribute direct, significant data which can expand our knowledge in this area.
Moderate	Dataset can contribute direct data which will be relatively standard for this chronological period and region.
Low	Dataset has a relatively low potential to augment our knowledge of this subject. It may be of only minor relevance to the research aim, or may help to add to a database of ‘less significant evidence’ which, when combined, is useful in recognising patterns, e.g. pottery assemblages, settlement types.
-	Dataset has no potential to provide useful information on this subject.

Table 6-1: Research objectives for analysis and potential of the datasets to address them



7. UPDATED PROJECT DESIGN

7.1 Introduction

This section provides a task list for the analysis, publication and archiving programme. Tables 7-1 to 7-2 provide a summary of the tasks associated with analysing each dataset; while Table 7-3 summarises the tasks associated with publication, archiving and overall project management. Table 7-4 provides a combined summary of all tasks. Table 7-5 describes the project team and lists their initials, and Table 7-6 details the proposed timescale for completion of each key stage in the project.

7.2 Analysis of Contextual Data

7.2.1 Liaison / Meetings

On-going discussion will take place between the principal members of the Albion project team, external specialists and CgMs throughout the analysis and publication stages. These will involve discussion over the nature of the work required, as well as commissioning the work and addressing any queries that arise during the course of the analysis.

7.2.2 Analysis of documentary, cartographic and photographic sources

The Bedfordshire Historic Environment Record and Bedfordshire and Luton Archives and Records Service will be visited to provide background information on the excavation area and archaeological sites in the vicinity. All relevant maps, photographs and other documents will be examined.

Archaeological features will be plotted and (where possible) used to extrapolate the full extent of physical remains (partially) revealed during fieldwork. Investigation of physical remains was limited to within the confines of the agreed reduced excavation area. As a result, a part of the Roman cultivation fields (the NE corner of the site) was not investigated. Information from other investigations in the vicinity, most notably from the evaluation geophysical survey, may fill gaps that exist in our plans of the physical remains within the DA and help tie them in to archaeological evidence from the wider area.

7.2.3 Database

The size of the datasets means that they would benefit from computerisation. Albion operates a fully integrated, computer-based system of structural analysis using databases (through Access) and a mini GIS (G-Sys) for interrogation. Basic contextual information and an Assessment hierarchy has been entered into a database table and has been successfully utilised to produce this report.

The digitised all-features drawing produced for the assessment will require checking and correcting to ensure it is linked correctly with the contextual database. Once this is complete, the drawings can be fully interrogated and manipulated by any database table.

Once this is achieved, it will be possible to rapidly interrogate datasets within the G-Sys programme. For example, it would be possible to plot the distribution of specific



artefact types, or all features which are considered to be contemporary. This type of interrogation will greatly enhance the analysis of data and, therefore, assist in the interpretation of the archaeological remains. It also provides a basis for publication figures to be produced rapidly.

Any relevant historical maps and plans from earlier archaeological investigations will be geo-referenced and digitised to permit cross-examination with the all-features drawing.

7.2.4 Sub-Group and Group analysis

Building on the Assessment hierarchy, each context will be assigned to a single Sub-Group, consisting of one or more (usually several) contexts that are closely related both stratigraphically and interpretatively. The Sub-Group to which each is assigned will be determined by analysis of the primary contextual information, specifically context sheets and section drawings that were produced on site.

The deposits within features will be assigned to separate Analysis Sub-Groups from their cuts. For deep features that may have filled up over a long period of time, more than one Sub-Group will be used in order to separate their lower and upper deposits. However, to ensure that their spatial location is easily identifiable, they will be issued a Sub-Group number comprising a decimal point of the 'containing' Sub-Group.

When assigning contexts to Sub-Groups, the artefactual and ecofactual assemblage recovered from each context will be considered. This will identify any that contained significant assemblages which may need to be referred to in detail in the descriptive section of the publication text. Such contexts will be identified at Sub-Group level.

Contexts which have no analytical potential, e.g. some undated features and some features of geological origin, will be assigned to collective subgroups to identify them but will not be subject to further analysis.

The Sub-Group allocation for each context will be entered into the contextual database table and a brief description of the Sub-Group will be written into the Sub-Group database table so that it can be easily accessed.

Sub-Groups with analytical potential will be assigned to a single Group representing a higher level of interpretation. Groups will be composed of Sub-Groups that are stratigraphically similar, and which combine to form a coherent unit of contemporary activity. Sub-Groups containing non-primary deposits may be assigned to separate Groups, in order to reflect the possibility that they are considerably later in date than the construction/primary deposits Sub-Groups, and would therefore need to be analysed separately. However, to ensure their spatial location is easily identifiable, they will be issued a Group number comprising a decimal point of the 'containing' Group.

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. A plan will be produced for each Group, with the location of all relevant Sub-Groups marked.

7.2.5 Land-use area and Phase analysis

Each Group will be assigned to a higher level of interpretation known as an Analysis Land-use area, which may contain one or more Groups. Each Land-use area will be composed of Groups that are broadly contemporary. Each Land-use area will, in turn, be assigned to a chronological Phase.

The Land-use area allocation for each Group will be entered into the Group database table. A Land-use area text will then be written directly into the Land-use area database table so that it can easily be accessed. It will contain a descriptive section as well as an interpretative section, and will form the basis for the site narrative section of the publication text. A plan will be produced for each Land-use area, with the location of all relevant Groups marked.

Each Land-use area will be assigned to a higher level of interpretation known as a Phase, which may contain one or more Land-use areas. Each Phase will represent a chronological period. The Phase allocation for each Land-use area will be entered into the Land-use area 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. A plan will be produced for each Phase, with the location of all relevant Land-use areas marked.

The completion of the landscape and phase analysis represents a key stage in the analytical programme, and is the precursor to the production of publication text and illustrations.

◆KEY STAGE 1

7.2.6 Final phasing/publication liaison

Once the final phasing has been established, the various specialists will be informed. Each will receive detailed phasing information, the required format of their publication text, and any other information that they may require.

7.2.7 Site narrative text

The site narrative will form the basis of the descriptive section of the publication text. It will be organised by Phase and Land-use area.

7.2.8 Structural illustration

The digitised plan and section data will be interrogated via the relational database tables to produce mock-up publication illustrations. Plans will be produced to show all features in each Phase, with Land-use areas and significant Groups identifiable.

◆KEY STAGE 2

Task	Staff	Days
Structural analysis liaison/meetings	PM/PO/Ills	5
Analysis of HER data	PO	2
Cartographic data-gathering and selection of maps for illustration	PO	1
Geophysical survey, cropmark and cartographic digitisation	Ills	1



Task	Staff	Days
Cropmark identification and selection	PO	1
Geophysical survey, cropmark and cartographic interpretation and integration with planned physical archaeological remains via the contextual structural hierarchy	PO	1
Sub-Group and Group analysis	PO	10
Land-use area and Phase analysis	PO	5
Assistance with structural analysis	PM	3
◆ KEY STAGE 1		
Structural phasing/publication liaison	PM/PO	5
Geophysical survey publication text	PO	1
◆ KEY STAGE 2		

Table 7-1: Summary of structural analysis tasks

7.3 Analysis of Pottery

7.3.1 Quantification and recording of pottery

Pottery will be laid out in context order and will be quantified by minimum vessel and sherd count, and weight. Fabric identifications will be in accordance with the Bedfordshire Ceramic Type Series, currently maintained by Albion Archaeology. Attributes such as decoration, evidence of function (sooting, wear marks etc.), and manufacturing techniques (firing characteristics etc.) will be recorded. All quantified data will be entered on to the relevant table within the site database.

7.3.2 Production of technical text for pottery

A detailed description will be produced of the pottery recovered, including fabric and form definitions. Any selection of pottery vessels 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

7.3.3 Phasing/publication Liaison

See structural analysis section.

7.3.4 Pottery publication text

A specialist text will be produced 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, where appropriate, the pottery assemblage from individual elements of the structural hierarchy, *e.g.* Land-use areas and Groups, will be discussed.



7.3.5 Illustration

Illustration of the material selected for inclusion in the technical text will be carried out in consultation with the pottery analyst.

◆KEY STAGE 2

Task	Staff	Days
Pottery liaison/meetings	FO/PO	0.5
Pottery quantification and recording	FO	3
Pottery technical text (type series)	FO	1
◆ KEY STAGE 1		
Pottery phasing/publication liaison	FO/PO	0.5
Pottery publication text	FO	2
Pottery illustration	Ills/FO	1
◆ KEY STAGE 2		

Table 7-2: Summary of pottery analysis tasks

7.4 Analysis of Other Artefacts

7.4.1 Other Artefacts identification

Each object will have a full catalogue description entered into the database, and where possible, a date range identified. 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

7.4.2 Other Artefacts technical catalogue

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

◆KEY STAGE 1

7.4.3 Final phasing/publication liaison

See structural analysis section.

7.4.4 Other Artefacts overview text

Following phasing confirmation, and liaison with external specialists, the artefact assemblage will be discussed by period in relation to the spatial framework of the site. Evidence contributing to the project research objectives will be discussed and comparisons drawn to local, regional and/or national trends.



7.4.5 Other Artefacts illustration

Illustration of the material selected for inclusion in the publication will be carried out by the Illustrator in consultation with the artefact analyst and Project Manager. The artefact analyst will provide instructions, check the individual illustrations and compile mock-ups of the figures.

◆ KEY STAGE 2

Task	Staff	Days
Other artefacts identification	AM	2
◆ KEY STAGE 1		
Other artefacts phasing/publication liaison	AM/PO	0.5
Other artefacts publication text	AM	1
Other artefacts illustration	Ills/AM	1
◆ KEY STAGE 2		

Table 7-3: Summary of other artefacts analysis tasks

7.5 Analysis of Animal Bone

No further work is proposed other than radiocarbon dating and the incorporation of the results of the assessment into the publication text.

7.6 Analysis of Human Bone

No further work is proposed other than radiocarbon dating and the incorporation of the results of the assessment into the publication text.

7.7 Analysis of Ecofacts

7.7.1 Quantification and recording

On the basis of the assessment no further work is necessary on the few charred plant remains recovered from five samples. The results of the assessment will be incorporated into the publication text, with particular reference to the presence of hulled barley in the late Bronze Age/early Iron Age period at the site.

Eight pollen samples will be further assessed for analytical potential and will be progressed to full analysis, if deemed to be viable. These samples will include four from sections of ditches G13 and G24 (sample 77 and 501); the latter may have slightly more potential and may help to address the question regarding the use of the bedding trenches. Four samples from the basal clayey fills of water pit G48 (sample 20) will be examined in order to assess the potential for reconstructions of late prehistoric environment and land-use.

◆ KEY STAGE 1

7.7.2 Phasing/publication Liaison

See structural analysis section.

7.7.3 Publication text

A specialist publication text on pollen will be produced on receipt of the final phasing structure, incorporating the results of the analysis with the data from the assessment.



◆ KEY STAGE 2

Task	Staff	Days
Pollen identification and recording	F	3
◆ KEY STAGE 1		
Pollen phasing/publication liaison	F/PO	1
Pollen publication text	F	2.5
◆ KEY STAGE 2		

Table 7-4: Summary of ecofact analysis tasks

7.8 Overall Publication, Archiving and Project Management

7.8.1 Integration of all specialist reports to form site narrative

All the specialist reports will be read and edited to ensure a consistency in approach. They will then be integrated to form a site narrative.

7.8.2 Production of synthesis

A synthetic text will be produced discussing the key elements of the site, within the major chronological periods.

7.8.3 Amendments and queries in consultation with specialists during article preparation

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

7.8.4 Albion refereeing process

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

◆ KEY STAGE 4

7.8.5 Submission of article and amendments resulting from editor's comments to publication text and figures

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

7.8.6 Printing and proof reading

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

7.8.7 Archiving and accessioning

Upon completion of the report, the written and material archives will be prepared for accessioning to Luton Museum. The cost of transfer includes transport, liaison and storage charges.



7.8.8 Project management

All project tasks will be tracked on Albion's Time Recording System (TRS) so that expenditure and resources can be monitored 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.

◆ KEY STAGE 5

Keystage 2: completion of all specialist text

Structural illustration	Ills	7
Assistance with structural illustration	PO	2
Integration of all specialist publication reports to create site narrative report	PO	10
Assistance with site narrative report	PM/OM	2
Amendments and queries in consultation with specialists during article preparation	PO	1
Production of synthesis	PO	4
Editing publication text	PM/OM	4

Keystage 3: completion of 1st Draft

Albion's refereeing process	PM/OM	2
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Keystage 4: Submission to *Bedfordshire Archaeology*

Submission to <i>Bedfordshire Archaeology</i>		
Amendments resulting from editor's comments	PO	3
Printing	External	-
Proof reading	PM	2
Archive preparation (Structural)	PO	2
Archive preparation (Artefacts)	FO/AM	2
Archive preparation and liaison with Museum	AM/AO	5
Archive microfiching	External	-
Archive transfer (storage costs)	External	-
Archive transfer	PO	0.5
Project management (overall)	OM	3
Project management (Albion)	PM	3

Keystage 5: end of project

Table 7-5: Overall publication, archiving and management tasks

7.9 Publication

A report will be submitted to the CBCA that is suitable for inclusion in *Bedfordshire Archaeology*. The chronological phased development of the site will provide the basic narrative. Within each Phase, text will be organised by Land-use area and Group, with artefactual and ecofactual information integrated into the text as appropriate.

Evidence from documentary, cartographic and photographic sources will be integrated into this chronological framework.

The discussion will concentrate on evidence for the late Bronze Age / early-middle Iron Age and early Roman periods, with the focus lying on the research objectives identified in Section 6.

The outline of the publication should be considered as only a guideline, and may be altered during the analysis and pre-publication stages if the results warrant it.



The Editor of *Bedfordshire Archaeology*, the county journal, has agreed to publish an article on the results of the excavation. The suggested format is set out below with indicative word and figure counts. The overall length is likely to be approximately 30 pages. All text and illustrations will be submitted in electronic format.

- **Section 1: Background**

Summary

Introduction

- Project background
- Topographical context
- Archaeological context
- Investigation methodology
- Layout of report

Approx. 1500 words and 3 figures

- **Section 2: Late Bronze/early Iron Age activity**

Approx. 1000 words and 1 figure

- **Section 3: Early-middle Iron Age settlement**

Approx. 2000 words and 3 figures

- **Section 4: Early Roman bedding trenches**

Approx. 4000 words and 5 figures

- **Section 5: Later Roman activity**

Approx. 1000 words and 1 figure

- **Section 6: Discussion**

Approx. 4000 words and 5 figures

- **Bibliography**

Approx. 2000 words

7.10 Archiving

On publication of the final report the archive of materials (subject to the landowner's permission) and accompanying records will be deposited with Luton Museum, Accession Number LUTNM 2011/87.

7.11 Summary of All Tasks

Description	Title/ Organisation initials	Days
Structural analysis liaison/meetings	PM/PO/ILls	5
Analysis of HER data	PO	2
Cartographic data-gathering and selection of maps for illustration	PO	1
Geophysical survey, cropmark and cartographic digitisation	ILls	1



Description	Title/ Organisation initials	Days
Cropmark identification and selection	PO	1
Geophysical survey, cropmark and cartographic interpretation and integration with planned physical archaeological remains via the contextual structural hierarchy	PO	1
Sub-Group and Group analysis	PO	10
Land-use area and Phase analysis	PO	5
Assistance with structural analysis	PM	3
Pottery liaison/meetings	FO/PO	0.5
Pottery quantification and recording	FO	3
Pottery technical text (type series)	FO	1
Other artefacts identification	AM	2
Pollen identification and recording	F	3
Keystage 1: completion of analysis		
Structural phasing/publication liaison	PM/PO	5
Geophysical survey publication text	PO	1
Pottery phasing/publication liaison	FO/PO	0.5
Pottery publication text	FO	2
Pottery illustration	Ills/FO	1
Other artefacts phasing/publication liaison	AM/PO	0.5
Other artefacts publication text	AM	1
Other artefacts illustration	Ills/AM	1
Pollen phasing/publication liaison	F/PO	1
Pollen publication text	F	2.5
Keystage 2: completion of all specialist text		
Structural illustration	Ills	7
Assistance with structural illustration	PO	2
Integration of all specialist publication reports to create site narrative report	PO	10
Assistance with site narrative report	PM/OM	2
Amendments and queries in consultation with specialists during article preparation	PO	1
Production of synthesis	PO	4
Editing publication text	PM/OM	4
Keystage 3: completion of 1st Draft		
Albion's refereeing process	PM/OM	2
Keystage 4: Submission to Bedfordshire Archaeology		
Submission to Bedfordshire Archaeology		
Amendments resulting from editors' (including CgMs) comments	PO	3
Printing	External	-
Proof reading	PM	2
Archive preparation (Structural)	PO	2
Archive preparation (Artefacts)	FO/AM	2
Archive preparation and liaison with Museum	AM/AO	10
Archive microficheing	External	-
Archive transfer (storage costs)	External	-
Archive transfer	PO	0.5
Project management (overall)	OM	3
Project management (Albion)	PM	3
Keystage 5: end of project		

Table 7-6: Summary of all tasks



7.12 The Project Team

To ensure a consistency of approach, the same specialists will be used (as far as possible) who have been involved in the assessment stage of the project.

Task	Organisation, Title and Name	Initials of Title
Overall management	Albion, Operations Manager, Drew Shotliff	OM
Project management	Albion, Project Manager, Rob Wardill	PM
Daily management and structural analysis	Albion, Project Officer, Ben Barker	PO
Other artefact analysis	Albion, Artefacts Manager, Holly Duncan	AM
Pottery/CBM analysis	Albion, Artefacts Officer, Jackie Wells	FO
Pollen	University of Lampeter	F
Illustration	Albion, Illustrator, Joan Lightning	Ills
Archiving	Albion, Archives Officer, Helen Parslow	AO

Table 7-7: The project team

7.13 Timetable

Following acceptance by the client and CBCA of the assessment and Updated Project Design, Albion would like to proceed rapidly with analysis and publication of the results. This would ensure that project momentum is maintained. Table 7-8 sets out the five key stages within the analysis and publication programme. An indication of the time required to reach the first three key stages is indicated, and these could serve as appropriate monitoring points, if required.

Task	Anticipated date of completion
Structural analysis	December 2014
Quantification and recording by specialists	March 2015
Completion of KEY STAGE 1	
Compilation of specialist reports	June 2015
Completion of KEY STAGE 2	
Compilation of 1st draft	September 2015
Completion of KEY STAGE 3	
Refereeing	October–December 2015
Completion of KEY STAGE 4	
Publication of report*	TBC
Deposition of archive*	TBC
Completion of KEY STAGE 5	

Table 7-8: Provisional timetable to complete the project

*Publication, and therefore deposition of the archive with Luton Museum, will be dependent on the publication timetable of *Bedfordshire Archaeology*



8. BIBLIOGRAPHY

- Albion Archaeology 2005. *Land South of Leighton Buzzard, Bedfordshire and Buckinghamshire: Archaeological Desk-based Assessment*. Document no. 2005/20.
- Albion Archaeology 2006. *Land at Potential Development Area H17, Southern Leighton Buzzard, Bedfordshire. Archaeological Field Evaluation*. Report no. 2006/14.
- Albion Archaeology 2010. *Land West of Bedford: Assessment of Potential and Updated Project Design, Vol. 1*. Report no 2010/002.
- Albion Archaeology 2011. *Home Farm, Cranfield, Bedfordshire: Assessment of Potential and Updated Project Design*. Report no. 2011/152.
- Albion Archaeology 2013a. *Site 17A Grovebury Farm, Grovebury Road, Leighton Buzzard, Bedfordshire: Written Scheme of Investigation for Archaeological Area Excavation*. Document no. 2011/139, v. 1.3.
- Albion Archaeology 2013b. *Former Howe Dell School Playing Field, Hatfield, Hertfordshire: Assessment of Potential and Updated Project Design*. Report no. 2013/22.
- Brown, N. and Glazebrook, J. 2000. *Research and Archaeology: a Framework for the Eastern Counties. Vol. 2. Research Agenda and Strategy*. East Anglian Archaeology Occasional Paper No. 8.
- Brown, A. G., Meadows, I., Turner, S. D. and Mattingly, D. J., 2001. *Roman vineyards in Britain: stratigraphic and palynological data from Wollaston in the Nene Valley, England*. *Antiquity* **75**, 745-757.
- CBC 2011. *Brief for a programme of archaeological investigation, recording, analysis and publication at site 17A, Land at Grovebury Farm, Grovebury Road, Leighton Buzzard, Bedfordshire*. (V1 21st October 2011 HF).
- CBC 2013. *Brief for a programme of archaeological investigation, recording, analysis and publication at site 17A, Land at Grovebury Farm, Grovebury Road, Leighton Buzzard, Bedfordshire*. (V2 Final HF).
- Cooper, A., Edmonds, M., 2007. *Past and Present: Excavation at Broom, Bedfordshire, 1996-2005*. Cambridgeshire Archaeological Unit.
- Cruise, G.M., 2008. Report on the palynology of the pond and wells at Wixams, Bedfordshire. Unpublished Report to Albion Archaeology.
- Cunliffe, B., 1974. *Iron Age Communities in Britain*.
- Cunliffe, B., and Poole, C., 1991. *Danebury: an Iron Age hillfort in Hampshire, Volume 5 The Excavations, 1979-88: the finds*. CBA Research Rep. No. 73.
- DCLG 2012. *National Planning Policy Framework*.
- English Heritage 1991. *Exploring our past: strategies for the archaeology of England*.
- English Heritage 1997. *Research Agenda*.



- Giorgi, J., 2011. The Plant Remains from Bedford Western Bypass and Land West of Bedford (BWB1124 and LWB1289) (Albion Archaeology Archive Report)
- Glazebrook, J. ed., 1997. *Research and Archaeology: a Framework for the Eastern Counties I. Resource assessment*. EAA Occasional Paper No.3.
- Greig, J., 1991. The British Isles, *Progress in Old World Palaeoethnobotany* (eds W van Zeist, K Wasylikowa and K-E. Behre), Rotterdam, 229-334
- Kenney, S. 2007. *A Banjo Enclosure and Roman farmstead at Caldecote Highfields, Cambridgeshire: Archaeological Investigations 2000-2001*. CAMARC Report no. 888.
- Mackney, D. *et al.*, 1983. *Soils of England and Wales*. Soil Survey of England and Wales. Sheet 4 Eastern England.
- Medlycott, M. and Brown, N., 2008. *Revision of the Regional Research Framework for the Eastern Region*.
- Medlycott, M. (ed) 2011. *Research and Archaeology Revisited: A Revised Framework for the East of England*. East Anglian Archaeology Occasional Paper 24.
- Northamptonshire Archaeology 2010. *A possible Roman vineyard on land off Tavistock Avenue, Ampthill, Bedfordshire*. Report no. 10/132.
- Oake, M, Luke, M, Dawson, M, Edgeworth, M. and Murphy, P., 2007, *Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy*. Bedfordshire Archaeology Monograph 9.
- Oake, M., 2007 'Research Agenda and Strategy' in M. Oake et al. *Bedfordshire Archaeology, Research and Archaeology: Resource Assessment, Research Agenda and Strategy Bedfordshire Archaeology Monograph 9*.
- Oxford Archaeology East 2009. *Late Iron-Age/Early Roman "Vineyard" at the Cokenach Estate, Barkway, Hertfordshire. Archaeological Strip, Map and Excavation*. Report no. 1055.
- Stace, C., 2005. *New Flora of the British Isles*. Cambridge
- White, K. D, 1970. *Roman farming*, London: Thames & Hudson.
- Cho, H., A. B. Falsetti, J. McIlwaine, C. Roberts, P. S. Sledzik & A. W. Willcox. Editors 1996. *Handbook of the Forensic Anthropology Course of the Department of Archaeological Sciences, University of Bradford and the NMHM/AFIP, Washington, D.C.*
- Iscan, M. Y. & K. A. R. Kennedy. Editors. 1994. *Reconstruction of life from the skeleton*. 2nd edition. New York: Wiley-Liss.
- Mayne Correia, P. 1997. 'Fire modification of bone: a review of the literature,' in *Forensic taphonomy. The postmortem fate of human remains*. Edited by W. D. Haglund & M. H. Sorg, pp. 275-93. Boca Raton: CRC Press.
- Mays, S. 1998. *The archaeology of human bones*. London: Routledge.
- McKinley, J.I. 1989. *Cremations: expectations, methodologies and realities*. In C.A. Roberts, F. Lee & J. Bintliff (eds.), *Burial archaeology. Current research, methods and developments*: 65-76. Oxford: British Archaeological Reports (BAR British Series 211).



- Steele, D. G. & C. A. Bramblett. 1988. The anatomy and biology of the human skeleton. College Station: Texas A & M University Press.
- Ubelaker, D. H. 1989. Human skeletal remains: excavation, analysis, interpretation. (Manuals on Archeology 2). Washington: Taraxacum for Smithsonian Institution.



9. APPENDIX 1: DETAILED PROVISIONAL STRUCTURAL HIERARCHY

9.1 *Assessment Phase 1: Late Bronze Age / early Iron Age*

9.1.1 **Field system L1**

A probable field was identified towards the northern edge of the area of excavation. It covered c. 0.5 ha, but continued to the east and north, beyond the limits of excavation. Its southern and south-western limits were defined by ditches G25 and G6 respectively. A gap of at least 10m wide was identified in the south-western boundary that likely formed an entrance to the field. Gully G5 was orientated perpendicular to ditch G6, and is likely to have extended the field system further westward. Ditch G9 was aligned parallel to the south-western ditch G6. It was located c. 33m to the north-east of it and is likely to have defined a subdivision within field L1. The only other internal activity within the field comprised a group of seven postholes G12 and an isolated sub-circular pit G16. A total of 46 sherds (23g) of late Bronze Age to early Iron Age pottery was recovered from L1, together with one intrusive sherd of early-middle Iron Age pottery.

Field boundaries G5, G6, G9 and G25

All the linear features were 0.6–0.75m wide and shared similar U-shaped profiles that measured less than 0.25m in depth. The only exception was gully G5 that was poorly preserved and faded out midway along its length. It did not exceed 0.4m in breadth and 0.1m in depth. All the ditches were truncated by a number of later cultivation rows with the exception of G5.

Internal activity G12 and G16.

Posthole group G12 was located c. 10m to the east of internal field division gully G9. The postholes were generally circular to oval in plan and were 0.15–0.35m in diameter. They shared similar profiles that were steep to vertical-sided with concave bases and were <0.15m deep. They appeared to be randomly distributed and do not form any coherent structure. The postholes seem to have been deliberately backfilled with some *in situ* burning present. Two of them (in the SE corner) appeared to have been paired, which may indicate that one was replaced by the other.

Isolated sub-circular pit G16 was located c. 4m to the south of postholes G12. Its sole fill likely derived from refuse disposal and contained pottery, burnt clay and animal bone. The pit was 1.4–1.6m in plan, with a U-shaped profile, 0.17m deep. It was truncated by a Phase 3 Roman bedding trench.

9.1.2 **Peripheral activity L30**

Two sub-circular pits G48 were located at least 7m to the south of the southern field boundary, outside the field system L1. They were located c. 20m apart and were of a similar size. Although located within a gap between two later fields, their fills yielded a significant quantity of pottery dated to the late Bronze Age/early Iron Age.

Pit group G48

The two pits G48 were 1.15–1.55m in plan and had U-shaped profiles that were less



than 0.15m deep. The upper fill (G48.6) of the southernmost pit (SG239) contained a notable finds deposit of a deliberately placed crushed pot. In addition, this fill contained frequent charcoal and burnt stone inclusions, which indicated a deliberate deposition of waste from burning.

9.2 Assessment Phase 2: Early-middle Iron Age

9.2.1 Field system L4

The field system shifted south and south-westwards and substantially expanded to encompass an area of over 1.9 ha. L4 comprised ditches G21 and G22/G92/G93 that formed T-shaped elements of an enclosure system. The field extended beyond the limit of excavation towards the west and south. Linear G8 and G22/G92/G93 were approximately NW-SE aligned (though on a slightly different alignment) and formed the actual field boundary, whilst a gap between them, of at least 14m, likely served as an entrance from the NE. Ditch G21 had a NE-SW orientation and formed not only a T-shaped with ditch G22/G92/G93, but also likely delineated one side of a possible trackway leading to the field. The two perpendicular ditches did not intersect and are, therefore, considered to be contemporary.

Boundary G22/G92/G93 and Boundaries G8 and Ditch G21

The linear features were not particularly substantial in size — 0.6–0.63m in breadth and 0.19–0.27m in depth; only SE segment G93 of the long boundary was 0.85m wide and up to 0.33m deep. The profiles varied from 45 degrees to near vertical with flat to concave bases. All the ditches were truncated by the Phase 3 cultivation trenches.

Isolated pits G110 and G27

Associated features within L4 took the form of two isolated pits G110 and G27 as well as a group of five postholes G26. Sub-circular pit G27 was located *c.* 5m to the SW of the corner formed by ditches G21 and G22, whereas oval pit G110 was located just outside the boundary ditch G8 (to the NE) and very close to the northern limit of excavation. The pits were of similar size and were 0.52–0.73m in plan and 0.09–0.19m deep with gradual to steep profiles.

Five postholes G26

Group of five postholes G26 formed a curved, N-S orientated and *c.* 5m-long line (SG113 and 115) with a slightly separated posthole SG117, which was located *c.* 3.5m to the E. The entire group formed a roughly L-shaped structure at the SW terminus of ditch G21. This post-structure may have once served as a platform or ‘roofed’ shed of uncertain function. Postholes were sub-circular in plan, 0.3–0.45m in diameter and 0.07–0.15m deep with concave to steep profiles. Most of postholes were infilled with single deposits that derived from deliberate backfill (SG114) with some burning of a post *in situ* also present (SG116).

9.2.2 Activity focus L9

Approximately 15m from the western limit of excavation, activity focus L9 comprised two sets of postholes that may represent the remains of a post-built structure or structures. The two groups of postholes were located *c.* 10m apart on a NW-SE axis. The two postholes within G35, to the NW, were 2.5m apart, whereas postholes G36 were separated by only a 1m gap.



Postholes G35 and G36

The remains were circular in plan and 0.2–0.45m in diameter. They had similar concave to near vertical profiles that were 0.1–0.2m deep.

9.2.3 Activity focus L10

Pit G37, possible human burial G39 and associated postholes G38 formed activity focus L10, which was located 15m to the south-east of activity focus L9. Possible human burial G39 was located between postholes G38. Three circular postholes G38 did not form any obvious structure; however, two of them (SG213 and SG215) were likely to have been paired with a 1.5m gap between them, whereas posthole SG210 was c. 6m away to the SW. Sub-circular pit G37 was located c. 4m to the north of postholes G38.

Possible human burial G39

This feature was excavated as a cremation burial. It was sub-circular in plan and measured 0.25m in diameter; it had an irregular profile. It was heavily truncated and only the basal 50mm of the feature survived. Assessment of the bone indicates that it is not burnt, but is possibly human (see Section 4.6.3).

Postholes G38

The three postholes within G38 were 0.2–0.55m in plan and up to 0.15m deep with gradual to steep-sided profiles. Posthole SG215 was truncated by a later bedding trench.

Pit G37

Pit G37 was 1.1m in diameter and had an asymmetrical profile that did not exceed 0.15m in depth. No evidence for its function was recovered.

9.2.4 Burial activity L11

Two burials L11 were located in the north-east of the excavation area. The graves comprised animal burial G40 and the inhumation burial G41. The graves were 25m apart, with the human remains located to the south-east. The animal burial may represent ritual activity associated with the human inhumation. The remains within grave G41 were poorly preserved due to truncation by a later bedding trench, soil conditions and later agricultural activity.

Animal burial G40

Grave G40 was oval in plan and orientated NW-SE. It contained the articulated but fragmentary skeleton of a cow/ox in poor condition. A large part of the burial had been removed by a later bedding trench.

Inhumation burial G41

The human remains within grave G41 were deposited in an oval, N-S orientated grave. The bones were excavated as a number of separate contexts but only the skeleton of one individual was present — a young adult, possibly male though gracile, buried face down with knees folded tightly beneath the body just as the arms were folded beneath the torso with hands up to the face; the pelvis and spine, being uppermost in the grave, had been almost totally destroyed.



9.2.5 Activity focus L12

A group dispersed postholes G42 and G47, as well as pit G46, formed activity focus L12.

Postholes G42 and G47

Postholes G42 were probably paired as they were located 2.5m apart; whilst posthole G47 was located 15m away to the SE. They were 0.15–0.3m in diameter and 0.15–0.25m deep with near vertical profiles. They were filled naturally after removal of the posts (G42) or contained traces of deliberate backfill or decayed post remains (G47).

Isolated pit G46

Isolated pit G46 was 2.5m long by 0.85m wide. It had an asymmetrical profile that was less than 0.2m deep.

9.2.6 Activity focus L13

A large water pit G43 was located towards the centre of the site. It is likely to have been associated with pits G45 and G49, which, together, formed activity focus L13. Pits G45 were cut into ditch L14. They were dug after ditch L14 had gone out of use and may suggest the ditch was a short-lived feature. Together with L14 and L15 activity focus L13 seems to represent some level of domestic activity close to a settlement focus, probably to the west of the excavation area.

Water pit G43

Water pit G43 was NE-SW orientated; it was 14.5m long by 8m wide and was slightly irregular in plan. It had a stepped profile that exceeded 1.2m in depth. All deposits within G43 formed naturally, largely through waterborne processes; the only indication of deliberate backfilling was present in the uppermost fill.

Pits G45 and G49

Four pits G45 and G49 were located SW and SE of G43 respectively. They were of small to medium size, 0.4–0.7m wide and 0.8–1.4m long. They had similar shallow concave profiles that did not exceed 0.15m deep.

9.2.7 Boundary L14

Ditch L14 adjoined pit G43 (L13) to the NE and continued beyond the limit of excavation to the SW. Although L14 appeared to be truncated in plan by G43, these two features seem to have been associated and were probably dug at the same time. The ditch is likely to have drained into the water pit, as it followed the natural downward slope of the ground towards the NE.

Ditch G44

Ditch G44 was orientated NE-SW; it was more than 49m long and up to 2.15m wide. It had a V-shaped profile that measured 0.6m deep. The secondary fill contained a high concentration of charcoal, which may indicate occupation activity in the vicinity.

9.2.8 Activity focus L15

An activity focus L15 comprising an extensive area of pitting and associated postholes was located to the west of the central parts of the excavation. The features were spread over a c. 30m by 30m area. The postholes comprised a group of five to the



north G50 and an isolated example G57, c. 15m to the south-east. The 13 pits appeared to be randomly scattered across the area. A deliberately placed finds deposit consisting of crushed pot fragments was recovered from one pit within G51. The recovered pot is of transitional LBA/EIA date and was accompanied by EMIA pot sherds that are unlikely to have been intrusive.

Posthole group G50

G50 was a possible post-built structure that was defined by a roughly trapezoidal arrangement of four postholes, covering an area of c. 4m by 5.5m. The fifth posthole was probably a replacement or repair to the south-east corner of the structure. The postholes were 0.2–0.5m in diameter, with concave to near vertical profiles that were less than 0.15m deep. None of them contained evidence of packing or post-pipes and all seem to have been backfilled after the posts had been removed.

Isolated posthole G57

Posthole G57 was c. 0.25m in diameter and less than 0.1m deep with near vertical sides and a flat base.

Dispersed pits G51-G55, G58

The thirteen pits (G51-G55 and G58) within activity focus L13 varied in size: 0.5–2.6m long, 0.4–1.4m wide and, generally, were <0.2m deep. They were generally filled with indistinctive deposits that are likely to have largely derived through natural silting. Of note were the two inter-cutting pits G54 that were 0.3–0.7m deep and are likely to have served as storage pits. The secondary fill of the more substantial pit (SG272) contained a concentration of charcoal and burnt stones, which may indicate occupation activity nearby.

9.2.9 Dispersed activity focus L18

Two pits and a ditch formed L18 in the south-west corner of the excavation area. Ditch G68 was truncated by two bedding trenches assigned to G60 in Field L17 of Phase 3, and Pit G69 by a single bedding trench within G65 in Field L17.

Ditch G68

Short linear ditch G68 was NE-SW aligned and did not continue to the NE beyond bedding trench SG296 of G60 in L17. It was c. 11.5m long by 0.8m wide, had a steep-sided and concave profile that was 0.2m deep.

Isolated pits G69 and G111

Two pits G69 and G111 were located c. 20m to the north-west of ditch G68, approximately 14m apart. The smaller, eastern pit G111 was 0.35m wide by 0.55m long and less than 0.1m deep with steep sides and uneven base; it contained a deposit of burnt material. Pit G69, was 1.2m long, by 1.06m wide, and 0.1m deep with concave sides and flat base.

9.2.10 Dispersed activity focus L19

Dispersed activity focus L19 comprised a number of isolated discrete features located to the south-east of the centre of the excavation area. The remains were in a form of four pits, three postholes and a tree-throw dispersed over an area of 50m by 20m. Pits G70 and G72 were truncated by later bedding trenches from Phase 3 Field L17.

***Isolated Pits G70, G72, G73, G75,***

The pits were circular to sub-oval in plan and were 0.7–1.1m in diameter and 0.1–0.2m deep. They generally had concave to asymmetrical profiles.

Tree-throw G74

Isolated tree-throw G74 was located close to pit G73. It was 0.6m wide by 0.75m long and less than 0.05m deep, with a highly asymmetric profile.

Postholes G76, G85, and G112

The postholes were spaced c. 18–24m apart in a curved line, but did not appear to form any obvious structure. They were 0.15–0.3m in diameter and 0.15–0.25m deep with near vertical profiles. Posthole G85 was probably deliberately backfilled after the post had been removed.

9.2.11 Activity focus L22

Activity focus L22 was located towards the south-east corner of site. It comprised an area of pitting, with an associated posthole and curved gully covering an area of c. 30m NE-SW by 15m NW-SE. Curved gully G84 was truncated by two bedding trenches within G64 of Phase 3 Field L17 and bedding trenches G82 within Field L21. The function of curved gully G84 is unproven, but it could be the highly truncated remains of a roundhouse drip gully. Pit G86 may have been used for storage.

Gully G84

Curved gully G84 was roughly NW-SE aligned. It was >10m long, 0.55m wide and less than 0.1m deep, fading out in places. Due its poor survival and the lack of associated structural features, the function of the gully is unknown.

Rectangular pit G86

Medium-sized, rectangular pit G86 was N-S orientated. It was c. 1.6m long by 0.65m wide and 0.45m deep. It had regular, near vertical sides and a flat base. Its main fill contained domestic refuse. Its regular shape suggests that it is likely to have originally performed a storage function. It was truncated by smaller pit SG393 of G87.

Three small pits G87

Three small pits G87 were roughly circular in plan. Pit SG508 was truncated by cultivation trench SG376 of G81 in L21. On the other hand, pit SG393 was cut into the top fill of pit G86. They were 0.6–0.8m in diameter, 0.1–0.25m deep and shared similar concave profiles. The function of these features remains unclear but they were stratigraphically and spatially associated with pit G86 and posthole G88.

Two medium-sized pits G89

G89 comprised two medium-sized pits. They were roughly circular in plan and located c. 6m apart. Both were located in the SW part of L22 in close proximity to curved gully G84. The pits were 1.35–1.5m diameter and c. 0.15–0.5m deep with concave and asymmetrical profiles.

Posthole G88

Isolated sub-circular posthole G88 was located close to pits G86 and G87. It was 0.22m in diameter, 0.12m deep and had an asymmetrical profile.



9.2.12 Activity focus L25

A group of four sub-circular and medium-sized pits L25 was located in the eastern part of the site, spatially associated with ditch G93 of field system L4. Three of the pits were located to the east of the boundary and all of them were truncated by it. They were assigned to two groups G105 and G106 that were approximately 10m apart. Despite the fact that pits within L25 were stratigraphically earlier than boundary ditch G93, they seem to have been associated with it; their function, however, remains uncertain.

Two pits G105

The two pits that formed G105 were located either side of ditch G93, adjacent to the limit of excavation. They were >1m in diameter and up to 0.3m deep.

Two pits G106

The two pits within G106 were both located 3.6m apart along the eastern edge of ditch G93. They were 0.65–0.75m in diameter and 0.1–0.2m deep. They had concave profiles, similar to pits G105.

9.2.13 Activity focus L26

Activity focus L26 was located in the south-east corner of the excavation area. It comprised a large rectangular pit G107 and two associated postholes. The postholes are suggestive of a structural function. L26 was located outside the field boundary G93 of field system L4. Activity focus L26 only produced LBA/EIA pottery which is assumed to be residual but this may be worthy of further consideration during analysis.

Rectangular pit G107

Pit G107 was a single rectangular pit, orientated NW-SE. It was 3.4m long by 2.6m wide with steep sides and a flat base; it was 0.3m deep. It may have originally served for a storage or drying purpose.

Postholes G108

Pit G107 was associated with two postholes G108 that were located c. 5.5m apart on a NE-SW alignment. They were located close to the pit's south-west and south-east corners. The postholes may have formed a kind of superstructure associated with pit G107 (e.g. roof). They were deliberately backfilled, although the fill of posthole SG489 (to the south-west) exhibited signs of a post burning *in-situ*.

9.2.14 Peripheral activity L27

In the south-east corner of the excavation area, a group of eight tree-throws G109 was investigated. Their presence in the south-east part of the site may be related to a change in the underlying geology from light-mid brown orange silty clay to blue clay, where soils were penetrated more easily by vegetation.

Tree throws G109

G109 comprised eight sub-circular to irregular tree throws. They were mainly NE-SW orientated, 1.5–3m in diameter and 0.3–0.35m deep, with irregular and uneven profiles.



9.3 Assessment Phase 3: Early Roman

9.3.1 Fields L2 and L3

Fields L2 and L3 were only fragmentarily present within the excavation area and both probably continued beyond the northern and western extents of the site. They both had irregular layouts and neither of them respected the access track leading to the large field system to the south. In addition, Field L3 proved stratigraphically later than L5 to the south-east, as bedding trench G13 of Field L3 truncated trenches G15.

Bedding trenches G4, G28 and G7

Field L2 consisted of three trenches: G4, G28 and G7; the latter was separated from the other trenches by a small gap to the north-east. This gap may have served as a narrow 'track' that was probably no more than 2m wide. The trenches survived in a rather poor condition, particularly row G28, which was lost to plough truncation to the north-east. Their recorded dimensions ranged from at least 10m to up to 26.5m in length and 0.45–0.75m wide. In profile, they were steep to near vertical-sided and were 0.2–0.4m deep. A single abraded sherd of 2nd-century pottery was recovered from bedding trench G4.

Bedding trenches G10

Field L3 consisted of bedding trench array G10, comprising three parallel gullies. They followed a NE-SW alignment and were spaced 6–7m apart. All rows were of similar size, up to 1m wide and less than 0.40m deep with similar profiles. They continued beyond the northern limit of excavation and appeared to respect trench G13 to the south.

Boundary trench G13

Boundary trench G13 was at least 42m long and was aligned ENE-WSW. It was of a similar size and profile to the bedding trenches within array G10 and is likely to be contemporary. The only artefact recovered was a residual flint flake dated to the late Bronze Age.

Pit G11

Sub-circular pit G11 truncated the westernmost trench SG25 of array G10. The pit was over 1.1m diameter and its steep-sided and flat-based profile was less than 0.2m deep. The pit was sterile but is likely to have been associated with agricultural activity in Field L3.

9.3.2 Field L5

Bedding trench array L5 was located in the north-east part of the excavation area, to the south of field L3. It extended over at least 0.15ha and comprised eight NE-SW orientated rows, G15, G17 and G18. The layout of the L5 trenches suggests contemporaneity with Field L6 either side of an access trackway (see L6, below). Three sherds of Roman pottery were recovered from Field L5 in addition to four smaller sherds of abraded EMIA pottery and twelve residual sherds of LBA/EIA pottery.



Bedding trenches G15, G17 and G18

Bedding trenches G15, G17 and G18 comprised eight gullies that were spaced c. 6m apart. Due to the triangular shape of the field, the trenches varied significantly in length (12.5–55m). They were all c. 1m wide by 0.3–0.4m deep and had profiles that were V-shaped to near vertically-sided with concave and uneven bases. The basal irregularity was interpreted as the result of bioturbation. The northernmost trench SG48 within G15 produced a bone awl, of probable Iron Age date.

9.3.3 Field L6

The largest of the bedding trench fields within the excavation area was Field L6. It was located in the north-west part of the site, south of field L2, and covered an area of at least 0.75 ha. It bordered Fields L5 and L7 to the north-east, Fields L21 and L17 to the south-east, and continued beyond the western limit of excavation. This field comprised twenty parallel trenches that were arranged in NE-SW orientated rows. There was a gap between the north-east termini of the Field L6 trenches and the south-west ends of the trenches within Field L5 and L7. The gap was c. 4–4.5m wide on a NW-SE axis and may have served as a trackway to facilitate access to individual bedding trenches. All of the datable artefacts recovered were heavily abraded and considered to be residual. They comprised two sherds of EMIA pottery, one sherd of generic Iron Age pottery, and twelve sherds of LBA/EIA date.

Bedding trenches G14, G29, G30 and G31

The trenches were distributed roughly 5–7m apart. The south-west part of the field was far less regular and was heavily truncated in places. This resulted in trenches of significantly variable size. Only rows G31 and G34 continued beyond the limits of excavation, but this may have been a product of truncation on the shallower trenches. The bedding trenches were 47–93m long, 0.4–0.9m wide, and 0.05–0.35m deep. Their profiles ranged from V-shaped, through concave, to near vertical-sided. Bases ranged from flat, through concave to uneven.

Bedding trenches G32 and G34

The two trenches within G32 were slightly off-set and exhibited a 2m-wide gap at the north-east end of the array. A similar gap was revealed along the south-east limit of bedding trench system L6 between two trenches within G34, c. halfway along the length of the field. The gap to the south may have served as an access to Field 17.

Re-cut SG157 of G33 was identified midway along the length of row SG152. In addition, two discrete features were associated with cultivation array L6.

Bedding trench G33

Evidence for the re-digging of the bedding trenches was identified in trench G33. Re-cut SG157 was identified midway along the length of row SG152. Bedding trench G33 also contained associated posthole SG246 that appeared to be cut into the trench. It was c. 0.55m in diameter and less than 0.2m deep.

Pit G56

Pit G56 truncated the southernmost trench (SG168) within G30. It was less than 0.55m in diameter and had a shallow concave profile, less than 0.2m deep.



9.3.4 Field L7

Field L7 was a small array arranged in at least six NE-SW aligned rows, distributed c. 5.5m apart. It stretched over a 'diamond-shaped' area of 21m by 35m and extended beyond the eastern limit of excavation. The field bordered Field L5 to the north-west and Field L6 to the south-west. It was limited by ditch G22 of Phase 2 to the NE. No stratigraphic relationship with surrounding field systems could be discerned.

However, it is likely that Field L7 was constructed earlier than Field L5, given the fact that it respected the Phase 2 early-middle Iron Age boundary G22, which was not respected by the Field L5 trenches. Five small sherds of residual LBA/EIA pottery were recovered from bedding trench G23.

Bedding trenches G23 and G24

The array of trenches consisted of four that were c. 21m in long (G23), and two partial trenches G24 that continued beyond the eastern limit of excavation. All the bedding trenches were reasonably regular, approximately 1m wide and 0.2–0.35m deep. They had steep-sided and slightly uneven profiles.

9.3.5 Field L8

Two bedding trenches G19 and G20 were identified close to the eastern limit of the excavation area, to the east of Field L7. They were on different alignments and may represent singular examples from wider arrays continuing beyond the excavation area. This fragmentary field bordered Field L5 to the north-west and Field L7 to the south-west. It also appeared to respect the Phase 2 early-middle Iron Age boundary ditch G22, suggesting that it might have been an early array, but no artefacts were present.

Bedding trenches G19 and G20

The two rows were at least 7–12m long, up to 0.85m wide and had near vertical-sided profiles, which were less than 0.25m deep. Bedding trench G19 was orientated NE-SW; trench G20 was aligned NW-SE.

9.3.6 Field L16

Bedding trench array L16 was revealed in the narrow excavation strip in the east-central part of site. It comprised five cultivation trenches that were NE-SW aligned and continued beyond the limit of excavation to the north and south. The extent of the investigation area in this part of site was too limited to establish any stratigraphic relationships with other fields, but it is likely that Field L16 may have been a continuation of Field L24 located to the south.

Bedding trenches G90 and G91

The trenches were 6–8m long, up to 0.25m deep, and < 0.85m wide. They had concave to near vertical profiles. Trench G91 appeared to have been re-dug and did not respect earlier boundary ditch G92 of Phase 2. Two sherds of LBA/EIA pottery were recovered from trench G91, but this may have derived from the earlier boundary ditch.

9.3.7 Field L17

Field L17 was located in the south-west corner of the excavation area. It bordered Field L6 to the north-west and Field L21 to the north-east. It covered an area of at least 0.45 ha and continued beyond the southern, and possibly western, limits of



excavation. The 13 NW-SE orientated rows of bedding trenches were largely evenly distributed *c.* 6–7.5m apart. A wider gap of *c.* 16m between G66 and SG326 of G65 in the south-west corner of the field may have been the result of plough truncation, as many of the trenches within Field L17 were poorly defined and shallow. This bedding trench array is likely to postdate Fields L23, L24 and L21 and represents expansion onto the more marginal heavy clay in this part of the site.

Bedding trenches G59, G60, G61 and G65

The majority of the trenches within Field L17 exceeded 70m in length; they were up to 1.2m wide and up to 0.4m deep. Due to truncation some trenches were only 16m long and some were 0.5m wide. They generally shared similar concave to steep-sided profiles and were 0.1–0.35m deep. A deposit of cremated bone was recovered from the surface of trench G61. It was only 0.03m deep and is likely to be associated with plough disturbance of nearby Phase 4 cremation burial G71 that was cut into trench G61.

Bedding trenches G62

The two bedding trenches within G62 were of particular significance as they were on the same alignment, at the eastern side of the field, but separated by a 3m-wide gap. Both opposing trench termini were genuine and probably formed an entrance, possibly relating to that identified within G34 of Field L6 to the north.

Bedding trenches G63 and G64

Bedding trenches G63 and G64 were separated by a *c.* 20m-wide gap but this is likely to have been the result of later plough truncation. Trench G64 did, however, exhibit evidence for being re-cut towards the south-east, either suggesting prolonged maintenance of the field, or a redefinition of its north-east boundary.

Bedding trench G66

Only very limited information was retrieved about the south-westernmost trench G66 — it was almost entirely truncated by later Phase 4 ditch G67 (L28). It was *c.* 6.5m long, 0.35m wide, and less than 0.1m deep with a concave profile.

9.3.8 Field L21

L21 comprised twelve parallel cultivation trenches (G77 to G82), orientated NE-SW. They were evenly spaced, *c.* 6.5–7.5m apart. It was located in the south-east corner of the investigation area, immediately to the north-east of Field L17. It is likely to have covered an area of 0.3 ha (75m by 40m), although only 60% of its predicted extent was archaeologically stripped. Field 21 appears to pre-date the construction of Field L17 as its southern boundary trench G82 was truncated by trench G64 of Field L17. It was stratigraphically later than Field L24. Only two sherds of residual LBA/EIA pottery were recovered.

Bedding trenches G78, G79 and G80

Bedding trenches G78 to G80 were 0.55–0.9m wide and had gradual U-shaped to steep-sided profiles that did not exceed 0.2m in depth. Only trenches G78, to the north-east, and G80, to the south-west, were exposed to their full length of up to 40m.



Bedding trenches G77 and G81

Trenches G77 and G81, which bordered the adjacent fields, were significantly shorter, at c. 19m and 22m in length respectively. The orientation of trench G77 was also slightly rotated — effectively being squeezed in between Field L21 and Field L6 to the north. As such, it may be later addition to either field. Trench G81, to the south, was of similar size to G77 and may suggest the presence of discrete features associated with this field, or an earlier phase of activity in this area. It should be noted that this area was the previous location of Phase 2 Activity Focus L22 that contained potential roundhouse gully G84.

Boundary trench G82

Trench G82 was at least 60m long and extended beyond the south-west and north-east extents of all the other cultivation trenches within Field L21. It was, however of a similar size, measuring c. 1m wide by less than 0.2m deep, with a concave profile. It is likely to have formed the south-east boundary for the bedding trench array within Field L21, and possibly Field L17 to the west. Boundary trench G82 truncated trench G96 within Field L24 and features within the Phase 2 Activity Focus L22.

9.3.9 Field L23

Field L23 was located next to the south limit of the excavation area, immediately to the south-east of Field L21. It comprised five bedding trenches, G98 and G99, three postholes, and a small pit. It covered an area of at least 30m by 35m and continued beyond the south-east limit of excavation. The rows were NW-SE aligned and c. 5.5m apart, with a wider c. 12m gap between the two groups of trenches. The gap may suggest that one trench was missing due to poor survival of remains in this area or the presence of an access track. Only three small sherds of LBA/EIA pottery were recovered and no stratigraphic relationships were identified.

Bedding trenches G98 and G99

The bedding trenches were 4.5m–27.5m long and up to 1.1m wide. The only hand-excavated section had a concave profile that was < 0.25m deep.

Three postholes G101

Three postholes G101 formed a triangular structure at the north-west end of the easternmost trench of G98. The postholes were set c. 2–2.5m apart and were 0.35–0.45m in diameter with concave to steep-sided profiles, less than 0.15m deep. They seem to have been deliberately backfilled after the removal of the posts but did not contain any artefacts. The structure may have served to support the crops grown within the bedding trenches.

Pit G100

A small pit G100, that was 0.6m diameter and 0.1m deep, was located c. 9m to the south-west of postholes G101. It was sterile, and of no obvious function, but appeared to respect the layout of the bedding trenches and the adjacent boundary ditch G82.

9.3.10 Field L24

Field L24 was located in the south-east corner of the excavation area, immediately to the north-east of Field L23 and to the east of Field L21. It covered an area at least 50m by 50m and extended to the north beyond the limit of excavation. It comprised



nine parallel cultivation rows (G94 to G97). They were orientated NE-SW, with a gap of c. 5.5–6m between them. Field L24 proved to be stratigraphically earlier than L21 as row G96 of L24 was truncated at its south-west end by trench G82 in Field L21. The only finds recovered were seven small fragments (16g) of abraded animal bone.

Bedding trenches G94, G95, G96 and G97

The bedding trenches within G94 to G97 were 12–43m long and 0.8–1m wide. They had concave to steep profiles and were less than 0.25m deep. Most of the trenches survived in moderate to poor condition and often faded out and / or were truncated by later plough activity, particularly towards the north-east. This could be associated with a change in the underlying geology from more gravely strata of brown orange silty clay (majority of site) to heavy blue clay (south and south-east corner of site).

Posthole groups G102 and G103

Two sets of three postholes G102 and G103 were located close to the south-west termini of cultivation rows SG426 of G94 and SG433 of G95 respectively. The two groups were located over 20m apart. The postholes themselves were 2.5–4m apart. They were 0.35–0.55m in diameter and 0.15–0.25m deep. All of them appear to have been backfilled following the removal of posts. Both arrangements probably formed right-angled structures, which may have served a similar purpose to structure G101 in Field L23. It remains unclear whether the fourth post did not survive in either structure or whether they were purposely built as three-post platforms.

Two circular pits G104

Roughly halfway between the post-structures G102 and G103 were two circular pits G104. They were located 2m apart and were 0.8–1.15m diameter. They had similar steep-sided profiles that were 0.25–0.35m deep. They probably performed a storage function, possibly associated with the agricultural activity in Field L24.

9.4 Assessment Phase 4: Later Roman

9.4.1 Burial activity L20

Unurned cremation burial G71 was the only feature within L20. It was cut into the top fill of a bedding trench within G61 of Field L17 in Phase 3. Three small sherds (4g) of LBA/EIA pottery were recovered from the soil sample of the cremation deposit, but these are likely to be residual.

Cremation burial G71

The grave SG341 was oval and was orientated E-W. It was 0.56m long, 0.27m wide, and 0.13m deep with near vertical sides and flat base. It was excavated in four spits. The cremation deposits contained approximately 50g of burnt human bone. A very shallow (less than 0.03m thick) spread of cremation deposit was located c. 0.1m to the east from the grave cut on the surface of the bedding trench. It is likely that this material would have originated from the same grave, but may have been dispersed by later ploughing. A small quantity of very fragmented residual LBA/EIA pottery was recovered from the cremation deposit.



9.4.2 Boundary Ditches L28

Two isolated ditches G67 and G83 were located over 90m apart along the southern limit of the excavation area. Both features continued beyond the confines of the area and had quite different characteristics in terms of their shape in plan, profile and infilling deposits. Ditch G67 was sterile but followed the same alignment as an early Roman bedding trench. Ditch G83 produced six sherds of pottery broadly dated to the Roman period.

Ditch G67

Ditch G67 in the south-west corner of the site followed a NW-SE alignment. It truncated bedding trench G66 of Field L17 from the preceding phase but followed exactly the same alignment as the trench. It was at least 6.7m long by c. 1m wide and less than 0.1m wide. It had a U-shaped profile with a flat base.

Ditch G83

Ditch G83 truncated two bedding trenches G82 and G62, in Fields L21 and L17 of Phase 3. It was curvilinear in plan and followed a W-E orientation before turning towards the south-east at its east end. The ditch was in excess of 7.9m long and up to 2.25m wide. It had a steep-sided profile and was c. 0.4m deep. Ditch G83 may have been part of an enclosure that continued beyond the southern limit of excavation.

9.5 Assessment Phase 5: Modern

9.5.1 Modern activity L29

The modern features within L29 comprised: pond G113; a small oval pit G114; a short length of ditch G115; and modern land drains G116.

Pond G113

Pond G113 was irregular in plan, c. 21m long by 18m wide. It continued beyond the confines of the excavation area to the north and south. A pond is shown in a similar position on the 1884 1st edition OS map of the area. It is likely to have been backfilled sometime between 1978 and 1995, when it stopped appearing on OS mapping. The pond was not excavated and was defined as a spread of demolition debris that included timber, fragments of plastic and asbestos sheeting.

Oval pit G114

Oval pit G114 was located 20m to the west of pond G113. It truncated bedding trench G4 in Phase 3. It was 0.8m by 0.95m in plan and its upper fill contained moderate amounts of plastic, ceramic building material and asbestos fragments. It was not excavated.

Ditch G115

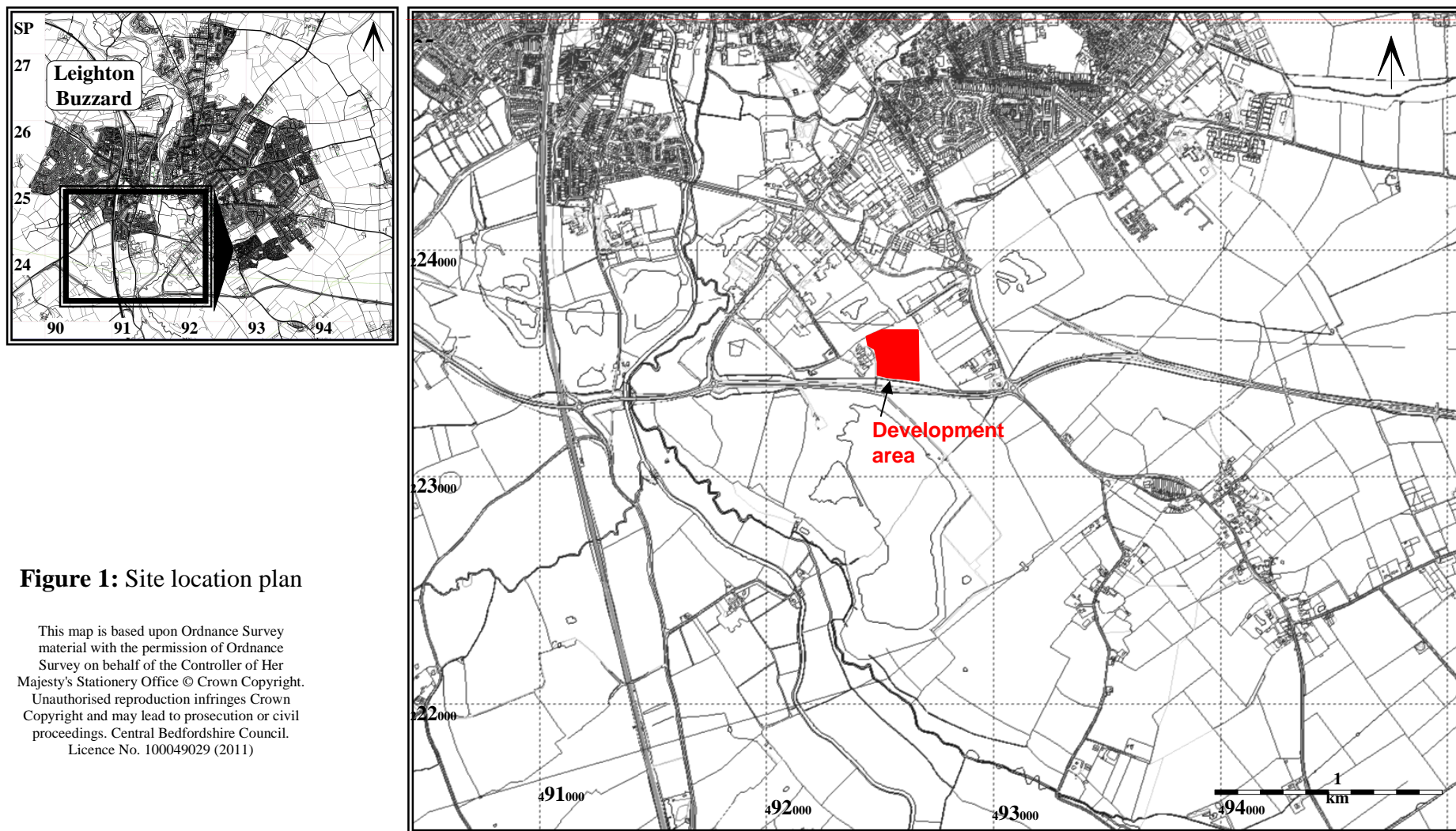
Ditch G115 was located approximately 15m to the south-west of Pond G113. It was orientated NE-SW, but had a short SE-NW 'dog-leg' at its south-west end. The ditch was investigated by hand because it was located parallel to, and equidistant between, Phase 3 bedding trenches G28 and G29. It was over 13m long and less than 1m wide; its concave profile was 0.15m deep. It may have been a drainage feature associated with pond G113, but there was no surviving stratigraphic relationship.



Land drains G116

An array of modern land drains were excavated and recorded within relationship segments, where relevant. They generally contained modern ceramic land drain pipe, although corrugated modern plastic pipes were also present.

10. APPENDIX 2: FIGURES



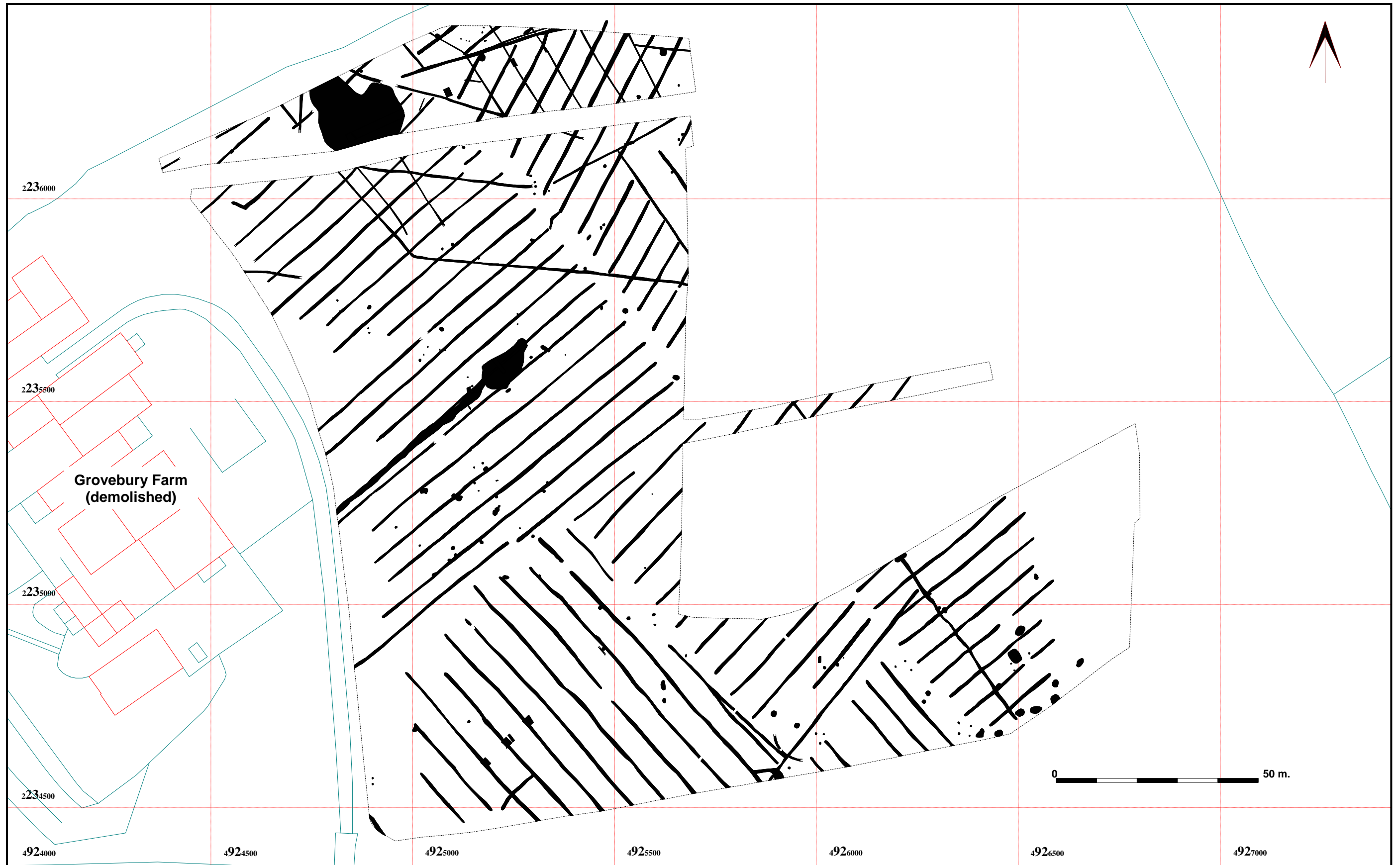


Figure 2: All features plan

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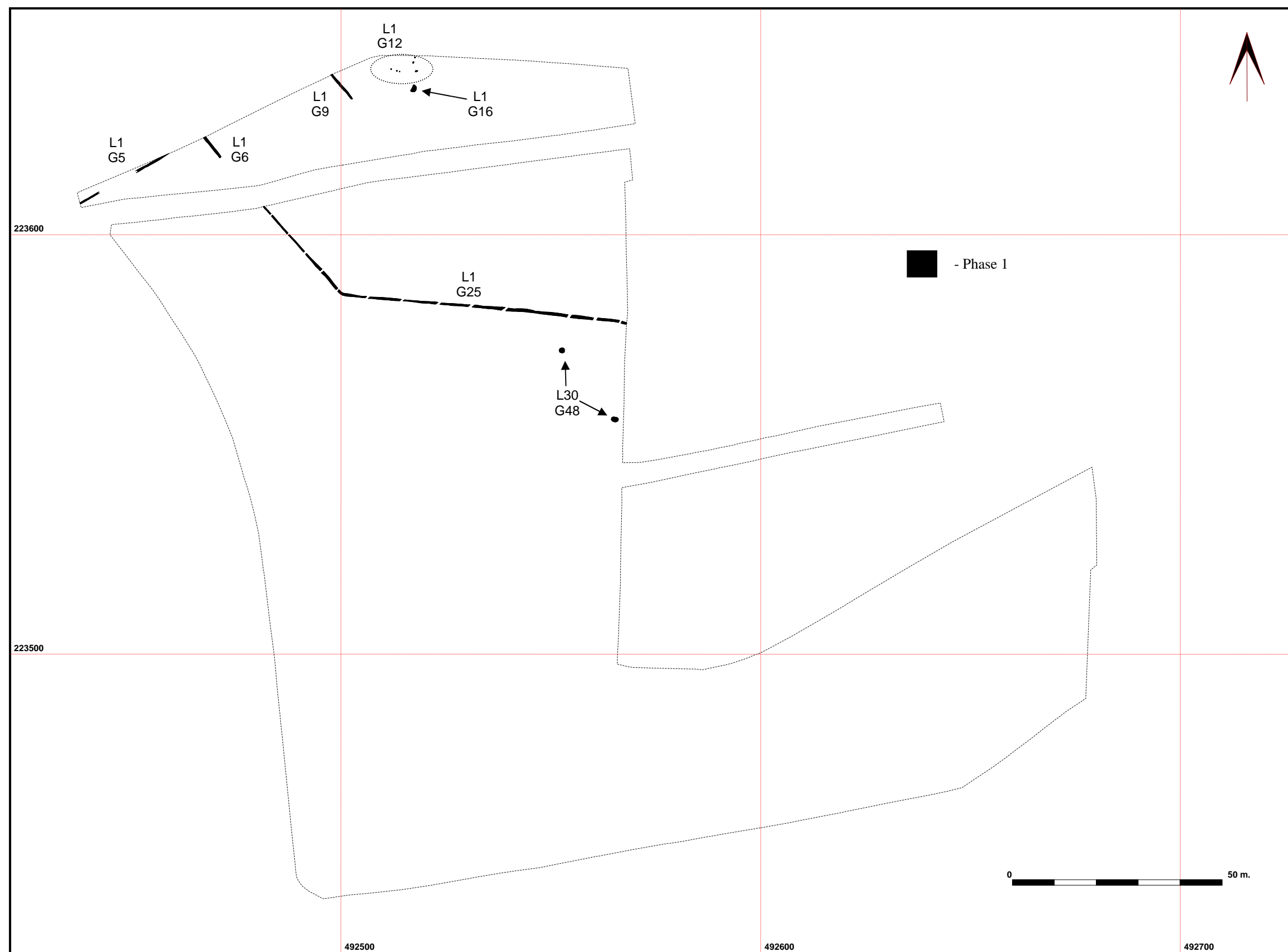


Figure 3: Assessment Phase 1 – Late Bronze Age / early Iron Age

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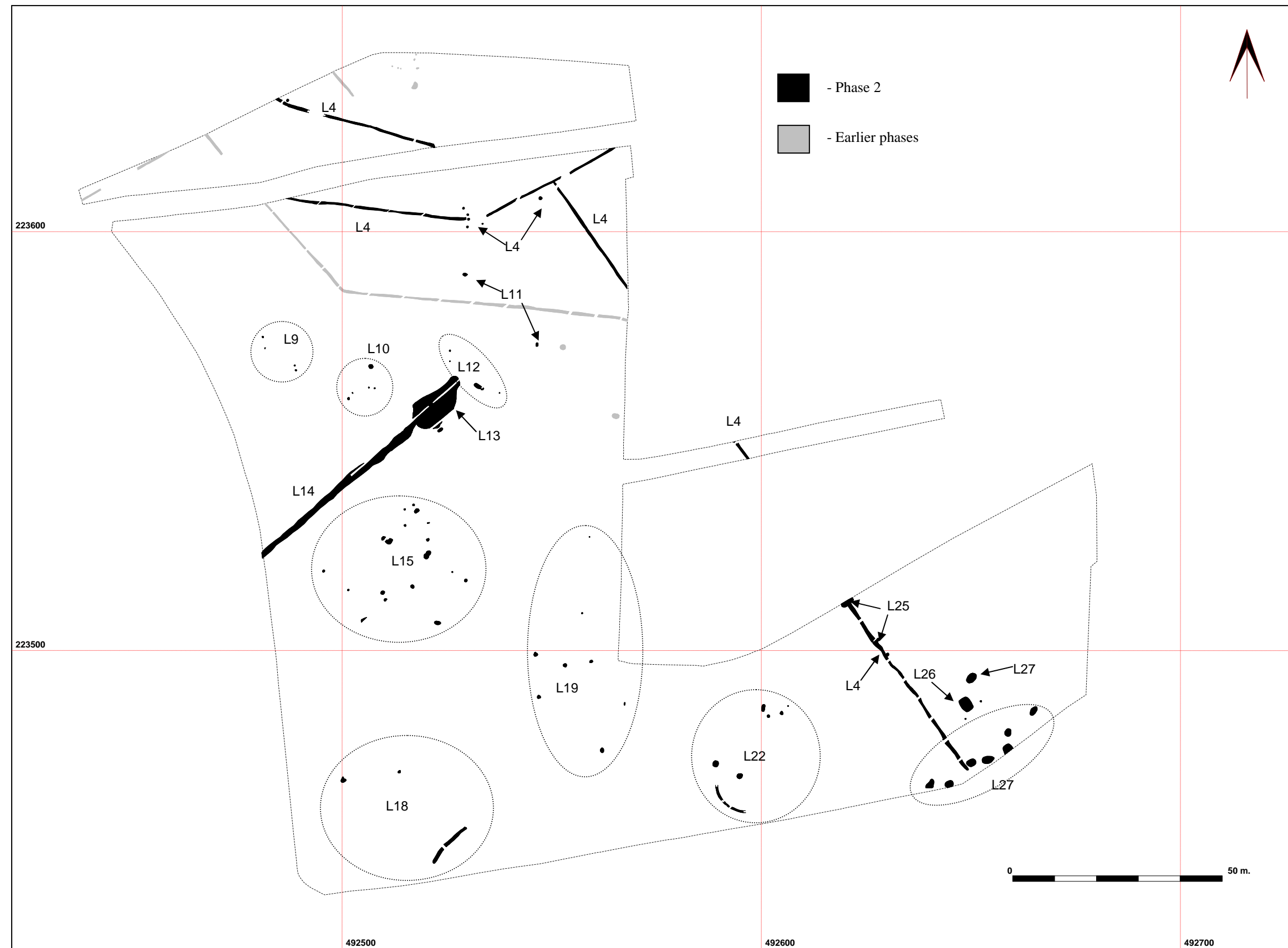


Figure 4: Assessment Phase 2 – Early-middle Iron Age

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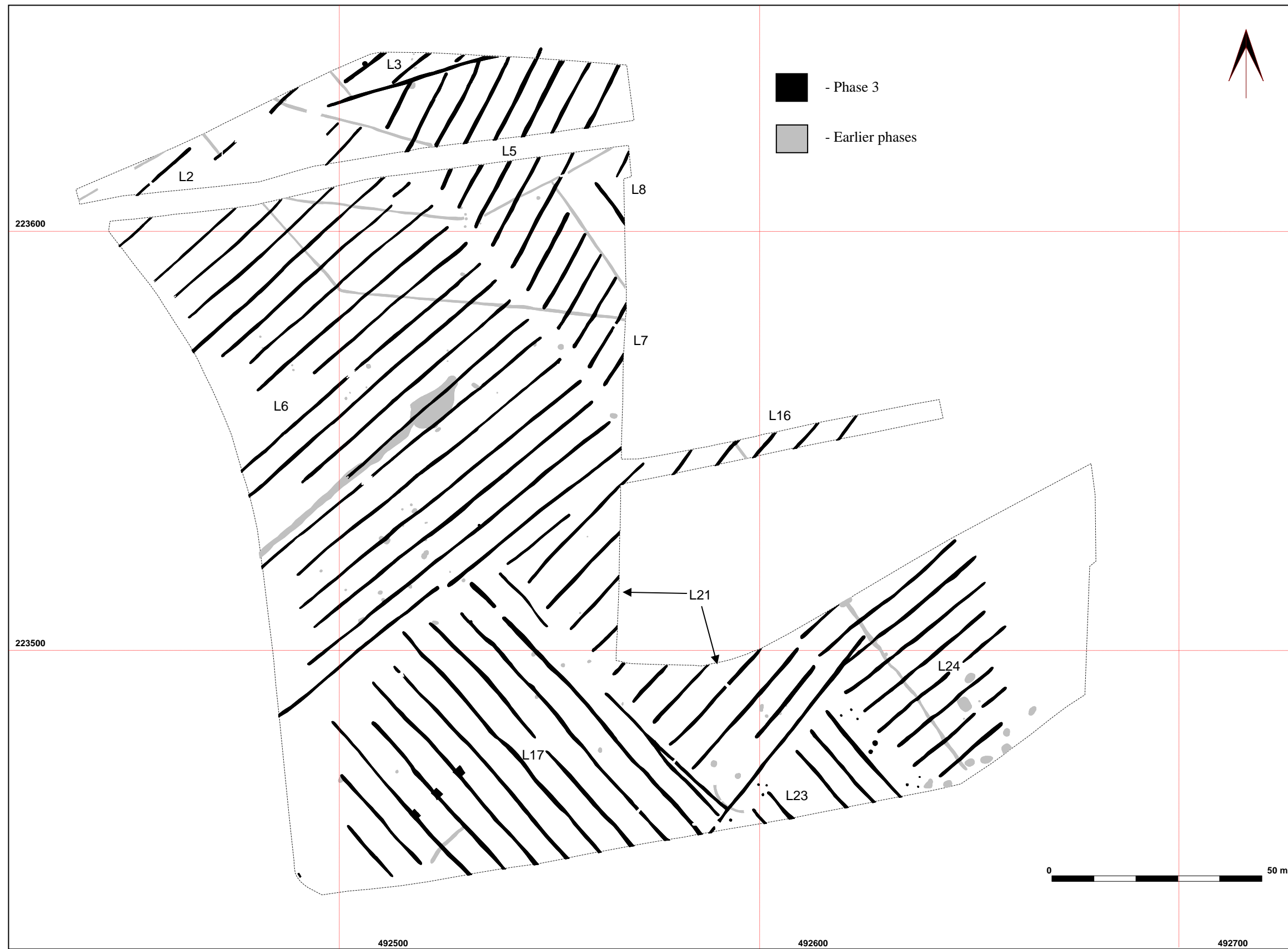


Figure 5: Assessment Phase 3 – Early Roman

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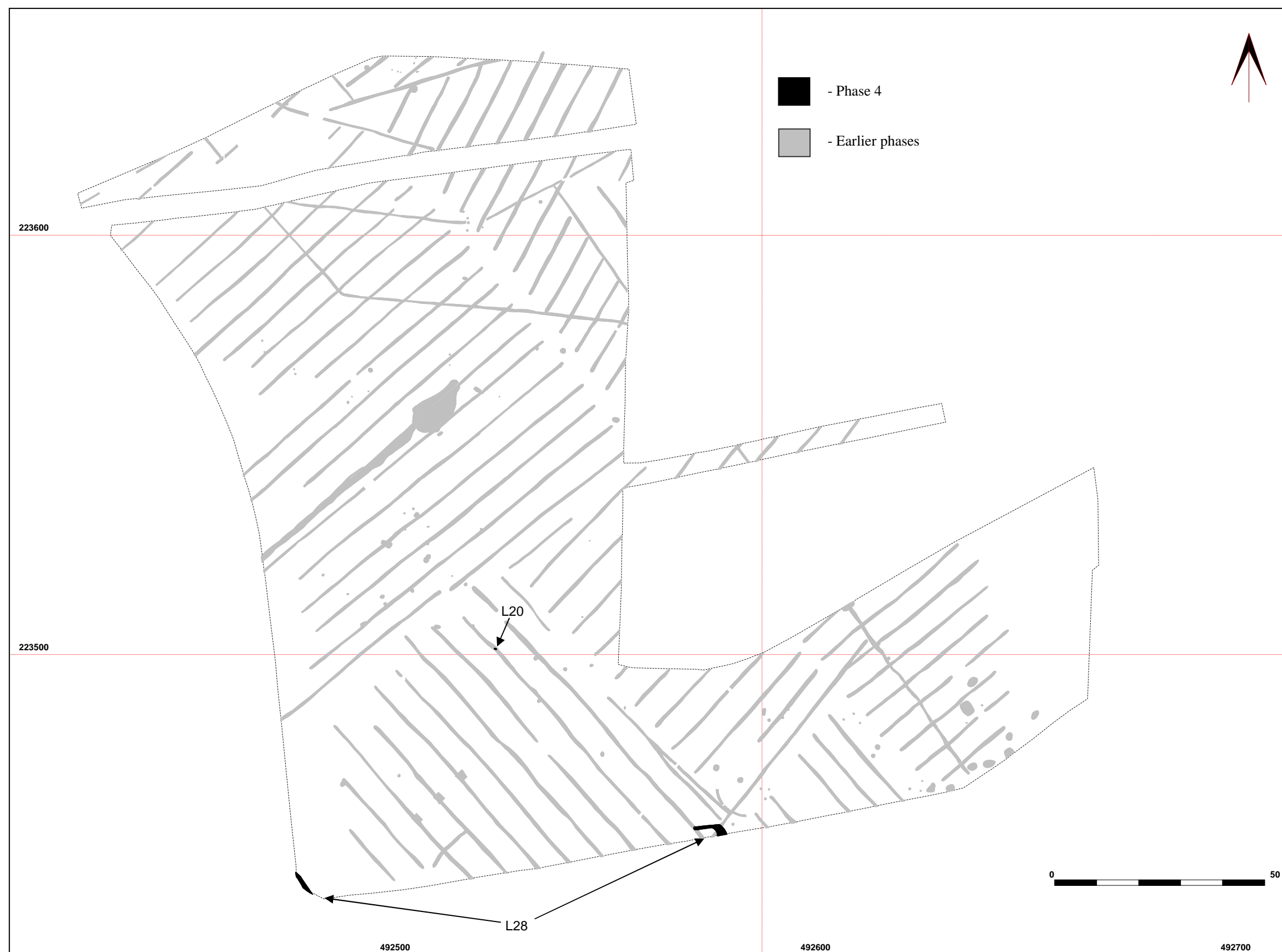


Figure 6: Assessment Phase 4 – Later Roman

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Figure 7: Assessment Phase 5 – Modern

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