SITE SOUTH OF THE A46, ASHCHURCH NEAR TEWKESBURY, GLOUCESTERSHIRE

AN ARCHAEOLOGICAL INVESTIGATIONS ASSESSMENT REPORT

PLANNING REF: 14/00972/OUT

JUNE 2019

REPORT: 13340

PRE-CONSTRUCT ARCHAEOLOGY

DOCUMENT VERIFICATION

SITE SOUTH OF THE A46, ASHCHURCH NEAR TEWKESBURY, GLOUCESTERSHIRE

Type of project

ARCHAEOLOGICAL INVESTIGATIONS

Quality Control

Pre-Construct Archaeology Limited	**Project Code**	K5349
	Report Number	R. 13340
Text Prepared by:	H James & J Webster	March 2019
Graphics Prepared by:	R Murphy	March 2019
Graphics Checked by:	M Roughley	March 2019
Project Manager Sign-off:	J Webster	March 2019

Document Version:	**Date:**	**Checked:**	**Approved:**
001	19.03.2019	J Webster	T Bradley
002	05.06.2019	J Webster	T Bradley

Pre-Construct Archaeology Ltd
Unit 9, The Mill,
Mill Lane,
Little Shrewley,
Warwick,
Warwickshire
CV35 7HN

Site south of the A46, Ashchurch near Tewkesbury, Gloucestershire:

An Archaeological Investigations Assessment Report

Local Planning Authority:	**Tewkesbury District Council**
Planning Reference:	**14/00972/OUT**
Central National Grid Reference:	**SO 9365 3339**
Site Code/Event Number:	**LSAG - 17**
Report No.	**R. 13340**
Written and researched by:	**Hayley James & Jonathan Webster** **Pre-Construct Archaeology Ltd**
Project Manager:	**Jonathan Webster**
Commissioning Client:	**Environmental Dimension Partnership**
Contractor:	**Pre-Construct Archaeology Ltd** **Unit 9, The Mill,** **Mill Lane,** **Little Shrewley,** **Warwick,** **Warwickshire** **CV35 7HN**
Tel:	**01926 485490**
E-mail:	**jwebster@pre-construct.com**
Website:	**www.pre-construct.com**

June 2019

CONTENTS

ABSTRACT

Pre-Construct Archaeology was commissioned by the Environmental Dimension Partnership on behalf of Linden Homes Western to undertake a programme of archaeological investigations on Land South of the A46, Ashchurch, Gloucestershire. The investigations were required to investigate and record the known archaeological remains ahead of the new development comprising 150 domestic houses along with associated road access, services and landscaping for which full planning permission has been granted by Tewkesbury District Council.

The archaeological investigations found evidence of human activity which spanned from Prehistory through to the post–medieval period. The earliest activities were represented by two residual worked flint flakes which dated from either the Mesolithic or Neolithic periods and were most likely dropped during transit through the area. No insitu remains from these early periods were identified.

A known occupational site of Iron Age/Romano-British date had previously been recorded lying in the west of the development area and the current series of archaeological investigations studied the fringes of this settlement. Ditches of Romano-British date ran across the site, which are evidence of a semi-enclosed landscape thought to have been used in the management of livestock.

In the northern portion of the site, a 'T' shaped corn dryer was noted, sat within a small square enclosure with repeated charcoal-rich rake outs. This was demonstrated to be a small 'industrial' oven, probably used to dry corn and possibly to bake bread. The lack of chaff in the charcoal rake out suggested that the threshing occurred elsewhere. In close proximity to this, a well and several pits helped establish the extent of a relatively confined and small scale 'industrial' foci along the edge of a small plateau.

No evidence for early medieval activity was recorded during the investigations. The medieval and post–medieval periods were characterised by agricultural management, primarily ridge and furrow which had partly truncated the earlier activities across the site. Finally, a post–medieval sheep dipping pond was exposed, which had a stone lined access/egress ramp that helped demonstrate the latter stages of the wool trade

related activity for which the Cotswolds were famous.

1 INTRODUCTION

1.1 An archaeological strip, map and sample was undertaken by Pre-Construct Archaeology Ltd (PCA) on land to the south of the A46, Ashchurch, near Tewkesbury, Gloucestershire centred on (National Grid Reference NGR: SO 9365 3340; Figure 1) between the 4th December 2017 and 6th April 2018. This was followed by an archaeological watching brief between the 10th and 12th December 2018 during the installation of a new supply gas pipeline. The investigations were commissioned by the Environmental Dimension Partnership (EDP) on behalf of their client, Linden Homes Western to inform upon, investigate and record the known archaeological resource ahead of the development of 150 domestic houses along with associated road access, services and landscaping for which full planning permission has been granted by Tewkesbury District Council (Planning Reference: 14/00972/OUT).

1.2 Previous phases of archaeological investigations associated with the development demonstrated that it would affect known below ground archaeology. As a result, the Local Planning Authority (LPA) required a programme of archaeological investigation through a full strip, map and sample to investigate the known archaeological resource in order to gain a full understanding of the date, function, evolution and development of all features and deposits present, as well as to place the archaeology into its wider landscape context.

1.3 The definition of an archaeological strip, map and sample is ‘a programme of controlled, intrusive fieldwork with defined research objectives which examines, records and interprets archaeological deposits, features and structures and, as appropriate, retrieves artefacts, ecofacts and other remains within a specified area. The records made and objects gathered during the fieldwork are studied and the results of that study published in detail appropriate to the project design’ (CIFA 2014a).

1.4 The archaeological strip, map and sample was carried out in accordance with an agreed written scheme of investigation (WSI) prepared PCA Ltd (2015) in response to an archaeological brief prepared by Charles Parry, Planning

Archaeologist at Gloucestershire County Council.

1.5 Following the archaeological strip, map and sample, a new gas pipeline was required by the development. The route of this pipe ran along the northern edge of the known Iron Age/Romano-British settlement to the immediate west of the previous investigations.

1.6 The definition of an archaeological watching brief is 'a programme of monitoring and investigation carried out during a non-archaeological activity within a specified area of land or development where construction operations may disturb or destroy archaeological remains' (CIFA 2014b).

1.7 In addition to the methodologies noted above (Paragraph 1.4), the archaeological investigations conformed to the guidelines and standards laid down in the following documents:

- *Standard and Guidance for an Archaeological Excavation,* Chartered Institute for Archaeologists: Reading (CIFA 2014a);
- *Standard and Guidance for an Archaeological Watching Brief,* Chartered Institute for Archaeologists: Reading (CIFA 2014b);
- *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology*, Chartered Institute for Archaeologists: Reading (CIFA 2014c);
- *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists: Reading (CIFA 2014d);
- *Management of Archaeological Research Projects in the Historic Environment (Morphe)*, Historic England: London (HE 2015);
- *Fieldwork Induction Manual: Operations Manual 1*, Pre-Construct Archaeology Limited, London (Taylor and Brown 2016).

1.8 This report describes the results of the archaeological investigations and sets

their results within the known local and regional archaeological resource of the area. The site archive will be deposited at Tewkesbury City museum.

2 AIMS AND OBJECTIVES

2.1 The purpose of the requested archaeological investigations was to investigate the known archaeological resource and gain a full understanding of its character, date, form and function. The aims have been drawn together primarily in reflection of the local regional research frameworks (Webster 2008; Grove & Croft 2012). These aims were re-assessed periodically and adapted both during the archaeological fieldwork and before undertaking this post-excavation assessment to maximise the potential of research questions that could be addressed by the archaeological resource.

2.2 The original general aims (Reference: Research Aims 1 (RA1), as set out in the WSI, prior to any intrusive works being undertaken, were as follows. All of these are still relevant.

- Research Aim 1.1 (RA1.1): To record the nature, extent, date, character, quality, significance and state of preservation of any archaeological remains affected by the investigation;
- Research Aim 1.2 (RA1.2): Recover artefacts to assist in the development of type series within the region;
- Research Aim 1.3 (RA1.3): To assess where appropriate any ecofactual and palaeoenvironmental potential of archaeological deposits and features from within the site;
- Research Aim 1.4 (RA1.4): Determine the levels of disturbance of any archaeological deposits through plough damage or any other agricultural/industrial practices;
- Research Aim 1.5 (RA1.5): To set the site and its potential archaeological remains into the context of the wider landscape;
- Research Aim 1.6 (RA1.6): To establish the longevity of the outlying settlement activity within the site;
- Research Aim 1.7 (RA1.7): To establish the extent of the peripheral settlement activity associated with the core settlement area identified by the geophysical survey;
- Research Aim 1.8 (RA1.8): To establish as far as possible the function and

extent of all features within the area of the archaeological investigation and ascertain were possible if they relate to the settlement identified in the geophysics survey.

2.3 Following from the archaeological investigations, a revised, more focused, set of research aims were produced based in relation to the known priorities of the local regional research frameworks. These have been separated into appropriate chronological phases;

2.4 Research Aims 2 (RA2): Prehistoric deposits:

- Research Aim 2.1 (RA2.1): To establish if there is any evidence to suggest the Romano British settlement had earlier origins.

2.5 Research Aims 3 (RA3): Romano-British deposits:

- Research Aim 3.1 (RA3.1): Improve our understanding of non–villa rural settlements (research aim 29 regional research framework);
- Research Aim 3.2 (RA3.2): The impact of the Roman empire on farming (research aim 41 regional research framework);
- Research Aim 3.3 (RA3.3): Improve our understanding of wild and cultivated plants in the past (research aim 20 regional research framework);
- Research Aim 3.4 (RA3.4): Improve our understanding of wild and domestic animals in the past (research aim 19 regional research framework);
- Research Aims 3.5 (RA 3.5): Understanding of key transitional periods (research aim 10 regional research framework);

2.6 Research Aims 4 (RA4): Medieval deposits:

- Research Aim 4.1 (RA4.1): Utilise the survival of Medieval and later artefacts and buildings to their full extent (research aim 8 regional research framework);
- Research Aim 4.2 (RA4.2): Improve our understanding of Medieval farming (research aim 42 regional research framework);
- Research Aim 4.3 (RA4.3): To investigate the landscape use during the Medieval period.

2.7 Research Aims 5 (RA5): Post-medieval deposits:

- Research Aim 5.1 (RA5.1): to Build upon the cartographic evidence to develop understanding of landscape use during the post medieval period.

3 GEOLOGY AND TOPOGRAPHY

3.1 Geology

3.1.1 The underlying geology is mapped as the Charmouth Mudstone Formation, formed during the Jurassic period, representative of a landscape of shallow seas in the area. Along the southern third of the site this was mapped as being overlain by a combination of clay, silt, sand and gravel alluvium deposited via fluvial action during the Quaternary Period (BGS 2019). The soils were mapped as a lime-rich loam and clay rich soil that impedes drainage (Landis 2019). The underlying geology observed on site during the excavation was a mid to light grey clay with frequent pea-grit inclusions with the alluvial sequences seen much further north than mapped.

3.2 Topography

3.2.1 The site is located to the immediate east of the village of Ashchurch and approximately 4.5km to the east of Tewkesbury itself. The investigation area sits astride Pamington Lane and is bounded to the north by the A46, whilst the south is limited by the Tirle Brook.

3.2.2 The area of investigation is approximately 12 hectares in size and is broadly rectangular with the longitudinal axis orientated roughly east/west and separated into two fields via Pamington Lane. A third field is present to the immediate southwest of the western most field and is broadly triangular, this latter field was not excavated but was used for spoil storage with the agreement of the Archaeological Advisor. It was limited to the north by the A46 and to the south by the Tirle Brook. Fields lay to the east whilst the edge of Ashchurch was present to the west.

3.2.3 On arrival to the area of investigation, the site comprised pastural fields. The ground at the northern edge of the area of investigation is situated at a height of *c*.23m AOD (Above Ordnance Datum) descending gradually to the south towards the Tirle brook which acted as the southern limit at a height of *c*.18m AOD. One point of note is a clear plateau across the northwest half of the west field seen at a height of *c*.21m a distinct lip being visible at its eastern and southern limits.

4 ARCHAEOLOGICAL BACKGROUND

4.1 General

4.1.1 An archaeological desk-based assessment (AAL 2014) was produced on the known historical and archaeological background of the site and immediate vicinity. It is not intended to repeat that information here and what follows is a brief overview of that document. For more information please refer to the original report.

4.1.2 HER reference **32938** relates to an excavation and watching brief conducted *c*.1.3km to the west of the study site. These works produced the earliest evidence for human activity within the vicinity, comprising residual finds from both the Neolithic and Bronze age periods. Evidence for occupation was recorded from the mid to late Iron Age with later linear and rectilinear features forming enclosures and/or boundaries recorded dating to the Romano-British period. Evidence demonstrated that Romano-British occupation was present from the 1st century AD, with continuity of occupation throughout to at least the 3rd century AD. Based on the limited amount of structural evidence found, along with a small cemetery of five inhumations, this site was interpreted as being on the periphery of a settlement, based on the understanding of the spatial landscape usage during the Romano-British period.

4.1.3 HER references **33518** and **33902** relate to a geophysical survey and following archaeological evaluation *c*.600m to the east of the study area, during which 88 trenches were excavated. The findings of these investigations reflect a similar chronology to that observed during the above, with cut features and artefacts dating from the Bronze Age, through the Romano–British period through to the modern period.

4.1.4 A geophysical survey (HER reference **44550**), just over 1km to the south-west, identified potential features indicative of former settlement activity. Which, based on morphological indicators from other known sites in the region suggest Iron Age/Romano-British farmsteads.

4.1.5 The A46, running along the northern limit of the area of investigation, is

thought to have originated as a Romano-British road, and has continued in use since that date, it is first recorded in the Anglo-Saxon Charter as a boundary for the Teddington estate, although its Romano-British origins are archaeologically unsubstantiated (AAL 2014; 20).

4.1.6 A geophysical survey, conducted by Archaeological Surveys Ltd (AS 2014), identified a concentrated area of settlement activity on the elevated plateau, confined to the northwest corner of the study site, the morphology of which suggested an Iron Age/Romano-British date. Outlying activity away from the settlement can broadly be grouped as linear features, thought to be trackways, boundaries and agricultural enclosures. A few small discrete features were also identified during the survey, which were interpreted as probable occupational and/or industrial/agricultural activities.

4.1.7 Following the geophysical survey an archaeological evaluation was conducted by Cotswold Archaeology (CA 2014) within the study site, the results of which largely corroborated. Due to the clearly archaeological nature of the main 'settlement area' revealed during the geophysical survey, this part of the site was not evaluated to preserve potentially complex stratigraphic relationships and the development was designed to retain this area as a green space and avoid intrusive works.

4.1.8 Of note during the archaeological evaluation was Trench 6 which, due to the proximity to the settlement area, yielded five east to west ditches, and although three were undated; **(612)** and **(606)**, generated cultural material, dating to the 1st and 2nd Centuries respectively. Also, within Trench 6, a probable midden **(608)** was identified, containing late 2nd Century pottery and a coin dating from between AD 138-161. Further ditches seen during the geophysical survey were identified in several other trenches, with limited success in providing dating evidence. Within Trench 10, a cereal dryer was excavated, with 4th Century pottery retrieved from the charcoal rich fill.

4.1.9 A map regression showed that the study site was open fields, dating back to 1768, and was portioned in to separate plots, with slight changes to plot size and shape over time, although the historic field boundaries are no longer

visible in the landscape (AAL 2014; 15-18).

4.1.10 The general landscape has been shown to contain medieval and post-medieval ridge and furrow with much being lost to later ploughing and the geophysical survey carried out on this study site (AS 2014), showed that this area was no exception. Ridge and furrow was identified as lying north to south, parallel to the probable Romano-British linear features that were also identified. Evidence of ridge and furrow earthworks are still extant in the immediate landscape, particularly in the fields to the south of the study site, indicative of the medieval to post medieval land use.

4.1.11 A probable Deserted Medieval Village (DMV) (HER Reference **40418**) is situated *c*.200m to the south of the study site at Middle Farm. Extensive traces of medieval and/or post-medieval building platforms and other earthwork features have been identified, most notably ditches and the site of a possible dovecote.

4.1.12 Given the location of the investigation area directly opposite a MOD complex, it is unsurprising that there are numerous HER entries relating to modern military utilities. HER references **22902** and **40415** relate to two POW camps, situated immediately to the west of the study site. Finally, HER reference **19906** relates to a water tower which was situated on the southern boundary of study site.

4.2 Conclusions

4.2.1 The regional frameworks for both the South West (Webster 2007) and the West Midlands (Watt 2011) note that the landscape in which the current area of investigation is situated is typified through the Iron Age and Romano-British periods by partially enclosed landscapes segregated by dispersed farmsteads and settlements. The proximity of the A46 which is known to have origins in at least the Romano-British period, if not earlier, is also of particular note as it is expected to have acted as a foci of activity as a main transit route for trade and cattle.

4.2.2 It is clear from both the archaeological record and the cartographic record that

the wider study area was dominated by an agricultural landscape with dispersed settlements from at least the Iron Age, as evidenced by the frequent ridge and furrow throughout the area, the ditch systems and building platforms at Middle Farm and the historic mapping, which documents a slowly changing layout of fields and occupation from the mid-18th Century through to the 20th Century.

4.2.3 Based on the information provided above it was concluded that the geophysical survey gave an accurate representation of the archaeology present within the study site, although there was potential that smaller discrete features may have been missed. It was decided that, as the area of the main 'settlement' would remain intact as a green space in the upcoming development, part of the remainder of the site would be subject to an archaeological strip, map and sample investigation to ensure that any features likely to be disturbed by the development would be sufficiently investigated, characterised and understood before the development took place.

4.2.4 The route of the utility pipeline was kept towards the northern limit of the area of investigation which, whilst running through an area of high potential, was seen via the geophysical survey to be within the boundary between the settlement and road. As such it was deemed suitable for a watching brief to be undertaken to fully characterise, investigate and, if needed, flag areas of high potential where further works may have been required.

5 METHODOLOGY

5.1 Excavation and Sampling

5.1.1 A WSI for the archaeological excavation (PCA 2015), in agreement with the LPA, set out that the excavation methodologies to be employed were undertaken to best satisfy the stated objectives of the project, as set out in section 2 above.

5.1.2 Seven separate areas were identified as potentially containing significant archaeological deposits, which were referred to as Areas A-G (See Figure 2). Fieldwork was completed over an 18-week period from December 2017 through to April 2018 and coincided with one of the worst winters recorded with frequent heavy rain, three separate heavy snow falls and extremely low temperatures recorded across the UK.

5.1.3 Topsoil and subsoil stripping of areas A, C and D through to G was completed by 360º tracked excavators, utilising toothless buckets with spoil removed to storage areas by dumpers working simultaneously. In Area B, as agreed with Linden Homes Western, the LPA and EDP, the topsoil and subsoil were removed by a 360º tracked excavator, and spoil side cast to the areas immediately either side, this was undertaken due to the accumulative wet weather experienced, and the difficulty in access for the dumpers.

5.1.4 All machine excavation was monitored and supervised by a suitably experienced archaeologist. The areas stripped for archaeology totalled 26,098m² (*c*.2.6ha).

5.1.5 The movement of plant across site was closely monitored at all times, with particular attention to wheel rutting. Movement was restricted to areas where topsoil was still in place and vehicles were not permitted to track across any areas where archaeological features or deposits had been exposed or likely to be disturbed, such as the preservation area to the north west of the site, which was avoided entirely. Where wheel ruts became present alternative routes were used, where this was not practicable, such as the bottleneck between the fields, these were infilled as frequently as required to ensure no

significant damage was done to any underlying archaeology that might be present.

5.1.6 Once exposed all surfaces were cleaned by hand and all possible features were inspected for their potential, selected deposits were excavated by hand to retrieve artefactual material and palaeoenvironmental samples.

5.1.7 Following on from these investigations a second WSI was produced ahead of the archaeological watching brief required for the installation of a new supply gas pipeline (PCA 2018). This set out the methodologies to be employed during the intrusive works and was designed to address the agreed objectives set out in section 2 above.

5.1.8 Undertaken on the 25th May 2018, an archaeological watching brief was carried out to monitor the removal and transportation of the spoil away from the fringe areas of the 'settlement' to ensure that no damage was caused to any underlying archaeological deposits. This was followed by a second archaeological watching brief undertaken between Monday 10th and Wednesday 12th December 2018 to monitor the placing of a new service route. The trench was placed parallel to the A46 just inside the west boundary and ran broadly west to east with a slight curve following the existing northern field boundary. At the western edge the route turned sharply to the north where it then intersected the existing gas pipe to the northwest. The trench was excavated 1.80m in width and to an averaged c.1m in depth. All works were monitored by a suitably experienced archaeologist and any potential deposits/features of archaeological potential were cleaned, inspected and investigated by hand using the same methodologies as undertaken in the previous works.

5.2 Recording Methodology

5.2.1 Archaeological features were sampled sufficiently to fully characterise them, understand their relationships and determine their significance. Features were excavated as follows, as agreed with the LPA;

- All early prehistoric features were 100% excavated;

- All structural features (eg. Postholes and hearths), burials, industrial features (eg. Ovens and kilns) etc were 100% excavated;
- Other discrete features (eg. Pits) of late prehistoric or later date were excavated to a minimum of 50% based on the potential for the recovery of important material or ecofactual assemblages;
- Features of possible natural origin (eg. Variations in the geology) were excavated until a full characterisation of the feature type, profile, fill and any other characterisations were adequately demonstrated;
- Linear features (eg, ditches and gullies) were excavated to a minimum of 20% or until a full understanding of the feature was ascertained. All intersections were sampled to establish relationships and a higher percentage of excavation was undertaken in areas of potential domestic activity;
- Occupational layers were excavated to a minimum 50% with higher percentage for prehistoric layers as required to gain full understanding of the various functions and any spatial variations.

5.2.2 The limits of excavations, heights above Ordnance Datum (m OD) and the locations of archaeological features and interventions were recorded using a Leica Viva series GPS rover unit with RTK differential correction, giving three-dimensional accuracy of 20mm or better. Each point was recorded in relation to the OSGB36 geod model and coded to an internal PCA database to provide a dataset that recorded feature type, context number, associated drawing numbers and any other information that may be relevant.

5.2.3 This survey provided a three-dimensional geo-referenced visual representation of the archaeology present. Where features were determined to require more detailed illustration, these were undertaken by hand and drawn in relation to a feature specific geo-referenced baseline and drawn at an appropriate scale on polyester based drafting film and labelled in relation to a site specific drawing register.

5.2.4 Hand drawn sections were drawn at an appropriate scale, primarily 1:10. Likewise, plans of archaeological features were drawn at a suitable scale to

record them in detail. Where appropriate a larger site plan was produced at a scale between 1:100 and 1:1,250 to show the location of monitored works/grid system reference numbers, detailed plans and sections and any other information appropriate. These plans were accurately related to the National Grid. All plans and sections were be levelled in respect to AOD and drawn on polyester based drafting film and clearly labelled.

5.2.5 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 (Taylor and Brown 2016). Context sheets were primarily filled in by the archaeologist who excavated the feature/deposit. All deposits recorded during the archaeological investigations are listed in Appendix 2.

5.2.6 All deposits were recorded with sufficient data to allow for a full characterisation of the context and its relationships to be made and allow for future studies to query and compare the dataset with confidence.

5.2.7 High-resolution digital photographs were taken at all stages of the archaeological excavation/strip, map and sample using a Canon EOS 1300D digital SLR camera with a 18.0-megapixel resolution. Digital Photographs were taken of all deposits and all images will be labelled appropriately and cross-referenced in relation to a site specific photography register and regarded as part of the primary archive.

5.3 Finds recovery and processing

5.3.1 All artefacts recovered during the course of the archaeological investigations are the property of the landowner/client who will be asked to sign across the recovered archive to the local repository for deposition.

5.3.2 Any artefacts that were considered potentially significant were provided a unique registered artefact identification number, as provided by the site specific registered artefact register. The location of the item will be recorded in three dimensions and marked on any relevant drawings as appropriate

before being lifted. Also, as required, items were photographed and appropriate specialists would be on hand to ensure the object was lifted and transported in the most stable and suitable fashion to stop any potential degradation.

5.3.3 All artefacts revealed were recovered regardless of date so that the provisional dating of as many contexts as possible can be ascertained, they were retained on site and added to a site specific register before being returned to the office where they were identified, quantified and dated to period. A *terminus post quem* was then produced for each stratified context and the dates used to help determine the broad date phasing for the site. On completion of the fieldwork, the finds were cleaned and packaged according to standard local and national guidelines (CIFA 2014d). Please note, the following categories of materials will be discarded after a period of six months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified;
- modern pottery;
- material that has been assessed as having no obvious grounds for retention.

5.3.4 Archaeological features were sampled sufficiently to characterise, date them and determine their significance.

5.3.5 Field excavation techniques and recording methods are detailed in the PCA Fieldwork Induction Manual (Operations Manual I; Taylor & Brown 2016).

5.4 Palaeoenvironmental Sampling

5.4.1 A structured programme of palaeoenvironmental sampling appropriate to the specific aims of the project was implemented. The strategy and methodology for the sampling of deposits were undertaken in accordance with the agreed methodology provided in the WSIs (PCA 2018 & 2015) and follows Historic England (Formerly English Heritage) Centre for Archaeology Guidelines

"*Environmental Archaeology – A guide to the theory and practice of methods, from sampling and recovery to post – excavation"* (2011).

5.4.2 All samples were provided a unique identification number and accompanied with an appropriate sample form that provided the information on the reasons for, research questions asked and methodologies to be employed to maximise recovery potential.

5.4.3 Where deposits were dry, bulk samples were taken for the recovery of charred plant remains, small bones and finds, they were taken from sealed and datable features such as pits, ditches, hearths and floors. Each context was sampled in isolation and were not taken from the intersection of features or where context horizons could not be fully defined.

5.4.4 Bulk samples were taken for the recovery of charred plant remains, small bones and finds, they were taken from sealed and datable features such as pits, ditches, hearths and floors. Each context was sampled in isolation and were not taken from the intersection of features or where context horizons could not be fully defined.

5.4.5 Palaeoenvironmental samples from dry deposits were processed by floatation following the fieldwork and the residues were sorted to retrieve small bones, small finds and charcoal.

6 ARCHAEOLOGICAL SEQUENCE

6.1 Introduction

6.1.1 The archaeological investigations produced evidence of multiple phase use and occupation, primarily Romano-British in date, but also extending into the late medieval and post medieval periods. Evidence was also noted for a glacial or immediate post-glacial ablation landscape.

6.1.2 Contexts have been assigned to broad periods:

- Period 1- Geological/Glacial
- Period 2 – Mesolithic to Neolithic
- Period 3 – Iron Age to Romano-British
- Period 4 – Medieval to Post medieval
- Period 5 – Modern

Record/catalogue type	Quantity
Context registers	11
Photographic registers	14
Drawing number registers	4
Context numbers	139
Registered small finds	4
Sample register	1
Drawings	88
Digital photographs	585
Matrix	1
Boxes of finds	TBC
Environmental samples	11

Table 1: Quantification of fieldwork archive

6.2 Period 1: Geological deposits

6.2.1 The geology encountered broadly across the site presented as a mid greyish-brown clay with frequent pea grit and fossilised material such as belemnites and ammonites throughout, in addition to this patches of mid yellowish-brown sands were noted on occasion. The natural geology identified on site

corresponded to that mapped by the British Geological Society although it should be noted that the alluvium spread further north than had been suggested.

6.2.2 Cutting across the site a large palaeochannel **[5008]** was noted, cutting through the natural substrate and carving a distinctive mark through the geology. The palaeochannel could clearly be seen in plan projecting from the northeast side of site in a southwest direction and was characterised by a mid-orange brown sandy silt deposit, which could be seen in stark contrast to the surrounding geological substrate. Investigative slots through this revealed frequent well sorted and graded individual clasts orientated along the longitudinal axis of the feature within an overall sterile matrix consistent with low energy fluvial deposition. Based on the evidence seen the feature was interpreted as being part of a larger landscape of anastomosing channel development within the melt spillway of a former glacier to the north (Benn and Evans 1998 pp. 318-9, 345).

6.2.3 Running downslope from the northwest corner of excavation area A towards **[5008]** in a south-easterly direction, two irregularly profiled linear features were investigated **[5004]** & **[5006]**. Their fills ranged from a mid-yellowish brown to a mid-reddish brown, comprised of a silty clay, with occasional patches of coarse sand. Other inclusions of note within the fills ranged from occasional pea grit, as observed in the underlying geology, to well sorted small to medium sized sub-rounded gravels. The profile of the features varied down their length, in places the profile comprised a gentle to moderate slope on one side with a steep to almost vertical slope on the opposing side, whereas in others it was more of a moderate U-shaped slope. The irregularity of the form, the sterile nature of the fills and the similarity to that of **[5008]** all indicate that these features were of natural fluvial origin and most likely seasonal tributaries of a larger watercourse system.

6.2.4 Two further linear features were identified in areas F and G. The feature in area F **[3004]** was orientated north northwest – south southeast. The shape, both in plan and profile was irregular and varied from a sharp break of slope

at the top, to imperceptible to diffuse in others. The base was mostly a shallow concave shape, however in places it appeared to be flatter. The feature had a single fill, comprising a light to mid-orange brown silty clay, with occasional unsorted grit and gravels.

6.2.5 The linear revealed in area G **[4004]** was comparable in profile with that above with variable; sharp in places to more gradual in others, with a concave to irregular base. It was filled by a single fill, which ranged from a light greenish brown to a mid-yellowish brown silty clay, with occasional well sorted pea-grit to gravels throughout. Similarly to **[5008]**, the sterile nature of the fills, the irregular shape, silt rich, sterile fills and depositional nature of the inclusions again point to both features representing natural, probably seasonal watercourses.

6.3 Period 2: Mesolithic to Neolithic

6.3.1 There are no archaeological deposits or features which directly relate to the early prehistoric period. The only indication of Mesolithic to Neolithic activity in the area is represented in the form of a small number of residual finds. Two residual struck flint flakes were recovered, from contexts **(5021)** and **(5089)** respectively, although these features, based on their characteristics, the additional finds and the landscape setting are interpreted as Romano-British in date.

6.4 Period 3: Iron Age to Romano-British period

6.4.1 The epicentre of the known occupation was situated on a plateau to the immediate west and northwest of the archaeological strip, map and sample excavation and to the immediate south of the archaeological watching brief. This occupational site has been primarily characterised by previous geophysical survey and archaeological evaluation around its fringes. The development was designed to ensure preservation in situ with the current phases of fieldwork located on the peripheral areas only (Figure 03).

6.4.2 Three outlying linear features, which have been interpreted as boundary ditches, were excavated, two with an east -west orientation **[5019]** & **[5024]** and one orientated north – south **[5047]**. The two east-west linears ran parallel

to each other, although the northern most linear **[5019]** of the east-west orientated features was terminated in the western side of the area of excavation, whereas the southern linear **[5024]** continued across the area becoming imperceptible towards the eastern side of area A. A moderate quantity of dating material was retrieved from these linears, which clarified the relationships and phasing. The remaining north-south linear **[5047]** was at approximately a 90º angle from the known Romano-British enclosure system and was revealed across area A and into area C. These three linear features closely corresponded to the geophysical anomalies that had previously been identified.

6.4.3 The profile of the northernmost east to west linear feature **[5019]** had moderately sloped edges and a concave base, with an average width of 0.71m, and an average depth of 0.18m. The feature terminus was rounded with the base rising with the topography in such a way that it should be considered as potentially being the result of later plough action rather than a true terminus.

6.4.4 The profile of the southernmost linear feature **[5024]** (Plate 2) was significantly different in profile with steeper sides and a flat base, becoming shallower to the western end of the feature making a distinct U-shaped profile. The width of the feature varied from 1.20m to 1.65m, and the depth ranged between 0.44m and 0.56m. At the eastern end of the observed linear there was evidence of a recut **[5022]**, interpreted as a phase of cleaning out and evidenced by moderately steep sides and a concave base. No dating was recovered from the above linear but the profiles and orientation that respected the known Romano-British features was felt to be sufficient to date through association.

6.4.5 The profile of the north to south orientated linear feature **[5047]** was slightly irregular along its length, it had moderately sloped edges in places, but slightly sharper edges in others, and a concave to flat base, with some undulation along its length. The fill was a mid to light orange brown, composed of silty clay, with occasional pea grit inclusions. This feature was latterly truncated by

a wide shallow furrow **[5093]** and a modern ceramic land drain. Within the fill of the ditch, in the southern part of the feature, a semi articulated animal skeleton was excavated, which have been characterised as bovine, with some evidence of butchery, as one side of the rib cage was removed before burial.

6.4.6 The evaluation conducted by Cotswold Archaeology (CA 2014), identified the western end of a corn dryer in trench 10. This phase of excavation exposed the entirety of this feature, which transpired to be a stone 'T' shaped corn dryer **5013** (Plate 1), which is typical for the typology of Roman features of this variety (Figure 05).

6.4.7 The feature appeared to be in two main sub divisions; a 'T' shaped end, with a central flue, and a slightly elevated platform at the western end, as identified in the prior evaluation, with a delineation between the two, separated by a barrier of stone. Both the 'T' shape and the platform sat within the same sub oval cut, with a linear aspect to the west. The structure was made from a combination of roughly faced and unfaced limestone and two fragments of a repurposed mill stone (**SF. 1**) with very little bonding remaining aside from sand packing surrounding and enclosing some of the stones. The main 'T' shaped part of the corn dryer had three fills, two of which were associated with the construction/use of the corn dryer **(5025)** & **(5026)**. These were charcoal rich and have moderate to high potential for charred seed and plant macrofossil remains. The third fill, **(5027)**, was a fill comprising of a high frequency of stones and filled the main flue of the corn dryer, which may have been part of the flue construction, and had collapsed a degree. To the west end of the corn dryer was the elevated platform area, which was heavily truncated by the previous archaeological evaluation. However, the very basal limits of the deposit were still present and was also charcoal rich (Figure 06).

6.4.8 The corn dryer was situated within a small multi-phased rectangular enclosure *c*.80m^2 in size and comprised of at least two separate phases. The individual linears measured *c*.0.60m in width and varied in depth from 0.16m to 0.30m with the profile comprising a moderately steep U-shape. The enclosure was orientated north/south, with a break 1.80m in width present to the immediate

east of the southwest corner.

6.4.9 The second phase of the enclosure comprised a recut of both the northwest and southeast corners. It is clear that this alteration was undertaken and extant during the usage of the corn dryer and this is demonstrated by the fills which comprised a charcoal rich silty clays **(5064)** & **(5065)**. The deposits showed thin laminations and these along with the associated tip lines helped to demonstrate that they represented the frequent and periodic raking out of the corn dryer over an unknown period of time. The alteration to the southwest part of the enclosure reduced the entrance to *c*.0.70m in width and shifted the entrance so that it lay on the actual corner of the enclosure as opposed to the immediate east of it as it had been placed before.

6.4.10 No structural remains were present within or associated with the enclosure and it is not believed that the corn dryer was placed within a covered area, but, rather, that the enclosure acted as a demarcation of space and to stop the raked out debris from straying too far from its source. To the southwest three pits of varying size were noted truncating palaeochannel **[5008]**. The southernmost pit, **[5066]**, was heavily truncated by east-west orientated ditch **[5024]** and as a result primarily survived north of the ditch. This pit measured 0.09m in depth by 0.82m in diameter. To the immediate north of this a smaller sub circular pit **[5058]**, which measured 0.63m in diameter, and a maximum depth of 0.20m, was fully excavated and showed a steep U-shaped profile with steep sides dropping onto a flat base. The feature had been used for refuse deposition and contained a moderate quantity of Romano-British pottery and animal bone. Finally, to the immediate northeast of **[5058]**, a large pit **[5061]** measuring 2.28m in width by 3.0m in length was revealed (Plate 3). This feature, whilst large, contained an almost imperceptible profile dropping to a maximum depth of 0.17m across an uneven and undulating base. The shallowness of the feature is interpreted to be the result of later plough action across the field. It was filled by a single soft mid greyish orange silt rich sandy fill **(5062)** which contained occasional charcoal flecking throughout along with refuse of Romano-British date, both pottery and unworked animal bone being recovered. It is not believed to have been a structure and at present the

interpretation is one of mineral extraction and later reuse for refuse disposal.

6.4.11 Just over 10m to the south of the small enclosure associated with the corn dryer, a large, 2.03m diameter feature **[5081]** was revealed (Figure 09; Plate 6). This feature had vertical sides and was excavated to a depth of 1.60m when it was stopped with agreement from the LPA Archaeologist for health and safety purposes. Excavated as it was through the earlier palaeochannel **[5008]**, the form and profile of the feature suggests that it was a well, although a robbed out one, as no structural elements remained. The excavations revealed at least two deliberate backfills **(5082)** & **(5083)**.

6.4.12 The earliest of these **(5082)** comprised a firm mid greyish orange clay with occasional charcoal flecks throughout. This fill was fairly sterile in nature and no laminations or tiplines noted that might have suggested a deliberate backfill. This was sealed by a deliberate backfill deposit **(5083)** of silt rich clay that contained a relatively large later Romano-British finds assemblage.

6.4.13 During the archaeological watching brief undertaken to the northwest of the above and to the immediate north of the known settlement activity three linears were revealed that are believed to be of Iron Age or possible Romano-British date based on their morphology and location in relation to the previous geophysical survey results. Two **[8004]** and **[8008]** being orientated north to south, whilst the remaining feature **[8006]** was orientated northeast to southwest. Although no artefactual remains were recovered from any of these features, all were located such that they could be seen to be the continuation of the 'enclosure' system identified to the north of the settlement during the geophysical survey. All three had moderately steep sides descending imperceptibly onto a concaved base c.0.30m in depth. Each of these linears contained a single fill which comprised mid orange-brown silty clays with frequent poorly sorted gravel inclusions, suggestive of redeposited natural. Of note was **(8007)**, fill of **[8006]** which contained a moderate amount of charred animal bone and charcoal flecks throughout, more suggestive of domestic waste being placed here from the south.

6.5 Medieval to post medieval

6.5.1 The late Medieval to post Medieval activity primarily comprised north to south orientated furrows that were present across the entirety of the western areas of the development area and seen more episodically in the east. This variation in their presence was demonstrated to be the result of later truncation by plough action rather than a true representation of distribution across the site.

6.5.2 The profile of the furrows was broadly wide with gently sloping even sides dropping imperceptibly onto a moderately concave base. The mean width of the furrows was 1.50m whilst the average surviving depth measured 0.25m. The fills generally comprised a mid to light orange brown, with slight variation in places to a mid grey with orange mottling. The composition was a silty clay, with infrequent inclusions such as very occasional charcoal, pea grit and medium sized stones.

6.5.3 A pond like feature **[5055]** was investigated in the northeast portion of area A and was noted as sub-rectangular in plan with rounded corners. Measuring 5.50m in length by 4.20m in width with a depth of at least 1.58m. The northern slope of this feature was embedded by roughly hewn blocks of locally sourced Oolithic limestone packed together with no visible bonding present beyond a small quantity of CBM and gravels. These blocks were placed as such to create a ramp that measured 2.82m north-south by at least 4.16m east-west. Investigations demonstrated that this sub-rectangular feature contained two fills, the primary fill **(5056)** was made up of a light blueish grey silt rich clay with occasional well sorted rounded to sub-rounded peagrit to gravel throughout along with occasional organic remains. The largest being a large unworked timber at the base of the 'ramp'. It is clear from the nature of the deposit that it was the result of low aerobic, low energy fluvial deposition such as stagnant water. This was overlain by **(5057)**, a deliberately backfilled sandy clay that contained moderate poorly sorted inclusions from peagrit of Oolithic boulders. Post medieval artefacts were recovered from both fills with a thimble from **(5056)** and a Cu alloy coin, from **(5057)** being recovered in addition to pottery.

6.6 Period 4: Modern

6.6.1 In the north portion of Area A, parallel to the A46, a rectangular concrete footing **5110** for a former small structure was recorded. The footing was constructed of concrete with a single course of breeze blocks remaining in places, and wood cladding to the outside of the concrete. Due to the construction materials, it is self-evident that this feature is modern in date, and is thought to associate with the military facility to the immediate north, although it does not show on any previous mapping and as such a full conclusion cannot be given.

7 FINDS ASSESSMENT

7.1 Pottery and ceramics prepared by Jane Timby

7.1.1 The archaeological work resulted in the recovery of 202 sherds of pottery weighing 2502g. In addition, there are 28 fragments of ceramic building material (CBM) and 20 pieces of fired clay. The assemblage includes material of Roman-British, later medieval and post-medieval date.

7.1.2 The pottery was recorded using recommendations outlined in Pottery Standards (2016). To this end it was examined macroscopically and sorted into fabrics based on inclusions present, the frequency and grade of the inclusions and the firing colour. Traded, named Romano-British wares are coded using the National Roman reference collection (Tomber and Dore 1998; www.romanpotterystudy.org/) or, where relevant, to the Gloucester City fabric reference collection. The medieval wares are cross-referenced to the Gloucester City museum fabric series (cf Vince 1983). Rims were additionally coded to form. The data was recorded on to an MS Excel spread-sheet a copy of which is deposited with the site archive.

7.1.3 Overall the assemblage was in moderately poor condition partly due to the soft nature of many of the fabrics. Surfaces finishes had in many cases been lost. The overall average sherd weight of 12.4 g is typical of rubbish material.

7.1.4 Pottery was recovered from 30 contexts distributed across five areas with the maximum quantity of 28 sherds from context **(5018)**; thus, the individual quantities are very low which has some ramifications on the accuracy of the dating. A summary of the finds along with spot dates can be found in Appendix 3.

7.2 Description of pottery

7.2.1 Some 165 pieces of pottery date to the Romano-British period. The range of wares is extremely limited with oxidised, and reduced, Severn Valley wares (SVW OX/ RE) dominating accounting for 59% (by count). Forms include dishes, bowls and jars. Of note is a jar base from context **(5070)** with a pre-firing cross on the base.

7.2.2 Other traded wares include 15 sherds of Dorset black burnished ware (DOR BB1); a single sherd of Central Gaulish samian (5059)(LEZ SA) and at least two sherds of Oxfordshire colour-coated ware from a flanged bowl Young (1977) type C51.

7.2.3 More local Romano-British wares included products from the Malvern industries encapsulated in Glos type fabric 19.

7.2.4 Also present are 16 sherds of medieval/ early post-medieval pottery most of which appears to be from jars and jugs in Malvernian 'glazed' ware (Glos TF 52) probably spanning the 14/15th - 16th centuries into the early 17th century. Of note is the bunghole from a cistern from **(5002)**.

7.2.5 A further 21 sherds date to the post-medieval/modern period comprising glazed red earthenware, industrial china. English stone ware and slip-decorated wares.

7.3 Ceramic building material (CBM)

7.3.1 In total 28 fragments of CBM weighing 989.25g are present comprising a mixture of Romano-British pieces and post-medieval brick and roofing tile.

7.3.2 The Romano-British pieces appear to be from large thick floor tile or *pilae* and came from contexts **(5083)** and **(5102)**.

7.4 Fired Clay

7.4.1 Some 20 fragments of fired clay, or very abraded CBM, weighing 115g were recovered from five contexts. All are moderately small pieces of indeterminable form and function.

7.5 Chronology

7.5.1 Several of the contexts excavated produced a mixture of Romano-British and later material. Where the Romano-British wares could be dated the emphasis appears to be towards the mid to later Roman period (late 2nd-early 4th centuries). The Severn Valley ware industry is a particularly long-lived one spanning the 1st to 4th centuries and thus unfeatured sherds are difficult to date with precision. There is nothing present indicative of very late Romano-

British activity.

7.5.2 Of the 30 contexts with ceramic material, 18 produced exclusively Romano-British pottery but the quantities are generally low. The spectrum of wares is fairly typical of a later Romano-British rural settlement with a very small fine ware or specialist ware component. The apparent low density of finds suggests the investigated area is beyond the focus of any settlement.

7.6 Further work and retention

7.6.1 The assemblage is rather small and limited in scope and no further work is recommended. Romano-British activity has been well-documented at Ashchurch and this group adds little further information in general terms.

7.6.2 It is considered that none of the non-ceramic finds need be retained as they have limited potential in furthering local knowledge.

7.7 The metal and small finds by Märit Gaimster

7.7.1 Three small finds were recovered from the excavations; listed in appendix 4. One of the objects, originally listed as part of a copper-alloy brooch (**SF 4**) is in fact an iron nail. The form, with a narrow T-shaped head, is a characteristic Romano-British nail type (Type 3; Manning 1985, 135 and pl. 63 no. 99). The nail was retrieved from the fill of furrow **(5092)**. The other two small finds came from deposit **(5056)**; at least one of these is a post-medieval object, and the second is likely to be so. A cast copper-alloy thimble with a characteristic waffle-patterned crown (**SF 3**) is a well-known form (Lofting Type III) that dates from the period 1730–1800 (Holmes nd, 2 and fig. 7c). A worn and corroded thin coin, finally, is very likely a 17th-century Royal farthing (**SF 2**). These small coins were minted under James I and Charles I, during the period 1613 to 1644. Alternatively, this may be a residual Late Romano-British coin; however, the thin flan would suggest a 17th-century date is more likely.

7.7.2 Metal and small finds potentially provide key elements of domestic material culture and activities related to the investigated site. At present, the three small finds from Ashchurch present only a very small and limited source of information. The only object clearly relating to the Iron Age/Romano-British settlement and activities near or on the site is an iron nail of a characteristic Roman form (**SF 4**). The 18th-century copper-alloy thimble (**SF 3**) and potential 17th-century Royal farthing coin (**SF 2**), both small portable objects, likely represent casual losses of much later travellers or passers-by. The finds provide limited research potential and no further investigation is needed.

7.8 Worked stone by Kevin Hayward

7.8.1 The form and the fabric of two items (*c*.12,000g) of stone from **5013** were examined to determine their form and geological source.

7.8.2 The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabrics were examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10). A petrological sample was removed from a large millstone <1> recovered from **5013** which was examined in a similar way.

7.8.3 Examination of the 1:50,000 geological map (sheet 216) and accompanying memoir (Worrsam et. al. 1989) provided the suitable geological background.

7.8.4 The millstone <1>, estimated weight 12kg. The petrological sample removed from one of two millstone fragments can be described as a dark brown medium-coarse grained micaceous quartz gritstone with an occasional larger 5-10mm fractured quartz. The millstone is comparable to a fine example of the Basal Quartz Conglomerate, Basal Upper Devonian, Forest of Dean, exploited and supplied in enormous quantities throughout central-southern Britannia (Shaffrey 2006) as far as Cambridge e.g. Bottisham (Hayward 2018). With Ashchurch lying close to Tewkesbury and the River Severn it would have been a relatively straightforward process to transport large blocks upstream from the estuary area by boat. The millstone would have been suitable material as ballast.

7.8.5 The millstone itself which measures about 1.50m in diameter, exceeds the maximum 0.57m diameter figure for a quern proposed by Shaffrey (2015, 56) which means the stone can be classified as a millstone. It consists of two substantial pieces (estimated combined total weight 12kg) and criss-crossed by deep linear markings that would have facilitated the processing of grain into coarse flour.

7.9 Worked flints prepared by Ella Egberts

7.9.1 Single struck flints were recovered from contexts **(5021)** sample <6> and

(5089) sample <10>. They comprised a struck flint flake (context **(5089)**), 28mm long, 34mm wide, 5mm thick and weighing 5.2g. It is an irregular but relatively thin flake of dark grey translucent flint, partly recorticated and with a thin strip of nodular cortex along its distal edge. The flake has a small striking platform and some platform trimming. The concave part of the right edge, towards the distal end of the flake, shows some glossy use-wear and fine use-damage. The second struck flint context **(5021)** is a very small blade-like trimming flake of fine-grained, translucent orange/red flint, which is 9mm long, 5mm wide, 2mm thick and weighs 0.01g. The large flake shows clear evidence of use, the trimming flake points to some flint working/reshaping in the vicinity of the site.

7.9.2 The small and prepared platform of the larger flake and the fine trimming/shaping evidenced by the blade-like flake are technological and typological characteristics typical for Mesolithic/Early Neolithic flint working. Both pieces were recovered from contexts believed to be of Iron Age/Romano-British date. The trimming flake was recovered from the upper fill of a small enclosure, context **(5089)** has been identified as a spread of material overlying a Romano-British ditch. In both situations it is likely that the earlier prehistoric worked flint has become incorporated in the later enclosure and ditch through the filling/covering of these features. This is also evidenced in the slightly chipped condition of the worked flint which indicates the material has undergone some movement after initial discard. This assemblage holds little further research value and no further research is recommended.

8 PALAEOENVIRONMENTAL ASSESSMENT

8.1 Introduction

8.1.1 This section summarises the findings of the rapid assessment of the environmental remains in eleven bulk samples taken during the programme of archaeological investigations. These samples were all taken from area 'A' of the excavation phase, identified to be the peripheral of an area of former occupation within the archaeological landscape. Samples were collected from four pits, two ditches and additional deposits associated with corn dryer **5013**, the context information for which is given in table 2.

8.1.2 The aim of this assessment is to:

- Give an overview of the contents of the assessed samples;
- Determine the environmental potential of these samples;
- Establish whether any further analysis is necessary.

Table 2: Context information for environmental samples.

Context No.	Feature	Context type	Feature Type	Environmental Sample No.	Area	Phase	Interpretation
5014	5033	Fill	Corn dryer	<2>	A		Fireplace for corn dryer [5033]
5016	5033	Fill	Corn dryer	<3>	A		Fill of deepest part of corn dryer [5033]
5021	5024	Fill	Ditch	<4>, <6>	A		Fill of recut ditch, charcoal rich indicates backfilling could be related to corn dryer [5033]
5059	5058	Fill	Pit	<5>	A		Fill of a small pit [5058], adjacent to boundary ditch.
5062	5061	Fill	Pit	<9>	A		Fill of pit [5061]
5069	5073	Fill	Ditch	<8>	A		Natural siltation, fill of linear enclosure ditch [5073]
5070	5068	Fill	Ditch	<7>, <14>	A		Fill of possible 'rake out' ditch, associated with corn dryer waste
5082	5083	Fill	Pit	<11>	A		fill of a small pit, cut into the top of disused well (5083)
5085	5084	Fill	Pit	<10>	A		Fill of small pit, cut into the top of disused well (5083)

8.2 METHODOLOGY

8.2.1 Eleven environmental bulk samples, of between six and thirty-four litres in volume, were processed using the flotation method; material was collected using a 300µm mesh for the light fraction and a 1mm mesh for the heavy residue. The heavy residue was then dried, sieved at 1, 2 and 4mm and sorted to extract artefacts and ecofacts. The abundance of each category of material was recorded using a non-linear 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).

8.2.2 The light residue (>300µm), 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.

8.3 RESULTS

8.3.1 For the purposes of this discussion, samples will be grouped by feature type and sample number in order to assess environmental potential. Cultural material collected from the heavy residues has been catalogued and passed to the relevant specialists for further assessment. A full account of the sample contents is given in appendices 5 and 6. Animal bone will be discussed elsewhere.

8.3.2 Feature **5013**, a corn dryer was dated to the Romano-British period, set within its own enclosure.

8.3.3 Six bulk samples were collected in total, from both the body of the corn dryer and deposits associated with this structure.

Sample <2>, context (5014)

8.3.4 Sample <2> was taken from an area of burnt material abutting the corn dryer, interpreted as a possible fireplace or burning platform.

8.3.5 Preservation of environmental material in this deposit was good. Charred cereals were recovered in abundance, including specimens of spelt/emmer wheat (Triticum dicoccum/spelta), indeterminate wheat (Triticum sp.) and a large concentration (>100) of grains that were too damaged for species to be determined. A minimal number of barley grains (Hordeum sp.) were also recognised. Chaff was less frequent, with only a small amount of wheat spikelet forks being reported, along with fragmented spikelet bases.

8.3.6 Charred seeds were found in low to moderate densities. Grasses (Poaceae sp.) were the most frequent, with between eleven and thirty specimens of large grasses identified, as well as stinking chamomile (Anthemis cotula), goosefoots (Chenopodium sp.), peas (Fabaceae sp.), knotgrasses (Polygonum sp.) and black-bindweed (Fallopia convolvulus), all of which are weeds commonly associated with agriculture. Wood charcoal was present in this sample; however, the bulk of this material was heavily fragmented, and less than thirty fragments of a suitable size for species identification (>4mm in length/width) were extracted.

8.3.7 Sample <2> contained a small assemblage of land snails, including specimens of *Oxychilus* sp., *Vallonia* sp. and *Vertigo* sp., a moderate number of juvenile shells and snail eggs were additionally recorded. In terms of other environmental remains, the heavy residue yielded small animal bone, and the flot a reasonable amount of insect remains and eggs, though not enough to constitute a significant assemblage.

8.3.8 Modern rootlets and grasses, and modern seeds including thistle (*Cirsium* sp.) and yellow water-lily (*Nuphar* sp.) were recovered in this deposit, the occurrence of which may be an indication of bioturbation. Several specimens of the non-native subterranean snail species *Cecilioides acicula* were also identified which, when found in archaeological deposits, are also often seen as evidence of disturbance.

Sample <3>, context (5016)

8.3.9 Sample <3> was collected from a charcoal rich deposit that constitutes the fill

of the deepest part of the corn dryer structure.

8.3.10 Archaeobotanical remains were moderately well preserved in this context. Wood charcoal was abundant; however, levels of fragmentation were high, and no sizeable pieces were recovered. Charred cereals were recorded in small numbers, including specimens of barley and spelt/emmer wheat, along with some possible grains of rye (Secale cereale), though these are too damaged to be definitively identified. Several grains were also found that were too distorted for species to be recognised.

8.3.11 Burnt weed seeds, including mustards (Brassica/Sinapis sp.), bromes (Bromus sp.), sedges (Carex sp.), grasses and goosefoots were identified, all of which are often associated with agriculture. Snails were moderate, with dominant species being Vertigo sp. and Cecilioides acicula.

8.3.12 Other environmental remains present in the heavy residue included small animal bone and burnt bone. Small animal bone was also recovered from the flot material, along with insect remains and apparently modern insect eggs/worm cases which, in conjunction with modern seeds, root and snails, is likely to indicate post depositional disturbance in this deposit.

Samples <4> and <6>, context (5021)

8.3.13 Bulks <4> and <6> were sampled from the fill of a re-cut east to west linear boundary ditch, thought to contain backfilled material related to rake-out deposits from the corn dryer.

8.3.14 Cereals were abundant in both samples. Grains and glumes of emmer/spelt wheat were frequent, with between thirty and one-hundred specimens of each identified per sample, along with grains, glumes and fragmented rachis material from undifferentiated wheats. A significant amount of unidentifiable chaff and distorted cereals were recorded. Sample <4> additionally yielded a small number of detached coleoptiles, and several barley grains.

8.3.15 Charred weeds were similarly common; sample <4> contained the highest density, with over one-hundred specimens recorded, including grasses (small

to large), daisies, stinking chamomile, docks and bromes. Sample <6> featured a similar range of species, though overall abundance was lower; the most frequent seeds were smaller sized specimens (<2mm in length), largely of the daisy family. Large amounts of wood charcoal were recovered, but none were of a suitable size for species identification.

8.3.16 A small number of snails of the species Vallonia sp., Vitrea sp. and/or Vertigo sp. were reported in both samples, along with insect remains that are likely modern in origin. Modern plants material and roots were also observed.

8.3.17 In terms of other cultural and environmental artefacts, sample <4> yielded a low frequency of burnt bone and some fragmented pottery, and sample <6> small animal bone, bone fragments, and struck flint. Vitrified material, likely a by-product of the combustion process, was recognised in both flots.

Samples <7> & <14>, context (5070)

8.3.18 Samples <7> and <14> were taken from a small gully which truncates the rectangular enclosure ditch, interpreted as a possible 'rake-out' gully for the corn dryer.

8.3.19 In terms of environmental recovery, sample <7> contained the greatest density of remains; wood charcoal was abundant, though most of this material was small, with no identifiable pieces reported. Cereals and chaff were also found in significant amounts, with grains of spelt/emmer wheat and undifferentiated wheat, and glume bases and rachis fragments of wheat all reported. Whilst preservation of chaff was good in this context, a substantial proportion of the grains recovered could not be identified to species, due to the degree of surface damage and fragmentation. This is likely to be because of prolonged, repeated or high-temperature combustion.

8.3.20 Charred seeds of agricultural weeds were frequent, with a moderate number of daisies (Asteraceae sp.) and lesser concentrations of bromes, mustards, grasses (small to medium), sedges, goosefoots, docks (Rumex sp.) and stinking chamomile found in the flot material.

8.3.21 Charred grain was also reported in sample <14>, however less than thirty grains were found in total. Both spelt/emmer wheat and unidentifiable specimens were observed, along with a small amount of spelt and spelt/emmer glumes. Stinking chamomile, daisies and other crop weeds were recorded but, again, in low densities.

8.3.22 Snails were relatively scarce in both samples, with only a low frequency of Vallonia sp. and Vertigo sp. shells identified. Modern remains, in the form of rootlets, modern plant material, insect eggs and/or insect remains were recognised throughout the assemblage, in small concentrations.

8.4 Other deposits

Sample <5>, context (5059).

8.4.1 Sample <5> was taken from the fill of a small pit, feature **[5058]**, located adjacent to boundary ditch **[5063]**.

8.4.2 Preservation of archaeobotanical material was good in this deposit. Whilst wood charcoal was relatively scarce, with no identifiable specimens observed, carbonised cereals were present in moderate densities, as well as glume bases and rachis material (undiff. wheat). Several preserved grains were recognised, including specimens of spelt/emmer wheat and undifferentiated wheat, however chaff was more frequent, with between thirty and one-hundred pieces observed.

8.4.3 A small assemblage of charred weed seeds, similar to that observed in other samples, was recovered, which included examples of daisy, sedge, goosefoot and dock; overall abundance did not exceed thirty specimens.

8.4.4 The heavy residue additionally contained a minimal amount of CBM and fragmented bone, and the flot a low frequency of rootlets.

Sample <8>, context (5069).

8.4.5 Sample <8> was taken from the fill of a curvilinear enclosure ditch, feature **[5073]**.

8.4.6 Environmental remains were relatively sparse in this deposit. Wood charcoal was recorded in moderate amounts; however, fragment size was small, with no sizeable pieces recovered. Carbonised weeds and cereals were also found, including specimens of spelt/emmer wheat, naked wheat (Triticum durum/aestivum), chaff and a low concentration of sedge and goosefoot. Evidence of modern contamination, in the form of rootlets, modern plant material and insect remains was observed throughout the flot residue.

Sample <9>, context (5062).

8.4.7 A single environmental sample, <9>, was collected from the fill of a natural depression.

8.4.8 Archaeobotanical remains were well preserved in this sample. A moderate assemblage of carbonised cereals was observed, with a small amount of spelt/emmer wheat and undifferentiated wheat grains reported, along with between thirty and one-hundred spelt/emmer glumes and a similar number of broken wheat glumes, exact species of which could not be determined. As well as cereals, a number of burnt weed seeds were recognised, including examples of black-bindweed, daisies, stinking chamomile and other species often associated with agriculture. Wood charcoal was abundant, though heavily fragmented, and sizeable material was absent.

8.4.9 Possible indicators of bioturbation were present, in the form of modern rootlets and grasses, and insect/worm eggs.

Sample <10>, context (5085).

8.4.10 Sample <10> was taken from **(5085)**, the fill of small pit cut **[5084]** into the top of well feature **[5081]**.

8.4.11 Wood charcoal was abundant in this deposit, with over one-hundred fragments counted, including a small number of a size for species to be identified. Cereals and weeds were less common, with only a low frequency of indeterminate grains recorded, and a small amount of carbonised daisy seeds. Molluscs were well preserved, with between thirty and one-hundred

shells of freshwater and terrestrial species identified. Vallonia sp. was the most frequently observed type, though lesser numbers of Vertigo sp., Oxychilus sp., Discus rotundatus, common to moist and sheltered places, and Lauria cylindracea were also found, as well as a small amount of Planorbis sp., a freshwater type. Roots, modern seeds and grasses, and insect eggs were frequent in the flot material, suggesting the possibility of post depositional disturbance.

8.4.12 The heavy residue was found to contain fragmented bone, large and small mammal bone, pottery and struck flint.

Sample <11>, context (5082).

8.4.13 Sample <11> was taken from the same feature as sample <10>, within pit **[5084]** located in the top of disused well, **[5081]**.

8.4.14 Environmental material was poorly preserved in this sample and associated with substantial modern contamination. Wood charcoal was reported in moderate amounts, with less than ten sizeable fragments found. Several charred daisy seeds were also recognised, as well as a small number of terrestrial snails (Carychium sp., Discus rotundatus), and a low frequency of burnt bone. Modern plant matter, grasses, woody roots and rootlets and modern seeds, including goosefoot, nettle (Urtica sp.) and duckweed (Lemna sp.), were abundant, suggesting that bioturbation is likely to have occurred in this context.

8.5 DISCUSSION

8.5.1 An assessment of the flots has shown that cereals, namely wheat, are likely to have been grown in the area of the site. Grains, along with chaff remains were moderate to abundant in six out of the eleven assessed samples, with the highest concentration being observed in deposits associated with the suspected corn dryer, structure **5013**, and the enclosure ditch **[5073]**. In terms of the corn dryer feature itself, the samples taken from the fill of this feature, and the area interpreted to be the firing platform did not yield the largest assemblage, this was instead found in the fill of ditch **[5024]**, thought to be a

rake-out ditch for waste from the oven. Carbonised remains of spelt/emmer wheat and undifferentiated wheat were frequent in this deposit, as well as grains that were too damaged to be identified to species, likely as a result of the temperature and duration at which they were burnt, which does indeed indicate that it may constitute the remains of fuel or similar material from the nearby dryer.

8.5.2 All of the grain assemblages were also found to contain glume, rachis and assorted chaff remains, along with carbonised seeds from common agricultural weeds including daisies and goosefoot. In the case of samples <4>, <6>, <7> and <9> chaff was identified in greater abundances than grains, suggesting the likelihood that cereal processing is being carried out at the site, as well as the possibility that processing waste may be being used as a fuel source. The weeds may have come from plants collected accidentally during the crop harvest, or perhaps plants that may have been growing in the area surrounding the oven.

8.5.3 The overall concertation of grain and chaff in the features associated with the suspected corn dryer does suggest that this oven may indeed have been used for drying cereals before storage, or cooking activities, there is also the possibility that straw was being used as a fuel source for another type of usage. A small amount of barley was identified along with the wheat in several samples, which may be a sign that the oven was being used for the drying both.

8.5.4 Charcoal was generally poorly preserved in these deposits, with the majority of remains being highly fragmented and only three samples yielding any material of a suitable size for species identification. This assemblage is likely to constitute the remains of fuel waste from the oven, though there is not enough available material to recommend additional analysis of this.

8.5.5 Modern contaminants are present throughout the sample set, including modern weeds, rootlets and insect eggs. The potential for some level of bioturbation should therefore be noted, particularly in samples where the root material is woody and dense. The samples are considered to have a low

overall potential and further processing and analysis of the samples are unlikely to provide any further information, as such no further works on this is recommended.

8.6 Animal and fish bones by Kevin Rielly

8.7 Introduction

8.7.1 Animal bones were recovered from deposits dating from the Romano-British period, medieval and post-medieval were recovered across the development area, although principally from those dating to the Roman-British era. A major part of the collection was taken from the fill of boundary ditch **[5047]**, incorporating the near complete remains of a young cow or steer.

8.7.2 Bones were recovered by hand as well as from residues sorted from a series of bulk samples, a number of which were taken from or in the vicinity of the Romano-British corn dryer **5013**.

8.8 Methodology

8.8.1 The bone was recorded to species/taxonomic category where possible and to size class in the case of unidentifiable bones such as ribs, fragments of longbone shaft and the majority of vertebra fragments. Recording follows the established techniques whereby details of the element, species, bone portion, state of fusion, wear of the dentition, anatomical measurements and taphonomic including natural and anthropogenic modifications to the bone were registered. The sample collections were washed through a modified Siraf tank using a 1mm mesh and the subsequent residues were air dried and sorted. A concerted effort was undertaken to refit as many bones as possible, noting the actual number of fragments prior to refitting.

8.9 Description of faunal assemblage

8.9.1 The site provided a total of 529 bones by hand collection and an additional 234 from the samples. Following refitting the former total reduces to 205 and the latter to 226 fragments. Much of the difference between the two hand collected totals is related to an individual cattle skeleton (see below), where the actual number of fragments recovered was about 370, reducing to 133. There is a small proportion of heavily eroded and/or laminated fragments, however, the great majority suffered no more surface damage than a slight amount of root etching.

8.9.2 Almost all of this collection has been allotted to the Romano-British and/or medieval/post-medieval eras. The latter two are combined here as the quantity of bones is rather small and the dating at present is somewhat tentative. Some 120 bones, from eight deposits, are undated, including two unstratified **(2000)** and **(5000)** contexts. Clearly the greater part of the collection is Romano-British in origin. The dating at present is rather broad; however, these finds are likely to have been deposited within the early to mid Romano-British period, consistent with the evidence recovered during the previous evaluation (CA 2014, 2).

8.10 Romano-British Period

8.10.1 The Romano-British dated collection was essentially retrieved from deposits in Area A, largely taken from ditch fills (see table 5; Appendix 7). While the principal part of this collection is represented by the partial skeleton found within the lowermost fill **(5052)** of boundary ditch **[5047]**, other notable collections were retrieved from corn dryer **5013**, another ditch **[5022]** and from well **[5081]** (See table 6; Appendix 7). The animal bones from these other features are clearly dominated by cattle and cattle-size pieces with some sheep/goat (from well **[5081]**) and then pig and equid (ditch **[5022]** and well **[5081]**). All species are represented by a variety of parts, a small proportion of which offer age and size data. The majority if not all of this collection could be interpreted as food waste, here perhaps including the equid remains. There is unfortunately very little evidence for butchery, restricted to superficial chops observed on a cattle scapula and radius and a heavier chop to an equid radius. The latter evidence strongly suggesting the food use of at least a proportion of the equids represented at this site.

8.10.2 A single partially articulated cattle skeleton was found at the base of ditch **[5047]**. As almost all parts are present and as there is no evidence pertaining to scavenger activity (dog gnawing and/or dismemberment), it can be conjectured that this represents the remains of a complete carcass which had been covered/buried shortly after deposition. However, while complete, there is some rather unusual butchery. Both tibias had been chopped and snapped through at about the midshaft. In fact it would appear that both tibias had been

chopped at least twice, approximately parallel blows (the one higher up the shaft from anterio-medial and the lower chops from anterio-lateral) some 2 to 3 centimetres apart. There is some new breakage in the midshaft sections of these bones but while certainly part of the same tibias, the remaining proximal and distal halves do not fit together. There is the possibility that the central part of these bones between the parallel chop marks (and presumably the accompanying flesh) had been removed. Clearly the severed parts of the lower hindlimbs were then added to the rest of the carcass prior to burial. The mandibular and limb bone fusion data suggest this animal was no older than about 9 to 12 months; while certain aspects of the pelvis clearly show that it was a male (ox or bull).

8.11 Medieval/Post-medieval

8.11.1 A small number of bones were recovered from medieval furrows, which clearly postdate this period but are not necessarily medieval in origin. These essentially include a hand collected component consisting of single cattle and sheep/goat fragments accompanied by six sheep-size indeterminate pieces taken from a bulk sample. Otherwise there was a cattle tibia shaft piece from the 'sheep dipping pond' **[5055]**, dating to the later post-medieval era. This was clearly from a rather large animal and could therefore provide coincidental dating evidence. While size was not a prerequisite of the domestic stock 'improvements' dating to the 18th and 19th centuries, archaeological evidence does appear to suggest an increased number of notably larger animals entering the food market from the latter part of the 18th century (see Rielly, forthcoming and Rixson, 2000, 215). This same feature also provided a small fragment of human cranium, taken from fill **(5042)**. The poor state of preservation of this bone suggests a certain level of redeposition.

8.12 Undated

8.12.1 A proportion of the deposits included under this general heading are unstratified reference contexts However, others are simply 'undated' and a thorough review of the stratigraphic and dating evidence may occasion their entry into the occupation sequence. A notable aspect of this collection is the good representation of equid bones, here including a potential semi-

articulation taken from deposit **(5010)**, comprising the atlas, axis and four other cervical vertebrae. In addition, a small cattle-size indeterminate fragment from subsoil **(2002)** is of interest as it has clearly been sawn. This would suggest it is likely to date to the late post-medieval era, the use of this utensil for butchery purposes tending to date from the latter part of the 18th century (Albarella 2003, 74).

8.13 Conclusions

8.13.1 This collection is well preserved although tending towards a moderate to high level of fragmentation. The great majority of the bones were taken from Romano-British levels, here undoubtedly corresponding to the noted settlement located to the immediate west. Various ditches and pits, as well as the corn dryer provided rather minor quantities of animal bones, with the obvious exception of the near complete cattle skeleton from boundary ditch **[5047]**. The assemblage which can be interpreted as food waste is clearly rather minimal, the available information merely indicative of the exploitation of cattle, sheep/goat and pig with insufficient evidence regarding exploitation methods or indeed the size of the respective domesticates. Yet there is at least one interesting aspect – the butchery noticed on one of the equid bones, clearly suggestive of the exploitation of equids at this rural site for their meat.

8.13.2 The cattle skeleton can be regarded as a placed deposit, clearly of some significance to the local populace at this time. It could represent no more than the deposition of a diseased and therefore 'unfit for consumption' animal placed in a convenient ditch and then covered/buried. However, it is known that so-called ABGs (associated bone groups), including anything from partial to complete articulations, are regularly found in Romano-British levels, obviously suggesting something other than the deposition of unwanted carcasses (see Morris 2008). In addition, this particular example is rather unusual, here referring to the butchery practised on both tibias. Butchery has been observed on other ABGs but these are essentially cut marks associated with the production of partial articulations rather than damage wrought to complete skeletons (ibid, 297). It was suggested that the butchery may in fact suggest the removal of a small mid section of each tibia. As the skeleton is

complete it is highly likely that this represents the burial of a complete carcass, the mid sections therefore including flesh and bone. The other possibility, that this animal was actually cooked (spit roasted?) is unlikely considering the presence of the lower limb bones which would surely have been removed prior to roasting.

8.13.3 The later collections (medieval and post-medieval) are also rather small with information here limited to the potential late dating evidence suggested by the recovery of a large domesticate and one sawn fragment. There is no potential for the assemblage to provide anything new and is typical for the area. As such no further work is recommended.

9 DISCUSSION & CONCLUSIONS

9.1.1 The archaeological investigations undertaken revealed fringe activity associated with a multi-phased roadside settlement set within a rolling glacially formed landscape as it drops from the Cotswold Plateau to the east into the River Severn valley system. Whilst the main foci of the settlement remained untouched by the design of appropriate green space within the new development, these investigations helped to further document roadside settlement activity within the region and helped to further the previously stated research frameworks (see section 2). What follows is a synthesis of the works undertaken to provide a narrative of the site which is driven by the research aims of the project.

9.2 Prehistoric

9.2.1 The landscape is one which has been formed and dominated by former glacial activity (Benn & Evans 1998) with the earliest features revealed being palaeochannels. Although, not investigated directly, previous work along the Severn Valley has demonstrated from the Devensian Late Glaciation (*c*.13kya) the evolution of the system was a dynamic landscape (Macklin, Johnstone & Lewin 2005). Alternate flooding and channel cutting through seasonally unstable anastomising channels feeding meltwater from the declining glaciers to the north into the proto-riverine systems. This landscape then was one in which alluvial deposits accumulated seasonally, eroded in places and redeposited elsewhere as variations in seasonal discharge strength transited through the landscape. Although no direct archaeological features from these early periods were noted, worked flints of potential Mesolithic date helped identify a human presence within this swiftly changing landscape. Indeed this landscape, parallel and on the fringes to the Severn River floodplain is consistent with the believed preferred movements of such nomadic populations, allowing them to access a wide range of resources within a relatively small geographical extent and would have helped provide an easy and recognisable route to follow through the landscape (Cunliffe 2001; Darvill 2006).

9.2.2 The topography of the investigation area, formed in this early period has

clearly been demonstrated to have played a large part in the later activities, or more pertinent, lack of activities seen. The palaeochannel created a clay rich band through much of the development area and with the exception of the plateau in the west on the area of investigation the ground was prone to waterlogging and is likely to have been marginal in its use for much of the last 12,000 years.

9.2.3 Although no direct activity from the Iron Age was seen during the current phases of investigation, previous work (CA 2014) demonstrated that the main settlement foci in the west of the development area had probable Iron Age origins. The establishment of small rural settlements in the later Prehistoric period continuing into and through the Romano-British period is one which is well known within the region and beyond (Cunliffe 1991; Barber and Watts 2008; Holbrook 2006; Nichols 2014; Webster 2015; 2017). The geophysical results (AS 2014) demonstrated that the settlement area most likely formed a multi-phased settlement set within a semi-enclosed landscape comprising a whole series of apparent animal droves and enclosure pens present in the form of both ditches and pit alignments. This is comparable to a number of 'aggregated' open settlement sites of this period seen in Gloucestershire, Oxfordshire, Somerset, Hereford, Worcestershire and Wiltshire (Moore 2006; Moore & Holbrook 2007; Webster & Jackson forthcoming) as well as further afield in Leicestershire, Northamptonshire and Warwickshire to the north (Thomas 2011; Webster & Jackson 2015).

9.3 Romano-British

9.3.1 As discussed above the known settlement in the west of the development area is likely to have Iron Age origins and whilst this remains theoretical what is clear is that it continued in use and evolved throughout the Romano-British period. Trench 6 of the previous evaluation (CA 2014), located closest to the settlement area revealed material culture typical of rural settlement occupation. This becoming of further interest when compared to the low levels of artefatual material recovered during the later investigations. Previous studies, where a combination of the settlement foci and fringe areas have been examined such as to the immediate west in Ashchurch itself (Nichols

2008), Toddington, Gloucestershire (Coleman, Hancocks & Watts 2006), Saxon's Lode Farm, Ripple, Worcestershire (Barber and Watts 2008), Wilcote, Oxfordshire (Hands 1998), Church Farm, Worcestershire (Webster 2017) and Rugby Gateway, Warwickshire (Webster & Jackson 2015) have demonstrated that the 'domestic' material culture tended to remain in close proximity to the living area itself with the fringes containing more of the industrial and food production waste such as butchery, tanning and baking (Holbrook 2008; Webster & Jackson forthcoming).

9.3.2 The activities seen during the current investigations were primarily evidenced in Area A which, whilst still within the semi-enclosed fringe area of the settlement, contained a corn dryer, set within a small sub-enclosure, and to the south of this a well. The reduction of activity to the east is thought to primarily be due to the drop off the visible plateau into the wetter area associated with the earlier palaeochannel and clay rich geology.

9.3.3 However, it should also be noted that the corn-dryer was uncovered at a very shallow depth and may give an indication that any archaeology of a more ephemeral nature than stone structures or deep ditches had been truncated by modern ploughing. A similar situation being seen at Ball Mill, Grimley where investigations over a 40 year period demonstrated the scouring and destructive nature of 'sustainable' ploughing on sites of identical form and date where features such as ring ditches, gullies, post holes and pits were progressively destroyed till only the basal remnants of only the largest features remained (Webster 2017).

9.3.4 **Boundary ditches:** Two parallel ditches ran east from the centre of the settlement foci across the site. The northern most of these two parallel features terminated first and was recorded at a relatively shallow depth. The southern ditch continued further and notably varied in profile along its length, and was believed to be of at least two phases, based on the stratigraphy but not confirmed due to the lack of associated artefactual assemblage. It varied from a singular cut with a concave base to a cut with steeper sides and a flat base, with the concave recut in the top of the feature. The extension and/or

recutting of linear boundaries within this period being well documented and often believed to be associated with animal management (Ibid; Nichols 2008).

9.3.5 The corn dryer and associated enclosure was located to the east of this. In this area, the fill of the above boundary ditch contained a significant quantity of charcoal, suggesting rake out during the usage of the corn dryer. Similar to this being previously seen at Newport Street (Davenport 2015) and Kenchester (Webster & Jackson forthcoming).

9.3.6 The environmental assessment (See section 8) found concentrations of burnt wood with small quantities of grains and glumes of emmer/spelt wheat, burnt bone and some fragmented pottery. This being almost identical in make up to samples taken in association with the corn dryer itself. As such the stratigraphic nature of the site has demonstrated that the boundary ditch, and later recut pre-dates the construction and use of the corn dryer and associated sub-enclosure. However, these ditches were still extant in the landscape, albeit seemingly of less importance to keep defined during the active use of corn dryer.

9.3.7 **Corn-dryer and its construction:** The increase in this style of corn-dryer are associated with the increase in grain production and processing during the Romano-British period (Bradley et al. 2018; Hingley 1989; Holbrook 2008; Pelling 2013) and is comparable to other examples found within the region, for example at Foxes Fields, Stonehouse, Gloucestershire (CA 2013), situated approximately 23 miles to the south of Ashchurch, and Brockworth, Gloucestershire, further to the south (Catchpole & Chadwick 2012). The corn-dryer seems to have been strategically placed based on the topography and hydrology of the area to remain dry and still have good and easy access to water, whilst still away from the main foci of the settlement to the west where corn-dryers have been suggested as being a perceived fire risk (Cool 2006).

9.3.8 The construction of the dryer appears to have been completed in one phase. Both the ‘T’ end of the feature and the ‘platform’ area abutting to the west sit within the same sub oval cut, with no evidence for a recut, or any kind of preparation or alteration in order to categorize the western platform as a

second phase. The stones used to create the structure of the corn dryer were a combination of faced and unfaced locally sourced geology, included in the construction, but of a more alien nature were two fragments of reused mill stone which, given their size would have been prized possessions during their original use (Shaffrey 2006). The 'heath-robinson' nature of corn dryer construction, using both worked and unworked stone suggests that it was constructed out of what was available as opposed to having had material specifically sourced for it. This reuse of earlier building material having been seen elsewhere (Hands 1998; Catchpole & Chadwick 2012). A layer of sand was packed around the stones in the centre of the corn dryer, thought to aid in heat retention whilst also protecting the geology from being thermally shattered (Reynolds & Langley 1979). No evidence for a superstructure was recorded, and although it would be thought likely to have been set within a super-structure it is not uncommon for no associate features to be present. This has been previously discussed as suggesting that any associated structure was of such a temporal nature as to not leave any archaeological remains (Bradley et al. 2018; Pelling 2013).

9.3.9 It is suggested that the fills of corn dryers may relate largely to post-use back fill, with only the basal fills tending to relate to use (Davenport 2015; Pelling 2013). The basal fill of the corn dryer was charcoal rich, however the level of preservation was poor, limiting further identification of many of the inclusions beyond a basic level. The environmental assessment unsurprisingly concluded that this feature was used for the processing of crops, with the presence of barley and spelt/emmer wheat, along with some possible grains of rye.

9.3.10 The upper fill comprised predominantly unworked stones that were clearly of demolition rather than active use. Only the two basal courses of masonry were present, suggesting that the structure was collapsed in on itself and any potential robbing from the structure did not bother with those stones, either through awkwardness of access or their likely to have been most damaged by heat (Reynolds & Langley 1979). As discussed above, this feature lay very shallow and another possibility is that modern ploughing had caused much of

the damage, although no direct plough damage was seen in any of the extant stone, nor were large stones noted as having been 'dragged' away in the immediate vicinities.

9.3.11 **Corn-Dryer Enclosure:** Surrounding the corn dryer was the sub oval multi-phase enclosure, comprising three phases. An initial sub rectangular enclosure with an opening on the south side, a secondary phase which survived as an ephemeral curvilinear addition truncating the west side of the enclosure, and a third phase which added that of the second phase above. The latter two phases contained more frequent charcoal rakeout, although this is thought to be a result of where the opening of the corn-dryer lay and direction of raking out rather than anything else. Similar rake out fan patterns being seen elsewhere (Davenport 2015; Webster & Jackson forthcoming).

9.3.12 As with the palaeoenvironmental samples recovered from the southern boundary ditch and from within the corn-dryer itself the rake out material here contained significant amounts of burnt wood, cereals and chaff, with grains of spelt/emmer wheat recorded. Although, due to the degree of surface damage and fragmentation, potential for identification to species was limited. The degree of fragmentation is likely to be because of prolonged, repeated or high-temperature combustion, which would be synonymous with the process of corn drying.

9.3.13 The enclosure itself is believed to have served as a demarcation of the corn-dryer process, potentially also being to store materials for processing at the same time as seen in other examples (Bradley et al. 2018; Catchpole & Chadwick 2012; Webster & Jackson forthcoming). However it is clear that either at or near the end of its active usage, this boundary became less significant and was allowed to be infilled with raked out material, or, as with the southern part of the enclosure, allowed to naturally silt up.

9.3.14 **Other features:** Outside of the above enclosure, but postulated to be of a broadly contemporary date, a large discrete feature, interpreted as a well, due to its depth and profile compared to other examples (Webster & Jackson forthcoming). This had been situated, perhaps unsurprisingly, to truncate the

clay rich palaeochannel, which even to the present day is a natural conduit for the local water table. Due to health and safety considerations, this feature being outside any proposed building footing and in agreement with the LPA it was not fully excavated, and only the final phases of backfilling investigated. This feature, like most of the features seen in this area, had not been used for domestic waste and the artefactual remains recovered were minimal.

9.3.15 A later small pit truncated the uppermost infill of the well and yielded a high quantity of charcoal. Although without the chaff and grain concentrations present in the samples taken to the north.

9.3.16 At present it is thought that the well and corn-drying industry were contemporaneous, and that water was involved in this process. Wells often being present in close proximity to corn-dryers (Bradley et al 2018; Davenport 2015; Holbrook 2008; Webster & Jackson forthcoming).

9.3.17 **The wider context:** The proximity of this settlement to the main Roman Road system, and with it access to the main British hubs, specifically Gloucester, and probably Cirencester and Worcester, are likely to have had a major influence on the economic development and social identity. Both of which have been subject to much investigation and discussion over the years. Based on current studies, the placement of the site lies in the northern hinterlands of the *Dobunni*. Described as occupying a zone of innovation which easily assimilated with 'Roman' cultural identities and being seen to swiftly adopt their building techniques, lifestyle and material culture (Esmonde Cleary 2011). The region during this period has been one described as dispersed small towns, villa estates and compound settlements within an un-nucleated semi-enclosed landscape with a mixed, primarily arable based economy. The current area of investigation and associated settlement is typical of this and the adjacent road system, combined with the relatively close proximity of the River Severn to the west would have helped it in the distribution of agricultural surplus and goods to the major towns and ports.

9.3.18 Research in Worcester has long pressed its importance as a trading hub, particularly regarding cattle (Dalwood & Edwards 2004) and there has been

much discussion as to how far cattle was being sourced from. A study looking at the regional dietary chemical variations within cattle bones found within the city noted that the animals had been transported from much further afield than previously speculated (R Jackson Pers comms.). Whilst the ecofactual assemblage was too small to draw any conclusions regarding of this site being used specifically for animal husbandry. The layout of the various field boundaries, primarily seen in the geophysical survey are identical to sites of known animal farming and commercial exploitation (Webster 2017).

9.3.19 The corn-dryer oven demonstrates the process was industrial, at least on a small scale. It has been previously suggested that ovens of this type may have been in a multitude of usages, such as bread making, brewing and salt making (Darling 2012; Woodiwiss 1992), the presence of wood along with burnt crop within the rake out and fragments of quern both lend evidence towards bread being produced. Previous studies have noted crop waste have been used as fuel in these ovens (Taylor 1981), by contrast, here the percentage of wood to chaff suggests that if winnowing/threshing was taking place in the immediate area they were not using it to fuel the oven. Following on from this, the lack of chaff generally could suggest that the wheat and corn was being imported to this location already processed. It is possible to theorise with the presence of the grindstones that the bread was also in production although to what degree and if it was for local use or sale is unknown. As with the animal husbandry speculation, the quantities of material culture recovered were too low to draw concrete conclusions.

9.4 Medieval to post Medieval landscape

9.4.1 Due to the lack of artefactual material and the investigations being undertaken away from the foci of the settlement, it is not known when the settlement was abandoned although there has been no evidence to date that would suggest it continued into the post-roman period. Previous investigations to the west in Ashchurch itself demonstrating that the settlement there may have ended in the late 3rd or early 4th century (Nichols 2008). Documentary evidence first mentions the area in 969AD, where it is mentioned as part of an Anglo-Saxon charter bound where it is mentioned as a boundary point on the west side of

Teddington, spelt *Pæuintune,* interpreted as coming from the old English to mean something akin to 'Pæfen's settlement, farmstead or estate' (Smith 1964). It is not possible from this early charter to establish if any settlement was present although the line of the Romano-British road is mentioned twice, demonstrating that it at least remained in use (AAL 2014). The area is next mentioned in Domesday (1086AD) as *Pamintonie*, later anglicised to Pamington. However, this again gives little insight into the nature of the estate as it was included as part of the borough of Tewkesbury itself. The abbey at Tewkesbury, as it became in the late 11th Century (VCH 1968; Rudder 1779), was to play a very important part in the evolution and utilisation of the local landscape until the dissolution, and as a result much of the documentary and cartographic evidence are from the Abbeys own records. Ashchurch does not appear in any written sources, in its own right, until the 12th century where is appears as *Estchirche* referring alternatively as meaning either 'the church at the ash tree' or more likely 'the eastern church', being as it was *c*.4km to the east of the Abbey (Youngs 1979). Despite the presence of the church in the vicinity however there is still little suggestion of a settlement being present and neither documentary or archaeological studies have found anything that would suggest that the immediate area was already utilised by Tewkesbury Abbey for agriculture.

9.4.2 Ridge and furrow of probable medieval date is known throughout the region (Coleman, Hancocks & Watts 2006; Glove & Croft 2012; Holbrook & Juřica 2006; Priest and Dickson 2013; Watt 2011), and was seen to cover much of Areas A and B although ploughed flat and gives indications to the 'industrial' agricultural usage of the site. However, the presence of ridge and furrow does not necessarily mean that only pastural farming was taking place (Bowden 2006). Previous studies have suggested that on the shallow lime rich soils of the Cotswolds sheep were often used to help keep the soils fertile (Dyer 1995), feeding on stubble and fields left for fallow. The importance of the wool trade in the Cotswolds, especially in the latter part of the medieval period are well known (Hurst 2005) and Tewkesbury Abbey gained much of its wealth from such farming.

9.4.3 As with the earlier Romano-British period the proximity of the road system and River Severn would have greatly assisted in getting produce to market, be it through the Abbey at Tewkesbury, Gloucester, Bristol and beyond. The importance of river trade in the medieval period is well studied and the proliferation of new river ports and quays established at this time (Beteux 1996; Hurst & Miller 2008; Stamper 1994), even with the issues caused by various shallow sections and the tidal nature of the Severn. It is known that boats travelling down the Severn during the latter part of the medieval period grew quite large. One such example being excavated at Magor Pill, Gwent was recorded as measuring c.14m in length with a shallow draft and flat bottom (Nayling 1998). Documentary evidence from Tewkesbury Abbey, as well as the Abbey itself and the various richly constructed 'Wool' Churches of the region attesting to just how successful this venture became.

9.4.4 In the northeast corner of Area A, a deliberately constructed watering area and probable dipping pond was revealed with a stone ramp constructed on its eastern and northeastern edge of local Oolithic limestone to aid ingress and egress. Typical of previously seen sheep dips (Dyer 1995; Hurst 2005) of medieval and early-post medieval date it provides evidence of sheep utilisation on the site. Although it is believed likely that sheep were being husbanded on the site in the medieval period the sheep dip revealed is thought to be of later date. A probable 17th-century Royal farthing coin and thimble recovered from the base of this feature providing the main dating evidence.

9.4.5 The earliest known map of the area of investigation dates to 1768 and this, along with later maps shows that the area was in use as agricultural fields and, with the exception of the attempted straightening of the Tirle Brook in the early 19th century and the removal of field boundaries in the 20th century to accommodate the industrialisation of farming, little changed.

10 ACKNOWLEDGEMENTS

10.1 Pre-Construct Archaeology Ltd would like to thank Richard Vine of Linden Homes Western and Richard Gilmore of the Environmental Dimension partnership. PCA are also grateful to Charles Parry for their advice and for monitoring the work. The author would also like to thank the project team: Owen Batchelor, Yannis Kantaros, Ian Mackey, Susan Walker, Robin Weaver and James Webb. Illustrations were produced by Ray Murphy. Finds assessment was conducted by Märit Gaimster, Dr. Kevin Hayward and Jane Timby, and the palaeoenvironmental assessment was undertaken by Kevin Rielly and Kate Turner. The project was managed by Jonathan Webster, who was also responsible for the quality of the project. The report was proof read and edited by Tim Bradley.

11 BIBLIOGRAPHY

11.1 Printed Sources

AAL. 2014 *Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment*, Avon Archaeology Limited, Bristol

Albarella, U. 2003 *Tawyers, tanners, horn trade and the mystery of the missing goat*, in Murphy, P. and Wiltshire, E J. 2003 *The Environmental Archaeology of Industry,* Symposia of the Association for Environmental Archaeology, Oxford, pp. 71-86, **20**

AS. 2014 *Land off the A46, Ashchurch, Gloucestershire; Magnetometer Survey Report*, Archaeological Surveys Limited, Chippenham

Barber, A. and Watts, M. 2008 *Excavations at Saxon's Lode Farm, Ripple, 2001-2: Iron Age, Romano-British and Anglo-Saxon rural settlement in the Severn Valley*, Transactions Worcestershire Archaeological Society, **3**, Ser. 21, pp. 1-90

Bradley, R. Evans, J. Pearson, E. Richer, S. and Sworn, S. 2018 *Archaeological excavation at the site of the Hive, the Butts, Worcester,* Worcestershire Archives and Archaeology Service, Worcestershire County Council, Research Report **10**

Benn, D I. and Evans, J A. 1998 *Glaciers and Glaciation*, Arnold Publishing, London

Beteux, V. 1996 *Archaeological Assessment of Bewdley and Wribbenhall, Hereford and Worcester*. Hereford and Worcester County Archaeological Service, **298**

Bowden, M. 2006 The Medieval countryside, in Holbrook, N. and Juřica, J. (eds.) *Twenty-five years of archaeology in Gloucestershire. A review of new*

discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, **3**, pp. 167-87

Brown, D.H. 2011 *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum

CA. 2014 *Land South of A46, Ashchurch, Gloucestershire; Archaeological Evaluation*, Cotswold Archaeology, Cirencester, **14536**

Catchpole, T. and Chadwick, A M. 2012 *Archaeological investigations undertaken with the construction of the A417 Brockworth Bypass, Gloucestershire, 1990-1994*, Gloucestershire County Council Archaeology Service, Gloucester

CIFA. 2014a *Standard and Guidance for an Archaeological Excavation*, Chartered Institute for Archaeologists, Reading

CIFA. 2014b *Standard and Guidance for an Archaeological Watching Brief*, Chartered Institute for Archaeologists, Reading

CIFA. 2014c *Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology*, Chartered Institute for Archaeologists, Reading

CIFA. 2014d *Standard and Guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute of Field Archaeologists, Reading

Coleman, L. Hancocks, A. and Watts, M. 2006 *Excavations on the Wormington to Tirley Pipeline, 2000,* Cotswold Archaeology Monograph **3**, Cirencester

Cool, H E M. 2006 *Eating and Drinking in Roman Britain,* Cambridge University Press, Cambridge

Cunliffe, B. 1991 *Iron Age communities in Britain,* 3rd Edition, Routledge, London

Cunliffe, B. (ed.). 2001 *The Oxford Illustrated History of Prehistoric Europe,* Oxford University Press, Oxford

Dalwood, H. and Edwards, R. 2004 *Excavations at Deansway, Worcester, 1988-89, Romano-British small town to late medieval city*, CBA Research Report **139**, pp. 81-4

Darling, M. 2012 Stuffed dormice or tandoori chicken in Roman Britain, in Bird, D. (ed.). *Dating and interpreting the past in the Western Roman Empire. Essays in honour of Brenda Dickenson*, Oxford, pp. 346-57

Darvill, T. 2006 Early Prehistory, in Holbrook, N. and Juřica, J. (eds.) *Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004*, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, **3**, pp. 5-60

Darvill, T. and Gerrard, C. (eds.). 1994 *Cirencester: Town and landscape. An urban archaeological assessment,* Cotswold Archaeological Trust, Cirencester

Davenport, P. 2015 *Excavations at Newport Street, Worcester, 2005: Roman Roadside Activity and Medieval and Post-Medieval Urban Development on the Severn Floodplain*, Cotswold Archaeology & Worcestershire Archives and Archaeology Service, Cirencester

Dyer, C. 1995 Sheepcotes; evidence for medieval farming, *Medieval Archaeology,* **39**, 136-64

English Heritage. 2005 *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England*, English Heritage,

London

English Heritage. 2007 *Understanding the Archaeology of Landscapes: A Guide to good recording practice*, English Heritage, Swindon

English Heritage. 2011 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, English Heritage, London

Esmonde Cleary, S. 2011 *The Romano-British period,* in Watt, S. (ed.) *The Archaeology of the West Midlands; A framework for Research*, University of Birmingham, Oxbow Books, Oxford, pp. 127-47

Grove, J. & Croft, B. (eds.). 2012 *The Archaeology of South West England; South West Archaeological Research Framework,* Somerset Heritage Services, Somerset County Council, Taunton

Hands, A R. 1998 *The Romano-British Roadside settlement at Wilcote, Oxfordshire*: 1: Excavations 1993-96, BAR British Series **265**, Oxford

Hart, J. 2009 *Honeybourne to Wormington Natural Gas Pipeline: Worcestershire and Gloucestershire: Post-excavation assessment and updated project design*, Cotswold Archaeology, Cirencester, **08197**

HE. 2015 *Management of Archaeological Research Projects in the Historic Environment, (Morphe)*, Historic England, London

Heighway, C M. 1983 *The East and North Gates of Gloucester,* Western Archaeological Trust, Gloucester

Hingley, R. 1989 *Rural Settlement in Roman Britain*, Seaby, London

Holbrook, N. 2006 The Roman Period, in Holbrook, N. and Juřica, J. (eds.) *Twenty-five years of archaeology in Gloucestershire. A review of new*

discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, **3**, pp. 97-132

Holbrook, N. (ed.) 2008 *Iron Age and Romano-British agriculture in north Gloucestershire Severn Valley*, Bristol, Gloucestershire Archaeol Soc, Rep **6**

Holmes, E F. nd *Sewing Thimbles,* Finds research Group 700–1700, Oxford, Datasheet **9**

Hurst, D. 2005 *Sheep in the Cotswolds,* The History Press, Stroud

Hurst, D. and Miller, D. 2008 *River Severn; bank-side survey, Worcester to Tewkesbury,* Worcestershire Historic Environment and Archaeology Service, Worcestershire County Council, Worcester, **3039**

Macklin, M G. Johnstone, E. and Lewin, J. 2005 *Pervasive and long-term forcing of Holocene river instability and flooding in Great Britain*, The Holocene **15.7**, pp. 937-43

Manning, W H. 1985 *Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum*, British Museum Publications Limited, Dorset

Moore, T. 2006 The Iron Age, in Holbrook, N. and Juřica, J. (eds.) *Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004*, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, **3**, pp. 61-96

Morris, J T. 2008 *Re-examining associated bone groups from southern England and Yorkshire*, PhD Thesis, Bournmouth University

Morton, R. and Holbrook, N. 2007 Later pre-Roman Iron Age to sub-Roman period, in Jackson, R. and Dalwood, H. *Archaeology and aggregates in*

Worcestershire: a resource assessment and research agenda, Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, **1477** pp.101-11 (available online at www.worcestershire.gov.uk/home/wccindex/wcc-arch/wcc-archaeology-aggregates.htm)

Nayling, N. 1998 *The Magor Pill medieval wreck,* CBA Research Report **108**, cited in Jackson, R. and Dalwood, H. *Archaeology and aggregates in Worcestershire: a resource assessment and research agenda,* Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, **1477**

Nichols, P W. 2008 *An archaeological excavation on the A46 Ashchurch Railway Bridge, Ashchurch, Gloucestershire*, 2003, Gloucestershire County Council Archaeology Service, Gloucester, **477.76**

Nichols, P. 2014 *Greet Road, Winchcombe, Gloucestershire; Post-excavation analysis and reporting of archaeological evaluation and excavation*, Gloucestershire County Council Archaeology Service, Gloucester, **476.3.65**

PCA. 2015 *Land South of A46, Ashchurch, Gloucestershire; Written Scheme of Investigation for an Archaeological Excavation*, Pre-Construct Archaeology Limited, Market Harborough

PCA. 2018 *Land South of the A46, Ashchurch, Gloucestershire; Written Scheme of Investigation for an Archaeological Watching Brief*, Pre-Construct Archaeology Limited, Warwick

Pelling, R. 2013 *Stanley Meadow, Lower Woods, South Gloucestershire; Charred plant remains from a corn-dryer*, English Heritage, Portsmouth, Research Report Series **30-2013**

Perrin, K. et al. 2014 *A Standard and Guidance to Best Practice for*

Archaeological Archiving in Europe, EAC Guidelines 1, Europae Archaeologia Consilium: Namur

Priest, R. and Dickson, A. 2013 *Southeast Warwickshire and Cotswolds Higher Level Stewardship Target Areas: A Report to for the National Mapping Programme*, English Heritage and Gloucestershire County Council, Gloucester, **6053**

Reynolds, R J. and Langley, J K. 1979 *Romano-British Corn-Drying Oven: An Experiment,* Archaeol. J. **136**, pp. 27-42

Rielly, K. forthcoming *18th century evidence for cattle 'improvements' at Dickens Square*, *Southwark*, Pre-Construct Archaeology Limited, London

Rixson, D. 2000 *The History of Meat Trading,* Nottingham University Press, Nottingham

Rudder, S. 1779 *A New History of Gloucestershire,* reprinted with a new introduction by Nicholas Herbert, 2006, Nonsuch Books, Stroud, pp.234-7 cited in AAL 2014 *Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment,* Avon Archaeology Limited, Bristol

Shaffrey, R. 2006 *Grinding and Milling: A study of Romano-British Rotary Querns and Millstones made from Old Red Sandstone*, British Archaeological Reports, Oxford, **409**

Shaffrey, R. 2015 The Worked Stone, in Paul, S. and Hunt, J. *Evolution of a Community: The Colonisation of a Clay Inland Landscape. Neolithic to post-medieval remains excavated between 1995 and 2011*, Archaeopress, Oxford

Smith, A H. 1965 *The Place-Names of Gloucestershire, II: The North and West Cotswolds, English Place-Name Society*, Cambridge, **39** cited in AAL Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

Stace, C. 2010 *The new Flora of the British Isles*, 3rd edition, Cambridge University Press, Cambridge

Stamper, P. 1994 *The medieval river*, in Morriss, R K. (ed.). *The Shropshire Severn*, Shropshire Books, Shropshire, pp. 63-73

Taylor, J. and Brown, G. 2009 *Fieldwork Induction Manual: Operations Manual 1,* Pre-Construct Archaeology Limited, London, Unpublished internal document

Taylor, J. and Brown, G. 2018 *Fieldwork Induction Manual: Operations Manual 1,* Pre-Construct Archaeology Limited, London, Unpublished internal document

Thomas, J. 2011 *Two Iron Age 'Aggregated' settlements in the environs of Leicester. Excavations at Beaumont Leys and Humberstone*, Leicester Archaeology monograph **19**

Tomber, R. and Dore, J. (eds.). 1998 *The National Roman Fabric Reference Collection,* Museum of London, London, MOLAS monograph **2**

VCH. 1968 *Victoria History of the County of Gloucester*, Vol **8**, pp.172-88 (Ashchurch)

Vince, A G. 1983 The medieval pottery, in Heighway, C M. 1983 pp.125-61

Watt, S. (ed.). 2011 *The Archaeology of the West Midlands; A framework for Research*, University of Birmingham, Oxbow Books, Oxford. Also available at: http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/index.htm

Webster, C. (ed.). 2007 *The Archaeology of the South West Archaeological Research Framework Resource Assessment and Research Agenda*, Somerset Heritage Services, Somerset County Council, Taunton

Webster, J. 2017 *Archaeological investigations at Church Farm West, Ball Mill Quarry, Grimley,* Worcestershire Archives and Archaeology Service, Worcestershire County Council, Research Report **6**

Webster, J. 2018 *Fieldwork Operations Manual Regional Variation Addendum; Warwick,* Pre-Construct Archaeology Limited, Warwick, Unpublished internal document

Webster, J. and Jackson, R. 2015 *Excavation of a* Middle *Bronze Age, Iron Age and Romano-British settlement at Rugby Gateway,* Rugby*, Warwickshire,* Worcestershire Archives and Archaeology Service, Worcestershire County Council, **2064**

Webster, J. and Jackson, R. forthcoming *The development of the Roman Roadside Suburb east of Kenchester, Herefordshire: Investigations on the Yazor Brook Flood Alleviation Scheme (2010-11)*, Worcestershire Archives and Archaeology Service, Worcestershire County Council, **2028**

Woodiwiss, S. (ed.). 1992 *Iron Age and Roman salt production and the medieval town of Droitwich*, CBA Research Report **81**

Worssam, B C. et al. 1989 *Geology of the country around Tewkesbury,* British Geological Survey Publications, London

Young, C J. 1977 *The Roman pottery industry of the Oxford region,* British Archaeological Reports, Oxford, **43**

Young, F A. 1979 Guide to the Local Administrative Units of England, Vol. 1: Southern England, Royal Historical Society, cited in AAL 2014 Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

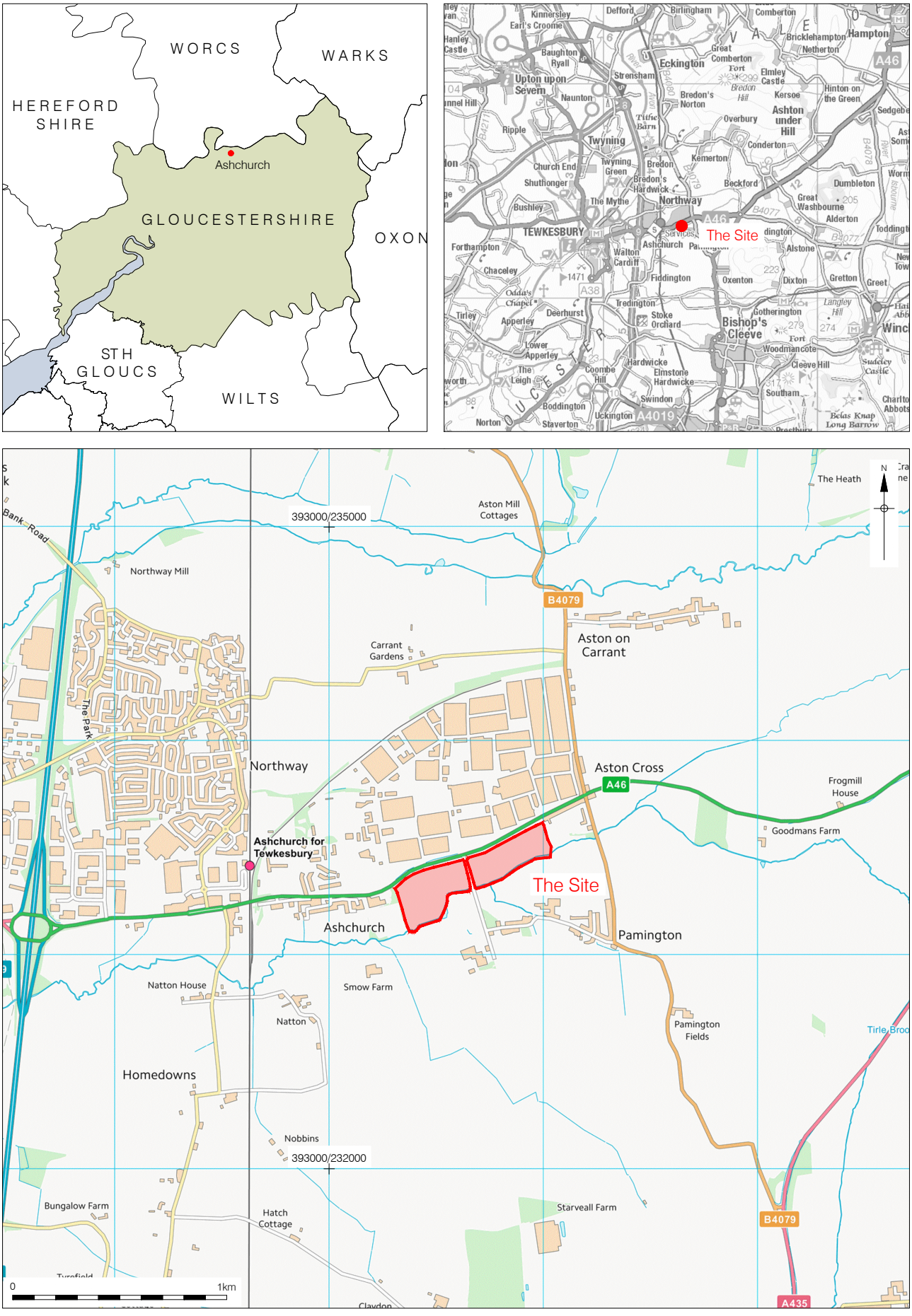
11.2 Websites

1) British Geological Survey (Date accessed: 23/01/2019)

www.bgs.ac.uk

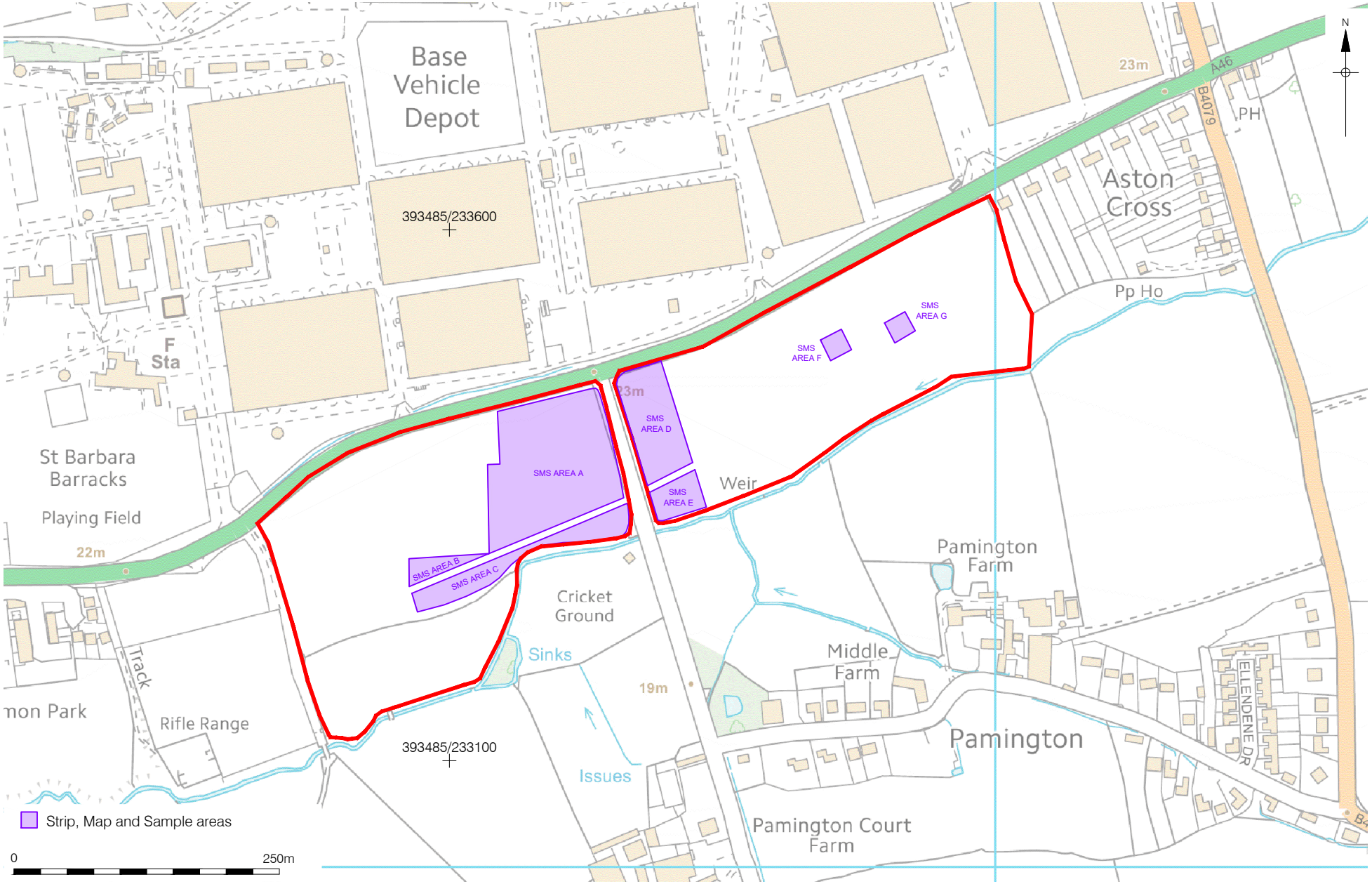
2) Landis: Land information system (Date accessed: 23/01/2019)

www.landis.org.uk



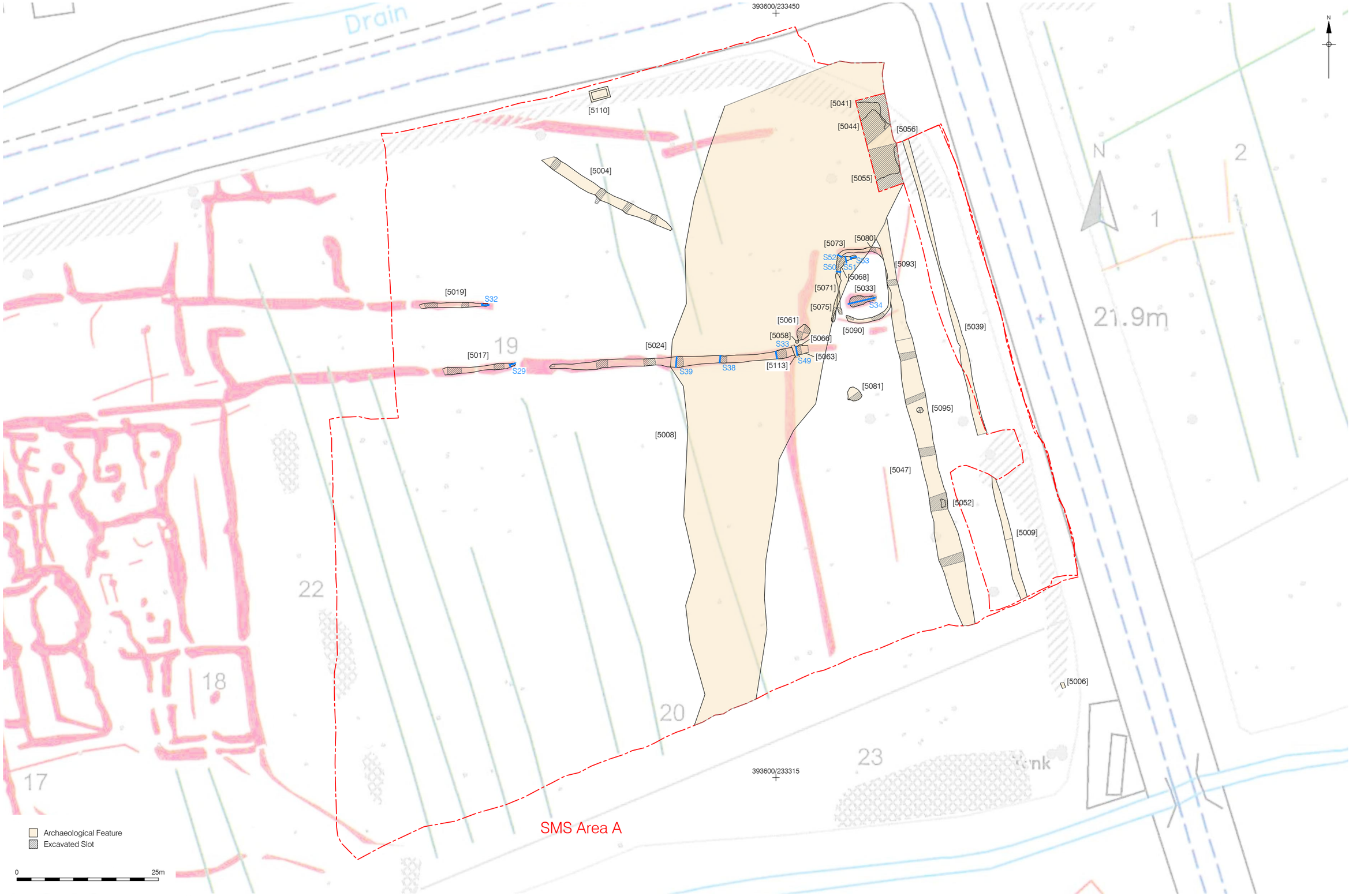
08/08/18 MS

Figure 1
Site Location
1:1,250,000 & 1:250,000 & 1:25,000 at A4



08/08/18 MS

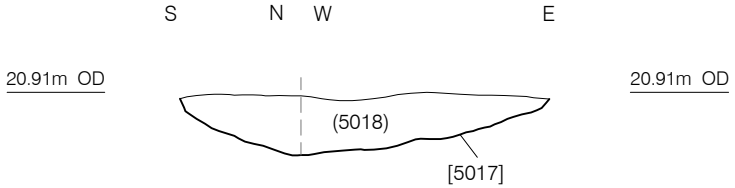
Figure 2
Excavation Areas
1:500 at A4



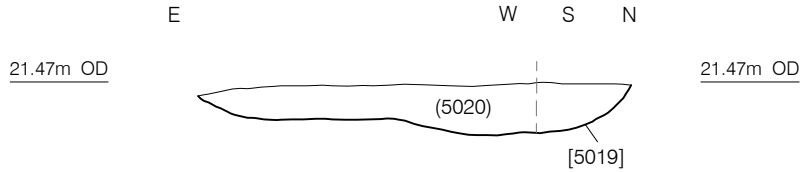
Geophysics survey supplied by Archaeological Surveys Ltd

08/08/18 MS

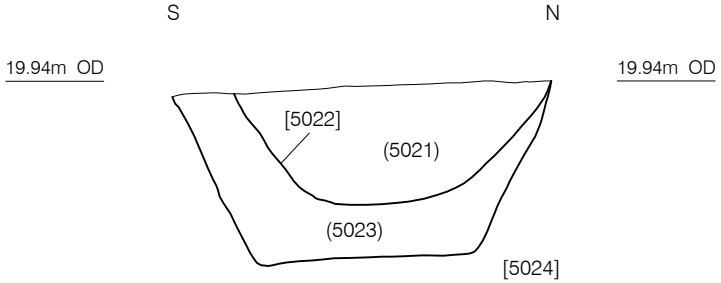
Figure 3
All Features over geo-physical Survey
1:625 at A3



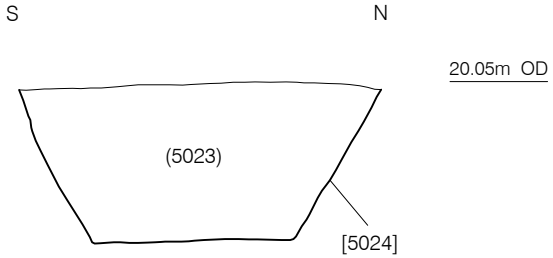
Section 29
East and South Facing



Section 32
North and East Facing

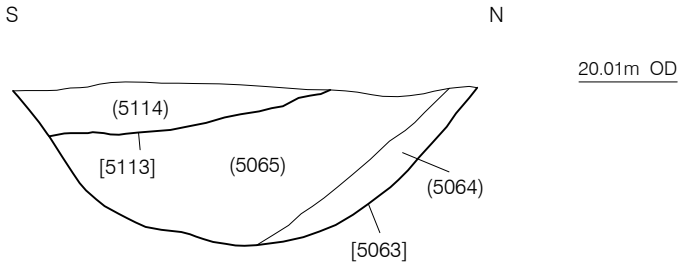


Section 33
East Facing



Section 38
East Facing

Section 39
East Facing

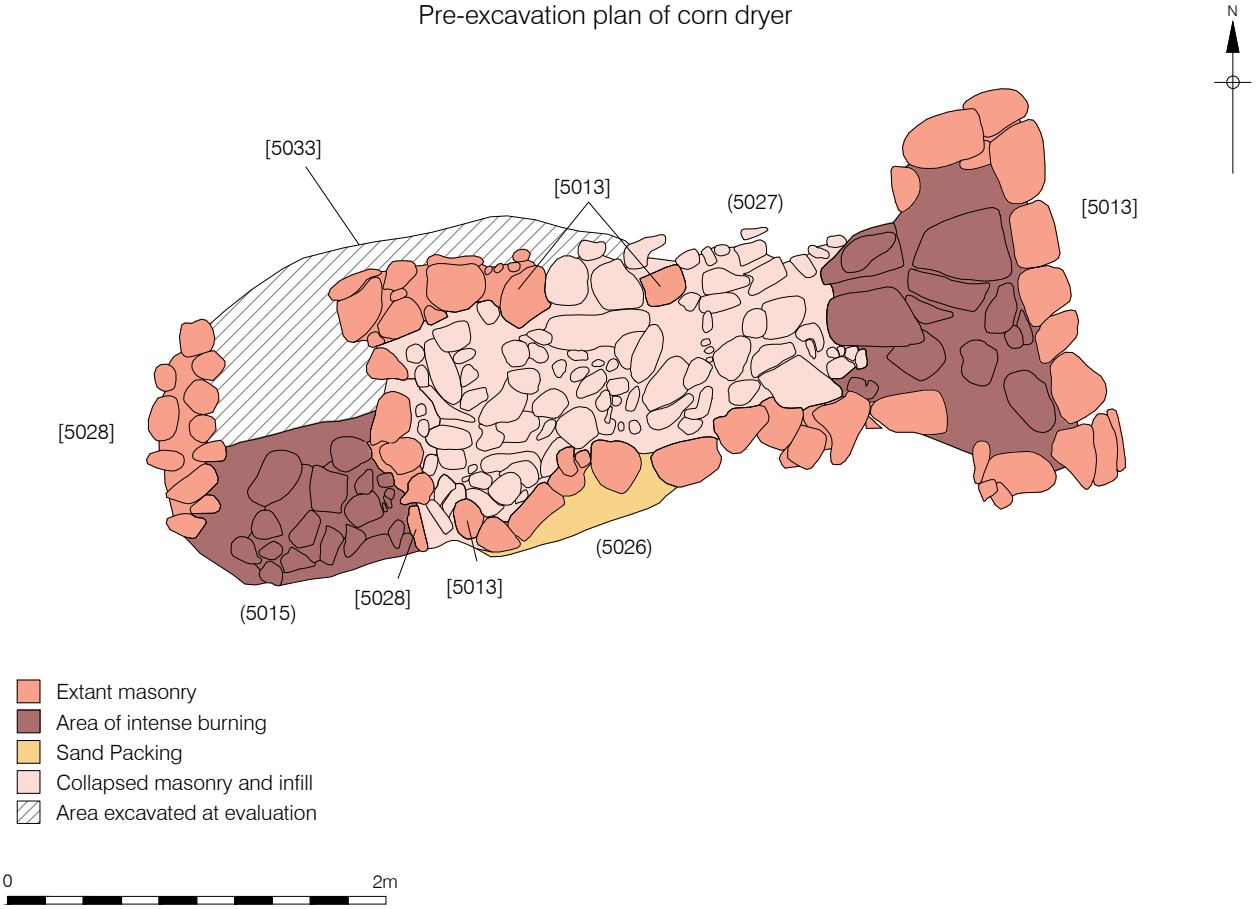


Section 49
East Facing

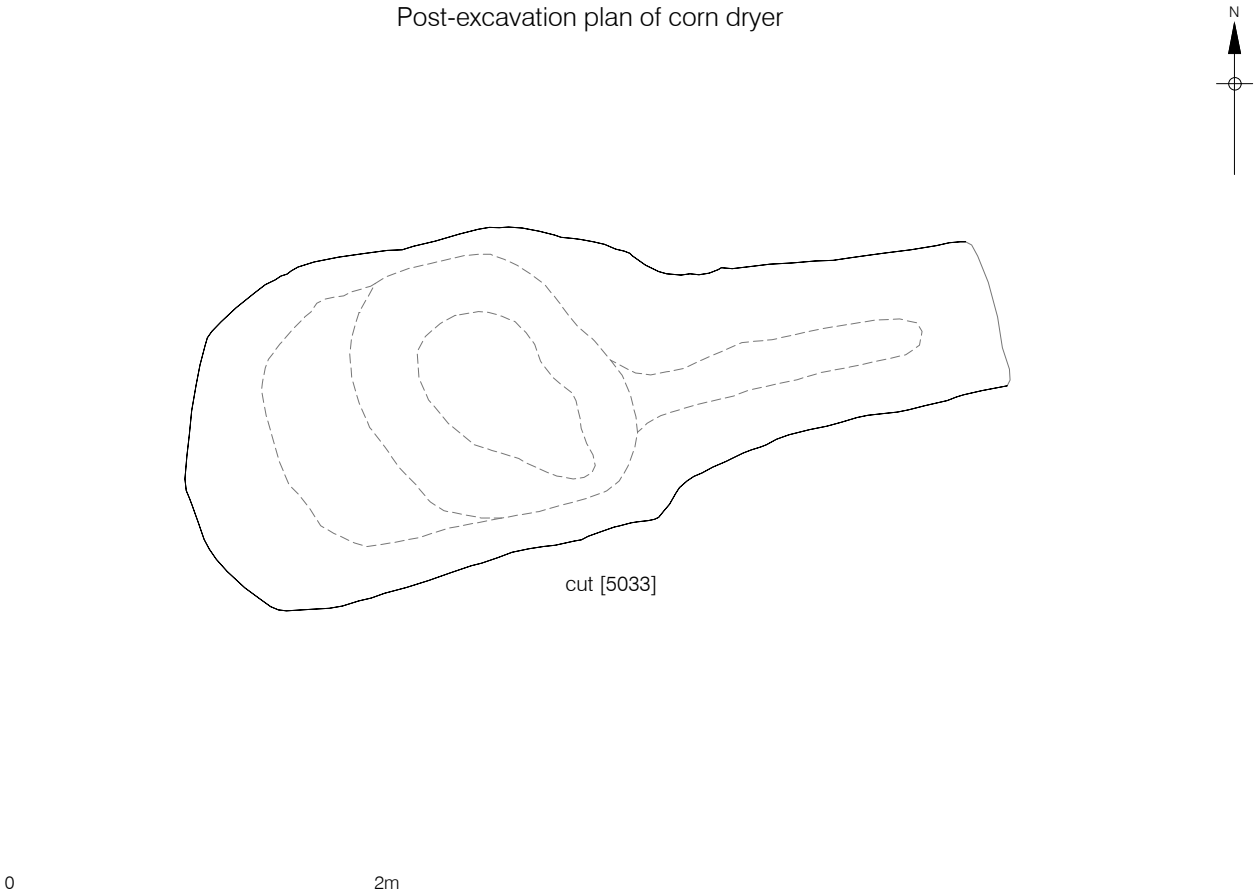
30/07/18 MS

Figure 4
Sections 29, 32 , 33, 38, 39 and 49
1:25 at A4

Pre-excavation plan of corn dryer

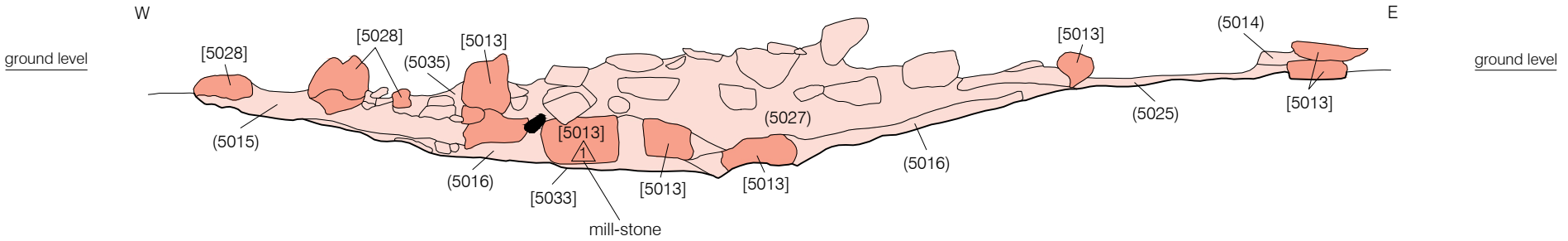


Post-excavation plan of corn dryer



08/08/18 MS

Figure 5
Pre and post excavation plan of T-shaped corn dryer
1:40 at A4



Section 34
South Facing

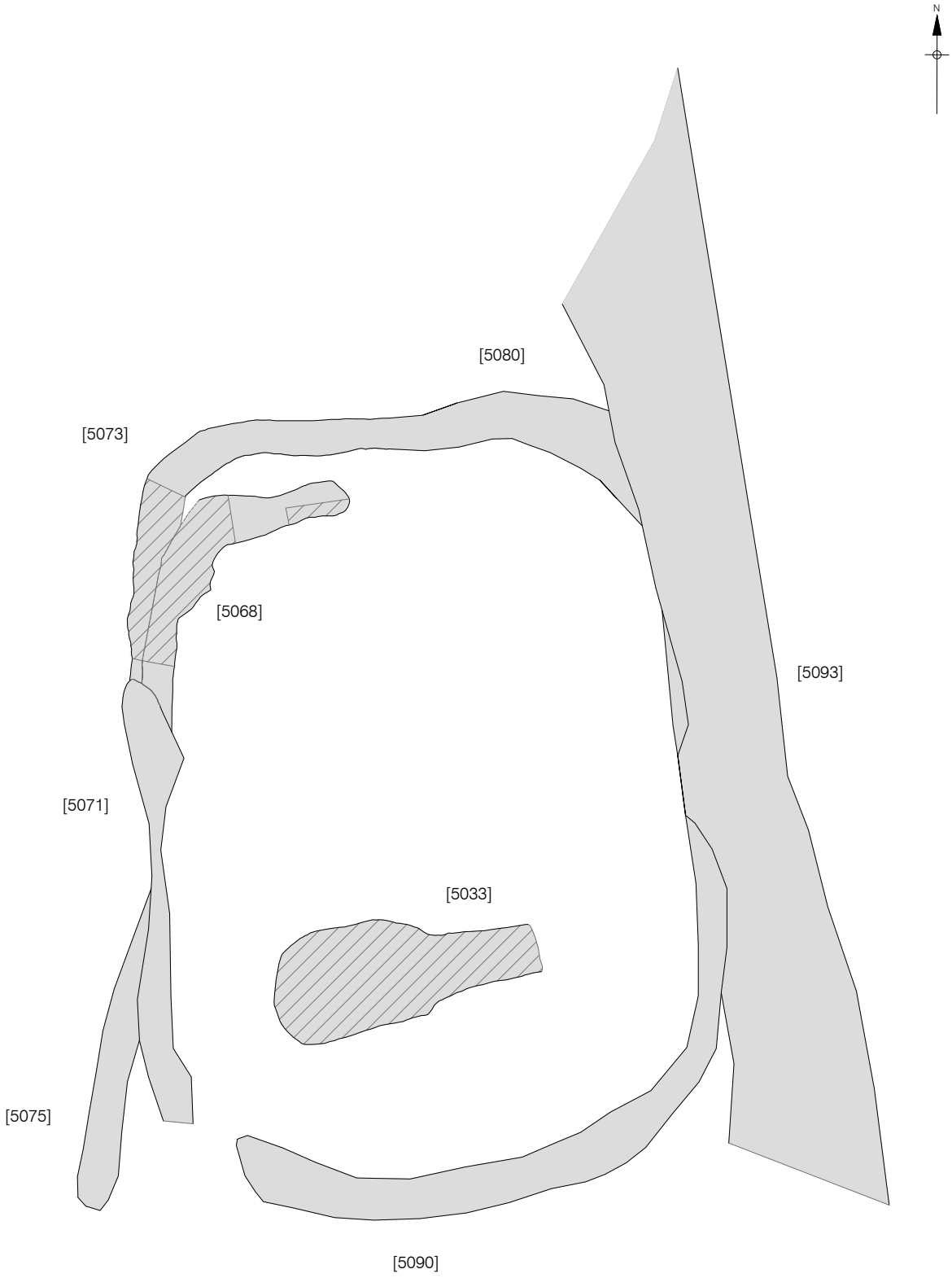
Section 76
South Facing

Extant masonry
Collapsed masonry and infill
Pottery

0 1m

30/07/18 MS

Figure 6
Sections 34 and 76
1:25 at A4

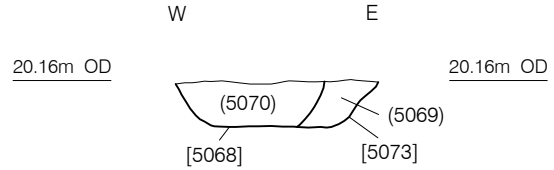


Archaeological Feature
Excavated Slot

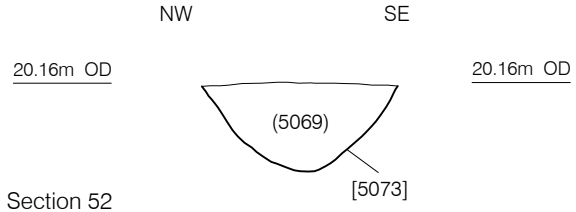
0 4m

08/08/18 MS

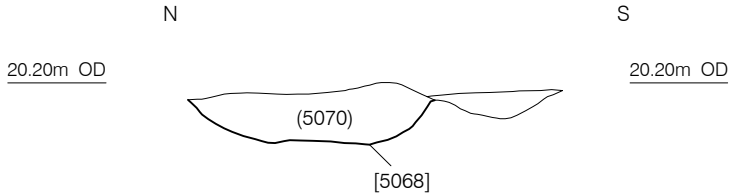
Figure 7
Ditched enclosure surrounding corn dryer
1:100 at A4



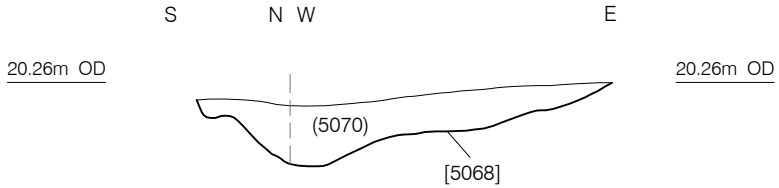
Section 50
North Facing



Section 52
Southwest Facing



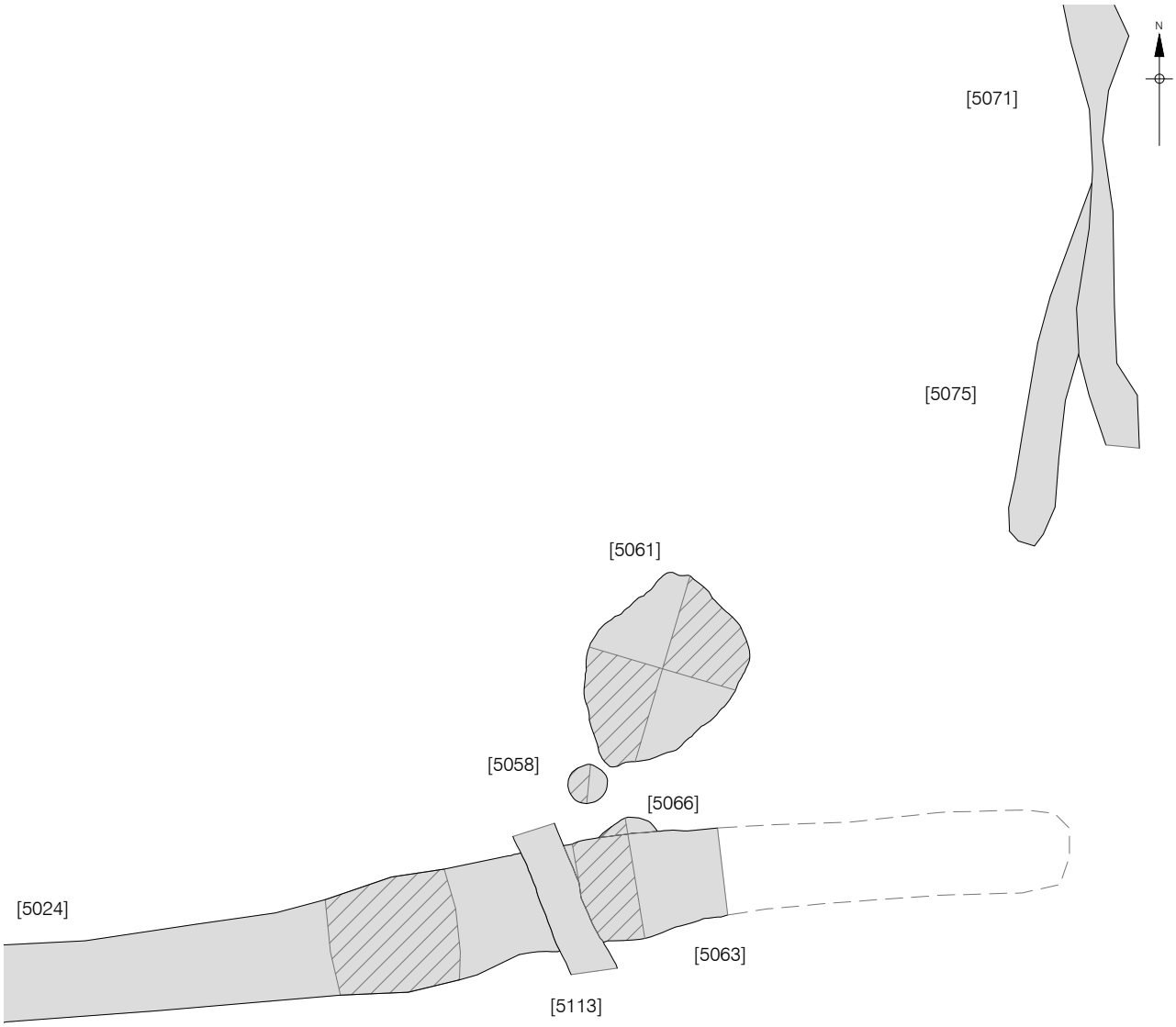
Section 51
West Facing



Section 53
East and South Facing

30/07/18 MS

Figure 8
Sections 50 - 53
1:25 at A4



Archaeological Feature
Excavated Slot

0 4m

08/08/18 MS

Figure 9
Plan of pits [5061], [5066] and [5058] interacting with ditch [5063]
1:100 at A4

12 APPENDIX 1: PLATES

Plate 1; Corn-Dryer 5033, facing west. Scale 1m.

Plate 2; West facing section of 5024, facing east. Scale 1m.

Plate 3; Pit 5061, facing south. Scale 2x 1m.

Plate 4; Southeast facing section of 5063, facing northwest. Scale 1m.

Plate 5; South facing linear 5068.

Plate 6; Pit 5081, facing southeast. Scale 2m.

Plate 7; Linear 5090, facing west. Scale 1m.

Plate 8; Stone ramp of sheep dipping pond 5045, facing east. Scale 2x 1m.

Plate 9; Articulated sheep carcass, facing east. Scale 1m.

13 APPENDIX 2: CONTEXT INDEX

AREA A				
Context Number	**Context Type**	**Description**	**Thickness**	**Discussion**
5000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
5001	Layer	Moderate dark grey brown silty clay frequent rooting and biomass moderate small to medium stones	0.28-0.35m	topsoil
5002	Layer	Moderate compaction mid to light yellowish brown silty clay occasional irregular stones	0.28-0.35m	Subsoil
5003	natural substrate	Moderate compaction light blueish grey clay	N/a	natural substrate, underlying entire site
5004	Cut	NW-SE to NNW-SSE linear L=23.0m SLOT A gradual at E side sharp at W concave base W=2.2m gradual E side sharp W side W=1.63m SLOT C moderate E side gradual W side irregular flat base W=1.6m SLOT D gradual E side moderate W side flat base W=1.74m	0.25-0.42m	Possible palaeochannel
5005	Deposit	Firm to moderately firm yellowish brown to greyish orange silty clay occasional gravel and occasional chalk flecks	0.25-0.42m	Natural sedimentation
5006	Cut	N-S linear in plan moderate sides "V"-shaped profile L=10.0m W=0.62m; filled by (5007)	0.22m	Geological feature or palaeochannel
5007	Fill	Moderately compact mid orangey grey silty clay no inclusions	0.22m	Geological feature or palaeochannel

5008	Cut	Northwest to southeast aligned irregular profiled linear L=entirety of Area A W=about 16.0m	0.86m	Palaeochannel; known from geophysics
5009	Cut	N-S linear in plan L=more than 10.0m Moderate to sharp and imperceptible sides a concave base W=1.50-2.10m	0.22-0.30m	Agricultural furrow
5010	Deposit	Firm to moderate mid grey with orange mottling to orangey brown silty clay occasional small to medium stones occasional charcoal	0.22-0.30m	Natural sedimentation
5011	Deposit	Friable reddish brown sandy silt occasional small to medium stones L=entirety of Area A W=about 16.0m	0.86m	Fill of 5008 Palaeochannel; known from geophysics
5012	Void context			
5013	Masonry	Yellow and red sandstone Maximum size 350-500mm x 200-250mm x 200mm Minimum 75-150mm x 100-150mm x 150mm finished 1-3 courses no bond "T"-shaped E-W orientated L=3.70m W= 1.1-2.2m. Largest stones used in deeper central area; 2 fragments of a mill stone also used	N/a	Basic structure of corndrier; see also 5028
5014	Deposit	Firm dark brownish grey silty clay moderate charcoal; overlay 5013	0.10m	Fireplace for corndrier; sample 02

5015	Deposit	Firm compaction mid greenish black-brown silty clay moderate charcoal occasional sandston and frequent pebbles that are fire affected, occasional other stones not affected, inclusions sorted to the upper and lower interfaces 1.10m x 1.75m; overlay 2013, underlies 2028	0.15m	Fireplace for corndrier; sample 01
5016	Deposit	Plastic dark brownish grey silty clay frequent charcoal and occasional burnt sandstone pebbles and possible burnt reddish clay/pot L=2.9m W=1.3m	0.20-0.25m	Sample 03
5017	Cut	NW-SE linear SLOT A sharp at the top with gradually sloping sides to a concave to flat base W=1.32m SLOT B concave moderate sides to a concave base W=1.05m SLOT C moderate concave sides to a concave base	0.15-0.19m	Ditch terminating in Slot C
5018	Fill	Firm to moderate mid grey with orange mottling to mid grey brown silty clay occasional charcoal in [5017] Slot A, moderate stones and occasional pea grit generally	0.15-0.19m	naturally sedimented fill of linear feature [5017]

5019	Cut	NW-SE linear L=c.12.0m SLOT A moderate at top imperceptible towards the concave base W=0.71m SLOT B sharp at top gradual to a concave base W=1.0m SLOT C sharp at top imperceptible towards the base	0.17-0.25m	Ditch terminating in Slot C
5020	Fill	Firm compaction mid grey brown silty clay occasional small to medium stones	0.17-0.25m	Natural sedimentation
5021	Fill	Firm dark brownish grey to mid-dark brown with blackish yellow hue and yellowish grey streaks silty clay frequent charcoal flecks occasional red sandstone possibly worked W=1.80m	0.38m	fill of recut ditch, charcoal rich indicates backfilling could be related to corn dryer
5022	Cut	E-W linear sharp at the top moderate to a flat to concave base W=1.8m; cuts (5023)	0.38m	Re-cut of [5024]
5023	Fill	Firm mid brownish grey silty clay occasional charcoal occasional CBM flecks occasional pot occasional pea grit W=1.8m	0.44-0.56m	Natural sedimentation
5024	Cut	E-W linear W= 1.50-1.80m SLOTS A & B steep sides sharp to base to near flat SLOT C sharp at top gradual to sharp to a concave base SLOT D moderately steep sharp towards the concave base W=1.10m SLOT E Terminus sharp sides to a flat base, unclear relationship with terminus of [5097] slot C	0.44-0.56m	Boundary ditch

5025	Fill	Firm compaction mottled greyish brown with midbrown silty clay occasional small stones occasional charcoal E-W=0.90m, N-S-0.80m; overlays [5033], underlays masonry 5013	0.10m	Bedding for corndrier; probably same as or contemporary with (5016)
5026	Fill	Firm light orangish brown silty sand occasional sandstone fragments (max 20mm) occasional charcoal flecks frequent other stones	0.05m	Sand packing around the outside of the corndrier's structural stones, [5013]
5027	Fill	Firmly compacted light yellow brown silty sand with stone fragment inclusions, and occasional charcoal flecks	East - West - 1.25m North - South - 0.60m -1.0m	Fill of corn dryer, forming central flue, forming a 'bowl' in the centre of [5013], deepest part of feature
5028	Masonry	Sandstone, Maximum size 250-300mm x 200mm x 200mm Minimum 120mm x 70mm x 80mm unfinished, no coursing, no bond. Unfaced stones. Truncated by previous archaeological invervention. Immediately adjacent to corn dryer [5013].	East - West 1.10m, North-South at least 1.40m.	Well defined area of the corndryer, and not a subsequent construction. Contained within [5013], possibly a burning area or fireplace, possibly relating to a phase of modification or maintenaince
5029	Fill	Moderately compact mid grey brown silty clay. Occasional charcoal flecks and irregularly sorted gravel.	Width - 1.05m Length - unknown total length Depth - 0.30m	Single fill of linear feature [5030]. Likely to be naturally sedimended, no finds retrieved
5030	Cut	Linear feature, sharp sides, probable concave base. East to West orientation	Width - 1.05m Length - unknown total length Depth - 0.30m	Cut of linear feature, possible boundary ditch.
5031	Cut	Linear feature, irregular sides, and concave base. North west to South east orientation.	Width - 1.38m Length - unknown total length Depth - 0.38m	cut of medium sized ditch, possible enclosure

5032	FIll	Moderately compacted mid grey silty clay with orange mottling	?	fill of ditch , naturally sedimented over time.
5033	Cut	Oval in plan, with a linear aspect to east side. East and west sides gradual, north and south sides gradual, and moderately steep in the centre. Concave base, with slightly inclined flat 'platforms' to the east. East to west orientation	East - West - 4.30m North - South - 0.78m	Foundation cut of corn dryer [5013], and associated potential fireplaces
5034	Cut	Terminus with concave base and gradually sloped sides. North west to south east orientation.	0.54m wide 0.2m deep	cut of possible entrance to enclosure ditch
5035	Fill	firmly compacted greenish grey brown silty clay, occasional charcoal flecks and pea-grit.	depth 0.15m (recorded in section)	deliberate backfill deposit, possibly associated with rake out from the corn dryer. Possibly residual from previous archaeological invervention
5036	Void context			
5037	Fill	Firmly compacted mid brown sandy clay, occasional charcoal and rounded pebbles	width - 0.78m depth - 0.34m	naturally sedimented fill of agricultural furrow [5038]
5038	Cut	linear in plan, sharp sides at top and base, north to south orientation. Ceramic land drain at base.	width - 0.78m depth - 0.34m	cut of agricutlrual furrow
5039	Cut	linear in plan, moderately irregular sides at top and base, north to south orientation.	width - 1.17m depth - 0.33m	cut of agricutlrual furrow

5039	Cut	linear in plan, sharp sides at top and more gradual base, north to south orientation.	width - 1.15m depth - 0.24m	cut of agricutlrual furrow
5040	Fill	moderately compacted light greyish brown silty clay. White stone flecks	width - 1.15m depth - 0.24m	Fill of agricultural furrow, formed via a natural silting process.
5041	Cut	Incomplete in plan but sub-oval overall, moderate-gradually sloping edges, around 30 to 40 degrees. Base is broadly flat, with minor undulations		Construction cut for possible sheep dipping pond or watering hole; probably same as or functional with [5055]
5042	Fill	Firmly compacted light brownish grey fine sandy silt with a yellow hue in places. Occasional grit and small stones, less than 2% of overall fill.	width - 3.38m seen in section depth - average 0.32m	fill of sheep dipping pond or waterhole, likely to be sedimented over time.
5043		void context		
5044	Masonry	red and white limestone, roughly cut with aound 10% of stones being faced,1 course, quite irregualrly laid, to form a irregular square shape in plan. No bonding, although some crushed CBM and small stones packing in between.	north - south - 2.9m east - west - 4.0m	external access slope to sheep dipping pond or watering hole
5045	Fill	Soft light blueish grey with yellowish hue and whiteish yellow streaks silty clay occasional pea grit occasional charcoal flecks	0.25m	Natural siltation; watterlogging
5046	Fill	Firm orangery brown silty clay occasional pea grit occasional pebbles occasional charcoal W= 3.33m	0.18m	Fill of furrow [5093] Slot D

5047	Cut	Linear in plan, N-S in orientation SLOT A moderate sides concave base with undulation W = 3.00m D = 0.47m SLOT B gradual sides irregular flat base W = 3.14m D = 0.36m SLOT C steep sides concave base W = 2.50m D = 0.43m SLOT D gradual east side moderate west side concave base W 2.40m D = 0.45m SLOT E gradual with step to east flat base	0.36-0.47m	Field boundary
5048	Fill	Compact Mid orangey brown with yellowish hue silty clay occasional pea grit	0.47m	Natural sedimentation
5049	void context			
5050	void context			
5051	Fill	Moderate greyish brown silty clay occasional pea grit occasional chalk flecks	0.36m	Natural sedimentation
5052 and 5053	Fill and ABG	Soft mid orangey brown with a yellowish hue silty clay and occasional sandy lenses	Not given	backfill of ditch, with mammalian inhumation placed at the base of ditch
5054	Fill	Soft mid grey with orange mottling silty clay occasional chalk flecks	0.20m	secondary fill of terminus, possibly natural sedimentation
5055	Cut	Incomplete in plan but probably rectangular with rounded corners, one seen, sharp at top, sides and base not seen; dimensions = <5.50m x <4.20m	At least 1.58m	Construction cut for sheep dipping pond or watering hole; not fully excavated; Same as [5041]

5056	Fill	Firm light orange-yellowish brown with greyish blue mottling to greyish orange silty clay occasional chalk fleck, small-large rounded stones and CBM fragments, occasional biomass including wood; overlies (5057), (5095), (5102) and (5103)	1.09m	Natural sedimentation; medieval to post-medieval finds
5057	Fill	Firm dark reddish brown with orange hue and occasional streaks of pale blueish grey clay and siltoccasional large pebbles and small pebbles of sandstone, sorted to top; dimensions = at least 2.10m x 0.42m; located only to north of <5044>, overlies (5042), underlies (5056)	0.11m	Deliberate backfill
5058	Cut	Circular in plan, steep to moderate concave sides, flat base, Diam = 0.63m	0.20m	Small pit adjacent to boundary ditch [5063]
5059	Fill	Moderately firm dark grey silty clay frequent small cobbles, frequent charcoal	0.20m	fill of a small pit [5058], possible deliberately backfilled with some waste from corndryer [5013]
5060	Fill	Firm mid grey with a reddish orange hue and yellowish orange streaks silty clay no inclusions; dimensions L = < 10.00m, W = 1.10m	0.36m	Natural siltation
5061	Cut	Oval in plan shallow concave sides with concave base diametre = 2.28-3.00m	0.17m	Refuse pit
5062	Fill	Soft mid grey with orange mottling silty sand occasional chalk and charcoal flecks, pot- and bone-rich	0.17m	Deliberate backfill
5063	Cut	Linear in plan moderately steep concave sides with a concave base NW-SE orientation W = 1.54m, L = at least 3.00m	0.52m	Field boundary ditch; forms continuous boundary with [5022, 5024, 5030, 5031, 5034]

5064	Fill	Moderately firm mid grey-orange silty clay occasional chalk and charcoal flecks W = 0.12m	0.50m	Natural slumping from possible bank on north side
5065	Fill	Moderately compact dark grey with orange mottling silty clay frequent chalk and charocal flecks W = 1.55m	0.52m	Backfill, possibly from corndrier <5013>
5066	Cut	Circular, truncated, shallow concave sides with a flat base W = 0.82m	0.09m	Small pit, cut by ditch [5063]
5067	Fill	Loose light grey with orange mottling silty clay frequent charcoal flecks	0.09m	Deliberate backfill
5068	Cut	Curvilinear/"L"-shaped in plan, moderately steep sides flat base, undulates, L = <6.00m, W = 0.90m max, ENE-WSW then N-S orientated, trunc by furrow [5071]	0.22m	Possible "rake-out" ditch associated with charcoal waste from corndrier <5013>; cuts fills of [5073] and [5080], which enclose the corndrier and = [5077] & [5090]
5069	Fill	Firm pale grey with orange mottling silty clay occasional small stones, occasional charcoal flecks; fill of [5073]	0.30m	Natural siltation
5070	Fill	Firm pale grey-to-greyish orangey grey silty clay occasional small cobble of (?) sandstone, occasional sandstone pebble and gravel-sized stones, occasionally fire cracked, frequent charcoal; W = 0.50m	0.16-0.21m	Charcoal- and finds-rich, formed by natural siltation and "rake-out" of material from corndrier <5013, 5028>
5071	Cut	Linear in plan, sharp break at top with moderate sides to irregular flat base, W = 0.81m	0.17m	Agricultural furrow, filled by (5072) and (5078), natural siltation deposits
5072	Fill	Firm orangey brown silty clay no inclusions	0.12m	Fill of furrow [5071]
5073	Cut	Curvilinear moderately steep sides with a rounded "U"-shaped profile, truncated by [5068], L = at least 4.00m, W = 0.65m	0.29m	Same as [5077] and [5080]

5074	Fill	Moderate dark greyish brown silty clay frequent charcoal, occasional pot, occasional gravel, occasional organic material	0.08m	Possibly same as (5070)
5075	Cut	Linear, N-S orientation, terminates in Slot B. SLOT A sharp at top moderately steep sides to near flat base W = 0.48m, L = < 1.0m,truncated by furrow [5071]; cuts (5076), overlies [5077] SLOT B terminus, sharp at top, moderate sides, gradual slope from terminus, W = 0.60m	>0.12m	Terminus of "rake-out" channel, overlies and truncates enclosure [5073], which does not appear to the south
5076	Fill	Firm pale greyish brown silty clay no inclusions W = at least 0.50m; cut by "rake-out" [5075] Slot A	0.21m	fill of linear [5077], formed by natural silting
5077	Cut	Linear in plan moderately steep concave sides rounded concave-flat base, W = at least 0.50m, L = 2.0m, NNE-SSW oriented, truncated at top by [5075], filled by (5076)	0.21m	Enclosure ditch, associated with corndrier <5013, 5028>
5078	Fill	Firm mid orangeish brown silty clay no inclusions W = 0.81m	0.17m	Fill of furrow [5071]
5079	Fill	Firm greyish orangey brown with managese flecks silty clay occasional small stones occasional sandstone pebbles moderate pea grit, occasional charcoal; fills [5080]	0.22m	Naturally deposited, probably from spoil heap or bank
5080	Cut	Curvilinear in plan, E-W to N-S orientations moderately steep sides with a moderate break to a flat base, W = 0.50-0.80m, truncated by furrow [5093] to east	0.22m	Same as [5073] and probably [5090]
5081	Cut	Circular in plan, steep to vertical sides, base not seen, diametre = 2.03m; filled by (5082) and (5083)	1.47-1.60m	Not fully excavated; cut of well

5082	Fill	Moderately firm mid grey with orange streaks clay occasional small charcoal and chalk flecks, W = 1.38m	0.64m max	Not fully excavated; formed of natural siltation and may be primary deposit
5083	Fill	Moderately firm mid grey with orange flecks silty clay occasional small charcoal and chalk flecks; W = 2.03m	0.90m max	Deliberate backfill; finds-rich, dates disuse
5084	Cut	Circular moderately steep sides, concave to a concave base; diametre = 1.07m; cuts (5083)	0.31m	cut of a small pit, cut into the top of a disused well (5083)
5085	Fill	Moderatly firm mid grey silty clay frequent charcoal flecks; W = 0.92-1.07m	0.31m	Natural siltation
5086	Cut	Sub-circular with irregular outline, sharp at the top, moderate sides to a concave base W = 2.20m; cuts (5056), filled by (5087)	0.37m	Undated pit in post-medieval pond deposit
5087	Fill	Firm mid orangeish brown snady silt and clay no inclusions, diametre = 0.80-0.90m; fills [5056]	0.37m	fill of small undated pit [5086]
5088	Fill	Firm compaction greyish orangey brown silty clay occasional gravels, occasional pea grit, occasional sandstone pebbles, occasional charcoal, W = 0.97m, L = <3.00m	0.12m	General spread
5089	Fill	Firm greyish orangey brown silty clay occasional charcoal, occasional pea grit, occasional sandstone pebbles, occasional fragments of bone and ceramic, W = 0.80m max, L = at least 5.0m	0.21m	General spread

5090	Cut	Curvilinear, terminates in Slot A at the west, 1.80m from [5075 & 5077], truncated by furrow [5093] at Slot C. SLOT A E-W orientation, moderately steep moderate break at base, flat base with a slightly deeper norther side, W = 0.97m, SLOT B curvilinear NE-SW orientation, steep near vertical sides moderate to sharp break at base, flat concave base, W = 0.80m, SLOT C Curvilinear N-S orientation, moderately steep side, truncated on east side by furrow [5093] Slot A, flat broad base at least 0.35m wide, W = 0.61m, L = 0.50m survives in slot	0.12-0.21m	Same as [5080] and [5073] in plan; forms enclosure around corndrier <5013, 5028> in conjunction with [5077]
5091	Fill	Firm orangey brown silty clay moderate pea grit W = 0.74m, L = >2.00m	0.05-0.06m	Natural siltation of agricultural furrow [5093] Slot A
5092	Fill	Firm greyish orangey brown silty clay occasional pea grit occasional sandstone pebbles occasional ceramic crumbs; W = upto 0.55m, L = more than 5.00m	0.18m max	Upper fill of bifurcating agricultural furrow; natural siltation
5093	Cut	Linear in plan,bifurcates in Slot A, N-S to NNW-SSE orientation, moderate to gradual sides, flat concave bases; W = 1.00m (Slot B) - 3.33m (Slot D)	0.14-0.18m	Agricultural furrow; filled by (5091), (5092), (5100), (5104), (5107), natural siltation deposits
5094	Fill	Firm greyish orangey brown with a distinct greyish charcoal affected area, sorted to the west side, silty clay occasional burnt ceramic flecks, occasional to moderate charcoal flecks occasional pea grit, W = 0.61m	0.16m	Natural siltation; brunt ceramic inclusions indicate that it was formed during the use period of the corndrier <5013, 5028>
5095	Fill	Firm mid to dark grey clay occasional charcoal and biomass, L = upto 9.00m	0.49m	

5096	Fill	Firm greyish orangey brown, mottled with orangey brown silty clay occasional pea grit occasional charcoal; W = 1.18m, L = at least 4.0m	0.20m	Possibly overlying [5063] - unclear relationship.
5097	Cut	Linear in plan, E-W (Slots A & C) and N-S (B & D) orientation, terminates in Slots B and D, corners 90 degrees in Slot B. SLOT A Moderately steep at top, stepped profile with moderate rounded break at concave flat base, W = 1.18m, SLOT B steep to vertical sides sharp at flat level base, W = 0.64m, truncated by furrow [5093] Slot B, SLOT C gradual sides, concave base, W = 1.18m	0.20-0.22m	Possibly overlying [5063] - unclear relationship Also relationship with [5047] not certain
5098	Fill	Moderately firm dark brown silty clay occasional chalk flecks occasional small rounded and sub-rounded stones; fills pit [5099]	0.08m	Natural sedimentation
5099	Cut	Circular, gradually sloping to a flat base, W = 0.92-1.08m; cuts fill of furrow (5046)	0.08m	Undated pit, post-medieval to modern
5100	Fill	Firm greyish mid brown silty clay moderate pea grit occasional small stones; fill of [5093] Slot B	0.22m	Natural sedimentation
5101	Fill	Firm greyish orangey mid brown silty clay moderate pea grit, W = 0.64m	0.22m	Natural sedimentation
5102	Fill	Soft light blueish grey with yellowish hue and reddish brown mottling silty clay occasional gravels and pea grit, occasional CBM fragments, dimensions = 2.50m; overlies <5044> N-S, underlies (5056),	0.10m max	Not fully excavated; primary silting of surface <5044>
5103	Fill	Firm to stiff grey brown clay occasional pea grit excavated dimensions	0.24m	Located at the eastern edge of pond cut [5055],

		= 0.90m E-W		underlies (5056); formed by natural siltation
5104	Fill	Moderately firm light brown with a yellowish hue and blueish grey streaks silty clay occasional charcoal flecks occasional pea grit, L = at least 9.0m, W = 1.84m; fill of [5093] Slot D	0.26m	Natural siltation of furrow
5105	Fill	Firm light mid brown with a yellowish hue and occasional streaks of blue-grey silty clay occasional pea grit occasional chalk, W = 2.20m, L = more than 20m; upper fill of [5047] Slot D	0.28m	Formed by natural processes
5106	Fill	Firm light-mid blueish grey silty clay occasional pea gravel, W = 1.26m; fill of [5047] Slot D	0.12m	Slumping
5107	Fill	Light greyish brown with blueish grey lenses silty clay occasional charcoal flecks occasional pea grit	0.18m	fill of furrow
5108	Fill	Firm light blueish grey with orangey hue silty clay; fill of [5047] Slot E	0.10m minimum, maximum 0.042m	fill of [5047], field boundary/ditch
5109	Fill	Soft light brown with light yellowish hue and blueish grey streaks silty clay occasional charcoal flecks; fill of [5017] Slot D	0.24m	Natural silting
5110	Masonry	Concrete; fills [5012]		concrete footing for modern building, several breeze blocks in situ above concrete, removed while machining, rough, compacted hard core base
5111	Fill	mid orange brown sandy silt, Fills [5110]		shallow fill of modern concrete footing
5112	Cut	Rectangular in plan, vertical at top, not excavated, E-W orientation; Cut for	Unknown	Cut for concrete modern foundation <5010>

		<5010>, filled by (5111)		
AREA B				
7000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
7001	Layer	Firmly compacted, greyish brown silty clay. Occasional unsorted rounded stones	Maximum 0.35m	Topsoil
7002	Layer	Firmly compacted orange brown silty clay. Occasional pea-grit and small irregular stones	Maximum 0.25m	subsoil
7003	Layer	Firmly compacted light grey clay, with patches of grey orange brown clay. Frequent pea-grit	N/A	Natural substrate
7004	Fill	Firmly compacted greyish brown silty clay, with orange brown mottling. Frequent pea grit and occasional charcoal flecks	Width - 1.58m maximum Depth - 0.44m Length - minimum 5m	Fill of [7005] agricultural furrow
7005	Cut	Linear feature, gradually sloping sides, gradual break of slope on east edge, moderately sharp on west, flat, slightly concave base. North north west to south south east orientation	Width - 1.58m maximum Depth - 0.44m Length - minimum 5m	Agricultural furrow
7006	Fill	Firmly compacted greyish orange brown silty clay, moderate pea-grit and occasional charcoal flecks	Width - 0.5m to 0.6m Depth - not observed Length - minimum 5m	Fill of [7007] probable agricultural furrow
7007	Cut	Linear feature, North north west to south south east orientation	Width - 0.5m to 0.6m Depth - not observed Length - minimum 5m	Agricultural furrow

AREA C				
6000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
6001	Layer	Loose dark greyish brown silty clay occasional rooting and charcoal flecks	0.25-0.30m	Topsoil; disturbed by root action.
6002	Layer	Firm mid greyish brown silty clay occasional manganese staining occasional pea grit	Not recorded	Subsoil
6003	Natural Substrate	Firm light blueish grey silty clay pea gravel at interface with (6002)	N/a	
AREA D				
2000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
2001	Topsoil	Moderately firm mid dark grey brown silty clay frequent roots biomass moderate medium to small gravel stones	Average 0.30m	Disturbed by root action.
2002	Deposit	Moderate compaction mid to light yellowish brown silty clay (10:90) occasional stones and flint occasional charcoal	0.22m	Subsoil
2003	Natural Substrate	Firm light blueish grey clay with occasional orangeish grey patches frequent pea grit	N/a	
2004	Fill	Moderately firm light yellowish brownish grey silty clay (10:90) occasional CBM crumbs occasional charcoal animal tooth; fill of [2005]	0.14m	Natural sedimentation
2005	Cut	E-W Linear in plan sloping sharply at top falling gradually to a concave base L= 38.50m, W=1.14m	0.14m	Modern feature; cuts agricultural furrows

2006	Cut	E-W Linear in plan sloping sharply at top gradual to concave base L=38.50m, W=0.95m	0.30m	Same as [2005]
2007	Fill	Firm light yellowish brown grey silty clay occasional CBM or burnt clay occasional charcoal; fill of [2006]	0.30m	Natural sedimentation
AREA E				
1000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
1001	Layer	Loose to moderately firm mid to dark greyish brown silty clay occasional small gravel stones frequent rooting	Average 0.30m	Topsoil
1002	Layer	Moderately firm mid to light yellowish brown clay with silt occasional stones	Average 0.70m	Subsoil/alluvium
1003	Natural Substrate	Moderately firm light blue grey clay with mottled areas and patches of orangey brown silt frequent small gravels unsorted	N/a	
AREA F				
3000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
3001	Layer	Loose dark reddish brown silty clay	0.30m	Topsoil
3002	Layer	Friable mid to light yellow brown sandy clay occasional pebbles and pea grit	Average 0.23m	Subsoil

3003	Natural Substrate	Friable light blue grey silty with patches of bright yellowish orange silt occasional pea grit	N/a	
3004	Cut	SLOT A NNW-SSE Linear in plan imperceptible to gradual sides shallow concave base, W=1.74m SLOT B NNW-SSE Linear Sharp at the top imperceptible to gradual sides to concave to flat base W=0.50m SLOT C NNW-SSE linear and possible terminus sharp at top imperceptible to concave base, diffuse SSE side W=0.52m SLOT D NNW-SSE linear imperceptible to gradual at top and sides to sloping flat base W=0.96m	0.20m max	Possible palaeochannel
3005	Fill	Friable Light to mid orangey brown silty clay occasional gravel or pebble	0.13-0.20m	Natural sedimentation
AREA G				
4000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
4001	Layer	Moderate dark greyish brown silty clay frequent rooting and biomass moderate medium and small stones occasional charcoal	0.31-0.34m	Topsoil
4002	Layer	Moderate mid to light greyish brown silty clay occasional small to medium stones occasional charcoal	0.31m	Subsoil

4003	Natural Substrate	Firm light blueish grey clay with occasional yellowish orange bands frequent gravels	N/a	
4004	Cut	NNE-SSW to N-S linear L= 18.0m SLOT A gradual sloping sides concave base W=2.2m SLOT B gradual to irregular base W=2.5m SLOT C gradual sides concave base W=1.67m SLOT D gradual at the top and imperceptible towards the irregular base W=1.02m	0.10-0.30m	Possible palaeochannel or agricultural furrow
4005	Fill	Friable to firm pale greenish to mid to light yellowish brown silty clay Occasional small stones, rooting at edges	0.10-0.30m	Natural sedimentation

Service Route				
8000	Unstratified	N/a	N/a	Unstratified finds located around trench area.
8001	Layer	Moderate dark greyish brown silty clay frequent rooting and biomass moderate medium and small stones occasional charcoal	0.21-0.34m	Topsoil
8002	Fill	Moderate mid to light yellowish brown silty clay occasional small rounded gravels and occasional charcoal throughout	0.30m	Fill of [8004]

8003	Layer	Mid orange brown silty clay occasional small to medium gravels throughout. Cut by 8004	>0.12m	Subsoil
8004	Cut	N-S linear with moderately steep sides descending onto concaved base. 0.84m in width. Filled by 8002. Truncates 8003	0.30m	Linear
8005	Fill	Firm mid orange brown silty clay Occasional small gravels throughout	0.30m	Fill of 8008
8006	Cut	NE-SW aligned linear with moderately steep sides dropping imperceptibly onto a concaved base. Truncates 8003, Filled by 8007	0.29m	Linear
8007	Fill	Mid orange brown silty clay with occasional small rounded gravels and moderate charred animal bone and charcoal flecks throughout	0.29m	Fill of 8006
8008	Cut	N-S linear with vertical to moderately steep U-shaped profile dropping onto a concaved base. Filled with 8005, truncates 8003	0.31m	Linear

14 APPENDIX 3: POTTERY

Cxt	Fabric	Name	Form	Wt	No	Rim	Eve	Comment
1002	CBM/FC	ceramic building material/fired clay		40	7	0	0	
1002	SVWOX	Severn Valley ware (oxidised)		26	5	0	0	
2002	Glos 52	Herefordshire Border ware		92	3	0	0	
2002	Glos 52?	Herefordshire Border ware		16	1	0	0	
2002	PM	post-med		97	12	0	0	china, stoneware, slip, glazed
2002	PMCBM	post-med cbm	roof tile	193	6	0	0	
2002	PMCBM	post-med cbm	brick	246	10	0	0	
2002	SVWOX	Severn Valley ware (oxidised)	jar	53	4	1	7	
2002	SVWOX	Severn Valley ware (oxidised)	jar	23	0	1	7	
2002	SVWOX	Severn Valley ware (oxidised)	bowl	27	0	1	7	
2002	SVWOX	Severn Valley ware (oxidised)		1	1	0	0	
3002	Glos 52	Herefordshire Border ware		6	3	0	0	
3002	Glos 52?	Herefordshire Border ware		5	1	0	p	
3002	PMCBM	post-med cbm		0.25	1	0	0	
5000	Glos 52	Herefordshire Border ware		6	1	0	0	
5000	PMCBM	post-med cbm		49	1	0	0	
5001	BWSY	black sandy ware		2	1	0	0	
5001	DORBB1	Dorset black burnished ware	flanged bowl	45	0	1	9	
5001	PMCBM	ceramic building material	brick	44	1	0	0	
5001	SVWOX	Severn Valley ware (oxidised)		21	2	0	0	x1 burnt stone
5002	DORBB1	Dorset black burnished ware	flanged bowl	42	0	1	10	
5002	Glos 19	Malvernian ware	flared rim jar	34	0	1	6	
5002	Glos 52	Herefordshire Border ware	cistern bunghole	36	1	0	0	
5002	PMGL	post-med glazed		3	1	0	0	
5002	PMSLIP	pmed slipped ware		30	2	0	0	x1 sandstone
5002	SVWOX	Severn Valley ware (oxidised)		324	16	0	0	
5010	PMGRE	post-med glazedred earthenware		5	1	0	0	
5010	SVWOX	Severn Valley ware (oxidised)		8	4	0	0	
5015	BWSY	black sandy ware		8	1	0	0	
5015	FC	fired clay		5	2	0	0	
5015	Glos 19	Malvernian ware		52	4	0	0	
5015	SHELL	shelly ware		29	3	0	0	hm
5016	Glos19	Malvernian ware	everted rim jar	339	22	6	52	1 vessel
5018	DORBB1	Dorset black burnished ware		14	4	0	0	just oblique
5018	SVWOX	Severn Valley ware (oxidised)		37	4	0	0	
5021	DORBB1	Dorset black burnished ware		24	6	0	0	
5021	FC	fired clay		25	4	0	0	

Cxt	Fabric	Name	Form	Wt	No	Rim	Eve	Comment
5021	SVWOX	Severn Valley ware (oxidised)		246	11	0	0	
5021	SVWRE	Severn Valley ware (reduced)	curved-wall dish	58	4	1	5	
5021	SVWRE	Severn Valley ware (reduced)	rolled rim jar	38	0	1	10	
5023	BWSY	black sandy ware		6	1	0	0	
5023	POT/FC	pot/fired clay		5	3	0	0	
5023	SVWOX	Severn Valley ware (oxidised)		11	2	0	0	
5023	SVWRE	Severn Valley ware (reduced)		5	1	0	0	
5045	OXFRS	Oxon red-slipped ware	Young C51 flanged bowl	63	2	0	0	
5045	OXIDF	fine oxidised ware	beaker	1	0	1	7	
5045	SVWOX	Severn Valley ware (oxidised)		5	2	0	0	
5045	SVWRE	Severn Valley ware (reduced)		4	1	0	0	
5046	DORBB1	Dorset black burnished ware		5	1	0	0	
5046	GYSY	grey sandy ware		1	1	0	0	
5046	PM	post-med		1	1	0	0	
5046	PMCBM	post-med cbm		4	3	0	0	
5046	SVWOX	Severn Valley ware (oxidised)		17	6	0	0	
5053	Glos 52?	Herefordshire Border ware		1	1	0	0	
5053	SVWOX	Severn Valley ware (oxidised)		36	4	0	0	
5056	CBM/FC	ceramic building material/fired clay		12	2	0	0	?post-med
5056	Glos19	Malvernian ware		29	1	0	0	
5056	PMCBM	post-med cbm		29	1	0	0	
5056	PMGL	post-med glazed		10	3	0	0	
5056	PMGRE	post-med glazedred earthenware		34	1	0	0	x2 stone
5056	SVWOX	Severn Valley ware (oxidised)		5	2	0	0	
5057	PMCBM	post-med cbm		25	1	0	0	
5059	LEZSA	Central Gaulish samian		1	1	0	0	
5062	DORBB1	Dorset black burnished ware	plain-walled dish	13	0	1	9	
5062	Glos19	Malvernian ware		12	1	0	0	
5062	GYSY	grey sandy ware		6	1	0	0	
5062	SVWOX	Severn Valley ware (oxidised)	everted rim jar	47	2	1	2	
5065	STONE			0	0	0	0	X2 pieces - burnt
5065	SVWOX	Severn Valley ware (oxidised)	jar	11	1	1	5	
5070	SVWOX	Severn Valley ware (oxidised)	jar base	282	8	0	0	pre-firing X on base
5074	Glos 19	Malvernian ware		15	1	0	0	
5079	SVWOX	Severn Valley ware (oxidised)		6	3	0	0	
5083	CBM	ceramic building material	flat tile	113	1	0	0	

Cxt	Fabric	Name	Form	Wt	No	Rim	Eve	Comment
5083	POT/FC	post/fired clay		0.25	1	0	0	
5083	SVWOX	Severn Valley ware (oxidised)		21	3	0	0	
5089	DORBB1	Dorset black burnished ware		0.25	1	0	0	
5089	OO	crumbs		1	4	0	0	
5091	SVWOX	Severn Valley ware (oxidised)	bowl	63	0	1	11	
5092	FC	fired clay		18	1	0	0	
5096	OXIDF	fine oxidised ware	beaker	3	0	1	17	
5102	CBM	ceramic building material	flat tile	274	1	0	0	
5102	CBM	ceramic building material	frags	12	2	0	0	
5105	Glos 52	Herefordshire Border ware		19	5	0	0	X1 BONE
5105	SVWOX	Severn Valley ware (oxidised)		21	3	0	0	
TOTAL				3596.8	230	20	164	

15 APPENDIX 4: REGISTERED ARTIFACTS

context	SF	description	recommendations
5046	4	Iron nail; near-complete Manning Type 3 with fine hammered shank and small T-shaped head; L 45mm; shank W 3mm; head W 10mm	x-ray
5056	2	Copper-alloy coin; thin and heavily worn and corroded flan with part of edge missing; almost certainly a royal farthing from the first half of the 17th century; diam. 15mm	Clean to identify
	3	Copper-alloy thimble; complete cast Lofting type III, cast with fine knurled indentations on the body and a characteristic waffle-patterned crown; diam. 16mm; ht. 18mm; date 1730-1800	

16 APPENDIX 5: ASSESSMENT OF ENVIRONMENTAL RESIDUES

Sample No.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**14**
Context No.		**5014**	**5016**	**5021**	**5059**	**5021**	**5070**	**5069**	**5062**	**5085**	**5082**	**5070**
Feature No.		**5033**	**5033**	**5024**	**5058**	**5024**	**5068**	**5073**	**5061**	**5084**	**5083**	**5068**
Area		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
Volume of bulk (litres)		34	33	24	6	18	29	15	32	33	27	32
Volume of flot (millilitres)		37	25	30	8	14	17	7	20	18	80	12
Method of processing		F	F	F	F	F	F	F	F	F	F	F
Heavy Residue												
Charcoal												
Charcoal >4 mm		2								1	1	
Charcoal 2 - 4 mm		1							1	1		
Charcoal <2 mm												
Fragmented wood												
Wood >4 mm											1	
Wood 2 - 4 mm												
Wood <2 mm												
Burnt seeds												
Bromus sp.	Bromes			1								
Fabaceae sp.	Peas			1								
Poaceae sp. (small)	Grasses			1								
Poaceae sp. (medium)	Grasses			1								
Poaceae sp. (large)	Grasses			3		1			1			
Cereals												
Hordeum sp.	Barley			1								
Triticum dicoccum/spelta	Spelt/Emmer wheat	2	1	2	1	1	1					
Triticum dicoccum/spelta (glumes)	Spelt/Emmer wheat			3								
Triticum spelta (glumes)	Spelt wheat			3								
Triticum sp.	Undiff. Wheat	2		3		1	1	1	1			
Triticum sp. (rachis frags.)	Undiff. Wheat			4								

Sample No.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**14**
Context No.		**5014**	**5016**	**5021**	**5059**	**5021**	**5070**	**5069**	**5062**	**5085**	**5082**	**5070**
Feature No.		**5033**	**5033**	**5024**	**5058**	**5024**	**5068**	**5073**	**5061**	**5084**	**5083**	**5068**
Triticum sp. (glume bases)	Undiff. Wheat			3								
Detached sprouts				1								
Broken/distorted (No ID)		4	2	4	2		3	1	2			1
Other plant macrofossils												
Modern grasses		1						1				
Molluscs												
Discus Rotundatus	Terrestrial									1	1	
Oxychilus sp.	Terrestrial	1								1		
Bone												
Large animal bone										1		
Burnt bone			1	1								
Small animal bone		2	1			1				1		
Bone fragments					1	1	2			3		
Other Artefacts												
CBM					1							
Pottery		1		1						1		
Struck Flint						1				1		

17 APPENDIX 6: ASSESSMENT OF ENVIRONMENTAL FLOTS

Sample No.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**14**
Context No.		**5014**	**5016**	**5021**	**5059**	**5021**	**5070**	**5069**	**5062**	**5085**	**5082**	**5070**
Feature No.		**5033**	**5033**	**5024**	**5058**	**5024**	**5068**	**5073**	**5061**	**5084**	**5083**	**5068**
Area		**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**	**A**
Volume of bulk (litres)		34	33	24	6	18	29	15	32	33	27	32
Volume of flot (millilitres)		37	25	30	8	14	17	7	20	18	80	12
Method of processing		F	F	F	F	F	F	F	F	F	F	F
FLOT RESIDUE												
Charcoal												
Charcoal >4 mm										1		
Charcoal 2 - 4 mm		2		1	1	1	1	1	1	1		
Charcoal <2 mm		3	4	4	3	4	4	3	4	4	3	3
Frags. of ID size		X	X	X	X	X	X	X	X	X	X	X
Fragmented wood												
Wood >4 mm			1									
Wood 2 - 4 mm											1	
Wood <2 mm											3	
Seeds												
Asperula arvensis	Blue woodruff									1		
Carduus crispus	Welted thistle	1										
Chenopodium sp.	Goosefoots	1									2	
Cirsium sp.	Thistles	1	1									
cf. *Inula* sp.	Fleabanes									1		
Lemna sp.	Duckweeds										1	
Nuphar sp.	Yellow water-lilies	1										
Sonchus asper	Prickly sow-thistle	1										
Persicaria sp.	Knotweeds	1										
Picris sp.	Ox-tongues		1									
Polygonum sp.	Knotgrasses		1									
Potentilla sp.	Cinquefoils										1	
Ranunculus repens/bulbosus	Buttercup										1	
Rubus sp.	Brambles					1				1	1	
Sambucus sp.	Elder										1	
Sonchus sp.	Sow-thistles									1	1	

Sample No.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**14**
Context No.		**5014**	**5016**	**5021**	**5059**	**5021**	**5070**	**5069**	**5062**	**5085**	**5082**	**5070**
Feature No.		**5033**	**5033**	**5024**	**5058**	**5024**	**5068**	**5073**	**5061**	**5084**	**5083**	**5068**
Urtica sp.	Nettles									1	3	
Unknown		1										
Burnt seeds												
Anthemis cotula	Stinking Chamomile	1	1	2	1	2	1		2			1
Asteraceae sp.	Daisies			3	2	3	3		2	1	1	1
Brassica/Sinapis sp.	Mustards		2			1	1					
Bromus sp.	Bromes		1	1		1	1		1			
Carex sp.	Sedges		1	1	1	1	1	1				
Chenopodium sp.	Goosefoots	1	1	1	1	1	1	1	1			
cf. *Erucastrum* sp.	Hairy rocket		1	1								
Fabaceae sp. (indet)	Peas	1										
Fallopia convolvulus	Black-bindweed	1		1					1			
Medicago/Melilotus sp.	Medicks/Melilots			1								
Poaceae sp. (small)	Grasses		1	2			1		1			1
Poaceae sp. (medium)	Grasses			1			1		1			
Poaceae sp. (large)	Grasses	2	1	1	1	1			1			
Polygonum sp.	Knotgrasses	1										
Rumex sp.	Docks			2	1	1	1		1			1
Verbena sp.	Vervains					1						
Broken		1				2						
Unknown			1	1	1	1	1		1		1	
Cereals												
Hordeum sp.	Barley	1	1	1								
Cf. *Secale Cereale*	Rye		1			1			1			
Triticum dicoccum/spelta	Spelt/Emmer wheat	2	1	2	2	2	1	1	1			1
Triticum dicoccum (glumes)	Emmer wheat						1					1
Triticum spelta (glumes)	Spelt wheat			3	1	2	2	1	3			1
Triticum durum/aestivum	Naked wheat							1				
Triticum sp.	Undiff. Wheat	3		1		1	1		1			
Triticum sp. (spikelet base/forks)	Undiff. Wheat	1				1			1			
Triticum sp. (rachis frags.)	Undiff. Wheat				3		3					
Triticum sp. (glume bases)	Undiff. Wheat			3	3	3	3		3			
Detached sprouts							1					

Sample No.		**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**14**
Context No.		**5014**	**5016**	**5021**	**5059**	**5021**	**5070**	**5069**	**5062**	**5085**	**5082**	**5070**
Feature No.		**5033**	**5033**	**5024**	**5058**	**5024**	**5068**	**5073**	**5061**	**5084**	**5083**	**5068**
Undiff. chaff				3		2						1
Broken/distorted (No ID)		3	2	3	2	3	2	1	2	1		1
Other plant macrofossils												
Anther/stamen fragments (mod)	Undiff.			1		1	1	1				1
Aquatic weed (mod)	Undiff.						1					
Fragmented plant matter	Undiff.										2	
Thorns	Undiff.	1										
Woody stems/twigs	Undiff.										3	
Roots/tubers	Undiff.	2	1	2	1	2	2	2	2	3	4	3
Poaceae sp. (mod)	Grasses	3	2			1			1	2	2	1
Molluscs												
Carychium sp.	Terrestrial									1	1	
Cecilioides acicula	Terrestrial	1	2									
Discus rotundatus	Terrestrial									1	1	
Lauria cylindracea	Terrestrial	1	1							1		
Oxychilus sp.	Terrestrial	1										
Planorbis sp.	Freshwater									1		
Vallonia sp.	Terrestrial	1	1	1		1	2	1		3		1
Vertigo sp.	Terrestrial	1	2			1	1			2		1
Vitrea sp.	Terrestrial					1				1		
Snail eggs		1	1									
Broken shell										1		
Juveniles (no ID)		3	3				1			3		1
Bone												
Small animal bone			1									
Burnt bone											1	
Bone fragments										1		
Other remains												
Insect remains		3	2	1	1	1	1		1	1	2	1
Insect eggs/worm cases		2	3			1	1	2	3	2		1
Vitreous material		3		3		2		1	1			
Coal						1	1					

18 APPENDIX 7: ANIMAL BONE

Period:	Roman	M/PM	UD	Total
Hand collected				
Ditch	152			152
Well	23			23
Pit	2			2
Corn dryer	5			5
Furrow		2		2
Pond		1		1
Layers			20	20
Total	**182**	**3**	**20**	**205**
Sieved				
Ditch	20			20
Well	100			100
Corn dryer	100			100
Furrow		6		6
Total	**220**	**6**		**226**
Grand Total	**402**	**9**	**20**	**431**

Table 5. The distribution of bones by Period, Recovery and Feature type, where M/PM is medieval/post-medieval and UD is undated. Note that all of the bones were found in Area A with the exception of 3 bones from a soil in Area D and then single bones each from a layer in Area F and from an unspecified area (all hand collected).

Period:	Roman						Roman	M/PM	UD
Feature:	**CD**	**D**		**D**	**P**	**W**	**All**		
Cut:		**5022**	**5047**	**All**		**5081**			
Rec/Species									
Hand coll.									
Cattle	3	4	133	137	2	7	149	2	4
Equid		1		1		3	4		8
Cattle-size	1	13		13		5	19		7
Sheep/Goat						6	6	1	
Pig		1		1		1	2		
Sheep-size	1					1	2		1
Total	**5**	**19**	**133**	**152**	**2**	**23**	**182**	**3**	**20**
Sieved									
Cattle						1	1		
Cattle-size	3	1		1			4		
Sheep/Goat						14	14		
Sheep-size	41	18		18		80	139	6	
Amphibian	28					1	29		
Small rodent	28	1		1		4	33		
Total	**100**	**20**		**20**		**100**	**220**	**6**	

Table 6. A description of the site assemblage by Period, feature type, main features (cut numbers), Recovery and Species, where CD is corn dryer, D is ditch, P is pit and W is well; M/PM is medieval/post-medieval.

19 APPENDIX 8: OASIS FORM

OASIS ID: preconst1-346238

Project details

Project name	Site south of the A46, Ashchurch near Tewkesbury
Short description of the project	An archaeological strip, map and sample and later watching brief was undertaken to investigate the fringe elements of a known Iron Age/Romano-British settlement.
Project dates	Start: 04-12-2017 End: 12-12-2018
Previous/future work	Yes or No
Any associated project reference codes	14/00972/OUT.
Type of project	Archaeological strip, map and samples &Watching Brief
Site status	None
Current Land use	Cultivated Land 1- Minimal cultivation
Monument type	NONE
Methods & techniques	Archaeological monitoring
Development type	Housing development
Prompt	Planning condition
Position in the planning process	Condition of full planning permission granted

Project location

Country	England
Site location	Land south of the A46, Ashchurch, near Tewkesbury, Gloucestershire
Postcode	GL20 8LY
Study area	12ha.
Site coordinates	SO 9365 3340

Project creators

Name of Organisation	PCA Warwick
Project brief originator	Gloucestershire County Council
Project design originator	PCA Warwick
Project director/manager	J Webster
Project supervisor	Hayley James
Type of sponsor/funding body	Property developer

Project bibliography 1

AAL. 2014 Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

Albarella, U. 2003 Tawyers, tanners, horn trade and the mystery of the missing goat, in Murphy, P. and Wiltshire, E J. 2003 The Environmental Archaeology of Industry, Symposia of the Association for Environmental Archaeology, Oxford, pp. 71-86, 20

AS. 2014 Land off the A46, Ashchurch, Gloucestershire; Magnetometer Survey Report, Archaeological Surveys Limited, Chippenham

Barber, A. and Watts, M. 2008 Excavations at Saxon's Lode Farm, Ripple, 2001-2: Iron Age, Romano-British and Anglo-Saxon rural settlement in the Severn Valley, Transactions Worcestershire Archaeological Society, 3, Ser. 21, pp. 1-90

Bradley, R. Evans, J. Pearson, E. Richer, S. and Sworn, S. 2018 Archaeological excavation at the site of the Hive, the Butts, Worcester, Worcestershire Archives and Archaeology Service, Worcestershire County Council, Research Report 10

Benn, D I. and Evans, J A. 1998 Glaciers and Glaciation, Arnold Publishing, London

Beteux, V. 1996 Archaeological Assessment of Bewdley and Wribbenhall, Hereford and Worcester. Hereford and Worcester County Archaeological Service, 298

Bowden, M. 2006 The Medieval countryside, in Holbrook, N. and Juřica, J. (eds.) Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, 3, pp. 167-87

Brown, D.H. 2011 Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation, Archaeological Archives Forum

CA. 2014 Land South of A46, Ashchurch, Gloucestershire; Archaeological Evaluation, Cotswold Archaeology, Cirencester, 14536

Catchpole, T. and Chadwick, A M. 2012 Archaeological investigations undertaken with the construction of the A417 Brockworth Bypass, Gloucestershire, 1990-1994, Gloucestershire County Council Archaeology Service, Gloucester

CIFA. 2014a Standard and Guidance for an Archaeological Excavation, Chartered Institute for Archaeologists, Reading

CIFA. 2014b Standard and Guidance for an Archaeological Watching Brief, Chartered Institute for Archaeologists, Reading

CIFA. 2014c Code of Approved Conduct for the Regulation of Arrangements in Field Archaeology, Chartered Institute for Archaeologists, Reading

CIFA. 2014d Standard and Guidance for the collection, documentation, conservation and research of archaeological materials, Chartered Institute of Field Archaeologists, Reading

Coleman, L. Hancocks, A. and Watts, M. 2006 Excavations on the Wormington to Tirley Pipeline, 2000, Cotswold Archaeology Monograph 3, Cirencester

Cool, H E M. 2006 Eating and Drinking in Roman Britain, Cambridge University Press, Cambridge

Cunliffe, B. 1991 Iron Age communities in Britain, 3rd Edition, Routledge, London

Cunliffe, B. (ed.). 2001 The Oxford Illustrated History of Prehistoric Europe, Oxford University Press, Oxford

Dalwood, H. and Edwards, R. 2004 Excavations at Deansway, Worcester, 1988-89, Romano-British small town to late medieval city, CBA Research Report 139, pp. 81-4

Darling, M. 2012 Stuffed dormice or tandoori chicken in Roman Britain, in Bird, D. (ed.). Dating and interpreting the past in the Western Roman Empire. Essays in honour of Brenda Dickenson, Oxford, pp. 346-57

Darvill, T. 2006 Early Prehistory, in Holbrook, N. and Juřica, J. (eds.) Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, 3, pp. 5-60

Darvill, T. and Gerrard, C. (eds.). 1994 Cirencester: Town and landscape. An urban archaeological assessment, Cotswold Archaeological Trust, Cirencester

Davenport, P. 2015 Excavations at Newport Street, Worcester, 2005: Roman Roadside Activity and Medieval and Post-Medieval Urban Development on the Severn Floodplain, Cotswold Archaeology & Worcestershire Archives and Archaeology Service, Cirencester

Dyer, C. 1995 Sheepcotes; evidence for medieval farming, Medieval Archaeology, 39, 136-64

English Heritage. 2005 Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England, English Heritage, London

English Heritage. 2007 Understanding the Archaeology of Landscapes: A Guide to good recording practice, English Heritage, Swindon

English Heritage. 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation, English Heritage, London

Esmonde Cleary, S. 2011 The Romano-British period, in Watt, S. (ed.) The Archaeology of the West Midlands; A framework for Research, University of Birmingham, Oxbow Books, Oxford, pp. 127-47

Grove, J. & Croft, B. (eds.). 2012 The Archaeology of South West England; South West Archaeological Research Framework, Somerset Heritage Services, Somerset County Council, Taunton

Hands, A R. 1998 The Romano-British Roadside settlement at Wilcote, Oxfordshire: 1: Excavations 1993-96, BAR British Series 265, Oxford

Hart, J. 2009 Honeybourne to Wormington Natural Gas Pipeline: Worcestershire and Gloucestershire: Post-excavation assessment and updated project design, Cotswold Archaeology, Cirencester, 08197

HE. 2015 Management of Archaeological Research Projects in the Historic Environment, (Morphe), Historic England, London

Heighway, C M. 1983 The East and North Gates of Gloucester, Western Archaeological Trust, Gloucester

Hingley, R. 1989 Rural Settlement in Roman Britain, Seaby, London

Holbrook, N. 2006 The Roman Period, in Holbrook, N. and Juřica, J. (eds.) Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, 3, pp. 97-132

Holbrook, N. (ed.) 2008 Iron Age and Romano-British agriculture in north Gloucestershire Severn Valley, Bristol, Gloucestershire Archaeol Soc, Rep 6

Holmes, E F. nd Sewing Thimbles, Finds research Group 700–1700, Oxford, Datasheet 9

Hurst, D. 2005 Sheep in the Cotswolds, The History Press, Stroud

Hurst, D. and Miller, D. 2008 River Severn; bank-side survey, Worcester to Tewkesbury, Worcestershire Historic Environment and Archaeology Service, Worcestershire County Council,

Worcester, 3039

Macklin, M G. Johnstone, E. and Lewin, J. 2005 Pervasive and long-term forcing of Holocene river instability and flooding in Great Britain, The Holocene 15.7, pp. 937-43

Manning, W H. 1985 Catalogue of the Romano-British iron tools, fittings and weapons in the British Museum, British Museum Publications Limited, Dorset

Moore, T. 2006 The Iron Age, in Holbrook, N. and Juřica, J. (eds.) Twenty-five years of archaeology in Gloucestershire. A review of new discoveries and new thinking in Gloucestershire, South Gloucestershire and Bristol 1979–2004, Bristol and Gloucestershire Archaeological Report, Stroud, 5-60, 3, pp. 61-96

Morris, J T. 2008 Re-examining associated bone groups from southern England and Yorkshire, PhD Thesis, Bournmouth University

Morton, R. and Holbrook, N. 2007 Later pre-Roman Iron Age to sub-Roman period, in Jackson, R. and Dalwood, H. Archaeology and aggregates in Worcestershire: a resource assessment and research agenda, Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, 1477 pp.101-11 (available online at www.worcestershire.gov.uk/home/wccindex/wcc-arch/wcc-archaeology-aggregates.htm)

Nayling, N. 1998 The Magor Pill medieval wreck, CBA Research Report 108, cited in Jackson, R. and Dalwood, H. Archaeology and aggregates in Worcestershire: a resource assessment and research agenda, Historic Environment and Archaeology Service, Worcestershire County Council and Cotswold Archaeology, 1477

Nichols, P W. 2008 An archaeological excavation on the A46 Ashchurch Railway Bridge, Ashchurch, Gloucestershire, 2003, Gloucestershire County Council Archaeology Service, Gloucester, 477.76

Nichols, P. 2014 Greet Road, Winchcombe, Gloucestershire; Post-excavation analysis and reporting of archaeological evaluation and excavation, Gloucestershire County Council Archaeology Service, Gloucester, 476.3.65

PCA. 2015 Land South of A46, Ashchurch, Gloucestershire; Written Scheme of Investigation for an Archaeological Excavation, Pre-Construct Archaeology Limited, Market Harborough

PCA. 2018 Land South of the A46, Ashchurch, Gloucestershire; Written Scheme of Investigation for an Archaeological Watching Brief, Pre-Construct Archaeology Limited, Warwick

Pelling, R. 2013 Stanley Meadow, Lower Woods, South Gloucestershire; Charred plant remains from a corn-dryer, English Heritage, Portsmouth, Research Report Series 30-2013

Perrin, K. et al. 2014 A Standard and Guidance to Best Practice for Archaeological Archiving in Europe, EAC Guidelines 1, Europae Archaeologia Consilium: Namur

Priest, R. and Dickson, A. 2013 Southeast Warwickshire and Cotswolds Higher Level Stewardship Target Areas: A Report to for the National Mapping Programme, English Heritage and Gloucestershire County Council, Gloucester, 6053

Reynolds, R J. and Langley, J K. 1979 Romano-British Corn-Drying Oven: An Experiment, Archaeol. J. 136, pp. 27-42

Rielly, K. forthcoming 18th century evidence for cattle 'improvements' at Dickens Square, Southwark, London

Rixson, D. 2000 The History of Meat Trading, Nottingham University Press, Nottingham

Rudder, S. 1779 A New History of Gloucestershire, reprinted with a new introduction by Nicholas Herbert, 2006, Nonsuch Books, Stroud, pp.234-7 cited in AAL 2014 Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

Shaffrey, R. 2006 Grinding and Milling: A study of Romano-British Rotary Querns and Millstones made from Old Red Sandstone, British Archaeological Reports, Oxford, 409

Shaffrey, R. 2015 The Worked Stone, in Paul, S. and Hunt, J. Evolution of a Community: The Colonisation of a Clay Inland Landscape. Neolithic to post-medieval remains excavated between 1995 and 2011, Archaeopress, Oxford

Smith, A H. 1965 The Place-Names of Gloucestershire, II: The North and West Cotswolds, English Place-Name Society, Cambridge, 39 cited in AAL Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

Stace, C. 2010 The new Flora of the British Isles, 3rd edition, Cambridge University Press, Cambridge

Stamper, P. 1994 The medieval river, in Morriss, R K. (ed.). The Shropshire Severn, Shropshire Books, Shropshire, pp. 63-73

Taylor, J. and Brown, G. 2009 Fieldwork Induction Manual: Operations Manual 1, Pre-Construct Archaeology Limited, London, Unpublished internal document

Taylor, J. and Brown, G. 2018 Fieldwork Induction Manual: Operations Manual 1, Pre-Construct Archaeology Limited, London, Unpublished internal document

Thomas, J. 2011 Two Iron Age 'Aggregated' settlements in the environs of Leicester. Excavations at Beaumont Leys and Humberstone, Leicester Archaeology monograph 19

Tomber, R. and Dore, J. (eds.). 1998 The National Roman Fabric Reference Collection, Museum of London, London, MOLAS monograph 2

VCH. 1968 Victoria History of the County of Gloucester, Vol 8, pp.172-88 (Ashchurch)

Vince, A G. 1983 The medieval pottery, in Heighway, C M. 1983 pp.125-61

Watt, S. (ed.). 2011 The Archaeology of the West Midlands; A framework for Research, University of Birmingham, Oxbow Books, Oxford. Also available at: http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/index.htm

Webster, C. (ed.). 2007 The Archaeology of the South West Archaeological Research Framework Resource Assessment and Research Agenda, Somerset Heritage Services, Somerset County Council, Taunton

Webster, J. 2017 Archaeological investigations at Church Farm West, Ball Mill Quarry, Grimley, Worcestershire Archives and Archaeology Service, Worcestershire County Council, Research Report 6

Webster, J. 2018 Fieldwork Operations Manual Regional Variation Addendum; Warwick, Pre-Construct Archaeology Limited, Warwick, Unpublished internal document

Webster, J. and Jackson, R. 2015 Excavation of a Middle Bronze Age, Iron Age and Romano-British settlement at Rugby Gateway, Rugby, Warwickshire, Worcestershire Archives and Archaeology Service, Worcestershire County Council, 2064

Webster, J. and Jackson, R. forthcoming The development of the Roman Roadside Suburb east of Kenchester, Herefordshire: Investigations on the Yazor Brook Flood Alleviation Scheme (2010-11), Worcestershire Archives and Archaeology Service, Worcestershire County Council, 2028

Woodiwiss, S. (ed.). 1992 Iron Age and Roman salt production and the medieval town of Droitwich, CBA Research Report 81

Worssam, B C. et al. 1989 Geology of the country around Tewkesbury, British Geological Survey Publications, London

Young, C J. 1977 The Roman pottery industry of the Oxford region, British Archaeological Reports, Oxford, 43

Young, F A. 1979 Guide to the Local Administrative Units of England, Vol. 1: Southern England, Royal Historical Society, cited in AAL 2014 Land off the A46, Ashchurch, Gloucestershire; Archaeological Desk-Based Assessment, Avon Archaeology Limited, Bristol

P C A

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

PCA DURHAM
THE ROPE WORKS, BROADWOOD VIEW
CHESTER-LE-STREET
DURHAM DH3 3AF
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 370 410
e: newark@pre-construct.com

PCA NORWICH
QUARRY WORKS, DEREHAM ROAD
HONINGHAM
NORWICH NR9 5AP
T: 01603 863 108
e: norwich@pre-construct.com

PCA WARWICK
UNIT 9, THE MILL, MILL LANE
LITTLE SHREWLEY, WARWICK
WARWICKSHIRE CV35 7HN
t: 01926 485 490
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

PCA 25 years
PRE-CONSTRUCT ARCHAEOLOGY 1993-2018

REGISTERED ORGANISATION CIfA