

**LUTON AQUATIC CENTRE
STOPSLEY
LUTON**

ARCHAEOLOGICAL MITIGATION

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Preface

Every effort has been made in the preparation of this document to provide as complete an assessment as possible, within the terms of the specification. 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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Key Terms

Throughout this report the following terms or abbreviations are used:

<i>Albion</i>	Albion Archaeology
<i>CAO</i>	Central Bedfordshire Council Archaeologist
<i>IFA</i>	Institute of Field Archaeologists
<i>Procedures Manual</i>	<i>Procedures Manual Volume 1 Fieldwork, 2nd Edition 2001.</i> Bedfordshire County Council



Non-Technical Summary

Luton Borough Council has granted planning permission for a new recreation centre, the Luton Aquatic Centre, on land adjacent to Lothair Road Recreation Ground, Hitchin Road, Luton. Following advice from the Central Bedfordshire Council Archaeological Officer (AO), the LPA attached a Condition (18) to the planning permission, requiring a programme of archaeological works to be carried out prior to development.

The proposed development comprises the construction of a new building, containing an Olympic-size swimming pool and other facilities, with associated car- and coach-parking, services and road improvements. This will serve as a replacement for the Regional Sports Centre on the southern edge of Stopsley Common, which will be demolished and the area returned to grass.

Following preparation of a desk-based assessment (RPS 2009), the site was evaluated in January 2010 by means of trial trenching (Albion 2010a). This revealed a small concentration of archaeological remains of varying significance. The earliest dated to the late Iron Age, with some suggestion of late Bronze Age/early Iron Age activity, although most of the remains were essentially undated. A few post-medieval remains associated with Swifts Farm were discovered, but no evidence was found of Swifts Green medieval settlement within the evaluated area. The presence of these remains triggered mitigation works (in October 2010) and the AO required the opening of four Strip, Map and Sample areas. This report combines the results of both the trial trenching and the mitigation works.

Investigations at the Luton Aquatic Centre have revealed an agricultural landscape, in existence possibly from as early as the Bronze Age, but with definite dating evidence from the late Iron Age/early Roman to modern periods. It includes direct evidence for late Iron Age/early Roman agricultural and livestock enclosures and a trackway as well as post-medieval enclosures, field boundaries and the remains of a medieval to post-medieval Manor House and Farm.

These remains are part of a wider landscape of prehistoric and Roman settlements, sampled at Butterfield Green, Butterfield Business Park and the Vale Cemetery and Crematorium extension. The development area is also located on the periphery of the recorded medieval settlements of Swifts Green and Hayes Manor, although only medieval and post-medieval field systems and enclosures, indicating agricultural use, were recorded during the works reported here.



1. INTRODUCTION

1.1 *Planning Background*

Luton Borough Council has granted planning permission (10/00042/FUL) for a new recreation centre, the Luton Aquatic Centre, on land adjacent to Lothair Road Recreation Ground, Hitchin Road, Luton. Condition 18 attached to the planning permission required a programme of archaeological works to be carried out prior to development.

The proposed development comprises the construction of a new building, containing an Olympic-size swimming pool and other facilities, with associated car- and coach-parking, services, and road improvements. This will serve as a replacement for the Regional Sports Centre on the southern edge of Stopsley Common, which will be demolished and the area returned to grass.

Initially, a desk-based assessment (RPS 2009) was prepared. On the basis of the assessment and discussions between RPS Planning & Development and Central Bedfordshire Council's Archaeological Advisor (AO), who had issued a 'model' brief detailing the required archaeological works (CBC 2009), a trial trench evaluation was carried out in January 2010 (Albion Archaeology 2010a, Plate 1).

On the basis of the results of the evaluation, four Strip, Map and Sample (SMS) areas were identified, targeted on concentrations of archaeological features identified in the trial trenches. RPS Planning & Development produced a Written Scheme of Investigation (WSI) for the mitigation, setting out the scope of the works and the methods to be used (RPS 2010).

Albion Archaeology was commissioned to carry out the mitigation works during the last two weeks of October 2010. The results are presented in this report, which also integrates the results of the earlier trial trenching.

1.2 *Site Location and Description*

The development area (DA) is centred on (NGR) TL 106 243 (Figure 1). It is bounded by Hitchin Road to the south-east, Butterfield Green Road to the east, Manor Farm to the north, and a linear north-south area of rough grass with some trees to the west, representing a former field boundary. It mostly lies at a height of c.167m OD, rising slightly to c.168m OD in the north-west corner and falling to c.166m OD in the north-east.

The DA was used as playing fields prior to re-development. Underlying solid geology comprises Upper Chalk of the Upper Cretaceous period, overlain by clay-with-flints.

1.3 *Methodology*

Four SMS areas (1–4) were opened (Figure 2). They were targeted on concentrations of archaeological features identified in the evaluation and were designed to further elucidate the date, form and function of those features.



In Area 3, the north-east corner of a large enclosure was revealed. The AO required additional SMS works in order to fully reveal the extent of this enclosure. This was achieved by several machine-cut interventions (Area 5 on Figure 2), which closely followed the line of the enclosure ditch and succeeded in revealing its eastern extent and a proportion of its southern arm.

Throughout the project the standards set out in the relevant IfA *Standard and Guidance* documents (IfA 2008) were adhered to, as were those in Albion Archaeology's *Procedures Manual for Archaeological Fieldwork and the Analysis of Fieldwork Records* (2001), the IfA *Code of Conduct* and English Heritage's *Management of Archaeological Projects* (1991).

Details of the area excavation methodology are set out in Albion Archaeology's method statement (Albion 2010b), produced for AO approval prior to the start of works in accordance with the WSI (RPS 2010).

1.4 Archaeological and Historical Background

The archaeological background to the development area was described in detail in the desk-based assessment (RPS 2009). A summary is provided below.

No prehistoric finds or features have been recorded within the DA. The nearby Bradgers Hill Lynchets on the west side of the Common (HER 209) are generally thought to be Iron Age (or possibly Neolithic) in origin. To the east of the Common, limited Bronze Age field systems have been recorded at Vale Cemetery (Albion Archaeology 2005) and Butterfield Green Business Park (Luke and Preece, forthcoming). A rectangular crop-mark (HER 3351) and two linear crop-marks (HER 12418) on the west side of the Common may also be prehistoric in date. More extensive Iron Age field systems have been recorded in the investigations at Vale Cemetery (Albion Archaeology 2005) and Butterfield Green Business Park (Luke and Preece, forthcoming), located to the east and north-east of the Common.

Although Roman field ditches were recorded at Vale Cemetery, and a stone-lined pit and gully at Butterfield Green Business Park, there is no known Roman settlement activity in the area.

There is a similar dearth of evidence for Saxon occupation; it is possible that settlements at Butterfield Green, Swifts Green and Stopsley had their origins in the Saxon period, but a single field boundary containing Saxon pottery at Butterfield Green Business Park is the only physical evidence for activity from this period.

The deserted medieval settlement of Swifts Green (HER 17099) is recorded in the HER as being located to the east of the Common, with a possibility that it extended into the DA. Earthworks in the north-eastern part of the Common may have been associated with the medieval Hayes Manor (HER 3341; now Manor Farm). The medieval settlements of Butterfield Green (HER 12399)



and Stopsley (HER 17100) are close to the DA and medieval field systems have been excavated at Vale Cemetery to the east (Albion Archaeology 2005).

Swifts Farm was present in the north-east corner of the Common until the end of the 19th century. Some of the earthworks associated with the farm still existed within the DA, while the remains of an associated dovecote (HER 12658) and a 19th-century brick water cistern (HER 14069) were also thought to be present.

Aside from an area of brickworks and clay pits which was subsequently built over by the Luton Regional Sports Centre, the remainder of the DA had been open land throughout the post-medieval period. It is probable that some of the land within the DA was levelled during the 20th century in order to create sports pitches.



2. RESULTS

2.1 Introduction

Post-excavation analysis consisted of a comprehensive examination of the contextual data in order to provide a coherent spatial and chronological framework. This framework is built from a structural hierarchy of context groupings which gradually become more interpretative in nature.

The structural hierarchy of all excavated contexts comprised:

- Sub-groups (indivisible units of interpretation, *e.g.* the primary fills of the same ditch);
- Groups (more interpretative entities, *e.g.* a building, concentration of pits, or a boundary ditch. Group labels G5, G6 *etc.* are used in this report);
- Land-use groups (a collection of broadly contemporary and spatially coherent groups, *e.g.* a boundary and associated activity, or a field system. Land-use group labels L15, L16 *etc.* are used in this report).
- Phases (divisions of periods based on stratigraphical evidence; there can be several phases to one period).

The results of the post-excavation analysis are presented in chronological order by phases and period.

Phase	Period
Phase 1	Geological deposits
Phase 2	Natural features
Phase 3	Late Iron Age/early Roman enclosure
Phase 4	Late Iron Age/early Roman trackway
Phase 5	Late Iron Age/early Roman trackway (shifted to west)
Phase 6	Undated features (discussed at the end of Section 2)
Phase 7	Post-medieval enclosures
Phase 8	Post-medieval enclosures
Phase 9	Post-medieval field system
Phase 10	Post-medieval farmstead
Phase 11	Modern features

Table 1: *Phases and periods*

2.2 Soils, Geological Deposits and Natural Features

All of the SMS areas were situated in the grassed playing fields of the Luton Regional Sports Centre. Topsoil was generally 0.25–0.35m thick. In all areas it overlay a thinner subsoil which consisted of a friable light orange brown clay silt, 0.14–0.20m thick. The subsoil was derived from the underlying geological deposits and in areas further down the slope may also have formed through colluviation.

The underlying geology (Phase 1) consisted of firm, light orange clay-with-flints, with patches of gravel. All archaeological features occurred at this level.



A number of natural features, largely representing tree-throws and root bowls, were identified in all the SMS areas (Phase 2, Figure 6). No dating material was retrieved from these features. In some instances, they were truncated by late Iron Age/early Roman ditches, suggesting prehistoric origins. Otherwise, they represent trees or vegetation that could have been part of the landscape of the site at any period in time.

2.3 Late Iron Age/Early Roman Field System and Trackway

2.3.1 Phase 3: Enclosures

The whole east side and a proportion of the south side of enclosure L3 were identified in the centre of the DA (Figure 4, Plate 3). The east side of L3 was on a roughly N-S alignment and was 75m long. The roughly E-W aligned south side was exposed for a distance of 65m but its full extent was not ascertained. The enclosure ditch was 1.44–2m wide and 0.35–0.70m deep with sides sloping at 45 degrees to a concave base.

Apart from several abraded fragments of Bronze Age pottery, the ditch also produced a small number of ceramic fragments dating to the late Iron Age/early Roman period.

Two possible smaller enclosures L4 and L13 were situated immediately adjacent to the north-east corner of enclosure L3 (Figure 4, Plate 4). They respected the boundary established by L3 and are thought to be broadly contemporary.

Enclosure L4 may represent the south-east corner of a sub-circular enclosure visible as a crop-mark on an aerial photographs (RAF/HLA/II) examined during post-fieldwork analysis (Figure 3). The full extent of the enclosure on the photograph appears to be c. 20m x 25m. A second small enclosure is visible on the photograph to the west of L4, beyond the limits of Area 3.

Ditch G19, a gully on a NE-SW alignment with a curious ‘kink’ to the west, may represent a possible internal feature within L4. It was 0.21–0.45m wide and up to 0.27m deep, with steep-sided, concave to irregular sides and a concave base. Its precise function was unclear.

Enclosure L13 was more ephemeral and was represented by two shallow lengths of ditch G6 and G23, which could arguably form an enclosure. They were generally 0.45–0.60m wide and up to 0.30m deep with steep, concave sides and a concave base. Both ditches produced late Iron Age/early Roman pottery. Together they formed part of an arc which terminated before making a full circuit. This could be due to horizontal truncation by later activity and ploughing; alternatively, the ditches may never have formed a complete enclosure.

2.3.2 Phases 4 and 5: Trackway

At some point in the late Iron Age/early Roman period a trackway L5 (Phase 4) was established. It extended across, and beyond, the DA for an overall



length of 133m. It consisted of two parallel ditches G3 and G4, spaced *c.* 1.6–1.8m apart on a sinuous N-S alignment (Figure 4). The ditches were generally 0.85m wide and 0.33m deep with steep sides and concave bases. Ditch G8 in Area 2 probably represents a continuation of the eastern trackway ditch G4.

A possible wheel rut G24 was identified between the two ditches G3 and G4 in the northern part of Area 3. However, this contained small fragments of coal and is more likely to be a post-medieval or modern feature (Section 2.4.4).

Several segments of trackway L5 produced small fragments of pottery dating to the late Iron Age/early Roman period. One segment produced a small angle tie which may be Roman or medieval/post-medieval in date (Section 4.1.3).

The trackway skirted the east edge of enclosure L3, at a distance of *c.* 10m, closely following its alignment. This suggests that the enclosure and trackway formed part of a broadly contemporary field system. However, the more ephemeral enclosure L13 was replaced by trackway L5, suggesting some development in terms of landscape division.

The trackway, or the boundary established by the trackway, appears to have out-lived enclosure L3. This is signified by the establishment of ditch L6 (Phase 5) which runs parallel to the trackway at a distance of *c.* 10m to the west. It cuts across the infilled enclosure ditch L3, suggesting that the latter had fallen out of use or that its east side, at least, had been remodelled. The route represented by the trackway appears to have either shifted westwards or to have increased in width.

There is a possibility that the trackway may be post-medieval in date. It contained few finds in total, and its northern ditch G8 seems to head in the direction of the former Swift's Farm in the north-eastern part of the DA. However, during analysis the relationship and alignment of the trackway with the late Iron Age/early Roman enclosure of Phase 3 gained more weight and the trackway was associated with that period.

2.4 Post-medieval and Modern Field System and Farmstead

2.4.1 Phases 7 and 8: Enclosures

Enclosure L7 (Figure 5) is represented by NNW-SSE aligned ditch G13, which ran for an overall length of 36m in the southern part of the DA. It was 0.7–1.03m wide and up to 0.39m deep with convex, slightly stepped sides and a concave base. Ditch G14, on a perpendicular alignment, may represent the north side of the enclosure. It was only revealed for a length of 4m in evaluation Trench 14 where it was 0.6m wide and 0.2m deep with concave sides, sloping to a concave base.

Two fragments of abraded late Iron Age/early Roman pottery were recovered from ditch G13; they are likely to be residual. Enclosure L7 is on a markedly different alignment to the late Iron Age/early Roman Phase 4 trackway. It is



more likely to be associated with the later post-medieval field system, which is on a similar NNW-SSE alignment.

The north-east corner of another NNW-SSE aligned enclosure L8 was revealed in Area 4 in the south of the DA. It was on a similar alignment to ditch G13 of enclosure L7 but truncated its southern end and was therefore later in date.

The north and east sides of enclosure L8 were exposed for a distance of 14m and 8m respectively. The enclosure ditch was 1.55–2.20m wide and up to 0.87m deep with sides sloping at 45 degrees to a concave base. It produced fragments of early and high medieval pottery as well as post-medieval brick.

2.4.2 Phase 9: Field System

Three ditches L9 (Figure 5) were revealed in the eastern part of the DA, forming a field system on a NNW-SSE alignment. The more substantial of the ditches, G9 and G10, were 1.33–2.80m wide and up to 0.74m deep with concave sides which were slightly stepped towards the base. G9 was revealed for a length of 75.6m. Ditch G11, on a similar alignment to G9, was narrower at 0.33m wide and only 0.06m deep. It is possible that ditch G11 is more closely related to the Phase 10 Farmstead L10, which may be contemporary with the field system.

These ditches produced very few finds; the one excavated segment of ditch G9 contained post-medieval brick fragments.

2.4.3 Phase 10: Farmstead

Three postholes, a small gully and a large area of demolition rubble L10 (Figure 5) were exposed in Area 1 in the north corner of the DA. The postholes were spaced 1.0m and 1.7m apart but formed no obvious structure. The small gully may represent a beam-slot foundation.

The area of demolition rubble was irregular in plan and measured 13m x 8m in extent. During the evaluation a single layer of randomly compacted brick and clay, suggestive of a wall foundation, was excavated within the feature.

The location of these features corresponds with that of buildings shown on the 1842 Luton Tithe Map (RPS 2009).

Isolated pit L11 was located c. 24m to the south-west of the farmstead and may be associated. It was c. 3.15m in diameter and 1.05m deep. It produced fragments of post-medieval brick but its function remains uncertain.

2.4.4 Phase 11: Modern features

Three sub-rectangular pits L12 and L14 were recorded in the south part of the DA in Area 4 (Figure 6). They were only recorded in plan as all contained post-medieval brick and fragments of modern concrete.

Modern feature L16 occupied the whole of Trench 2. Its precise nature was undefined, although it appeared to be aligned broadly N-S. Its proximity to



the boundary shown on the 1842 Luton Tithe Map suggests that it may have been associated with a later version of this land division. Its infill dates to the latter half of the 20th century and perhaps relates to ground-works associated with construction of the car parks along Butterfield Green Road.

A short, linear feature G24 between the two ditches of late Iron Age/early Roman trackway L5 was originally thought to be a wheel rut. However, the presence of fragments of coal and a post-medieval angle tie (section 4.1.3) suggest that the feature is post-medieval or modern in date.

2.5 Undated features

Several isolated ditch segments and pits were identified throughout the investigation areas (Figure 6, Phase 6). Their precise nature, function and date could not be fully established. The alignment of most of the ditch segments is more akin to the N-S alignment of the majority of the late Iron Age/early Roman features. As this period saw the most intense utilisation of the site, it is possible that these features represent part of the agricultural landscape at that time.

Notable amongst the undated features was a possible structural feature (S46, G22) recorded in Trench 12 (Figure 6, Plate 2). It was 3.5m long and *c.* 0.5m wide with steep sides, a roughly flat base and at least four post-holes along its length (Albion 2010). It may have been a slot designed to hold a ground beam. However, no other structural features were recorded in the vicinity and the possibility that it could be of agricultural or natural origin cannot be ruled out.



3. DISCUSSION

3.1 *Earlier Prehistoric Period*

No remains that could be securely dated to the earlier prehistoric period were revealed within the DA. The only evidence for early prehistoric activity comes in the form of residual artefacts in later features, *e.g.* the small number of flint flakes and burnt flints recovered from ditch segments of the late Iron Age/early Roman enclosure L3 and trackway L5.

A total of 14 fragments of Bronze Age and 22 fragments of early to middle Iron Age pottery were recovered. Most of the fragments also came from enclosure ditch L3 (Section 2.3.1); all were heavily abraded and entirely residual.

This pottery distribution is reminiscent of that seen on the excavations at Butterfield Farm to the north-east of the DA (Luke and Preece, forthcoming). There, the pottery was believed to indicate the presence of a nearby Bronze Age settlement and the beginnings of early to middle Iron Age occupation of the site. No such settlements exist at Luton Aquatic Centre, although the residual pottery does suggest a general background presence of Bronze Age/early Iron Age agricultural activity and dispersed settlement in the wider area.

3.2 *Late Iron Age / Early Roman Agricultural Landscape*

The majority of features within the DA can be dated to the late Iron Age/early Roman period. They consisted of a large enclosure with several adjacent smaller enclosures and a trackway.

The paucity of artefacts and ecofacts (see Sections 4.1 and 4.2) together with a lack of evidence for internal features suggest that the enclosures did not directly form part of a settlement. It is more likely that they were part of a field system, associated with agriculture — perhaps animal husbandry. The survival of the trackway through a number of phases also suggests that the area was traversed rather than lived in.

Part of an actual late Iron Age settlement has been investigated within an extension to the Vale Cemetery, *c.* 200m to the north-east of the DA (Albion Archaeology 2005). It is possible that the trackway is heading towards that settlement and that the enclosures at Luton Aquatic Centre are part of a wider associated agricultural landscape.

3.3 *Medieval*

No medieval remains were identified within the DA. A small number of residual medieval (AD1250–1400) pottery fragments were retrieved from post-medieval enclosure L8 in the south of the DA (Section 2.4.1). They probably originate from the medieval settlement at Swifts Green towards the south-east corner of the DA (RPS 2009).



3.4 Post-medieval Agriculture

A new agricultural landscape was established in the post-medieval period, represented by field boundary ditches L9 and enclosure L8. The remains of a farmstead L10 in the north-east corner of the DA are also part of this landscape. The remains probably represent part of the 19th-century Manor Farm, which had its origins in 1195 (when it was known as Hayes Manor) and stood in the north-east corner of the field until the later part of the 19th century (RPS 2009).

3.5 Summary of Significance

Investigations at the Luton Aquatic Centre have revealed an agricultural landscape, in existence possibly from as early as the Bronze Age, but with definite dating evidence from the late Iron Age/early Roman to the modern periods.

The DA includes direct evidence for late Iron Age/early Roman agricultural/livestock enclosures and a trackway. Post-medieval enclosures, field boundaries and modern building remains on the site of a medieval to post-medieval manor house / farm were also revealed.

These remains are part of a wider landscape of late prehistoric and Roman settlements, excavated at Butterfield Green (Luke and Preece, forthcoming), Butterfield Business Park (Foundations Archaeology 2006) and the Vale Cemetery extension (Albion Archaeology 2005).

The remains at the Luton Aquatic Centre do not represent concentrated settlement activity but are part of a wider agricultural hinterland between occupation sites. The DA is also located on the periphery of the recorded medieval settlements of Swifts Green and Hayes Manor, although only post-medieval field systems and enclosures were recorded on the site itself.



4. APPENDICES

4.1 Appendix 1: Artefacts

4.1.1 Pottery

The investigations produced 126 pottery sherds, weighing 747g. The majority of the assemblage dates to the late 'Belgic' Iron Age and is associated with enclosures L3, L4 and L13 (Table 2). The pottery survives in very poor condition, with a high incidence of abrasion and leaching; its fragmentary nature is indicated by a low vessel to sherd ratio, and average sherd weight of less than 6g. The degraded state of the pottery suggests it cannot be used to provide entirely reliable dating for the features from which it derived.

Phase	Landscape	Group	Description	Sherd No.	Wt (g)
2	2	17	Tree throws and natural features	2	10
3	3	2	Large enclosure	37	134
	4	7	Small enclosure ditch	51	370
	13	6	Enclosure gully	14	108
4	5	3	Trackway ditch	2	6
	5	4	Trackway ditch	1	15
	5	8	Boundary or trackway ditch	4	4
6	15	22	Undated cut features	2	5
7	7	13	Boundary or drainage ditch	1	12
8	8	12	Enclosure ditch	11	80
9	9	9	Field system	1	3
				126	747

Table 2: Pottery quantification

Pottery was examined by context and twenty fabric types¹ were identified in accordance with the Bedfordshire Ceramic Type Series, held by Albion Archaeology (Table 3). Form codes were assigned where possible, and catalogued within fabric type. Quantification was by minimum vessel and sherd count, and weight. Attributes including decoration, manufacturing techniques, levels of abrasion, and evidence of use (such as the presence of residues, sooting and wear marks) were recorded.

Fabric type	Common name	Sherd No.	Wt (g)
<i>Late Bronze Age/early Iron Age</i>			
F01B	Fine flint	5	20
F01C	Flint and quartz	9	42
<i>Early to middle Iron Age</i>			
F03	Grog and sand	7	48
F17	Grog	6	55
F19	Sand and organic	1	5
F28	Fine sand	3	3
F35	Fine micaceous	5	7
<i>Late Iron Age</i>			
F05	Grog and shell	8	44
F06B	Medium grog	32	238
F06C	Coarse grog	4	25
F07	Shell	1	2
F09	Grog and sand	25	155
F39	Grog and mica	2	9

¹ Defined either by type and quantity of inclusions, or by finish.



Fabric type	Common name	Sherd No.	Wt (g)
F	Non-specific Iron Age	5	8
<i>Medieval</i>			
C03	Fine sand	1	9
C09	Brill/Boarstall ware	1	17
C59B	Sand	2	10
C60	Hertfordshire-type grey ware	6	40
C67	Mixed inclusions	2	9
UNID	Unidentified/undatable	1	1

Table 3: Pottery type series

Prehistoric

The earliest pottery comprises fourteen undiagnostic flint-tempered sherds (62g) of late Bronze Age/early Iron Age date, which occur as residual finds in later features (Phases 3, 4 and 9).

Pottery broadly datable to the early to middle Iron Age comprises 22 undiagnostic sherds (118g), recovered from enclosures G2 (L3), G3 (L5) and G7 (L4). Hand-made sherds occur in a range of fabrics tempered with sand, grog and organic matter, characteristic of the period, and are likely to be residual.

The late Iron Age assemblage comprises 72 predominantly grog-tempered sherds (473g) deriving from wheel-thrown vessels in the ‘Belgic’ tradition (c. 50BC–AD100) and contemporary hand-made shelly coarse wares. Diagnostic elements are everted rim jars, some with combed and rouletted decoration. Several sherds are sooted indicating their use as cooking pots. The majority derive from enclosure G7 (L4).

Medieval

Twelve sand-tempered sherds (85g) of early and high medieval date derived mainly from post-medieval enclosure G12, L8, where they are considered to be residual. Fabrics are local in character, and dominated by Hertfordshire-type grey wares datable to the 12th or 13th century. A single glazed jug sherd of 13th–14th-century Brill/Boarstall ware, a regional import from Buckinghamshire, is the only diagnostic form.

4.1.2 Brick and Tile

Sixteen pieces of sand-tempered peg tile and eight brick fragments (total weight 5.1kg) datable to the post-medieval period were recovered, the majority deriving from Phase 10 pit G26 (L11). The peg tiles range in thickness from 13–16mm; some are mortared, indicating use. A complete brick associated with farmhouse demolition debris G16 (L11) measured 220 x 100 x 50mm.

4.1.3 Non-ceramic Artefacts

A dark grey flint scraper was retrieved from post-medieval boundary ditch G13 (L7) in Area 4. It was a possible hollow scraper or tertiary flake with a shallow triangular cross-section. The platform and bulb of percussion had been removed and there was heavy post-depositional damage on all edges,



apart from the concave edge which retains a section of abrupt retouch. It is 45mm long, 22.2mm wide, and 5.5mm thick.

Hollow scrapers are rare in the Mesolithic and early Neolithic period and common in the late Neolithic/early Bronze Age and also into the later Bronze Age. Post-depositional damage on this scraper is evidence that it is clearly residual.

An iron angle tie was recovered from wheel rut G3 (L5) in Area 3. It is an incomplete, rectangular-sectioned, right-angled example with a tapering foot and short portion of an upright arm. It is 40.8mm long and 25mm high. The angle tie is not closely datable; they are common in the medieval and post-medieval periods but can also date to the Roman period.

4.2 Appendix 2: Environmental Evidence

4.2.1 Methods

A total of seven samples taken for the recovery of charred plant remains were wet-sieved in a York tank using a 0.5mm mesh with flotation into a 0.3mm mesh sieve. The flotation fractions (flots) were air-dried and packed carefully in self-seal polythene bags. The residues were also air-dried and sorted for all finds and recorded in archive.

Flots were sorted for plant and animal remains using a x10-30 stereo microscope. The plant remains were identified by comparison with modern reference material at the University of Leicester Archaeological Services and were counted and tabulated below (Table 4). The plant names follow Stace (1991), both botanical and common names. A few snail shells were also recovered from two of the samples in single numbers too few for analysis. The results are described below.

4.2.2 Results

The flots were all very small and no charred plant remains were recovered except for a few very small fragments of charcoal. Fine roots were present in all the flots with a few remains of soil fungi represented by small round sclerotia. Uncharred seeds were also absent except for occasional fragments in one sample.

Late Iron Age to Roman

Four samples (1, 4, 6 and 7 from ditches in L5, L4, L7 and L3 respectively) contained no charred plant remains other than tiny fragments of charcoal. Two of the samples contained single numbers of snail shells of *Anisus leucostoma* which lives in slum conditions, *i.e.* water prone to drying. This suggests the ditches contained water periodically. There were too few snail shells for analysis.

Post-medieval

Sample 5 from enclosure ditch L8 was similar to those above with no remains other than a few charcoal flecks and a fragment of a modern seed of goosefoot.



Undated

Sample 2 from a pit from L15 contained nothing but a few flecks of charcoal. Sample 3, from another pit in L15, was similar to Samples 2 and 5 with only occasional flecks of charcoal.

4.2.3 Conclusions

No charred plant remains other than tiny flecks of charcoal were present in the samples. Iron Age occupation sites in the region usually produce at least a low density scatter of cereal remains from samples (Monckton 2004), but they are absent here. Possible explanations are that these features may be at some distance from occupation, perhaps as field ditches or in pastureland. In the absence of other evidence from waterlogged remains or a suitable assemblage of snails it is not possible to say.

These samples have no potential for further analysis. The negative evidence here may contribute to future study of the distribution of remains in the area.

Samp No.	Cont No.	Feat type	Samp Vol. litres	Flot Vol. mls	Chc	Gr ch	Cf ch	Se ch	Se un	SN	i/L	Charred plant remains and comments.
Late Iron Age/early Roman												
1	2504	D	9	3	+	-	-	-	-	-	-	Roots, Sclerotia, earthworm egg cases.
4	3031	D	10	2	Fl	-	-	-	-	3	-	Roots, charcoal flecks, 3 water snails.
6	4006	D	10	4	Fl	-	-	-	-	-	-	Small charcoal frag, vitrified frag of rock.
7	3516	D	10	4	+	-	-	-	-	1	-	Charcoal flecks, Sclerotia, 1 water snail.
Post-medieval												
5	3537	D	10	5	Fl	-	-	-	1	-	-	Roots, a modern seed of goosefoots.
Undated												
2	2506	P	9	2	Fl	-	-	-	-	-	-	Roots and flecks of charcoal. Uncharred fungal Sclerotia present.
3	3501	P	9	1	Fl	-	-	-	-	-	-	Roots, charcoal flecks.

Table 4: Summary of environmental samples

Key: Gr = cereal grain, Cf = chaff, Se = seed, ch = charred, un = uncharred, n = nutshell, st = straw, Chc = charcoal, fl = flecks, fr = fragments, lg = large, sm = small, + = present, ++ = moderate amount, +++ = abundant. SN = snail shells, P = pit, D = ditch. i/L = items per litre of soil



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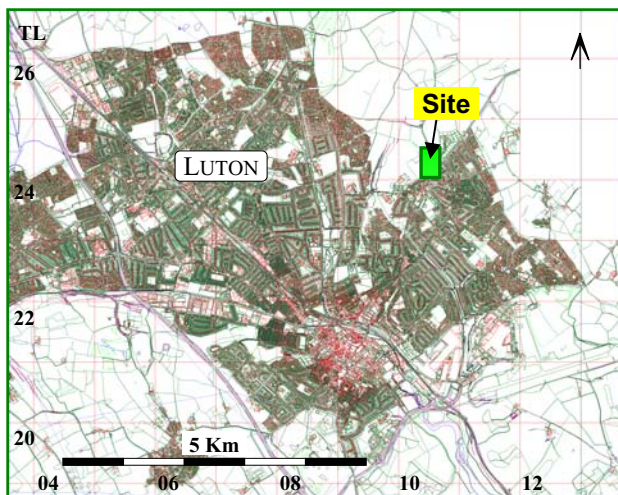
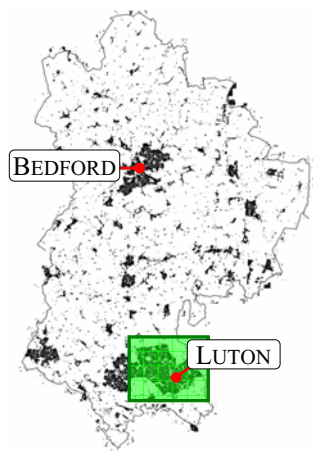
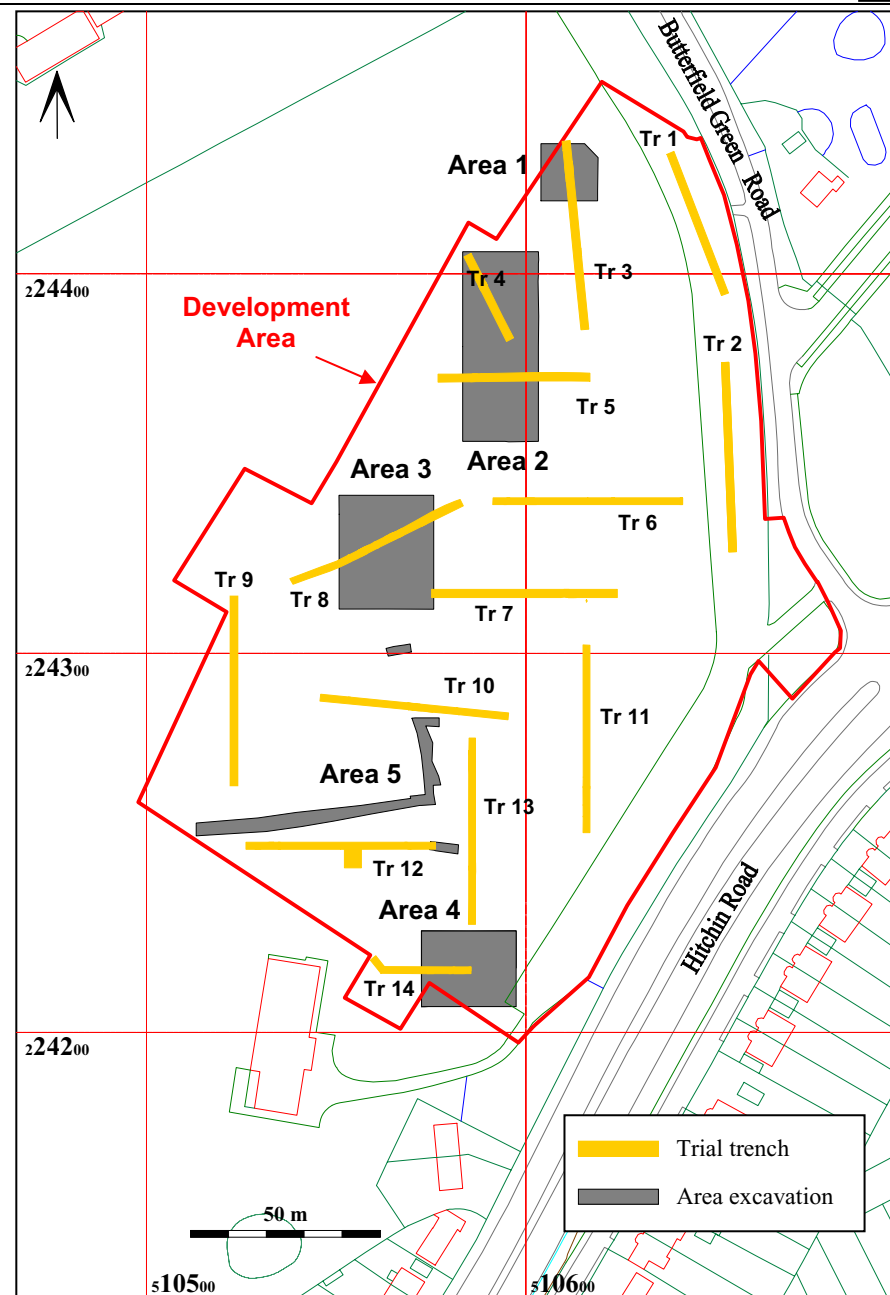


Figure 1: Site location

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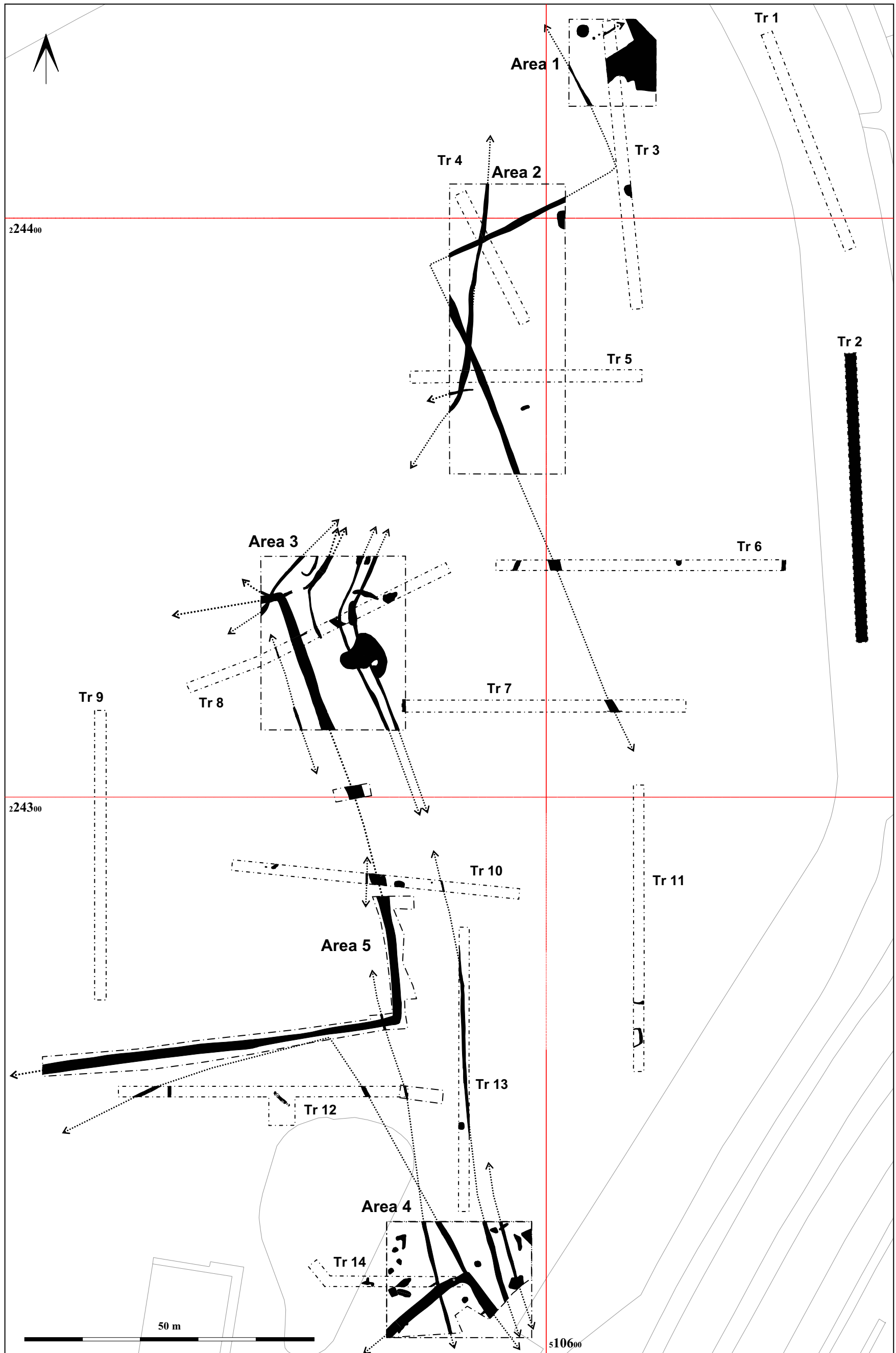
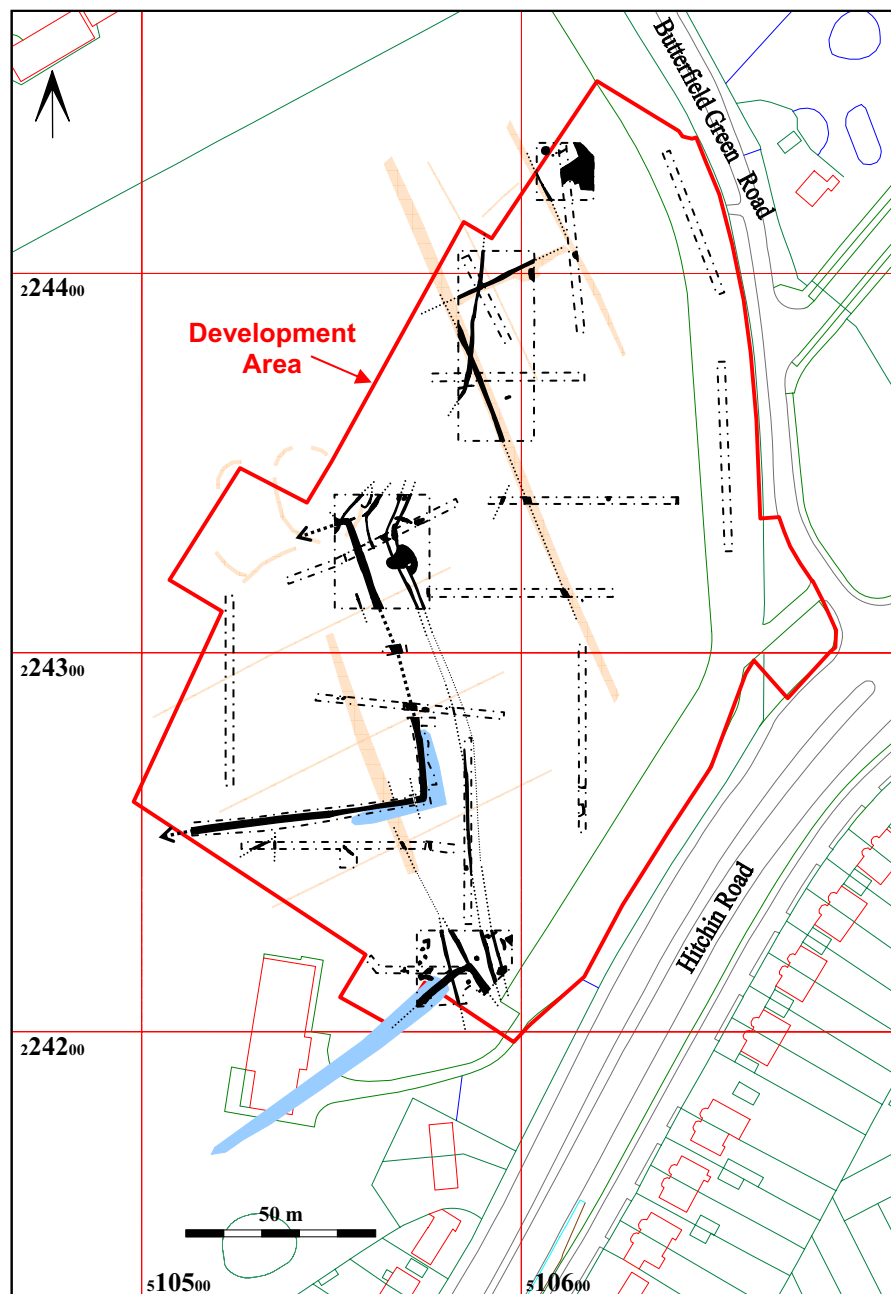


Figure 2: All features plan

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



-  Limits of trenches and excavated areas
-  Archaeological features
-  1941 cropmarks which match excavated features
-  Other cropmarks

Figure 3: All features plan and cropmarks shown on aerial photograph
(ref: RAF/HLA/II)

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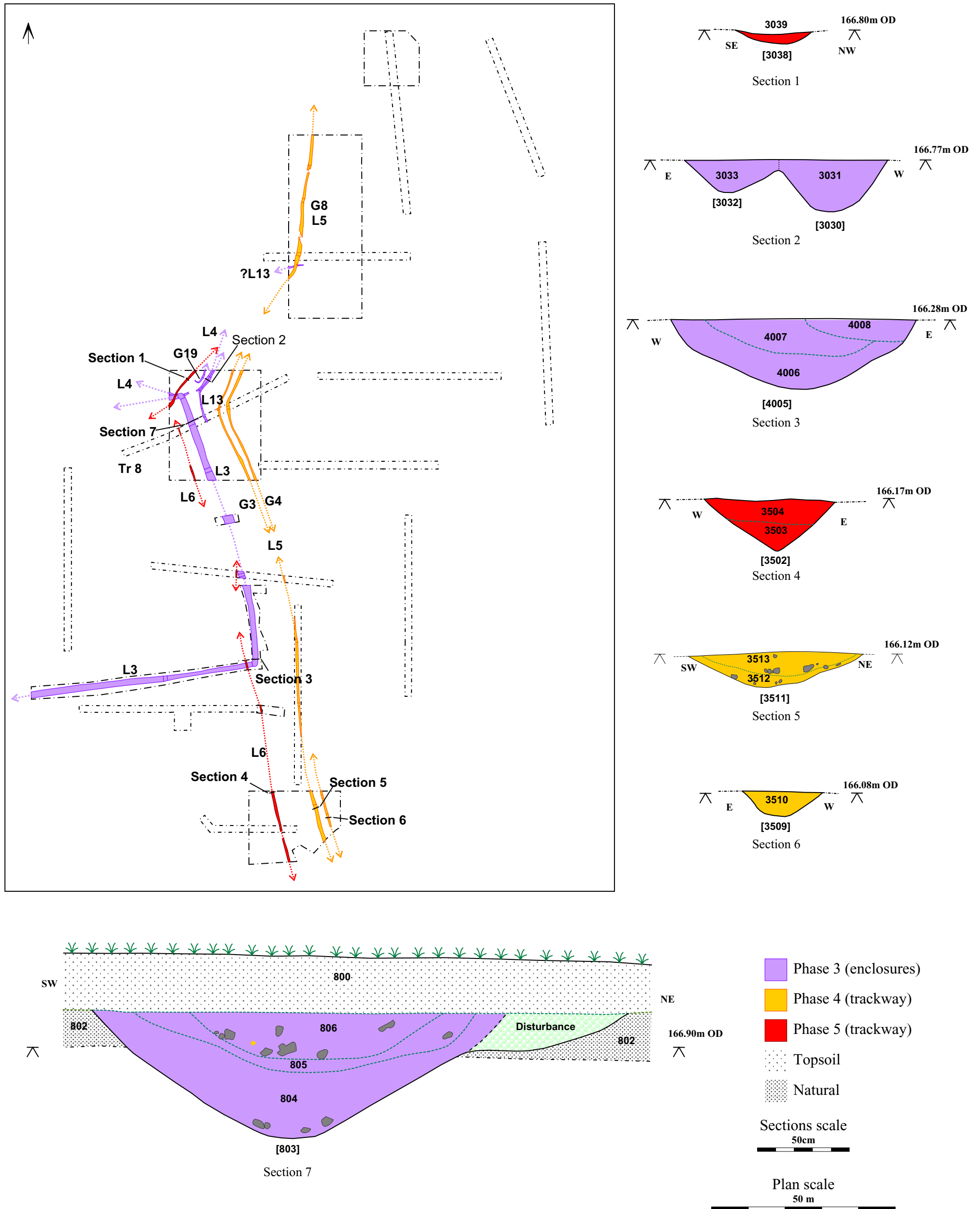


Figure 4: Phases 3–5 (late Iron Age/early Roman)

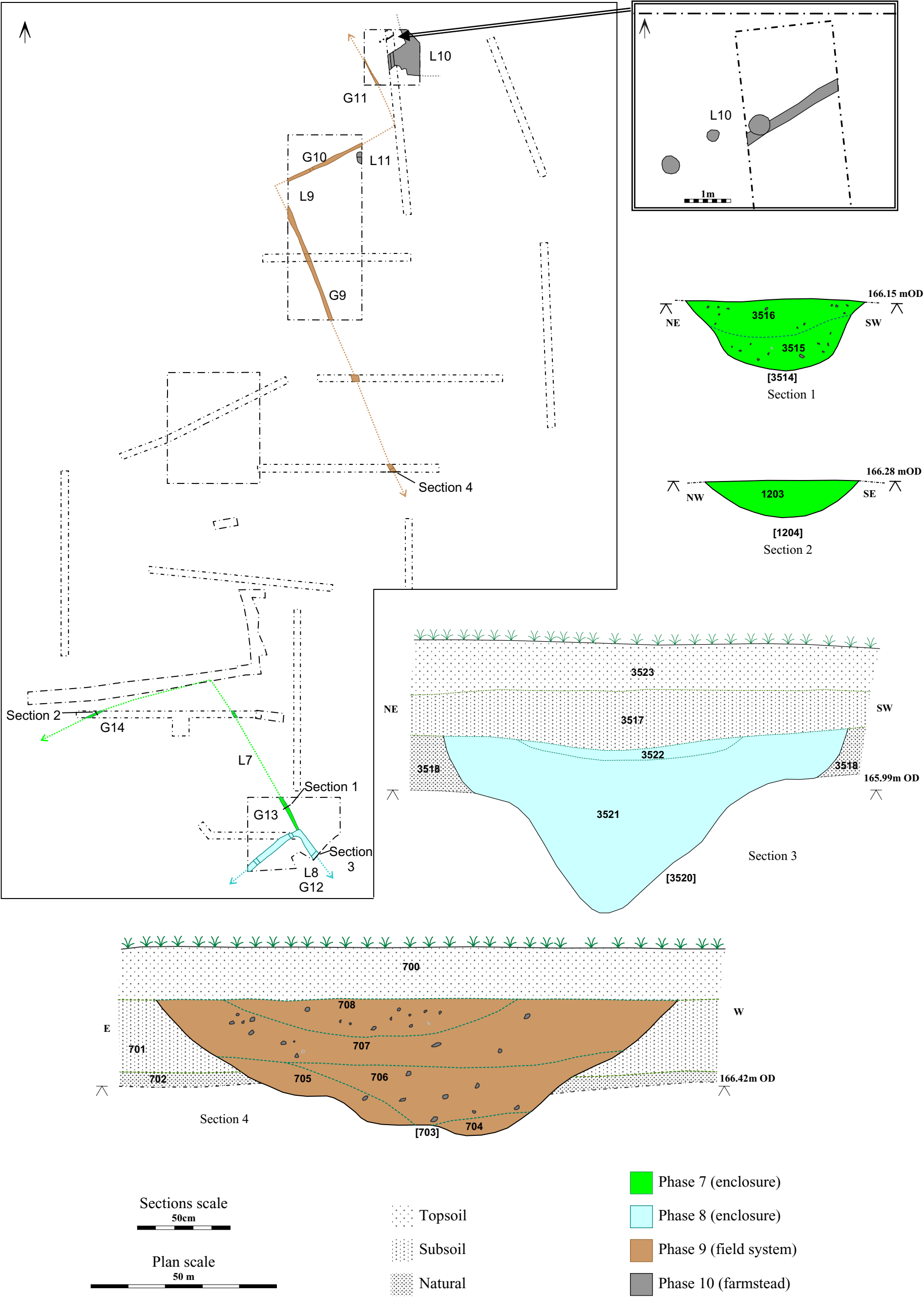


Figure 5: Phases 7–10 (post-medieval)

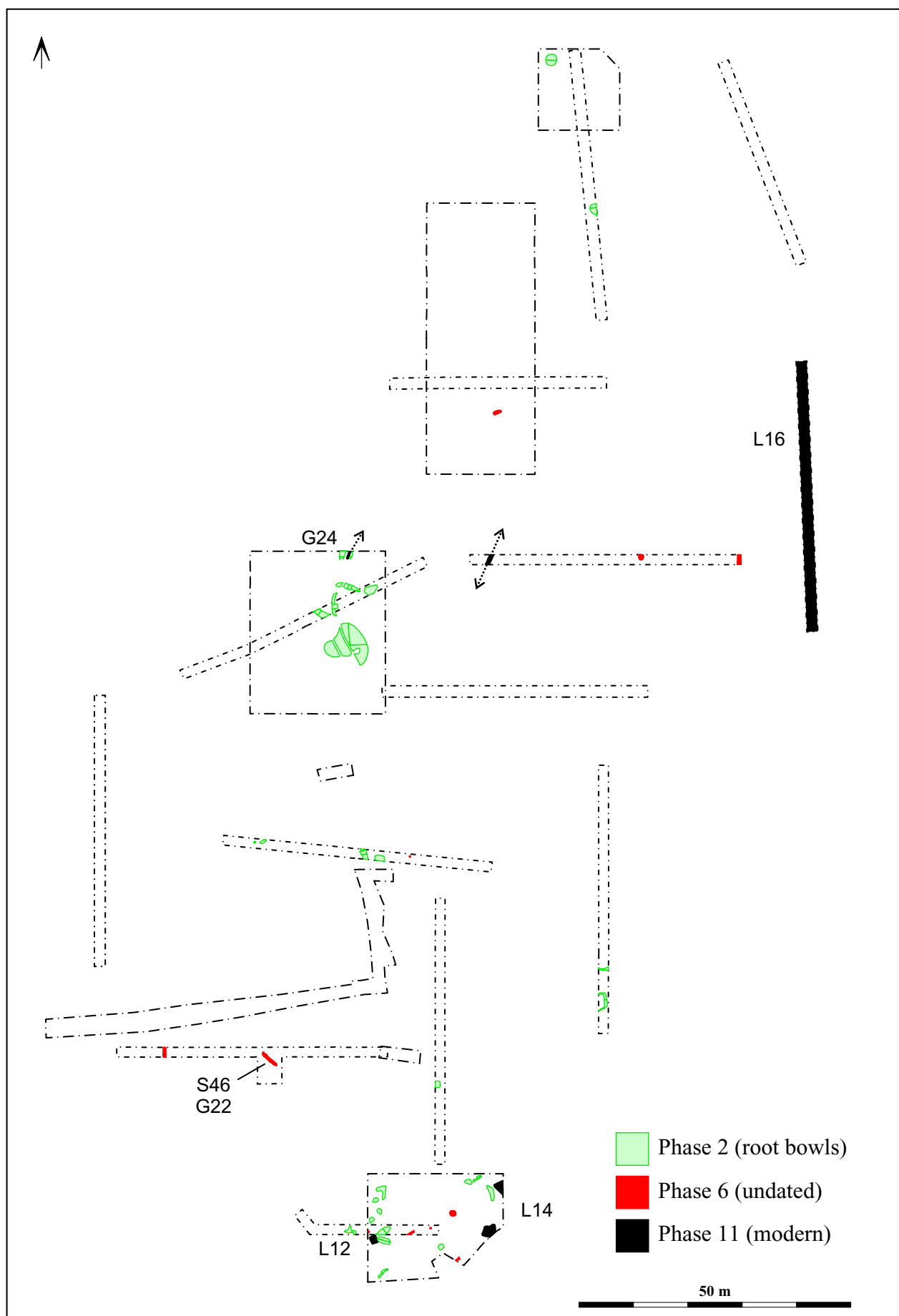


Figure 6: Phases 2, 6 and 11 (root bowls, undated, and modern)



Plate 1: Trial trenching in January 2010



Plate 2: Undated possible structural feature S46 in Trench 12



Plate 3: Late Iron Age/early Roman enclosure L3



Plate 4: Area 3, looking SW. Late Iron Age/early Roman enclosure gullies L4 in foreground



Plate 5: Area 4 looking south. Possible late Iron Age/early Roman trackway ditch L6 and post-medieval boundary and enclosure ditches L7 and L8