

**BIRCHERLEY GREEN SHOPPING
CENTRE,
HERTFORD,
HERTFORDSHIRE,
SG14 1BN**

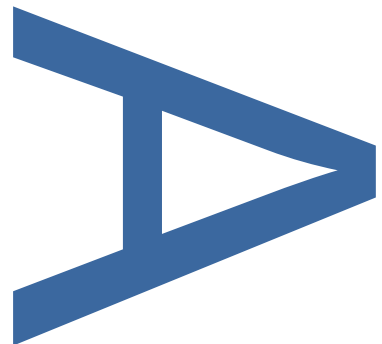
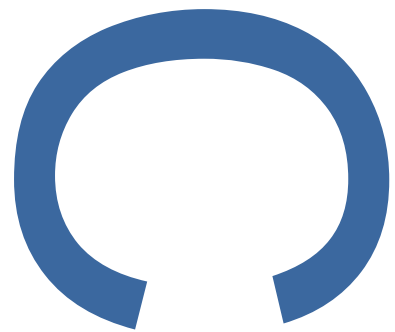
**AN ARCHAEOLOGICAL
EVALUATION**

**LOCAL PLANNING AUTHORITY: EAST
HERTFORDSHIRE DISTRICT COUNCIL**

**PLANNING APPLICATION NUMBERS:
3/17/0392/FUL**

PCA REPORT NO: 13467

SITE CODE: HBGH18



PRE-CONSTRUCT ARCHAEOLOGY

Land at Bircherley Green Shopping Centre, Hertford, SG14 1BN: An Archaeological Evaluation

Local Planning Authority: East Hertfordshire District Council

Planning Reference: 3/17/0392/FUL

Central National Grid Reference: TL 32701 12735 (c)

Site Code: HBGH18

Report No. R 13467

Written and researched by: Kevin McHugh & Thomas Learmonth

Project Manager: Mark Hinman

Commissioning Client: Archaeological Collective on behalf
Diageo Pension Trust Ltd

Contractor: Pre-Construct Archaeology Ltd
Central Office
The Granary Rectory Farm
Brewery Road
Pampisford
Cambridgeshire
CB22 3EN

Tel: 01223 845522

E-mail: mhinman@pre-construct.com

Website: www.pre-construct.com

**©Pre-Construct Archaeology Ltd
November 2018**

The material contained herein is and remains the sole property of Pre-Construct Archaeology Ltd and is not for publication to third parties without prior consent. Whilst every effort has been made to provide detailed and accurate information, Pre-Construct Archaeology Ltd cannot be held responsible for errors or inaccuracies herein contained.

CONTENTS

CONTENTS	2
ABSTRACT	4
1 INTRODUCTION	5
2 GEOLOGY AND TOPOGRAPHY	7
3 ARCHAEOLOGICAL BACKGROUND.....	8
4 QUANTIFICATION OF ARCHIVE.....	14
5 THE FINDS AND ENVIRONMENTAL EVIDENCE	19
6 ACKNOWLEDGEMENTS.....	39
7 BIBLIOGRAPHY	40
8 FIGURES.....	42
9 APPENDIX 1: PLATES.....	46
10 APPENDIX 2: CONTENTS INDEX AND TRENCH INDEX.....	54
11 APPENDIX 3: OASIS FORM	61
12 APPENDIX 4: HERTS HER SUMMARY FORM (HERTS ONLY)	64
FIGURE 1: SITE LOCATION	42
FIGURE 2: TRENCH LOCATIONS WITH UPPER LEVEL OF ARCHAEOLOGY	43
FIGURE 3: TRENCH LOCATIONS WITH THE LOWER LEVEL OF ARCHAEOLOGY	44
FIGURE 4: SECTIONS	45
PLATE 1. PIT [007] AND [009]. TRENCH 2; VIEW EAST.....	46
PLATE 2. DITCH [016] AND PIT [018]. TRENCH 2; VIEW SOUTH WEST.	47
PLATE 3 DITCH [016] AND PIT [018]. TRENCH 2; VIEW NORTH WEST.....	47
PLATE 4. PIT [020]. TRENCH 2; VIEW EAST.....	48
PLATE 5. TRENCH 2 OVERVIEW; VIEW NORTH EAST.....	48
PLATE 6. TRENCH 2 OVERVIEW; VIEW SOUTH WEST.....	49
PLATE 7. TRENCH 3 OVERVIEW; VIEW NORTH-WEST.	49
PLATE 8. TRENCH 1 OVERVIEW; VIEW SOUTH.	50

PLATE 9. TRENCH 4 OVERVIEW; VIEW WEST.	50
PLATE 10. DITCH [024] TRENCH 4; VIEW NORTH.	51
PLATE 11. PIT [027] TRENCH 4; VIEW EAST.	51
PLATE 12. PIT [031] TRENCH 4; VIEW WEST.	52
PLATE 13. PIT [029] TRENCH 4; VIEW NORTH.	52
PLATE 14. PIT [033], DITCH [035] TRENCH 4: VIEW NORTH.	53

ABSTRACT

This report details the results of an archaeological trial trench evaluation and associated watching briefs at Bircherley Green Shopping Centre, Hertford, Hertfordshire. The archaeological fieldwork was carried out between the 15th and 23rd of October 2018.

The evaluation identified a high density of archaeological features relating to Early Medieval occupation in the centre of Hertford. At least four pits were dateable to the Saxon/early medieval periods. Other features uncovered over the course of the evaluation included quarry pits and rubbish pits containing evidence for medieval domestic occupation. A large pit with upper fills containing post medieval destruction debris, could be a large quarry pit for gravel extraction.

The evaluation also identified Victorian occupation in the form of wall foundations and demolition debris. These relate to earlier stages of building and possibly of a basement, which may relate to one of the three malshouses that stood on the site during the 1800's. The malshouses were demolished during the 1970's to make way for access to the shopping centre.

1 INTRODUCTION

- 1.1 The site is part of a mixed-use redevelopment site, including partial demolition of existing buildings, to provide up to 4,694 sqm retail floorspace, an 86-bed hotel, 70 residential flats. The development also includes refurbishment of the existing car park to provide 143 pay and display, 40 residential, 5 car club parking spaces, enhancement of bus station facilities, new public realm and landscaping to riverside, and associated works and improvements. A programme of archaeological trial trench evaluation was undertaken by Pre-Construct Archaeology Ltd (PCA) on land at Bircherley Green Shopping Centre, Hertford, SG14 1BN. TL 32701 12735. Monitoring and evaluation took place on the 26/09, 01/10, 03/10-05/10/2018.
- 1.2 The archaeological work was commissioned by Archaeological Collective on behalf of Diageo Pension Trust Ltd in response to an archaeological planning condition (Planning Reference: 3/17/0392/FUL). This was due to high archaeological significance of the proposed development area (PDA). The work was undertaken in line with National Planning Policy Framework 2018, Section 16 'Conserving and enhancing the historic environment'.
- 1.3 The evaluation was carried out in accordance with a Written Scheme of Investigation prepared by Ben Hobbs of PCA (Hobbs 2018) in response to a Brief for archaeological evaluation issued by Hertfordshire county council.
- 1.4 The aim of the evaluation was to determine the location, date, extent, character, condition and quality of any archaeological remains on the site. The archaeological significance of any such remains to be placed within the local, regional and national context as appropriate and to assess the potential impact of the development proposals on the site's archaeology.
- 1.5 The archaeological trial trench evaluation of Phase 1 consisted of 4 trenches between 10m and 18m in length and 1.8m wide, the locations of which are shown in Figure 2.

This report describes the results of the evaluation and aims to inform the design of an appropriate archaeological mitigation strategy. The site archive

will be deposited at Hertfordshire County Council Historic Environment Record (HER).

2 GEOLOGY AND TOPOGRAPHY

2.1 Geology

2.2 The solid geology of the site consists of Lewes Nodular Chalk Formation and Seaford Chalk Formation, biogenic and detrital sedimentary bedrock formed in the Cretaceous period when local environment was dominated by warm chalk seas. The overlying superficial geology is Kempton Park Gravel Member – sand and gravel. These detrital and fluvial coarse and fine-grained sedimentary deposits formed in the Quaternary period in a local environment of river channels and floodplains (BGS 2018).

2.3 Topography

2.4 The site as a whole lies at approximately 43m Above Ordnance Datum (AOD) within the valley of the River Lea. The surrounding land rises to the north at c70m and to the south at c. 68m. All the land within 1km surrounding the development site is built ground.

3 ARCHAEOLOGICAL BACKGROUND

3.1 The following account is taken from the DBA prepared by Archaeology Collective (Lord 2017). This considered archaeological finds and features from within a 750m radius of the proposed development site (the study area) as recorded in the Hertfordshire County Council Historic Environment Record (HHER). The DBA also undertook a map regression exercise, charting the cartographic history of the site from the mid-18th century to the present day (ibid.).

3.2 The application site lies within an area of archaeological significance, as identified in the Local Plan, Policy HA3. This relates mainly to the early medieval settlement of the town, notably the establishment of a Saxon Burgh. Later medieval settlement activity has also been noted within the designated re-development area.

3.3 Prehistoric

3.4 No finds or features of Palaeolithic, Mesolithic, Neolithic or Bronze Age date have been recorded from the immediate area of the site. Paleoenvironmental deposits recovered from a borehole located c.85m north-west of the site indicated a postglacial peat fen environment within the river valley. Consequently, the potential for encountering remains of prehistoric periods within the application site is low (Lord 2017).

3.5 Iron Age and Roman

3.6 Evidence of Iron Age occupation was revealed during excavations c.350m to the west of the application site consisting of a scatter of Iron Age pottery and artefacts, likely indicating a small settlement or farmstead within the confluence of the Lea and Beane Rivers (Bryant & Seddon, 1999). Excavations at Millbridge, c.200m to the west of the site, revealed a cremation burial and circular enclosure dating to the 1st century AD (Bryant & Seddon, 1999).

3.7 Roman pottery sherds were found during the 19th century, c.190m to the

south-west of the site (HHER 1400).

3.8 Early Medieval and Medieval

- 3.9 Within Phase 1 of the re-development programme, on the western edge of excavations in 1973 revealed a portion of a substantial ditch, 2m deep and around 6m wide on a north-west to south-east alignment (HHER 9832). A ditch of similar dimensions was uncovered some 35m to the north in 1980. Both features had been backfilled in the 12th century and were interpreted as evidence of the southern part of 10th century defences for the Saxon Burgh of Hertford.
- 3.10 The foundations of walls representing the locations of two 11th century buildings were found fronting Railway Street within the Phase 1 area (HHER 9886). The buildings were interpreted as lying to the east and outside of the 10th century defences. An assemblage of pottery including 9th-11th century sherds were located during excavations at the former 'Turks Head' pub fronting Station Street and within the Phase 1 re-development area (HHER 1402).
- 3.11 The Anglo-Saxon Chronicle mentions the construction of a fortress on the north and south banks of the River Lea in AD 912/13, the settlement established by King Edward. It has been suggested that there was no significant Saxon settlement here prior to this (Bryant & Seddon, 1999). Archaeological excavations in the 1980's have suggested that although the Burgh was located mainly in the western portion of the re-development area, there was evidence that settlement had extended beyond the limit of the eastern defences by the 11th century and also marked the eastern limit of the later medieval town (ibid.).
- 3.12 A sequence of domestic rubbish pits containing 13th and 14th century pottery had been located near the western edge of the Phase 1 area (HHER 6427), two of the pits having been cut into the defensive ditch bank.

3.13 Post medieval and Modern

- 3.14 The 1610 'Hartford' map of John Speed shows the area concerned as relatively open ground with a few buildings along the line of the later Station Street and Bircherley Green. It is interesting to note what appears to be the remains of a substantial wall running along the south-west side of Bircherley Green that may equate to the west side of the line of the Saxon defensive ditch.
- 3.15 Within 150 years, depicted on the Andrews and Wren 1766 Hartford plan, buildings have appeared in greater profusion within the proposed re-development area, this expansion continuing into the 19th century.
- 3.16 The first named building within the Phase 1 site, on the 1881 OS map, is a substantial malthouse running along the east side of the site. A courtyard or open space divides the malthouse with a group of extant buildings currently fronting Station Street.
- 3.17 This grouping of buildings survives into the mid-20th century. As shown on the 1963 OS map, the malthouse is now designated a warehouse and a car park has been created to the north by clearing the majority of the building previously standing in this area. The size of the warehouse may indicate the depth of the foundation footprint for this building.
- 3.18 The 1982 OS map, possibly due to a reproduction error, curiously shows the location of the Phase 1 re-development as an empty, open area with even the historic buildings along Station Street missing. This is rectified by the 1993 OS map that now shows a bank occupying the eastern half of the site.
- 3.19 Map progression showing the post medieval development of the site is illustrated in the desk-based assessment report previously produced for the site (Lord, 2017).

3.20 Previous Archaeological Interventions

- 3.21 Among the overall extensive archaeological intervention carried out previously across the site, there have been three archaeological investigations within the

Phase 1 area itself. From the mid 1970's to mid 1980's excavations have been carried out of the Saxon Burgh ditch (EHT 4376) and excavations and watching brief on the Station Street frontage (EHT 4377, 4394).

3.22 It has been suggested that these investigations may have truncated archaeological deposits during working site practices (Lord, 2017). This possibility has been noted by the Hertfordshire Historic Environment Advisor. However, from examination of the archaeological record, the advisor concludes that these interventions may have only affected up to 2% of the overall site and are unlikely to have greatly adversely affected the survival of archaeology (Wood, S., e-mail correspondence with the local planning authority 21-03-17 and 28-06-17).

3.23 Methodology

3.23.1 The archaeological evaluation was originally comprised of four trial trenches, totalling 50m. These were distributed evenly across the site in order to provide a representative sample of the development area. Due to the discovery of a previously unknown basement it was not possible to cut or relocate Trench 3.

3.24 Excavation methodology

3.24.1 All machine-led sub-surface groundworks were monitored by an experienced archaeologist. This work included the removal of concrete slab and footings, this work was undertaken to enable the excavation of archaeological trial trenches.

3.24.2 The intended trial trench locations were adjusted according to onsite circumstances and unforeseen ground conditions. Changes were carried out to achieve sufficient coverage of the site while observing all relevant concerns for health and safety.

3.24.3 The trial trenches were excavated using a toothless ditching bucket. Modern overburden was removed and where possible deeper modern intrusions. A soil horizon was exposed, walls and features at this level were investigated and recorded, prior to a second reduction with machine onto the 'natural' undisturbed geological horizon. Features observed at this level were cleaned and again investigated and recorded.

3.25 Recording and Finds Recovery

- 3.25.1 The limits of excavations, heights above Ordnance Datum (m OD) and the locations of archaeological features and interventions were recorded using Leica 1200 GPS rover unit with RTK differential correction, giving three-dimensional accuracy of 20mm or better.
- 3.25.2 Deposits or the removal of deposits judged by the excavating archaeologist to constitute individual events were each assigned a unique record number (often referred to within British archaeology as 'context numbers') and recorded on individual pre-printed forms. Archaeological processes recognised by the deposition of material are signified in this report by round brackets (thus), while events constituting the removal of deposits are referred to here as 'cuts' and signified by square brackets [thus]. Where more than one slot was excavated through an individual feature, each intervention was assigned additional numbers for the cutting event and for the deposits it contained (these deposits within cut features being referred to here as 'fills'). The record numbers assigned to cuts, deposits and groups are entirely arbitrary and in no way reflect the chronological order in which events took place. All features and deposits excavated during the evaluation are listed in Appendix 1. Artefacts recovered during excavation were assigned to the record number of the deposit from which they were retrieved.
- 3.25.3 Metal-detecting was carried out during all stages of excavation subsequent to the removal of modern deposits.
- 3.25.4 High-resolution digital photographs were taken of all relevant features and deposits and were used to keep a record of the excavation process.

3.26 Sampling Strategy

- 3.26.1 Discrete features were half-sectioned, photographed and recorded by a cross-section scaled drawing at an appropriate scale (either 1:10 or 1:20).
- 3.26.2 Ditch features were investigated by means of 1m slots. Where stratigraphic relationships between features could not be discerned in plan, relationship slots were also excavated and these were recorded as part of the GPS survey and noted on the relevant context sheets.

3.27 Environmental Sampling

3.27.1 A single bulk sample was taken to extract and identify micro- and macro-botanical remains (Turner, K. 5.5). The aim of this sampling was to investigate the past environment and economy of the site, the diet of the ancient inhabitants and the agricultural basis of the settlement. An additional aim of the sampling was to recover small objects that are not readily recovered by hand-collection, such as metalworking debris and bones of fish and small animals. These samples were taken from sealed deposits.

4 QUANTIFICATION OF ARCHIVE

4.1 Paper Archive

Context register sheets	5
Context sheets	83
Plan registers	1
Plans at 1:50	0
Plans at 1:20	0
Plans at 1:10	0
Plans at 1:5	0
Section register sheets	2
Sections at 1:10 & 1:20	68
Trench record sheets	20
Photo register sheets	9
Small finds register sheets	0
Environmental register sheets	1

4.2 Digital Archive

Digital photos	254
GPS survey files	6
Digital plans	1
GIS project	0
Access database	1

4.3 Physical Archive

Struck flint	4
Burnt flint	0
Pottery	326/3377g
Ceramic building material (CBM)	0
Glass	0
Briquetage	0
Small Finds	0
Slag	0
Animal bone	31
Shell	0
Environmental bulk samples	12
Environmental bulk samples (10 litre buckets)	23
Monolith samples	0
Other samples (specify)	0
Black and white films	2
Colour slides	0

4.4 ARCHAEOLOGICAL RESULTS BY TRENCH

4.5 Introduction

4.5.1 The trenches are described below in numerical order, with technical data

tabulated (Appendix 2). Features and deposits are first split into feature type, and then described in numerical cut order. Archaeological features and deposits were sealed by post medieval made ground unless otherwise stated. The principal result of the fieldwork was the identification of a ditch and pits, the full extents of which could not be defined within the excavated area. Artefactual material recovered including a large amount of post medieval Ceramic building material, Animal bone and pottery from early-medieval contexts and a small amount of Saxon pottery.

4.6 Trench 1

- 4.6.1 Trench 1 (Plate 8, Section 10) was 1.8m wide x 10m long on a northeast-southwest alignment. The trench contained four pits, none of which, were fully visible in plan.
- 4.6.2 Pit [037] (Plan 6) was a large feature, being 4.35m in length and 1.2m wide. The fill (038) was a mid brownish yellow, silty sand with frequent chalk and occasional flint inclusions. The pit was not fully excavated. This pit is cutting another possible quarry pit [041] The fill contained animal bone, C.B.M and pottery.
- 4.6.3 Pit [039] (Plan 6) was quarter sectioned (1.45m wide and 0.28m deep). It contained a single fill (040) of dark brownish grey, sandy silt. The fill contained clay pipe and C.B.M.
- 4.6.4 Pit [041] (Plan 6) is a possible quarry pit (+4m long, +2m wide and +0.5m deep). The fill (042) is being cut [037], it was a dark brownish grey, sandy silt. No finds were recovered.
- 4.6.5 Pit [043] (Plan 6) was heavily truncated by pit [037] and was therefore left unexcavated, as only a small proportion was visible in plan. The fill (044) was a dark-brownish, grey, sandy silt with moderate flint inclusions. A single sherd of Saxon pottery was recovered.

4.7 Trench 2

- 4.7.1 Trench 2 (Plate 2, Section 5 & 6) was 1.8 wide x 18m long, on an east-west alignment. It contained a Redbrick wall with lime mortar, 5 pits and a ditch

feature.

- 4.7.2 Wall foundation [004] (Plan 1), a brick wall with a lime mortar bond (006) and wall foundation (005) extended across Trench 2. The wall extended across the trench on a north-south alignment
- 4.7.3 Pit [007] (Plate 1, Section 2) was not fully visible in plan (c. 0.60m wide by 0.35m deep), a 0.5m step was left from the trench edge and an intervention excavated. The pit had a fill (008) of an orangey dark brown, sandy loam. No dating evidence was recovered from the fill. The pit was cut by Pit [009].
- 4.7.4 Pit [009] (Plate 1, Section 2) was not fully visible in plan (c. 2.60m wide by 0.75m deep), extending beyond the limits of excavation to the south. A 0.5m step was left from the trench edge. This pit had a fill of redeposited natural (015), sealing fill (008) and likely was a result of re-cutting the pit. The main fill (010) was, a dark greyish brown, sandy loam. The fill contained animal bone, sherds of unglazed pottery dating from the early-medieval period, an unidentified iron object, a Copper alloy buckle and some fragments of robust daub.
- 4.7.5 Pit [011] (Plate 2, Section 1 (c. 0.90m, wide by 0.60m deep). It had a single fill (012), a mid brownish grey sandy loam, which contained a single fragment of animal bone and ceramic building material (CBM). The feature cut Pit [013].
- 4.7.6 Pit [013] (Plates 2, Section 1) was located near the centre of the trench but could not be fully excavated as a concrete footing was in place across the centre of the trench. A 0.5m step was left from the trench edge and the concrete beam (c. 0.48m wide by 0.30+ deep). Pit was not bottomed. It had a single fill (014) consisting of a mid to light greyish brown, sandy loam, it contained a single fragment of animal bone and pottery dating from the mid medieval period. The feature was cut by Pit [011].
- 4.7.7 Ditch [016] (Plate 3 and 4, Section 3) was located at the southwestern end of the trench. The feature was not fully visible in plan (c. 0.90m wide by 0.38m deep). The ditch contained a single fill (017) of dark brownish grey, sandy loam. No dating evidence was recovered from the fill. The feature is cut by pit

[018].

- 4.7.8 Pit [018] (Plate 3 and 4, Section 3) was cut into (017) it contained a light brownish grey, sandy gravel (c. 0.30m wide by 0.25m deep). The pit contained a single fill (019). The pit was densely packed with modern material including CBM, laminated chip board and a small length of PVC pipe, these have not been retained.
- 4.7.9 Pit [020] (Plate 5, Section 4) was fully visible in plan (c. 0.90m wide by 0.23m deep). The pit contained 3 fills (021), (022) and (023). The primary (021) fill was mid brownish grey, sandy loam with dense gravel inclusions. Secondary fill (022) was a small lens of white, chalky material in the south western edge. The final fill (023) was a mid brownish grey, sandy loam. No finds were present.
- 4.7.10 Datable material recovered from several of the features was ample. Most of the features appear to be early medieval and post medieval in date.

4.8 Trench 3

- 4.8.1 Trench 3 (Plate 7) was unable to be excavated as the position was truncated by modern basement back fill and due to space constraints on site was unable to be relocated.

4.9 Trench 4

- 4.9.1 Trench 4 (Plate 09, Plan 5) was 15m long x 1.8m wide. On an east-west alignment. It contained brick walls with a lime mortar bond, a large ditch and a series of intercutting pits.
- 4.9.2 Ditch [024] (Plate 10, Section 9) was a large ditch running across the trench northwest-southeast. It was not fully visible in plan and could not be fully excavated to the base. The ditch extended beyond the limits of excavation and measured 1.8m long, 5.75m wide and 1.50m Deep. The ditch had three fills (025), (026) and (001). The primary fill (025) was a dark brownish grey, sandy loam with gravel inclusions, pottery dating from the early post medieval period and animal bones were recovered from this fill. The secondary fill (026) was a mid brown sandy loam with inclusions of stones <70mm. The fill

- contained some animal bone fragments. The final fill (001) of the ditch was a dark brown, sandy loam with modern backfill consisting of CBM, concrete debris and chalk, these were not retained.
- 4.9.3 Pit [027] (Plate 11, Section 7) was amorphous in plan and part of a series of intercutting ditches. It was not fully visible in plan (c. 1.40m wide x 0.45m deep). The pit contained a single fill (028) of orangey brown, sandy gravel <20mm. No dating evidence was recovered from this fill. The fill of this pit is cut by [029].
- 4.9.4 Pit [029] (Plate 13, Section 7) was not fully visible in plan (c. 0.95m wide x 0.30m deep). Containing a single fill (030) consisting of a mid brownish grey, sandy loam with stones <30mm. No dating evidence was recovered from the fill. The fill is cut by [031].
- 4.9.5 Pit [031] (Plate 12, Section 7) was circular in plan and measured 1.10m wide x 0.23m deep. The fill (032) was a dark grey, sandy loam with gravel inclusions <30mm. A single sherd of medieval pottery was recovered from this fill and a bulk soil sample of 20 litres <1> was taken.
- 4.9.6 Pit [033] (Plate 14, Section 7), Amorphous and not fully visible in the plan (c. 0.45 wide x 0.22m deep). Contained a single fill (034) of orangey brown, sandy gravel <20mm. The pit contained no dating evidence. This feature is cutting ditch [035].
- 4.9.7 Construction cut [035] (Plate 14, Section 7) was 0.5m wide x 0.15m deep. It contained a single fill (036), a dark grey, sandy loam. No dating was recovered from this fill. The fill is being cut by [033].
- 4.9.8 Cut [046] (Plan 5) was for a foundation of a basement on the site. It was not excavated but is 4.5m long in plan, the wall (structure 047) sits on the cut and has presumably been back filled (048). The internal area of the basement has been back filled by (049) with a mid reddish brown, clayey silt with occasional flints and frequent demolition debris.

5 THE FINDS AND ENVIRONMENTAL EVIDENCE

5.1 Pottery

By Berni Sudds

- 5.1.1 A total of 45 sherds were recovered from the evaluation, weighing 680g. Although fragmentary the assemblage is in good condition and includes material of late 9th to 12th century and post medieval date.
- 5.1.2 The pottery was recorded and quantified for each context by fabric, vessel form and decoration using sherd count (with fresh breaks discounted) and weight. The fabrics were examined under x20 magnification and recorded using a system of mnemonic codes based on common name. Examples of the fabrics can be found in the Ceramic Type Series held at St Albans Museum, in the archives of PCA and/or the Museum of London. The data has been entered onto an Access Database, a copy of which is held with the archive. The pottery types identified on site are listed chronologically below in Table 1 and a summary catalogue of the pottery by context, with date ranges and suggested spot dates, appears at the end of the report (Table 2).

Fabric code	Common name	Date range	Sherd count	Weight
NEOT	St. Neots type-ware	875 - 1150	8	59
EMCH	Early medieval chalk-tempered ware	1000 - 1150	1	22
EMSS	Early medieval sand- and shell-tempered ware	1000 - 1150	1	10
EMS	Early medieval sandy ware	1000 - 1200	14	333
EMSC	Early medieval sandy ware with calcareous inclusions	1000 - 1200	7	74
EMGR	Early medieval grog-tempered ware	1050 - 1150	2	23
GRE	Glazed red earthenware	1550 - 1900	2	25
BORDY	Surrey-Hampshire border whiteware with yellow glaze	1550 - 1700	1	9

PMFR	Post medieval fine redware (Essex-type)	1580	- 4	91
		1800		
STSL	Combed slipware	1660	- 1	4
		1870		
LONS	London stoneware	1670	- 1	15
		1926		
TGW H	Tin-glazed ware with pale blue glaze and dark blue decoration (Orton and Pearce style H)	1680	- 1	5
		1800		
TGW	English tin-glazed ware	1700	- 1	4
		1800		
SWSL	Dipped white salt-glazed stoneware	1710	- 1	6
		1760		

Table 1: Ware types present. Weight in grams.

5.1.3 The earliest dated pottery recovered is the distinctive fine shell-tempered St Neots-type ware (NEOT). The latter has a core area of production centred on the Jurassic geology found further north and east in Bedfordshire, Cambridgeshire and Northamptonshire, but represents something of a type fossil on late 9th to 11th century sites in the region. A single sherd occurs in isolation in pit [043], potentially dating from as early as the 9th century, although the tradition does not appear to have been in widespread production or circulation until the 10th century so a later date is more likely and would correspond with findings elsewhere in the town (Borrill 2008, 8). St Neots-type ware was also recovered from pits [009] and [031], but the additional presence of early medieval coarsewares, and few diagnostic forms suggest these features were probably backfilled during the mid 11th to mid 12th century. In common with findings on contemporary sites elsewhere in the town the handmade early medieval wares, dating from the 11th to 12th century, are dominated by locally produced sandy and calcareous rich sandy wares (EMS and EMSC; Borrill 2008; Sudds 2008 and 2016). There are also single vessels of early medieval chalk-tempered ware (EMCH), early medieval grog-tempered ware (EMGR) and early medieval sand- and shell-tempered ware (EMSS).

5.1.4 The EMCH sherd has characteristic combed decoration and an internally vesiculated surface where the calcareous inclusions have leached away.

Early medieval 'chalky' wares have been found elsewhere in the town and also in St Albans and London (Borrill, 2008; Turner-Rugg 1988, 1995; Vince 1985). A survey of distribution might suggest a source somewhere in the vicinity of St Albans for this type (Vince 1985). Unlike elsewhere in the town, where grog is also present in this fabric (Borrill 2008; Sudds 2008 and 2016), the example from site is more akin to the examples from St Ablans and London. There is, however, also a grog-tempered vessel with incised horizontal wavy lines very similar in description to early medieval grog-tempered ware identified in London (Vince 1985, 80). EMGR in London is not thought to be a local product, but had no ascribable source, as at the point of description had not been identified in the regions surrounding London. Interestingly, the basic fabric is similar to the chalk-tempered wares, and there are evidently vessels in both Hertford and London that contain both chalk and grog temper, possibly suggesting a shared or related source, perhaps one in south-Hertfordshire. The single sherd of EMSS is very similar to examples from London, and was probably produced somewhere in the Thames Valley (Vince 1985, 59-62).

- 5.1.5 Jars represent the only form type positively identified, although the EMGR body sherd with incised horizontal wavy decoration may come from a spouted pitcher. The jar rims can be well-paralleled in the town, comprising simple everted and thickened, everted and thumb-decorated and thickened flat-topped types (Borrill 2008, 25-28).
- 5.1.6 The small post medieval assemblage dates to the 17th and 18th century and is also comprised of local and regional ware types well-paralleled in the town and regionally. The red earthenwares include examples from nearby Essex, in addition to more locally produced material. The regional imports include the ubiquitous combed slipware and dipped white salt-glazed stoneware produced at a number of centres across Britain and tin-glazed wares and stoneware from London.
- 5.1.7 In composition the assemblage is consistent with assemblages recovered on previous excavation on the current site and in the locality (Borrill 2008, 25-28; Sudds 2008 and 2016). In terms of dating the assemblage also reflects results

from other town centre investigations that suggest Hertford prospered during Late Saxon / Early medieval period, suffered fairly extensive decline from the 12th century, only regaining any real economic vitality during the 17th and 18th centuries with the development of the seed trade (Borrill 1981, 16).

5.1.8 In addition to providing dating evidence for the features from which it was recovered, the primary significance of the assemblage is local, specifically arising from the information it can provide about the ceramic profile of Hertford and the nature of activity in the immediate vicinity. The assemblage should be reappraised alongside any additional pottery recovered should any further investigation be undertaken on site.

Cut	Cxt	Fabric code	Form code	SC	Wg (g)	Comments	Date range	Spot date
009 Pit	010	NEOT		1	15	Body sherd.	875 - 1150	1050 - 1150
		NEOT		1	8	Sagging base.	875 - 1150	
		NEOT		1	4	Body sherd. Thick internal limescale deposit. External sooting.	875 - 1150	
		NEOT	Jar	1	12	Everted, thickened rim. Rounded.	875 - 1150	
		NEOT		1	16	Body sherd, external sooting.	875 - 1150	
		EMCH		1	22	Body sherd. Vesiculated internal surface. External combed decoration. Sample retained for type series.	1000 - 1150	
		EMSS		1	10	Body sherd. Fine sand, sparse shell. Dark grey/black body. London EMSS?	1000 - 1150	
		EMSC		3	21	Body sherds. Different vessels, variable firing.	1000 - 1200	

					Sparse calc. EMS?		
	EMSC	Jar	1	10	Everted rim. Thumbed to top providing external bevel and internal bead. Sparse calc. EMS?	1000 - 1200	
	EMSC	Jar	1	19	Everted, slightly thickened rim. Thumbed to top. External sooting. Sparse calc. EMS?	1000 - 1200	
	EMS	Jar	1	8	Thickened, flat-topped rim. External sooting.	1000 - 1200	
	EMS		1	62	Fresh break. Thick-walled body sherds (near base). Laminated internal surface.	1000 - 1200	
	EMS		4	29	x1 fresh break. Four vessels.	1000 - 1200	
	EMS		1	13	Body sherd, external sooting, internal limescale.	1000 - 1200	
	EMS		1	5	Body sherd, external sooting.	1000 - 1200	
	EMS		1	17	Body sherd. Fine sandy micaceous matrix with sparse/mod sand. Non-local? Essex?	1000 - 1200	
	EMS		1	13	Sagging base sherd. External sooting. Retained for type series.	1000 - 1200	
	EMGR		2	23	Hard body sherds from same vessel with incised horizontal wavy lines. Coarse grog? temper. London, or possibly Essex source? Decoration very similar	1050 - 1150	

						to seen on London EMGR spouted pitchers. Possibly a high-fired chalk and grog-tempered vessel. Small sherd retained for type series.		
013 Pit	014	EMS		3	179	Large body and sagging base sherds from the same large vessel. Applied thumbed handle or strip terminal. External sooting.	1000 - 1200	1580 - 1800
		EMS		1	7	Body sherd. External sooting.	1000 - 1200	
		PMFR	Jar	2	75	Fine bodied Essex-redware. Internal clear glaze. Closed form. Pipkin/ handled jar? Thickened rim.	1580 - 1800	
024 Ditch	025	BORDY		1	9	Carinated body sherd with handle scar. Internal clear (yellow) glaze. Porringer/ skillet?	1550 - 1700	1710 - 1760
		GRE		1	17	Internal olive glaze (over reduced inner surface).	1550 - 1900	
		PMFR		1	13	Fine bodied Essex-redware. Internal clear glaze.	1580 - 1800	
		PMFR	Bowl	1	3	Fine bodied Essex-redware. Internal clear glaze. Thin-walled, folded thickened rim.	1580 - 1800	
		STSL	Dish	1	4	Moulded dish, simple notched rim. Combed slip decoration.	1660 - 1870	
		TGW	Rounded	1	4	Simple upright rim.	1700 -	

			bowl			External fine blue painted scrolled decoration.	1800		
		SWSL		1	6	Small strap handle from drinking vessel or small jug.	1710 - 1760		
031 Pit (incl. SMP 1)	032	NEOT		2	3	Body sherds. Vesiculated surfaces.	875 - 1150	1000 - 1100	
		EMSC		1	3	Body sherd. Partially vesiculated surface. External sooting.	1000 - 1200		
		EMSC	Jar	1	21	Simple, everted rim. Continuous light thumb-impressions to inside of rim. External sooting.	1000 - 1200		
041 Pit	042	GRE		1	8	Closed form. Internal clear glaze.	1550 - 1900	1680 - 1800	
		LONS	Tankard?	1	15	Body sherd from a cylindrical form with bichrome clear and brown glaze. Tankard?	1670 - 1926		
		TGW H	Plate	1	5	Dark blue painted decoration. Two shades.	1680 - 1800		
044 Pit	043	NEOT		1	1	Small body sherd.	875 - 1150	875 - 1150	

Table 2: Summarised catalogue and dating of the pottery by context. Cxt = context; SC = sherd count; Wg (g) = weight in grams.

5.2 Metalwork and Glass report

By Ruth Beveridge

- 5.2.1 A total of three objects were recovered from the evaluation, one each of copper alloy, iron, and glass. These finds have been fully recorded and a complete listing is provided in the catalogue below. They have been examined with the assistance of low level magnification, but without the aid of radiographs. They are discussed below by period and material type. Two objects were found in pit [009] in Trench 2, one object was recovered from

ditch [024] in Trench 4.

- 5.2.2 Overall, the condition of the metalwork is poor, with corrosion on the iron object masking detail. The glass fragment is weathered but reasonably stable.

Post medieval

Glass

- 5.2.3 From fill 025 of ditch [024], Trench 4 a curved fragment of dark green bottle glass was retrieved; it is lenticular in plan. The surfaces are yellowed and iridescent in places due to weathering. It is likely a body fragment from a 17th century wine bottle; the thickness of the wall indicating that it could be from either a 'shaft and globe' form or from an 'onion' form, Dungworth, 2012, 38, fig.1.

Uncertain date

Copper alloy

- 5.2.4 From fill 010 of pit [009], Trench 2 an L-shaped fragment of sheet copper alloy was recovered. Its inner edge is concave; the outer edges are straight. It has small patches of corrosion on the surfaces. It appears to be a small piece of sheet waste/offcut from the manufacture of a circular object.

Iron

- 5.2.5 An iron object was also collected from fill 010 of pit [009], Trench 2. It is an elongate object with shaft that is square in section, possibly truncated at both ends. The shaft curves slightly in the middle. It is corroded and encrusted. Radiography could assist with its identification.

Discussion

- 5.2.6 The metalwork objects recovered from pit [009] could be of medieval date, contemporary with the dating provided by the pottery. They are likely to have been discarded as debris in the pit.

5.2.7 Similarly, with the piece of post medieval glass, this is consistent with an object that has been discarded during the demolition of the post medieval structures on the site.

Recommendations for further work

5.2.8 Should further investigation be undertaken on the site, it is recommended that the metalwork is re-examined in the light of radiography.

Context	Material	Object	Description	Width (mm)	Length (mm)	Depth (mm)	Weight (g)	Extent	Recommendation
010 [009]	Copper alloy	Waste	L-shaped fragment of sheet copper alloy with inner concave edge; outer edges straight. Small patches of corrosion on the surfaces.	16	27.4	0.9	0.5	Incomplete	
010 [009]	Iron	Rod	Elongate object with shaft that is square in section, possibly truncated at both ends. The shaft curves	9.8	152.8	8.5	33	Incomplete	Requires x-ray

			slightly in the middle. It is corroded and encrusted.						
025 [024]	Glass	Bottle	Curved fragment of dark green bottle glass; lenticular in plan. The surfaces are yellowed and iridescent in places due to weathering.	20	77	12	19	Incomplete	

5.3 Animal Bone

By Ryan Desrosiers

Introduction

5.3.1 Evaluation trenching at Land at Bircherley Green Shopping Centre, Hertford, Hertfordshire, presented three trenches containing six features yielding a total of 134 fragments of animal bone. These remains, weighing a total of 1303.63g, are comprised of taxa from two taxonomic orders including mammals (Mammalia) and birds (Aves). This section details the assessment of these faunal remains and presents any recommendations for future work.

Methodology

5.3.2 The animal bone recovered from Bircherley Green was identified and recorded to species level whenever possible. In the case of unidentifiable fragments, like long bone shaft fragments or vertebral fragments, classification

into size classes (e.g. cattle sized, sheep sized, or rat sized) as per Rielly (2018) was attempted. During the recording of individual elements recovered, attributes including, species, bone portion, condition, taphonomy, pathology, or anthropogenic alteration to elements were noted. A J-Scale CJ-4000 scale which is accurate to within a half a gram was used to ascertain weights of specimens. Attempts were made by the analyst to refit all possible elements within contexts, with the total number of fragments being additionally noted.

- 5.3.3 The majority (90.7%) of the animal bone found in the course of trial trenching at Bircherley Green were collected by hand, with the remaining minority of remains (9.3%) being recovered through environmental sampling. Once brought back from site to PCA's office, all hand collected specimens were washed by hand using tepid water (roughly 20-25°C), and medium to firm bristled toothbrushes (depending on condition of specimens). Specimens found within environmental samples, have been subjected to flot processing, which separates heavy residue (e.g. stones, bone, or pottery) from lighter residue (e.g. charcoal, seeds, or insects) through submergence of soil samples into a closed circulating water system and subsequent filtration.

Assemblage Description

- 5.3.4 Evaluation trenching at Bircherley Green yielded 134 fragments of animal bones from nine features ranging in date from late Saxon to early medieval within eight trenches. After attempting to refit, 134 fragments were further reduced to a total of 117 specimens. At least four common domesticated species, including cattle (*Bos taurus*), horse (*Equus ferus caballus*), domestic pig (*Sus scrofa domesticus*), and sheep/goat (*Ovicaprid*) are present within the Bircherley Green assemblage (see Table 3). Additionally, domestic goose (*Anser anser domesticus*), possible fox (*Vulpes vulpes*), badger (*Meles meles*), and dog (*Canis lupus familiaris*) remains were collected during hand collection within contexts from Bircherley Green.

Context	Goose	Badger	Possible Fox	Dog	Pig	Sheep/Goat	Sheep Sized	Cattle	Cattle Sized	Possible Horse	Unidentified Mammal	Grand Total
10	4	1	4		2	8	24	10	9	1	6	69
12									3			3
14				1								1
25					2	4	9	1	20	1	2	39
32											13	13
42					1	1		5	2			9
Grand Total	4	1	4	1	5	13	33	16	34	2	21	134

Table 3. Species (By NISP) present at Bircherley Green by context

- 5.3.5 Given the relatively small proportion of highly diagnostic elements within the assemblage present, the Bircherley Green assemblage is not statistically significant. Overall, the state of preservation of the Bircherley Green assemblage is relatively poor for smaller fragments, but larger fragments display little evidence of extraneous taphonomic factors influencing preservation save for possible water wear and root etching. Very few specimens from Bircherley Green display direct evidence of human consumption or alteration, with a small proportion (8.2%) displaying evidence of burning, and 3.7% of specimens exhibiting butchery markings.
- 5.3.6 A single feature within Trench 1 yielded 9 fragments of faunal remains. A possible post medieval refuse pit [41] (fill (42)) contained a possible distal cattle femur, a distal ovicaprid humerus, a pig lower incisor, and two unidentified cattle sized long bone shaft fragments. No specimens from this trench displayed any evidence of butchery or alteration.
- 5.3.7 Trench 2 contained three features which yielded animal remains. Two of which only contained a single element each, while the remaining feature contained a sizeable amount of remains. The fill (12) of an undated pit [11] contained a single cattle size rib. The early medieval pit [13] (fill (14)) contained a single dog tibia displaying no evidence of butchery or alteration. The fill (10) of a possible late Saxon to early medieval waste pit [9] within Trench 2 contained 73 fragments of faunal remains. This context presented the greatest variety of taxa, with wild carnivore species including badger and possible fox present, and many domesticates including domestic goose, cattle, ovicaprids, and horses occurring in relatively substantial quantities. Overall, cattle sized, and sheep sized specimens were the most abundant,

and a small proportion display evidence of butchery. Specimens recovered from this context also ranged greatly in terms of the degree of preservation and were rather variable in terms of size of fragments. No elements displayed any evidence of burning.

- 5.3.8 Lastly, Trench 4 yielded two features containing faunal remains. Unidentifiable mammal bone was recovered from environmental sample <1> from a late Saxon to early medieval pit [31] (fill (32)). All but three specimens from this context display some evidence of burning and all are poorly preserved. Additionally, 39 fragments of animal remains were hand collected from a post medieval ditch [24] (fill (25)). Domestic species including pig, cattle, ovicaprid, and horse remains were recovered from this context. A small proportion of specimens from this context display evidence of butchery and are well preserved.

Discussion and Conclusions

- 5.3.9 A brief assessment of the faunal remains present, suggests that cattle and sheep/goat, and likely pig may have played a significant role in the subsistence economy during the various phases at Bircherley Green based on the degree of their abundance. However more data is necessary to validate this inference directly at Bircherley Green.
- 5.3.10 It is of note that the two pits sampled during trial trenching yielded direct evidence of consumption activity (e.g. butchery), and the specimens present within context have been directly deposited by inhabitants. The fill of the single ditch sampled also would appear to be of the same nature of deposition.

Table 4 Species by phases represented at Bircherley Green by NISP

Phase	Goose	Badger	Possible Fox	Dog	Pig	Sheep/ Goat	Sheep Sized	Cattle	Cattle Sized	Possible Horse	Unidentified Mammal	Grand Total
Early Medieval				1								1
Late Saxon to Early Medieval	4	1	4		2	8	24	10	1	9	19	82
Post Medieval					3	5	9	6	1	22	2	48
Undated										3		3
Grand Total	4	1	4	1	5	13	33	16	2	34	21	134

5.3.11 If archaeological mitigation is undertaken in the future, further excavation in the vicinity of this site will likely yield a reasonable quantity of animal bones and would likely aid in informing a more comprehensive understanding of animal husbandry within the Hertford, and the surrounding area. Given the relative proximity to a waterway, it is also recommended that an environmental sampling regiment is undertaken to increase the likelihood of recovery of fish and microfaunal remains. If fish or small mammal bones are recovered from further archaeological mitigation at Bircherley Green, they should be subject to analysis by a relevant specialist.

Shell

5.3.12 By Ryan Desrosiers

5.3.13 A total of 4 common oyster (*Ostrea edulis*) shells were recovered from a post medieval ditch in Trench 4, during the course of trial trenching at Bircherley Green, Hertford, Hertfordshire. No specimens display evidence of parasites or crowding which would indicate provenience. All specimens appear very worn due to soil conditions. The presence of these taxa within this feature was likely resultant due to human predation, however no direct evidence of human modification is present among any specimen from Bircherly Green.

Phasing	Category	Trench	Context	Cut	Genus	Species	Element	Landmark	Count	Wght(g)	Side	Notching
Post-medieval	Ditch	4	25	24	Ostrea	edulis	Valve	Whole	2	64.5	L	N
Post-medieval	Ditch	4	25	24	Ostrea	edulis	Valve	Whole	2	27.5	R	N
Totals:									4	92		

Table 5.

5.4 ENVIRONMENTAL ARCHAEOLOGICAL ASSESSMENT REPORT

By Katie Turner

PCA Report Number: R13467

Introduction

5.4.1 This report summarises the findings of the rapid assessment of the environmental remains in one bulk soil sample taken during the archaeological excavation of land at Bircherley Green Shopping Centre, Hertford. This sample was collected from the fill of a circular pit, feature [031].

5.4.2 The aim of this assessment is to:

1. Give an overview of the contents of the assessed sample;
2. Determine the environmental potential of this sample;
3. Establish whether any further analysis is necessary.

Methodology

5.4.3 One environmental bulk sample, of sixteen litres in volume, was processed using the flotation method; material was collected using a 300 µm mesh for the light fraction and a 1 mm mesh for the heavy residue. The heavy residue was then dried, sieved at 1, 2 and 4 mm and sorted to extract artefacts and ecofacts. The abundance of each category of material was recorded using a non-ditch scale where '1' indicates occasional occurrence (1-10 items), '2' indicates occurrence is fairly frequent (11-30 items), '3' indicates presence is frequent (31-100 items) and '4' indicates an abundance of material (>100 items).

5.4.4 The light residue (>300 µm), once dried, was scanned under a low-power binocular microscope to quantify the level of environmental material, such as seeds, chaff, charred grains, molluscs and charcoal. Abundance was recorded as above. A note was also made of any other significant inclusions, for example roots and modern plant material.

5.5 Result and Discussion

5.5.1 Sample <1>, context (032) - fill of Pit [031]]

5.5.2 A single environmental sample was collected from the fill of a circular pit (Feature 031). Preservation of environmental remains in this sample was mixed; wood charcoal was abundant, with a large number of specimens identified over a variety of size categories (Table 6), including over-one

hundred pieces of a suitable size for species to be determined (>4 mm in length/width). Other archaeobotanical material was relatively rare; only a small number of carbonised seeds were recovered, of brome (*Bromus* sp.), wild grasses (*Poaceae* spp.), woodruff (*Asperula* sp.), elder (*Sambucus* sp.) and flax (*Linum* u.). A moderate amount of charred cereal grains were also reported, largely of barley (*Horedum* sp.) and bread wheat (*Triticum aestivum/durum*), along with a small amount of indeterminate wheats (*Triticum* spp.) and grains that were too heavily damaged to be identified to species.

- 5.5.3 In terms of other environmental material, a small amount of fungal schleroderma were reported in the flots, and animal bone in the residue. Burnt flint and pottery were also recognised, along with what appeared to be small nodules of fuel-ash slag. Cultural material collected from the heavy residue has been catalogued and passed to the relevant specialists for further assessment. A full account of the sample contents is given in table 6.

Discussion

- 5.5.4 A rapid assessment of the environmental remains of the sample collected from Bircherley Green suggests the possibility that cereals, such as bread wheat and barley, may have been cultivated or consumed locally, though the concentration of remains is too low to suggest that these were a significant part of diet on site. Around 50% of the observed cereals too heavily degraded for species to be identified, likely as a result of the temperature and/or duration of the fire in which this material was burnt. Chaff was absent from this deposit, which could be an indication that processing activities are being undertaken elsewhere, or perhaps that the nature of the fire was as such that more fragile remains were not preserved. This material is likely to have been accidentally burnt during cooking, or may perhaps be the remains of spoilt grains, or ears that have been used as kindling. The small number of carbonised weeds identified were largely of species often associated with agriculture, including wild grasses. As these are found in conjunction with crop material, it is possible that they were unintentionally collected during the harvesting process or were perhaps growing wild in the vicinity of the site. The wood charcoal is likely to constitute the spent fuel from domestic or industrial

fires.

Recommendation and Conclusions

- 5.5.5 With the exception of wood charcoal, preservation of archaeobotanical material in Bircherley Green assemblage was relatively poor. The recommendations for additional work are outlined below. A summary of this assessment should be included in any future publications.

Wood Charcoal

- 5.5.6 Preservation of wood charcoal was excellent in sample <1>, which yielded a statistically significant assemblage of identifiable fragments (>100 specimens). As a result, additional specialist analysis is suggested, prior to publication, as this may shed light on the types of wood that were being selected for use as fuel during this period, both for domestic and industrial uses, and may also give an idea of the methods of combustion being undertaken (in terms of duration, temperature and other variables). It may also help to provide a partial reconstruction of the local woodland and give an idea of the landscape of the area. Radiocarbon dating could additionally be carried on selected sizeable specimens, in order to improve the chronology of the site.

Plant Macrofossils

- 5.5.7 As none of the assessed samples produced a statistically significant seed and/or cereal assemblage (>100 specimens), no additional work is recommended on this material.

Recommendations for future excavations

- 5.5.8 A rapid assessment has shown that carbonised material has the potential to be preserved on this site. Should future interventions be undertaken this should be reflected in the environmental sampling strategy, and samples should, where possible, be collected from well-sealed deposits, with little evidence for bioturbation.

Sample No.	1
Context No.	032

Feature No.	031	
Feature Type	Pit	
Volume of bulk (litres)	16	
Volume of flot (millilitres)	39	
Method of processing	F	
HEAVY RESIDUE		
Charcoal		
Charcoal >4 mm	3	
Charcoal 2-4 mm	3	
Charcoal <2 mm		
Bone		
Animal bone - undiff.	1	
Other Material		
Burnt flint	3	
Pottery	1	
FLOT RESIDUE		
Charcoal		
Charcoal >4 mm	3	
Charcoal 2 - 4 mm	4	
Charcoal <2 mm	4	
Frag. of ID size	Y	
Burnt Seeds		
Asperula sp.	Woodruffs	1
Bromus spp.	Bromes	1
cf. Linum usitatissimum	Flax	1
Poaceae spp. - large(indeterminate)	Grasses	1
Poaceae spp. - medium (indeterminate)	Grasses	1
Sambucus sp.	Elder	1
Carbonised Cereals		
Hordeum sp.	Barley	1
Triticum aestivum/durum	Bread wheat	1
Triticum spp. (indeterminate)	Wheats	1
Cereals - broken/distorted (indeterminate)	2	
Other plant macrofossils		
Fungal scleroderma	1	

Key: 1- Occasional, 2- fairly frequent, 3- frequent, 4- abundant

Table 6: Assessment of environmental samples, HBGH18DISCUSSION and conclusion

5.6 Anglo-Saxon to Medieval (410-1485AD)

- 5.6.1 Remains from this period come in the form of domestic refuse pits containing pottery and animal bone and despite later post medieval quarry pitting, pits [009], [013] and [029] confirm the presence Saxon settlement activity within this site located in the centre of Hertford. Based on the pottery found within the previously mentioned pits and later post medieval quarry pitting, there also seems to be evidence suggesting a transitional phase between the Saxon and Norman period.
- 5.6.2 Earlier excavations from the 1970s and the 1980s discovered a large defensive Saxon ditch, with mention of a fortified burgh being constructed during the late 10th century. The ditch was also interpreted as being infilled during the 12th century which would also support the idea of a Norman transitional phase.
- 5.6.3 The pottery and types of features found during this evaluation would support the idea of at least settlement activity and the prospect of finding Saxon remains of archaeological significance are of high probability. As was expected by the background information.

5.7 Post medieval (1540-1900)

- 5.7.1 Post medieval quarry pits containing a moderate amount of glazed pottery and animal bone would suggest a continued occupation of the site from the Saxon period to the post medieval period. Also, worth mentioning would be where post medieval quarry pitting is occurring, it would be expected to have removed earlier features, however this cannot be stated with a level of absolute certainty.
- 5.7.2 A ditch being of a substantial size (6m wide with a depth of at least 1.5m) with a date range in pottery from the earliest post medieval period continuing through to the late Stuart period would suggest the ditch had been left open. The function of said ditch could be a re-established outer boundary or could have been used to keep livestock etc.

5.8 Modern (1900-2000+)

- 5.8.1 Modern activity relating to the previous buildings has been observed in the form of truncations, modern services and concrete foundations. Some of which, have removed the very top of archaeological layers/features. This however has not impacted on the archaeology entirely and in much of the area has been removed to reveal the archaeological features preserved in situ.

6 ACKNOWLEDGEMENTS

6.1 Pre-Construct Archaeology Ltd would like to thank Archaeology collective for commissioning and funding the work on behalf of Diageo Pension Trust Ltd. PCA are also grateful to Hertfordshire County Council Historic Environment Team for monitoring the work on behalf of the Local Planning Authority. The project was managed for PCA by Mark Hinman and was supervised by Kevin McHugh. The author would like to thank the site team: Jon House for his hard work. Figures accompanying this report were prepared by PCA's CAD Department. Edits to this report were made by Jon House and Thomas Learmonth.

7 BIBLIOGRAPHY

7.1 Printed Sources

Barrett, J. 1980. The pottery of the later Bronze Age in lowland England. Proceedings of the Prehistoric Society, Vol. 46, 297-319 (Format Style: plain).

Borrill, H. 1981. 'Hertford: Early Settlement and Recent Excavations'. Hertfordshire's Past, 10, 15-20.

Borrill, H. 2008. The Post-Roman Pottery from Excavations in Hertford and Ware 1973-2004. Hertfordshire Archaeology and History, Volume 15.

Bryant, S. and Seddon, V. 1999 Hertford Extensive Urban Survey Project Assessment Report. Unpublished report.

British Geological Survey, 2014. Geology of Britain Viewer <http://mapapps.bgs.ac.uk/geologyofbritain/home.html?location=IP9%203DG>. Accessed 31/07/14

Cappers, R.T. Bekker, R.M. and Jans, J.E., 2012. Digitale Zadenatlas van Nederland/Digital seed atlas of the Netherlands (Vol. 4). Barkhuis.

CIfA (2014) Standard and Guidance for historic desk-based assessment.

Dungworth, D. 2012. 'Three and a half centuries of bottle manufacture'. Industrial Archaeology Review, 34. 1, 37–50.

Jacomet, S. 2006. Identification of cereal remains from archaeological sites. Basel University, Basel.

Lord, J. 2017. Birchley Green Shopping Centre Desk Based Assessment Archaeology Collective Desk based assessment

Mills, D. 1991 Dictionary of English Place Names. Oxford University Press

Rielly, K. 2018. 'The Animal Bone' in Meckseper and Lloyd-Smith 'Land at Shepreth Road, Foxton, Cambridgeshire, CB22 6SU: An Archaeological Evaluation'. PCA Report: R16263

Stace, C, 1991. New flora of the British Isles. Cambridge: Cambridge University Press

Sudds, B. 2008. 'The Pottery' in L. Prosser and M. Wotherspoon 'Excavations at Dolphin Yard, Hertford, 2002'. Hertfordshire Archaeology and History, Vol.15 (2006-2008).

Sudds, B. 2016. 'The medieval pottery' in P. Boyer 'An Archaeological Watching Brief and Excavation at the Former Council Depot, Mill Road, Hertford'. Hertfordshire Archaeology 2009-2015, Vol.17.

Turner-Rugg, A. 1995. 'Medieval Pottery from St Albans', Medieval Ceramics, 19, 45-64.

Turner-Rugg, A. 1988. 'Medieval Pottery Production in Hertfordshire', Hertfordshire's Past, 25, 17 – 21.

Vince, A. G. 1985. 'The Saxon and Medieval Pottery of London: A Review'. Medieval Archaeology, 29, 25-93.

(Wood, S. e-mail correspondence with the local planning authority 21-03-17 and 28-06-17).

8 FIGURES

Figure 1: Site location

Figure 2: Trench locations with upper level of archaeology

Figure 3: Trench locations with the lower level of archaeology

Figure 4: Sections

9 APPENDIX 1: PLATES



Plate 1. Pit [007] and [009]. Trench 2; view East.



Plate 2. Pit [011] and [013]. Trench 2; view East.



Plate 2. Ditch [016] and Pit [018]. Trench 2; View South west.



Plate 3 Ditch [016] and Pit [018]. Trench 2; View North west.



Plate 4. Pit [020]. Trench 2; View East.



Plate 5. Trench 2 overview; View North East.



Plate 6. Trench 2 overview; View South West.



Plate 7. Trench 3 overview; view North-West.



Plate 8. Trench 1 overview; view South.



Plate 9. Trench 4 overview; view West.



Plate 10. Ditch [024] Trench 4; view North.



Plate 11. Pit [027] Trench 4; View East.



Plate 12. Pit [031] Trench 4; view West.



Plate 13. Pit [029] Trench 4; View North.



Plate 14. Pit [033], Ditch [035] Trench 4: View North.

10 APPENDIX 2: CONTENTS INDEX AND TRENCH INDEX

Site Code	Trench	Context No	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Section	Description	Fill Sequence	Period Name
HBGH18	2	1	1	Layer	Made Ground	0	0	0.15	5	Compact, Dark Brown Sandy Loam	1/1	modern
HBGH18	2	2	2	Layer	Subsoil	0	0	0.5	5	Compact, Dark Brown Sandy Loam	1/1	
HBGH18	2	3	3	Layer	Natural	0	0		5	Loose Light Brown Gravel	1/1	
HBGH18	2	4	4	Cut	Foundation	1	0.5	0.7		Ditch, Steep Sides, Flat base		post medieval
HBGH18	2	5	4	Fill	Foundation	1	0.5	0.2		Compact, Dark Grey Silty Loam	1/2	post medieval
HBGH18	2	6	4	Masonry	Wall	1	0.3	0.6		Red Brick	2/2	post medieval
HBGH18	2	7	7	Cut	Pit	0.35	0.6	0.35	2	Circular, Steep Sides, Concave Base		medieval
HBGH18	2	8	7	Fill	Pit	0.35	0.6	0.35	2	Firm, Dark Brownish-Orange Sandy Loam	1/1	medieval
HBGH18	2	9	9	Cut	Pit	0.95	2.6	0.75	2	Circular, Steep Sides, Concave base		medieval
HBGH18	2	10	9	Fill	Pit	0.95	2.6	0.75	2	Firm, Dark Grey-Brown Sandy Loam	2/2	medieval

Site Code	Trench	Context No	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Section	Description	Fill Sequence	Period Name
HBGH18	2	11	11	Cut	Pit	0.48	0.3	0.14	1	Circular, Gentle Sides, Concave Base		post medieval
HBGH18	2	12	11	Fill	Pit	0.48	0.3	0.14	1	Firm, Mid Brownish-Grey Sandy Loam	1/1	post medieval
HBGH18	2	13	13	Cut	Pit	0.9	1.14	0.6	1	Sub-Circular, Steep Sides, Concave Base		medieval
HBGH18	2	14	13	Fill	Pit	0.9	1.14	0.6	1	Compact, Mid Brownish-Grey Sandy Loam	1/1	medieval
HBGH18	2	15	9	Fill	Pit	0.3	0.3	0.02	2	Loose, Light Brown Gravel	2/2	medieval
HBGH18	2	16	16	Cut	Ditch	1.2	0.8	0.38	3	Ditch, Gentle Sides, Concave Base		medieval
HBGH18	2	17	16	Fill	Ditch	1.2	0.8	0.38	3	Compact, Dark Brownish-Grey Sandy Loam	1/1	medieval
HBGH18	2	18	18	Cut	Pit	0.8	0.3	0.25	3	Circular, Gentle Sides, Concave Base		post medieval
HBGH18	2	19	18	Fill	Pit	0.8	0.3	0.25	3	F. Compact, Light Brownish-Grey Sandy Gravel	1/1	post medieval
HBGH18	2	20	20	Cut	Pit	0.9	0.3	0.23	4	Circular, Shallow		post medieval

Site Code	Trench	Context No	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Section	Description	Fill Sequence	Period Name
										sides, Concave Base		
HBGH18	2	21	20	Fill	Pit	0.3	0.9	0.09	4	Compact, Mid Brownish-Grey Sandy Loam	1/3	medieval
HBGH18	2	22	20	Fill	Pit	0.3	0.3	0.01	4	Compact, White Chalk	2/3	medieval
HBGH18	2	23	20	Fill	Pit	0.3	0.9	0.11	4	Compact, Mid Brownish Grey Sandy Loam	3/3	medieval
HBGH18	4	24	24	Cut	Ditch	2	5.75	1.5	9	Ditch, Steep Sides, Not Bottomed		post medieval
HBGH18	4	25	24	Fill	Ditch	2	5.75	1.5	9	Compact, Dark Brownish-Grey Sandy Loam	1/2	post medieval
HBGH18	4	26	24	Fill	Ditch	2	5.75	1.5	9	Firm, Mid Brown Sandy Loam	1/2	post medieval
HBGH18	4	27	27	Cut	Pit	0.35	1.4	0.45	7	Oblong, Moderate Sides, Concave Base.		medieval
HBGH18	4	28	27	Fill	Pit	0.35	1.4	0.45	7	Compact, Mid Orangey-Brown Sandy Gravel	1/1	medieval
HBGH18	4	29	29	Cut	Pit	0.35	0.95	0.3	7	Circular, Gentle Sides, Concave Base		post medieval

Site Code	Trench	Context No	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Section	Description	Fill Sequence	Period Name
HBGH18	4	30	29	Fill	Pit	0.35	0.95	0.3	7	Compact, Mid Brownish-Grey Sandy Loam	1/1	post medieval
HBGH18	4	31	31	Cut	Pit	0.4	1.1	0.23	7	Circular, Gentle Sides, Concave Base		post medieval
HBGH18	4	32	31	Fill	Pit	0.4	1.1	0.23	7	Compact, Dark Grey Sandy Loam	1/1	post medieval
HBGH18	4	33	33	Cut	Pit	0.44	0.45	0.22	8	Oblong, Gentle Sides, Concave Base		medieval
HBGH18	4	34	33	Fill	Pit	0.44	0.45	0.22	8	Compact, Mid Orangey-Grey Sandy Gravel	1/1	medieval
HBGH18	4	35	35	Cut	Ditch	0.5	0.5	0.15	8	Ditch, Gentle Sides, Flat Base		post medieval
HBGH18	4	36	35	Fill	Ditch	0.5	0.5	0.15	8	Compact, Dark Grey Sandy Loam	1/1	post medieval
HBGH18	1	37	37	Cut	Pit	4.35	1.2			Amorphous, Gradual Sides, Not bottomed		post medieval
HBGH18	1	38	37	Fill	Pit	4.35	1.2			Firm, Mid Brownish- Yellow Silty Sand	1/1	post medieval
HBGH18	1	39	39	Cut	Pit	0	1.45	0.28	10	Circular, Shallow Sides, Flat Base		post medieval

Site Code	Trench	Context No	Cut	Type	Category	Length (m)	Width (m)	Depth (m)	Section	Description	Fill Sequence	Period Name
HBGH18	1	40	39	Fill	Pit	0	1.45	0.28	10	Soft, Dark Brownish-Grey Sandy Silt	1/1	post medieval
HBGH18	1	41	41	Cut	Pit	4	2	0.5		Circular, Steep Sides, Not Bottomed		post medieval
HBGH18	1	42	41	Fill	Pit	4	2	0.5		Firm, Dark Brownish-Grey Sandy Silt	1/1	post medieval
HBGH18	1	43	43	Cut	Pit	0	0.6	0.4		Unexcavated		post medieval
HBGH18	1	44	43	Fill	Pit	0	0.6	0.4		Firm, Dark Brownish-Grey Sandy Silt	1/1	post medieval
HBGH18	1	45	45	Masonry	Wall	2	0.22	0.4		Red Brick Wall, Lime Mortar	1/1	post medieval
HBGH18	4	46	46	Cut	Foundation	4.5	0	0		Not Excavated		post medieval
HBGH18	4	47	46	Masonry	Wall	0.22	4.5	1.5		Not Excavated	2/3	post medieval
HBGH18	4	48	46	Fill	Foundation	4.5	0	0		Not Excavated	1/3	post medieval
HBGH18	4	49	46	Fill	Made Ground	4.2	0	0		Not Excavated	3/3	modern

Site Code	Trench Number	Alignment	Length (m)	Max Machine depth (m)	Topsoil depth (m)	Subsoil depth (m)	Summary of Archaeological Features
HBGH18	1	NW-SE	10	0.66			Post- medieval pits
HBGH18	2	NE-SW	18	0.82	0.2	0.65	Saxon, early medieval and post medieval pits
HBGH18	3						Not Excavated
HBGH18	4	NE-SW	15	1			Saxon pits and post medieval ditches. Victorian wall foundations

11 APPENDIX 3: OASIS FORM

11.1 OASIS ID: preconst1-334095

Project details

Project name an archaeological evaluation at land off Bircherley Green shopping centre, Hertford, SG14 1BN.

Short description A trial trench evaluation conducted at the site of a previous shopping of the project centre. Late saxon, early medieval and post medieval pits were recorded in the centre of Hertford.

Project dates Start: 01-10-2018 End: 20-11-2018

Previous/future work No / Yes

Any associated project reference codes HBGH18 - Sitecode

Type of project Field evaluation

Current Land use Industry and Commerce 3 - Retailing

Monument type N/A None

Monument type N/A None

Significant Finds POTTERY Early Medieval

Methods & techniques "Targeted Trenches"

Development type Building refurbishment/repairs/restoration

Prompt Planning condition

Position in the planning process After full determination (eg. As a condition)

Project location

Country England

Site location HERTFORDSHIRE EAST HERTFORDSHIRE HERTFORD Bircherley Green

Postcode SG14 1BN
Study area 4694 Square metres
Site coordinates TL 32701 12735 51.797032785839 -0.075427015599 51 47 49 N 000
04 31 W Point
Height OD / Depth Min: 38.96m Max: 39.49m

Project creators

Name of PCA Central
Organisation

Project brief Alison Tinniswood
originator

Project design PCA Central
originator

Project Mark Hinman
director/manager

Project supervisor Kevin McHugh

Type of Client
sponsor/funding
body

Name of Diageo Pension Trust Ltd
sponsor/funding
body

Project archives

Physical Archive Hertford Museum
recipient

Physical Contents "Animal Bones","Ceramics","Environmental"

Digital Archive Hertford Museum
recipient

Digital Contents "Animal Bones","Ceramics","Environmental"

Digital Media "Database","Geophysics","Survey"
available

Paper Archive Hertford Museum

recipient

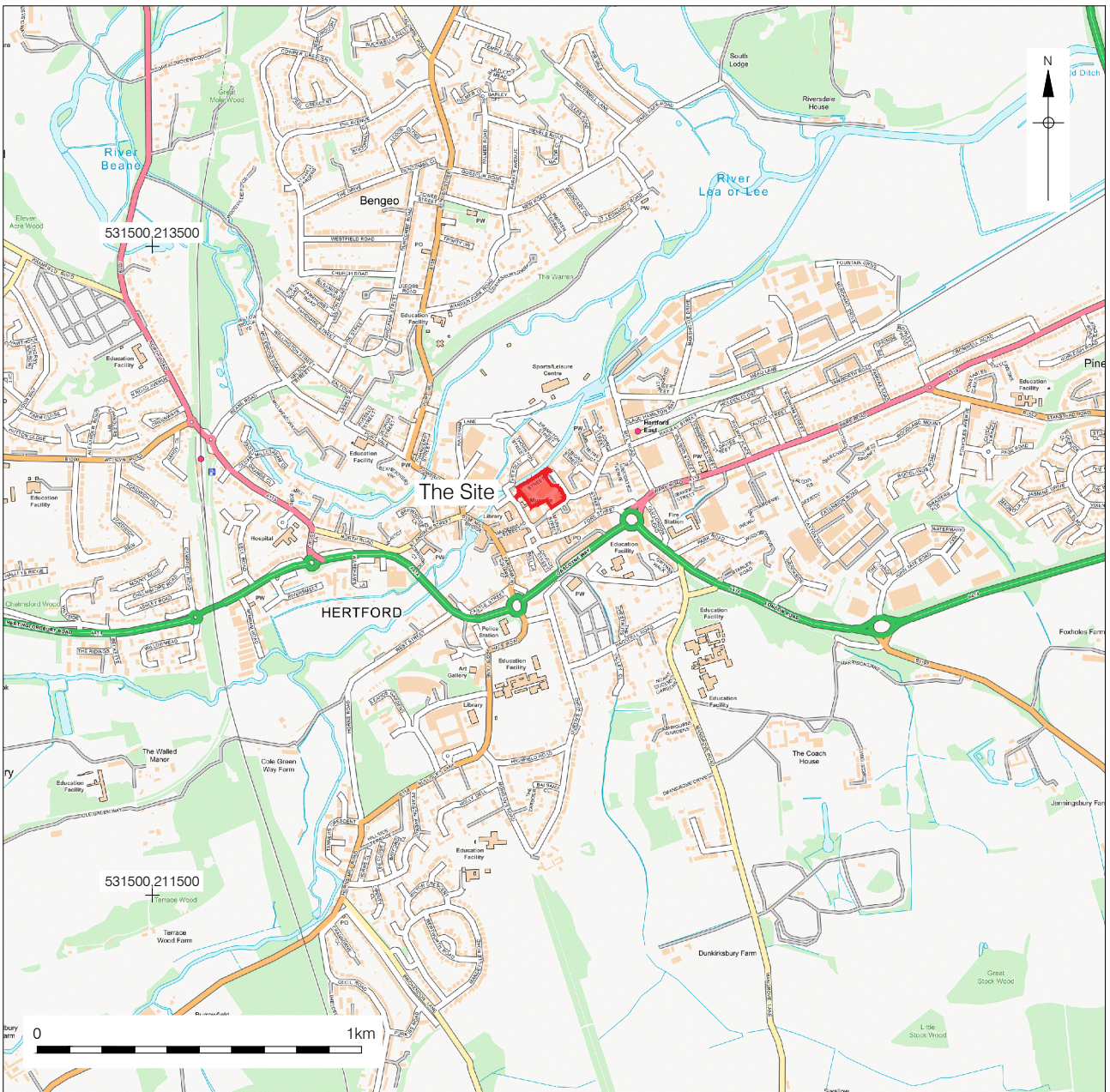
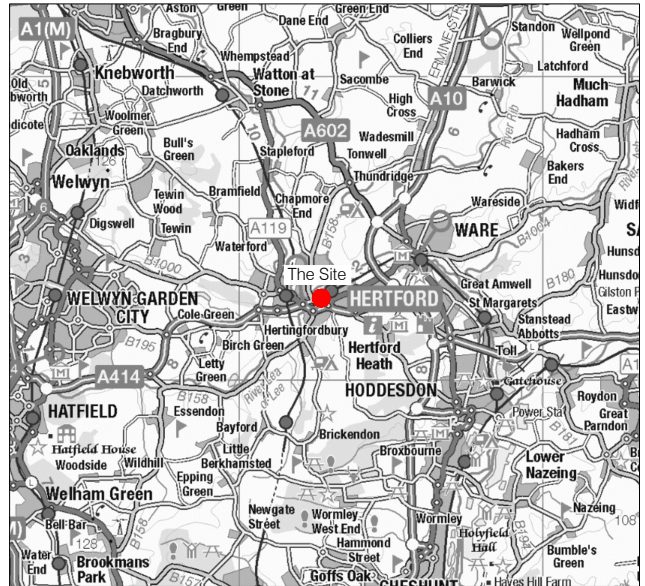
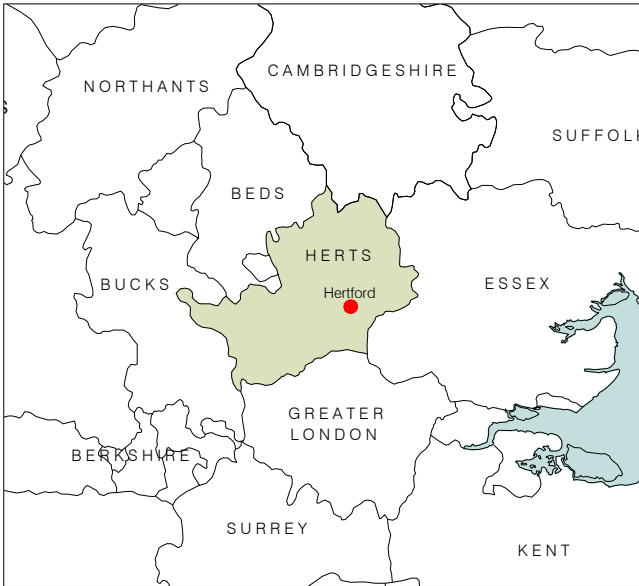
Paper Contents "Animal Bones","Ceramics","Environmental"

Paper Media "Context
available sheet","Drawing","Photograph","Plan","Report","Section","Survey "

Entered by Thomas Learmonth (tomlearmonth@gmail.com)

Entered on 16 November 2018

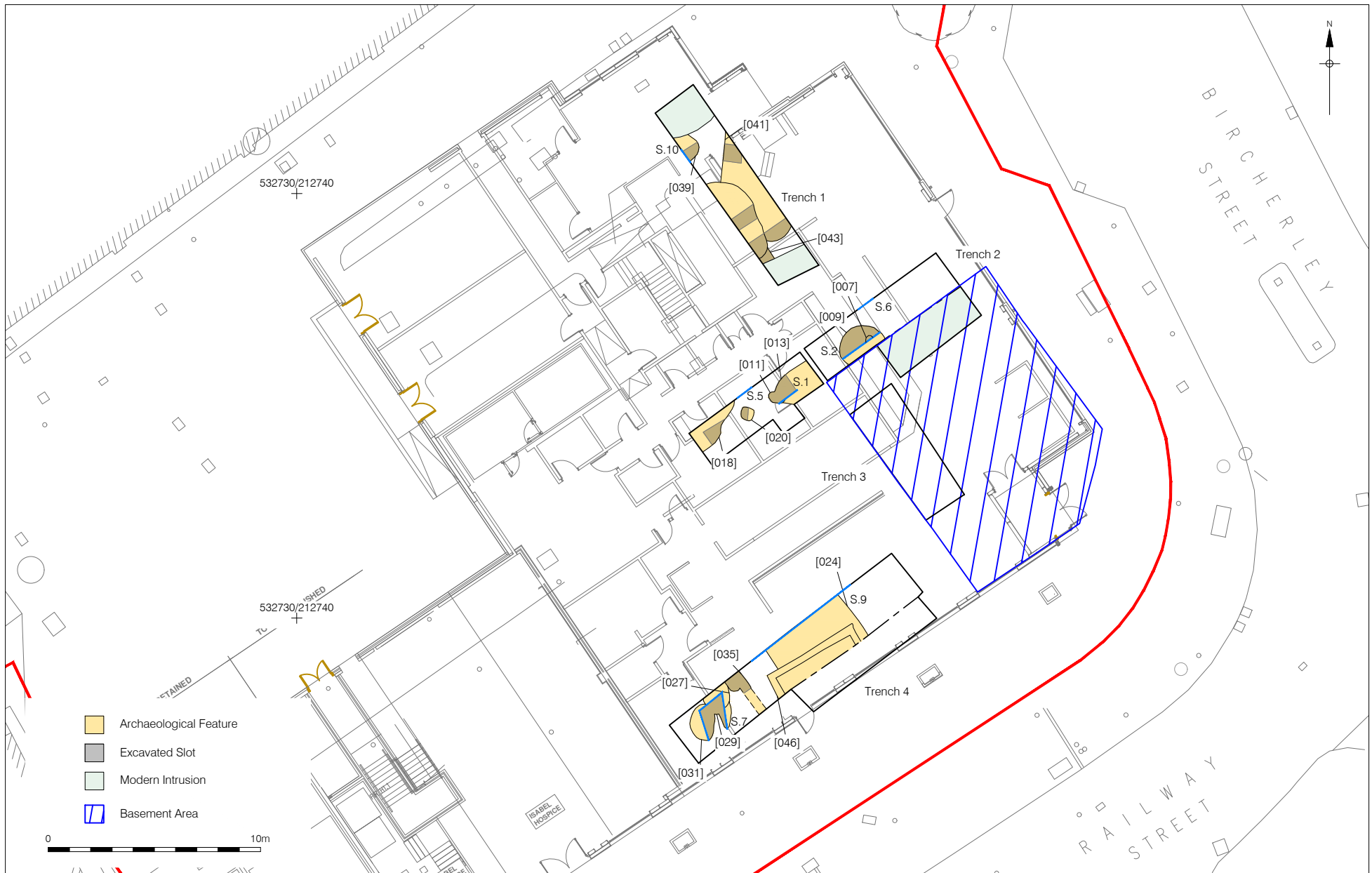
12 APPENDIX 4: HERTS HER SUMMARY FORM (HERTS ONLY)





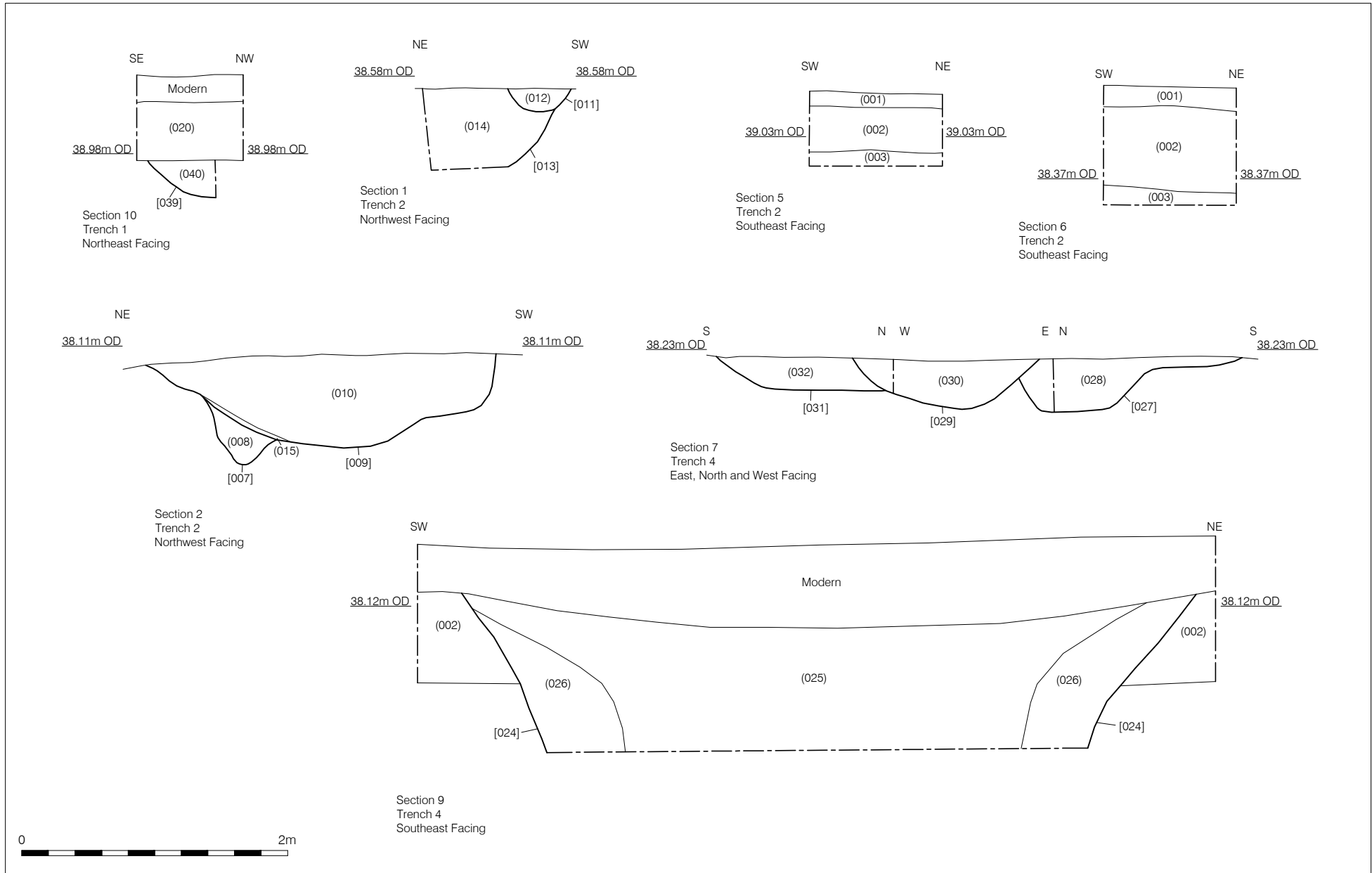
Base map supplied by BJB Consulting
 © Pre-Construct Archaeology Ltd 2018
 16/11/18 RS

Figure 2
 Upper level plan of Archaeology
 1:250 at A4



Base map supplied by BJB Consulting
 © Pre-Construct Archaeology Ltd 2018
 16/11/18 RS

Figure 3
 Lower level plan of Archaeology
 1:250 at A4



PCA

PCA CAMBRIDGE

THE GRANARY, RECTORY FARM
BREWERY ROAD, PAMPISFORD
CAMBRIDGESHIRE CB22 3EN
t: 01223 845 522
e: cambridge@pre-construct.com

PCA DURHAM

UNIT 19A, TURSDALE BUSINESS PARK
TURSDALE
DURHAM DH6 5PG
t: 0191 377 1111
e: durham@pre-construct.com

PCA LONDON

UNIT 54, BROCKLEY CROSS BUSINESS CENTRE
96 ENDWELL ROAD, BROCKLEY
LONDON SE4 2PD
t: 020 7732 3925
e: london@pre-construct.com

PCA NEWARK

OFFICE 8, ROEWOOD COURTYARD
WINKBURN, NEWARK
NOTTINGHAMSHIRE NG22 8PG
t: 01636 370410
e: newark@pre-construct.com

PCA NORWICH

QUARRY WORKS, DEREHAM ROAD
HONINGHAM
NORWICH NR9 5AP
T: 01223 845522
e: cambridge@pre-construct.com

PCA WARWICK

UNIT 9, THE MILL, MILL LANE
LITTLE SHREWLEY, WARWICK
WARWICKSHIRE CV35 7HN
t: 01926 485490
e: warwick@pre-construct.com

PCA WINCHESTER

5 RED DEER COURT, ELM ROAD
WINCHESTER
HAMPSHIRE SO22 5LX
t: 01962 849 549
e: winchester@pre-construct.com

