#### LAND AT STATION ROAD LANGFORD BEDFORDSHIRE

# **ARCHAEOLOGICAL MITIGATION**

# Albion archaeology





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This report has been prepared by Iain Leslie and Wiebke Starke, with contributions from Holly Duncan (non-ceramic artefacts), John Giorgi (ecofacts), Mark Maltby (animal bone) and Jackie Wells (ceramic artefacts). All Albion projects are under the overall management of Drew Shotliff.

### Version History

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1.0	19/06/2018	n/a

### Key Terms

The following abbreviations are used throughout this report:

HER	Historic Environment Record
CIfA	Chartered Institute for Archaeologists
EAA	East Anglian Archaeology
CBCA	Central Bedfordshire Council Archaeologist
PDA	Permitted development area



Archaeological investigation at Station Road, Langford revealed evidence of early-middle Iron Age, medieval and post-medieval to modern activity.

Early-middle Iron Age activity comprised three rectilinear enclosures of varying sizes, which probably represent elements of a small settlement. Enclosure L1 was located at the southern extent of the excavation area and was defined by substantial ditches. Extending north from this was a more extensive enclosure L3, within which were scattered discrete features as well as a further, small enclosure L2. The remains extended beyond the extent of the investigation area, limiting the conclusions that can be drawn from the revealed remains.

The lack of diagnostic pottery forms makes precise dating of specific settlement elements difficult; however, the available evidence suggests that whilst the settlement may have been established in the early Iron Age, the majority of activity probably took place in the middle Iron Age (c. 4th–2nd century BC). The lack of finds dating to late Iron Age or Roman periods suggests that the settlement was probably abandoned by the 1st century BC. Although there was no direct evidence of habitation, such as roundhouses, the quantity of finds indicates that settlement activity was taking place in the vicinity. The small assemblages of animal bone and charred plant remains corroborate this conclusion.

After abandonment of the Iron Age settlement there is no further evidence of activity within the investigation area until the medieval period. Although very few features of this period were present, the identification of a furrow suggests that this area was most likely open fields at this time, utilised for strip cultivation.

In the post-medieval to modern period a number of field boundaries were established, defined by ditches. Gaps in the boundaries probably represent field entrances and parallel ditches in the eastern part of the excavation area may represent a routeway. Given their isolated position within a field, the cluster of pits and layer are probably associated with farming activities.

A summary of the work will be published in South Midlands Archaeology and this report will be uploaded onto the OASIS website (ref. no: albionar1-277098). With the landowner's permission, the archive will be deposited with the Higgins Art Gallery & Museum (accession no.: BEDFM 2015.40).



#### 1.1 Project Background

Planning permission (CB/15/02419/FULL) was granted by Central Bedfordshire Council for the construction of 42 dwellings and associated infrastructure on Land North of Flexmore Way, Station Road, Langford (Figure 1). Archaeological evaluation comprising geophysical survey (Stratascan 2014) and trial trenching (Albion Archaeology 2015), undertaken in support of the planning application, identified archaeological remains in the central and eastern parts of the permitted development area (PDA). As a result, the Central Bedfordshire Council Archaeologist (CBCA) recommended that a programme of archaeological works should be undertaken as a condition of planning consent.

Albion Archaeology was commissioned to undertake the archaeological works, in accordance with a Written Scheme of Investigation (WSI) that was approved in advance by the CBCA (Albion Archaeology 2017).

#### 1.2 Site Location and Description

Langford lies immediately east of the River Ivel, *c*. 3km south-west of Biggleswade and *c*. 20km south-east of Bedford, north of the A507. The settlement extends northwards along the B659 (Figure 1).

The PDA lies in the south-east part of Langford (known as Flexmore End) between Flexmore Way and Station Road. It is roughly rectangular in plan, covering an area of c. 1.5ha, centred on grid reference TL 1881 4033.

It lies on slightly sloping ground, which falls from 40m OD in the east to 37m OD in the north-west towards the valley of the River Ivel. The superficial deposits comprise Quaternary Glacio-fluvial sands and gravels of the Lowestoft Formation, above Mudstone of the Gault Formation. Further west, chalky, sandy, stoney clay Till deposits are exposed, beyond which are 1st and 2nd terrace deposits of the River Ivel (BGS 2001). Immediately prior to thee commencement of the mitigation works, the site was grassland, grazed by horses.

### 1.3 Archaeological Background

#### 1.3.1 Introduction

The archaeological background to the site is principally provided by the evaluation that was undertaken in support of the planning application. A search of the Historic Environment Record (ref. no. 201617/309) was also undertaken during preparation of the WSI.

#### 1.3.2 Archaeological and historical evidence

There is evidence for the utilisation of the landscape around Langford over an extended period of time, commencing in the prehistoric period. Neolithic and Bronze Age ritual activity is located near Biggleswade in the form of a cursus (HER 644), an unusual "C-shaped" monument at Broom Quarry (Cooper and Edmunds 2007), and a number of round barrows and ring ditches (HERs 3576 and 9093). There is evidence for settlement remains contemporary with the ritual monuments at Broom Quarry



A cropmark complex consisting of polygonal enclosures and an abutting linear feature (HER 16810), identified from aerial photographs to the north-east of Langford, may be prehistoric in date.

To the east of the PDA, beyond Station Road, evidence of early-middle Iron Age settlement (HER 19872) has been revealed by evaluation and open-area excavation (Albion Archaeology 2014; 2018). This site is part of the extensive Iron Age and Roman settlement of the Ivel valley.

A Roman origin has been postulated for Cambridge Road to the south of the PDA (Viatores No 176, HER 5342). A small number of Roman find-spots have been recorded near Langford — a reputed item of Roman cavalry equipment (HER 16287) near the railway crossing to the south of Cambridge Road and two Roman coins (HER 19402 and HER 19447), recorded by the PAS east of the village. A series of Roman settlements to the east of Broom (HER 631, HER 1486 and HER 9095) and also around Stotfold (HER 74, HER 16829 and HER 19534) occupy similar topographical locations to the current PDA.

A number of archaeological investigations have been undertaken in the area — at Pound Close and Mushroom Farmhouse (HER 19841) (Hood 2012 and Albion Archaeology 2012 respectively). These revealed well-preserved archaeological deposits relating to the origins and development of the settlement in the Saxon and medieval periods.

The earliest written mention of Langford comes from 944–6 (Coleman, unpublished). It has been suggested that Church End was Danish in origin, due to the presence of Danish names amongst its earliest recorded inhabitants.

Langford is recorded in Domesday Book of 1086 as having a manor assessed at 10 hides and held by Lewin, a thegn of Edward the Confessor. Two smaller manors, the manor of Holme with Langford and Langford Rectory, were offshoots of the main manor (Page 1908). A church is recorded in the parish from at least 1142, presumably on the same site as the 13th-century St Andrew's Church, situated in Church End (HER 1087).

The current elongated settlement of Langford combines a number of smaller medieval settlements, with the PDA including part of the medieval hamlet of Flexmore End (HER 17137). This is one of a number of "ends" in the parish, with Church End to the north (HER 17135) and Water End (HER 17136) on the bank of the River Ivel to the south-west. Documentary evidence for Langford, including an entry in Domesday Book, suggests that the settlement originated in the Saxon period. It is likely that Langford, which has several ends, was a polyfocal settlement in this period.

Portable Antiquities Scheme (PAS) finds dating to the medieval period consist of a medieval pilgrim badge (HER 19403) and a mount and pilgrim badge, dating to the medieval or post-medieval period (HER 19397 and HER 19401 respectively).

#### **1.3.3** Evaluation results

Evaluation revealed archaeological remains in the central and eastern parts of the PDA, principally comprising a series of early-middle Iron Age land divisions, including an enclosure and other linear land boundaries that been remodelled at least once. Other undated but possibly associated activity comprised two postholes. Finds comprised small quantities of pottery and animal bone, recovered from the southern part of the site, possibly indicating a focus of activity. These remains were thought to represent the continuation of an extensive early Iron Age enclosure system identified on the opposite side of Station Road. Also present in the trenches were a series of boundaries corresponding to post-medieval and later land divisions depicted on historical maps.

# 1.4 Project / Research Objectives

The principal objective of the archaeological investigation was to preserve the archaeological evidence contained within the site by record and to determine and understand the nature, function and character of the site in its cultural and environmental setting. Based on the local and regional research agenda, the research objectives for the excavation aimed to:

- Identify potential evidence for late Bronze Age/early Iron Age transition of activity and settlement (Medlycott 2011, 30);
- Characterise of the early Iron Age enclosure, its date, form and function;
- Characterise the chronological development, layout and zonation of any settlement remains and investigated their relationship with surrounding contemporary settlement and landscape features (Bryant 2000, 15; Oake 2007, 11; Medlycott 2011, 30–1);
- Characterise the ditches extending from the enclosure (Medlycott 2011, 30, Oake 2007);
- Characterise the origins and development of field systems and the relationship between field systems and settlements in the Iron Age (Oake 2007, 10–12; Bryant 2000, 15; and Medlycott 2011, 47);
- Retrieve artefactual and ecofactual material to assist in characterising the early Iron Age settlement, the economy, status and social organisation of its inhabitants, and to determine local environmental conditions (Medlycott 2011, 30–2);
- Retrieve pottery in order to refine the early Iron Age ceramic chronology of the region (Oake 2007, 20; Medlycott 2011, 31);
- Establish whether any features relating to the medieval settlement at Flexmore End were present on the site and characterise their nature (Oake 2007, 14).

### 1.5 Methodologies

The full methodological approach to the project is detailed in the WSI (Albion Archaeology 2017). The project adhered throughout to the standards set out in the following documents:

Albion Archaeology Procedures Manual: Volume 1 Fieldwork (3rd edn. 2017)
 ALGAO (East) Standards for Field Archaeology in the East of England (2003) East Anglian Archaeology Monograph. Association of local Government Archaeological Officers

•	Bedford Borough Council CIfA	Preparing Archaeological Archives for Deposition in Registered Museums in Bedford (ver. 2.8, 2010) Charter and By-law and Code of conduct (2014) Standard and guidance for archaeological excavation (2014) Standard and guidance for the collection
•	Historic England (formerly English	<i>Standard and guidance for the collection,</i> <i>documentation, conservation and research of</i> <i>archaeological materials</i> (2014) <i>Management of Research Projects in Historic</i> <i>Environment, PPN 3: Archaeological Excavation.</i>
	Heritage)	English heritage Guidelines (2015) Management of Research Projects in the Historic Environment (MoRPHE) Project Managers' Guide (2015) Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (2nd edn. 2011)

An excavation area of c. 0.6 ha was stripped to the top of the undisturbed geological deposits under archaeological supervision. The investigations were undertaken between 24th July and 17th October 2017.

#### 1.6 Project Archive

With the landowner's permission, the project archive will be deposited with the The Higgins Art Gallery & Museum (accession no.: BEDFM 2015.40). Details of the project and its findings will be submitted to the OASIS database (reference no.: albionar1-277098) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.



#### 2.1 Introduction

The results of the investigation are presented below. This section presents the contextual evidence, while information on the artefacts and ecofacts that were recovered can be found in Section 3.

For ease of analysis and discussion, all features recorded on site were combined into Groups (indicated by a 'G' prefix). The Groups were then assigned to Landuse Areas (indicated by an 'L' prefix) and then to chronological Periods. A total of 402 context numbers were recorded and assigned to the hierarchy.

Period		G	Description	No.
_			-	contexts
1	Early–middle Iron Age	6	Eastern north-south aligned enclosure ditch	13
		7	Southern east-west aligned enclosure ditch	10
		8	Western north-south aligned enclosure ditch	30
		9	Pits and postholes inside large rectilinear enclosure	12
		10	Small rectilinear enclosure	34
		11	Internal features of small enclosure G10	6
		12	Discrete features in close proximity to small enclosure G10	8
		13	Curvilinear ditch	6
		14	Features west of enclosure G18	14
		17	Internal pits of enclosure G18	27
		18	Enclosure	142
		19	Other internal features of enclosure G18	4
		21	Cluster of five pits and two postholes	21
2	Medieval	5	Furrow	2
		15	Pits	4
3	Post-medieval to modern	1	Pits	7
		2	Boundary ditch	6
		3	Boundary ditch	19
		4	Boundary	31
		16	Undated pits and layer	6
Total				402

#### Table 1: Summary of Groups

The text which follows is structured by Period and discussed by Group and Landuse area. A plan of all the excavated features can be found on Figures 2 and 3, with selected sections on Figure 4 and photographs on Figures 5–8.

Most of the deposits on site comprised relatively homogeneous mid-brown sandy silt or silty sand with minor variations. Lower deposits occasionally comprised silty clays. Individual deposits are only described below where they differed significantly from this 'norm'.

### 2.2 Early-middle Iron Age (Period 1)

The majority of features encountered during the excavation have been assigned to this period. They comprised several enclosures of varying sizes as well as small clusters of pits and postholes. Dating is based on the modest pottery assemblage (2.1kg), which comprised almost entirely non-diagnostic Iron Age sherds, making precise dating difficult. The available evidence suggests that the settlement was probably



established in the early Iron Age, with the majority of activity occurring in the middle Iron Age. Other finds included 4.7kg animal bone and 0.3kg fired clay.

The features in this period were assigned to three Landuse areas (L1, L2 and L3), which are discussed below (Figure 3).

#### 2.2.1 Enclosure and associated features L1

Landuse area L1 (shown in green on Figure 3) comprised enclosure G18, features within the enclosure G17/G19 and features located just outside the enclosure G14.

The enclosure continued to the south beyond the limits of the development area and, therefore, its full extent and form are unknown. The exposed part of the enclosure was rectilinear in form, at least 28m by 18m in size, covering an area of 225m<sup>2</sup>. No entrance was present within the excavated area.

The enclosure's defining ditch was substantial and had been recut on multiple occasions. The excavated segments suggest that the ditch had been recut at least ten times with the ditches ranging in size from 0.5–2.7m wide and 0.3–1.2m deep (Figure 4: sections a and d). The earliest ditches tended to be located closer to the interior of the enclosure, with subsequent recuts moving progressively outwards. Tipping lines visible within the fills of the enclosure ditches may suggest that an interior bank was present (Figure 4: sections a and d; Figure 5). A dark deposit within several of the ditch sections (see Figure 5) may represent slumping of unstable topsoil from an internal bank, situated close to the edge of the ditch.

Within the enclosure was a cluster of five pits G17 and two postholes G19. The pits ranged in size from 0.6-2m wide and 0.4-1m deep (Figure 4: section c). They were located at the northern limit of the enclosure and truncated the innermost ditch. Their presence at this location may suggest that, if there were an inner bank at this time, there was a gap or berm between the ditch and bank, within which these pits were situated. Subsequently an unstable topsoil bank, possibly an 'enhancement' of the enclosure, appears to have encroached on this area. Two adjacent postholes G19 were situated at the north-west corner of the enclosure; they were *c*. 1.2m apart, *c*. 0.4m in diameter and 0.05m deep (Figure 4: section g).

Two elongated pits and a posthole (G14) were located just beyond the west side of the enclosure. One of the pits contained a single sherd of Iron Age pottery. These features were probably contemporary with the main enclosure, although their function is uncertain.

#### 2.2.2 Small enclosure and associated features L2

Landuse area L2 (shown in light blue on Figure 3) comprised a small sub-rectangular enclosure G10, internal postholes G11 and nearby features G12 and G13. Enclosure G10 measured c. 16.5m by 9.5m, with an approximate internal area of  $110m^2$  (Figure 5). It was aligned broadly north-west to south-east, with a 5.8m-wide entrance at its north-west corner. The enclosure was defined by a U-shaped ditch, c. 0.7–1.7m wide and 0.3–0.6m deep (Figure 4: section e; Figure 7); its north-west side was slightly curved. The corner location of the entrance may suggest that, originally, the enclosure served a livestock function.

Three postholes G11 within the enclosure formed no obvious pattern or structure. Four further isolated postholes G12 were present in close proximity to the enclosure, but again did not form any discernible pattern.

A curvilinear ditch G13 was located c. 6.5m to the south-east of enclosure G10. The ditch continued beyond the limits of excavation to the south-east and, therefore, its full form in plan is not available. It did, however, terminate to the north. The ditch had a U-shaped profile, 0.7m wide by 0.25m deep. The curvature, profile and size of the ditch as well as the northern terminus are similar to that of the north-west side of enclosure G10, which may suggest that it forms part of a similar enclosure.

# 2.2.3 Large enclosure L3

Landuse area L3 represents a possible larger rectangular enclosure (covering an area of at least 0.4ha) defined by ditches G6, G7 and G8, as well as two activity clusters G9 and G21 (shown in light brown on Figure 3). The long axis of the enclosure was aligned NNW-SSE, although its northern side was not identified within the excavation area. At its south-west corner it appeared to respect/incorporate enclosure G18 (L1), suggesting that they were contemporary. Enclosure ditch G8 stops short of enclosure ditch G18 (L1), creating a 2.5m-wide gap (Figures 3 and 6). This may suggest that they were associated — this type of narrow gap in the corner of an enclosure may have been designed for the management and control of livestock.

The enclosure was defined on its south (G7) and east (G6) sides by small gullies *c*. 0.5m wide by 0.1–0.3m deep (Figure 4: section 1). The west side of the enclosure was defined by a much more substantial ditch (G8), which was *c*. 1.5–2m wide and up to 1.4m deep with a Y-shaped profile (steeply tapering V with near-vertical lower element) (Figure 4: section b and Figure 6). The substantial size of this ditch, compared to the other components, suggests it may have served a purpose beyond that of simple drainage or field enclosure. The geophysical survey (Stratascan 2014) suggests that ditch G8 continued to the north-west beyond the limits of the PDA.

Set within the enclosure were two loose clusters of activity, G9 to the west and G21 to the east (in addition to the small enclosures and associated activity described above (L2)). Activity area G9 comprised three postholes and two pits; activity area G21 comprised five pits and two postholes. The postholes did not form any obvious structure or pattern, whilst the pits were generally sub-circular with U-shaped profiles, up to c. 1.3m in diameter by 0.4m deep (Figure 4: sections h and i). The two activity areas formed a loose linear arrangement of features on a roughly east-west alignment across the width of the enclosure (c. 60m long). Whilst it is unlikely that the features themselves formed a boundary, it is possible that this arrangement reflects the presence of a contemporary boundary, of which no remains survived.

### 2.3 Medieval (Period 2)

Very little medieval evidence was present within the excavated area (shown in purple on Figure 3). Two intercutting pits G15 at the northern limit of the area contained five sherds of medieval pottery (0.04kg). They were U-shaped in profile, *c*. 0.5–1.3m in diameter by 0.25–0.35m deep (Figure 4: section f). A single surviving furrow G5, extending from the south-east margin of the excavated area, suggests that the PDA was mostly likely open fields in this period.



### 2.4 Post-medieval to Modern (Period 3)

This period was characterised by ditched field boundaries (G2–G4) and clusters of pits (G1 and G16), confined to the northern part of the site (shown in red on Figure 3). The field boundaries were on a roughly WSW-ENE and SSE-NNW alignment and were defined by 1–2m-wide ditches (Figure 4: sections k and m and Figure 8). Gaps along the eastern side of the enclosures adjacent to G4 may represent field entrances and possibly a routeway. Ditch G3 correlates with a boundary shown on the First Edition OS map of 1881.

A cluster of pits and adjacent layer (G1), located within a gap in boundary ditch G2, probably defined at least one outbuilding or field barn (Figure 4: section j).

Finds from these features included 0.2kg pottery, 1kg animal bone, 0.3kg ceramic building material and two sherds of vessel glass. The majority dated to the post-medieval or modern period, although sherds of residual Roman and medieval pottery were also recovered.

# 3 ARTEFACTS AND ECOFACTS

### 3.1 Pottery

### 3.1.1 Introduction and methodology

A total of 199 mainly Iron Age sherds, representing a minimum of 94 vessels (2.3kg) was collected. Fifteen sherds are datable to the Roman, medieval, post-medieval and modern periods. Fabric types are identified in accordance with the Bedfordshire Ceramic Type Series (Table 2).

Fabric type	Common name	Sherd no.	Wt (g)
Iron Age			
F01A	Coarse flint	2	11
F01C	Flint and quartz	11	69
F03	Grog and sand	1	3
F16	Coarse shell	8	201
F16B	Vesicular shell	2	130
F17	Grog	2	12
F18	Sand and shell	2	5
F19	Sand and organic	9	61
F20	Calcareous	1	27
F28	Fine sand	70	621
F29	Coarse sand	22	228
F37	Calcareous mixed	15	147
F38	Glauconitic	39	582
Roman			
R05A	Oxidised sandy	1	11
Medieval			
C59A	Coarse sand	5	39
C59B	Harsh sand	3	8
E01	Late medieval reduced ware	1	16
Post-medieval			
P01	Glazed fine red earthenware	3	183
Modern			
P55	White earthenware	2	17

Table 2: Pottery quantification by type

### **3.1.2** Iron Age (Period 1)

The assemblage totals 184 sherds (2kg) the majority deriving from enclosures G10 and G18 (Table 3). Pottery displays variable fragmentation, with the smallest sherd weighing 1g and the largest 155g (mean sherd weight 11g). Dense sandy wares comprise the dominant fabric group, with a smaller number of wares containing flint, fossil shell, grog, calcareous inclusions, and organic matter. No diagnostic vessel forms occur; three upright flattened rims (one with finger nail impressed decoration) are the only feature sherds (Figure 7). The surfaces of most sherds are untreated, although two have been wiped smooth and seven are faintly scored. Thickness of the hand-built vessel walls ranges from 5–14mm.

The small assemblage size and lack of diagnostic forms makes dating problematic. However, the dominant sandy wares and scored sherds are closely paralleled by a recently excavated middle Iron Age (*c*. 4th–2nd centuries BC) assemblage on the east side of Station Road, Langford (Albion Archaeology 2018). The pottery also compares well with material recovered from middle Iron Age (Ceramic Phase III) deposits at the Gypsy Lane and Hill Lane sites at nearby Broom (Brudenell 2007,



257). The small number of flint-tempered sherds, usually dominant in later Bronze Age/early Iron Age assemblages are either residual, or suggestive of 'background' activity during this period.

Table 3: Pottery quantification by Period and Group

#### 3.1.3 Medieval (Period 2)

Adjacent pits G15 yielded four abraded sand-tempered body sherds (23g) of 12th–13th-century date and a sherd of late medieval reduced ware (16g).

#### **3.1.4** Post-medieval to modern (Period 3)

A disparate assemblage of ten sherds (235g) was collected from field boundary ditches G3, G4 and pit cluster G1: a highly abraded Roman coarse ware sherd, four sand-tempered early medieval sherds, three sherds of 17th-century fine glazed earthenware and two pieces of 19th-century white earthenware. The features also contained three sand-tempered pieces of late medieval/post-medieval roof tile (264g) and three brick fragments (77g).

#### 3.2 Fired Clay

Deriving entirely from Period 1 pits G17 and enclosure G18, the assemblage totals 23 fired clay pieces (292g). Fragments occur in a coarse oxidised sandy fabric, a few containing organic inclusions. The material is well-fired, with a mean fragment weight of 13g. Most pieces are amorphous, although seven organic examples retain flat or slightly undulating finger-smoothed surfaces and wattle impressions c. 20mm in diameter.

#### 3.3 'Other Artefacts'

#### 3.3.1 Introduction and methodology

A total of seven 'other artefacts' was recovered during investigations. Each object was assigned a preliminary identification and functional category and was quantified by number and/or weight. The assemblage contained one worked flint, two items of iron, two of copper alloy and two fragments of glass.

### **3.3.2 Early-middle Iron Age (Period 1)**

'Other artefacts' from Period 1 deposits were limited to two items. A primary flint flake of opaque toffee-coloured flint with step fracture at the distal end was found within the fills of ditch G10. The relatively thick butt at the proximal end, combined with the step fracture indicate the flake was hard hammer-struck. Extensive post-depositional damage to the lateral edges of the flake suggests it was residual.

The fills of ditch G7 yielded a short portion (26.5mm) of a narrow (13.5mm) triangular-sectioned blade, possibly approaching the tip of a knife or shears blade (RA3). Unfortunately, due to the small size of this fragment, certainty as to identification is not possible.

#### 3.3.3 Post-medieval to modern (Period 3)

Period 3 deposits accounted for five objects, the majority recovered from east-west ditch G3 or north-south gullies G4. Ditch G3 contained part of a dark olive green rim, neck and start of the body of a wine bottle, the neck constricted below the down-tooled string rim, with an additional trail tooled down over the upper edge of the string rim. This conforms to Ivor Noel Hume's type 26 wine bottle, and is dated to 1750–80 (1961, 105 and fig.5). Also from ditch G3 was a fragment of copper alloy with a small section of curved edge (RA1). This may be the remains of a coin or token; however, it is illegible. A second fragmentary item (RA4) is of iron and appears to be the heel of a horseshoe; again not enough of the shoe survives to assign it to a type or date range.

Gully G4 also produced a fragment of flattened copper alloy sheet metal vessel (dimensions 75mm by 50mm by 0.9mm), with evidence of repair, in the form of a circular hole near the rim and a smaller hole on the body (RA2). Such vessels are not closely dated but are fairly common finds in later medieval and post-medieval contexts (Margeson 1993, 93 nos, 566, 567A; Egan 1998, 169-172; Biddle 1990, 951).

One of the pits of cluster G1 contained a pale olive green glass fragment, from the body, probably shoulder, of a vessel. The form of the vessel cannot be determined; it could derive from a thin-walled (2.2mm) jar/jug or possibly a wine bottle.

### 3.4 Animal Bone

#### 3.4.1 Introduction and methodology

All the bones and teeth recovered from the investigation were recorded individually onto a relational database (Microsoft Access). In the main database table the following data were recorded where appropriate for each specimen: species; anatomical element; zones of bone present; approximate percentage of bone present; gnawing damage; erosion; weathering; burning (charring and calcification); fusion data; other comments including observations of pathology. Separate tables linked to the main table by an individual identification number were created for metrical, butchery and tooth ageing data. Tooth eruption and wear descriptions for cattle, sheep/goat and pig follow the method of Grant (1982). Measurements followed those described by von den Driesch (1976). All fragments, including loose teeth, shaft fragments, rib heads and vertebrae were recorded to species level where possible. Unidentified elements were placed into two size categories where possible: large mammal (cattle, horse or red deer); and medium-sized mammal (sheep/goat, pig, dog, roe deer).

#### **Overall Sample Size and Bone Preservation**

Animal bones were retrieved from 53 contexts. They provided a total of 481 individual specimens (NISP), of which only 96 were identified to species (Table 4-Table 7). All bar 28 elements came from Period 1 (early–middle Iron Age). The

remainder came from Period 3 (post-medieval to modern). Sieved samples (all from Period 1) produced 86 of these fragments, of which only six were identified. Assemblages from each context were assigned to one of five preservation grades. None of the assemblages were allocated to the highest grade (excellent preservation) and only one assemblage was graded as good, containing bones with good surface preservation and relatively little fragmentation or other damage. Thirty-two contexts produced moderately-preserved assemblages, which generally had fair surface preservation but included significant numbers of slightly weathered specimens. Sixteen assemblages were assigned to the quite poorly preserved category. These contained higher numbers of eroded and weathered fragments. Four assemblages were classified as very poorly preserved consisting entirely of burnt fragments in three cases and very heavily eroded bones in the fourth. A total of 20 fragments, all from Period 1, were burnt, including one each of cattle and sheep/goat. Amongst the identified elements, 24 were recorded as eroded (including four from Period 3) and 19 as weathered (including one from Period 3). Many of the bones had modern breaks. Gnawing damage was observed on seven cattle elements (2 from Period 3), and on a pig and seven horse elements (all from Period 1). In general therefore, the assemblage was only moderately preserved.

#### 3.4.2 Early-middle Iron Age (Period 1)

A total of 453 animal bone fragments were recovered from three Landuse areas. Seventy-five of these were identified (Table 4).

Landuse Area	1	2	3	Total	%		
Cattle	22	8	9	39	52.0		
Sheep/goat	9	2	1	12	16.0		
Pig	2	1	1	4	5.3		
Horse	17	3		20	26.7		
Total identified	50	14	11	75			
Large mammal	33	13	2	99			
Medium-sized mammal	7	2	1	194			
Unid. mammal	19	14	52	85			
Total unidentified	59	29	55	378			
Total	109	43	66	453			
Counts are of numbers of individual specimens (NISP)							

Table 4: Period 1 (early-middle Iron Age) animal bone species counts by Landuse Area

#### Enclosure and associated features L1

Of the 109 fragments, 97 came from enclosure ditch G18; the remainder came from pits G17 within the enclosure. A total of 50 elements were identified, mainly belonging to cattle and horse. Sheep/goat and pig elements were present in smaller numbers (Table 4).

#### Small enclosure and associated features L2

All 43 animal bone fragments were obtained from enclosure ditch G10. Only 14 elements were identified to cattle, horse, sheep/goat and pig (Table 4).

#### Enclosure and associated features L3

Although 66 animal bone fragments were recorded, 50 of these were unidentified mammal fragments retrieved from sieved samples from two of the pits in G21. A further seven fragments were recovered from pits in G21, plus seven from ditch G8 and two from ditch G7. Altogether, only 11 fragments were identified, nine of which belonged to cattle and one each to sheep/goat and pig (Table 4).

#### Discussion

A small assemblage incorporating only 75 identified elements inevitably provides only limited information about meat diet and animal exploitation. Cattle elements were comfortably the most abundant (52%). Cattle and sheep/goat are usually the most common species identified on British Iron Age sites (Hambleton 1999) and beef is likely to have been the main sources of meat at this settlement, even though preservation conditions favoured the survival of bones of large mammals.

Cattle have provided the highest number of the identified elements in many Iron Age and Romano-British assemblages from Bedfordshire including sites in Biggleswade, Shefford and Broom (Maltby 2007; 2010; Swaysland 2007). Scapula, pelvis and tibia fragments were the most commonly identified elements in the cattle assemblage but bones of less meat value were also present (Table 5). No butchery marks were observed on any of the cattle bones. Although four complete or largely complete specimens of a humerus, femur, tibia and metatarsal survived despite some gnawing damage, most of the cattle bones were quite fragmented. In addition to abundant evidence of modern breaks, some fragmentation was caused by other taphonomic agencies, such as weathering and gnawing. However, some of the ancient breakage was probably initiated during processing for marrow and pot-boiling.

The assemblage was too small to determine detailed mortality profiles. Two cattle mandibles possessed fully erupted tooth rows and belonged to adults. Adult cattle were also represented by a radius and femur with fused distal epiphyses. A proximal epiphysis of a tibia had just fused and belonged to a young adult. Nine bones with early-fusing epiphyses had all fused, and all of these probably belonged to sub-adult or fully adult cattle. The only evidence for the presence of immature cattle came from a femur diaphysis on which neither epiphysis had fused and a very porous shaft of a humerus of a neonatal calf. The latter probably indicates that cattle were bred at the settlement.

	Period 1				Period 3			
	Cattle	S/G	Pig	Horse	Cattle	S/G	Pig	Horse
Horn/antler	1	_	_	_	_	_	_	_
Maxilla		_	_	_	1	_	_	_
Skull fragment	1	_	_	_	_	_	_	_
Mandible	3	1	_	2	1	2	_	
Loose teeth	2	1	_	2	1	1	_	1
Scapula	4	_	1	_	-	_	_	_
Humerus	3	2	1	_	-	_	_	_
Radius	3	_	_	2	2	_	_	_
Ulna	2	1	1	2	1	_	_	_
Pelvis	4	_	_	1	—	1	1	_

The few measurements taken all indicated that the cattle were small and typical of stock found in the British Iron Age (Table 6).

	Period 1					Peri	od 3	
	Cattle	S/G	Pig	Horse	Cattle	S/G	Pig	Horse
Femur	3	1	_	4	_	_	_	_
Patella	_	_	_	_	_	_	_	_
Tibia	4	3	_	1	1	_	_	2
Astragalus	_	_	_	_	2	_	_	_
Calcaneus	_	_	_	_	1	_	_	_
Other tarsals	_	_	_	1	_	_	_	_
Metacarpal	2	1	_	1	_	_	_	_
Metatarsal	3	1	_	2	1	_	_	_
Lat. metapodial	_	_	_	1	_	_	1	_
1st phalanx	2	1	_	1	_	_	_	_
2nd phalanx	1	_	1	_	_	_	_	_
Sacrum	1	_	_	_	_	_	_	_
Total	39	12	4	20	11	4	2	3

S/G = sheep/goat

Counts are of numbers of individual specimens

(NISP)

Period 1 = Early-middle Iron Age

Period 3 = Post-medieval

#### Table 5: Mammal element counts by Period

Only 12 sheep/goat elements were recorded (Table 4). Three of the elements could be more closely identified as sheep and the likelihood is that most, if not all, of the sheep/goat bones belonged to sheep. Sheep/goat were, however, relatively poorly represented (16%) compared with many Iron Age assemblages in the region. Preservation conditions, however, were not very favourable and most of their assemblage consisted of the more robust parts of the largest bones in the body (Table 5).

Ageing evidence was sparse. A fully worn mandibular third molar belonged to an adult; whereas a mandible that still possessed deciduous premolars came from a sheep of less than two years old. A porous metatarsal belonged to a young lamb. A deep blade mark near the distal end of a tibia was the only evidence for butchery. None of the bones could be measured.

Pigs were even less well represented with only four bones (5%) identified (Table 4). Pigs have commonly provided less than 10% of the identified elements from Iron Age and Roman sites in Bedfordshire, although an unusual exception in the locality is the early-middle Iron Age Hill Lane assemblage from Broom, where pigs provided over 20% of the assemblage (excluding associated bone groups) (Swaysland 2007).

Element	Measurements (mm)					
Humerus	HT 36.5					
Metacarpal	Bp 50.9; Dp 32.7					
Metatarsal	Bp 45.9					
Radius	Bp 72.7 BFp 66.6					
Scapula	GLP 57.6; LG 47.9					
Scapula	GLP 58.7; LG 49.1; BG 40.4					
Tibia	Bd 51.5 Dd 39.6					
Measurements follo	Measurements follow von den Driesch (1976)					
HT = greatest height of distal trochlea						
Bp = proximal breadth; Dp = proximal depth						
BFp = breadth of pr	oximal articular surface					



GLP = greatest length of glenoid process LG = length of glenoid cavity; BG = breadth of glenoid cavity Bd = distal breadth; Dd = distal depth

Table 6: Cow metrics

It is assumed, although not proven, that all the equid bones belonged to horse. They were, however, unusually well represented, particularly in L1, and their elements provided over 26% of the Period 1 identified assemblage. Horses rarely form >10% of the identified components of Iron Age and Roman assemblages in the region. However, this assemblage was small and survival favoured the bones of large mammals.

As is usual in archaeological assemblages, horse bones tended to be less fragmented than those of cattle. Complete or fairly complete bones included a radius, femur, metacarpal and metatarsal. There was no evidence for butchery marks on any of the horse bones, but their exploitation for meat cannot be ruled out. In addition, a proximal portion of a tibia had been sawn transversely through its shaft, which would have released the central part of the shaft for bone-working. There is little evidence for the presence of immature horses and some of the latest-fusing epiphyses had fused (one proximal and two distal femora and a distal radius). One proximal femur was unfused and belonged to a sub-adult or young adult. The horse's main attribute was as a transport animal and beast of burden and they could expect longer lives than other domestic stock, raised mainly for meat production. The greatest length of a radius measured 290mm, which can be translated into a withers height estimate (Witt 1952) of c.119cm. Horses of this small stature (c.11.5 hands) have been commonly on British Iron Age sites. A first phalanx with a greatest length of 71mm came from an even smaller pony.

The Iron Age assemblage produced no evidence for the exploitation of wild mammals, birds or fish. Although no bones of dog were discovered, their presence is attested by the many gnawed bones. No associated bone groups were found. These have been found on many Iron Age settlements (Morris 2011) including sites in Broom (Swaysland 2007).

#### 3.4.3 Post-medieval to modern (Period 3)

Small numbers of animal bones were retrieved from G1 (1), G3 (7), G4 (12) and G16 (8). The total assemblage of 28 fragments included 21 identified elements (Table 7). The 11 cattle elements (Table 5) included an associated calcaneus and astragalus, the latter bearing chop marks made during dismemberment of the hind foot. Adult cattle were represented by an ulna with a fused proximal epiphysis and probably by a tibia with a fused distal epiphysis. The presence of immature cattle was attested by a maxilla with deciduous teeth and a radius with an unfused distal epiphysis. The four sheep/goat elements included a complete mandible from a mature adult. The three horse elements included two tibiae from animals of different ages. One had a fused distal epiphysis and probably belonged to an adult; the second was porous and had an unfused distal end and belonged to quite a young foal. Two bones of pig (Table 5) and the humerus of an adult chicken completed the identified assemblage. The sample is much too small to merit discussion of exploitation patterns.

Landuse Area 5	Total
Cattle	11
Sheep/goat	4
Pig	2
Horse	3
Chicken	1
Total identified	21
Large mammal	4
Medium-sized mammal	2
Unid. bird	1
Total unidentified	7
Total	28

Counts are of numbers of individual specimens (NISP)

Table 7: Period 3 (post-medieval to modern) animal bone species counts by Landuse Areas

#### 3.5 Charred Plant Remains

#### 3.5.1 Introduction and methodology

Twenty-one samples were taken from pit fills (4) and ditch fills (17). All the sampled features were dated to the early-middle Iron Age (Period 1). Soil was processed using a Siraf-style type flotation tank with mesh sizes of 0.3mm and 1mm for the recovery of the flot and residue respectively. The residues were dried and sorted for biological remains and artefacts. The flots were also dried and charred plant remains sorted from the flots and quantified with the exception of grain fragments <2mm, charcoal and indeterminate items, estimates of which were made using the following scale: +=1-10; ++=11-50; +++=51-150; ++++=151-250; +++++=>250 items. The charred plant remains were identified using a binocular microscope (with a magnification of up to x40) together with modern and charred reference material and reference manuals (Cappers *et al* 2006; Jacomet 2006).

Fifteen of the 21 samples produced identifiable charred plant remains (Table 8). Taxonomic order for the wild plants follows Stace (2005), also used for ecological data together with Brenchley (1911, 1913), Hanf (1983) and Wilson *et al* (2003). Charred cereal grains accounted for the bulk (77%) of the quantified remains with traces of chaff (4%) and wild plant/weed seed remains (19%). The total charred plant assemblage from the site, however, consisted of only *c*. 200 quantified items, most of the individual samples producing less than ten charred items.

There follows a discussion of the cereals and wild plant/weed seeds and the information that these remains may provide on crop husbandry and processing at the site during the early-middle Iron Age followed by an examination of the spatial distribution of the charred plant remains by Landuse Area and Group.

#### 3.5.2 Crop husbandry and processing

Charred cereal grains and fragments were found in all the productive samples, although most were poorly preserved, with *c*. 65% being unidentifiable; chaff fragments were present in four samples. Identifiable cereals consisted of *Triticum* (wheat) in nine samples including hulled wheats *Triticum dicoccum/spelta* (emmer/spelt) in five, single glume bases showing the presence of both emmer and

spelt wheat. Two grains of free-threshing *Triticum aestivum/turgidum* (bread/rivet wheat) were found in in two samples. *Hordeum vulgare* (barley) was also identified in nine samples with hulled and twisted grains indicative of six-row hulled barley. These cereals may have been used for bread, porridge or gruel or added to stews or soups (Renfrew 1985, 15). Barley may have also been used for brewing or as animal fodder.

These results are similar to previous archaeobotanical research from other Iron Age sites in southern England, showing hulled wheat (mainly spelt) and hulled barley to be the main cereals, with occasional finds of free-threshing wheat (Greig 1991, 306). It was not possible to establish which was the dominant of the two hulled wheats given the limited evidence at the site, although cereal remains from other Iron Age sites in Bedfordshire, for example at Fairfield Park, Stotfold, just to the south of Langford (Pelling 2007, 117), suggest that spelt was the main hulled wheat during this period. Free-threshing wheat is not common in prehistoric contexts and it is possible that the two such grains in the Iron Age samples may be intrusive from later medieval and post-medieval activity on the site.

The remains from a small range of weeds and wild plants were found in seven samples, largely species indicative of disturbed and waste ground habitats and probably mainly arable weeds given their presence in cereal assemblages. The few weed seeds identified to species may provide information on other aspects of crop husbandry, *Fallopia convulvulus* (black bindweed), common on acid soils, and *Sherardia arvensis* (field madder), often found on light calcareous soils, tentatively suggesting the use of the river terrace deposits and chalky boulder clay, to the east of the site, for growing cereals. *Fallopia convolvulus* may suggest that some of the cereals, probably barley, were spring-sown. Charred rhizome and tuber fragments of *Arrhenatherum elatius* var *bulbosum* (onion couch) may be from the harvesting of cereals by uprooting.

It is possible that some of the charred seeds may be from weeds growing around the site: for instance, *Urtica dioica* (common nettle) and *Hyoscyamus niger* (henbane), albeit only represented by single seeds, are potential ruderals found in nitrogen rich soils including where animals defecate and may be indicative of grazing livestock and/or possibly refuse areas nearby.

The weed seeds along with the cereal remains also provide information on cropprocessing activities being carried out on the site, the bulk of the material coming from the later stages of crop-cleaning and food preparation; thus, the cereal grains may have been accidentally burnt while being dried before milling or storage or during the cooking of whole grains, or in the case of the hulled wheats during activities to facilitate de-husking, although little chaff was found in the samples. The smaller weed seeds in the samples would have been mainly separated from the grains by sieving while the larger ones including *Bromus* (brome) (identified in five samples) would have required hand-sorting, these weed seeds are often found in virtually clean cereal deposits.



	Landuse Area	1						2							3	
-	Group	17	1		18					10 -			13		21	
-	Feature type	1/ P	р	р	D	р	D	р	р	D	р	р	D	р	P	Р
-	Feature number	2287	2297	2198	2318	2226	2280	2125	2159	2364	2366	2121	2149	2143	2117	2109
-	Context number	2291	2298	2199	2324	2220	2281	2125	2160	2365	2367	2122	2150	2146	2118	2111
	Sample number	21	25	17	19	2220	30	11	12	2505	29	15	2150	13	14	10
Cereal grains	Sumple number			11			00					10		10		10
Triticum dicoccum/spelta	emmer/spelt wheat	_	_	_	_	2	_	4	_	_	_	_	_	_	_	_
T cf_dicoccum/spelta	?emmer/spelt wheat	2	_	_	_	_	_	2	_	_	_	_	_	_	_	_
T aestivum type	free-threshing wheat	_	_	_	_	_	_	_	_	_	_	_	1	_	_	_
T of aestivum type	2free-threshing wheat	1	_	_	_	_	_	_	_	_	_	_	-	_	_	_
Triticum sp(n)	wheat	2	_	_	_	2	_	2	1	_	_	_	_	_	_	_
cf Triticum sp(p).	2wheat	2	_	1	3	2	2	5	-	_	_	_	_	_	2	_
Hordeum yulaare I	barley, bulled twisted	2		-	_	-	2	2						1	-	
H yulaare I	barley, hulled straight	_		1	_		_	2	_	_	_	_	_	1	_	_
H wulgare I	barley, hulled indet			1		1		1				1		_		
H wulgare I	barley, indet	1		1	_	1	_	2	_	_	_	1	_		_	_
n. vargare L.	Darley, indet.	1	_	1	-	1	-	2	-	-	1	_	-	-	-	-
Ci. H. vulgure	(Darley	_ 0	-	-	-	11	2	57	1	1	2	1	-	-	2	1
Cerealia	indet. cerear (estimate)	0	3	-	4	11	5	37	3	1	2	1	-	2	2	1
Concellation	indet cerear ir agments <2mm	++	τ	τ	+	++	+			+	+		τ	+	Ŧ	
		1														
Triticum alcoccum Schubi.	emmer wheat glume base	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I. spelta L.	spelt glume bases	-	-	_	-	_	1	-	-	-	-	-	-	-	-	-
Triticum sp(p).	wheat glume bases	1	-	1	-	2	2	-	-	-	-	-	-	-	_	-
Other plant/weed seeds																
Urtica dioica L.	common nettle	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Chenopodium sp.	goosefoots etc.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Fallopia convulvulus (L.) A Love	black bindweed	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-
Rumex sp.	dock	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
Medicago/Trifolium sp.	medicks/clover	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Hyoscyamus niger L.	henbane	-	-	-	-	-		1	-	-	-	-	-	-	-	-
Sherardia arvensis L.	field madder	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
Arrhenatherum elatius var bulbosum (Willd.) St-Amans	onion couch-grass tubers	1	-	-	-	3	-	-	-	-	-	-	-	-	-	-
Bromus sp(p).	brome	2	-	-	1	-	-	1	-	-	-	-	-	-	-	-
cf. Bromus sp(p).	?brome	2	-	1	-	-	1	2	-	-	-	-	-	-	-	-
Poaceae indet.	grasses (large seeds)	-	-	1	-	1	-	1	1	-	-	-	-	-	_	-
Poaceae indet.	grasses (small seeds)	-	-	-	-	-	1	6	-	-	-	-	-	-	-	-
indeterminate	rhizome fragments	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-
indeterminate	wood charcoal	++	+++	++	++	+++	+++	+++++	+++	+++	+++	++	++	+++	+++++	++
Total		23	3	6	8	26	12	95	7	1	3	2	1	3	5	1
	vol sample (l)	20	20	20	20	20	20	18	19	20	20	18	20	19	20	10
	vol flot (ml)	2	1	2	1	1	1	22	1	<1	1	1	1	4	9	<1
	item density per litre of processed soil	12	0.2	03	0.4	13	0.6	53	0.4	0.1	0.2	0.1	0.1	0.2	03	0.1

key: item frequency: + =1-10 items: ++ =11-50 items; +++ = 51-150; ++++ = 150-250; ++++=>250 items key: feature type: P = pit; D = ditch

Table 8: Period 1 (early-middle Iron Age) charred plant remains

#### **3.5.3** The spatial distribution of the charred plant remains

#### L1: Iron Age enclosure and associated features

Six of 11 samples from L1 in the south-west corner of the site produced charred plant remains from the fills of enclosure ditch G18 and one sample from a pit (G17). There was no significant difference between the samples, which contained variable but small amounts of charred plant remains (low densities ranging from 0.2–1.3 items per litre of processed soil), consisting of cereal debris — emmer, spelt wheat, possibly free-threshing wheat and (hulled) barley — represented by grains and the few chaff fragments from the site, and wild plant/weed seeds, notably *Bromus* and onion couch tubers. These remains are indicative of debris from small-scale activities possibly taking place within the enclosure and associated with the final stages of crop-cleaning, including the de-husking of hulled wheats, and food preparation.

#### L2: Small Iron Age enclosure and associated features

Six samples from L2 in the south-eastern half of the site produced charred plant remains; five were from the fills of a small rectilinear enclosure ditch G10 and included the largest assemblage from the site with *c*. 100 items and an item density of 5.3, consisting of mainly cereal grains, emmer/spelt wheat and (six-row) hulled barley, and a small range of small and large weed seeds. No chaff was found in this sample. Again these remains are from the final stages of crop-cleaning and food preparation probably being carried out nearby and possibly within the enclosure. The other four samples from this rectangular enclosure only produced occasional remains (virtually all grains) with very low item densities from 0.1—0.4, background debris from similar activities.

The other sample from L2 was from ditch G13 to the east of enclosure G10; it contained just one free-threshing wheat grain and a few grain fragments. As noted above, it is possible that this grain represents intrusive material, possibly from a medieval furrow which cuts the ditch.

#### L3: Possible Iron Age enclosure and associated features

Three samples from three pit fills (G21) in the central eastern part of the site each contained just a few charred grains (with low item densities of 0.1–0.3), probably accidentally burnt during the final stages of crop-cleaning and food preparation in activities, probably taking place at some distance from these sampled features.

#### 3.5.4 Summary

The charred plant remains from the site suggest that hulled wheat and hulled barley were the main grains being cultivated and used during the Iron Age; free-threshing wheat may have occasionally been grown, although the few such grains in the samples may be intrusive from medieval activity. The few weed seeds identified to species may tentatively point to the use of both the river terraces and boulder clays to the east of the site for growing crops, the spring-sowing of some cereals and possibly harvesting by uprooting. The individual charred plant assemblages were mainly small, with low item densities of remains; only the sample from ditch G10 produced a fairly large assemblage. The remains consisted largely of cereal grains with only occasional chaff fragments and a small range of wild plant/weed seeds, debris indicative of small-scale activities associated with the final cleaning of the grain and

food preparation/cooking taking place within the two enclosures L1 and L2, including the possible de-husking of spelt wheat within the larger rectilinear enclosure L1.



# 4 DISCUSSION

The excavations at Station Road, Langford revealed evidence of early-middle Iron Age, medieval and post-medieval to modern activity.

The early-middle Iron Age evidence comprised three rectilinear enclosures of varying sizes, which probably represent elements of a small settlement. Enclosure L1 was located at the southern extent of the excavation area and was defined by substantial ditches. Extending north from this was a more extensive enclosure L3, within which were scattered discrete features as well as a further, small enclosure L2. Activity continued beyond the PDA and, therefore, although some conclusions can be drawn from the revealed remains, a full interpretation of the settlement as a whole is not available at this time.

Enclosure L1 was defined by substantial ditches (up to 1.2m deep and 2.7m wide). The outer ditch had been re-dug several times, which may suggest that the enclosure was relatively long-lived. There were few internal features and given that the enclosure continued beyond the limits of the PDA to the south, an interpretation of function is difficult. Elsewhere it has been argued that similar enclosures may define work or storage areas, animal corrals or cultivated land (Williams 1993, 45; Knight 1984, 204), or where there is evidence for occupation, as 'household compounds' (Evans and Hodder 2006, 317). Certainly the size of the ditches appears excessive for the definition of storage areas, animal corrals or cultivated land. Instead, the large size of the ditches and any associated banks may have served to offer defence for any inhabitants, or perhaps more likely, to create an imposing physical and visual barrier to the outside world.

The more extensive enclosure L3, which extended north from enclosure L1, was defined in general by much smaller ditches. This larger enclosure may have served to enclose the wider settlement as a whole, although as it continues beyond the limits of the PDA, this interpretation cannot be confirmed. A similar, albeit more extensive, pattern of smaller enclosures defined by substantial ditches incorporated into larger settlement enclosures was observed at nearby Gypsy Lane, Broom (Cooper and Edmunds 2007, 180–3). There it was suggested that the smaller enclosures probably contained buildings, for which no evidence survived, whilst the larger-scale enclosures defined the settlement boundaries (Cooper and Edmunds 2007, 181–2).

One unusual aspect of enclosure L3 was its western boundary. This ditch, like those of enclosure L1, appeared excessively large (up to 2m wide and 1.4m deep), with a very steep, Y-shaped profile. The geophysical survey suggests that this ditch extended at least a further 40m (total length 75m) beyond the limits of the excavation area to the north-west. The unusual character of this ditch, especially when compared to the much smaller ones that made up the remainder of the enclosure, is difficult to reconcile. Perhaps, like the ditches of enclosure L3, it served to demarcate a particularly significant boundary for the purposes of visual impact, or to provide a significant physical barrier. This may suggest that the ditch represents an extensive linear boundary, off which enclosures L1 and L3 extended.

Activity within enclosure L3 consisted of scattered pits and postholes, as well as at least one small sub-rectangular enclosure L2. The postholes formed no obviously recognisable structures, whilst the pits did not have the 'classic' profile of storage

pits. This hampers meaningful interpretation of these features, although are suggestive of occupation in the vicinity. Given that the sub-rectangular enclosure L2 was too small to have contained a roundhouse, it seems likely that it served as a small livestock enclosure or defined a work area. The relatively large finds assemblage (0.6kg pottery) recovered from the enclosure ditch may suggest either a change in function of the enclosure over time, or possibly domestic activity in the vicinity.

The lack of diagnostic pottery forms makes precise dating of specific settlement elements difficult; however, the available evidence suggests that whilst the settlement may have been established in the early Iron Age, the majority of activity probably took place in the middle Iron Age (*c*. 4th–2nd century BC). The lack of finds dating to late Iron Age or Roman periods suggests that the settlement was probably abandoned by the 1st century BC. Although there was no direct evidence of habitation, such as roundhouses, the quantity and nature of the finds assemblage suggests that settlement activity was taking place in the vicinity. The small assemblages of animal bone and charred plant remains corroborate this conclusion.

A contemporary middle Iron Age settlement has been excavated c. 150m to the east (Albion Archaeology 2018). This was a larger enclosed settlement c. 0.5ha in extent. Given the relative proximity of the settlements, it is reasonable to assume that significant interaction would have taken place, and whilst they appear to form spatially distinct foci, it could also be speculated that such settlements may have comprised elements within a wider agglomerated community.

After abandonment of the Iron Age settlement there is no further evidence of activity within the excavation area until the medieval period. Although very few features of this period were present, the identification of a furrow suggests that this area was most likely open fields at this time, utilised for strip cultivation.

In the post-medieval to modern period a number of field boundaries were established, defined by ditches. Gaps in the boundaries probably represent field entrances and parallel ditches in the eastern part of the excavation area may represent a routeway. Given their isolated position within a field, the cluster of pits and layer are probably associated with farming activities and may have included outbuildings or a field barn.



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Figure 2: Phased plan



Figure 3: Plan of Landuse areas with Groups and selected section lines





Enclosure L1 looking north-west



Section of enclosure L1



Small enclosure L2 (foreground) and enclosure L1 (background left) looking south-west



Excavation of enclosure L1

Figure 5: Selected photographs



Enclosure/boundary ditch G8 (foreground) and enclosure L1 (background) looking south-east



South-east facing section of ditch G8

Figure 6: Selected photographs



Middle Iron Age pottery sherds recovered from small enclosure ditch G10



Terminus of small enclosure ditch G10, looking south-east

Figure 7: Selected photographs



Post-medieval to modern boundary ditches (G4) looking south-east



Post-medieval to modern pits and surface (foreground) (G1)

Figure 8: Selected photographs







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