Medieval Settlement Remains on the Biddenham Loop Reinforcement Water Main



Evaluation and Excavation Report, with Updated Project Design for Publication



Client: Anglian Water

OA East Report No: 1944 OASIS No: oxfordar3-273802

NGR: TL 01320 47363



Medieval Settlement Remains on the Biddenham Loop Reinforcement Water Main

Evaluation and Excavation Report, with Updated Project Design for Publication

By Nicholas Cox BSc, with Rachel Clarke BA MCIfA

With contributions by Sue Anderson BA MPhil MClfA, Andrew Brown BA PhD, Rachel Fosberry AClfA, Angelos Hadjikoumis BA MSc PhD, Chris Howard-Davis BA (Hons) MClfA, Sarah Percival BA MA MClfA

Editor: Rachel Clarke BA MCIfA

Illustrators: Séverine Bézie BA MA and Charlotte Walton BA MPhil MClfA

Report Date: March 2017

© Oxford Archaeology East Page 1 of 68 Report Number 1944



Report Number: 1944

Site Name: Biddenham Loop Phase 2a Reinforcement Water Main

BBC HER Event No: N/A

Date of Works: May-June 2016

Client Name: Anglian Water

Client Ref: N/A

Planning Ref: N/A

Grid Ref: TL 01320 47363

Site Code: BEDFM 2014.63

Finance Code: XBDBIL15

Receiving Body: Higgins Bedford

Accession No: BEDFM 2014.63

Prepared by: Nicholas Cox Position: Supervisor

Date: January 2017, updated March 2017

Checked by: Matt Brudenell

Position: Senior Project Manager

Date: February 2017

Signed:

Disclaimer

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

Nevambrodish

Oxford Archaeology East,

15 Trafalgar Way, Bar Hill, Cambridge, CB23 8SQ

t: 01223 850500 f: 01223 850599

e: oaeast@thehumanjourney.net w: http://thehumanjourney.net/oaeast

© Oxford Archaeology East 2017 Oxford Archaeology Limited is a Registered Charity No: 285627



Table of Contents

S	ummary		7
1	Introduc	tion	9
	1.1	Project Background	9
	1.2	Geology and Topography	9
	1.3	Archaeological and Historical Background	10
	1.4	Acknowledgements	11
2	Aims and	d Methodology	11
	2.1	Aims	11
	2.2	Regional Research Objectives	12
	2.3	Local Research Objectives	12
	2.4	Site Specific Research Objectives	12
	2.5	Methodology for evaluation and excavation	12
3	Results.		13
	3.1	Introduction	13
	3.2	Evaluation	13
	3.3	Natural features (ponds)	16
	3.4	Period 1: Prehistoric (Fig. 8)	16
	3.5	Period 2: 9th-11th century (Fig. 8)	16
	3.6	Period 3: 12th to 15th century (Figs 9, 10 and 11)	16
4	Discussi	ion and Conclusions	23
	4.1	Pre-medieval (Periods 1 and 2)	23
	4.2	Medieval (Period 3)	23
	4.3	Late medieval: demolition and abandonment	26
	4.4	Significance	26
5	Updated	Project Design for Archiving and Publication	27
	5.1	Storage and Curation	27
	5.2	Publication	27
6	Resourc	es and Programming	27
	6.1	Project Team Structure	27



6.2 Stages, Products and Tasks	28
6.3 Project Timetable	28
Appendix A. Context Summary with Phasing	29
Appendix B. Finds Reports	36
B.1 Metalwork	36
B.2 Jet	41
B.3 Glass	41
B.4 Post-Roman Pottery	42
B.5 Building Stone	54
B.6 Ceramic Building Material and Fired Clay	54
Appendix C. Environmental Reports	57
C.1 Faunal Remains	57
C.2 Environmental samples	59
Appendix D. Bibliography	64
Appendix E. OASIS Report Form	67



List of Figures

Fig. 1 Site location showing pipeline route, archaeological trenches and excavation Fig. 2 Historic Environment Record Data Map showing entries mentioned in text Evaluation trench plans (Area 1): Trenches A-C Fig. 3 Fig. 4 Evaluation trench plans (Area 3): Trenches 2-3 and 15 Evaluation trench plans (Area 3): Trenches 4-6 Fig. 5 Fig. 6 Selected evaluation sections Fig. 7 All features excavation plan Fig. 8 Excavation plan (Periods 1 and 2) Fig. 9 Excavation plan (Periods 3.1 & 3.2) Fig. 10 Excavation plan (Period 3.3) Selected excavation sections Fig. 11 Excavation area in relation to Saxo-Norman and medieval features identified on Fig. 12 Bedford Western Bypass (after Luke and Barker fig. 10)

List of Plates

Plate 1	Plan view of Buildings 1 and 2
Plate 2	Building 1 beamslot 70 and posthole 72 , looking south-west
Plate 3	Building 2 posthole 98, looking south-west
Plate 4	Building 2 posthole 108, looking south-west
Plate 5	Building 2 wall 79, looking north-west
Plate 6	Building 2 hearths 104 and 106, looking south-west
Plate 7	Building 2 robber cut 115 and wall 79, looking north-east
Plate 8	Wall 152, looking south-east
Plate 9	Oven 155, looking south-west
Plate 10	Building 3, looking south-west
Plate 11	Kempston Inclosure Map (1804)
Plate 12	Inclosure Award showing field names

List of Tables

Table 1	The Excavation Record
Table 2	Project Team
Table 3	Task listings
Table 4	Evaluation Context Summary
Table 5	Excavation Context Summary



Table 6	Silver catalogue
Table 7	Copper-alloy catalogue
Table 8	Iron catalogue
Table 9	Glass
Table 10	Pottery quantification by fabric
Table 11	Quantities of Late Saxon fabrics
Table 12	Quantities of medieval fabrics
Table 13	Quantities of pottery by site phase
Table 14	Pottery catalogue by context (evaluation)
Table 15	Pottery catalogue by context (excavation)
Table 16	Ceramic building material catalogue by context
Table 17	Fired clay catalogue by context
Table 18	Summary of recorded faunal data
Table 19	Period 1 sample
Table 20	Period 2 sample
Table 21	Period 3 samples

© Oxford Archaeology East Page 6 of 68 Report Number 1944



Summary

Between 17th May and 8th June 2016 Oxford Archaeology East (OA East) carried out an excavation on part of the route of the Biddenham Loop Phase 2a Reinforcement Water Main. The excavation, which targeted remains identified by an evaluation, was carried out on an area of 520sqm within the easement of the water main.

The earliest phases of activity were represented by a single posthole of possible prehistoric date and a small group of truncated Late Saxon pits. Overlying these were the remains of at least three medieval buildings on a north-east to south-west alignment, the earliest of which was of timber construction. This was replaced by a more substantial rectangular building with stone foundations: internal features include an area of paved floor, a partition wall and a hearth, while a cobbled pathway led from a doorway on the northern side of the building. To the south of this was another, smaller building also with stone foundations but with no surviving internal features, while to the north-east was a separate kitchen containing at least three ovens, one of which produced a single silver coin dated to c.1278-1280 AD. Boundary ditches lay to the north of the kitchen. The foundations, particularly those of Building 3, had been comprehensively robbed and demolition deposits sealed these remains, from which a collection of pottery spanning the Late Saxon to late medieval periods was recovered.

This group of buildings and associated features represent the continuation of Late Saxon and medieval settlement remains revealed beneath the Bedford Western Bypass and around The Bury, extending to the east. The presence of buildings with stone foundations and a detached kitchen possibly forming part of a courtyard range suggests that this settlement may have been of some status, perhaps associated with one of Kempston's three documented manors.

© Oxford Archaeology East Page 7 of 68 Report Number 1944





1 Introduction

1.1 Project Background

- 1.1.1 Oxford Archaeology East (OA East) was commissioned by Anglian Water to undertake a programme of archaeological investigation along the route of the Biddenham Loop Phase 2b Reinforcement Water Main, Kempston Rural, Bedfordshire (centred TL 01320 47363; Fig. 1).
- 1.1.2 The Brief was written by Bedford Borough Council (BBC), in response to a request by Anglian Water, in compliance with their Code of Practice. Due to the potential for archaeological deposits on the site Bedford Borough Council recommended that an archaeological investigation (evaluation by trenching) be carried out.
- 1.1.3 The proposed pipeline was in two parts: Section 2 running for 2km from Green End, Kempston Rural to the junction of the Bedford Western Bypass and the A421, 1.48km of which was evaluated. Section 3 ran for 1.16km from the junction of Woburn Road and the A421 to the junction of Woburn Road and Fields Road, 0.33km of which was evaluated.
- 1.1.4 The evaluation was carried out between 14th October and 19th October 2015. Trench 3, north of Ridge Road, revealed the stone wall foundations of a medieval building with associated postholes, possible floor deposits and burnt pits immediately below the topsoil. The site was monitored by Venessa Clarke of BBC on 15th October 2015, who recommended excavating two further 15m-long trenches to the north and south of Trench 3 in order to define the extent of the building (Trenches 14 and 15). No further structural remains were revealed in the additional trenches. It was subsequently agreed with Geoff Saunders (20th October 2015) that the area of easement requiring mitigation by excavation prior to construction rested in a 55m-long section of the easement between the northern end of Trench 15 and southern end of Trench 14 (Fig. 1 and Plate 1). The easement stripped was 10m wide, making the total excavation area 520m².
- 1.1.5 This report and Updated Project Design (UPD) for publication has been compiled in accordance with the principles identified in Historic England's guidance documents Management of Research Projects in the Historic Environment, specifically The MoRPHE Project Manager's Guide (2015) and PPN3 Archaeological Excavation (2008).

1.2 Geology and Topography

- 1.2.1 Topographically the pipeline route followed an undulating course that ranged between c.30m OD and c.40m OD. To the north the ground drops down towards the floodplain of the River Great Ouse. The underlying drift geology of the route varies between sands and gravels of the various terraces of the Ouse Valley Formation and the clays of the Oxford Clay Formation (BGS Sheet 203, 2010). The solid geology of the excavation area, which lies at c.37m OD, is Peterborough Member mudstones formed from shallow seas during the Jurassic period.
- 1.2.2 The excavation area was located in Kempston Rural parish, approximately 230m southeast of Green End Road, and 490m north of Ridge Road, in a fallow field west of the Bedford Western Bypass A428.

© Oxford Archaeology East Page 9 of 68 Report Number 1944



1.3 Archaeological and Historical Background

- 1.3.1 The following section draws upon information from the approved WSI for evaluation prepared by OA East (Morgan 2014) and subsequent WSI (Brudenell 2015) and is based upon data held in the Bedfordshire Historic Environment Record (HER), with some additions.
- 1.3.2 This part of the pipeline runs roughly parallel to the A428 Bedford Bypass, the construction of which involved archaeological works which uncovered extensive evidence of activity dating to the prehistoric, Roman, Saxon and medieval periods (Barker and Luke 2008; Luke 2016). An area of medieval settlement and related features was identified adjacent to the site of the open area excavation, further details of which are included below. Pertinent records are shown on Fig. 2.

Prehistoric

- 1.3.3 Palaeolithic and Mesolithic finds have been recorded some distance to the north, on the east bank of the River Ouse (HER MBB257) and north-east (HER MBB15936) of the pipeline respectively (not illustrated).
- 1.3.4 Excavations within the Biddenham Loop (HER EBB572, not illustrated) in 2008 revealed an area of Late Neolithic settlement and a Late Neolithic or Early Bronze Age barrow has been identified by cropmarks c.1.3km north-east of the excavation (HER MBB18914, MBD1476). The excavations also found areas of Early Bronze Age, Middle Bronze Age and Iron Age settlement (HER MBB18915-6; MBB18918). Further cropmarks, including a sub-rectangular enclosure and associated linear ditches that are probably prehistoric in origin are located near Vicarage Farm, 890m north-west of the excavation site (HER MBD13976). On the Cutler Hammer Sports Ground, 700m east of the excavation, an evaluation (HER ECB558) found multi-period remains, the earliest of which dated from the Bronze Age period (HER MBD17748).

Roman

1.3.5 To the west of the River Ouse, 600m to the north of the route, is an extensive area of Roman settlement including part of a villa and a cemetery, which was in use until the 7th century (HER MBD162). To the east of this, 490m north-east of the site crossing the River Ouse, is a possible site of a Roman paved ford (HER MBD814), while the possible line of a Roman road passes c.700m south-east of the excavation area (HER MBD485). Occasional Roman features and coins have been recorded within a kilometre of the excavation, with one artefact scatter possibly denoting the site of a Roman villa (HER MBD3663).

Medieval

1.3.6 The nearby Biddenham Loop excavations (EBB572) revealed evidence for Saxo-Norman settlement north-east of Kempston Bury, c.300m east of the current excavation. This included the remains of buildings and a corn drying oven, interpreted as peripheral activity associated with the settlement identified during excavations undertaken in advance of the Bedford Western Bypass (MBB18922). The latter, located just 100m to the east of the current site, revealed Saxo-Norman enclosures (one a possible structure), boundaries and a trackway (EBB652; Barker and Luke 2008; Luke 2016). During the medieval period this developed into an enclosed farmstead divided into a number of domestic and non-domestic enclosures. The main domestic enclosure contained several post-built structures and pits, including some that appear to have been latrines. A cobbled yard or trackway extended to the north, beyond which were



the non-domestic enclosures, one of which contained a large pond. Collectively, these remains may have associated with one of the medieval manorial complexes of Kempston Hastingbury or Greys.

- 1.3.7 Further afield, a Saxo-Norman cemetery was discovered during excavations on Brook Road Kempston (HER MBD16064; EBB682, not illustrated).
- 1.3.8 To the north of the pipeline route lies the medieval/post-medieval settlement of Church End (HER MBD11560), c.600m north of the excavation area, which includes a 15th century church with Norman elements (HER MBD1166). A medieval hollow way and earthworks (HER MBD7327) were recorded 170m north-east of the excavation; these probably represent a trackway along a former field/parish boundary and associated ridge and furrow. Ridge and furrow has also been recorded in the central area of the pipeline route (HER MBD3665), 300m south-east of the excavation. The medieval route of the Kempston to Wootton portway (HER 11535) crosses the southern part of the pipeline. To the south-west of the southern part of the route is the site of the probable medieval road (HER 11532), while a medieval moat and earthworks at recorded at Keely Green (HER 3435).

Post-medieval

- 1.3.9 The post-medieval settlement of Green End is located to the west and incorporates a number of cottages dating from the 17th to 19th centuries (HER 11558). On the eastern edge of Green End are a 19th century Granary (HER 8746) and an Onion Loft, which is of local interest (HER 18642).
- 1.3.10 Some 200m to the east of the excavation, at Kempston Bury, are a 17th century demolished dovecote (HER MBB11679) and malthouse (HER MBB11680). A substantial house is documented in the area of the Bury in the early 16th century, which may have represented a shift of location from the possible medieval manorial centre identified to the west (see above). This was rebuilt in brick in 1630 but appears to have been subsequently replaced by another building called The Bury in the 19th century, located to the east of the Bedford Western Bypass (Luke et al. 2009, 8; Luke 2016)

1.4 Acknowledgements

1.4.1 The work was commissioned by Anglian Water; in particular OA East would like to thank Jo Everitt of Anglian Water. The works were supervised by Nick Cox and James Fairbairn with fieldwork being carried out with the assistance of Matt Brooks, Louise Bush, Zoe Clarke, Anthony Haskins, Neil Holbrook, Ted Levermore, Steve Morgan, Richard Scurr and Chris Swain. The project was managed for OA East by Matt Brudenell and was monitored on behalf of Bedford Borough Council by Geoff Saunders and Venessa Clarke.

2 AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 The original aims of the project were set out in the Brief (Saunders 2014) and Written Scheme of Investigation (Brudenell 2015).
- 2.1.2 The main aims of this excavation were:
 - To mitigate the impact of the development on the surviving archaeological remains. The development would have severely impacted upon these remains

© Oxford Archaeology East Page 11 of 68 Report Number 1944



- and as a result a full excavation was required, targeting the areas of archaeological interest highlighted by the previous phases of evaluation.
- To preserve the archaeological evidence contained within the excavation area by record and to attempt a reconstruction of the history and use of the site.
- 2.1.3 The aims and objectives of the excavation were developed with reference to Regional and Local Research Agendas.

2.2 Regional Research Objectives

- 2.2.1 This excavation took place within, and will contribute towards the goals of, the Regional Research Frameworks (Glazebrook 1997, Brown & Glazebrook 2000 & revised by Medlycott 2011; Oake *et al.* 2007) relevant to this area.
- 2.2.2 The general aim of the investigation was to investigate the origins, date, development, phasing, spatial organisation, character, function, status, and significance of the remains revealed.

2.3 Local Research Objectives

2.3.1 The primary local research aim was to identify how the buildings and other remains identified by the evaluation can be related to historic/medieval settlement core around Church End.

2.4 Site Specific Research Objectives

- 2.4.1 Site specific research objectives for this project are:
 - To establish what type of structure the building was
 - To establish what its function was, and whether it existed in isolation.
 - To determine whether the structure represented green-edge settlement

2.5 Methodology for evaluation and excavation

- 2.5.1 The methodology used followed that outlined in the Brief (Saunders 2014) and detailed in the Written Scheme of Investigation (Brudenell 2015).
- 2.5.2 Machine excavation was carried out by a tracked 360-type excavator using a 1.8m wide flat bladed ditching bucket under constant supervision of a suitably qualified and experienced archaeologist.
- 2.5.3 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.
- 2.5.4 All archaeological features and deposits were recorded using OA East's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and colour and monochrome photographs were taken of all relevant features and deposits.
- 2.5.5 Environmental samples were taken from features across the site with particular emphasis on the burnt contexts, such as hearths and ovens.
- 2.5.6 The site was generally dry apart from the very end of the excavation when heavy rain caused extensive flooding. The evaluation was located in farmland and partially in a nature reserve. The excavation was located in an area of scrub land.

© Oxford Archaeology East Page 12 of 68 Report Number 1944



3 Results

3.1 Introduction

- 3.1.1 This section includes the results from both the evaluation and the excavation; the results of the evaluation are described first.
- 3.1.2 The evaluation consisted of thirteen 30m by 1.8m trenches and two 15m by 1.8m contingency trenches located either side of Trench 3 to establish the extent of the stone building foundations identified in this trench and any associated evidence. Only eight of the trenches contained archaeology: these are described below starting at the southern end of the pipeline and working northwards.
- 3.1.3 The excavation area comprised a single open area 55m long and 8m wide along the line of the water main easement, which was 10m wide; an area totalling approximately 520m². This was opened around Trench 3 and between Trenches 14 and 15.

3.2 Evaluation

3.2.1 Descriptions of the features identified and artefacts recovered are given in this section with a context inventory presented in Appendix A, Table 4. Plans of trenches containing archaeology are presented as Figure 3 (Trenches A, B, and C in Area 1), Figure 4 (Trenches 2-3 and 15 in Area 3) and Figure 5 (Trenches 4-6 in Area 3). Selected sections are presented as Figure 6.

Area 1: Trench A (Fig. 3)

- 3.2.2 Trench A was located at the southern end of Section 1 of the pipeline and was aligned north-east to south-west. The topsoil was 0.25-0.29m thick, and the subsoil was 0.08-0.13m thick. None of the features in this trench produced finds.
- 3.2.3 A narrow linear gully (5) on a south-south-east to north-north-west alignment terminated just before the eastern edge of the trench 6.5m from the northern end. This was 0.37m wide and 0.15m deep and was filled by a light orange brown silty clay (4).
- 3.2.4 Two metres further south was a shallow ditch or furrow (7) running north-west to south east (Fig. 6, Section A.2). This was 1.05m wide and 0.15m deep, and contained a light pinkish brown silty clay (6).
- 3.2.5 At the southern end of the trench was a furrow (11) running north-west to south-east, 1.6m wide and 0.15m deep. This was filled by a light/mid greyish brown silty clay (10). It was truncated by a post-medieval gully (9) which also cut the subsoil (Fig. 6, Section A.3). The gully was 0.85m wide and 0.3m deep with a dark greyish brown silty clay fill (8).
- 3.2.6 Two further north-west to south-east aligned furrows were also revealed to the north and south of ditch/furrow **7**.

Area 1: Trench B (Fig. 3)

- 3.2.7 This was the middle of the three trenches in the southern section of the pipeline and was aligned north-east to south-west. The topsoil was 0.32m thick and the subsoil 0.2m thick.
- 3.2.8 At the southern end was a shallow sub-circular pit (13) measuring 1m by 0.68m and 0.08m deep. It contained a light pinkish brown silty clay (12) which contained no finds.



- 3.2.9 Just north of pit **13** was a gully terminus (**15**) on a north-east to south-west alignment, 0.9m wide and 0.3m deep (Fig. 6, Section B.2).
- 3.2.10 Mid-way along the trench was a tree throw (18), 2.15m by 1.35 and 0.18m deep. This contained two fills. A light pinkish brown clayey silt (17), 0.09m thick and a mid orange brown silt clay (16), 018m thick, from which no finds were recovered.
- 3.2.11 Running up the eastern edge of the trench at the northern end was a foundation trench (24) 0.72-0.8m wide and 0.06-0.12m deep. It was filled by a mid orange grey silty clay (23) that contained modern pottery, window glass, brick and charcoal.

Area 1: Trench C (Fig. 3)

- 3.2.12 This was the northernmost trench in the southern section of the pipeline, aligned northeast to south-west. The topsoil was 0.28m thick and the subsoil 0.32m thick.
- 3.2.13 It contained four north-west to south-east aligned furrows, roughly 2m wide and 0.1m deep.

Area 3: Trench 2 (Fig. 4)

- 3.2.14 Trench 2 was located towards the north end of the Phase 2b easement area, and was aligned north north-east to south south-west. The topsoil was 0.28-0.35m thick, and the subsoil was between 0.27 and 0.45m thick. The northern end of the trench contained a 0.15m thick dark grey silt clay lower sub-soil/buried soil (55). This yielded two sherds (16g) of mid 12th-14th century pottery.
- 3.2.15 Two parallel north-west to south-east aligned ditches (**49** and **51**, Fig. 6, Sections 2.3 and 2.4), a posthole (**53**) and a shallow pit (**59**) were revealed in the trench. The ditches were located towards the centre of the trench and measured 0.60-65m wide, 0.17-0.34m deep and had U-shaped profiles filled with mid grey silty clay. Ditch **49** yielded eight sherds (31g) of mid 12th-14th century pottery and a fragment of residual Roman pottery (2g), whilst ditch **51** yielded three sherds (6g) of mid 12th-14th century pottery. Bulk environmental samples taken from the ditches contained charred cereal grains (barley, wheat, oats), weed seeds and small amount of charcoal (Appendix C.2).
- 3.2.16 Posthole **53** was located at the southern end of the trench, and was 0.50m wide and 0.10m deep. It was circular in plan and had a concave profile filled with dark grey silty clay. Fragments of an 18th century (11 sherds, 407g) English 'mallet' type glass bottle were recovered from the posthole alongside a residual sherd (1g) of mid 12th-14th century medieval pottery.
- 3.2.17 Pit **59** was located at the northern end of the trench. It was partially exposed in the western section and measured 0.65m wide and 0.08m deep. The pit was filled with brown grey silty clay (60) and yielded a sherd of (11g) 17th-18th century pottery and a sherd of residual Roman pottery (4g). The pit cut sub-soil/buried soil 55.

Area 3: Trench 3 (Fig. 4)

- 3.2.18 Trench 3 was aligned north north-east to south south-west c.45m to the south of Trench 2. The topsoil was 0.28-0.34m thick, and the subsoil, present only in the northern half of the trench, was between 0.10-0.27m thick.
- 3.2.19 Parts of a structure were revealed in the southern half of the trench, comprising the foundations of two stone walls (27 and 28, which correspond with walls 79 and 86 in the excavation), a spread of rubble (42), layers probably representing floor surfaces (43 and 44) and four possible postholes (45-48). The structure was not excavated, but the



- features, layers and walls were cleaned, planned and photographed, with finds recovered from the surface. These comprise a total of 13 sherds (166g) of pottery. The material dates from the 9th-15th centuries, with the majority of sherds dating to the mid 12th-14th century. This area was subsequently opened up for excavation (see below).
- 3.2.20 In the northern half of the trench were two amorphous charcoal-rich deposits, possibly representing the upper fill of one or more pits (29). These were subsequently excavated as oven **182** and pit **190** in the excavation. Finds recovered from the surface comprised five sherds (40g) of late Saxon/Early medieval pottery dating from the mid 9th-mid 12th century.

Area 3: Trench 15 (Fig. 4)

- 3.2.21 Trench 15 was a contingency trench cut to the south of Trench 3, and aligned north to south. The topsoil was 0.27-0.30m thick, and the subsoil was between 0.04-0.16m thick.
- 3.2.22 The trench revealed a single shallow north-east to south-west aligned ditch (**61**). This was located toward the centre of the trench. The ditch displayed a U-shaped profile (Fig. 6, Section 15.1) and was 0.51m wide and 0.13m deep. It was filled with mid grey silty clay and yielded three sherds (5g) of mid 12th-14th century medieval pottery.

Area 3: Trench 4 (Fig. 5)

- 3.2.23 Trench 4 was aligned north north-east to south south-west. The topsoil was a maximum of 0.32m thick, and the subsoil was between 0.10-0.13m thick.
- 3.2.24 Two shallow east-west aligned inter-cutting ditches (31 and 33) and a pit (35) were revealed at the far northern end of the trench, whilst a series of inter-cutting features (37, 39, 41) were located at the far southern end (Fig. 6, Section 4.1). None of these produced finds.
- 3.2.25 Pit **35** was broadly circular in plan and measured 0.80m wide, 0.18m deep, and was filled with mid brown silty clay (34). A truncated ditch (**33**) lay to the north (which was 0.08m deep, cut by another ditch (**31**). This had a concave profile, was 0.54m wide, 0.09m deep, and filled with grey brown silty clay (30).
- 3.2.26 The groups of inter-cutting features at the southern end of the trench were amorphous within indistinct edges, all filled with pale grey silty clay. Features **37** and **39** were only 0.08m deep, and were cut by a field drain. Feature **37** appeared to cut **34**, which was more substantial, being 0.94m wide and 0.18m deep.

Area 3: Trench 6 (Fig. 5)

- 3.2.27 Trench 6 was located towards the southern end of the Phase 2b easement area and was aligned north north-west to south south-east. The topsoil was 0.28-0.36m thick, and the subsoil was between 0.05-0.33m thick.
- 3.2.28 A single pit (58) was revealed towards the northern end of the trench. Partially exposed in the western section, it was 1.25m wide and 0.26m deep. It was filled with brown silty clay that produced no finds.

Excavation (Figs 7-11)

3.2.29 The excavation revealed the remains of at least three medieval buildings and associated activity all on the same general north-east to south-west alignment.



- 3.2.30 Descriptions of the features identified and artefacts recovered are given in this section with a context inventory presented in Appendix A, Table 5. Phased plans of the excavation area are presented as Figures 8-10, with selected sections shown on Figure 11
- 3.2.31 Four periods of activity were identified.

Period 1: Prehistoric

Period 2: 9th-11th century

Period 3: 12th to 15th century

Period 4: Post-medieval

3.3 Natural features (ponds)

- 3.3.1 At both ends of the excavation area were two large, irregular natural hollows (probable shallow ponds) that were cut into by later features. At the northern end, pond **191** extended 5m into the excavation from the west and measured 19m wide and 0.35m in depth. It was filled by a mid brown orange clay silt (164), which contained 103g of mainly 9th to 11th century pottery, an iron nail and a single fragment of animal bone.
- 3.3.2 Located to the south was a second hollow or pond (132) which was exposed across the full width of the excavation area for a distance of 4m from the southern edge. It was filled by a 0.3m thick mid yellow grey clay (133), overlain by a small area of light yellow grey clay (129) 0.16m thick. These fills contained no artefactual or environmental remains.

3.4 Period 1: Prehistoric (Fig. 8)

3.4.1 The earliest feature appears to have been a posthole (**140**) located in the centre of the excavation area in an area of later pits (see below). Sub-circular in plan, the posthole had a diameter of 0.3m and depth of 0.17m (Fig. 8; Fig.11, Section 34). It was filled by a mid grey fine silty clay (141) which contained a moderate amount of charcoal and five sherds of pottery that are not very diagnostic but are probably prehistoric (App. B4 Table 16).

3.5 Period 2: 9th-11th century (Fig. 8)

3.5.1 Towards the centre of the excavation area, and to the south of pond **191**, was a group of four small pits (**92**, **112**, **138** and **142**), of which only **112** contained datable material, comprising a single sherd of 9th-11th century pottery. Pit **92** was truncated by a later feature – it measured 0.55m in diameter and was 0.08m deep with a dark grey brown sandy clay fill (93). To the north, pit **112** survived to a width of 0.4m and was 0.15m deep, and was filled by a dark brown grey clay (113). Pit **138** on the south-eastern edge of the group was 1.1m long, 1.0m wide and 0.15m deep, and was filled by a mid brown grey clayey silt (139). A similar pit (**142**) to the north was 1.0m long, 0.8m wide and 0.1m in depth, and was filled by a mid brown grey clayey silt (143).

3.6 Period 3: 12th to 15th century (Figs 9, 10 and 11)

Sub-period 3.1 (Fig. 9)

Building 1

3.6.1 The partial remains of a timber building were revealed towards the centre of the excavation, truncating Period 2 pit **92**. This poorly-dated structure was probably



- rectangular in plan although any remains of the southern wall may have been removed by the subsequent phase of building (see below).
- 3.6.2 Building 1 was aligned north-east to south-west, and was represented by two lengths of beamslot (68/96, 70) and some associated postholes. Beamslot 68/96 measured 6.0m long 0.26m wide and varied in depth from 0.06-0.09m. It was filled by a dark grey brown sandy clay (69) which contained a single sherd of 11th to 12th century pottery and two small 19th century sherds; the latter clearly intrusive. Other finds include two iron objects, one nail and a possible hinge (Sf 4). A second beamslot (70) continued on the same alignment for 2.4m to the north-east, separated from beamslot 68 by a 1.1m wide gap: its full length was not revealed within the excavation. This was 0.27m wide and 0.14m deep, filled by a dark grey brown sandy clay (71) similar to that within the adjacent beamslot, from which three iron objects were recovered.
- 3.6.3 Two small postholes were located along the line of the beamslots, offset on either side. Posthole **72** lay 0.12m to the north-east of beamslot **70** and was 0.28m in diameter, and 0.17m deep (Fig.11, Section 20; Plate 2). It contained a dark grey brown sandy clay fill (73) and produced no finds. Posthole **74** was just to south-east of the beamslot line, located adjacent to the gap between the two slots. It was 0.28m in diameter and 0.1m deep. It contained a dark grey brown sandy clay fill (75), with no finds.
- 3.6.4 Located *c*.2m south of the beamslot was another small posthole (**110**), which was 0.26m in diameter and 0.07m deep. It was filled by a dark grey sandy clay (111), from which an iron nail and a sherd of 9th to 11th century pottery were recovered.
- 3.6.5 Possibly contemporary was a large stone-packed posthole (87) located 4m north of beamslot 70. This was 0.4m in diameter and 0.15m deep (Fig.11, Section 22). It contained a dark red brown sandy clay packing material with frequent large stones (89) overlain by a later backfill of dark grey brown sandy clay (88). Neither fill produced finds and it is possible that this posthole was related to the subsequent phase of building construction.

Sub-period 3.2 (Fig. 9)

Building 2

- 3.6.6 Building 2, which was constructed on the same alignment over the footprint of Building 1, was more substantial than its predecessor, having stone-built foundations. Although not fully-exposed, it appears to have been 9m wide and at least 13.5m long. This structure had previously been identified within Trench 3 of the evaluation. The northeast corner and parts of the north-west, north-east and south-west walls of this building were revealed within the excavation area. These were all formed from roughly finished blocks of limestone laid in two rough courses surviving to a height of 0.18m and bonded primarily with clay rather than mortar (Fig. 9; Plate 1).
- 3.6.7 The north-west wall consisted of two lengths of foundation (**79** and **81**), between which was a 0.75m-wide doorway. Foundation **81** extended for 2.3m from the western baulk and was 1.05m wide, with the remains of a door jamb located at its north-eastern end. Twenty-three sherds of pottery dating to the 12th to 14th centuries were recovered from the fill of this foundation, 14 of which were pieces from the same jug with brown and pale slip strips. Although foundation **79** (exposed for a length of 4.5m) was narrower than foundation **81** at 0.61m wide, their internal faces were roughly aligned (Fig.11, Section 28; Plates 5 and 7).
- 3.6.8 Also surviving in two sections (**76** and **77**), the north-east wall appears to have been divided by a narrow gap, possibly for drainage. These foundations incorporated smaller,



- rougher pieces of stone than the other walls, with no proper coursing. Foundation **77** formed a corner with foundation **79** and was 1.6m long and 0.85m wide. Its inner southwestern face was in alignment with that of **76** which was 0.55m wide and was exposed for a length of 1.45m.
- 3.6.9 The south-east wall was mostly robbed out although a small section of foundation (67) survived against the western edge of the excavation. This was 1m long within the excavation and 0.5m wide.
- 3.6.10 In the area of the doorway, located between foundations **79** and **81**, were two sections of masonry (**80** and **117**), with a 0.2m-wide gap between them possibly forming a slot for a beam. These may have formed part of a threshold, although they may conceivably have been related to a different phase of construction or modification of the building. Threshold **80** was 1.75m long, 0.45m wide, and 0.18m thick. It was constructed from limestone pieces up to 30mm in size and roughly finished. These were laid in two rough courses and bonded with a sandy clay. The threshold abutted the north-western face of wall foundation **79** and extended to the end of foundation **81**. Located to the north-west of and parallel with this was threshold **117**, measuring 1m long, 0.25m wide and 0.08m thick. It was constructed in the same way as threshold **81** but was bonded with small amounts of light yellow mortar in addition to clay.
- 3.6.11 Extending to the north of these was a cobbled pathway or yard surface (82) running on a north-west to south-east alignment across the earlier (infilled) pond **191**. The surface was 2.75m wide and 3.0m long but appeared to continue beyond the western edge of the excavation area. It consisted of a 0.1m thick dark reddish brown sandy clay with frequent stones. A total of six sherds of 12th to 14th century pottery (including a rim sherd from a bowl which was also found in wall 81), three iron nails and a galliform bird bone were recovered from the surface.

Internal features

- 3.6.12 A line of large postholes and post pads was located 3m inside of the north-east wall on a north-west to south-east alignment. Post pad **126** was the most southerly of these, positioned 0.6m north-west of the south-east wall. This comprised a sub-square cut measuring 0.5m by 0.6m in plan and approximately 0.3m deep. It was filled with limestone pieces (66), 0.1-0.3m in size, roughly packed together with occasional mortar bonding, a single iron nail was recovered from this.
- 3.6.13 Located 1.45m further north-west was sub-rectangular posthole (98) (Fig.11, Section 17; Plate 3), measuring 0.8m long, 0.65m wide and 0.26m deep. It was filled by a stone packing layer (100) of mid grey brown silty clay containing large stones (up to 0.2m in size). Above this was very dark brown silty clay (99) containing large amounts of stone and charcoal. No finds were recovered from the posthole, although an environmental; sample produced a small amount of charred wheat grains (App. C.2.)
- 3.6.14 A further 0.75m north-west of this was another large posthole (108). This was subcircular, 0.64m in diameter and 0.36m deep (Fig.11, Section 23; Plate 4). It contained a mid greyish brown sandy silt (109) with frequent stones. A postpipe (114) was discernible, consisting of a mid yellowish brown silty sand, 0.2m in diameter and 0.22m deep. This posthole truncated the end of Building 1 beamslot 96. A single sherd of residual 9th to 11th century pottery was recovered from fill 109.
- 3.6.15 The last posthole (**119**) in this group lay 1.85m further north-west of posthole **108** and 0.5m from the north-west wall. This was sub-circular in plan, 0.7m in diameter and much shallower than the others at 0.1m deep. Its single fill (120) was a mid grey brown



- sandy clay with moderate stones and occasional charcoal. No finds or environmental evidence was recovered from the posthole.
- 3.6.16 A small area of flat stone paving (86) was located west of foundation **76** inside the building: possibly a remnant of an internal floor surface. The paving survived in an area measuring 2.5m long by 0.9m wide, with the paving slabs being a maximum of 0.7m by 0.42m and up to 0.07m thick.
- 3.6.17 A hearth (**104**) was located to the south-west of the posthole line, *c.*4.5m south of the north-west wall and against the western edge of the excavation area. It was subcircular in plan, measuring 1.3m long, 1.23m wide, and 0.14m deep. Its fill comprised a mid to dark orange brown silty clay (105), from which an environmental sample produced a small amount of charcoal. This hearth was subsequently re-cut (**106**) to a smaller size (0.7m long, 0.53m wide and 0.22m deep), which contained a dark yellowish brown silty clay (107) (Fig.11, Section 18; Plate 6). Both fills produced very small quantities of Late Saxon to late medieval pottery.
- 3.6.18 Immediately south-east of the hearth was a shallow sub-circular pit (127), 1.05m by 0.8m and 0.1m deep. This was filled by a mid brown fine clayey silt (128) which contained small sherds of residual Saxo-Norman pottery. An environmental sample produced a tiny amount of charcoal.
- 3.6.19 Overlying most of the interior of Building 2 was a spread of material (42/43/84/85/91) 0.08m thick, consisting of a mid grey brown sandy clay. This was removed during the cleaning of the building and is not shown on plan. A total of 29 sherds of Late Saxon and medieval pottery (latest of which is 13th-14th century, App. B5), a cattle ulna, a copper alloy cooking vessel foot (Sf 5; 13th-15th century), three iron nails (including a possible clench bolt) were recovered from it. Although thought to be an occupation-related deposit, this layer probably relates to a period of abandonment prior to the demolition of the building.

Building 3

- 3.6.20 Located *c*. 2m to the south of Building 2 was a second smaller building (Building 3) on the same alignment. This was 6.25m long and 3.5m wide but was more heavily robbed out and only a single phase was identified.
- 3.6.21 Traces of all four walls were present within the excavation area (Plate 10), although all had been robbed of any stone. On the north-west side, the base of a foundation trench was present (150) that was 1m wide and survived to a depth of 0.3m. It was filled by a light grey brown yellow silty clay (151), from which no finds were recovered.
- 3.6.22 A shallow foundation trench (**165**) formed the south-east side and measured 8m long, 1m wide and 0.2m deep. It was filled by a light grey brown yellow silty clay (166) (Fig.11, Section 43) which contained a single cattle bone. A find of interest from this fill is a small piece of decorated jet carved with a ring-and-dot motif (Sf 19) that may have originated from a knife handle (see App. B2).
- 3.6.23 On the north-east side the foundation trench (**167**) was approximately 4m long, 1.1m wide and 0.2m deep (Fig.11, Section 44). It contained a dark grey brown silty clay (168), which produced a single piece of cattle bone.
- 3.6.24 The south-west wall foundation (**170**) was 1m wide and continued beyond the excavation area to the west. It was filled by a light grey brown yellow silty clay (171) that produced no finds.

© Oxford Archaeology East Page 19 of 68 Report Number 1944



3.6.25 A few metres to the south of Building 3 was a small pit (**136**) measuring 1.1m in width and 0.17m deep. This contained a mid brownish grey fine clayey silt (137), which produced a single sherd of 12th to 14th century pottery.

Possible kitchen and associated features

- 3.6.26 Located 5.6m north of Building 2 was a short section of wall (**152**) that was revealed for a distance of 1m from the eastern edge of the excavation, extending in a north-westerly direction. Possibly forming part of a corner, the wall measured 0.4m wide and 0.1m thick. It was constructed from roughly-finished limestone in a single course and bonded with a mid brownish red gravely sand mortar (Plate 8).
- 3.6.27 To the north-west of wall **152** was a group of three truncated, small ovens (**155**, **163** and **182**), three burnt pits (**172**, **179** and **190**) along with another smaller but possibly associated pit (**159**). These formed a distinct rectangle in plan and probably represent a detached kitchen.
- 3.6.28 Ovens **155** and **163** were both key-hole shaped and built opposing each other on a north-west to south-east axis, cutting the edge of infilled pond **191**. Oven **155** to the north measured 1.8m long, 1.2m wide and 0.18m deep (Plate 9). Its basal fill was a 0.01m thick mid red brown silty clay (156) with occasional charcoal and burnt stone. Above this was fill 157: a dark red grey silty clay, 0.06m thick, containing occasional pottery sherds and frequent charcoal. The uppermost fill comprised a 0.04m thick light yellow brown silty clay (158) overlying which was a layer of tabular stones measuring 150-200mm in size. A small amount of fired clay and a mixture of Late Saxon to late medieval pottery were recovered from the fills of the oven, while environmental sampling yielded a single fish vertebra along with charred wheat grains and vetch seeds (App. C.2).
- 3.6.29 Oven **163** was 1.8m long, 1.1m wide and 0.18m deep. Its basal fill (162) was a 0.09m thick light orange brown silty clay, with some charcoal and degraded baked clay. The upper fill was a dark red grey silty clay (161), 0.06m thick, with frequent charcoal and some tabular stones. Finds comprise a small amount of medieval (late 12th-14th century) pottery along with fragments of fired clay, some possibly oven lining. Environmental remains included abundant charred wheat grain, vetch seeds, a small amount of barley and a single sheep bone (App. C.2.).
- 3.6.30 The third oven (**182**) was originally located within evaluation Trench 3 (recorded as part of context 29, see above). It was sub-rectangular in shape, 1.6m long, 1m wide, 0.24m deep and aligned north-east to south-west. It contained a mid grey red silty clay (183), 0.1m thick, and a dark grey silty clay (184); both with abundant charcoal. A silver farthing of Edward 1 (c. AD 1279-1280; Sf20) was found in fill 183. The oven had subsequently been re-cut (**185**) to a depth of 0.22m. The re-cut was lined with tabular stones (186) on its base and sides, forming a lining that was 0.04m thick. It was then filled by a 0.15m-thick dark brown grey silty clay (187) containing frequent charcoal along with a few sherds of late 12th to 14th century pottery. A final fill of a mid yellow grey clay (188), 0.05m thick was deposited over this (Fig.11, Section 47). Environmental samples from the fills of both phases of oven produced a moderate amount charred wheat, vetch seeds and abundant charcoal (App. C.2.).
- 3.6.31 Pit **172** was located 1.75m north-east of oven **155**. It was sub-circular, 1.1m in diameter and 0.26m deep. Its base fill (174) was a dark orangey brown silty clay, 0.17m thick. Its upper fill was a dark greyish brown silty clay (173) with occasional burnt stone and charcoal. A total of 42 sherds of 12th to 14th century pottery, in addition to a small amount of earlier medieval pottery and fired clay were recovered from the fills of the pit.



- Environmental remains include a piece of deer antler and a moderate amount of charred vetch seeds.
- 3.6.32 South of pit **172** was a larger, more irregular pit (**179**) that measured 2m long, 1.9m wide and 0.24m deep. This contained two fills: a lower fill of a mid orangey brown silty clay (181), 0.2m thick, and an upper fill of a dark greyish brown silty clay (180), 0.04m thick. No finds or environmental remains were recovered.
- 3.6.33 Just to the south of oven **182** (also within the evaluation trench) was another truncated pit (**190**, also recorded as part of context 29 in evaluation). This was sub-circular, 1.8m long, 1.2m wide and 0.15m deep (Fig.11, Section 46). It contained a dark grey silty clay fill (189) with very frequent charcoal and occasional stones. A single sherd of pottery dating to the 11th to 12th centuries and small amounts of fired clay were recovered, while environmental remains include charred wheat grains, barley grains and vetch seeds.
- 3.6.34 Pit **159** was the more southerly of the group and was sub-circular in plan, measuring 0.88m long, 0.54m wide, and 0.09m deep. It was filled by a mid greyish brown silty clay (160), which produced small amounts of late 12th to 14th century pottery and a single pig bone fragment.

Ditches

- 3.6.35 A series of three linear ditches crossed the northern end of the excavation, the more southerly of which (146) cut pit 179. Two of the ditches were parallel with each other (146 and 149), aligned on the same axis as the buildings to the south (north-east to south-west), while the third ditch (178) extended at right angles from the northern edge of ditch 149.
- 3.6.36 Ditch **146** was exposed for a distance of 4m before terminating (Fig.11, Section 36); it was not visible within the evaluation trench to the north-east. It was 1.04m wide and 0.31m deep with two fills. The basal fill was a light orange brown silty clay (145) with occasional charcoal, 0.11m thick. The upper fill was a mid brown grey silty clay (144), 0.19m thick. No finds were recovered from either ditch fill.
- 3.6.37 To the north of this, ditch **149** extended across the north-east corner of the excavation for a distance of *c*.9m. It was 0.95m wide and 0.26m deep with two fills. At the base was a 0.09m thick light orange grey silty clay fill (148), above which was a mid brown grey silty clay (147), 0.18m thick. These produced a small amount of medieval (late 12th-14th century) pottery and a single cattle scapula.
- 3.6.38 Only a short length of ditch **178** was exposed, which was 1.7m wide and 0.55m deep, steep-sided with a flat base (Fig. 11, Section 41). This ditch contained three fills: the lowest (177) was a 0.09m thick light orange grey silty clay, above which was a mid brown grey silty clay (176), 0.3m thick. The top fill was a 0.2m thick dark brown grey clay silt (175). A single sherd of pottery, dating to the 11th to 12th centuries was recovered, in addition to a single cattle mandible.

Sub-period 3.3: Demolition (Fig. 10)

Building 2

3.6.39 The south-eastern wall (67) of Building 2 was largely removed by a robber trench (121). This was 0.9m wide and 0.3m deep and contained two fills. The basal fill was a mid brownish grey fine clayey silt (122), 0.14m thick. This was overlain by a 0.16m thick light brown fine silty clay (123), containing frequent stones (up to 0.3m in size) (Fig.11,



- Section 27). A single large base sherd of late medieval pottery was recovered from the fills of this feature.
- 3.6.40 Along the outside edge of the north-west wall (**79** & **81**) was another robber trench (**115**). This was 0.95m in width and 0.49m deep with three fills. The basal fill was a 0.21m thick dark grey silty clay (125), above which was a 0.11m thick compact mid reddish grey sandy clay (116) with abundant stones. Overlying this was a dark grey brown sandy clay (118), 0.14m thick (Fig.11, Section 28; Plate 7). These fills collectively produced 11 sherds of mixed early to late medieval pottery along with cattle and sheep bones.

Building 3

- 3.6.41 Building 3 was also comprehensively robbed: foundation trench **150** was truncated by a robber trench **(134)** measuring 1m wide and 0.1m deep, filled by a mid grey brown silty clay (135). The latter produced sixty sherds of pottery, ranging from in date from Late Saxon to late medieval, and a single galliform bird bone.
- 3.6.42 Overlying the remains of Building 3 was a 0.2m-thick spread of demolition material (64) which largely consisted of limestone rubble, up to 0.2m in size. A total of 66 sherds of medieval pottery, four fragments of animal bone, a copper alloy fragment and possible iron hinge (sf 18) were recovered from this layer.
- 3.6.43 To the south-east of Building 3 was a short robber trench (**130**), presumably denoting the line of a former wall foundation. Measuring 3.3m long, 0.65m wide and 0.26m deep, it was aligned perpendicular to wall foundation **165**. This contained a mid red grey silty (131), with frequent large pieces of stone, that yielded 16 sherds of 12th to 14th century pottery and two cattle bones.

Finds summary

- 3.6.44 Metallic finds recovered included 33 iron objects (mostly nails), 4 copper alloy objects and a single silver coin, c.1278-1280 AD (Appendix B.1). Other finds include a single jet object believed to be a knife handle plate (Appendix B.2) and 12 fragments of post-medieval glass (Appendix B.3).
- 3.6.45 Five sherds of highly abraded prehistoric pottery were recovered from posthole **140**: these are all non-diagnostic (Sarah Percival pers. comm.). The evaluation produced 42 sherds, weighing 0.301kg of mid 9th to 19th century pottery and the excavation produced 34 sherds (0.205kg) of Saxo-Norman pottery and 349 sherds (3.37kg) of medieval pottery (Appendix B.4 and B.5).
- 3.6.46 Two stone peg tiles were recovered (Appendix B.5), in addition to five fragments of ceramic building material (0.378kg) and 0.12kg of fired clay (Appendix B.6).

Environmental summary

- 3.6.47 Animal bone totalling 23 specimens was recovered, primarily representing cattle and sheep, with a small amount of pig, bird and fish bones; a single fragment of deer antler was also found.
- 3.6.48 A total of 22 bulk environmental samples were taken, some of which produced abundant charred cereal remains, primarily wheat, with some barley and vetch seeds. Small quantities of charred wild plants seeds and abundant charcoal were also recovered. The preservation of charred remains was poor.

© Oxford Archaeology East Page 22 of 68 Report Number 1944



4 DISCUSSION AND CONCLUSIONS

4.1 Pre-medieval (Periods 1 and 2)

- 4.1.1 Evidence for activity prior to the medieval period is limited to a few poorly-dated shallow pits or postholes and two possible ponds located beneath the later medieval buildings and associated deposits.
- 4.1.2 One posthole (**140**) appears to have been prehistoric in date (containing five sherds of undiagnostic pottery), while one pit (**112**) contained pottery datable to the 9th to 11th centuries. The remaining scatter of features are undated but are likely to have been contemporary with the possible Saxo-Norman pit. Small quantities of residual Saxo-Norman pottery were also recovered from the later (medieval) features.
- 4.1.3 These features have no clear pattern or obvious function but provide some evidence for low level activity on the site prior to the medieval period. They probably represent peripheral activity associated with the Saxo-Norman settlement identified at SL168/9, during works for the Bedford Western Bypass and adjacent to The Bury, located between 100-300m to the north-east (see below) (Barker and Luke 2008, 58-59; Luke 2016, 342-8).

4.2 Medieval (Period 3)

4.2.1 The main phase of activity on the site was in the medieval period, primarily dating to the 12th to 14th centuries and represented by at least three buildings and associated pits, ovens and ditches. These were laid out on a general north-east to south-west axis, mirroring that of the main enclosure and ditches identified during the Bypass excavations located *c*.100m to the east close to The Bury (Fig. 12; Barker and Luke 2008; Luke 2016, 351; MBB18922).

Buildings

- 4.2.2 Building 1 was probably constructed at some point in the 12th to 13th centuries (Period 3.1). It was of timber construction, and was presumably rectangular in plan indicated by the survival of two beamslots and a number of postholes. Its full dimensions were not revealed, but it appeared to have been at least 9m long.
- 4.2.3 Much of this structure was destroyed by the construction of the much more substantial Building 2 in Period 3.2. The presence of a large part of a Brill glazed ware jug in foundation 81 suggests that the building was constructed from the late 12th century onwards, although other pottery recovered from associated deposits spans the Late Saxon to late medieval periods (see Appendix B4). This building had stone foundations and measured 9m wide and at least 13.5m long in plan. It had a central hearth and remnants of a paved floor. It may have had a second storey, indicated not only by the varying widths of the foundations but by the presence of a line of large stone-packed postholes within its eastern side. The latter would have supported the floor above and may have served to divide the main hall from a (rather narrow) parlour on the ground floor, presumably with the solar or private chambers above.
- 4.2.4 Externally, a cobbled pathway led north-westwards from a narrow doorway with a threshold in the north-western wall: the surface may have been necessary as the route of the path extended across a former pond (191). The building possibly had a stone tiled roof, suggested by the presence of dumps of partial stone roofing tiles near its north-east corner and a general lack of ceramic roofing tiles of contemporary date (Appendices B.5 and B.6). To the south of Building 2 was a smaller rectangular

Report Number 1944



structure, Building 3, that measured 6.25m long and 3.5m wide (c. 8m x 6m externally). The foundations of this building had been heavily robbed and no internal features survived, making interpretation of its function difficult. It was presumably of solid construction given the comprehensive robbing, while its proximity to Building 2 indicates a possible domestic function, although no obvious doorways were identified. Pottery associated with the buildings is entirely domestic in character (Appendix B.4), while metal finds include iron nails and three possible iron hinges, indicate the presence of some wooden internal fixtures, fittings and/or furniture (Appendix B.1).

Possible kitchen

- 4.2.5 A few metres to the north of the main dwelling (Building 2) was a probable detached kitchen comprising several ovens and burnt pits extending within a roughly rectangular area of c.6.5m by 4.5m. Two of the ovens had opposing flues and were on the same north-west to south-east alignment suggesting that they were contemporary. Environmental evidence indicates that they were probably bread ovens, although it is likely that they would have had multi-purpose functions within the household (Appendix C.2). A rectangular oven in this group contained a silver farthing of a type issued at the London mint for Edward I in c.1279-1280 AD.
- 4.2.6 Ditches to the north of these may represent boundaries and could be continuations of similar features found in the nearby Bedford Bypass excavation (SL172; Luke 2016, fig. 6.8). A small stub of wall to the south-east of the ovens may be indicative of other buildings extending to the east in this area.

Farming and economy

- 4.2.7 As only a small and fragmented animal bone assemblage (23 specimens) was recovered, it is not possible to reconstruct the diet or economy of the settlement's inhabitants with any certainty. Cattle, sheep, and to a lesser degree pig, formed the main components, although bird (fowl) and fish were also exploited to a certain extent. Some evidence of butchery was identified, while gnaw marks on some bones may point to the presence of dogs within the settlement. Charred remains, primarily wheat, with some barley and vetch seeds indicate that these cereals were grown in the vicinity, along with peas and small beans. Small quantities of charred seeds of crop weeds such as stinking mayweed, cornflower, clover/medick and scentless mayweed were also found, while oven 155 produced numerous rush seeds which may indicate the use of this wetland plant as fuel (see Appendix C2).
- 4.2.8 Excavations adjacent to The Bury as part of the Bedford Western Bypass project revealed broadly contemporary (1150-1500) enclosures, buildings and associated features (SL172), extending on both sides of a trackway leading to Green End. This settlement, which clearly had its origins in the Late Saxon/Saxo-Norman period and possibly earlier, was surrounded by open 'strip' fields to the north and south (Luke 2016, 351-9). Interestingly, the animal bone assemblage from this settlement (SL172) was also limited, producing 170 fragments of the overall total of 202 fragments recovered from five areas, of which 93 were identified to species (Maltby 2016, 30). Cattle elements formed the highest component and included evidence of primary butchery waste, while horse remains were better represented than is usual on sites of this date. In addition, sheep and pig bones were present in small quantities, alongside occasional bones of dog and cat. Conversely, a rich charred plant assemblage was recovered, mainly comprising cereal grains with a high percentage of free-threshing wheat, with smaller amounts of barley, rye and oats (Luke 2016, 371).

© Oxford Archaeology East Page 24 of 68 Report Number 1944



Manor or 'End'?

- 4.2.9 The buildings and other remains identified by the recent excavation clearly formed part of a larger swathe of settlement that may have extended westwards in the direction of Kempston Green End and Church End and possibly eastwards via The Bury towards Kempston East End. At the time of the Domesday Survey the manor of Kempston was assessed at 10 hides and was held by the Countess Judith (Page 1912, 296). By the early 13th century (1237) Kempston had been divided into three manors: Kempston Dauberry, Brucebury and Greys or Hastingbury (Wood 1984, 34; Luke 2016, 370). It had been thought that The Bury may have been the site of the manorial complex associated with Kempston Bruceberry, although the absence of corroborative evidence from the recent work in this area led to the conclusion that this was an unlikely location (Luke 2016, 370). A possible large fish pond was the only feature deemed to be indicative of a manorial site here, but this was tempered by the lack of animal bone deriving from food that would have been consumed by the higher classes, such as venison or pheasant amongst others. Manorial sites might also be expected to incorporate a church and possibly a mill; neither of which have so far been identified in the vicinity of The Bury. Further to this, manorial centres in the Great Ouse valley tend to be located close to the river, suggesting that Kempston Box End or Kempston Mill might be better candidates - or possibly Kempston Church End given the presence of All Saints Church here.
- 4.2.10 The name 'The Bury' originally applied to the field to the west of the current house (see below), recorded as 'the Berry' on the 1804 Inclosure map (Collisson 1804, Plates 11 and 12), and within which the current excavation was located. Despite the extensive settlement remains revealed by the Bedford Western Bypass excavations (SL172; Fig. 12) and adjacent to The Bury, these were not interpreted as representing part of a manorial centre, although the new evidence from the current investigation allows some reconsideration of this.
- Buildings 2 and 3 were clearly of some status given their construction using stone foundations, especially when combined with the possibility of an upper storey in Building 2 and the presence of a detached kitchen to the north. These were of more substantial construction than the post-built structures identified in the adjacent excavation and it is not inconceivable that they may have formed part of the core of a manorial complex. The adjacent settlement appears to have been focused around a trackway leading towards Kempston Green End, while the group of buildings identified by the current excavation were clearly positioned at some distance from this. This could also indicate that the buildings may represent more than a farmstead, especially when combined with the enclosures and other settlement remains extending to the north-east towards The Bury. The settlement pattern across much of Bedfordshire is 'characterised by a series of inter-connected hamlets or 'Ends", some of which may have 'been created or expanded in times of rising population' (Luke 2016, 359). Within this context it is probable that the buildings and associated features at the current excavation, and those in the adjacent settlement at SL172, represent expansion associated with Green End or Church End. It is also possible however, given the presence of the stone-footed buildings, that these remains were related to a higher status settlement and possibly the site of a manorial complex, the location of which appears to have shifted progressively eastwards over time.

© Oxford Archaeology East Page 25 of 68 Report Number 1944



4.3 Late medieval: demolition and abandonment

- 4.3.1 Within the pottery assemblage there is minimal evidence for late medieval or post-medieval activity, suggesting that intensive occupation of the site had probably ceased before the 15th century. The buildings were subsequently demolished, with any usable materials removed, and open features such as the ovens, pits and ditches filled in. Robber trenches were dug along both the north-west and south-east walls of Building 2, although the north-western wall foundation remained intact, whilst much of the south-eastern wall had been completely removed. Building 3's foundations appear to have been completely robbed out and these were then covered by a dump of rubble; presumably unwanted building material and other 'rubbish' from the demolition of Buildings 2 and 3 and other structures in the vicinity. The pottery and other finds from the demolition phase are very mixed but largely appear to reflect the main period of occupation of the site (12th to 14th centuries). This area appears to have reverted to open fields during the later medieval and post-medieval periods.
- 4.3.2 The manor of Kempston Brucebury, thought to have been located somewhere in the vicinity of The Bury (see above), was sub-divided in 1417, which may possibly tie in with the demolition (if not abandonment) of Buildings 2 and 3. The advent of the Black Death in the mid-14th century may also have played a role in the abandonment of these buildings. From 1624 The Bury was owned by a succession of wealthy landowners, including the Cater family, and documentary sources include reference to a brick mansion with a dovecote that was built in 1628 'a little to the east of the old house' which was called 'the Place' (Wood 1984, 37; cited in Luke 2016, 360; Page 1912, 300). Evidence from the adjacent excavations indicates that the focus of settlement shifted slightly eastwards from its medieval location in the post-medieval period. It was suggested that the site of the earlier manor house may have lain beneath the present (mid-19th century) house, although it is also possible that it was sited a little further east, in the area where Buildings 2 and 3 were identified. The earlier brick mansion lay to the east of this: its location is shown on historical maps and has been confirmed by geophysical survey (Luke 2016, 360).

4.4 Significance

4.4.1 The identification of previously unknown buildings of substantial construction, combined with the presence of a detached kitchen, is of some significance, especially when viewed within the immediate context of the extensive settlement remains identified to the east and around The Bury. Whether these buildings formed part of a manorial complex associated with Kempston Brucebury or one of the other 'lost' Kempston manors, or represents expansion related to the various hamlets or 'Ends' that characterise the county, is difficult to establish with any certainty given the small area excavated.

© Oxford Archaeology East Page 26 of 68 Report Number 1944



5 Updated Project Design for Archiving and Publication

5.1 Storage and Curation

The Excavation Record

5.1.1 All hand written records have been collated and checked for internal consistency, and the site records have been transcribed onto an MS Access Database. Quantities of records are laid out in the table below

Туре	Quantity
Context registers	4
Context numbers	191
Plan registers	1
Section registers	1
Sample registers	3
Plans	5
Sections	32
Digital photographs	192

Table 1: Excavation Record

- 5.1.2 Excavated material and records will be deposited with The Higgins Bedford Museum under the Site Code BEDFM 2014.63. A digital archive will be deposited with OA Library/ADS. During publication preparation, OA East will hold all material and reserves the right to send material for further specialist analysis.
- 5.1.3 The archive will be prepared in accordance with current OA East guidelines, which are based on current national guideline, and 'Preparing Archaeological Archives for Deposition in Registered Museums in Bedfordshire' (2010).

5.2 Publication

- 5.2.1 It is proposed that the results of the project should be published as a short note in *South Midlands Archaeology.* The article would be authored by Nick Cox and Rachel Clarke. The article would include a summary of the excavation with a focus on the medieval buildings. The publication will comprise c. 2000 words and include 2 figures and 3 plates. Tasks associated with publication are identified in Table 3.
- 6 RESOURCES AND PROGRAMMING

6.1 Project Team Structure

Name	Initials	Project Role	Establishment
Liz Popescu	EP	Post-Excavation and Publication Manager	OA East
Rachel Clarke	RC	Author/Editor	OA East
Nicholas Cox	NC	Author	OA East
Severine Bezie	GG	Illustrator	OA East
Kat Hamilton	KH	Archives officer	OA East

Table 2: Project Team

© Oxford Archaeology East Page 27 of 68 Report Number 1944



6.2 Stages, Products and Tasks

Task	Task		Staff						
No.			1.0						
Project I	Project Management								
1	Project management		EP/RC/M						
			В						
2	Team meetings		EP/RC/N						
			C/SB						
Stage 1:	Publication preparation		5.0						
3	Prepare publication figures		SB						
4	Edit/summarise text		NC/RC						
5	Compile list of illustrations/liaise with illustrators	NC/GG							
6	Update discussion		NC/RC						
7	Finalise figures		SB						
8	Collate/edit captions, bibliography		RC/NC						
9	Internal edit		RC/EP						
10	Post-refereeing revisions (if applicable)		RC						
11	Copy edit queries		EP/RC						
12	Proof-reading		RC						
Stage 3:	Archiving		2						
13	Archive/delete digital photographs		KH						
14	Compile/check material and paper archive		KH						
Total:									

Table 3: Task Listings

6.3 Project Timetable

It is anticipated that an article will be ready to submit within one year, with the archive deposited as the same time.

© Oxford Archaeology East Page 28 of 68 Report Number 1944



APPENDIX A. CONTEXT SUMMARY WITH PHASING

Evaluation

Context	Tr	Cut	Category	Breadth	Depth	Feature Type	Date Range	Phase
1	Α	-	layer	-	0.34	topsoil	-	4
2	Α	-	layer	-	0.21	subsoil	-	4
3	Α	-	layer	-	-	natural	-	4
4	Α	5	fill	0.37	0.15	gully	-	
5	Α	-	cut	0.37		gully	-	
6	Α	7	fill	1.05	0.15	gully	-	
7	Α	-	cut	1.05	0.15	gully	-	
8	Α	9	fill	0.85	0.3	gully	-	
9	Α	-	cut	0.85	0.3	gully	-	
10	Α	11	fill	1.6	0.15	furrow	-	4
11	Α	-	cut	1.6	0.15	furrow	-	4
12	В	13	fill	0.68	0.08	pit	modern	4
13	В	-	cut	0.68	0.08	pit	-	4
14	В	15	fill	0.9	0.3	gully	-	
15	В	-	cut	0.9	0.3	gully	-	
16	В	18	fill	1.74	0.18	tree throw	-	1
17	В	18	fill	0.55	0.9	tree throw	-	1
18	В	-	cut	1.35	0.18	tree throw	-	1
19	С	20	fill	2.2	0.1	furrow	-	4
20	С	-	cut	2.2	0.1	furrow	-	4
21	С	-	layer	-	0.25	subsoil	-	4
22	С	-	layer	-	0.3	topsoil	-	4
23	В	24	fill	0.72	0.12	foundation trench	-	4
24	В	-	cut	0.72	0.12	foundation trench	-	4
25	В	26	fill	0.8	0.06	foundation trench	-	
26	В	-	cut	0.8	0.06	foundation trench	-	
27	3	-	masonry	0.45	-	wall	medieval	3.2
28	3	-	masonry	0.6	-	wall	medieval	3.2
29	3	-	layer	-	-	kiln?	medieval	3.2-3.3
30	4	31	fill	-	-	ditch	-	
31	4	-	cut	-	-	ditch	-	
32	4	33	fill	-	0.08	ditch	-	
33	4	-	cut	-	0.08	ditch	-	
34	4	35	fill	0.8	0.18	tree throw	-	
35	4	-	cut	0.8	0.18	tree throw	-	
36	4	37	fill	0.94	0.08	ditch	-	
37	4	-	cut	0.94	0.08	ditch	-	
38	4	39	fill	1.3	0.1	ditch	-	
39	4	-	cut	1.3	0.1		-	
40	4	41		1		natural hollow	-	
41	4		cut	1		natural hollow	-	
42	3		layer	3.5		demolition rubble	medieval	3.2-3.3



Context	Tr	Cut	Category	Breadth	Depth	Feature Type	Date Range	Phase
43	3	-	layer	3.3	-	possible floor surface	medieval	3.2
44	3	-	layer	2	-	floor surface	medieval	3.2
45	3	-	pit	0.35	-	posthole	medieval	3.1-3.2
46	3	-	cut		-	posthole	medieval	3.1-3.2
47	3	-	cut		-	posthole	medieval	3.1-3.2
48	3	-	cut	0.3	-	posthole	medieval	3.1-3.2
49	2	-	cut	0.65	0.34	ditch	-	3.2
50	2	49	fill	0.65	0.34	ditch	-	3.2
51	2	-	cut	0.6	0.17	ditch	-	3.2
52	2	51	fill	0.6	0.17	ditch	-	3.2
53	2	-	cut	0.5	0.1	posthole	-	4
54	2	53	fill	0.5	0.1	posthole	-	4
57	6	58	fill	0.45	0.26	pit	-	4
58	6	-	cut	0.45	0.26	pit	-	4
59	2	-	cut	0.65	0.08	pit	-	4
60	2	59	fill	.65	0.08	pit	-	4
61	15	-	cut	0.52	0.13	gully	-	3.2
62	15	_	fill	0.52	0.13	gully	-	3.2

Table 4: Evaluation Context Summary

Excavation

Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
63	-	-	layer	1.5	0.2	rubble	14th century +	3.3
64	-	-	layer	-	-	demolition layer	14th century +	3.3
65	-	-	layer	-	-	demolition layer	14th century +	3.3
66	126	-	masonry	0.6	0.3	post pad	13-14th century	3.2
67	-	-	masonry	0.5	0.18	wall	13-14th century	3.2
68	-	96	cut	0.26	0.09	beamslot	12-13th century	3.1
69	68	97	fill	-	0.09	beamslot	12-13th century	3.1
70	-	-	cut	0.27	0.14	beamslot	12-13th century	3.1
71	70	-	fill	-	0.14	beamslot	12-13th century	3.1
72	-	-	cut	0.28	0.17	posthole	12-13th century	3.1
73	72	-	fill	-	0.17	posthole	12-13th century	3.1
74	-	-	cut	0.28	0.11	posthole	12-13th century	3.1
75	74	-	fill	-	0.11	posthole	12-13th century	3.1
76	-	-	masonry	0.6	0.18	wall	13-14th	3.2



Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
							century	
77	-	-	masonry	0.8	0.18	wall	13-14th century	3.2
78	-	-	layer	0.5	-	shoring	13-14th century	3.2
79	-	-	masonry	-	-	wall	13-14th century	3.2
80	-	-	masonry	0.35	0.09	wall	13-14th century	3.2
81	-	67, 76, 77, 79	masonry	1.05	0.18	wall	13-14th century	3.2
82	-	-	layer	2.75	0.1	surface (external)	13-14th century	3.2
83	-	-	layer	1.75	-	surface (external)	13-14th century	3.2
84	-	91	layer	3.75	0.05	spread	13-14th century	3.2
85	-	91	layer	0.8	0.05	spread	13-14th century	3.2
86	-	-	layer	-	-	surface (internal)	13-14th century	3.2
87	-	-	cut	0.4	0.15	posthole	13-14th century	3.2
88	87	-	fill	0.4	0.15	posthole	13-14th century	3.2
89	87	-	fill	-	0.15	posthole	13-14th century	3.2
91	-	84, 85	layer	-	0.08	spread	12-14th century	3.2
92	-	-	cut	0.3	0.08	posthole	12-13th century	3.2
94	-	-	masonry	0.45	-	foundation	13-14th century	3.2
95	-	-	layer	0.23	-	spread	13-14th century	3.2
96	-	68	cut	0.26	0.06	beamslot	12-13th century	3.1
97	96	69	fill	-	0.06	beamslot	12-13th century	3.1
98	-	-	cut	0.65	0.26	posthole	13-14th century	3.2
99	98	-	fill	0.65	0.26	posthole	13-14th century	3.2
100	98	-	fill	-	0.26	posthole	13-14th century	3.2
101	-	-	cut	0.1	0.16	stakehole	13-14th century	3.2
102	101	-	fill	0.1	0.16	stakehole	13-14th century	3.2



Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
103	-	-	layer	-	0.05	spread	12-13th century	3.1
104	-	-	cut	1.23	0.14	hearth	13-14th century	3.2
105	104	-	fill	-	0.14	hearth	13-14th century	3.2
106	-	-	cut	0.53	0.22	hearth	13-14th century	3.2
107	106	-	fill	-	0.22	hearth	13-14th century	3.2
108	-	-	cut	0.64	0.36	posthole	13-14th century	3.2
109	108	-	fill	0.64	0.34	posthole	13-14th century	3.2
110	-	-	cut	0.24	0.07	posthole	11-12th century	3.1
111	110	-	fill	-	0.07	posthole	11-12th century	3.1
112	-	-	cut	0.4	0.15	pit	9-11th century	2
113	112	-	fill	-	0.15	pit	9-11th century	2
114	108	-	fill	0.2	0.22	posthole	13-14th century	3.2
115	-	-	cut	0.95	0.49	robber trench	14th century +	3.3
116	-	-	fill	-	0.11	robber trench	14th century +	3.3
117	-	-	masonry	0.28	0.08	threshold	13-14th century	3.2
118	115	-	fill	-	0.14	robber trench	14th century +	3.3
119	-	-	cut	0.6	0.1	posthole	13-14th century	3.2
120	119	-	fill	-	0.1	posthole	13-14th century	3.2
121	-	-	cut	0.9	0.3	robber trench	14th century +	3.3
122	121	-	fill	0.86	0.14	robber trench	14th century +	3.3
123	121	-	fill	0.9	0.16	robber trench	14th century +	3.3
124	-	-	layer	-	-	surface (external)	13-14th century	3.2
125	115	-	fill	-	0.21	robber trench	14th century +	3.3
126	-	-	cut	0.6	0.3	post pad	13-14th century	3.2
127	-	-	cut	0.8	0.1	pit	13-14th century	3.2
128	127	-	fill	-	0.1	pit	13-14th century	3.2
129	132	-	fill	-	0.16	pond	natural	2
130			cut	0.65	0.26	robber trench	14th century +	3.3
131	130		fill	0	0.26	robber trench	14th century +	3.3
132	_		cut		0.3	pond	natural	2
133	132	_	fill	-	0.3	pond	natural	2



Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
134	-	-	cut	1	0.1	robber trench	14th century +	3.3
135	134	-	fill	-	0.1	robber trench	14th century +	3.3
136	-	-	cut	-	0.17	pit	13-14th century	3.2
137	136	-	fill	-	0.17	pit	13-14th century	3.2
138	-	-	cut	1	0.15	pit	-	2
139	138		fill	-	0.15	pit	-	2
140	-		cut	0.3	0.17	posthole	Prehistoric	1
141	140	-	fill	-	0.17	posthole	Prehistoric	1
142	-		cut	0.8	0.1	pit	-	2
143	142		fill	-	0.1	pit	-	2
144	146		fill	-	0.19	ditch	13-14th century	3.2
145	146	-	fill	-	0.11	ditch	13-14th century	3.2
146	-	-	cut	1.04	0.31	ditch	13-14th century	3.2
147	149	-	fill	-	0.18	ditch	13-14th century	3.2
148	149	-	fill	-	0.09	ditch	13-14th century	3.2
149	-	-	cut	0.95	0.26	ditch	13-14th century	3.2
150	-	-	cut	1	0.3	wall foundation	13-14th century	3.2
151	150	-	fill	-	0.3	wall foundation	13-14th century	3.2
152	-	-	masonry	-	-	wall	13-14th century	3.2
153	-	2	layer	2	0.15	spread	13-14th century	3.2
154	-	-	masonry	0.4	0.03	wall	13-14th century	3.2
155	-	-	cut	1.2	0.18	hearth/oven	13-14th century	3.2
156	155	-	fill	-	0.1	hearth/oven	13-14th century	3.2
157	155	-	fill	-	0.06	hearth/oven	13-14th century	3.2
158	155	-	fill	-	0.04	hearth/oven	13-14th century	3.2
159	-	-	cut	0.54	0.09	pit	13-14th century	3.2
160	159	-	fill	-	0.09	pit	13-14th century	3.2
161	163	-	fill	-	0.06	hearth/oven	13-14th century	3.2



Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
162	163	-	fill	-	0.09	hearth/oven	13-14th century	3.2
163	-	-	cut	1.1	0.18	hearth/oven	13-14th century	3.2
164	191	-	fill	-	0.35	pond	13-14th century	2
165	-	-	cut	1	0.2	wall foundation	13-14th century	3.2
166	165	-	fill	-	0.2	wall foundation	13-14th century	3.2
167	-	-	cut	1.1	0.2	wall foundation	13-14th century	3.2
168	167	-	fill	-	0.2	wall foundation	13-14th century	3.2
169	-	-	layer	4	0.2	spread	13-14th century	3.2
170	-	-	cut	-	-	wall foundation	13-14th century	3.2
172	-	-	cut	1.1	0.26	pit	13-14th century	3.2
173	172	-	fill	-	0.09	pit	13-14th century	3.2
174	172	-	fill	-	0.17	pit	13-14th century	3.2
175	178	-	fill	-	0.2	ditch	13-14th century	3.2
176	178	-	fill	-	0.3	ditch	13-14th century	3.2
177	178	-	fill	-	0.09	ditch	13-14th century	3.2
178	-	-	cut	1.7	0.55	ditch	13-14th century	3.2
179	-	-	cut	1.9	0.24	pit	13-14th century	3.2
180	179	-	fill	1.9	0.04	pit	13-14th century	3.2
181	179	-	fill	-	0.2	pit	13-14th century	3.2
182	-	-	cut	1	0.24	hearth/oven	13-14th century	3.2
183	182	-	fill	-	0.1	hearth/oven	13-14th century	3.2
184	182	-	fill	-	0.1	hearth/oven	13-14th century	3.2
185	-	-	cut	1	0.22	hearth/oven	13-14th century	3.2
186	185	-	fill	-	0.03	hearth/oven	13-14th century	3.2
187	185	-	fill	-	0.15	hearth/oven	13-14th	3.2



Context	Cut	Same as	Category	Breadth (m)	Depth (m)	Feature Type	Date Range	Phase
							century	
188	-	-	fill	-	0.05	hearth/oven	13-14th century	3.2
189	190	-	fill	-	0.15	pit	13-14th century	3.2
190	-	-	cut	1.2	0.15	pit	13-14th century	3.2
191	-		cut	19	0.35	pond	13-14th century	2

Table 5: Excavation Context Summary

© Oxford Archaeology East Page 35 of 68 Report Number 1944



APPENDIX B. FINDS REPORTS

B.1 Metalwork

By Andrew Brown

Introduction

- B.1.1 A total of thirty-eight metallic small finds were recovered from the excavation, 33 of which are iron, 4 copper-alloy, and one silver. The objects come from a range of archaeological contexts with evidence of medieval domestic activity, including occupation layers, surfaces, and fills of beamslots, hearths, and postholes. The assemblage as a whole has a date range spanning the medieval or later periods, with nothing identifiably earlier than the c.13th century AD.
- B.1.2 All objects were examined by hand, with details and descriptions entered into a basic catalogue by material type (see below). These are discussed further below. All finds are well packaged and labelled in stable plastic bags, stored within Stewart boxes containing silica gel and humidity indicator strips. The silver coin (sf20) is in a relatively good state of preservation, while all of the copper-alloy objects demonstrate varying degrees of post-depositional corrosion. This is also the case for the iron objects, the majority of which are undiagnostic or difficult to identify closely due to relatively extensive iron corrosion products in most instances. Three of the iron small finds (sf4, sf16, sf18) might potentially benefit from further stabilisation and conservation work.

Discussion

- B.1.3 The earliest diagnostic object within the assemblage, from the fill of a hearth or oven 182 (context 183), is a silver medieval farthing (sf20). This is of a type issued at the London mint for Edward I in c.1279-1280 AD (Withers and Withers, 2001: Type 7(i); North, 1960: no. 1052) and although perhaps less common than larger contemporary penny denominations is relatively typical of contemporary medieval coin loss (full details are in Table 7). To this can be added two copper-alloy objects of probable similar, or slightly later, date. One (sf5), from a medieval layer (context 84), appears to be the foot of a cast copper-alloy cooking vessel, most plausibly from a cauldron, posnet, or skillet of later medieval date, c.13th-15th centuries AD, with evidence of sooting on its surfaces indicative of exposure to high temperatures (cf. Butler, Green, and Payne, 2009; cf. Egan, 1998: 164). The other (sf7), from a wall (context 67), is poorly preserved but demonstrates possible similar evidence of exposure to heat and may well be a fragment from the leg(?) of a similar cooking vessel of medieval or slightly later date. Its current state of preservation does not allow for a more precise identification.
- B.1.4 Three possible iron strap hinge fragments (sf4, sf16, sf18) and five iron nail or clench nail/bolt fragments (sf17, sf23(x2), sf26, sf30) may also be contemporary with medieval activity at the site. Their recovery from beamslots, walls, and medieval surfaces is perhaps indicative of their functions as domestic structural or related (furniture?) fittings. However, their precise forms and close dating are uncertain due to their preservation, with objects of similar form also known from later, early post-medieval contexts (cf. Mould, 2005: 112, no. 503; Goodall, 1987: no. 32).
- B.1.5 The remaining two copper-alloy fragments (sf9, sf28), from probable medieval contexts, and 24 iron objects, for the most part often fragmentary nails or bolts, are undiagnostic and as likely to be dated by their associated contexts as their forms. A catalogue of all copper-alloy artefacts is included in Table 7, and a catalogue of iron artefacts in Table 8.



Conclusions

B.1.6 The small finds from excavations at the Biddenham Loop Pipeline demonstrate activity at the site during the medieval period. Nothing diagnostic dating earlier than the c.13th century AD is evident within the assemblage, with much of the iron and copper-alloy remaining undiagnostic. However, the single silver coin of Edward I (sf20), alongside the two probable copper-alloy cooking vessel fragments (sf 5, sf7) and iron fittings (sf4, sf, 16, sf17, sf18, sf23, sf26, sf30) attest to activity at least in the latter half of the medieval period, c.13th-15th centuries AD, or perhaps slightly later, and in all probability associated with domestic activity at the site.

SF no.	Context	Feature	Object	Period	Description
0	183	182	Coin	Med	A silver medieval farthing of Edward I, c.1279-1280 AD. London Mint. As Withers and Withers (2001) Type 7(i); North, 1960: no. 1052.
					Obverse: +EDWARDVS REX, Crowned bust facing within an inner circle.
					Reverse: LON/DON/IEN/SIS, Long cross dividing the legend, three pellets in each angle of the cross, all within an inner circle.
					Diameter: 13.55mm; Weight: 0.32g.

Table 6: Silver catalogue

SF	Context	Feature	Object	Period	Description
no.					
5	84	-	Vessel	Med	An incomplete fragment from a cast copper-alloy cooking vessel (cauldron, posnet, or skillet), probably from the base of the leg and foot. The out-turned and flattened foot survives, as does the base of the leg, terminating in old breaks just above the foot. It is rectangular in form and section, the sharp angle on the foot giving the object an L-shaped profile. All surfaces have the remains of copper-alloy corrosion as well as traces of sooting indicative of exposure to high temperatures. This fragment measures 42.62mm in length, 33.72mm in width, 13.65mm in thickness, and 128.91g in weight.
					Examples of cast cooking vessels such as this appear in domestic contexts from the c.12th century AD onwards (Butler, Green, and Payne, 2009; cf. Egan, 1998: 164). The current example is likely to date to the later medieval period, perhaps c.13th-15th centuries AD, if not slightly later.
7	67	-	Vessel?	Med?	A large fragment of cast copper-alloy. It is roughly rectangular in form and cross-section, terminating at one end in old breaks and with a large oval shaped cavity on one surface that may be resultant from production or alternatively damage during the lifetime of the object. The opposite end is slightly flattened with a small flat, oval shaped projection to one side. All surfaces are extremely worn and corroded, and most are unevenly cast. Relatively thick sooting visible on one face in particular suggests



the object was exposed to heat or fire, potentially through usage or equally during production or destruction. It measures 94.91mm in length, 31.62mm in width, 24.58mm in thickness, and 288.17g in weight. The precise function of this object remains unclear, in part as a result of its preservation. Its surviving form suggests it originally comprised one component of a larger object, perhaps most plausibly a leg from a cast medieval cooking vessel similar to SF5 (cf. Butler, Green, and Payne, 2009; Egan, 1998: 164). This would point to a later medieval date range for the object, perhaps c.13th-15th centuries AD, although a differing function, and therefore date range, cannot be ruled out entirely given the object's preservation. 9 64 - Unk Unk A small fragment of copper-alloy. It is roughly oval shaped in form, flat, and with worn surfaces terminating in old breaks in all directions. This fragment measures 7.64mm in length, 6.02mm in width, 1.53mm in thickness, and 0.20g in weight. It is undiagnostic and of unknown date. 28 157 **155** Unk Unk A small fragment of copper-alloy. It is flat, irregular, and terminates in sharp breaks in all directions. Both surfaces have evidence of post-depositional corrosion. This fragment measures 22.28mm in length, 13.09mm in width, 2.63mm in thickness, and 1.58g in weight. It is undiagnostic and of unknown date.

Table 7: Copper-alloy catalogue

SF no.	Context	Feature	Object	Period	Description
1	82	-	Nail	Unk	A large iron nail. It has a square sectioned shaft with flattened head, tapering to a relatively sharp point. This nail measures 99mm in length, 11mm in thickness, and 34.70g in weight.
2	91	-	Nail	Unk	An incomplete wrought(?) iron nail, missing its tip due to old breaks. It has a flattened lozenge shaped head, tapering to a circular sectioned shaft that terminates in old breaks. This fragment measures 35mm in length and 5.08g in weight.
3	91	-	Nail	Unk	A fragment from a very large nail, missing its tip due to old breaks. It has a rectangular sections shaft and large flattened head. This nail measures 74mm in surviving length, and 35.32g in weight.
4	69	68	Hinge	Med?	An incomplete and heavily corroded iron object, possibly a hinge. It is rectangular in form and section, expanded at the complete end where it appears to have been folded bock onto itself to create an oval shaped aperture. This object measures 45mm in length, 20mm in width, 14mm in maximum thickness, and 23.07g in weight.
					This object is nearly identical to SF16. Similar, larger, iron strap hinges are known from domestic contexts where they served to hang larger items such as doors in medieval to post-medieval (cf. Mould, 2005: 112, no. 503; Goodall, 1987: no. 32). It is plausible that the current example performed a similar function.
6	91	-	Nail	Unk	A heavily corroded nail fragment with square sectioned shaft and



SF	Context	Feature	Object	Period	Description
no.					
					possible corroded head, missing its tip due to old breaks. It measures 40mm in length and 8.23g in weight. Undiagnostic.
8	124	-	Nail	Unk	A heavily corroded nail fragment with square sectioned shaft, missing both ends due to old breaks. It measures 30mm in length and 3.04g in weight. Undiagnostic.
10	91	-	Nail	Unk	A heavily corroded large iron nail, sharply curved due to usage or post-depositional damage. It has a square sectioned shaft with large flattened head. The entire object measures 75mm in length, 23mm in maximum width, 16mm in maximum thickness, and 39.39g in weight.
11	97	96	Nail	Unk	Five heavily corroded fragments from incomplete iron nails, all missing both ends due to old breaks, with the exception of one that retains its tip. They measure 29, 30, 31, 38, and 42mm in length respectively, with a total weight of 12.29g. Undiagnostic.
12	69	68	Nail	Unk	Four heavily corroded fragments from incomplete iron nails, missing both ends due to old breaks. They measure 24, 39, 46, and 49mm in length respectively, and have a combined weight of 10.81g. Undiagnostic.
13	82	-	Unk	Unk	An incomplete and heavily corroded iron fragment. It is roughly semi-circular in form with one thickened, curved edge. Extensive corrosion and old breaks on three sides of the object make close identification impossible. It measures 66mm in length, 42mm in width, 12mm in thickness, and 31,06g in weight.
15	166	165	Nail	Unk	An incomplete and corroded iron nail. It has a square sectioned shaft, missing its head due to old breaks. This fragment measures 39mm in length and 4.84g in weight. Undiagnostic.
16	71	70	Hinge	Med?	An incomplete and heavily corroded iron object, possibly a hinge. It is rectangular in form and section, expanded at the complete end where it appears to have been folded bock onto itself to create an oval shaped aperture. This object measures 47mm in length, 19mm in width, 14mm in maximum thickness, and 24.02g in weight. This is an incomplete and heavily corroded object near identical to SF4. Similar, larger, iron strap hinges are known from domestic contexts where they served to hang larger items such as doors in
					medieval to post-medieval (cf. Mould, 2005: 112, no. 503; Goodall, 1987: no. 32). It is plausible that the current example performed a similar function.
17	91		Nail	Med/ P-Med	An incomplete iron nail, or possible clench bolt/nail (cf. Goodall, 1987: no. 42; Major, 2006: 66-67, no. 239), missing its tip due to old breaks. It has a square sectioned shaft that doesn't appear to taper, and flattened rectangular head, missing its tip due to old breaks. This fragment measures 47mm in length and 11.44g in weight. It is of probable medieval or later date.
18	64	-	Hinge?	Med/ P-Med?	A heavily corroded and incomplete iron object. It is flat, rectangular in form and section with one (complete?) curved end. The opposite end terminates in old breaks and has the remains of a possible



SF no.	Context	Feature	Object	Period	Description
					single central rivet or nail hole. It measures 51mm in length, 22mm in width, 8mm in thickness, and 20.06g in weight. The precise function of this object remains uncertain. However, similarities can be seen with iron strips from hinges for doors and similar objects of medieval and post-medieval date (cf. SF4, SF16; Mould, 2005: 112, no. 503).
21	164	191	Nail	Unk	An incomplete iron nail with square sectioned shaft and flattened rectangular head, missing its tip due to old breaks. It measures 26mm in length and 3.26g in weight. Undiagnostic.
22	118	115	Nail?	Unk	An incomplete and heavily corroded iron object, possibly a fragment from a blunt tip of a nail. It has a rectangular shaft, tapering to a curved point, and measures 68mm in length and 9.70g in weight. Undiagnostic.
23	81	-	Nail	Med/ P-Med	Two incomplete iron nails or possible clench bolts/nails (cf. Goodall, 1987: no. 42; Major, 2006: 66-67, no. 239), missing their tips due to old breaks. Both have square sectioned shafts that don't appear to taper, and flattened rectangular heads. They measure 23 and 37mm in length respectively, with a combined weight of 9.35g. They are of probable medieval or later date.
24	71	70	Nail	Unk	An incomplete and corroded fragment from an iron nail. It has a square sectioned shaft, missing both ends due to old breaks and measuring 45mm in length and 2.27g in weight. Undiagnostic.
25	71	70	Unk	Unk	An undiagnostic globular fragment of heavily corroded iron. It measures 24mm in length, 16mm in width, 13mm in thickness, and 5.25g in weight.
26	82	-	Nail	Med / P-Med	An incomplete iron nail, or possible clench bolt/nail (cf. Goodall, 1987: no. 42; Major, 2006: 66-67, no. 239), missing its tip due to old breaks. It has a square sectioned shaft that doesn't appear to taper, and flattened rectangular head, missing its tip due to old breaks. This fragment measures 19mm in length and 3.40g in weight. It is of probable medieval or later date.
27	91	_	Nail?	Unk	An incomplete and corroded iron object, possibly a nail or similar iron fitting such as a staple or hinge pivot (cf. Goodall, 1987: 28-29, no. 16; Margeson, 1995: 73). It is rectangular in section with a long body and head that appears to turn at an angle of 90 degrees before terminating in old breaks. The precise form is unclear due to corrosion products. It measures 88mm in length, 28mm in width, 12mm in thickness, and 33.31g in weight. Possibly medieval to post-medieval in date.
29	66	126	Nail	Unk	Two heavily corroded fragments from incomplete nails. Both have square sectioned shafts, one missing its tip, the other its head. They measure 31 and 34mm in length respectively, with a combined weight of 29.11g. Undiagnostic.
30	69	68	Nail	Med/ P-Med	An incomplete iron nail, or possible clench bolt/nail (cf. Goodall, 1987: no. 42; Major, 2006: 66-67, no. 239), missing its tip due to old breaks. It has a square sectioned shaft that doesn't appear to taper, and flattened rectangular head, missing its tip due to old breaks.



SF no.	Context	Feature	Object	Period	Description
					This fragment measures 31mm in length and 6.62g in weight. It is of probable medieval or later date.
31	111	110	Nail	Unk	Two joining(?) fragments from a heavily corroded iron nail. It is square in section, missing both(?) ends due to old breaks and measuring 44mm in length and 5.45g in weight. Undiagnostic.

Table 8: Iron catalogue

B.2 Jet

By Chris Howard-Davis

Introduction

B.2.1 There was a single fragment of black shiny material, probably jet, from context 166, the fill of the foundation trench **165** for a small outbuilding (Building 3) of medieval date.

Discussion

- B.2.2 The purpose of Sf19 is not clear, except to suggest that it may have served as a scale plate on the handle of a scale tang knife, or as a decorative applied strip on some other item. It should, however, be noted that there is no surviving evidence for any means of attachment. The use of a ring-and-dot motif for decoration extends over a long time from the Roman to the late medieval period, and thus cannot be of use in dating. A similar arrangement of motifs can, however, be seen on a wooden-hafted puzzle knife of late 16th-century date illustrated by Moore (op cit, 126). Scale-tang knifes became more and more common from the 14th century onwards, suggesting a general date range for the object, and although rare, jet handle plates are known (Gilchrist 2012, 77).
- B.2.3 Bearing in mind the suggested date range for the structures in the site, however, there was a fashion, originating in the 14th century, for the production of knives for use during specific religious festivals, with jet- or ebony-handled blades favoured for Lent (Moore 1999, 108).

Catalogue

Highly polished fragment of jet, with D-shaped cross-section, both ends are broken. The flat face, probably the underside, shows numerous file marks. The curving upper surface is decorated with groups of four ring-and-dot motifs, forming a cross, with a single motif joining the groups. One edge of the object is broken and irregular, the other appears deliberately bevelled. L: 24mm; W: 11.5mm; Th: 4.5mm

B.3 Glass

by Carole Fletcher

B.3.1 The evaluation produced a single shard of window glass and 11 shards of bottle glass, recovered from foundation slot **24** and posthole **53**. The slot **24** also produced pottery, the bottle base recovered from posthole **53** was found alongside residual medieval pottery. The small amount of glass recovered does not require further work and represents casual losses or breakages.

© Oxford Archaeology East Page 41 of 68 Report Number 1944



Context	Cut	Weight (kg)	Count	Form	Description	Date
23	24	0.004	1	Window	Shard of clear colourless glass with no bubbles or distortions but light surface scratching	,
54	53	0.407	11	Bottle	Base shards with flaking surface iridescence from an olive green or natural black glass English 'mallet' type bottle.	Early 18th century
Total		0.411	12			

Table 9: Glass

B.4 Post-Roman Pottery

By Sue Anderson

Introduction

B.4.1 The post-Roman pottery assemblage comprises 433 sherds of pottery weighing 3.899kg, collected from 49 contexts in the evaluation and excavation. Table 10 shows the quantification by fabric; summary catalogues by context are included as Tables 14 and 15.

Description	Group	Date range	No	Wt/g	Eve	MNV
Middle Saxon shelly?	MSSH?	MSax?	1	13		1
St. Neots Ware	STNE	850-1150	26	140	0.08	21
Late Saxon shelly wares	LSSH	9th-11th c.	14	107	0.08	12
St. Neot's Ware Developed	STND	Med	42	393	0.31	21
Early medieval wares	EMW	11th-13th c.	54	377	0.33	40
Early medieval ware shelly	EMWS	11th-13th c.	52	609	0.71	35
Medieval coarseware	MCW	L.12th-14th c.	187	1442	0.94	116
Medieval coarseware micaceous	MCWM	12th-14th c.	2	27		2
Herts greywares	HERT	L.12th-14th c.	3	24		3
Lyveden A ware	LYVA	12th-14th c.	3	36		3
East Anglian redwares	EAR	13th-15th c.	1	3		1
Yorkshire glazed wares	YORK	Medieval	3	16		1
Brill/Boarstall Ware	BRIL	L.12th-E.14th c.	20	392		7
Potterspury ware	POTT	13th-15th c.	7	51		6
Late medieval oxidised wares	LMO	14th-16th c.	1	114		1
Late medieval reduced wares	LMR	14th-16th c.	11	124	0.16	8
Glazed red earthenware	GRE	17th-18th c.	1	11		1
Pearlware	PEW	L.18th-M.19th c.	2	1		1
Porcelain	PORC	18th-20th c.	1	16		1
Unidentified	UNID		2	3		2
Totals			433	3899	2.61	283

Table 10: Pottery quantification by fabric

B.4.2 The pottery is generally in good condition with little abrasion and sherd sizes are large.

Methodology

B.4.3 Quantification was carried out using sherd count, weight and estimated vessel equivalent (eve). The minimum number of vessels (MNV) within each context was also recorded, but cross-fitting was not attempted unless particularly distinctive vessels were observed in more than one context. A full quantification by fabric, context and feature is

© Oxford Archaeology East Page 42 of 68 Report Number 1944



available in archive. All fabric codes were assigned from the author's post-Roman fabric series, which includes East Anglian and Midlands fabrics, as well as imported wares. Identification of fabrics and forms followed the Bedford type series published by Baker et al. (1979) and more recent additions (Brine 1988; Wells 1996), although separation of fabrics was difficult due to the lack of detailed descriptions. Form terminology for medieval pottery is based on MPRG (1998). Recording uses a system of letters for fabric codes together with number codes for ease of sorting in database format. The results were input directly onto an Access database.

Pottery by period

Pre-medieval

B.4.4 A body sherd in a black shell-tempered fabric appears similar to St Neot's type ware, but is thicker and handmade. It was an unstratified find (99999). The fabric is greasy and black in section, with a slightly browner internal surface, and the shell has leached out. This may be an example of the Middle Saxon fabric A11 described by Baker and Hassall as 'Proto-St. Neots type' (Baker *et al.* 1979, 155).

Saxo-Norman

B.4.5 Forty sherds are of Late Saxon or Saxo-Norman date. The majority of these were St Neots or St Neots-type wares. These were recorded based on the Bedford type series (Baker *et al.* 1979, 165–7). Fabric quantities are shown in Table 11.

Group	Fabric	Date range	No	Wt/g	Eve	MNV
STNE	B01	850-1150	19	109	0.04	15
	B01?	850-1150	3	1		2
	B01A	850-1150	3	18	0.04	1
	B01C	850-1150	1	12		1
LSSH	B02	9th-11th c.	3	26	0.03	3
	B03	9th-11th c.	1	12		1
	B04	9th-11th c.	9	64		7
	B04?	9th-11th c.	1	5	0.05	1
Totals			40	247	0.16	31

Table 11: Quantities of Late Saxon fabrics B01-B04

- B.4.6 Fabric B01 is defined as true St Neot's Ware, and is separated based on the inclusion of fine, evenly mixed shell and the presence of diagnostic fossils (Spoerry 2016). The other fabrics are coarser and B02 and B04 contain unspecified 'mineral' inclusions. Fabrics B02–B04 occur rarely in this assemblage.
- B.4.7 Fragments of six rims are present in the St Neot's group, all from bowls. The bowls generally have inturned, upright or beaded rims, although the one in B04 is an odd everted form with a curving end. There are no large pieces or full profiles in this group, but one B02 vessel is a carinated form.

Medieval

- B.4.8 Sherds of early, high and late medieval date form the bulk of this assemblage, with a total of 386 sherds. As both the early and late medieval groups overlap considerably in terms of date range with the high medieval group, they are considered together here.
- B.4.9 Table 12 lists the quantities by fabric, in approximate date order, based on the fabric descriptions for Bedford.

© Oxford Archaeology East Page 43 of 68 Report Number 1944



- B.4.10 Shelly wares are the most frequent fabrics in the earlier part of the period, carrying on the Saxo-Norman traditions and including Developed St Neots-type wares and early medieval wares from Harrold/Olney Hyde. A few sandy wares are also present, the most frequent being Fabric C01, one of the most frequently occurring fabrics in Bedford and elsewhere in the county.
- B.4.11 Identifiable forms in Developed St Neots-type ware include three jars with upright thickened, everted beaded and everted rims, a bowl with a beaded rim (cf. Baker et al. 1979, no. 348) and a ?jug with a flaring rim. Fabric B05 (Harrold/Olney Hyde) included a jar, two jugs and a bowl/dish (cf. ibid. nos 316 and 120 respectively). Three jugs were identified in Fabric B08 (?Harrold), all comparable with examples from Bedford (cf. ibid. nos 390, 395 and 402). A small fragment of rim with incised wavy line decoration appears to be from a handmade sand-tempered vessel (C13?). In Fabric C01 there are two jars which are similar to forms found in Bedford (cf. ibid. nos 444 and 463).

Group	Fabric	Date range	No	Wt/g	Eve	MNV
EMW	C13?	11th-12th c.	6	25	0.07	6
	D02	11th-12th c.	1	8		1
	C01	11th-13th c.	33	220	0.10	21
	C01?	11th-13th c.	6	88	0.16	4
STND	B07	L.11th-13th c.	39	369	0.31	20
	B07?	L.11th-13th c.	3	24		1
EMWS	В	11th-13th c.	2	4		2
	B05	12th-13th c.	20	291	0.33	18
	B05?	12th-13th c.	10	95	0.06	3
	B08	12th-13th c.	17	181	0.32	9
	B10	12th-13th c.	3	38		3
EMW	C59B?	12th-13th c.	9	42		9
MCW	C03	12th-14th c.	46	551	0.44	29
	C03?	12th-14th c.	7	45		6
	C03A	12th-14th c.	1	25		1
	C04	12th-14th c.?	2	19		2
	C06?	12th-14th c.	1	18		1
	C27?	12th-14th c.	1	3		1
	C28?	12th-14th c.	4	21		1
	C29	12th-14th c.+?	2	11		2
	C54?	12th-14th c.	1	2		1
	C71?	13th-14th c.?	1	2		1
	C75	12th-14th c.	2	27		2
	C05	12th–15th c.	114	711	0.50	65
	C05?	12th-15th c.	4	13		3
	C14?	14th-15th c.	2	15		2
LYVA	B09	12th-14th c.	3	36		2 3 3 5 2 6
HERT	C60	L.12th-14th c.	3	24		3
BRIL	C09	L.12th-E.14th c.	18	319		5
	C11	L.12th–E.14th c.	2	73		2
POTT	C10	13th–15th c.	7	51		6
EAR	E03	13th-15th c.	1	3		1
YORK	С	Medieval	3	16		1
LMO	E02	14th-16th c.	1	114		1
LMR	E	14th–16th c.	3	9	0.05	2
	E01	14th–16th c.	5	78	0.11	3
	E01?	14th-16th c.	1	4		1
	E01D	14th-16th c.	1	28		1
	E01D?	14th-16th c.	1	5		1
Totals			349	3367	2.03	217

Table 12: Quantities of medieval fabrics

© Oxford Archaeology East Page 44 of 68 Report Number 1944



- B.4.12 Amongst the high medieval group, fabrics C05 and C03 are by far the most frequent, with other fabrics occurring relatively infrequently. In Fabric C03, there are rim fragments of three bowls and three jars: the bowls have beaded, short thickened everted and flat-topped everted rims, and the jars all have flat-topped everted rims with no necks (cf. Baker et al. 1979, no. 503). Despite the large quantity of Fabric C05, only five rims are present, two flat-topped everted jars (cf. *ibid.* nos 503 and 534?), a flat-topped everted jug, an everted jar (similar to ibid no. 634?), and an upright thickened jug rim with wide strap handle decorated with thumbing and stabbing (cf. ibid. nos 539 and 525). Whilst these rim forms can be paralleled in the high medieval assemblage from Bedford, most are developed forms which continue into the late medieval period and some can also be paralleled in the assemblages from LMR production sites (Slowikowski 2011), despite being in non-calcareous fabrics. Indeed, the published description of Fabric C05 is very similar to that of the LMR fabric E01D, and it is possible that there is some overlap, especially given the suggested date range of C05.
- B.4.13 A few high medieval glazed wares are present, the majority being Brill/Boarstall types. Fourteen sherds of a jug with brown and pale slip strips were found in Building 2 wall foundation **81**.
- B.4.14 The late medieval wares in this assemblage were identified largely by their forms, as several are in fabrics which were largely indistinguishable from the main medieval coarsewares. None appear to be in Everton-type fabrics with calcareous inclusions/voids. There are two bowls with flat-topped everted rims (cf. Slowikowski 2011, type R73) and an inturned rim (ibid type R91) which is paralleled by an example from Cambridgeshire (Spoerry 2016, fig. 9.87, LM45), although only the upper part of the rim is present and it is not certain whether the vessel in this case is an alembic. The flat base of a small jug in late medieval oxidised ware is the only other find of this period.

Post-medieval and modern

B.4.15 A body sherd of post-medieval iron-glazed red earthenware (P01) was found. A base fragment of scratch-decorated oriental porcelain (P34/P35) and two small sherds (1g) of pearlware are the only modern pottery to be recovered.

Unidentified

B.4.16 One small sherd (<1g) in a black silty fabric with voids (leached fine shell or grass?) could be prehistoric, Early Saxon or St Neots-type ware. An abraded brown/orange soft fine sandy sherd may be of Roman or medieval date.

Pottery by site phase

B.4.17 Table 13 shows the quantities of pottery by site phase.

Period	Date	MSax	LSax	EMed	Med	LMed	PMed	Mod	Un	Tot No	Tot Wt/g
2	9th-11th c.		4	9	5					18	144
3.1	12th-13th c.			3	2	2		2		9	13
3.2	13th-14th c.		26	66	117	4			2	215	1908
3.3	14th c.		8	62	90	4				164	1605
4	Post-medieval			2	1		1	1		5	36
Unstrat	-	1	2	6	11	2				22	193

Table 13. Quantities of pottery by site phase

B.4.18 Three of the largest single groups of pottery were recovered from robber trench **134** (Period 3.3; 60 sherds), pit **172** (Period 3.2; 45 sherds) and layer 64 (Period 3.3; 68 sherds). Thirty-seven contexts contained less than ten sherds each. Unphased material



was recovered as unstratified finds or finds from subsoil; these will not be considered further.

Period 2

B.4.19 Eighteen sherds were recovered, the majority from natural pond fill **164**. These include several Late Saxon and early medieval ware sherds, as well as later material which was presumably intrusive. A Late Saxon shelly ware base fragment came from gully **112**.

Period 3.1

B.4.20 Five sherds of pottery were found in occupation layer 103, all very small but including early medieval ware (C13?), medieval coarseware (C05), Potterspury ware and late medieval reduced ware. Building 1 beam-slot 68 contained tiny sherds of early medieval ware (C01) and pearlware. A small sherd of early medieval ware (C59B) was found in post-hole 110.

Period 3.2

- B.4.21 Forty-two sherds were associated with structural features in Building 2, recovered from walls 27, and 81, shoring 78, hearth 104/106 and posthole 109. Material recovered from the walls ranged in date from Late Saxon to high medieval, and include 14 sherds of a Brill jug. Six sherds from the hearth were all relatively small, but include Late Saxon to late medieval wares. Fragments from the shoring are early to high medieval in date.
- B.4.22 Occupation layers, ?floor surfaces and other internal features associated with the building produced 42 sherds. Five sherds of St Neots-type ware came from the flagstones 28 and a Late Saxon shelly ware sherd was found with post-pad 126. Layer 42/43/84/91 contained 29 sherds of Late Saxon to medieval date, including rimsherds of two bowls, a jar and two jugs. Post-hole 48 contained two sherds of shelly wares (jug and jar) and two sherds of ?late medieval greyware. Pit 127 contained three small sherds of St Neots-type ware (B01?).
- B.4.23 External yard surface 82 contained seven sherds, one Late Saxon and the rest high medieval. These include a fragment of rim from a bowl which was also found in wall 81 of Building 2.
- B.4.24 The ovens and hearths to the north of the site produced 28 sherds between them. Most were recovered from the fill of oven 155, with only four from oven 185, three from oven 163 and five from the mixed context 29 (overlying oven 182 and pit 190). The only identifiable forms are two bowls from oven 155. Again, there is a range of Late Saxon to medieval wares from these features. The pits (159, 172, 190) and ditches (149, 178) in this area contained mainly early and high medieval wares.
- B.4.25 Ditches and gullies excavated during the evaluation in the trenches to the north and south of Area 3 produced 18 sherds. Gully 61 to the south contained two sherds of medieval coarseware (C03) and a fragment of Brill glazed ware. Ditch 49 to the north contained eight sherds of Developed St Neots-type ware and an unidentified sandy ware sherd. Ditch 51 contained shelly wares (B05, B10), medieval coarseware (C01) and Potterspury ware.

Period 3.3

B.4.26 Robber trenches of Building 2 (121 and 115) produced 12 sherds. From 121 there is a large base sherd from a late medieval oxidised ?jug. Most of the material from 115 was redeposited early medieval pottery, but one sherd of Brill and part of a late medieval reduced ware bowl are also present.



B.4.27 Robber trenches 130 and 134 in the area of Building 3 contained 76 sherds between them. Fragments from trench 130 represent only four vessels of medieval shelly and sandy wares, although all are body and base sherds. Trench 134 contained a small quantity of Late Saxon material, but most of the finds are early and high medieval sandy wares, with a few fragments of shelly ware and a late medieval reduced ware bowl also found. A further 77 sherds were recovered from demolition layers 64/65, this group being dominated by medieval sandy wares, with a few Late Saxon and early medieval wares and a few later medieval wares. Fragments of several bowl and jar rims were recovered.

Period 4

B.4.28 Foundation trench **24** contained a base fragment of a porcelain vessel. Posthole **53** in evaluation Trench 2 contained two sherds of a St Neots-type jar, and pit **59** in the same trench contained a sherd of Potterspury ware and a fragment of post-medieval ironglazed ware.

Discussion

- B.4.29 The majority of the assemblage was recovered from robber trenches and layers, where it was presumably redeposited. Some sherds were, however, associated with occupation layers, surfaces and hearths, and some came from structural remains. Most of these groups include a range of fabrics dating from the Late Saxon to the high, or even late, medieval periods and it is difficult to relate them to the use of the buildings, ovens and other features.
- B.4.30 The small quantity of Late Saxon material recovered is probably in keeping with the few features of this date to be identified. The majority of this material was redeposited in later phases however, owing to the high degree of disturbance during medieval building activity. Much of the early medieval ware was also redeposited in later phases, although some of it could be contemporary with the earliest use of Buildings 2 and 3. The presence of a large part of a Brill glazed ware jug in Building 2 foundation 81 suggests that the building was constructed from the late 12th century onwards. Medieval wares were mainly recovered from contexts assigned to Periods 3.2 and 3.3, but some were still likely to have been redeposited following demolition of the structures and infilling of the open features such as ovens and ditches. There is minimal evidence of late medieval and later activity in the pottery assemblage, suggesting that intensive occupation of the site had probably ceased before the 15th century.
- B.4.31 The range of wares at this site is similar to that seen in the larger group from Great Denham (Wells 2016), where fabrics B07, C01, C03, C05 were relatively common, although there the early medieval Fabric C59B dominated. Forms can be paralleled amongst the Bedford series and in other local assemblages. The Biddenham material is thus a typical rural assemblage in comparison with other contemporary local groups.



Context	Cut/ Structure	Fabric	Basic Form	Sherd Count	Weight (kg)	Pottery Date Range
23	24	Porcelain (P34/P35)	Bowl base sherd	1	0.016	17th-19th c
27	27	Medieval Shelly (B07)	Base sherd	1	0.018	Mid 12th-14th c
28	28	Fine Sandy (C03)	Base sherd	1	0.019	Mid 12th-mid 13th c
		Sandy (C01)	Body sherd	1	0.003	Mid 12th-mid 13th c
		St Neots-type ware (B01)	Body sherd	1	0.002	Mid 9th-mid 12th c
29		St Neots-type (orange) (B01A)	Base sherd	1	0.005	Mid 9th-mid 12th c
		St Neots-type (orange) (B01A)	Body sherd	1	0.004	Mid 9th-mid 12th c
		St Neots-type ware (B01)	Bowl rim sherd (partial profile)	3	0.031	Mid 9th-mid 12th c
42		Fine Sand and Flint (C03A)	Jar body sherd (sooted)	1	0.024	Mid 12th-mid 13th c
43		Sandy (C01)	Jar body sherd (sooted)	2	0.005	Mid 12th-mid 13th c
		Coarse Sand (C04)	Body sherd	1	0.006	Mid 12th-mid 13th c
		Fine Sandy (C03)	Body sherd	1	0.006	Mid 12th-mid 13th c
48	28	Medieval Shelly (B07)	Jug rim and strap handle	1	0.064	Mid 12th-14th c
		Medieval Shelly (B07)	Jar rim sherd	1	0.012	Mid 12th-14th c
		(E01) Late Medieval Reduced	Body sherd	2	0.007	15th c
50	49	Medieval Shelly (B07)	Jar/bowl rim	1	0.013	Mid 12th-14th c
		Medieval Shelly (B07)	Body sherd	4	0.011	Mid 12th-14th c
		Medieval Shelly (B07)	Jar body sherd	3	0.007	Mid 12th-14th c
		Unidentified fine sandy ware possibly Roman	Body sherd	1	0.002	Not closely datable
52	51	Medieval Shelly (B07)	Body sherd	2	0.003	Mid 12th-14th c
		Medieval Shelly (B07)	Rim sherd	1	0.003	Mid 12th-14th c
54	53	Medieval Shelly (B07)	Body sherd	1	0.001	Mid 12th-14th c
55		Medieval Shelly (B07)	Jar body sherd (slight	1	0.015	Mid 12th-14th c



Context	Cut/ Structure	Fabric	Basic Form	Sherd Count	Weight (kg)	Pottery Date Range
			sooting)			
		Medieval Shelly (B07)	Body sherd	1	0.001	Mid 12th-14th c
60	59	Glazed Earthenware (P01) (dark brown glaze	Bowl body sherd	1	0.011	17th-18th c
		Unidentified micaceous, fine sandy ware possibly Roman	Body sherd	1	0.004	Not closely datable
62	61	Brill/Boarstall type (C09)	Jug body sherd	1	0.002	Mid 13th-end 14th c
		Fine Sandy (C03)	Body sherd	2	0.003	Mid 12th-mid 13th c
99999		Fine Sandy (C03)	Body sherd	3	0.003	Mid 12th-mid 13th c
Total				42	0.301	

Table 14: Pottery catalogue by context (evaluation; Carole Fletcher)

Context	Feature Fabric	Beds Fabric	Form	Rim	Parallel	No	Wt/g	NV	Spot date	Fabric date range
2	- LSSH	B04				1	3	1		9th-11th c.
	MCW	C03				3	60	3		L.12th-14th c.
	MCW	C05				1	4	1		L.12th-14th c.
	LMR	E01D				1	28	1		14th-16th c.
64	- NVCC	R12B				1	76	1		RB
	STNE	B01				2	6	2		850-1150
	EMW	C01				10	15	2		11th-12th c.
	EMW	C13?				1	4	1		11th-12th c.
	EMW	C13?	?	UPPL		1	1	1		11th-12th c.
	EMW	C59B?				3	8	3		11th-12th c.
	EMWS	B05?	Bowl/ dish	BD	Bedford 120	6	77	1		11th-12th c.
	EMWS	B08				7	45	2		11th-12th c.
	STND	B07				2	12	2		Med
	MCW	C03				7	37	7		L.12th-14th c.
	MCW	C03	bowl	BD		1	28	1	12- 13?	L.12th-14th c.
	MCW	C03	bowl?	FTEV		1	4	1	13- 14?	L.12th-14th c.
	MCW	C03	jar	FTEV	Bedford 503	1	4	1	13-14	L.12th-14th c.
	MCW	C03?				5	39	5		L.12th-14th c.
	MCW	C05				9	60	8		L.12th-14th c.
	MCW	C05	jar	EV	sim Bedford 634?	1	27	1	13- 14?	L.12th-14th c.



Context	Feature	Fabric	Beds Fabric	Form	Rim	Parallel	No	Wt/g	NV Spo date	
		MCW	C05	jar	FTEV	Bedford 503	1	36	1 13- 14?	L.12th-14th c.
		MCW	C54?				1	2	1	L.12th-14th c.
		BBC HERT	C60				2	12	2	L.12th-14th c.
		BRIL	C09				1	11	1	L.12th-E.14th c.
		BRIL	C11	jug			1	61	1	L.12th-E.14th c.
		POTT	C10				4	42	3	13th-15th c.
65	-	STNE	B01				2	16	2	850-1150
		LSSH	B04				1	5	1	9th-11th c.
		EMWS	B05?				1	3		11th-12th c.
		MCW	C03				1	2	1	L.12th-14th c.
		MCW	C03	bowl	BD		1	10		L.12th-14th c.
		MCW	C03	jar	FTEV	Bedford 503	1	8	1	L.12th-14th c.
		MCW	C05				1	6	1	L.12th-14th c.
		MCW	C27?				1	3	1	L.12th-14th c.
66	126	LSSH	B04				1	5	1	9th-11th c.
69	68	EMW	C01				1	1	1	11th-12th c.
		PEW					2	1	1	L.18th-M.19th c.
78	-	EMW	C13?				2	16	2	11th-12th c.
		STND	B07				3	26	1	Med
		MCW	C05?				3	10	2	L.12th-14th c.
		MCW	C71?				1	2	1	L.12th-14th c.
		LYVA	B09				1	3	1	12th-14th c.
81	-	LSSH	B04				1	8	1	9th-11th c.
		EMW	C59B?				1	9	1	11th-12th c.
		EMWS	B05?				1	7	1	11th-12th c.
		MCW	C03				2	18	2	L.12th-14th c.
		MCW	C03	bowl	THEV		1	44	1 13- 14+	
		MCW	C05				2	6	2	L.12th-14th c.
		LYVA	B09				1	3	1	12th-14th c.
		BRIL	C09	jug			14	280	1	L.12th-E.14th c.
82	-	LSSH	B02				1	5	1	9th-11th c.
		MCW	C03	bowl	THEV		1	27		L.12th-14th c.
		MCW	C05				3	10	3	L.12th-14th c.
		MCW	C14?				1	7	1	L.12th-14th c.
		BRIL	C11				1	12	1	L.12th-E.14th c.
84	-	EMWS	B05?				2	8	1	11th-12th c.
		MCW	C05				1	2	1	L.12th-14th c.



Context	Feature	Fabric	Beds Fabric	Form	Rim	Parallel	No	Wt/g	NV	Spot date	Fabric date range
		MCW	C05	jar	FTEV	Bedford 534?	1	8	1	13-14	L.12th-14th c.
91	-	STNE	B01				1	4	1		850-1150
		STNE	B01	bowl	UPPL	Bedford 120	3	8	1		850-1150
		STNE	B01C				1	12	1		850-1150
		LSSH	B04?	bowl?	LSEV		1	5	1		9th-11th c.
		EMWS	B05	jug		Bedford 316	2	46	1		11th-12th c.
		EMWS	B08				2	14	1		11th-12th c.
		EMWS	B08	jug	BD	Bedford 395	2	14	1		11th-12th c.
		STND	B07				1	4	1		Med
		MCW	C05				5	27	4		L.12th-14th c.
		MCW	C14?				1	8	1		L.12th-14th c.
		LYVA	B09				1	30	1		12th-14th c.
103	-	EMW	C13?				1	2	1		11th-12th c.
		MCW	C05				1	1	1		L.12th-14th c.
		POTT	C10				1	4	1		13th-15th c.
		LMR	E				2	1	1		14th-16th c.
105	104	LSSH	B04				2	16	2		9th-11th c.
		STND	B07				1	1	1		Med
		MCW	C05				1	5	1		L.12th-14th c.
		LMR	E	ginger jar	FT	Spoerry 2016 LM45; Slowiskowki type R91	1	8	1		14th-16th c.
107	106	STNE	B01A	bowl	BD		1	9	1		850-1150
109	108	EMWS	B08				2	7	1		11th-12th c.
111	110	EMW	C59B?				1	3	1		11th-12th c.
113	112	LSSH	B04				1	9			9th-11th c.
116	115	EMWS	B05				1	5	1		11th-12th c.
		LMR	E01	bowl	FTEV	Slowikowski rim R73	2	48	1		14th-16th c.
118	115	EMW	C01				2	14	1		11th-12th c.
		EMW	C01?				1	3	1		11th-12th c.
		EMW	C59B?				1	3	1		11th-12th c.
		EMW	D02				1	8	1		11th-12th c.
		STND	B07				1	3	1		Med
		STND	B07	jug?	FLAR		1	16	1		Med
		BRIL	C09				1	23	1		L.12th-E.14th c.
123	121	LMO	E02	jug?			1	114	1		14th-16th c.
128	127	STNE	B01?				3	1	2		850-1150
131	130	STND	B07				9	31	1		Med



Context	Feature	Fabric	Beds Fabric	Form	Rim	Parallel	No	Wt/g	NV Spo	
		MCW	C03				6	55	2	L.12th-14th c.
		MCWM	C75				1	8	1	12th-14th c.
135	134	STNE	B01				3	22	3	850-1150
		EMW	C01				9	88	8	11th-12th c.
		EMW	C59B?				2	13	2	11th-12th c.
		EMWS	B08				1	10	1	11th-12th c.
		EMWS	B08	jug	EV	Bedford 390 rim	1	65	1	11th-12th c.
		STND	B07				1	15	1	Med
		MCW	C03				6	97	2	L.12th-14th c.
		MCW	C03			Bedford 506, 543	1	27	1	L.12th-14th c.
		MCW	C03?				2	6	1	L.12th-14th c.
		MCW	C05				32	259	18	L.12th-14th c.
		MCW	C05	jug	UPTH ?	Bedford 539, 525	1	65	1	L.12th-14th c.
		LMR	E01	bowl	FTEV		1	23	1	14th-16th c.
137	136	MCW	C05				1	5	1	L.12th-14th c.
141	140	PREH					5	4	1	Prehistoric
147	149	EMW	C01				4	65	2	11th-12th c.
		EMWS	B05				1	15	1	11th-12th c.
		MCW	C05				1	2	1	L.12th-14th c.
		MCW	C06?				1	18	1	L.12th-14th c.
153	-	UNID					1	1	1	
		LSSH	B04				1	9	1	9th-11th c.
		EMW	C01				1	2	1	11th-12th c.
		EMW	C01?				1	6	1	11th-12th c.
		EMW	C01?	jar	UPTH	Bedford 444	3	76	1	11th-12th c.
		EMWS	B05				1	18	1	11th-12th c.
		EMWS	B08	jug		Bedford 402	1	22	1	11th-12th c.
		STND	B07				1	8	1	Med
		MCW	C03				5	90	1	L.12th-14th c.
		MCW	C05				3	20	1	L.12th-14th c.
		MCW	C29				1	2	1	L.12th-14th c.
157	155	STNE	B01				2	2	2	850-1150
		EMWS	В				1	1	1	11th-12th c.
		EAR	E03				1	3	1	13th-15th c.
158	155	LSSH	B03	bowl	BD		1	12	1	9th-11th c.
		LSSH	B04				1	9		9th-11th c.
		EMWS	B05				3	32	3	11th-12th c.



EMWS B08 STND B077 bowl BD Bedford 348 3 24 1 Med MCW C04 MCW C05 1 1 19 1 12In-14th c. 160 159 MCW C05 jug FTEV 1 27 1 L.12In-14th c. BBC C60 BBC C60 1 1 12 1 L.12In-14th c. 161 163 STND B07 2 99 1 Med MCW C05 1 1 1 9 1 Medieval 161 163 STND B07 2 99 1 Med MCW C05 1 1 1 9 1 850-1150 LSSH B02 bowl INTT 1 1 9 1 9th-11th c. EMW C13? EMW C13? EMW C59B? 1 6 1 11th-12th c. STND B07 4 48 3 Med MCW C05 1 3 1 L.12In-14th c. 173 172 EMWS B05 2 9 2 11th-12th c. EMWS B05 2 9 1 1 L.12In-14th c. 173 172 EMWS B05 2 4 21 1 L.12In-14th c. 176 178 EMWS B05 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Context	Feature	Fabric	Beds Fabric	Form	Rim	Parallel	No	Wt/g	NV	Spot date	Fabric date range
MCW C04 1 13 1 L12th-14th c. MCWM C75 1 19 1 12th-14th c. LMR E017 1 4 1 14th-16th c. 160 159 MCW C05 jug FTEV 1 27 1 L.12th-14th c. BBC HERTT YORK C 3 16 1 Medieval 161 163 STND B07 2 90 1 Med MCW C05 1 1 1 1 L.12th-14th c. 164 191 SAM R01 ? ? 1 2 9 1 Med LSSH B02 bowl INTT 1 19 1 850-1150 1 1 9th-11th c. 1 9th-11th c. 1 9th-11th c. 1 9th-11th c. 1 1 1 11th-12th c. 1 1 1 1 1 1 1 </td <td></td> <td></td> <td>EMWS</td> <td>B08</td> <td></td> <td></td> <td></td> <td>1</td> <td>4</td> <td>1</td> <td></td> <td>11th-12th c.</td>			EMWS	B08				1	4	1		11th-12th c.
MCWM C75			STND	B07?	bowl	BD	Bedford 348	3	24	1		Med
LMR E01?			MCW	C04				1	13	1		L.12th-14th c.
160			MCWM	C75				1	19	1		12th-14th c.
BBC C60 HERT YORK C 3 16 1 Medieval			LMR	E01?				1	4	1		14th-16th c.
HERT YORK C 3 16 1 Medieval	160	159	MCW	C05	jug	FTEV		1	27	1		L.12th-14th c.
161				C60				1	12	1		L.12th-14th c.
MCW C05			YORK	С				3	16	1		Medieval
164	161	163	STND	B07				2	90	1		Med
STNE			MCW	C05				1	1	1		L.12th-14th c.
LSSH B02 bowl INTT 1 19 1 9th-11th c. LSSH B02 bowl INTT 1 19 1 9th-11th c. EMW C01 jar EVBD Bedford 463 1 16 1 11th-12th c. EMW C59B? 1 6 1 11th-12th c. EMWS B05 2 9 2 11th-12th c. STND B07 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. 173 172 EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. 187 185 PREH 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. 188 190 EMWS B05 1 27 1 11th-12th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01? 1 9 1 850-1150 EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med	164	191	SAM	R01	?	?		1	2	1		RB
LSSH B02 bowl INTT H EMW C01 jar EVBD Bedford 463 1 16 1 11th-12th c. EMW C13? 1 6 1 11th-12th c. EMW C59B? 1 6 1 11th-12th c. EMWS B05 2 9 2 11th-12th c. STND B07 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. MCW C28? 4 21 1 L.12th-14th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 173 178 EMWS B05 1 1 1 1 1 1 1th-12th c. MCW C05 3 18 3 L.12th-14th c. 187 185 PREH 1 1 1 1 Prehistoric MCW C29 1 1 9 1 L.12th-14th c. MCW C29 1 1 1 1 1 1 1th-12th c. MCW C29 1 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 2 1 1 1 1 1 E/MSax? STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 1 1th-12th c. EMW C01? 1 3 1 1 1th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 1 14 1 Med			STNE	B01				1	9	1		850-1150
H EMW C01 jar EVBD Bedford 463 1 16 1 11th-12th c. EMW C13? 1 2 1 11th-12th c. EMW C59B? 1 6 1 11th-12th c. EMWS B05 2 9 2 11th-12th c. STND B07 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. MCW C28? 4 21 1 L.12th-14th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 1 35 1 11th-12th c. EMWS B10 1 1 35 1 11th-12th c. 176 178 EMWS B05 42 107 11 L.12th-14th c. 187 185 PREH 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C017 EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			LSSH	B02				1	2	1		9th-11th c.
EMW C59B? 1 6 1 11th-12th c. EMWS B05 2 9 2 11th-12th c. STND B07 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. MCW C28? 4 21 1 L.12th-14th c. EMWS B10 1 35 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 173 172 EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 176 178 EMWS B05 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. 187 185 PREH 1 1 1 Prehistoric MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			LSSH	B02	bowl			1	19	1		9th-11th c.
EMW C59B?			EMW	C01	jar	EVBD	Bedford 463	1	16	1		11th-12th c.
EMWS B05 STND B07 A 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. MCW C28? A 21 1 L.12th-14th c. 173 172 EMWS B05 EMWS B10 MCW C05 A2 44 1 11th-12th c. EMWS B10 MCW C05 A2 107 11 L.12th-14th c. 176 178 EMWS B05 A2 44 1 11th-12th c. EMWS B05 A2 107 11 L.12th-14th c. 176 178 EMWS B05 A3 18 3 L.12th-14th c. 187 185 PREH MCW C05 A3 18 3 L.12th-14th c. MCW C29 A1 9 1 L.12th-14th c. 189 190 EMWS B05 A1 27 1 11th-12th c. STND B07 A Med 99999 - MSSH A11? A Med 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			EMW	C13?				1	2	1		11th-12th c.
STND B07 4 48 3 Med MCW C05? 1 3 1 L.12th-14th c. MCW C28? 4 21 1 L.12th-14th c. 173 172 EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 187 185 PREH 1 1 1 1th-12th c. MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 EMSax? STNE B01 1 9 1 850-1150 EMW C01? 1 3 1 11th-12th c. EMWS B bowl?			EMW	C59B?				1	6	1		11th-12th c.
MCW C05? 1 3 1 L.12th-14th c. MCW C28? 4 21 1 L.12th-14th c. 173 172 EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 176 178 EMWS B05 1 1 1 1th-12th c. 187 185 PREH 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 EMSax? STNE B01 1 9 1 850-1150 EMW C01? 1 3 1 11th-12			EMWS	B05				2	9	2		11th-12th c.
MCW C28? 4 21 1 L.12th-14th c. 173 172 EMWS B05 2 44 1 11th-12th c. EMWS B10 1 35 1 11th-12th c. MCW C05 42 107 11 L.12th-14th c. 187 185 PREH 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01? 1 5 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1			STND	B07				4	48	3		Med
173			MCW	C05?				1	3	1		L.12th-14th c.
EMWS B10			MCW	C28?				4	21	1		L.12th-14th c.
MCW C05 42 107 11 L.12th-14th c. 176 178 EMWS B05 1 1 1 1 1th-12th c. 187 185 PREH 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 850-1150 1	173	172	EMWS	B05				2	44	1		11th-12th c.
176 178 EMWS B05 1 1 1 11hh-12th c. 187 185 PREH 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			EMWS	B10				1	35	1		11th-12th c.
187 185 PREH 1 1 1 1 Prehistoric MCW C05 3 18 3 L.12th-14th c. MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			MCW	C05				42	107	11		L.12th-14th c.
MCW C05 3 18 3 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med	176	178	EMWS	B05				1	1	1		11th-12th c.
MCW C29 1 9 1 L.12th-14th c. 189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med	187	185	PREH					1	1	1		Prehistoric
189 190 EMWS B05 1 27 1 11th-12th c. STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			MCW	C05				3	18	3		L.12th-14th c.
STND B07 1 47 Med 99999 - MSSH A11? 1 13 1 E/MSax? STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med			MCW	C29				1	9	1		L.12th-14th c.
99999 - MSSH A11?	189	190	EMWS	B05				1	27	1		11th-12th c.
99999 - MSSH A11?			STND	B07				1	47			Med
STNE B01 1 9 1 850-1150 EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med	99999									1		
EMW C01 1 5 1 11th-12th c. EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med												
EMW C01? 1 3 1 11th-12th c. EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med												
EMWS B bowl? PL Bedford 348? 1 3 1 11th-12th c. STND B07 jar UPTH 1 14 1 Med												
STND B07 jar UPTH 1 14 1 Med					bowl?	PL	Bedford 348?					
			MCW	C03	J -	•••		1	9	1		L.12th-14th c.



Context Feature Fabric	Beds Form Fabric	Rim	Parallel	No	Wt/g	NV Spo date	t Fabric date range
MCW	C05			2	15	2	L.12th-14th c.
BRIL	C09			1	3	1	L.12th-E.14th c.
LMR	E01D?			1	5	1	14th-16th c.

Parallel: Bedford = Baker et al. 1979. Slowikowski = 2011

Rims: BD – beaded; EV – everted; EVBD – everted beaded/clubbed; FLAR – flaring; FT – flat-topped; FTEV – flat-topped everted; INTTH – inturned thickened; LSEV – lid-seated everted; PL – plain; THEV – thickened everted/wedged; UPPL – upright plain; UPTH – upright thickened.

Table 15: Pottery catalogue by context (excavation)

B.5 Building Stone

By Sarah Percival

B.5.1 Two incomplete stone peg tiles weighing 409g were recovered from layer 78. The pieces are a maximum of 15mm thick and have drilled holes 9mm in diameter. One face of one fragment is encrusted with limescale, evidence of exposure to rainwater during use. The tiles are made of fine ooilitic limestone, perhaps from Collyweston, where stone roofing tiles were produced from the medieval period.

B.6 Ceramic Building Material and Fired Clay

By Sue Anderson

Ceramic Building Material

- B.6.1 Five fragments of CBM weighing 378g were collected from four contexts. The assemblage was quantified (count and weight) by fabric and form. Fabrics were identified on the basis of macroscopic appearance and main inclusions. Dimensions were measured where possible, but roof tile thicknesses are only measured when another dimension is available. A full catalogue by context is included as Table 16.
- B.6.2 Period 3.3 demolition layer 63 contained an abraded fragment (114g) of Roman tile (medium sandy with calcareous and ferrous inclusions), pinkish with a light grey core and measuring 29mm thick. Another possible Roman tile fragment (222g) was recovered from ditch fill 175 and was in a medium sand and flint fabric, orange with a light grey core. It was tapered with one knife-trimmed edge and was 30mm thick.
- B.6.3 Two roof tile fragments (21g) were recovered from Period 3.3 demolition layer 64. One was in a fine silty fabric with common voids due to the leaching out of calcareous material, and was orange with a pink core. The other was a fully oxidised fragment in a fine sandy fabric with ferrous inclusions. The former may be medieval, whilst the latter is certainly post-medieval. Another fragment of post-medieval roof tile (21g) in a fine sand and flint fabric was found in Period 3.3 robber trench fill 135 (134). The surface was covered with a very fine calcareous 'sand'.

Context	Fabric	Form	No	Wt/g	Abr	Thickness	Comments	Date
63	mscfe	RBT	1	114	+	29	pink with It grey core	Rom
64	sc	RTM?	1	7			orange with pink core, fine silty with common voids	med?
64	fsfe	RTP	1	14				pmed
135	fsf	RTP	1	21			v fine calc stuck to surface	pmed
175	msf	RBT?	1	222		30	tapered, 1 KT edge, orange with It grey core	Rom?

© Oxford Archaeology East Page 54 of 68 Report Number 1944



Notes: RBT – Roman tile; RTM/P – plain roof tile medieval/post-medieval.

Table 16: Ceramic building material catalogue by context

Fired Clay

- B.6.4 Fifty-eight fragments of fired clay weighing 120g were collected from ten contexts. The fired clay was quantified by context, fabric and type, using fragment count and weight in grams. The presence and form of surface fragments and impressions were recorded. Data was input into an MS Access database and a summary catalogue by context is appended to this report as Table 17.
- B.6.5 Most of this material was recovered from bulk samples. Pieces are small and heavily abraded and few have original surfaces. The majority of fragments are in fine sandy fabrics but were too small to determine whether other inclusions had been present. Some small rounded fragments may have been pieces of prehistoric pottery (particularly from posthole fills 99 and 141, and possibly hearth fill 187).
- B.6.6 The majority of fragments were recovered from the fills of hearths/ovens, and in some cases were labelled 'oven lining', but the pieces are too small to determine their function based on morphology alone. One small fragment from oven fill 189 has a wattle or reed impression 6mm in diameter.

Context	Feature	Phase	Sample	Fabric	Туре	No	Wt/g	Colour	Surface	Impress- ions	Abr	Notes
99	Posthole 98	3.2	4	fs		4	2	orange/b uff/ black			++	small rounded frags, could be preh pot
131	Robber trench 130	3.3		fsfe		1	2	red/ black			++	rounded lump
141	Posthole 140	1	11	so		6	6	black			++	small rounded frags, could be preh pot
141	Posthole 140	1	11	fsf		2	3	orange			++	small rounded frags, could be preh pot
157	Hearth/ oven 155	3.2	13	fs		2	1	pink			++	
161	Hearth/ oven 163	3.2	23	fsf		1	6	red			+	9mm thick labelled 'oven lining'
161	Hearth/ oven 163	3.2	14	fs		2	1	red			+	
173	Pit 172	3.2	16	fsf		2	6	black- red			+	amorphous joining frags
183	Hearth/ oven 182	3.2	19	fs		8	4	red			++	small rounded frags
184	Hearth/	3.2	20	fs		1	4	white-	flattish?		+	slightly



Context	Feature	Phase	Sample	Fabric	Type	No	Wt/g	Colour	Surface	Impress- ions	Abr	Notes
	oven 182							pink				vitrified?
184	Hearth/ oven 182	3.2	20	fs		10	30	1	several flat		++	small rounded frags, labelled 'oven lining'
187	Hearth/ oven 185	3.2	21	fs		1	1	red			+	small frag could be preh pot
187	Hearth/ oven 185	3.2	21	fs		5	5	orange/b uff/ black			++	small rounded frags, could be preh pot
189	Pit 190	3.2	24	fs		1	2	buff		Small ? wattle/ree d 6mm diam)+ 1	
189	Pit 190	3.2	24	fs		12	47	grey/ red			++	rounded lumps, occ coarse incl.

Table 17: Fired clay catalogue by context

© Oxford Archaeology East Page 56 of 68 Report Number 1944



APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Faunal Remains

By Angelos Hadjikoumis BA MSc PhD

Introduction

C.1.1 Twenty-three specimens of animal bone were identified in the faunal assemblage recovered. Twenty-one of these are the result of hand-collection, while two more were identified in the residues of bulk samples processed by water flotation. This rather small faunal assemblage was studied in order to assess the preservation condition and overall potential of zooarchaeological remains at the site.

Methodology

C.1.2 Identification and full recording was attempted on each specimen. Besides anatomical and taxonomic identification, data on the fusion state of postcranial elements, eruption and wear of dental remains, fragmentation, level of erosion, taphonomy, butchery and biometrical measurements were also recorded, wherever available. Identification was carried out with the use relevant osteological atlases (*e.g.* Barone 1976; Pales and Garcia 1981; Schmid 1972).

Quantification

C.1.3 The basic unit for the quantification of this sample is the Number of Identified Specimens (NISP).

Contamination and Sampling Bias

C.1.4 No obvious contamination has been noted in the assemblage. The scarcity of faunal remains at the site and the inevitably small sample size render any results produced tentative and of limited reliability. The scarcity of faunal remains is consistent both in hand-collected material and bulk sample residues, which suggests that this picture possibly holds true throughout the site. Alternatively, this scarcity might be attributable to the use of the specific area (*i.e.* faunal remains discarded elsewhere). Moreover, the presence of small fish remains in the flotation samples illustrates the well-known fact that a recovery strategy involving hand collection only, introduces a size bias.

Results and Discussion

- C.1.5 The bulk of the assemblage dates to the 12th-14th centuries. The only two identifiable specimens recorded in flotation residues were a small fish vertebra and an amphibian long bone. The twenty-one hand-collected specimens represent a relatively large number of taxa, given the small size of the sample. Cattle (NISP= 8), pig (NISP= 2), sheep (NISP= 4), equid (NISP= 3), deer (NISP= 1), medium mammal (NISP= 1) and galliform bird (NISP= 2) were identified (see Table 17). In addition to the taxa identified by their skeletal remains, the presence of gnawing marks six specimens suggests that dogs were also present at the site, although other animals (e.g. pigs, cats, foxes, ferrets, etc.) can inflict such damage on bones.
- C.1.6 Seven of the recorded specimens yielded information on age-at-death. Two cattle mandibles represent an animal younger than 18-30 months and a senile animal. Concerning sheep, two fully fused early-fusing elements indicate survival beyond 6-10 months old, while a mandible belonged to an animal older than 24-36 months. An



- unfused pig calcaneus represents an animal younger than 24-30 months. An equid mandible contained all permanent dentition thus indicating an adult animal.
- C.1.7 The preservation condition of the material is deemed as very good, thus allowing the identification of eight specimens bearing butchery marks. Six of them were recorded on cattle and one on sheep remains, while a 'medium mammal' specimen also yielded a butchery mark. Besides gnawing and butchery marks, other modifications (e.g. burning or rodent gnawing) were absent from the recorded specimens. Moreover, the highly fragmented state and small size of the assemblage resulted in a complete lack of biometric measurements to be taken.

Context	Cut	Period	Collection	Element	Taxon	Proximal	Distal	Side	Age	Butchery	Gnawed
64	Demo layer	3.3	hand	Sacrum	Medium mammal	Not Counted	Absent	Unsided		V	
64		3.3	hand	Maxilla	Pig	Indeter- minate	Absent	Left			
64		3.3	hand	Pelvis	Sheep	Fused	Absent	Left	\checkmark		
64		3.3	hand	Loose maxillary	Sheep/Go at	Indeter- minate	Absent	Right			
82	Surface	3.2	hand	Radius	Galliform bird	Fused	Absent	Left			
91	Occ. layer	3.2	hand	Ulna	Cattle	Indeter- minate	Absent	Right			
95	spread	3.2	flotation	Long bone	Amphibian	Indeter- minate	Indeter minate	Unsided			
118	Robber trench 115	3.3	hand	Metapodial	Equid	Indeter- minate	Indeter minate	Unsided			
118		3.3	hand	Femur	Cattle	Absent	Indeter minate	Unsided			
131	Robber trench 130	3.3	hand	Metatarsus	Cattle	Indeter- minate	Absent	Right		V	
131	Robber trench 130	3.3	hand	Mandible	Cattle	IIndeter- minate	Absent	Right	V	V	√
135	Robber trench 134	3.3	hand	Humerus	Galliform bird	Indeter- minate	Indeter minate	Left			
147	Ditch 149	3.2	hand	Scapula	Cattle	Not Counted	Absent	Unsided			√
153	layer	3.2	hand	Scapula	Sheep	Fused	Absent	Left	V	√	
153	layer	3.2	hand	Mandible	Sheep	IIndeter- minate	Absent	Left	V		
157	Hearth/ oven 155	3.2	flotation	Vertebra	Fish	Not Counted	Absent	Unsided			
160	Pit 159	3.3	hand	Calcaneus	Pig	Unfused shaft	Absent	Left	V		√
161	Hearth/ oven 163	3.2	hand	Axis	Equid	Fused	Absent	Unsided			√
164	Pond 191	2	hand	Mandible	Equid	Indeter- minate	Absent	Left	V		
166	Wall 165	3.2	hand	Tibia	Cattle	Indeter- minate	Absent	Right		V	



Context	Cut	Period	Collection	Element	Taxon	Proximal	Distal	Side	Age	Butchery	Gnawed
168	Wall 167	3.2	hand	Humerus	Cattle	Ahsent	Indeter minate	Right		\checkmark	√
173	Pit 172	3.2	hand	Antler	Deer	Indeter- minate	Absent	Unsided		\checkmark	
176	Ditch 178	3.2	hand	Mandible	Cattle	Indeter- minate	Absent	Right	V	\checkmark	

Erosion grades (simplified version of Brickley & McKinley 2004, 14-15): 0 (surface morphology clearly visible, fresh appearance), 1 (light and patchy surface erosion), 2 (more extensive surface erosion than grade 1), 3 (most of bone surface affected by some degree of erosion, 4 (all of bone surface affected by erosive action), 5 (heavy erosion across whole surface, completely masking normal surface morphology). Flotation includes the combined fractions of 2-10 mm

Table 17: Summary of recorded faunal data.

C.2 Environmental samples

By Rachel Fosberry

Introduction

- C.2.1 Twenty two bulk samples were taken during excavation of features from three periods of activity with the main focus being in the medieval period.
- C.2.2 The purpose of this assessment is to determine whether plant remains are present, their mode of preservation and whether they are of interpretable value with regard to domestic, agricultural and industrial activities, diet, economy and rubbish disposal.

Methodology

C.2.1 For this assessment, one bucket (approximately 10 litres) of each of the samples was processed by tank flotation using modified Siraff-type equipment for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve. A magnet was dragged through each residue fraction for the recovery of magnetic residues prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The dried flots were subsequently sorted using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Tables 19-21. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers et al. 2006) and the authors' own reference collection. Nomenclature is according to Zoharv and Hopf (2000) for cereals and Stace (1997) for other plants. Carbonized seeds and grains, by the process of burning and burial, become blackened and often distort and fragment leading to difficulty in identification. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

Quantification

C.2.1 For the purpose of this initial assessment, items such as seeds, cereal grains and legumes have been scanned and recorded qualitatively according to the following categories

= 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens

© Oxford Archaeology East Page 59 of 68 Report Number 1944



Items that cannot be easily quantified such as charcoal have been scored for abundance

+ = rare, ++ = moderate, +++ = abundant

Results

C.2.1 Preservation of by plant remains is by carbonisation and is moderate to poor. The results are discussed chronologically:

Period 1: Prehistoric

C.2.2 A sample taken from prehistoric posthole **140** contains sparse charcoal with fired clay and a single pottery sherd.

Sample No	11
Context No	141
Cut No	140
Feature type	Posthole
Volume processed (L)	4
flot volume (ml)	1
Estimated charcoal volume (ml)	1
charcoal <2mm	++
charcoal 2-5mm	+

Table 19: Period 1 samples

Period 2: 9th-11th century

C.2.3 Pit **138** was one of four small pits in the middle of the excavation area. The sample from the fill (139) contains a single poorly-preserved cereal grain that is likely to be intrusive.

Sample No	10
Context No	139
Cut No	138
Feature type	Pit
Volume processed (L)	9
flot volume (ml)	1
Charred cereal grain	
cereal indet. caryopsis	#
Estimated charcoal volume (ml)	<1
charcoal <2mm	+
charcoal 2-5mm	0

Table 20: Period 2 sample

Period 3: 12th-14th century

C.2.4 A sample taken from beamslot **68** / **96** of Building 1 contains a single wheat (*Triticum aestivum* s.l.) grain and a fragment of barley (*Hordeum vulgare*) rachis (stem).

© Oxford Archaeology East Page 60 of 68 Report Number 1944



- C.2.5 Samples were taken from two postholes associated with Building 2 which replaced Building 1; **98** contains occasional charred wheat grains and **108** did not contain any preserved remains.
- C.2.6 Hearth 104 was located within the building and was re-cut at a later date. The fill (105) of the original hearth was sampled and did not contain any preserved remains. Pit 127 was located next to the hearth and was also sterile.
- C.2.7 Samples were taken from a collection of small ovens (155, 163 and 182) and pits (172 and 190) at the northern end of the excavation. The oven fills all produced similar charred plant assemblages in which wheat grains predominate. Also present are legumes (peas and small beans) and seeds of crop weeds such as stinking mayweed (Anthemis cotula), cornflower (Centaurea sp.), clover/medick (Trifolium/Medicago sp.) and scentless mayweed (Tripleurspermum inodorum). The charred plant assemblage in oven 155 differs from the others in that it contains numerous rush (Juncus sp.) seeds which may indicate the use of this wetland plant as fuel. Pit 172 produced a small assemblage of charred peas (Pisum cf. sativum), most of which were extracted from the sample residue rather than the flot (charred legumes often do not float). Pit 190 produced a charred assemblage that is similar to those from the ovens and mostly consists of wheat grains and legumes. A single seed of flax/linseed (Linum usitatissimum) was noted.

Sample no		8	4	7	9	12	13	14	15	16	19	20	21	22	23	24	3	17	5	6
Context no		109	99	105	128	156	157	161	162	173	183	184	187	157	161	189	97	176	95	103
Cut no		108	98	104	127	155	155	163	163	172	182	182	185	155	163	190	96	178	-	-
Feature type		Post hole	Post hole	Hearth	Pit	Oven	Beamslot	Ditch	Spread	Layer										
Volume processed (I)		3	7	8	8	7	7	8	6	5	3	5	6	5	7	8	7	6	2	7
Flot volume (ml)		1	2	1	1	1	20	30	1	1	1	15	10	10	20	50	15	1	120	1
Charred cereal grain:																				
Avena sp. Caryopsis	Oat (wild or cultivated) grain						#						#	#						
Hordeum vulgare L. caryopsis	domesticated Barley grain								#							#				
Triticum sp. caryopsis	Wheat grain		#			#	##	###	#			##	##	###	###	###	#			
Cereal indet. caryopsis	indeterminate grain		#				##	##			#	#	##	##	##	##				
Legumes (Fabaceae):																				
Small <2mm seed	small-seeded Vetches/Peas/ Garden Peas						#	##						#	#	#				
Medium 2- 4mm seed	medium- seeded Vetches/Peas/ Garden Peas						##	#		##	#		#	#	#	#				
Large >4mm seed	large-seeded Vetches/Peas/ Garden Peas							#								#				



Sample no		8	4	7	9	12	13	14	15	16	19	20	21	22	23	24	3	17	5	6
Context no		109	99	105	128	156	157	161	162	173	183	184	187	157	161	189	97	176	95	103
Cut no		108	98	104	127	155	155	163	163	172	182	182	185	155	163	190	96	178	-	-
Charred other edible or economic plants:																				
Linum usitatissimu m l. seed	Flax															#				
Charred wild seeds and fruits																				
Anthemis cotula L. achene	Stinking Chamomile						##	#				#		##						
Bromus sp. caryopsis	Bromes							#												
Centaurea sp. achene	Knapweeds													#	#					
Polygonum aviculare L. achene	Knotgrass												#	#						
Rumex sp. achene	small-seeded Docks							##							#	#				
Small Trifolium spp. (<1mm) seed	small-seeded Clovers						#													
Large Trifolium/Me dicago spp. (2-3mm) seed	large-seeded Clovers/Medic ks						#				#		#	#		#				
Tripleurosper mum inodorum L Sch. Bip. achene	Scentless Mayweed							#						#						
Wetland plant species																				
Juncus sp. seed	Rushes						##							###						
Other charred macrofossils:																				
Estimated charcoal volume (ml)		0	0	0	<1	1	1	1	0	0	<1	15	<1	<1	1	3	<1	0	120	0
Charcoal <2mm		0	0	+	0	+	++	++	0	0	+	+++	++	+	++	+++	+	0	++++	0
Charcoal 2- 5mm		0	+	0	0	0	0	0	0	0	0	++	0	+	+	++	0	0	++++	0

Table 21: Period 3 samples

Discussion

C.2.8 The environmental samples have provided little evidence of human settlement prior to the 12th century. The three ovens are thought to date to the latest period of occupation on the site and are likely to be bread ovens although they may have been multifunctional. Charred grains are frequently recovered from bread ovens despite their inferred use for cooking loaves of bread rather than whole grains. It is possible that grains were used to raise the loaves off the floor of the oven to prevent them from



- sticking (Moffett 1994, 61). Alternative uses of the ovens include the drying of grain prior to storage or milling although chaff elements (stem fragments) were absent from the oven fills, making this use less likely.
- C.2.9 The other economic plants are primarily legumes which would have been stored dried and were a valuable component of the medieval diet. They are likely to be underrepresented as they are less likely (than cereals) to come into contact with fire and subsequently become carbonised. The single flax seed suggests the use of this versatile plant for either whole seed consumption or for the pressing of seeds for linseed oil. The stems of flax can also be processed for linen.
- C.2.10 The weed seed assemblage represents plants that would have been growing amongst the cereal crop and harvested with it. The rush seeds represent the exploitation of wetland plants that was common in this region during the medieval period. It is possible that the seeds may have originated from the burning of peat but this is difficult to determine.

© Oxford Archaeology East Page 63 of 68 Report Number 1944



APPENDIX D. BIBLIOGRAPHY

Baker, D., Baker, E., Hassall, J. and Simco, A., 1979, *Excavations in Bedford 1967–1977*, Beds Archaeol. J, 13.

Barker, B. and Luke, M., 2008, *Bedford Western Bypass: Assessment and Updated Project Design*, Albion Archaeology, 2008/56

Barone, R., 1976, Anatomie comparée des mammifères domestiques. Paris: Vigot Freres.

Brickley, M., & McKinley, J., (eds.), 2004, *Guidelines to the standard for recording human remains*. IFA Paper 7. Reading: IFA/BABAO.

Brine, G., 1988, 'The pottery', in Pinder, A. and Davison, B., 'The excavation of a motte and bailey castle at Chalgrave, Bedfordshire, 1970', *Beds Archaeol. J.* 18, 40–46

Brown, N., and Glazebrook, J. (eds), 2000, Research and Archaeology: A Framework for the Eastern Counties 2. Research Agenda and Strategy. East Anglian Archaeology Occasional Paper 8, Norwich: Scole Archaeological Commitee.

Brudenell, M., 2015, Written Scheme of Investigation, Biddenham Loop Phase 2b Reinforcement Watermain, OA East (unpublished)

Butler, R., Green, C., and Payne, N., 2009, *Cast copper-alloy cooking vessels,* Finds Research Group Datasheet 41.

Cappers, R.T.J., Bekker R.M., and Jans, J.E.A., 2006, Digital Seed Atlas of the Netherlands Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. www.seedatlas.nl

Collisson, W., Inclosure Map of Kempston, 1804, [Map], Bedford Archives, Inclosure Awards, P60/26/1, Bedford.

Egan, G., 1998, The Medieval Household, Daily Living c.1150-c.1450, London: HMSO.

English Heritage, 2008, Management of Research Projects, PPN3: Archaeological Excavation

Gilchrist, R, 2012, Medieval Life: Archaeology and the Life Course, Woodbridge

Goodall, I. H., 1987, 'Iron objects' in Rogerson, A., Ashley, S., Williams, P., and Harris, A., (eds.) *Three Norman Churches in Norfolk,* East Anglian Archaeology 32

Glazebrook, J. (ed), 1997, Research and Archaeology: A Framework for the Eastern Counties 1. Resource Assessment. East Anglian Archaeology Occasional Paper 3, Norwich: Scole Archaeological Committee

Historic England, 2015, Management of Research Projects, The MoRPHE Managers' Guide

Hounsell D and Abrams J, 2004, Land at Van Dieman's Land, Woburn Road, Kempston Rural, Bedfordshire. Albion Archaeology, Report No. 2004/52.

Jacomet, S., 2006, Identification of cereal remains from archaeological sites. (2nd edition, 2006) IPNA, Universität Basel / Published by the IPAS, Basel University.

Luke, M., Barker, B. and Osborn, V., 2009 'Land west of Kempston' in South Midlands Archaeology 3, 6-8

Luke, M., 2016, Close to the Loop: landscape and settlement evolution beside the Biddenham Loop, west of Bedford. EAA 156

Major, H., 2006, 'The Finds' in Brown, N. R., *A Medieval Moated Manor by the Thames Estuary: Excavations at Southchurch Hall, Southend, Essex,* East Anglian Archaeology 102.



Maltby, M., 2016, 'The animal bone' in Luke, M., Close to the Loop: landscape and settlement evolution beside the Biddenham Loop, west of Bedford. E. Anglian Archaeol. 156 (pdf report on CD).

Margeson, S., 1995, 'The Iron Objects' in Rogerson, A., *A Late Neolithic, Saxon and Medieval site at Middle Harling, Norfolk*, East Anglian Archaeology 74.

Medlycott, M. 2011 Archaeology Revisited: a revised framework for the East of England, East Anglian Archaeological Occasional Papers 24 (EAA 24).

Moffett, L., 1994, 'Charred cereals from some ovens/kilns in late Saxon Stafford and the botanical evidence for the pre-burh economy', pp.55–64 J. Rackham (ed) Environment and economy in Anglo-Saxon England (CBA Research Report 89). York: Council for British Archaeology.

Moore, S, 1999, Cutlery for the Table. A History of British Table and Pocket Cutlery, Sheffield

Morgan, S., 2014, Specification for Archaeological Evaluation, Monitoring and Recording, Biddenham Loop, Kempston, OA East (unpublished)

Mould, Q., 2005, 'Ironwork' in Shelley, A., *Dragon Hall, King Street, Norwich: Excavation and Survey of a late Medieval Merchant's Trading Complex, East Anglian Archaeology* 112.

MPRG, 1998, *A Guide to the Classification of Medieval Ceramic Forms*, Medieval Pottery Research Group Occasional Paper 1.

North, J. J., 1960, English Hammered Coinage, Volume 2: Edward I to Charles II 1272-1662 (London: Spink and Son)

Oake, M, Luke, M, Dawson, M, Edgeworth, M & Murphy, P., 2007. *Bedfordshire Archaeology; Research and Archaeology: Resource Assessment, Research Agenda and Strategy.* Bedfordshire Archaeology Monograph 9. Bedfordshire Archaeological Council.

Page, W., ed, 1912, 'Parishes: Kempston', in *A History of the County of Bedford: Volume 3*, London: University of London, pp. 296-305.

Pales, L. & Garcia, M., 1981, Atlas ostéologique pour servir à l'identification des mammifères du Quaternaire, II. Les membres Herbivores. Paris: CNRS.

Saunders, G., 2014, *Brief for a Programme of Archaeological Evaluation at land southwest of Kempston, Kempston Rural, Bedfordshire*, BBC (unpublished).

Schmid, E., 1972, Atlas of animal bones. Amsterdam and New York: Elsevier.

Slowikowski, A., 2011, 'Genius in a Cracked Pot'. Late Medieval Reduced Ware, a regional synthesis. MPRG Res. Rep. 4.

Spoerry, P., 2016, *The Production and Distribution of Medieval Pottery in Cambridgeshire.* E. Anglian Archaeol.

Stace, C., 1997, New Flora of the British Isles. Second edition. Cambridge University Press

Wells, J., 1996, 'Ceramic artefacts', in Shotliff, D., 'A moated site in Tempsford Park, Tempsford', *Beds Archaeol. J.* 22, 108–116.

Wells, J., 2016, 'Pottery: middle Bronze Age to modern', in Luke, M., *Close to the Loop: landscape and settlement evolution beside the Biddenham Loop, west of Bedford*. E. Anglian Archaeol. 156 (pdf report on CD).

Withers, P., and Withers B., 2001, The Farthings and Halfpennies of Edward I and II (Galata).

© Oxford Archaeology East Page 65 of 68 Report Number 1944



Zohary, D., Hopf, M., 2000, Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the. Nile Valley. 3rd edition. Oxford University Press.

© Oxford Archaeology East Page 66 of 68 Report Number 1944



APPENDIX E. OASIS REPORT FORM

All fields are required unless they are not applicable.

Project D	etails		Ţ								
OASIS Nur	nber	oxfordar3-273802)								
Project Nar	ne	Medieval remains	on the Biddenh	nam Loop Pha	ise 2a	Reinforcer	nent Wat	ter Main			
Project Dat	es (field	lwork) Start	17-05-2016			Finish	08-06-2	016			
Previous W	ork (by	OA East)	Yes			Future	Work	No			
Project Ref	erence	Codes									
Site Code	BEDFM	2014.63		Planning	App.	No.					
HER No.				Related F	HER/C	DASIS N	0.				
	ject/Te	chniques Use	d								
Prompt		Water Act 198	39 and subsequ	ent code of pr	ractice						
Please se	lect all	techniques	used:								
Field Obse	rvation (p	eriodic visits)	Part Excavation				☐ Sa	Salvage Record			
Full Excava	ation (100)%)	Part Survey				☐ S	Systematic Field Walking			
Full Survey	,		Recorded Observation				Systematic Metal Detector Survey				
Geophysic	al Survey		Remote Operated Vehicle Survey				☐ Test Pit Survey				
	Excavati	on	Salvage Excavation				□ W	Watching Brief			
List feature typ	es using	/Significant Fi the NMR Mon	ument Type	e Thesaur		-		sing the MDA Object type te "none".			
Monument		Period		OI	bject			Period			
Building		Medieva	al 1066 to 154	.0 P	ottery			Medieval 1066 to 1540			
Oven		Medieva	0 Coin				Medieval 1066 to 1540				
Ditch		Medieva	al 1066 to 154	.0 Q	(uern			Medieval 1066 to 1540			
Project L	ocatio	on									
County	Bedford	dshire		Sit	te Ado	dress (in	cludina	postcode if possible)			

District Bedford Land off Ridge Road Kempston Bedford Bedford Bedfordshire

Study Area 520 sq.m National Grid Reference TL 01320 47363



Project Originators

Organisation	OA EAST
Project Brief Originator	Bedfordshire Borough Council
Project Design Originator	Matt Brudenell
Project Manager	Matt Brudenell
Supervisor	Nicholas Cox

Project Archives

Physical Archive	Digital Archive	Paper Archive
Higgins Bedford	OA East	Higgins Bedford
BEDFM 2014.63	BEDFM 2014.63	BEDFM 2014.63

Archive Contents/Media

	Physical Contents	Digital Contents	Paper Contents
Animal Bones	\times		
Ceramics	\times		
Environmental	X		
Glass			
Human Bones			
Industrial			
Leather			
Metal	X		
Stratigraphic			
Survey			
Textiles			
Wood			
Worked Bone	X		
Worked Stone/Lithic			
None		\times	X
Other			

Digital Media	Paper Media
□ Database	Aerial Photos
⊠ GIS	
Geophysics	Correspondence
	Diary
Illustrations	□ Drawing
☐ Moving Image	Manuscript
Spreadsheets	
Survey	Matrices
▼ Text	Microfilm
☐ Virtual Reality	Misc.
	Research/Notes
	Survey

Notes:

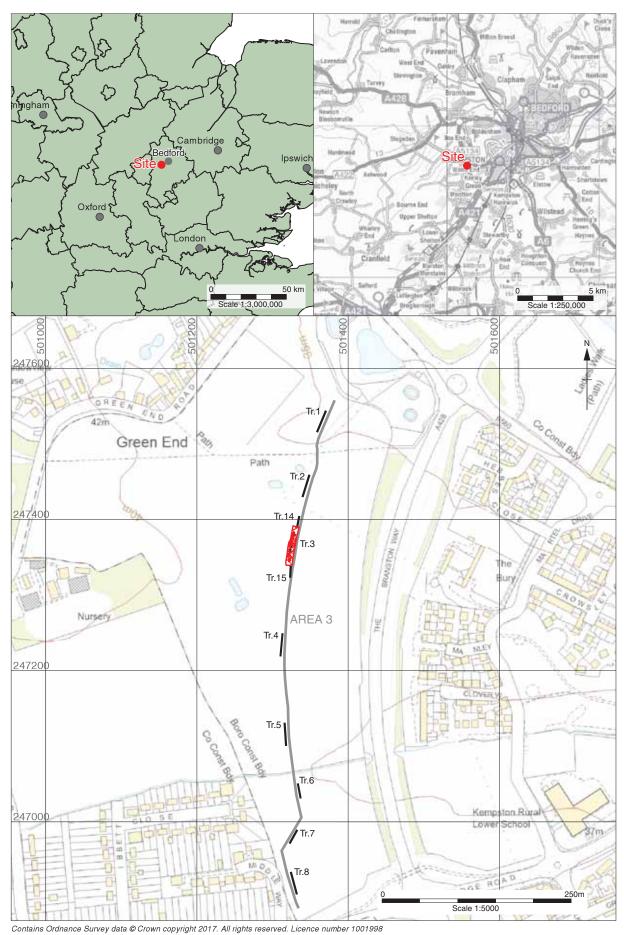


Figure 1: Site location showing pipeline route (dark grey), archaeological trenches (black) and excavation area (red)



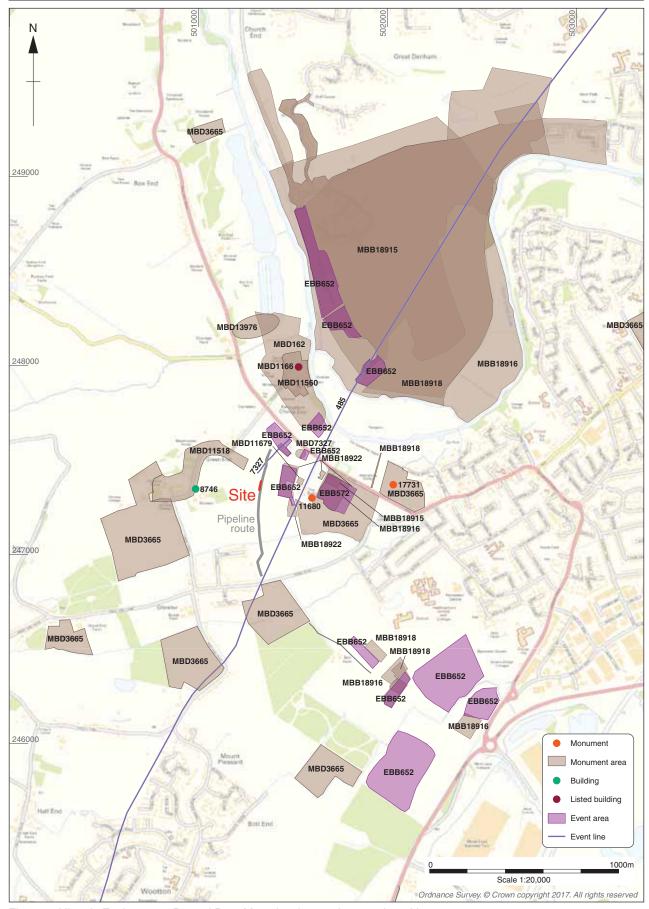


Figure 2: Historic Environment Record Data Map showing entries mentioned in text

© Oxford Archaeology East Report Number 1944

Figure 3: Evaluation trench plans (Area 1): Trenches A-C

Report Number 1944

© Oxford Archaeology East



Figure 5: Evaluation trench plans (Area 3): Trenches 4-6



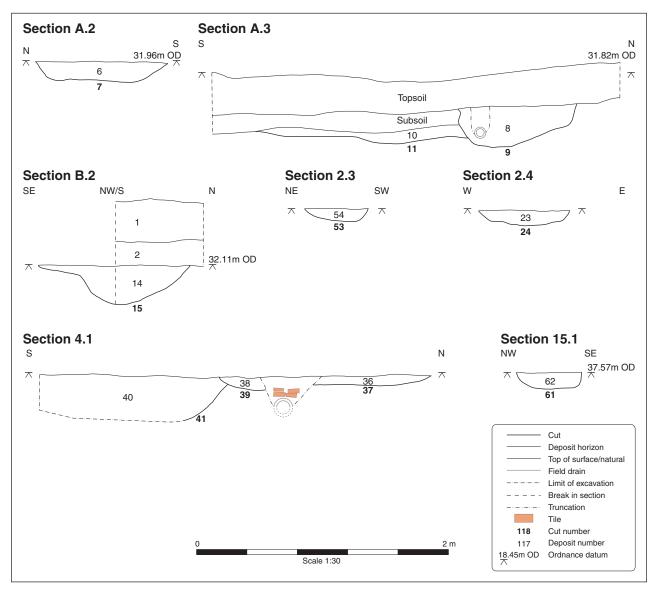


Figure 6: Selected evaluation sections



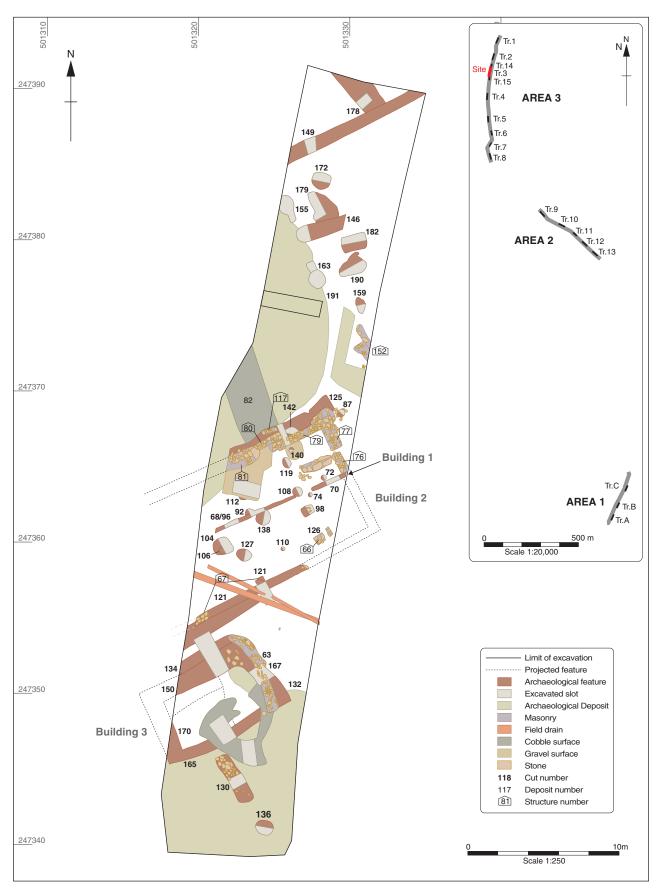


Figure 7: All features excavation plan



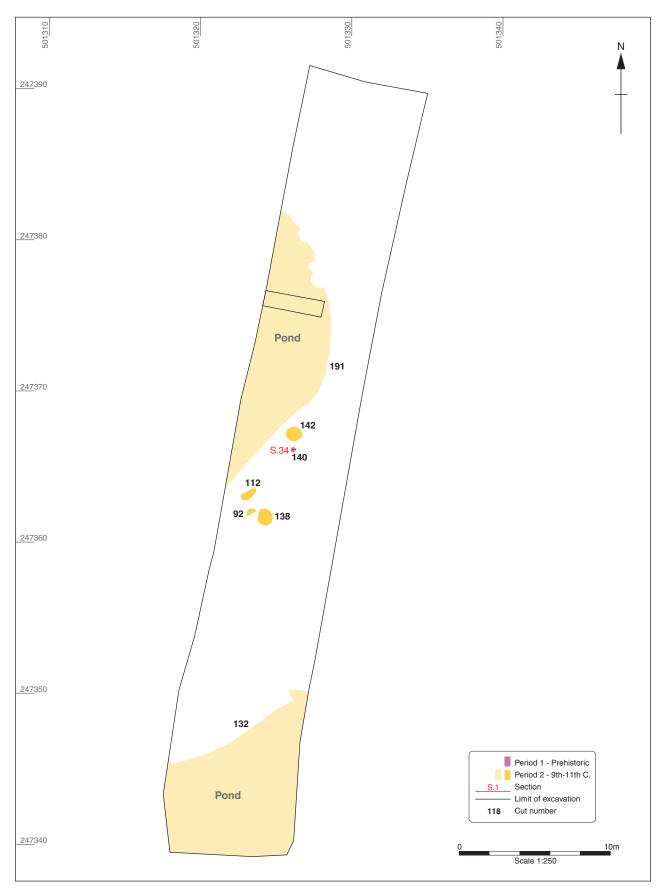


Figure 8: Excavation plan (Periods 1 and 2)



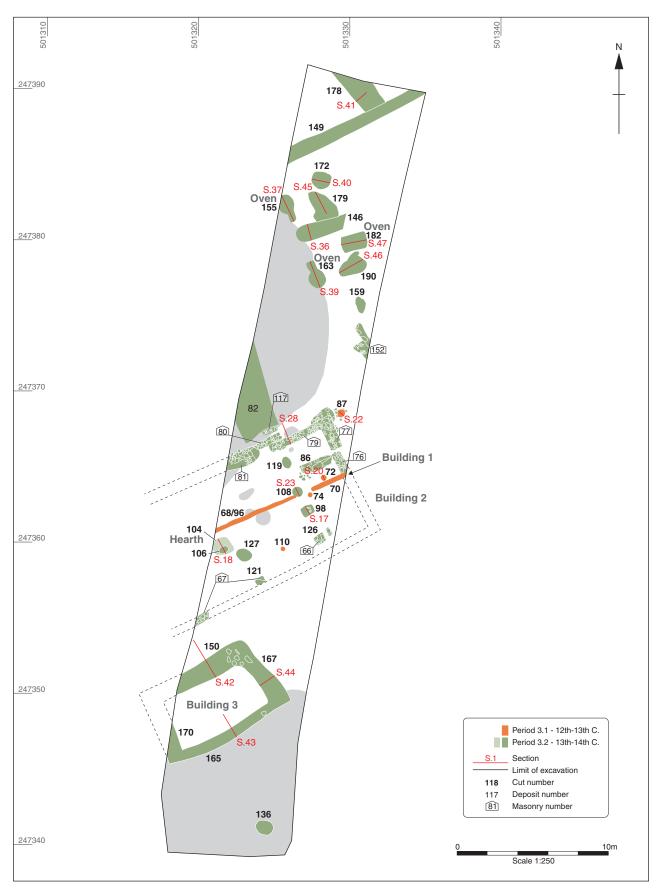


Figure 9: Excavation plan (Period 3.1 and 3.2)



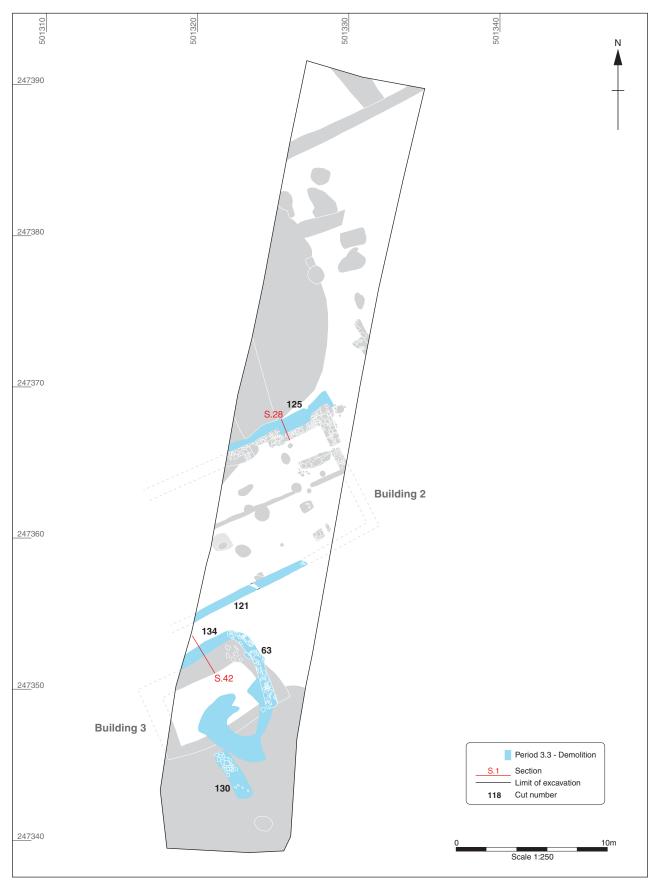


Figure 10: Excavation plan (Period 3.3)



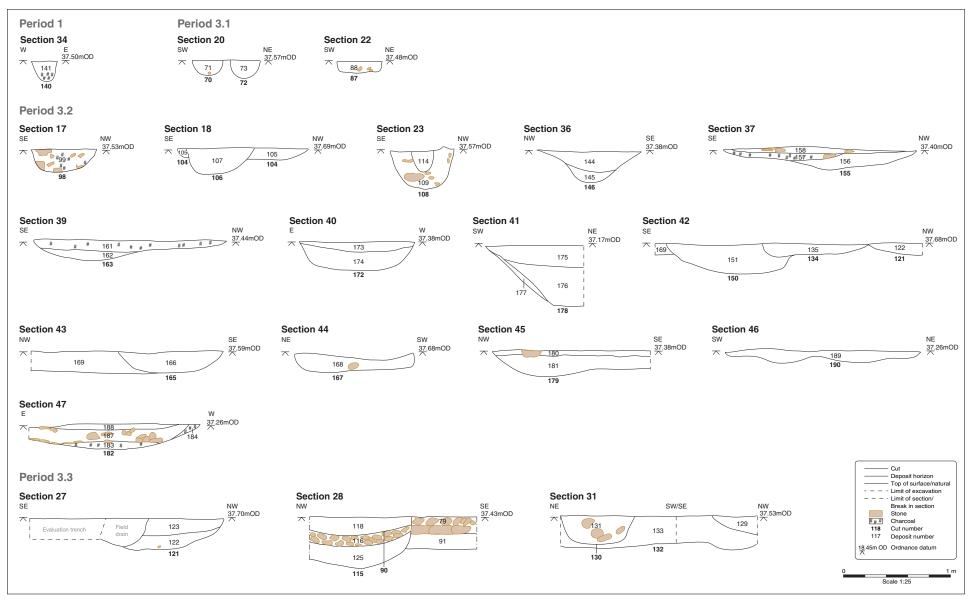


Figure 11: Selected excavation sections



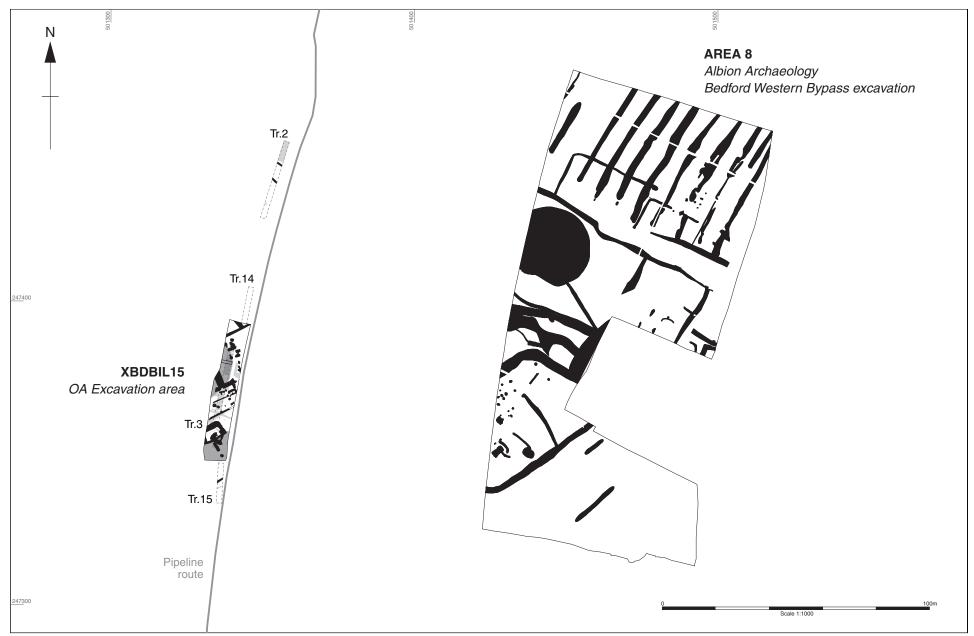


Figure 12: Excavation area in relation to Saxo-Norman and medieval features identified on Bedford Western Bypass (after Luke and Barker fig. 10)

© Oxford Archaeology East



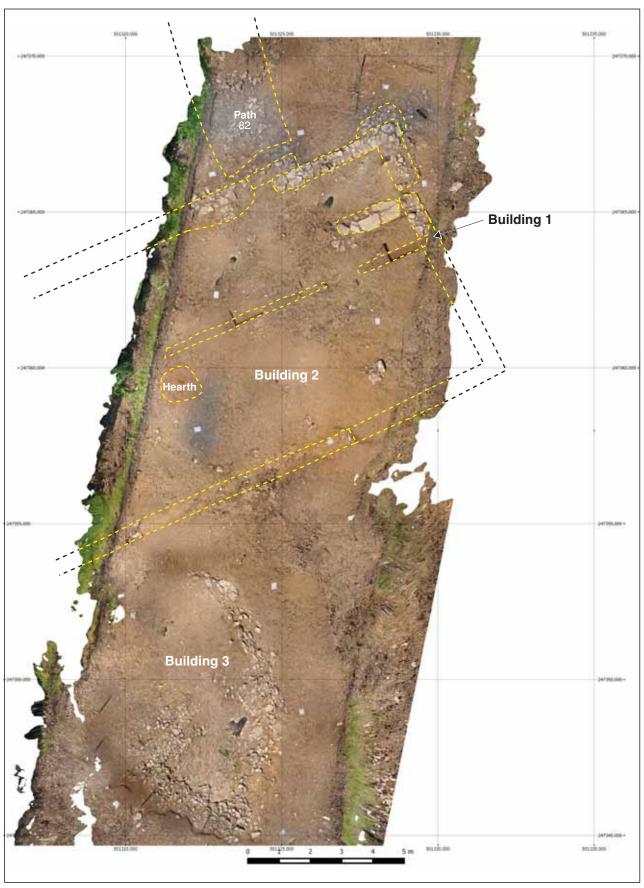


Plate 1: Plan view of Buildings 1 and 2





Plate 2: Building 1 beamslot **70** and posthole **72**, looking south-west



Plate 3: Building 2 posthole 98, looking south-west





Plate 4: Building 2 posthole 108, looking south-west



Plate 5: Building 2 wall 79, looking north-west



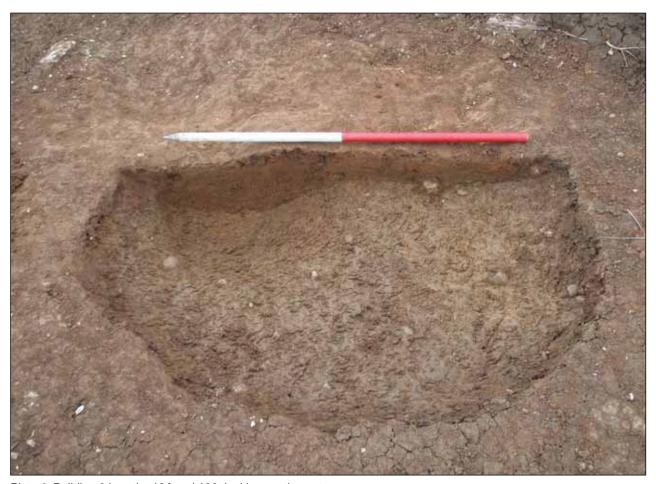


Plate 6: Building 2 hearths 104 and 106, looking south-west



Plate 7: Building 2 robber cut 115 and wall 79, looking north-east





Plate 8: Wall 152, looking south-east



Plate 9: Oven 155, looking south-west



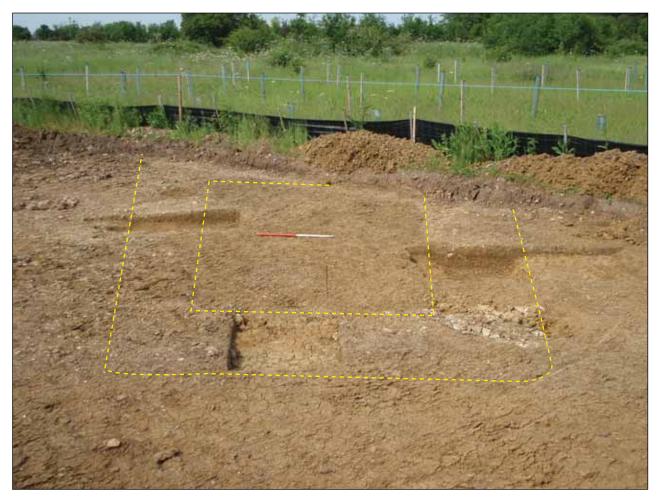


Plate 10: Building 3, looking south-west



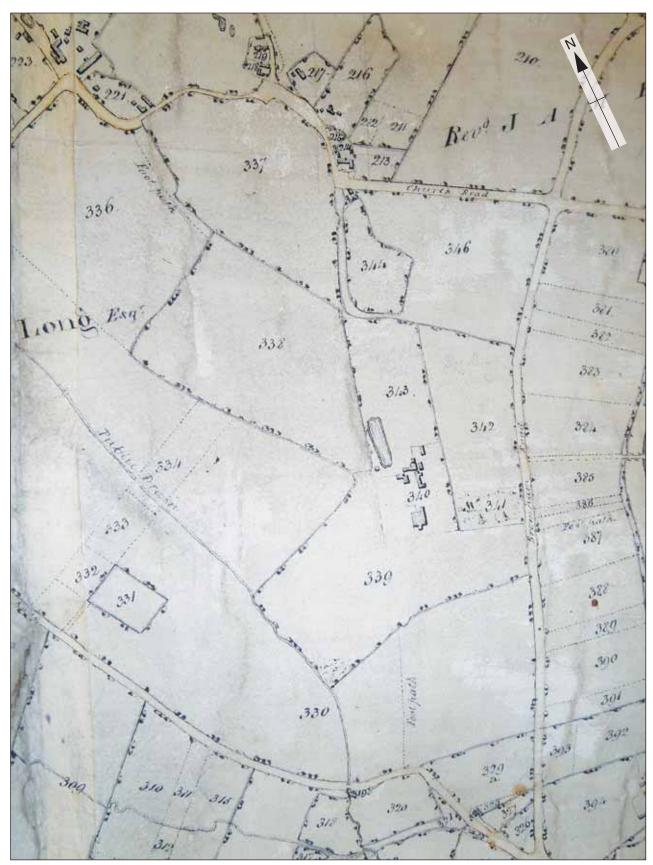


Plate 11: Kempston Inclosure Map (1804)



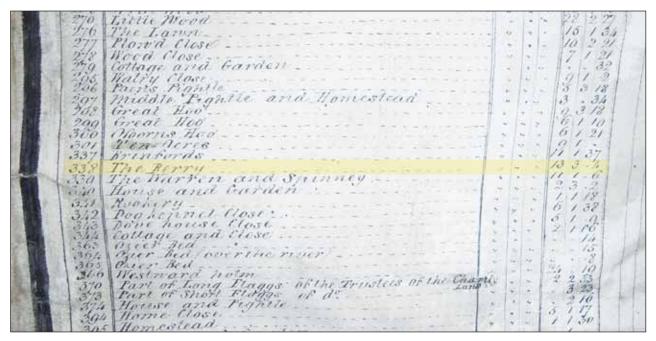


Plate 12: Inclosure Award showing field names



Head Office/Registered Office/ OA South

Janus House Osney Mead Oxford OX20ES

t: +44(0)1865 263800 f: +44(0)1865 793496

e:info@oxfordarchaeology.com w:http://oxfordarchaeology.com

OA North

Mill3 MoorLane LancasterLA11QD

t:+44(0)1524 541000 f:+44(0)1524 848606 e:oanorth@oxfordarchaeology.com w:http://oxfordarchaeology.com

OA East

15 Trafalgar Way Bar Hill Cambridgeshire CB23 8SQ

t:+44(0)1223 850500 e:oaeast@oxfordarchaeology.com w:http://oxfordarchaeology.com