



Excavating Elmswell: Seasons in Time

Archaeological Assessment Report - Redacted Copy

Chris Casswell and Stuart Noon

Excavating Elmswell: Seasons in Time
Community based archaeological excavation at Elmswell Farm,
Elmswell, Driffield, East Riding of Yorkshire
Archaeological Assessment Report

Compiled by:
Chris Casswell and Stuart Noon

With contributions from:
Manda Forster, Johanna Ungemach, Maiya Pina-Dacier, Phil Mills, Joshua Hogue, Hannah
Russ, Natasha Powers, Richard Coates, Robert Hamer, Paul King and Ian Rowlandson

DigVentures

The Workshop
Victoria Yard
26 Newgate
Barnard Castle
County Durham
DL12 8NG



Purpose of document

This document has been prepared as an Assessment Report for the landowners, the Heritage Lottery Fund and DigVentures' global crowdfunding community (Stakeholder Sponsors). The purpose of this document is to provide a comprehensive account of the 2018 field season, with specialist assessment of finds and samples, and recommendations for further investigation and analysis. It is supported by an easily accessible online database of all written, drawn, photographic and digital data for the 2019 field season.

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Project summary

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Approval:	Brendon Wilkins MCIfA



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The site was directed by Chris Casswell who was ably assisted by Ed Caswell, Maggie Eno, Manda Forster, Lucy Goodridge, Indie Jago, Harriet Tatton and Johanna Ungemach. The project was managed for DigVentures by Brendon Wilkins, with Lisa Westcott Wilkins in the role of Project Executive.

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Executive summary

DigVentures was invited by landowners John and Henrietta Fenton to undertake a community-based archaeological research project at Elmswell Farm (hereafter 'the site'), funded by the Heritage Lottery Fund and the DigVentures community. This report details the results of the second field season of a five-year multi-staged project, encompassing an excavation and assessment stage (Years 1 – 4), followed by final analysis and publication (Year 5).

Fieldwork took place between 15th and 26th August 2018 investigating the Roman elements of the farm (DigVentures Project Code: ELM18). This Assessment Report presents the results of the second season of fieldwork, incorporating specialist assessment and results from remote sensing representing the second phase of a multi-staged landscape investigation. The potential of these results to achieve the Aims and Objectives of the project are discussed in the final section of this report, with an outline of plans for further excavation in 2019.

Results summary

Fieldwork was undertaken in August 2018 to address a series of research questions which focused on the Roman elements of the farm on land south of Elmswell Farm farmyard, south of Elmswell Beck village, representing the second phase of a multi-staged landscape investigation. The investigations involved a programme of targeted interventions, metal detecting and field walking surveys, designed to investigate the earthworks and landscape features identified from LiDAR data and historical sources.

All data was recorded by community participants using a web accessible relational database. This is housed on the project microsite (<https://digventures.com/elmswell-farm>) and can be explored by following the links shown in green font throughout the report. In addition, excavated features are also navigable through a series of nested 3D models, from the landscape level down to individual trenches (<https://digventures.com/elmswell-farm/ddt/browser.php>).

Remote sensing combined metal detecting and field walking survey of the immediate area around the trenches in Low Railton field. There was a clear concentration of Roman finds of coins, tile and tesserae in Low Railton field and Roman coins, a Roman penannular brooch and later metal fragments in and around the trenches. A Roman coin treasure hoard case was also recovered representing a single hoard deposition discovered on four separate metal detecting occasions from 2015 to 2018. The composition of the group appears typical of Roman denarius hoards buried in Britain during the Flavian period. A building survey was undertaken at the Old Hall, comprising the photographic recording of the interior and exterior of the hall, a detailed study of the datestone and record of the upstanding remains of the adjacent dovecote.

Three trenches were opened directly south of Elmswell Farm farmyard to investigate landscape features, assess evidence for Roman settlement, and recover further elements relating to the treasure hoard. Archaeological features were found in all trenches, with Roman finds dating to the 1st to 3rd century AD. Pottery recovered suggests domestic occupation and a site of some significance in the Roman period established soon after the conquest until the very end of the Roman period. The wide-ranging taxa identified in the animal bone assemblage suggests waste from beef, pork, lamb/mutton and chicken production and/or consumption.



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1 INTRODUCTION

1.1 Project background

- 1.1.1 DigVentures was invited by John and Henrietta Fenton (hereafter 'the landowners') to undertake a crowdfunded community-based archaeological research project at Elmswell Farm (hereafter 'the site'; Figure 1). Following consultation with the landowners and Natural England, a project model was devised according to the MoRPHE framework (*Management of Research Projects in the Historic Environment*, Historic England 2015). This approach has been used to design a five-year multi-staged field research project, encompassing an excavation and assessment stage (Years 1-4), and a final publication and presentation stage (Year 5).
- 1.1.2 The information contained in this report encompasses the second year of archaeological excavation and assessment, focussed on the Roman elements of the farm land south of Elmswell Farm farmyard, south of Elmswell Beck. Investigations were supported by an Updated Project Design (Wilkins *et al.* 2018) and took place between 15th and 26th August 2018 (DigVentures Project Code: ELM18). An assessment of the results is presented here and have been circulated for peer review and consultation with the wider specialist team.
- 1.1.3 This report is one of a number of archive and dissemination products generated by the project, including the digital archive and metadata, the paper archive and the artefact and environmental material recovered and recorded. All archive material is currently held by DigVentures and will, when the project is complete, be deposited with the landowners and freely disseminated through Humber Historic Environment Record (HER), Archaeological Data Service (ADS), OASIS portal and the project microsite (<https://digventures.com/elmswell-farm>).

1.2 Project scope

- 1.2.1 Elmswell Farm lies in a rich and nationally important archaeological landscape, containing finds and features dating from the Mesolithic to WWII. Among the most significant of these at the farm include Neolithic/Bronze Age barrows, a Roman ladder settlement and the remains of the possible shrunken medieval village of Little Driffield. The first year of evaluation and assessment, undertaken in 2017, focussed on characterising the nature and extent of the medieval village of Little Driffield (Casswell 2018). In 2018, investigations focussed on characterising the nature and extent of the Roman elements of the farm on land south of Elmswell Farm farmyard, south of Elmswell Beck, and building recording of the Old Hall and adjacent dovecote (see Project Design, Wilkins *et al.* 2018).
- 1.2.2 An assessment of documentary and historic archive material, and LiDAR data, during the Project Design stage defined a number of questions warranting further archaeological research. The overarching aim of the project was to define and characterise the physical extent of the site through a programme of non-intrusive investigations and intrusive excavation, obtaining baseline data that will facilitate its future management (see Aims and objectives, Section 3).



1.3 Site description

1.3.1

[REDACTED] The site lies on land sloping gently down to Elmswell Beck at a height of approximately 24m OD on superficial geological deposits of alluvial clay, silt, sand and gravel, which overly the Flamborough Chalk Formation bedrock (BGS 2018). The land is owned by John and Henrietta Fenton and the farm is currently under the Higher Level Stewardship Scheme. A derogation was granted in consultation with Natural England's Historic Environment Specialist Dr. Margaret Nieke.

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Research context

- 2.1.1 For the purpose of this document, the archaeological and historical background focusses on Elmswell Farm and land immediately surrounding the site. The farm lies in a rich and nationally important archaeological landscape, containing finds and features dating from the Mesolithic to WWII. Significant amongst these are the remains of a Roman settlement and an extensive shrunken medieval village. The town of Driffield itself has an interesting association with Anglo-Saxon royalty; once part of the Kingdom of Deira, there is evidence that a royal palace once stood in its centre. Despite the site's wealth of archaeological potential, there have been few modern investigations into its archaeology, resulting in a strong need to understand the heritage resource in light of substantial attritional threats.
- 2.1.2 Elmswell has been the subject of widespread antiquarian intervention; in the 19th century, John Mortimer investigated the Neolithic barrows to the south of Elmswell and revealed multiple prehistoric burials, along with evidence of their reuse well into Anglo-Saxon period. Although it is difficult to decipher settlement patterns of the Romano-British period, there are a range of Roman finds as a result of earlier interventions at the site by Corder and others in 1935. A significant hoard of Roman coins, samian ware, and early medieval pottery were discovered in Cowgrass Field at Elmswell. Such finds accord well with remote aerial photographic evidence, with extensive cropmarks indicative of a Roman 'ladder settlement' coupled with a large Iron Age/Roman field system. A late Iron Age to early Anglo-Saxon settlement has also been identified, including the remains of a potential 4th century villa.
- 2.1.3 Fieldwork in 2018 focused on land south of Elmswell Farm farmyard, south of Elmswell Beck, to; recover the full extent of the treasure hoard found by metal detectorists in 2016/17; determine the nature, date and survival of archaeology at the site of Roman settlement; establish the relationship of these remains to nearby sites and how the settlement played a role in the wider environs. Recommendations made following the assessment of the archaeological material recovered during 2017, included the broadening investigations to explore features predating the medieval village. Metal detecting surveys carried out to the north of the Roman settlement on the Estate have identified dense concentrations of finds, including an ongoing treasure case. Fieldwork entailed the excavation of three trenches positioned over these areas (Figure 1) to enable the full recovery of the hoard, to characterise its depositional

context, and to establish whether this area of the Estate is worthy of protection and designation on the HER.

2.2 Summary of previous work

- 2.2.1 Known prehistoric sites at Elmswell Farm include two Neolithic/Bronze Age bowl barrows (SM1013707 and SM1013708) excavated by John Mortimer in 1870, and two further excavated, undated barrows. Excavations undertaken on the farm between 1935 and 1937 revealed Roman occupation, including mortared stone walls and floors, and artefactual evidence to suggest that settlement had begun in the Iron Age and continued into the Anglo-Saxon period (Corder 1940a). This activity is further evidenced by extensive cropmarks south of Elmswell Beck, immediately west of the site.
- 2.2.2 In 1975 excavations at Moot Hill in Driffield revealed a Norman castle containing the possible remains of a rare 8th century palace (SM1015612), approximately 1.5 miles northeast of the site. Excavations conducted in advance of the construction of Kellythorpe Industrial Estate, 300m southwest of the site, revealed numerous archaeological remains; including prehistoric flints, Roman and medieval ditches and enclosures, and modern remains related to the WWII RAF Driffield. Recent metal detecting and field walking surveys on Elmswell Farm have revealed extensive Mesolithic flint scatters and further assemblages of over 100 fragments of high-status Roman pottery, over 100 Roman coins including 27 denarii; the latest dating to c AD390. An overview of all heritage assets recovered from the area immediately surrounding the excavation site are presented in Figure 4: Selected sections



2.2.3 .

2.2.4 In 2017 fieldwork focussed on Little Driffield, a settlement believed to be the burial place of Alchfrid, King of Northumbria, who died in AD704/5 at a now lost royal palace. The location of the burial site and royal palace are not known although Anglo Saxon finds, such as part of a stone cross now incorporated into the fabric of St. Mary's Church, suggest that Little Driffield was a place of importance at that time. The first season of fieldwork focused on the shrunken medieval village of Little Driffield. Remote sensing surveys and targeted trenches enabled the characterisation of the remains, indicating that the landscape east of Church Lane was settled extensively between the late 11th and mid-14th century. The recovery of a Roman coin and a sherd of 9th to 11th century pottery suggest that earlier activity took place on or near to the site. Later pottery was found in smaller quantities, indicating that the main phase of settlement activity at the site had finished by the mid-14th century when the settlement was abandoned.

3 PROJECT AIMS AND OBJECTIVES

3.1 Background

3.1.1 The aims and objectives articulated below were defined in the Updated Project Design for this stage of research (Wilkins et al. 2018). The business case for this work has been designed in accordance with the fundamental principles of Historic England's Strategic framework for the Historic Environment Activities and Programmes (SHAPE) (*ibid.* 12).

3.2 Aims

3.2.1 The overarching aim of the project is to define and characterise the physical extent of the site through a programme of non-intrusive investigations and intrusive excavation, obtaining baseline data that will facilitate its future management.

3.2.2 Aim 1: Define and establish the precise physical extent and condition of archaeological remains on the site with a programme of remote sensing and metric survey. This aim entailed a non-invasive survey of the site, including aerial photography, geophysics and fieldwalking. The results were used to support plans for interventions and enabled us to determine likely features for targeted trenching addressing the specific questions:

- Q1: Can the layout and associated sub-surface archaeology be established by remote survey?
- Q2: Can we identify the location and extent of settlement evidence, and determine horizontal phasing between features?

3.2.3 Aim 2: Characterise the results of non-invasive survey, refining the chronological phasing of the site with a programme of trenching. In the light of the evidence base collated for Aim 1, this aim was addressed with targeted trenches to answer the following questions:



- Q3: What was the primary depositional context of the treasure hoard, and what can this tell us about the Site?
- Q4: Can we corroborate chronological phasing for the Site, including the presence of earlier and later features and structures, as defined in Aim 1?
- Q5: What are the typical and atypical features of the Site and did this influence the functions and activities that took place?
- Q6: What is the landscape setting and character surrounding the Site, and how did this shape its location, design and development?

3.2.4 Aim 3: Understand the palaeoenvironmental conditions at the site. This aim comprised the assessment of archaeological finds and samples recovered during excavations, using appropriate palaeoenvironmental and archaeological techniques to establish preservation and significance.

- Q7: What is the current state of the archaeological and palaeoenvironmental material across the site?
- Q8: How well do deposits and artefacts survive, and how deeply are they buried?
- Q9: Can the palaeoenvironmental data recovered from sampling in the trenches inform us about farming regimes, specialised food processing, industrial or military activities that may have taken place at the site?
- Q10: Can we increase our understanding of the local environment during the multi-period occupation of the Site?

3.2.5 Aim 4: Making recommendations, analysis and publication.

- Q11: What can an integrated synthesis of the results of this work with previous remote sensing and building survey tell us about the site and its setting?
- Q12: In light of the evidence recovered from this and previous work, can we articulate a link between the multi-phased use of the site and its different areas?
- Q13: Formulate recommendations for further archaeological and palaeoenvironmental analysis at Elmswell Farms based on Aims 1-3 and implement a programme to publish and disseminate the results or continue fieldwork into additional seasons.

3.2.6 Aim 5: Creating opportunities for people and communities. In addition to the archaeological research aims of the project, achieving public engagement and benefits for the local community have been key targets embedded within this project. As part of the overarching project, providing opportunities for volunteers was an important component of the defined aims. Key objectives defined included:

- Engaging 50 volunteers in undertaking archaeological surveys and delivering educational activities.
- Training volunteers in archaeological fieldwork, incorporating workshops and masterclasses and provide training in post-excavation analysis and digital recording techniques.
- Provision of a website and online learning resources.
- Delivery of a curriculum based educational programme for 250 children, incorporating tailored site tours
- Provision of a 'Dig Camp' parent and child activity weekend, hosted site tours, public lectures and Open Days.



- A pop-up finds room and venue to enable visitors to experience and learn about post-excavation processes.

3.2.7 In showcasing the excavation, the project has engaged both local and global audiences in order to ensure the future preservation and management of the site. A summary of the project's effectiveness in meeting these aims can be found in Section **Error! Reference source not found..**

4 METHODOLOGY

4.1 Project model

4.1.1 The archaeological fieldwork was carried out in accordance with the methodology defined in the Project Design (Wilkins *et al.* 2018, Section 12). All work was undertaken in conjunction with best practice, national guidelines and published standards (ClfA 2014). A summary of methodologies is presented below, following detailed descriptions in the Project Design linking specific techniques to aims and objectives (Wilkins *et al.* 2018, Appendix 1).

4.2 Metal detecting and fieldwalking methodology

4.2.1 Remote sensing consisted of a combined metal detecting and field walking survey of 100m x 80m in Low Railton field, approximately 500m northeast of Elmswell Farm farmyard. It was undertaken between the 15th and 26th August 2018 and designed to address research questions associated with Aim 1.

4.2.2 The survey area was walked by experienced metal detectorists and field walkers Paul King and Rob Hamer of Priscan Archaeology. Parallel crop lines were walked in 2m transects, ensuring that 100% of the survey area surface was examined for surface finds and metallic objects. The team used XP Déus motion metal-detectors using 13" and 9" coils under the factory setting 'Gold Maxx Power' with all other parameters set to standard; these detectors have a depth sensitivity of up to 0.13m. Following recovery of a metal artefact from the ground, the area was scanned again to assess for further signals before reinstating. All remote sensing small finds were assigned the context number (0003).

4.2.3 Visibility during the survey was good because the field had been recently ploughed and harrowed. No finds of obvious modern date were collected, and the finds were primarily Roman. It is worth noting that metal detecting and field walking surveys do not result in the recovery of all finds but do provide an indication of range, type and date of archaeological materials present.

4.3 Geophysical survey methodology

4.3.1 A geophysical resistivity survey of an area to the south of Elmswell Old Hall was undertaken by members of East Riding Archaeology Society on 18th August 2018. It was designed to address research questions associated with Aim 1, specifically to try and identify buried remains relating to the location of a tithe barn.



4.3.2 The survey area measured 1,200m² and was marked out using a survey grade GPS, targeting an unusual rise in the local topography. The survey was supervised by Richard Coates and entailed the use of a Mk2 TR Systems resistivity meter with 1.5m 4 probe beam; settings used were the Twin 2R, taking two parallel traverse readings at 1m pitch. As the area was being surveyed, the readings were logged onto a tablet, providing an instant visual display of the results.

4.4 Building survey methodology

4.4.1 It was originally intended that a landscape survey should be undertaken on the landscape surrounding the excavation areas; however, adverse weather conditions prevented meant that flying a UAV (drone) at height was unwise. Instead, a photographic building survey was made of selected structures around Elmswell Farm.

4.4.2 The Elmswell Old Hall building survey was carried out using a combination of UAV and pole mounted cameras and the techniques of Structure from Motion, or Photogrammetry. The UAV used was a DJI Mavic Pro and the pole camera was a Nikon D5300 DSLR. The cameras were remotely controlled and positioned to take multiple overlapping images all around the structure and at different heights.

4.5 Excavation methodology

4.5.1 Excavation took place between the 15th and 26th August 2018 to address the research questions associated with Aims 1 and 2. This entailed a programme of targeted interventions, outlined in the Updated Project Design (Wilkins *et al.* 2018), and comprised of three trenches designed to: recover the full extent of the treasure hoard found by metal detectorists between 2015 and 2017; the nature, date and survival of archaeology at the site of Roman settlement; the relationship of these remains to nearby sites and paleochannel and how the settlement played a role in the wider environs on land south of Elmswell Beck village. The Treasure Hoard find spot was originally located by handheld GPS units used to record the hoard.

4.5.2 All trenches were located using a GPS prior to the commencement of work, and each area scanned for finds with a metal detector prior to, and during, excavation. Machine excavation of three trenches was carried out using a JCB 3CX fitted with a toothless ditching bucket, removing the overburden to the top of the first recognisable archaeological horizon, under the constant supervision of an experienced archaeologist.

4.5.3 Trenches were subsequently hand-cleaned, planned and photographed prior to hand-excavation. Any archaeological features and deposits exposed in the evaluation trenches were hand-cleaned and excavated to determine their nature, character and date. Carefully chosen cross-sections were then excavated through features to enable sufficient information about form, development, date and stratigraphic relationships to be recorded. All excavated features were dry-sieved for artefacts using a 10mm gauge.

4.5.4 A complete drawn record of the trenches comprises plans and sections drawn to appropriate scales and annotated with coordinates and AOD heights. A single context recording system was used to record the deposits and a full list of all records is



presented in Appendix A. Layers and fills are recorded '(1001)'. The cut of the feature is shown '[1001]'. Each number has been attributed to a specific trench with the primary number(s) relating to specific trenches (i.e. Trench 1, 1001+, Trench 2, 2001+). Features were also specified in a similar manner, pre-fixed with the letter 'F' (i.e. Trench 1, F101+, Trench 11, F1101+).

4.5.5 All interventions were surveyed using a GPS tied into the Ordnance Survey grid. All recording was undertaken using the DigVentures Digital Dig Team recording system. Digital Dig Team is DigVentures' bespoke, cloud-based, open data recording platform, designed to enable researchers to publish data directly from the field using any web-enabled device (such as a smartphone or tablet) into a live relational database. Once recorded, the born-digital archive is instantly accessible via open-access on a dedicated website and published to social profiles of all project participants (community, professional and specialist). Links to all individual trench, feature and context records are provided in Appendix A, from where all associated finds, samples, plans, sections, photographic records and 3D models can also be explored.

4.6 Health and safety

4.6.1 All work was carried out in accordance with its company Health and Safety Policy, to standards defined in The Health and Safety at Work etc. Act 1974, and The Management of Health and Safety Regulations 1999, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual Health and Safety in Field Archaeology (1996), and DigVentures Health and Safety Policy.

5 REMOTE SENSING RESULTS

Stuart Noon, Adam Stanford, Richard Coates, Paul King and Robert Hamer

5.1 Introduction

A combined metal detecting and field walking survey, a geophysical survey and a photographic survey were undertaken in conjunction with the 2018 excavation to help 'define and establish the precise physical extent of archaeological remains' (Aim 1) and to aid in 'refining the chronology and phasing' of the site (Aim 2). The results of these surveys are presented in Figure 4: Selected sections



5.1.1 and 5. The results of the photographic building survey can be accessed online at:

<https://sketchfab.com/digventures/collections/elmswell-farm>.

5.2 Metal detecting and field walking

5.2.1 Remote sensing involved a combined of metal detecting and field walking survey of the immediate area around and in the trenches and 100m x 80m squared in Low Railton field. There were 12 Roman coins and 2 objects retrieved from the top soil in the vicinity of the trenches retrieved through metal detecting survey and from field walking, 40 fragments of tesserae and 31 fragments of tile.

5.2.2 The earliest identifiable find recovered was a *denarius* of Galba AD68-69 SF29. This denarius of Galba (c15) is a find of note which is rare; and possibly worthy of inclusion in the Coin Register of the British Numismatic Journal. The latest find was a copper alloy *nummus*, probably of Valens dating AD 364-78 SF41. The rest of the coins were from the Roman period with the last two both copper alloy *nummus* from AD364-375 of Valentinian I or Valens SF45 and SF34. Also recovered was metal working debris SF28, and a copper alloy strip of unknown date SF39. The coins and objects cannot be fixed to any secure features but are indicative of general Roman activity throughout the Roman period in the area specifically from AD 68 to 340. The finds indicate settlement activity in the form of a potential Roman building, possibly a villa, indicated by the coins, objects, tesserae and tile. A full assessment of the remote sensing small finds and treasure hoard has been made see Appendix B.

5.2.3 A Roman coin treasure hoard case was also located and reported from metal detecting surveys comprising of a number of separate events all representing one actual hoard deposition discovered on four separate occasions from 2015 to 2018. The case originated in 2015 with 9 coins discovered 2015T55 LANCUM-E3BE5C, with a further 7 in 2016 2016 T790 LANCUM-CE56B, T927 PUBLIC-084958 and one in 2018 2018 T691 LANCUM-A22097. The sixteen coins that comprise the entirety of the treasure hoard consist of silver Roman *denarii* ranging in date from the Roman Republic (1st century BC) to the reign of Titus (AD 79-81). The composition of the group appears typical of Roman *denarius* hoards buried in Britain during the Flavian period. The Treasure Act required that a group of coins should 'belong to the same find'. From the mix of coinage, it was safe to assume that this was the case for these coins. On the balance of probability, they constituted a *prima facie* case of treasure by being silver coins consisting of more than 10% precious metal content of an antiquity greater than 300 years. A full assessment of the treasure finds has been made see Appendix B.

5.3 Geophysical survey

5.3.1 The resistivity survey targeted an area to the south of the upstanding remains of the Old Hall where a raised platform is believed to represent the location of a tithe barn. However, the results of the survey proved inconclusive and no structural remains can be interpreted from them. It is likely that the mixed readings across the survey area indicate there has been considerable ground disturbance possibly from deposition of building remains in this location.



5.4 Building survey

- 5.4.1 The building survey consisted of three main elements: the Old Hall interior and exterior <https://skfb.ly/6BsUJ>, a detailed study of the datestone above the entrance to the Old Hall <https://skfb.ly/6BBnz>, and the upstanding remains of the adjacent dovecote <https://skfb.ly/6BAOY>. For the Old Hall, 269 images were processed to produce a 3D model at a resolution of 3.28mm/pix, with a point cloud in excess of 28,000,000 points. The 3D data can be positioned to generate orthophotographic images of each elevation and the building in plan. In addition to the main building, separate models were processed for the date stone and carved head, as well as the adjacent remains of the dovecote.

6 EXCAVATION RESULTS

Stuart Noon and Chris Casswell

All digital context and feature records have been archived on the Digital Dig Team system and can be reviewed here at:

<https://digventures.com/elmswell-farm/ddt/browser.php>

6.1 Introduction

- 6.1.1 During 2018, three trenches were investigated focusing on the Roman elements of the farm on land south of Elmswell Farm farmyard, south of Elmswell Beck village. The principle purpose of these excavations was to 'define and establish the precise physical extent and condition of archaeological remains' (Aim 1), to 'characterise the results of non-invasive survey, refining the chronology and phasing' (Aim 2), and to 'understand the palaeoenvironmental conditions at the site' (Aim 3). Each trench was designed to address specific research objectives, and these are discussed with the excavation results below. Figure 4: Selected sections



6.1.2 shows the overall location of each targeted area, and Figures 2 and 3 provide illustrations of individual trenches containing archaeological features. Detailed descriptions of every context are included in Appendix A, organised by trench number.

6.1.3 All three trenches were positioned in the southeast part of the field, targeting metal detecting and fieldwalking find spots. In order to provide an accurate findspot for the original hoard location, the field team met with landowners and the original finders of the hoard on site. The most suitable location for each of the three trenches was then determined as part of that site-based consultation.

6.2 Stratigraphic sequence

6.2.1 A common stratigraphic sequence was recognised across the site in terms of topsoil. Trench 4, for example, comprised of a silt ploughsoil (4001) overlying a natural layer (4056). Trench 5 contained a silty clay (5001) and Trench 6 likewise (6001). The stratigraphic sequence fluctuated in depth across the site predominantly due to natural height variation with the underlying sloping topography. All trenches were excavated by machine to remove the majority of the topsoil, at which point they were cleaned by hand to expose archaeological remains.

6.3 Trench 4 (Figure 2)

6.3.1 Originally Trench 4 measured 10m x 10m and targeted the Treasure Hoard to enable its primary depositional context to be established. However, upon metal detecting the surface to the south of the trench another silver denarius belonging to the hoard was found SF29 (2018 T691 LANCUM-A22097). As a result of this find the trench was extended 5m to the south.

6.3.2 Four inhumation burials were identified within the trench: three neonatal and one partial adult burial. One of the neonatal graves F406 was found in the western part of the excavation; the skeleton was found lying on its right side facing west, flexed in a foetal, and represents an infant slightly older than full-term. The grave was cut by a linear feature, interpreted as a beam slot for a wall F421, running north to south along the trench edge. Although the grave was cut by the beam slot, the skeleton remained undisturbed, and it is probable that the two features are contemporary or the grave was placed next to an upstanding wall; the beam slot either having been removed at a later date or decayed in place. Two more neonatal graves were found in Trench 4. One was found in the southeast part of the trench F410 cut on the western side by a small posthole F415. The grave cut contained the neonatal remains of a skeleton lying on its back with the feet facing east. To the northwest of this, in the centre of the trench, another small grave was recorded F403. The skeletal remains were in poor condition, but a small copper alloy penannular brooch SF43 was found, dating the feature to the 1st century BC to 1st century AD.

6.3.3 A single adult inhumation was recorded from the excavation F414. It was found in an oval-shaped grave, oriented with its long axis broadly east to west, situated in the east of the trench truncated by a later, north to south-aligned ditch F419. It was in very poor condition and the skeletal remains were only partially complete, with some disarticulated remains found within the fill of the ditch. The ditch that cut the adult



grave was itself heavily disturbed by later ploughing and shared many similarities with a parallel feature F407 5m to the east. They were both very shallow with rounded bases and at their southern termini turned in towards each other, mirroring their shape in plan. It appears likely these features were contemporary and, based on a single sherd of pottery, date to the Roman period. Interestingly, these features were also parallel with the beam slot found against the western edge of the excavation, suggesting that these too may be related to the same structure or plots of land respecting the same layout.

- 6.3.4 Crossing the southern end of the trench was a large, straight linear ditch F401 aligned east to west. It was 1.70m wide and 0.70m deep with steep sloping sides, and filled by a sequence of nine well-defined deposits. The basal fill comprised a 0.25m thick, firm sandy silt deposit representing initial weathering of the ditch while in use. No artefacts were recovered from this, but the eight fills that followed were all finds-rich. The nature of these later fills was noticeably different, comprising several backfill events of fine ash interspersed with stony, sandy silt layers to a combined thickness of 0.65m. These deposits represent a rapid backfill event, evidenced by the cross-joining sherds of samian pottery recovered from a number of fills. The fills also contained burnt bones and fragments of melted lead. These finds, together with the significant quantity of ash present, indicate these fills are likely to have derived from localised burning that were then used to level the ground over the ditch. From the ditch, a total of 122 sherds of pottery recovered, dating its backfill to the late 1st to early 2nd century AD. Cattle, pig, sheep/goat, dog and domestic fowl were all represented in the animal bone assemblage, some with signs of butchery and canid gnawing. Also of note is the large fragment of Roman roof tile (imbrex), likely to have formed part of a roofed structure nearby.
- 6.3.5 Two large sub-rectangular pits with near-vertical sides and flat bases were found in the southeast part of the site. The largest F405 was aligned north to south, measured 1m long, 0.75m wide and 0.51m deep, and produced a small group of 2nd century AD Roman pottery. The other F412 was slightly smaller, with its long-axis oriented at right angles to its neighbour. Although these features have been interpreted as pits, it is possible that they could be postholes for a large structure. Three shallow pits or postholes F415, F418 and F422 and were found north of the rectangular pits, and three more were identified in the centre of the trench F402, F408 and F409. All measured between 0.23m and 0.33m in diameter and contained no datable finds. One other, slightly larger, posthole F411 was found to the northwest. It is possible some represent postholes associated with a structure; however, too few were found, and too few similarities between them, to enable further interpretation.
- 6.3.6 An irregular-shaped feature F404 was excavated to the south, however, although finds of animal bone and shell were recovered, no convincing cut was identified and it was likely the result of animal or root activity. To the north of this was a short length of, what appeared to be a ditch F424. It had almost vertical, irregular sides and base and produced a single small sherd of Roman pottery. The full extent of the feature was unclear in plan and, although it has been recorded as archaeological, there is a chance it was also formed by animal burrowing.



- 6.3.7 At the northern end of the trench the chalk geology sloped down and was overlain by archaeological layers. During the course of the 2018 field season, unmodified natural subsoil was not reached in this part of the site. The earliest layer (4064) was found in the northeast corner and produced 88 sherds of 2nd century AD pottery. This was found below two contemporary layers (4045) and (4046), from which a total of 103 sherds of pottery, dating to the late 1st to early 2nd century, animal bone and flints were recovered. These deposits likely represent made ground deposits, presumably placed to consolidate and level the ground.
- 6.3.8 In the northwest an L-shaped robber cut F413 was investigated. It was predominantly aligned east to west with a short turn to the south at its eastern end. The cut measured 0.38m wide, was 0.2m deep, and it was filled with chalk rubble; this backfill represented discarded masonry following the removal of a stone wall. The southern turn aligned with one of the parallel ditches F407, suggesting that this too was formed as the result of robbing event. No dateable artefacts were recovered from the fill of the robber cut, but the fact that it had been made into a layer dated to the late 1st or early 2nd century indicates the robbing event and the original wall construction must have occurred after this date.
- 6.3.9 To the east of this a single posthole F420 also cut through these layers; its upper fill also comprised crushed chalk. Due to time constraints the posthole was not fully excavated, however the nature of its fill and position on site suggests it may have been associated with this walled structure.

6.4 Trench 5 (Figure 3)

- 6.4.1 Trench 5 measured 10m x 10m and was excavated to the base of the topsoil to reveal four archaeological features. The two archaeological features were investigated: one ditch and a pit in the eastern side of the excavation. Two further features were found elsewhere in the trench but due to time constraints and the density of features in Trench 4, these were simply mapped. The earliest feature investigated was a linear ditch F501 running from north to south along the eastern edge of the trench. It had shallow sloping sides, measured 0.39m wide and 0.12m deep and contained a single fill. Towards its southern end it cut through the top of a pit F502. This earlier feature was at least 1.5m in diameter and produced a small assemblage of late 1st to 3rd century pottery. Despite the other two features not being excavated, the relationships between them was clearly defined in plan; both excavated features were cut/overlain by the feature that occupied much of the southwestern part of the trench, which also overlay the unexcavated ditch to the west.

6.5 Trench 6 (Figure 3)

- 6.5.1 Trench 6 measured 10m x 6m and targeted an area of the field where it was believed a terret ring was found during a metal detecting survey. One archaeological feature was encountered F601, the top of which was cleaned by DigCamp participants. The feature was not fully excavated but six small sherds of 2nd century (or later) Roman pottery were recovered from its top fill.



7 THE ARCHAEOLOGICAL FINDS

Chris Casswell, Stuart Noon (copper alloy, lead, ferrous objects, small finds & treasure hoard), Ian Rowlandson (pottery), Phil Mills (CBM), Joshua Hogue (lithics), Hannah Russ (animal bone and shell) and Natasha Powers (human bone).

7.1 Summary

7.1.1 The recovery of finds from the excavations at Elmswell Farm characterised the results of the non-invasive survey and provided some insight into the chronological framework (Aim 2) as well as providing a better understanding of the site's archaeological conditions (Aim 3). The condition and preservation of finds across the site was generally good for all artefact types (Aim 3, Q7 and Q8). Pottery recovered from features dated them primarily from the 1st to the 2nd century, with some fragments dating to the prehistoric (Aim 1 Q2). The animal bone assemblage indicated domestic occupation usually associated with Roman sites, while the pottery assemblage suggested a relatively high status (Q9). The evidence of pottery from this site and previous investigations in the early 20th century suggest that Elmswell was a site of some significance in the Roman period from soon after the conquest until the very end of the Roman period (Q5). The assemblage of pottery suggests that the inhabitants had access to a relatively diverse range of Roman pottery including specialist table wares more akin to the inhabitants of the fortress at York than those that dwelt in the surrounding hinterland and it is possible that the settlement at Elmswell had an official function or was the location of a *mansio* (Q6).

7.1.2 The excavations yielded an assemblage of 398 sherds of pottery, 28 animal bones, three neonatal skeletons, one adult skeleton, 44 mollusc fragments, 83 fragments of CBM, 54 worked flints and 34 naturally broken/unmodified flints, six ferrous objects, seven fragments of lead, seven fragments of slag, two fragments of copper alloy objects, 15 fragments of stone, 21 fragments of daub and 24 small finds from the topsoil with five from excavated contexts. The most numerous finds were pottery and CBM, which were assessed and are reported on in detail in Sections 7.3 and 7.4 below. A preliminary identification of the other finds is catalogued in Appendix B, Appendix C and below.

7.1.3 Recovery of environmental remains from the site was minimal, with few paleoenvironmental remains present (see Appendix E). Ten bulk samples of 40 litres were taken during excavation, all from Trench 4. They were taken from deposits containing material which was not necessarily related to the function of the feature to which they are related, but which may characterise deposits from different areas of the site (Wilkins *et al.* 2018). Five samples and two hand picked charcoal samples were assessed, but no material of real interpretable value was recovered (see McKenna, Appendix E).

7.2 Pottery; condition and preservation of material across the site

7.2.1 The pottery assemblage consisted of 398 sherds of pottery weighing 3.114kg representing a maximum of 247 vessels (summarised in Appendix C). The assemblage consisted primarily of pottery dating to the Roman period. The majority of the fragments were of Roman date from the late 1st to mid-2nd century AD and there



were also two medieval or post medieval sherds. An additional sherd of amphora was also retrieved but not studied for this assessment giving a total of 392 sherds, 3.188kg, 4.54 RE, likely to be of Roman or perhaps prehistoric date. The assemblage was unusual for this part of eastern Yorkshire as it contained a high proportion of wheel made wares that were most likely to have been produced at York or Malton which stands in stark contrast to assemblages from humble rural sites of this period which have very few sherds of Roman wheel made pottery.

7.2.2 The material was consistent across the site. In Trench 4 pottery was recovered from sixteen contexts primarily dating from the 1st to 2nd century including Samian pottery from five contexts (4001), (4004), (4006), (4007), (4046) and amphora recovered from the topsoil (4001) and a ditch (F401, 4001). A smaller amount of material from Trench 5 in topsoil (5001) were retrieved consisting of two heavily abraded oxidised sherds, a stone and a sherd from a grey ware jar from a pit both dating late 1st to 3rd century F502. An even smaller amount of materiel from Trench 6 consisting of a small group of oxidised sherds including a sherd from a York/Malton mortarium dating from the late 1st to 3rd century, the Medieval and Post-medieval periods. The single sherd from the mortarium was probably manufactured in the vicinity of York.

7.2.3 The largest group of vessels Eboracum Ware 1, included a maximum of 34, and were retrieved from the site with much of the material from a ditch F401. The forms present included a carinated bowl, a rusticated jar, a flagon with a pulley wheel rim and a ring-necked flagon. All of these vessels could be dates to the late 1st to perhaps mid-2nd century AD. Finding such a volume of oxidised wheel made wares away from the fortress at York suggests the settlement may have had some form of official function.

7.2.4 The assemblage was unusual for this part of eastern Yorkshire as it contained a high proportion of wheel made wares that were most likely to have been produced at York or Malton. This stands in stark contrast to assemblages from humble rural sites of this period which have very few sherds of Roman wheel made pottery. The evidence from this site and previous investigations in the early 20th century suggest that Elmswell was a site of some significance in the Roman period from soon after the conquest until the very end of the Roman period. This small assemblage provides evidence for the pottery used by some of the first inhabitants of the site and suggests that they had access to a relatively diverse range of Roman pottery including specialist table wares more akin to the inhabitants of the fortress at York than those that dwelt in the surrounding hinterland.

7.3 Pottery chronology and type

7.3.1 The earliest pottery on site was a single handmade vesicular sherd with an oxidised external surface and a black internal surface was retrieved from a layer (4045). Although this sherd weighed only 2g it is possible that it may have been from a vessel manufactured in the earlier prehistoric period.

7.3.2 In the topsoil were a small group of sherds including a rim sherd from a Dressel 20 amphora, samian, oxidised wares including a rim sherd from a bowl with a bifurcated rim, a rusticated grey ware sherd and a rock-gritted jar dating AD120-150. Amphora sherds are rare finds from rural sites in this part of Yorkshire, such vessels are more commonly found on roadside settlements, towns and forts. The gritty fabric of these



sherds would fit with the early date of the rest of the pottery. A further sherd was recorded by Dr Phil Mills from amongst the ceramic building material. He writes "body sherd (with handle scar) from a Dr20 amphora from a ditch fill (4030) (weight 168g)".

- 7.3.3 Sandy grey wares were well represented on the site. Trying to establish the production source of the sandy grey wares recovered is not easy given the macroscopically similar fabrics produced by a number of industries, often with a similar suite of forms. Grey wares were produced in the vicinity of Brough-upon-Humber (Darling 2000 and 2005), Stamford Bridge (Roe 2009), Norton (e.g. Hayes and Whitley 1950), Holme on Spalding Moor (e.g. Halkon 1987), Lockington (Lloyd 1968) and a number of other potential kiln sites in East Yorkshire. A proportion of the grey wares found in East Yorkshire were also manufactured in northern Lincolnshire (Precious et al. 2011). The variety of sources make it challenging to attribute much of this material to a particular kiln site with any certainty. Limited work has been done on characterising grey ware fabrics since Evan's study of the pottery from the region in 1985. Since then, apart from Crambeck products which can easily be split macroscopically, there has not been a coherent system used by researchers for comparisons from site to site.
- 7.3.4 The early date range of this material along with the similarity of the quartz inclusions from both the Eboracum wares and the grey wares suggests a production source for much of the grey ware from this assemblage in the vicinity of York. At York grey wares, particularly rusticated jars, were also produced and used alongside the more diagnostic suite of Eboracum wares (Monaghan 1997). Production of grey wares and oxidised wares at Malton during the early Roman period has also been suggested (Bidwell and Croom 1997). None of the grey wares present appeared to be a good match with fabric samples from the later kilns listed above so it should be considered that the material recorded as GREY in this report represents products from the York or Malton area with a small quantity of material that was possibly produced in Lincolnshire.
- 7.3.5 The grey ware vessel with fossil shell inclusions (GREYS) was an interesting case as such material was not available locally to the potters at York or Malton. This carinated jar or bowl with a distinctive flat cordon is one that is particularly common in northern Lincolnshire where it appears amongst a number of kiln assemblages including Dragonby, Roxby and Market Rasen and is common amongst assemblages dating to the later 1st to 2nd century AD (Darling and Precious 2014, No. 1157-9, Rigby 1980, No. 99). An example of a similar vessel has also been published from Malton (Bidwell and Croom 1997, No. 405). Recent work on assemblages from North Killngholme and Immingham in northern Lincolnshire have produced a number of vessels in a similar fabric to the vessel from this site including examples of the same form (Rowlandson and Fiske 2016; Rowlandson et al. 2017; Rowlandson and Fiske forthcoming, North Lincolnshire fabric GREY2). Examples of similar grey wares with some fossil shell have also been noted by this author in the Sleaford area. The production site for the Elmswell vessel was probably located on or near Jurassic fossiliferous strata most likely to the west of the Lincolnshire Wolds. A further, more detailed, literature trawl through published reports from north of the River Humber may yet isolate further examples and it is possible that such a vessel may also have been produced in the vicinity of North Cave where fossiliferous strata outcrop but, to date, no kilns producing such wares have been published. The import north of the Humber of a number of early to

mid-Roman grey ware types from Lincolnshire has been noted by a number of authors although such vessels have seldom been recognised this far north (e.g. Precious et al. 2011). Although sherds from this vessel were found across a number of contexts, they represented a single vessel, which as it was probably a drinking vessel, may have reached the site as a personal possession rather than as part of a larger consignment.

- 7.3.6 In ditch F401 was a fresh medium sized group including a sherd from a decorated samian form 37 bowl with evidence of a rivet repair, a grey ware jar with an everted rim, a beaker in a sandy oxidised fabric, the base of a vessel in an oxidised white-slipped fabric, a handmade jar and a rim from a carinated drinking bowl (B334) of grey ware with some fossil shell inclusions of a type common from Lincolnshire was recorded possibly dating ?AD70-150. The date of the samian form 37 bowl with is to be confirmed by the samian specialist. The date offered may be refined by specialist identification, but white-slipped Eboracum fabric would appear to suggest a 2nd century AD date. Also in the ditch (4006) were sherds from the same decorated samian form 37 bowl, sherds of the carinated bowl (4004) and a decorated handmade jar. Also present were sherds from a samian form 27 cup, a very large dish in a burnished oxidised fabric (York form DD4), a handmade bowl possibly mimicking carinated legionary bowls (York form BD? cf Darling & Precious 2014 No. 763) and a fragment from a small flagon with a pulley-wheel rim (York form FP). The pottery dates AD100-150. In another fill (4007) were further sherds from the same decorated samian form 37 bowl, native tradition ware, legionary ware including a carinated bowl (York form BB, No. 3935-7), a bowl with a split rim a sherd of oxidised white slipped ware and a sherd from a rusticated jar in an oxidised fabric. The pottery dates AD100-150 but the earlier end of the date range given appear more likely. Miscellaneous grey wares were probably from more than one source and included carinated necked bowls from ditch F401 possibly from a Lincolnshire. A number of lipped bowls were recorded along with sherds from jars with web or nodular rustication decoration in a similar fabric to rusticated jars from York.
- 7.3.7 Neonatal grave F406 included two small fragments from a grey ware rusticated jar dating late 1st to 2nd century and in the fill (4017) was a single grey ware sherd attributed to the Roman period. In a pit F405 was a small group including a sherd from a bowl in an oxidised fabric, handmade sherds and sherds from a grey ware jar with linear rustication dating to the 2nd century (see Brewster 1957, Fig. 11.6; Darling & Precious 2014 No. 1050).
- 7.3.8 In the fill of a ditch (4028) was a handmade sherd, a white-slipped oxidised sherd, sherds from an oxidised jar or flagon, a carinated drinking bowl (B334, same vessel in context (4004) and a small flagon with a pulley-wheel rim (York form FP, same vessel in context (4006)). The pottery dates AD100-150. In the same ditch a small scrap of samian was retrieved dating AD70-110?. The date is to be confirmed by the samian specialist. Also in the same ditch (4029) was a basal fragment from a small handmade jar or beaker fired black with wiped external surfaces possibly Roman. In a fill of another ditch F419 was a sherd from a grey ware jar attributed to the Roman period.
- 7.3.9 In a raised layer (4045) at the northern end of the trench was a medium sized group including a ring-necked flagon in an oxidised fabric (Form as Gillam 1970 Fig. 1.4, RCHMY 1 H.2330, best parallel Brewster 1957 Fig. 11.9), sherds with 'nodular' or 'star'



rustication, a sherd from a grey ware necked jar and handmade rock-gritted sherds. The pottery probably dated from the late 1st to 2nd century. In another layer (4046) a small group including a sherd from a grey ware lipped bowl, a samian sherd, an oxidised sherd and handmade calcite-gritted sherds dated to AD120+. In the cut of a ditch F424 was a single oxidised sherd dating late 1st to 3rd century.

- 7.3.10 A limited number of Iron Age tradition sparry mineral calcite-gritted fabric/ Miscellaneous Calcite-gritted fabric handmade sherds were retrieved from the project and all were stratified with Roman pottery. A sherd from a necked jar was retrieved from topsoil that could be dated to the early Roman period (broadly as Bidwell and Croom 1997 No. 63; Rigby 2004 'Chamfered Jar' type).
- 7.3.11 The majority of sherds of handmade Iron Age tradition wares with coarse rock-grits. had irregularly fired surfaces with a few vessels fired to a homogenous black firing. Vessels variously included sandstone, quartz and rocks including black minerals from an igneous source that suggested that rocks from local drift deposits were used for their manufacture. This group was not rendered into fabric groups in the same fashion as this author's work on the assemblages from Newbridge and Catwick (Rowlandson 2012; 2016).
- 7.3.12 A small quantity of the Erratic pebbles broken up as temper ware vessels were retrieved from a ditch F401 but nearly all of the vessels were retrieved from a layer (4064). This layer contained fresh sherds from a handmade rock-gritted jars with an externally bevelled everted rim (as Rigby 1980 Fig. 30.34, Fig. 27.10,11,13) and a further example with an everted upright rim (broadly as Rigby 2004 Fig. 6 'Necked Jar'). An initial viewing of these sherds suggested that they were predominantly from one vessel but on closer inspection they have been recorded as their maximum number of vessels as there were variations in rim forms, surface firing and the rim sherds could not all be fitted to make a single vessel.
- 7.3.13 Small quantities of handmade sparry mineral calcite-gritted bodysherds were also retrieved from a layer (4046). Another layer (4064) revealed fresh sherds from a handmade rock-gritted jar with an externally bevelled everted rim (as Rigby 1980 Fig. 30.34, Fig. 27.10,11,13) and a further example with an everted upright rim (broadly as Rigby 2004 Fig. 6 'Necked Jar'). An initial viewing of these sherds suggested that they were predominantly from one vessel but on closer inspection they have been recorded as their maximum number of vessels as there were variations in rim forms, surface firing and the rim sherds could not all be fitted to make a single vessel. The pottery probably dates to the 2nd century. There was no evidence to suggest that any of this material dated before the Roman conquest and no evidence of late Roman wheel finished calcite-gritted wares in the Huntcliff/ 'proto-Huntcliff' tradition as illustrated from previous excavations at Elmswell (Corder 1940a, Fig. 11.13). Two small flakes of ceramic building material were retrieved from topsoil layer (4001) which were recommended be sent to the ceramic building material specialist for any final report.
- 7.3.14 In the topsoil in Trench 5 two heavily abraded oxidised sherds and a stone were retrieved dating late 1st to 3rd century. In pit F502 (5003) a small group including a sherd from a grey ware jar were retrieved dating late 1st to 3rd century. In the topsoil in Trench 6 (6001) a small group of oxidised sherds including a post-Roman glazed

sherd and a sherd from a York/Malton mortarium were located dating from the late 1st to 3rd century, the medieval and post-medieval periods. The single sherd from the mortarium was probably manufactured in the vicinity of York. Two medieval sherds were presented for study: a green glazed rod handle from a jug retrieved from context (0002) and a green glazed body sherd from topsoil (6001). These two sherds should be presented to a post-Roman pottery specialist for any final report. In another context (6002) a small group including grey ware, oxidised ware and a sherd from a colour-coated beaker with an everted rim were recovered that were probably medieval. The Nene Valley ware may be from a South Carlton/Lincoln production source, the Nene Valley or a continental import. This vessel probably dates to the middle of the 2nd century AD. Two further small sherds could not be identified with certainty although they were probably further handmade sherds in the Iron Age tradition.

7.4 CBM and fired clay

- 7.4.1 In total, 83 fragments of ceramic building material (CBM) weighing 4201g were recovered from six contexts (0003), (4001), (4004), (4038) and (4046). The material can all be described as Roman in character. There is a fragment from a lower cutaway (0003) which probably derives from a Warry 2006 type B,6 cutaway with a suggested date range of c. AD100 -180.
- 7.4.2 The relatively high level of imbrex in the group suggest that this material derives from a nearby structure, rather than from rural scatter. This is reinforced by the presence of brick and possible flue tile fragments which suggest that this is from a hypocaust structure. There are a number of tesserae, mainly c 20mm square but with some larger ones, most in tile but also with white limestone tesserae present. This suggests that the material derives from a relatively well decorated high-status hypocaust structure from the early to mid-2nd century AD.
- 7.4.3 The current group is quite small, but it is worth considering recording the CBM to fabric level as this would help the understanding of CBM supply in East Yorkshire in the 2nd century before the rise of the Holme-on-Spalding moor and Crambeck tile industries (Mills 2014).

7.5 Animal bone; preservation and taxa

- 7.5.1 A small assemblage of 28 animal bones and teeth were recovered from thirteen contexts in Trench 4, with a total of 81 pieces representing four mammals and one bird species. The number of identifiable fragments was good, although the size of the assemblage and potential for a wide chronology reduces their ability to inform particular research questions. Almost two thirds of the identified specimens came from fills of a ditch (4005, 4006, 4007 and 4030). The remains from this feature are also the most taxonomically diverse, with each of the species recorded at the site recovered from one or more of its fills. Other remains were recovered from pits, a posthole, a beam-slot, layers and a grave fill.
- 7.5.2 Surface preservation was generally poor throughout the assemblage, which displayed moderate levels of fragmentation. As such, identification at genus and species level was only possible for 28 specimens (Table 3). The assemblage comprised domestic taxa to be expected for a Roman period site in northern England; Cattle (*Bos taurus*),



pig (*Sus domesticus*), sheep/goat (*Ovis aries/Capra hircus*), domestic dog (*Canis familiaris*) and domestic fowl (*Gallus gallus domesticus*). The remaining fragments represented small to large mammals, and a single bone from a medium-sized bird. No microfauna or fish remains were present.

- 7.5.3 The vertebrate remains were identified to element, side and to as low a taxonomic level as possible using the Author's reference collection and published and online identification guides (Hillson 2003; 2005). Quantification used the diagnostic zone method as presented by Dobney and Rielly (1988). A taphonomic assessment of each fragment was undertaken, recording the presence and absence of cut and chop marks, burning and calcination, any evidence for animal activity (canid or rodent gnawing), and surface preservation; any other surface modifications of note were also recorded. At this stage, no attempt was made to sex any of the remains, or to measure any elements. Sheep (*Ovis aries*) and goat (*Capra hircus*) distinction was also not considered. Fragments of bones that could be identified to element but not any specific species were grouped as far as possible using size and class or order categories.
- 7.5.4 One unidentified longbone fragment from the fill of a ditch was burnt (4006), three elements from two contexts displayed evidence for canid gnawing from the same ditch and the cut of a pit (4006) and (4012), and four elements from two contexts had cut-and/or chop-marks resulting from butchery from the same ditch (4004) and (4006). Butchery marks were recorded on two rib fragments; one from a small-medium mammal, and one from a large mammal, a mandible fragment of a large ungulate, and a cattle calcaneum. There were no obvious deposits of butchery, bone working, or skin-processing waste. The presence of butchery marks suggests that there was some processing of the assemblage, and it is likely that it originated from multiple sources, dominated by domestic refuse. No associated bone groups were recovered, again implying processing or disturbance.
- 7.5.5 The remains of cattle were recovered from three contexts in the same ditch (4006), (4012), and (4030). All of the cattle remains were consistent with adult animals, though no precise age at death could be ascertained and all of the cattle remains represent limb elements. Site-wide, the remains represent a minimum of one individual. Gnawing by canids was recorded on a calcanium (4006) and metacarpal (4012) bone. There were possible fine cut marks to the calcanium, but these were distorted by poor surface preservation and canid gnawing, so cannot be confirmed.
- 7.5.6 Pig remains were recovered from three contexts, topsoil (4001), ditch fill (4007) and a layer (4046). The pig remains included non-adult individuals, with a mandible fragment (4046) containing deciduous teeth, and the metapodial being distally unfused. Site-wide the pig remains represent a minimum of one individual. No evidence for butchery or canid activity was recorded on the pig remains.
- 7.5.7 The remains of sheep/goat were recovered from five contexts, topsoil (4001), ditch fill (4006), two layers (4045), (4046), and a beam slot fill (4070). These included a left mandible with teeth in seven pieces, and a fragment of a right mandible (4006) and a right maxillary M3 tooth (4070). All of the remains were consistent with non-juvenile individuals, with the mandible containing a full set of adult dentition with the third



molar in wear; the maxillary M3 was also in wear. Site-wide the sheep/goat remains represent a minimum of one individual. No evidence for butchery or canid activity was recorded on the sheep/goat remains.

- 7.5.8 Two ditch fill contexts from the same ditch contained the remains of two dogs. A single bone consistent with domestic dog (4007) representing a puppy, with both the proximal and distal epiphyses unfused and a tibia (4012) very poorly preserved indicating an older animal. No evidence for butchery or canid activity was recorded on the dog remains. Canid gnawing on other bones within the assemblage further attests to the presence of dogs at the site and also indicates that bones were not always disposed of immediately following discard but were left for dogs to chew.
- 7.5.9 A single bone from domestic fowl was recovered from a ditch fill (4007). Anomalous bone growth on the medial portion of the bone indicates either a healed fracture, or an infection. Only one other bird bone was recovered from a layer (4045), and while this could not be identified at species level, it was from a medium-sized bird smaller than domestic fowl.
- 7.5.10 While the range of animals recovered from Elmswell include those frequently recovered at Roman sites in the region, there are two things of note; an absence of any equid remains, a taxon often forming a good proportion of Roman animal bone assemblages for this region, and the recovery of two left dog tibiae, which seems surprising in such a small assemblage where dietary domesticates represent no more than one individual each. While dogs are not rare on Roman sites in Britain, for two dogs to be represented in such a small assemblage is perhaps unusual, and more so that this was the same element from the same side of each animal. The two bones were recovered from separate contexts, one from a ditch fill, and the other from a pit, which offers no further explanation for their presence. The cattle, pig, sheep/goat and domestic fowl remains almost certainly represent waste from beef, pork, lamb/mutton and chicken production and/or consumption. The assemblage is not substantial enough to consider the potential role of these animals in the exploitation of/production of secondary products such as marrow, leather, wool, milk and eggs. The excavations at Elmswell were spatially restricted, and the recovered animal bone assemblage small. Firm interpretation of the role of animals at Elmswell during the Roman period could be made if sufficient material is recovered in any future excavations at the site.

7.6 Molluscan remains

- 7.6.1 In total, 44 mollusc and mollusc fragments were recovered from six contexts (4001), (4006), (4007), (4012), (4038) and (4050). The assemblage can be divided into three categories; marine, terrestrial, and fossil.
- 7.6.2 Three non-fossilized marine taxa were present in the assemblage; mussel (*Mytilus* sp.), the edible oyster (*Ostrea edulis*) and a fragment of another marine bivalve taxon that could not be identified any further. Fourteen fragments of mussel shell recovered from the fill of a rectangular pit (4050) representing a minimum of one individual. Remains of edible oyster were recovered from three contexts, topsoil (4001), and two ditch fills from the same ditch (4006) and (4007), representing a minimum of eight individual oysters across the excavations. While few were sufficiently complete to be measured,



all of the remains were consistent with specimens c. 7cm in length and c. 6cm in height – fairly small for this species. Damage was common on shell margins directly opposite the umbo which maybe coincidental, possibly resulting from a range of depositional and post-depositional taphonomic processes or from the shells being opened with some form of tool.

7.6.3 Remains of terrestrial molluscs were recovered from two ditch fill contexts (4012), (4038). In each case the remains represented a single individual of the *Cepaea* genus, with the specimen from (4012) identified as *Cepaea cf. hortensis*. This assemblage is too small and comprises taxa that are fairly ubiquitous in terms of habitat preferences to consider for use as an environmental or climatic proxy. Two fossil bivalves were recovered from one ditch fill context (4038). One could be identified as a 'devil's toenail' (*Gryphaea*), while another specimen could not be identified any further than bivalve. Devil's toenails are a feature of the local bedrock geology at Elmswell and it is likely that these two small specimens are present at the site as a result of natural erosion or human disturbance of the chalk bedrock, perhaps during the original excavation of the grave.

7.6.4 Oysters and mussels are the most common shellfish taxa recovered on Roman period sites in Britain (e.g. Cool 2006) and represent the waste from consumption of shellfish at Elmswell. While it is rarer for these remains to be recovered from sites of Iron Age date, they appear on Roman sites from the earliest occupation, as has also been recorded at Scotch Corner in North Yorkshire (Russ forthcoming). This suggests that reliable trade networks with coastal areas was established early on in the Roman occupation of Britain. The remains from excavations at Elmswell in 2018 are few, suggesting that, while contact and/or trade with the coast was possible, it did not form any significant part of the economy or diet of those living there. However, disposal of shellfish waste may have taken place outside of the excavated areas, which is something for investigation in future archaeological work at the site.

7.7 Human remains

7.7.1 In total, 44 human bone fragments were retrieved from six contexts comprising three neonatal inhumations and a group of disarticulated bones from a probable adult were recovered from Trench 4. Each of the three burials contain the largely complete and moderately to well-preserved remains of a single neonate. The first neonate F406, (4018), was interred in a flexed, foetal position, lying on its right side at one end of an oval pit or grave [4016]. This is the oldest of the three, appearing to be the size of an infant slightly older than full-term. The grave appeared to be deliberately positioned in association with a beam slot F421. The second burial (4034) had been placed in a supine and extended position in a sub-rectangular grave [4021] that was cut by a posthole F415, the head area showing signs of disturbance. The small size of the long bones of suggests that they are pre-term (foetal). The final burial (4051) is approximately full term and had been placed within a small, circular pit or posthole F403 and the condition of the remains made interpretation of the burial position problematic. No pathological changes in any of the skeletons were noted.

7.7.2 Three contexts of disarticulated bone were separated during assessment of the faunal remains. A ditch fill (4038) contained fragments of a left clavicle, scapula right patella



and a left capitate together with numerous fragments of long bone. The ditch fill was immediately stratigraphically below pit [4054] which contained fragments of probable adult long bone including tibia and femur (4055) and significant portions of both legs and both arms, one foot and occasional fragments of vertebra. It would appear that some elements were in articulation when discovered and so it may be that they represent reinterment of a disturbed and partially decomposed individual. A fragment of proximal right ulna has two small perforations in the anterior surface which require further investigation to determine if they are of taphonomic or pathological origin. The stratigraphic evidence suggests that the adult bone originates from a single individual.

7.7.3 The neonatal burials are moderately well-preserved, and a number of the long bones are complete, with good potential for refining the age estimates for the individuals using metric data. Whilst the adult remains are poorly preserved and fragmentary, there is the potential to obtain some metric data. The potential for population information is limited by the small sample size. There is sufficient bone surviving that it would be possible to investigate destructive sampling for radiocarbon and/or isotopic data. However, given the small size of the individuals and of the overall sample, the additional information this would provide should be carefully weighed against the loss of bone and it may reasonably be felt that such destructive testing cannot be justified in this instance.

7.7.4 Neonatal assemblages have sometimes been suggested as evidence of infanticide (Mays 1993). However, clusters of infant burials are not uncommon, particularly in association with structures and have been noted at numerous other sites of similar date, such as Barton Court Farm in Oxfordshire (Esmonde Cleary 2000, 135) and Poundbury (Watts 1989, 377).

7.8 Lithics

7.8.1 In total, 54 worked flints and 34 naturally broken/unmodified flints were recovered from ten contexts in Trench 4 and Trench 6. The lithic assemblage comprises of residual material dating from the Mesolithic, early Neolithic, late Neolithic/early Bronze Age, as well as, possibly the later Bronze Age/early Iron Age. The assessment describes a range of artefacts dating from the Mesolithic, early Neolithic, late Neolithic/early Bronze Age, as well as, possibly the later Bronze Age/early Iron Age, recovered from recent excavations at Elmswell Farm. All the material likely survives as residual finds that were redeposited during subsequent activities. The lithic assemblage contributes to the to the existing body of evidence indicating that the site was the focus of human activity in prehistory, with flint scatters and barrows having been previously identified and excavated at the site (Casswell, 2017; Wilkins et al 2018).

7.8.2 In Trench 4 much of assemblage belonged to the Mesolithic/early Neolithic. In Trench 6 a bladelet recovered from topsoil (6001) was broadly consistent with dating from the Mesolithic/early Neolithic. All the other finds were flakes and not especially diagnostic, although based on the range of conditions and subtle differences in typotechnological features they likely represent a range of different ages from the Mesolithic/early Neolithic through to the later Neolithic/early Bronze Age onwards. A



retouched blade SF48 was recovered from plough soil (0003) during fieldwalking, which broadly dates to the Mesolithic/early Neolithic.

7.9 Small finds assessment

7.9.1 In total, 21 small finds were recovered from the excavation. There were 12 coins and 2 objects Roman coins from the top soil in the vicinity of the trenches retrieved through metal detecting survey which cannot be fixed to any secure features but are indicative of general Roman activity throughout the Roman period in the area specifically from AD 68 to 340. These are discussed in Section 5.2 remote sensing results.

7.9.2 There were seven small finds from excavated contexts comprising three coins and four objects. The coins were a denarius of Vespasian SF31 discovered in the topsoil of Trench 5 (5001) it was minted in Rome, dating AD 69-70 (RIC II (pt. 1, 2nd ed.), Vespasian, No. 2). A dupondius of Vespasian SF26 was also discovered in the same top soil, minted in Lugdunum dating AD 71 (RIC II (pt. 1, 2nd ed.), Vespasian, No. 1144). A Nummus, probably of Valens SF41 was retrieved from Trench 4 in the topsoil (4001), the mint is unknown and it dated AD 364-78.

7.9.3 The objects comprised a possible belt or strap fitting SF25 which was retrieved from Trench 4 in the topsoil (4001), and probably dates to between 300 to 500AD. It could be Roman or early medieval. The object shares some similarities of form and attachment with bar mounts NMS-306290, DOR-C27897 on the PAS database. The object also shares some similarities with belt stiffeners NMS-656311 (cf. Appels & Laycock, 2007, 275-6), and also with another object on the database FAKL-EB0744 of Early Early-Medieval date which the author parallels with belt stiffeners from Fairford Gloucestershire, Grave 7 (McGregor and Bolick, 1993, 212). A copper alloy Roman penannular brooch, type C SF43 from (4011) was retrieved from the fill of a small pit containing a neonatal burial. It can be dated 1st century BC – 1st century AD, although Fowler type C brooches can demonstrate use and re-use in contexts dating from the Late Iron Age up to the 7th century AD, showing use from the Late Iron Age to Early Medieval periods and are most common in Lincolnshire and East Anglia.

7.9.4 A glass fragment SF49 from the cut of a pit (4045) is likely to be from a bowl or globular or cylindrical urn or similar vessel of probable Roman date, AD 200 – 410. A ceramic tile fragment SF44 from a raised layer below the topsoil (4045) can be broadly dated to the Roman period 43–410AD and could have been used as a tesserae or a component element within a tessellated pavement. The other small find objects from excavated contexts are undiagnostic and cannot be firmly fixed to a feature or date but they are from a known Roman site and could represent general activity within in the Roman period.

7.10 Metalwork, stone and daub assessment

7.10.1 In total, six ferrous objects were recovered from six contexts, four were nails and two cast iron fragments all probably modern (4001), (4031), (4046), (5003), (6002). Seven fragments of lead were recovered from two contexts (4001) and (4030). One was undiagnostic but possibly Medieval (4001) and six were possibly Roman casting waste (4030). Seven fragments of slag were recovered from four contexts (4001), (4030), (5003), (6001), with four relating to furnace waste and three probably clinker from



modern industrial activities. Two fragments of copper alloy objects were recovered from one context (4030) both undiagnostic. Fifteen fragments of stone were recovered from ten contexts with two possibly architecturally related (4004), (4017), two fossils and the rest natural. Twenty-one fragments of daub were recovered from four contexts (4004), (4006), (4007) and (4030), weighing 242.60g. All were heat affected suggesting that a structure was on the site or nearby and was damaged by fire.

8 PUBLIC IMPACT

8.1 Introduction

<https://digventures.com/elmswell-farm/timeline/>

8.1.1 The *Elmswell Farm: Seasons in Time* project has been a resounding success, with many positive outcomes being achieved for the community. The two-week excavation that took place in August 2018 brought together more than 70 participants with professional archaeologists to train them in archaeological field skills such as excavation, photography, photogrammetry, finds processing and archaeological recording, with many more visitors helping with post-excavation and finds processing on site. These are skills that they would likely not have had access to, had the dig not taken place.

8.1.2 Many participants also had the chance to observe and benefit from trying their hand at metal detecting, field walking and geophysical surveying, furthering their understanding of the range of techniques archaeologists employ to evaluate and investigate sites such as Elmswell. You can see who got involved in the archaeological project on our team pages: <https://digventures.com/dig-team/elmswell-farm/>

8.2 Participation

8.2.1 The project presented multiple passive and active, online and offline opportunities for people to learn about heritage. It should be noted that due to the sensitive nature of the archaeology, and issues with nighthawking in previous seasons, the online presence during the dig was significantly scaled down, to avoid encouraging any behaviour that may have compromised the archaeology. To mitigate this, online information regarding the dig has been scaled up in the post-excavation stage, revealing more to the public about the archaeology after the trenches were closed. This has been through posts on social networks such as Facebook, Twitter and Instagram, as well as blog posts that have been published on the DigVentures website and shared through our social media channels over the winter season.



- 8.2.2 During the excavation, people were able to come to visit the site and receive a tour from our archaeologists, and those who were interested in getting more actively involved could volunteer at the dig for a short session, while others joined us for a week or more to learn more deeply about archaeology and archaeological methods. Of our 2018 Dig Venturers, the majority joined us for one, two or three days (54 individuals), with 14 getting involved for a week or more. For dig participants, our archaeological curriculum is designed to ensure that anyone joining us for any amount of time receives structured learning, and is able to develop their skills incrementally. All our field training is designed in line with National Occupational Standards (NOS) and we encourage all participants to record their progress in learning new skills. This means participants are able to use tools such as the CPD Skill Passport to track progress.
- 8.2.3 Those participating in the excavations were a mix of local volunteers from East Riding Archaeological Society, and members of the DigVentures community. As a result, they represented a cross section of society, of professional people, retirees, and a small number with higher management positions. The remainder taking part were students, either of school age or those attending university. Of those visiting the site throughout the excavations, 56 responded to our evaluation survey. They demonstrate that all respondents (100%) of those who came to Elmswell Farm visited specifically to see the archaeological dig. This is likely due to the remote nature of the site, and the fact that it is located on private land, so visitors would not happen across the excavation and drop in unless they knew the dig was taking place. A significant percentage of people 27 (48%) said their visit to the site has changed their impression of archaeology, with 27 (48%) reporting that the dig was more exciting than they expected and 54 (96%) reporting they were now more likely to get involved with, or visit, heritage sites in their local area. A large majority of individuals told us that they would like to see more archaeology online (47, 83%).
- 8.2.4 Where respondents had provided their home postcode, most had come from the local area, with 36 (64%) from Driffield and the immediately surrounding area. A further 4 were from further afield in Yorkshire and the Humber (7%, from Sheffield, Hull), 2 from the Midlands (4%, Worcestershire, Leicestershire). Three visitors were from southeast England (5% London, Essex, Dover), and one visitor was from Poland. Of those from the local area, 20 had visited an archaeological site previously (55%), with 17 (47%) never having been to a dig before. Many of those did feel their impression of archaeology had changed (16, 44%) and 33 (91%) thought they were likely to get more involved with other archaeological sites in the local area. 63% of local visitors would like to see more information about archaeology online (23 people).
- 8.2.5 A wider geographical distribution was found with those who had supported the excavations either with a financial contribution (Digital Diggers), as a paying volunteer or a local volunteer who has a free dig place (Venturers). Our online supporters (22 individuals) represented the UK (14), USA (4), Canada (1), and Australia (3). Our UK based Digital Diggers included five from Yorkshire and the Humber, four from the south of England, one each from the northwest of England, the Midlands, the east England, and Wales.
- 8.2.6 Participant testimonials



- “My highlight was finding a piece of worked flint, and how everything has been taught clearly – you’ve made it understandable!”
- “I’ve loved all the light hearted chat about archaeology, and I was pleasantly surprised by the international element as well – it’s great to see Americans here!”
- “Finding some of the high quality pottery, the nice Samian ware and Roman grey ware. You just never know what you’re going to find next, and this trench has been absolutely brilliant, especially the staff!”
- “Seeing the children so excited was the best bit for me, and the glory of getting to put something in the finds tray!”
- “My highlight was bringing it all together at the end, learning how it will be recorded and having the story of the ditch explained after digging it! The people have been brilliant and have all been really approachable and explained everything the whole way through. I felt like I’ve learned the site with everyone else”

8.3 Wider engagement

8.3.1 In addition to the dig, a series of public lectures and talks helped to promote the wider archaeology of East Yorkshire and the Humber to the community and gave a deeper sense of context to the excavations at Elmswell. These talks were given by archaeologists who have vast experience of excavating in the region, and who were able to talk in-depth about the fascinating archaeology of the local area. This series of engagement events helped to encourage around 60 people to visit the site during the course of the excavation.

8.3.2 Education sessions engaged 253 primary aged children, teaching them about Elmswell in the Roman and Medieval periods with a particular focus on ancient health and medicine. The dig ran during the summer holidays, so sessions were offered to local holiday clubs and scouts groups. Further sessions were delivered during the autumn term, when schools were back in session; these sessions used video footage of the dig to help children understand what the excavation actually looked like, and gave them the opportunity to speak to an archaeologist who had dug the site during the excavation.

8.3.3 The DigVentures team ran two Open Day sessions and a number of talks as part of the Yorkshire Festival of Archaeology 2018 encouraging visitors to attend our guided tours of the site on Saturday 18th August and Saturday 25th August. The tours started at our Welcome Tent, and visitors were introduced to each trench with a discussion about the visible archaeological finds and features. Visitors were able to ask the archaeologists and volunteers questions about the trenches. After the tour, visitors were encouraged to stay and see the finds from the site, and even get involved with some finds washing. Locals in particular came to see how the dig was progressing on more than one occasion and learnt about the finds and features recorded since their last visit.

- Project timeline: <https://digventures.com/elmswell-farm/timeline/>
- BBC Radio Humber: <https://www.bbc.co.uk/radio/play/p06bjdx4>
- Smithsonian Magazine coverage: <http://ow.ly/mKw630nDft1>



9 DISCUSSION

9.1.1 Excavation at Elmswell Farm focussed on the results of previous years' metal detecting and fieldwalking surveys undertaken by Paul King and Rob Hamer. In December 2015 they recovered part of a treasure find that consisted of a number of late 1st century AD silver coins. The finds were logged with the Portable Antiquities Scheme and, in 2018, DigVentures were invited to excavate the site to establish whether more of the hoard remained buried and in what context they were originally deposited. More of the same hoard was recovered from the topsoil during excavation of Trench 4, but it is now thought that its original depositional context has been lost to ploughing as no features were found to contain similar material.

9.2 Structural remains

9.2.1 Archaeological remains found below the topsoil also date from the late first to mid second century AD and indicate extensive early Roman settlement at the site. No extant structural remains had survived but stone rubble found in the backfill of a robber cut showed that a substantial structure had been present from the 2nd century or later. Parallel beam (or wall) slots were also found across the trench, indicating a degree of complexity to the structures on site. It is probable that the two wall slots that mirrored each other in the centre of the trench were part of the same building. Its northern extent was unclear - either buried below 2nd century layers or completely removed as the later Roman settlement developed - and the southern end of had been heavily truncated. However, its projected shape in plan appears curved, similar to the 2nd to 3rd century building footprint found at Shiptonthorpe (Millet 2006), which provides a useful comparison. Phasing the building at Elmswell is somewhat more problematic because of the lack of stratigraphic or artefactual information available, although a 2nd century date would seem likely.

9.2.2 Small postholes found in and around these wall-lines infer that upright timbers were erected but no clear alignments could be discerned. The shallow depth of these, and all other, structural features identified, it is likely that the site has suffered severely from more recent agricultural practices. Two particularly large, sub-rectangular features found in the southeast part of the site may tentatively be interpreted as postholes, forming the settings for very tall upright timbers. However, these two were found in isolation and did not respect the other structural alignments observed across the rest of the excavation area; they may have simply been large pits.

9.3 Burials

9.3.1 Four burials were found during excavation: three neonatal and one adult inhumation. The adult grave had been disturbed during the construction of one of the walled buildings and was in very poor condition. However, the state of preservation of the neonatal burials was considerably better. One had been placed in a grave abutting the wall of one of the buildings, another was cut by a posthole, while a third was found accompanied by a penannular brooch within the footprint of a building. Associations between neonatal burials and buildings was not uncommon in the Roman period and has been recorded from nearby sites at Shiptonthorpe (Millet 2006) and Rudstone Dale (Wood 2011). Dating evidence from the burials was scarce, but their association with



the structural remains suggests they were made at a similar time to their original construction.

9.4 Date and function

9.4.1 Much of the dating evidence from the excavation comes from the pottery assemblage. It is particularly noteworthy because the group comprises predominantly wheel made late 1st to mid 2nd century pottery likely produced at York or Malton. These dates correspond well with those of the coins recorded from the treasure case and that of the brooch recovered from one of the neonatal burials. This highlights a significant Roman presence in the area from the late 1st century AD onwards.

9.4.2 Archaeological investigations undertaken in fields immediately to the east, by Congreve and Corder in the late 1930s, found similar dating evidence, claiming that Elmswell was the site of a major Parisi settlement. Corder's excavation revealed "an insignificant Iron Age village, inhabited apparently without interruption from about the middle of the 1st century AD until at least AD 500". They found a number of decorated samian ware vessels, red painted wares and carinated bowls dating to the period c. AD70-110. In addition to this, a large quantity of iron slag and evidence for casting bronze was also found, indicating diverse industries in operation at the site. Of particular note was the discovery of the Elmswell panel; an elaborately decorated panel from a casket believed to date to the mid to late 1st century AD (Corder 1940b). For such an "insignificant Iron Age village", the local inhabitants certainly had access to some very significant trade networks.

9.4.3 There are a number of theories regarding the nature and function of the settlement at Elmswell because of how extensive the archaeological remains are. The remains found during the 2018 excavation strongly suggest a significant Roman establishment at Elmswell from the late 1st century onwards; and previous excavations identified more significant Late Iron Age remains. There seems little dispute that there was a large Parisi settlement at Elmswell; however, soon after the Romans spread north across the Humber, they invested heavily into establishing a presence there. At this stage the exact form this presence would have taken is unclear but it is likely that the site was established either as an official posting station (or *mansio*) or was settled by retired veteran soldiers, both as a gift and to promote Roman culture and law. This 'Romanisation' of the local populations seems a likely theory when we consider the presence of early coinage at Elmswell, which would have demonstrated not only wealth but also a mechanism for propaganda by distributing images of the Emperor. Further work would be required at the site to define the function and extent of the early Roman settlement and the role it played in assimilating the native inhabitants.

9.5 Fieldwalking

9.5.1 The fieldwalking survey found a spread of tesserae, tile and coins across the site. There was a concentration of tesserae in the centre of the site, but was distributed across the entire survey area. There was a concentration of tile to the North and West of the tesserae concentration, with a less dense scatter to the South-West. Ten coins were found on the site with an even spatial distribution across the survey area.



- 9.5.2 The distribution of finds across the survey area suggests the presence of a Roman villa/farmstead. The coins found on site date to the 3rd and 4th century, coinciding with the widespread construction of Roman sites such as this. The recovered tesserae are large and unrefined, typical of material expected from an outside working area. As roof tile often collapses into the centre of buildings over periods of disuse, it could be understood that the tile surrounding the tesserae represents an outside working area. The site would benefit from further archaeological excavation to define the extent, date and function of the buried remains.

10 CONCLUSIONS AND RECOMMENDATIONS

10.1 Conclusions

- 10.1.1 The principle aims of the investigations were to define and establish the archaeological remains (Aim 1) and to characterise the site (Aim 2) with a programme of metal detecting, fieldwalking and archaeological excavation. The fieldwork results have successfully achieved these aims, with metal detecting and fieldwalking finds adding to the previously finds from the site with a significant number of Roman coins and other finds. The archaeological trenches recovered remains dating from the 1st to 2nd century AD, relating to extensive and significant Roman settlement at the site. Although no clear structural features were extant, a number of pits, post holes and a beam slot are all suggestive of structural. The recovery of three in-situ neonate burials may also have been associated with the buildings - clusters of infant burials are not uncommon, particularly in association with structures. One partial adult inhumation has been disturbed during the construction of a presumed walled building.
- 10.1.2 The material finds recovered from the site indicated that the site has been disturbed over time, both through the development of the site during the Roman period and later agricultural activity. The condition of the finds recovered was generally good, with pottery, tile, bone and small finds all surviving. Iron was notably absent from the archaeological record and the recovery of paleoenvironmental remains was minimal (Aim 3). Although the surface preservation of animal bone was poor, the range of fauna has the potential to contribute to a wider understanding of the site's economy. The character of the pottery assemblage was unusual, and suggested Elsmwell had access to material culture more akin to the inhabitants of the fortress at York than those that dwelt in the surrounding hinterland. The high status nature of the site is also supported by the suggestion of a well decorated hypocaust structure from the numerous tesserae recovered.
- 10.1.3 The level of public engagement with the investigations – both from individuals volunteering with the project and participants taking part in Open Days and public events – was very high (Aim 5). The two-week excavation attracted more than 70 participants who took part in the full range of activities available. Those who contributed their time included volunteers from East Riding Archaeological Society, and members of the DigVentures community. Visitors to the site came from the local

area and from further afield, whilst supporters of the project online brought a global audience. Education sessions and public lectures reached over 300 people, and media coverage took the project to national and international audiences via broadsheet newspapers, radio and magazine features.

10.2 Recommendations

10.2.1 The 2018 season has recorded a newly discovered and significant Roman settlement site as part of a multi-staged archaeological research project focussed on the developing landscape around Elmswell Farm. The archive adds to the growing material evidence associated with the site, including finds recovered from metal detecting and fieldwalking prior to this project, and that relating to the first season of excavation at the deserted medieval village. The recording of the standing remains of the 17th century Old Hall in 2018, and attempts to locate the earlier tithe Barn, brings the chronology of the site into more recent history. The picture developing is one of an important landscape which has been the focus of settlement, life and death, for millennia. The long-term focus of the *Excavating Elmswell: Seasons in Time* project will bring together all the evidence, interpreting the archaeological material and making that story available to everyone through publication (Aim 4). The next stage of the project will involve a third season of archaeological fieldwork in 2019 focussing on the area to the north of the current farm, where a collection of Roman tesserae, coins and tile was recovered in 2018. An Updated Project Design prepared as a separate document presents the full aims, objectives and methodology for the next phase (Casswell and Noon 2019).

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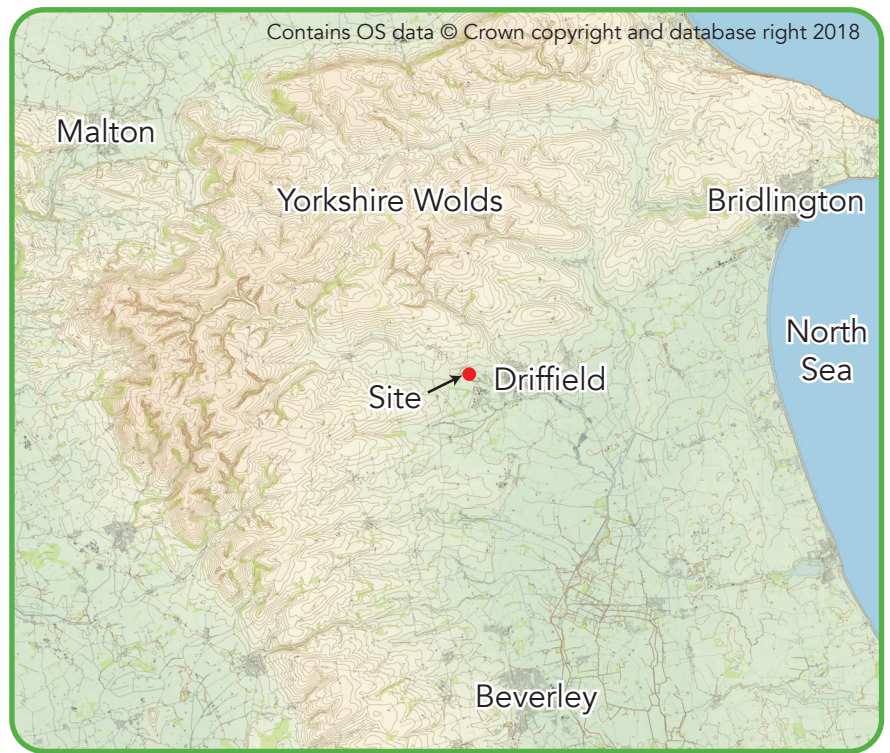


Figure 1 - Site location



Post-excavation plan



West facing section of ditch F401, 2m and 0.4m scales



Rubble backfill in robber trench F413, 1m scale



Disturbed adult inhumation (4055) in grave F414, 1m scale



Neonatal skeleton (4018) in grave F406



Neonatal skeleton (4051) in grave F403

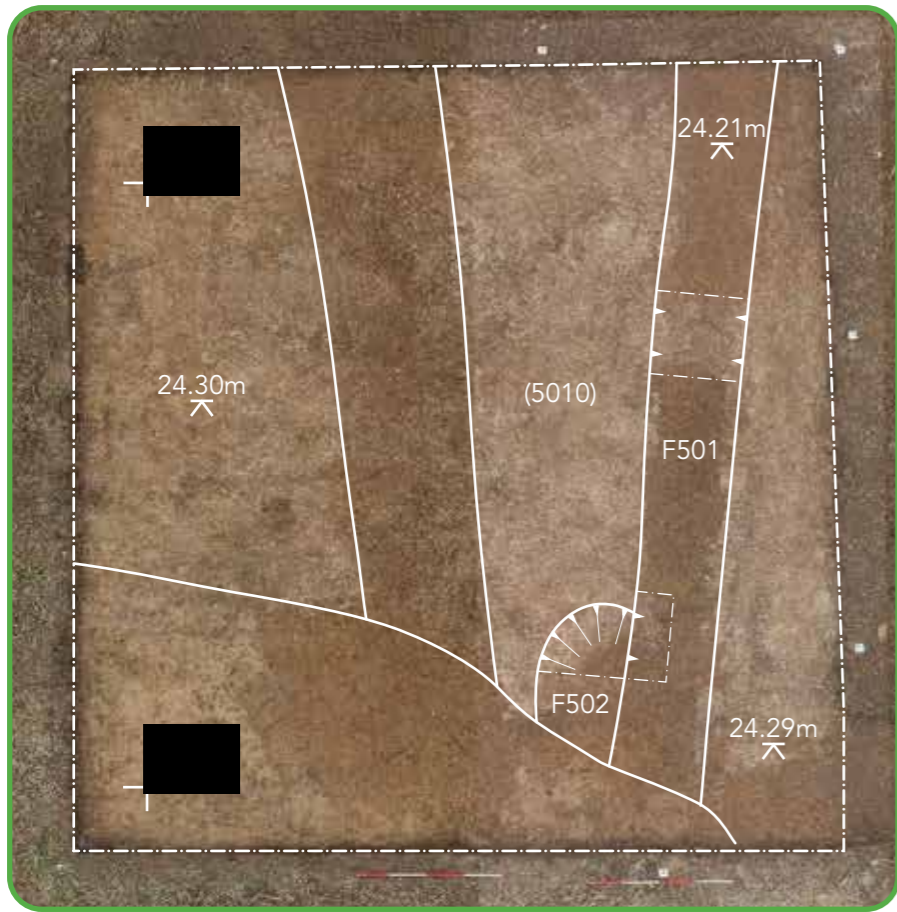


Neonatal skeleton (4034) in grave F410



Post-excavation photo of trench, looking north, 2m scales

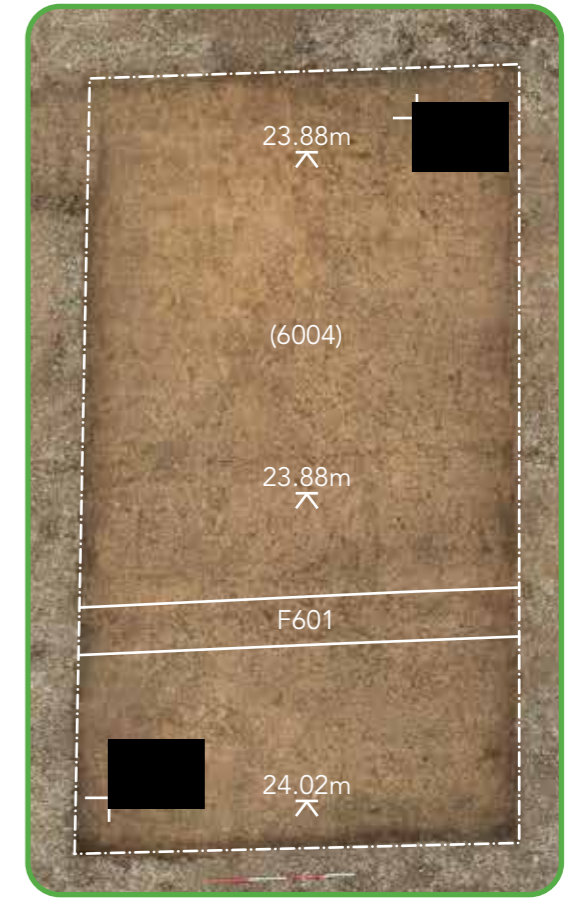
Figure 2 - Trench 4 excavation results



Post-excitation plan of Trench 5



DigCamp hard at work cleaning Trench 6



Post-excitation plan of Trench 6



Excavated features in eastern part of Trench 5, 2m scales



South facing section of ditch F501, 1m scale



North facing section of pit F502, 1m and 0.4m scales



Post-excitation photo of Trench 6, looking north, 2m scales

Figure 3 - Trench 5 and 6 excavation results

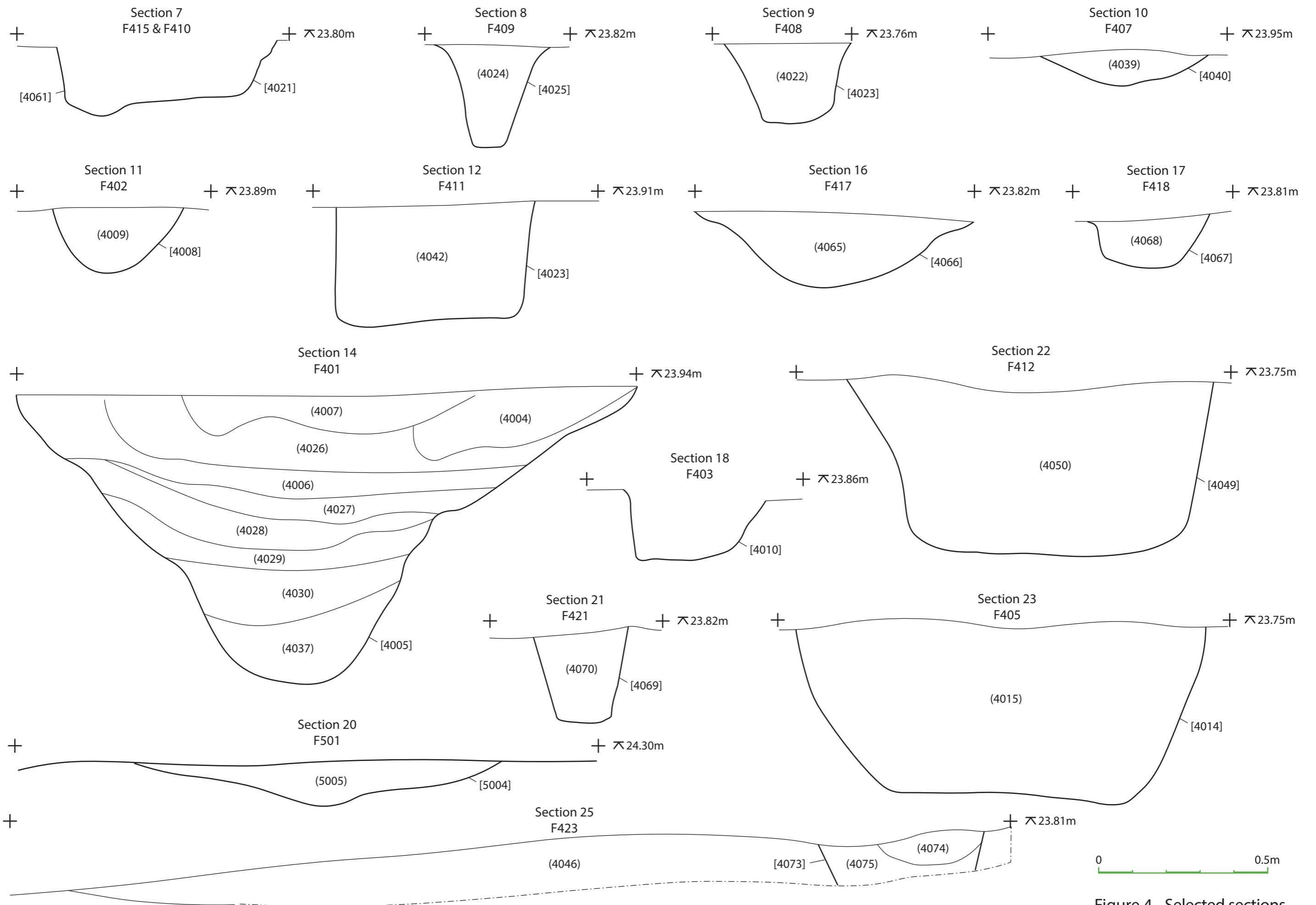


Figure 4 - Selected sections

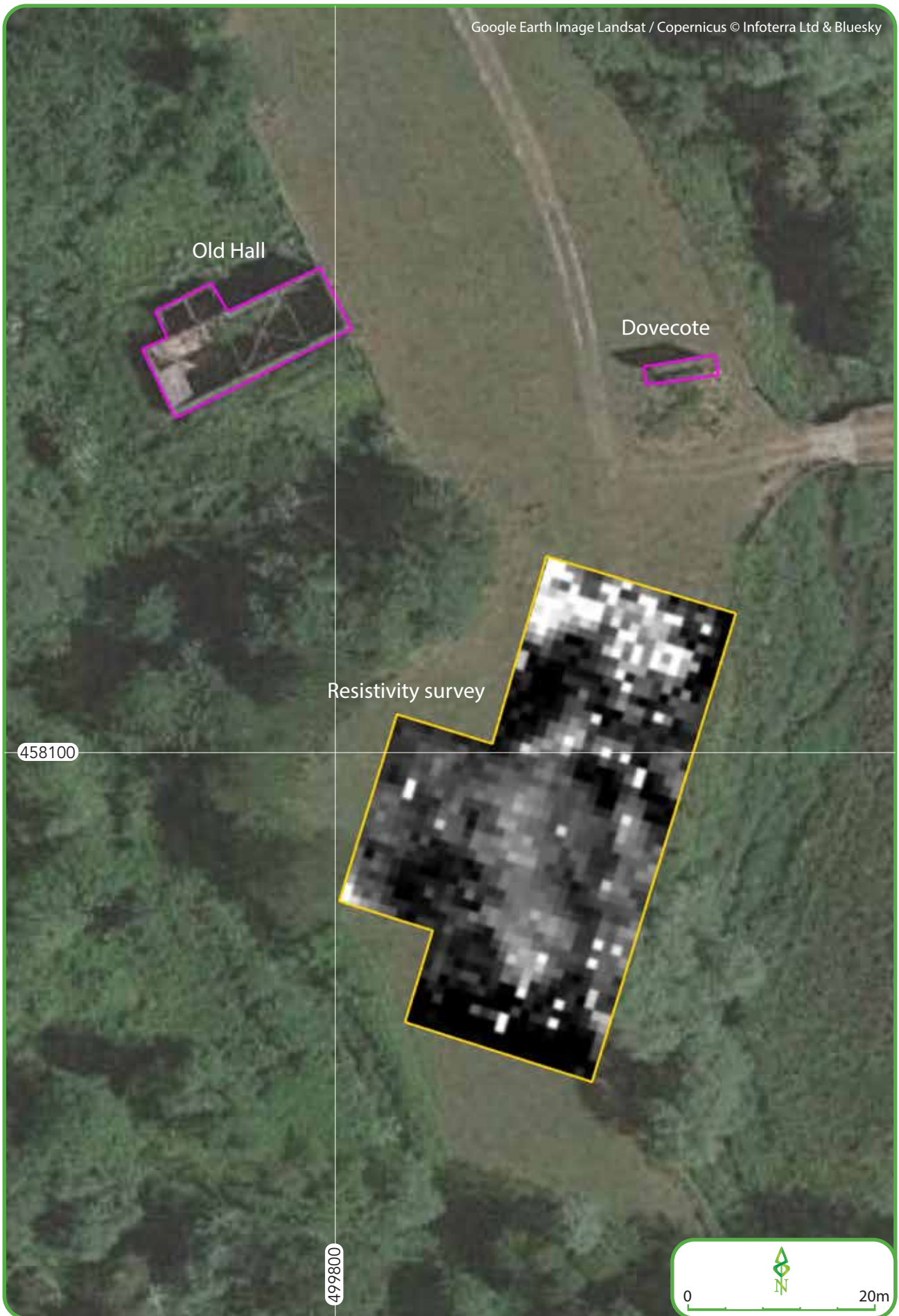
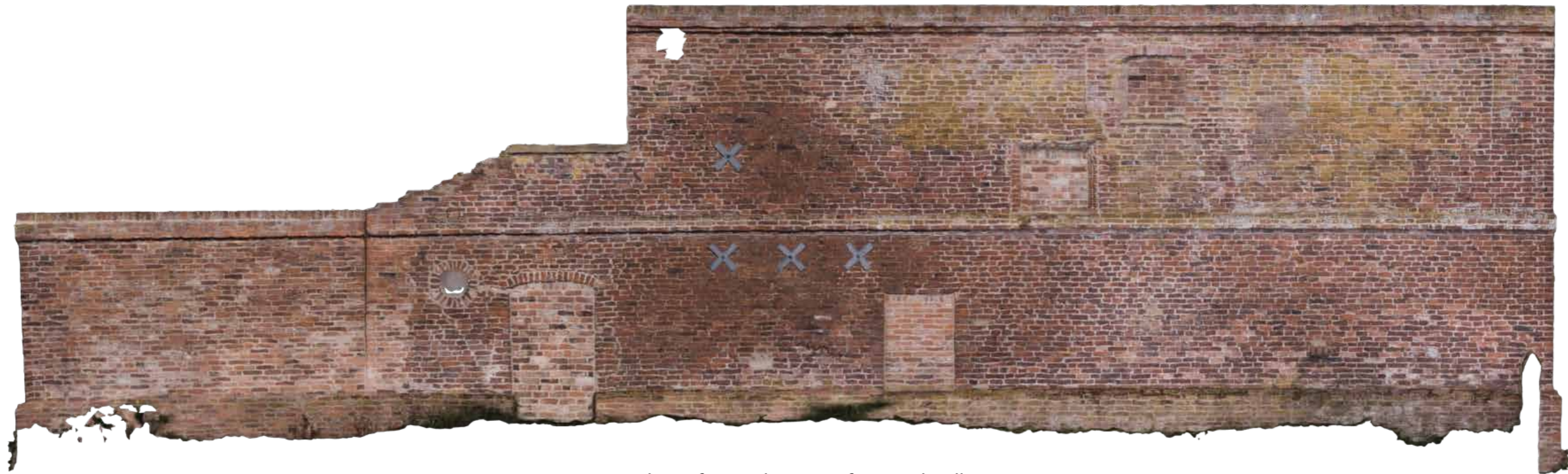


Figure 5 - Geophysical survey results and building survey areas



Northwest facing elevation of external wall



Southeast facing elevation of external wall



Figure 6 - Elmswell Old Hall external elevations (1)



Northeast facing elevation of external wall



Southwest facing elevation of external wall

0 2.5m

A green horizontal scale bar with tick marks at 0 and 2.5m.

Figure 7 - Elmswell Old Hall external elevations (2)



Northwest facing elevation of internal wall



Southeast facing elevation of internal wall



Figure 8 - Elmswell Old Hall internal elevations (1)



Northeast facing elevation of external wall

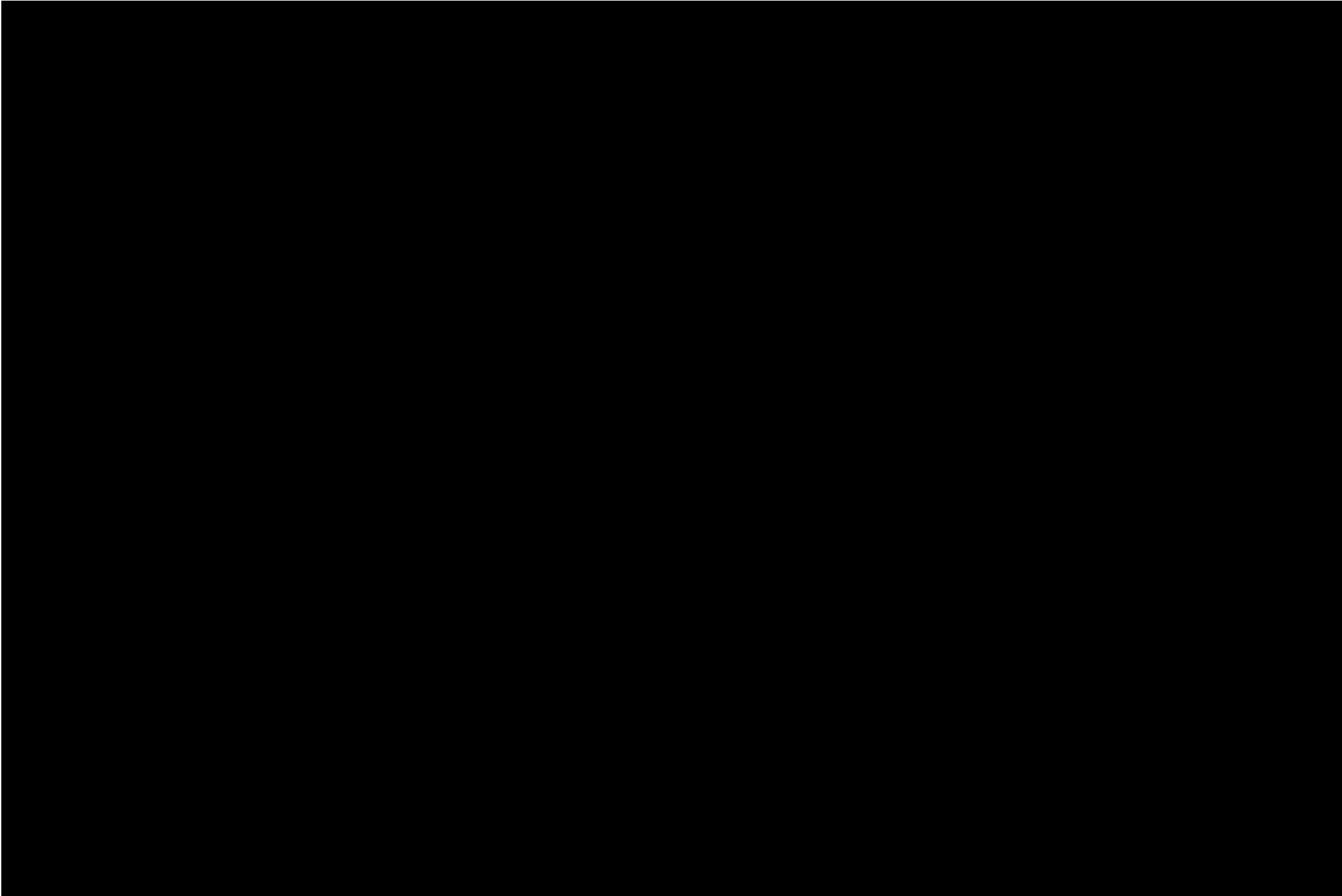


Southwest facing elevation of external wall

0 2.5m

A horizontal scale bar with a green line and tick marks. The number '0' is at the left end and '2.5m' is at the right end.

Figure 9 - Elmswell Old Hall internal elevations (2)



Appendices

Appendix A: Trench and context descriptions

Table 1: Trench 4 context descriptions

Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
Context	Description	Interpretation/ Process of deposition	Dimensions (m)		Feat ure
4001	Friable mid brown silt with 20% subangular stones, including flint, chalk and sandstone, poorly sorted	Layer - Ploughsoil	Length –	16.00m	
			Width –	10.00m	
			Depth –	0.29m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4002				
4002	Reddish fill	Fill– ditch [4003]	Length –	Not detailed	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4003				
4004	Firm mid reddish-brown sandy silt with frequent small rounded and sub angular chalk pebbles.	Fill - ditch [4005] in south east corner	Length –	2.00m	401
			Width –	0.48m	
			Depth –	0.27m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4004				
4005	Linear shape in plan with sharp break of slope at the top, a U-shaped base and steep sides	Cut - ditch in south east corner	Length –	2.00m	401
			Width –	1.70m	
			Depth –	0.90m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4005				
4006	Firm mid reddish-brown silty sand with frequent subangular and angular small chalk round stones	Fill - ditch [4005] below ash fill (4026)	Length –	2.00m	401
			Width –	1.40m	
			Depth –	0.20m	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4006				
4007	Firm mid reddish-brown sandy silt with frequent sub-angular small chalk pebbles and occasional medium angular chalk stones.	Upper fill - ditch [4005]	Length	2.00m	401
			Width	0.80m	
			Depth	0.23m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4007				
4008	Circular in plan with steep sides and a narrow-rounded base	Cut – posthole	Length	Not detailed	402
			Width	0.17m	
			Depth	0.18m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4008				
4009	Hard mid yellowish-brown sand with 50% sub-angular small poorly sorted stones	Fill – posthole	Length	0.34m	402
			Width	0.32m	
			Depth	0.18m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4009				
4010	Circular in plan with very steep near vertical sides with a flat base	Cut – pit neonate burial	Length	0.42m	403
			Width	0.42m	
			Depth	0.23m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4010				
4011	Moderately firm mid yellowish-brown silty sand with 50% sub-angular and angular chalky gravel with occasional sub rounded larger stones	Fill - small pit [4010] neonate burial	Length	0.23m	403
			Width	0.42m	
			Depth	0.42m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4011				
4012	Irregular in plan with gradual to steep irregular sides with an uneven base with pitting	Cut – pit	Length	Not detailed	404
			Width	0.27m	
			Depth	0.16m	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4012				
4013	Friable mid brown silt with 30% small sub angular stones, poorly sorted	Fill - pit [4012]	Length	2.05m	404
			Width	1.08m	
			Depth	0.20m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4013				
4014	Sub-rectangular in plan with steep near vertical sides and a flat base	Cut – pit	Length	Not detailed	405
			Width	0.29	
			Depth	0.51	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4014				
4015	Firm mid reddish-brown silty clay with 40% small sub-angular/sub-rounded poorly sorted stones, mainly chalk	Fill - pit [4014]	Length	1.25m	405
			Width	0.88m	
			Depth	0.55m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4015				
4016	Oval in plan with very steep near vertical sides and a flat base		Length	0.53m	406
			Width	0.40m	
			Depth	0.16m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4016				
4017	Firm light yellowish-brown chalky silt with 60% small sub-rounded stones	Fill - grave [4016]	Length	0.53m	406
			Width	0.40m	
			Depth	0.16m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4017				
4018	Neonatal skeleton lying on right side facing west in the foetal position with the head tucked	Neonatal skeleton - grave cut [4016]	Length	N/A	406
			Width	N/A	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
	down facing west with the arm under the head pointing north with the hand under the chin with the arm bent lying along top of body. The humerus ran west along top of body with the radius and ulna running northwest with the hand forward of the legs. The right leg was under the body, bent, more so than left leg, femur running north east and the radius and ulna running broadly west. The skull was reasonably completely with the bone well preserved, mostly complete and most long bones had one break.		Depth -	N/A	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4018				
4019	Mid reddish-brown silty clay with 2% chalk inclusions	Fill - south east of trench	Length -	0.82m	
			Width -	0.69m	
			Depth -	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4019				
4020	Friable reddish-brown gritty silt with 20% chalk inclusions	Fill - post hole at the southeast of trench	Length -	0.26m	415
			Width -	0.31m	
			Depth -	0.26m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4020				
4021	Oval in plan with steep sides and concave base	Cut - neonate grave at the south east of trench	Length -	0.42m	410
			Width -	0.35m	
			Depth -	0.26m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4021				



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
4022	Firm mid brown clay silt with 20% chalk stone fragments	Fill - post hole in the center of trench	Length –	0.36m	408
			Width –	0.28m	
			Depth –	0.19m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4022				
4023	Oval in plan with steep sides and a flat base	Cut - post hole in the center of trench	Length –	0.36m	408
			Width –	0.28m	
			Depth –	0.19m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4023				
4024	Firm dark brown silty clay with 10% with mixed stone inclusions	Fill - possible post hole in centre of trench	Length –	0.38m	409
			Width –	0.16m	
			Depth –	0.32m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4024				
4025	Kidney shaped in plan with steep sides and a slightly concave base	Cut - possible post hole in centre of trench	Length –	Not detailed	409
			Width –	0.5m	
			Depth –	0.23m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4025				
4026	Friable mid bluish grey sandy silt with occasional small charcoal fleck and very occasional small rounded chalk pebble	Ash layer - above (4006) in [4005]	Length –	2.00m	401
			Width –	1.40m	
			Depth –	0.17m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4026				
4027	Friable mid bluish grey sandy silt with occasional small charcoal fleck and very occasional small rounded chalk pebble	Ash layer - below (4006) in [4005]	Length –	2.00m	401
			Width –	1.00m	
			Depth –	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4027				
4028	Firm mid brownish grey sandy silty sand with	Fill - ditch [4005] below (4027)	Length –	2.00m	401



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
	frequent small Sub-angular and angular chalk stones		Width –	0.90m	
			Depth –	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4028				
4029	Friable mid-bluish grey ashy silt with occasional medium sub-angular chalk stones	Grey ash fill - ditch [4005] below (4028)	Length –	2.00m	401
			Width –	0.90m	
			Depth –	0.12m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4029				
4030	Firm mid brownish grey sandy silt with frequent small rounded chalk stones, poorly sorted	Fill - ditch [4005] below (4029)	Length –	2.00m	401
			Width –	0.64m	
			Depth –	0.18m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4030				
4031	Firm light brown clayey silt with 30% chalk rubble	Fill - linear feature at east of trench running north south	Length –	0.56m	419
			Width –	0.79m	
			Depth –	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4031				
4032	Linear in plan with gradual sloping sides and a narrow-rounded base	Cut - linear feature at east of trench running north south	Length –	Not detailed	419
			Width –	0.39m	
			Depth –	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4032				
4033	Firm mid brown sandy silt with 20% small sub-angular stones, poorly sorted	Fill - neonate grave at south east of trench	Length –	0.42m	410
			Width –	0.35m	
			Depth –	0.26m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4033				
4034	The skeleton was lying on its back with the feet facing east. Only small skull fragments were	Neonate skeleton - southeast of	Length –	N/A	410
			Width –	N/A	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
	found with the fragments located 2-3cm higher than the rest of the skeleton. The upper right arm and elbow pointed south with the lower arm placed on torso. The humerus was missing and the lower arm bones were placed on the torso. The femur to the knee pointed south in a semi flexed position with the lower leg bones pointing east. The feet were disturbed but some tarsals were located. The skull was almost completely absent and the condition of the remainder of the bone was good.	trench 4 in fill 4033	Depth -	N/A	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4034				
4035	Firm light greyish brown sandy silt with 25% chalky gravel sub-angular stones	Fill - linear feature running north south in west of trench	Length -	1.20m	407
			Width -	0.44m	
			Depth -	0.13m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4035				
4036	Linear in plan with gently sloping sides and a concave base	Cut - linear feature running north south in west of trench	Length -	1.20m	407
			Width -	0.44m	
			Depth -	0.08m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4036				
4037	Firm mid greyish-brown sandy silt with frequent small to medium sub angular chalk stones	Basal fill - ditch [4005]	Length -	2.00m	401
			Width -	0.45m	
			Depth -	0.25m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4036				



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
4038	Firm light reddish-brown silty clay with 10% chalk and small red inclusions	Section of fill - ditch running north south in east of trench	Length -	0.97m	419
			Width -	0.58m	
			Depth -	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4038				
4039	Firm light greyish-brown sandy silt with 25% chalk sub-angular gravel	Fill - ditch running north south in the west of trench	Length -	0.75m	407
			Width -	0.65m	
			Depth -	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4039				
4040	Sub-rectangular in plan with gently sloping sides and a concave base	Cut - ditch running north south in the west of trench	Length -	Not detailed	407
			Width -	0.22m	
			Depth -	0.07m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4040				
4041	Circular in plan with steep sides and a flat base	Cut - posthole north end of the trench	Length -	Not detailed	411
			Width -	0.05m	
			Depth -	0.33m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4041				
4042	Compact mid yellowish-brown silty clay with 10% angular and sub-angular moderately sorted stones	Fill - post hole north end of the trench	Length -	0.25m	411
			Width -	0.61m	
			Depth -	0.35m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4042				
4043	Linear in plan with gently sloping sides and a rounded base	Cut - north south linear feature in west of trench	Length -	Not detailed	421
			Width -	0.12m	
			Depth -	0.08m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4043				
4044		Fill - linear running north	Length -	0.49m	421



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
	Firm mid brown silty clay with 10% sub-angular portly sorted stones	south at west side of trench	Width –	0.20m	
			Depth –	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4044				
4045	Firm mid reddish-brown silty clay with 5% sub angular stones poorly sorted stones	Raised layer - below topsoil on the northwest end of trench	Length –	8.80m	
			Width –	4.31m	
			Depth –	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4045				
4046	Firm mid reddish-brown silty clay with 5% sub-angular stones poorly sorted	Raised Layer - below topsoil on northeast end of trench	Length –	7.00m	
			Width –	10.00m	
			Depth –	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4046				
4047	Firm mid reddish-brown sandy silt with 25% chalk fragments sub-angular with occasional large stones	Fill – possible ditch north west of trench	Length –	0.47m	424
			Width –	0.32m	
			Depth –	0.15m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4047				
4048	Linear in plan with steep sides and a flat base	Possible cut - ditch running northwest to southeast west of trench	Length –	Not detailed	
			Width –	0.40m	
			Depth –	0.50m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4048				
4049	Rectangular in plan with steep sides and a flat base	Cut - pit	Length –	Not detailed	412
			Width –	0.22m?	
			Depth –	0.33m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4049				
4050	Soft mid yellowish-brown silty clay with 30% small, sub angular, sub	Fill - rectangular pit orientated east-west in the	Length –	1.04m	412
			Width –	0.29m	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
	rounded, poorly sorted stones	southeast of trench	Depth –	0.23m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4050				
4051	Not detailed	Fill - neonate 4011	Length –	Not detailed	403
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4051				
4052	Not detailed	Robber trench	Length –	Not detailed	413
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4052				
4053	Not detailed	Robber trench backfill	Length –	Not detailed	413
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4053				
4054	Oval in plan with gently sloping sides and a bowl-shaped base	Cut - pit containing animal bones in east of trench	Length –	Not detailed	414
			Width –	0.36m	
			Depth –	0.20m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4054				
4055	Firm mid yellowish-brown silty clay with 10% sub-angular to sub-rounded poorly sorted stones	Fill – pit containing animal bones in east of trench	Length –	0.82m	414
			Width –	0.65m	
			Depth –	0.20m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4055				
4056	Firm whitish-brown clayey chalk with 40% small sub-angular stones	Layer – Natural	Length –	16.00m	
			Width –	10.00m	
			Depth –	Unexc.	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4056				



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
4058	Not detailed	Fill - oval shaped solution hollow in south east of trench	Length –	Not detailed	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4058				
4059	Linear in plan with steep sides and a flat base	Cut - linear feature running north south in west of trench, same as [4043]	Length –	0.39m	421
			Width –	0.40m	
			Depth –	0.15m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4059				
4060	Firm mid brown silty clay with 30% sub angular stones	Fill - cut [4059]	Length –	0.39m	421
			Width –	0.40m	
			Depth –	0.15m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4060				
4061	Circular in plan with steep sides and a flat base	Cut - post hole cutting neonate grave in east of trench	Length –	Not detailed	415
			Width –	0.27m	
			Depth –	0.09m	
4062	Firm light yellowish brown silty clay with 30% small sub-rounded to sub-angular, poorly sorted chalk inclusions	Chalky layer - north west of trench, and north of robber trench	Length –	0.26m	406 2
			Width –	0.32m	
			Depth –	0.26m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4062				
4063	Firm light whitish brown sandy silt with 40% sub-angular and sub-rounded poorly sorted chalk	Chalky layer – north east of trench	Length –	1.15m	
			Width –	0.70m	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4063				
4064	Medium mid reddish-brown silty clay 5% sub-angular to sub-rounded poorly sorted chalk	Layer – north east of trench	Length –	1.16m	
			Width –	1.76m.	



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
			Depth –	0.10m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4064				
4065	Loose light greyish brown sandy silt with 30% sub angular chalk Inclusions	Fill - circular pit in the south east of trench	Length –	0.56m	422
			Width –	0.39m	
			Depth –	0.21m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4065				
4066	Oval in plan with gently sloping sides and an irregular base	Cut - circular pit in the south east of trench	Length –	Not detailed	422
			Width –	0.25m	
			Depth –	0.15m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4066				
4067	Circular in plan with steep sides and a flat to sub-rounded base	Post hole - south east of trench	Length –	Not detailed	417 =418?
			Width –	0.07m	
			Depth –	0.20m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4067				
4068	Medium mid brown silt with 40% small sub-angular to sub-rounded stones, poorly sorted	Fill - post hole in south east of trench	Length –	0.35m	417 =418
			Width –	0.30m	
			Depth –	0.20m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4068				
4069	Not detailed	Cut - beam slot running north south against west edge of trench	Length –	Not detailed	421
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4069				
4070	Not detailed	Fill - beam slot running north south against west edge of trench	Length –	Not detailed	421
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4070				



Trench 4	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting metal detecting find and treasure hoard				
4071	Firm light whitish brown silty clay with 40% small sub angular to sub rounded poorly sorted chalk and stones	Fill - posthole in north of trench	Length –	0.43m	420
			Width –	0.42m	
			Depth –	0.09m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4071				
4072	Circular in plan with gently sloping sides and a bowl-shaped base	Cut - posthole in north of trench	Length –	Not detailed	420
			Width –	0.21m	
			Depth –	0.9m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4072				
4073	Not detailed	Cut - posthole	Length –	Not detailed	423
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4073				
4074	Not detailed	Chalky fill - post holes	Length –	Not detailed	423
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4074				
4075	Not detailed	Dark fill - post holes	Length –	Not detailed	423
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_4075				



Table 2: Trench 5 context descriptions

Trench 5	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting linear earthwork from aerial photographs				
Context	Description	Interpretation/ Process of deposition	Dimensions (m)		Feature
5001	Friable mid brown silty clay with 1% poorly sorted sub-angular to sub-rounded stones	Layer - Topsoil/Ploughsoil	Length –	10.00m	
			Width –	10.00m	
			Depth –	0.36m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5001				
5002	Not detailed	Fill - circular feature at north of trench	Length –	Not detailed	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5002				
5003	Not detailed	Fill - circular feature at north of trench	Length –	Not detailed	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5003				
5004	Linear in plan with gently sloping sides and a slightly rounded base	Cut - linear feature north east of trench	Length –	Not detailed	501
			Width –	0.39m	
			Depth –	0.12m	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5004				
5005	Firm mid reddish-brown silty clay with 1% small sub angular to sub rounded stones poorly sorted	Fill - linear feature north east of trench	Length –	Not detailed	501
			Width –	0.39m	
			Depth –	0.12m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5005				
5006	Linear in plan with gently sloping sides and rounded base	Cut - linear feature running north south in south east of trench	Length –	1.21m	501
			Width –	0.58m	
			Depth –	0.16m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5006				



Trench 5	Dimensions: 10.00m x 10.00m				
	Orientation: North to south				
	Reason for Trench: Targeting linear earthwork from aerial photographs				
Context	Description	Interpretation/ Process of deposition	Dimensions (m)		Feature
5007	Firm mid reddish-brown silty clay with 1% small sub angular to sub rounded stones poorly sorted	Fill - linear feature south east of trench	Length –	1.21m	501
			Width –	0.58m	
			Depth –	0.16m	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5007				
5008	Not detailed	Cut - pit in south east of trench	Length –	Not detailed	502
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5008				
5009	Not detailed	Fill - pit in south east of trench	Length –	Not detailed	502
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_5009				

Table 3: Trench 6 context descriptions

Trench 6	Dimensions: 10.00m x 2.00m				
	Orientation: North to south				
	Reason for Trench: Targeting linear earthwork from aerial photographs				
Context	Description	Interpretation/ Process of deposition	Dimensions (m)		Feature
6001	Topsoil	Layer - Topsoil/Ploughsoil	Length –	Not detailed	
			Width –	Not detailed	
			Depth –	Not detailed	
Link	http://www.digventures.com/elmswell-farm/ddt/cxt/ELM_6001				



Appendix B: Small finds and treasure finds registers

Table 4: Small finds register

Small find	Context	Material	Quantity	Weight (g)	Description
25	4001	Copper alloy	1	0.37	Copper alloy object with no exact parallel but is probably a belt or strap fitting dating 300 to 500AD. It could be Roman or early medieval.
26	5001	Coin	1	9.83	Vespasian, dupondius, Lugdunum, AD 71, RIC II (pt. 1, 2nd ed.), Vespasian, No. 1144.
27	0002	Coin	1	8.01	Denarius, Titus, Rome, AD 80, RIC II (pt. 1, 2nd ed.), Titus, No. 112.
28	0002	Copper alloy	1	1.74	Copper alloy metalworking debris fragment. It could be any date but is from a known Roman site and could represent general metalworking activity.
29	0002	Coin	1	3.42	Denarius, Galba, Tarraco, AD 68-69, RIC I (2nd ed.), Galba, No. 60. This denarius of Galba (c15) is noteworthy and rare; and possibly worthy of inclusion in the Coin Register of the British Numismatic Journal.
31	0002	Coin	1	3.30	Denarius, Vespasian, Rome, AD 69-70, RIC II (pt. 1, 2nd ed.), Vespasian, No. 2.
32	0003	Coin	1	3.07	Denarius, Nerva, Rome, AD 98, RIC II, Nerva, No. 43.
33	0003	Coin	1	1.97	Radiate contemporary copy 3rd to 4th century AD.
34	0003	Coin	1	2.20	Nummus, Valentinian I or Valens, c. AD 364-75/8. Mint: Arles.



Small find	Context	Material	Quantity	Weight (g)	Description
35	0003	Coin	1	1.89	Radiate, Claudius II (lifetime issue), AD 269-70, RIC V (pt. 1), Claudius Gothicus, No. 95.
36	0002	Coin	1	8.01	As, Antoninus Pius, Rome, AD 154-55. RIC III, Antoninus Pius, No. 934.
37	0003	Coin	1	3.71	Radiate, late third century (post-AD 275). Figure standing left on reverse.
38	0003	Coin	1	2.82	Denarius, Julia Domna, Rome, AD 193-96, RIC IV (pt. 1), Septimius Severus, No. 536.
39	4001	Copper alloy	1	2.28	Copper alloy fragment currently unidentified possibly Roman 43-410AD but much more likely to be early modern in date.
40	0003	Coin	1	2.15	'Barbarous' radiate imitation, c. AD 274-. Prototype: a radiate of one of the Gallic emperors, Victorinus or Tetricus I.
41	0003	Coin	1	2.82	Nummus, probably of Valens, mint unknown, c. AD 364-78.
43	4011	Copper alloy brooch	1	1.72	Copper alloy Roman penannular brooch, Fowler type C. Most of these brooches are dated 1st century BC – 1st century AD, although a few continue into the second century and quite a number appear as reused in Anglo-Saxon (Early Medieval) contexts. Fowler type C brooches can demonstrate use and re-use in contexts dating from the Late Iron Age up to the 7th century AD and are most common in Lincolnshire and

Small find	Context	Material	Quantity	Weight (g)	Description
					East Anglia, showing use from the Late Iron Age to Early Medieval periods.
44	4045	Ceramic	1	3.45	Ceramic fragment probably a fragment of a Roman tile dating 43 – 410AD.
45	0003	Coin	1	1.91	Nummus, Valentinian I or Valens, c. AD 364-75/8. Mint: uncertain.
46	0003	Coin	1	0.48	An indeterminate radiate or nummus.
47	0003	Coin	1	2.88	Denarius, Marcus Aurelius (as Augustus), Rome, AD 162-63, RIC III, Marcus Aurelius, No. 59.
49	4001	Glass	1	2.10	Glass fragment probably from a bowl or globular or cylindrical urn or similar vessel of probable Roman date, AD 200 - 410.

Treasure Ref	PAS Ref	Material	Quantity	Weight (g)	Description
2015T55-1	LANCUM-E3BE5C	Silver	1	1.67	Republican denarius of Flaminius Cilo. Mint of Rome: 109 or 108 BC (Reece Period 1). RRC 302/1. Obverse inscription: ROMA, mark X - Helmeted head of Roma right. Reverse inscription: L FLAMINI CILO- Victory in biga right. Diameter: 17.99mm.
2015T55-2	LANCUM-E3BE5C	Coin	1	3.49	Republican denarius serratus of Naevius Balbus. Mint of Rome: 79 BC (Reece Period 1). RRC 382/1b. Obverse inscription: S C - Head of Venus right. Reverse inscription: C NAE BALB, control-mark (CXXXVIII) - Victory in triga right. Diameter: 19.39mm; thickness: 1.75mm.
2015T55-3	LANCUM-E3BE5C	Coin	1	3.20	Republican denarius of Mark Antony. Moving mint: 41 BC (Reece Period 1). RRC 517/2. Obverse inscription: M ANT IMP AVG III VIR R P C M BARBAT Q P - Head of Mark Antony right. Reverse inscription: CAESAR IMP PONT III VIR R P C - Head of Octavian right. Diameter: 19.51mm; thickness: 1.65mm.
2015T55-4	LANCUM-E3BE5C	Copper alloy		3.37	Denarius of Vespasian, AD 69-79. Mint of Rome: AD 76 (Reece Period 4). RIC 849, BMC 276. Obverse inscription: IMP CAESAR VESPASIANVS AVG - Laureate head right. Reverse inscription: IOVIS CVSTOS - Jupiter standing facing, with patera over altar and sceptre. Diameter: 19.53mm; thickness: 2.14mm.
2015T55-5	LANCUM-E3BE5C	Coin	1	2.73	Denarius of Vespasian, AD 69-79. Mint of Rome: AD 70 (Reece Period 4). RIC 29, BMC 26. Obverse inscription: IMP CAESAR VESPASIANVS AVG - Laureate head right. Reverse inscription: COS ITER TR POT - Pax seated left, holding branch and caduceus. Diameter: 18.23mm; thickness: 1.97mm.
2015T55-6	LANCUM-E3BE5C	Coin	1	3.30	Denarius of Vespasian, AD 69-79. Mint of Rome or Lyon: AD 69-79 (Reece Period 4). Obverse



Treasure Ref	PAS Ref	Material	Quantity	Weight (g)	Description
					inscription: [...] VESPASIAN[...] - Laureate head right. Inaccessible reverse. Fused together with no. 7.
2015T55-7	LANCUM-E3BE5C	Coin	1	3.07	Denarius of Vespasian, AD 69-79. Mint of Rome: AD 74 (Reece Period 4). RIC 702, BMC 136. Obverse inscription: [IMP CAESAR VESPASIANVS AVG] - Laureate head right. Reverse inscription: PON MAX TR P COS V - Vespasian seated right on curule chair, holding sceptre and branch. Fused together with no. 6.
2015T55-8	LANCUM-E3BE5C	Coin	1	3.11	Denarius of Vespasian, AD 69-79. Mint of Rome: AD 73 (Reece Period 4). RIC 546, BMC 98. Obverse inscription: IMP CAES VESP AVG CENS - Laureate head right. Reverse inscription: PONTIF MAXIM - Vespasian seated right on curule chair, holding sceptre and branch. Diameter 19.25mm; thickness: 2.19mm; weight.
2015T55-9	LANCUM-E3BE5C	Coin	1	3.48	Denarius of Titus, AD 79-81. Mint of Rome: AD 80 (Reece Period 4). RIC 128, BMC 78. Obverse inscription: IMP TITVS CAES VESPASIAN AVG P M - Laureate head right. Reverse inscription: TR P IX IMP XV COS VIII P - Tripod with fillets; above, dolphin. Diameter is 19.46mm; thickness: 2.44mm.
2016 T790-1	LANCUM-CE56B1	Coin	1	3.65	Denarius, Tiberius (AD 14-37), Mint of Lyon. As BMC no. 48; RIC I no. 30. Obverse: TI CAESAR DIVI-AVG F AVGVSTVS, Laureate head right. Reverse: PONTIF MAXIM, Female figure seated right on chair holding branch and vertical spear. The diameter is 18mm.
2016 T790-2	LANCUM-CE56B1	Coin	1	N/A	Denarius, Vitellius (AD 69), Mint of Rome. Obverse: [A VIT]ELLIVS GERM IMP AVG TR P, Laureate head right Reverse is illegible. Fused together.

Treasure Ref	PAS Ref	Material	Quantity	Weight (g)	Description
2016 T790-3	PUBLIC-7812E8	Coin	1	2.74	Denarius, Vespasian (AD 69-79), Mint of Rome. Cf. BMC no. 26; RIC II no. 10. Obverse: [IMP CAE]SAR VESPASIANVS [AVG], Laureate head right. Reverse: COS ITER-TR POT, Pax seated left holding branch and caduceus. The diameter is 17mm and the weight 2.74g.
2016 T790-4	LANCUM-CE56B1	Coin	1	N/A	Denarius, Vespasian (AD 69-79). Uncertain mint. Obverse: []SPASIANVS [], Illegible bust. Reverse type is illegible. Fused together.
2016 T790-5	PUBLIC-783662	Coin	1	3.31	Denarius, Domitian (AD 81-96) striking under Vespasian (AD 73-79). Mint of Rome. Cf. BMC no. 193; RIC II no. 238. Obverse: CAESAR AVG F DOMITIANVS, Laureate head right. Reverse: COS II[III], Pegasus walking right. The diameter is 22mm.
2016 T790-6	LANCUM-CE56B1	Coin	1	N/A	Denarius, Uncertain (Flavian?). Obverse is illegible. Reverse: [] IMP X[]. Fused together.
2016T927	PUBLIC-084958	Coin	1	3.05	Denarius of Titus (AD 79-81) dating to the period AD 79 (Reece period 4). TR P VIII IMP XV COS VII P reverse type depicting a quadriga left with corn ears. Mint of Rome. As RIC II (2nd. ed), p. 201, no. 43. The diameter is 19mm.
2018T691	LANCUM-A22097	Coin	1	8.01	Denarius, Titus, Rome, AD 80, RIC II (pt. 1, 2nd ed.), Titus, No. 112. O: IMP TITVS CAES VESPASIAN AVG P M. Laureate bust, right. R: TR P IX IMP XV COS VIII P. Dolphin coiled around anchor. Reece period: Period 4 [69-96] The diameter is 17mm.

Appendix C: Pottery catalogue

Table 5: Pottery catalogue

Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
0002	Misc Medieval	-	-	-	-		1	Med to Post-med	HANDLE; GREEN GLAZED
4001	CBM?	-	-	-	-		0	AD120-150	SANDY; VERY ABRADED; TRACE OF MORTAR
4001	CBM?	-	-	-	-		0	AD120-150	SANDY WITH VOIDS; THIN FLAKE
4001	Calcite gritted, as Bidwell & Croom 1997	Necked Jar	-	-	-	HM	1	AD120-150	RIM; BLACK FIRED; BROADLY AS BIDWELL & CROOM 1997 NO. 63 OR RIGBY 2004 'CHAMFERED JAR' TYPE
4001	Dr 20 amphorae	Amphora Unclassified Form	-	-	-		1	AD120-150	RIM; AS MARTIN-KILCHER BIELAGE 1 NO. 57 AD70-110/150?
4001	Eboracum 1	-	-	-	-		5	AD120-150	BS



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4001	Eboracum 1?	Jar/Bowl Unclassified Form	-	-	-		1	AD120- 150	BS
4001	Eboracum 2	Everted Rim Beaker	-	-	-		1	AD120- 150	RIM
4001	Eboracum white slipped	Jar Unclassified Form?	-	-	-		1	AD120- 150	BS
4001	Erratic pebbles broken up as temper	-	-	-	-		1	AD120- 150	BS; OX/R/OX; THIN WALLED; ROCK INCLUSIONS WITH SAND
4001	Erratic pebbles broken up as temper	-	-	-	-	HM	1	AD120- 150	BS
4001	Erratic pebbles broken up as temper	-	-	-	-	HM	1	AD120- 150	BS; BLACK FIRED;? BLACK ROCK
4001	Erratic pebbles broken up as temper	Jar Unclassified Form	-	-	-	HM	1	AD120- 150	BASE; OX/R/OX; COARSE SANDSTONE
4001	Fired clay?	-	-	-	-		0	AD120- 150	OXIDISED SANDY
4001	Miscellaneous grey wares	-	-	-	-		1	AD120- 150	BS; FINER FABRIC
4001	Miscellaneous grey wares	-	-	-	-		1	AD120- 150	BS CHIP; SANDY



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4001	Miscellaneous grey wares	-	-	-	-		1	AD120-150	BS
4001	Miscellaneous grey wares	Closed Form	-	-	-		1	AD120-150	BS; AS YG01 FABRIC
4001	Miscellaneous grey wares	Closed Form	-	-	-		1	AD120-150	BS; BURNISHED EXT
4001	Miscellaneous grey wares	Rusticated Jar	-	-	-	RWEB	1	AD120-150	BS; AS YR02 FABRIC
4001	Misc. oxidized wares	-	-	-	-		1	AD120-150	BS
4001	Misc. oxidized wares	-	-	-	-		1	AD120-150	BS
4001	Misc. oxidized wares	B333	-	-	-		1	AD120-150	RIM; EBOR?; FORM AS MONAGHAN 1997 NO. 4010
4001	Central Gaulish Samian?	-	-	-	-		1	AD120-150	BS SMALL FRAGMENTS
4004	Eboracum 1	Jar/Bowl Unclassified Form	-	-	-		1	AD70-150?	RIM
4004	Eboracum 2	Everted Rim Beaker	-	-	-		1	AD70-150?	RIM SHLDR
4004	Eboracum 3	Dish Unclassified Form	-	-	-	B EXT; B INT	1	AD70-150?	RIM; AS MONAGHAN 1997 FORM DD4 NO. 4023



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4004	Eboracum white slipped	Jar/Bowl Unclassified Form	-	-	-		1	AD70-150?	BASE
4004	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	1	AD70-150?	BS; R
4004	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	1	AD70-150?	BS; R; THIN WALLED
4004	Erratic pebbles broken up as temper 2	Everted Rim Jar	-	OV	-	HM; ROUZ; B EXT	1	AD70-150?	BS; IRF
4004	Erratic pebbles broken up as temper 2	Everted Rim Jar	EVR	GLOB	-	HM	1	AD70-150?	RIM SHLDR; HIGH SHLDR
4004	Erratic pebbles broken up as temper, finer than ETW2	Everted Rim Beaker	EVR	GLOB	-	HM	1	AD70-150?	RIM SHLDR
4004	Fired clay	-	-	-	-		0	AD70-150?	OXID; FINE SANDY; LARGE FLINT FRAGMENT
4004	Fired clay?	-	-	-	-		0	AD70-150?	OXID; FINE SANDY; ?CBM
4004	Miscellaneous grey wares	B334	-	-	-		1	AD70-150?	BS CARINATION; LINCOLNSHIRE?



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4004	Miscellaneous grey wares	Jar Unclassified Form	-	-	-		1	AD70-150?	BASE
4004	Miscellaneous grey wares	Everted Rim Jar	-	-	-		1	AD70-150?	RIM; HIGH SHLDR AS YORK TYPES
4004	Miscellaneous grey wares	Rusticated Jar	-	-	-	RUST	1	AD70-150?	BS
4004	Miscellaneous grey wares	B334	-	-	-		1	AD70-150?	RIM CARINATION
4004	Misc. oxidized wares?	Jar/Bowl Unclassified Form	-	-	-		1	AD70-150?	RIM
4004	Undifferentiated Samian	37	-	-	-	MOULD	1	AD70-150?	BS
4004	Central Gaulish Samian	27	-	-	-		1	AD70-150?	RIM
4006	Eboracum 1	-	-	-	-		3	AD100-150	BS
4006	Eboracum 1	Bowl Unclassified Form	-	-	-		1	AD100-150	BS



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4006	Eboracum 1	Flagon Unclassified Form	-	-	-		1	AD100-150	RIM; PULLEY WHEEL RIM AS YORK FORM FP
4006	Eboracum 1	Large Jar/Bowl	-	-	-		1	AD100-150	BS
4006	Eboracum 3	Dish Unclassified Form	-	-	-	B EXT; B INT	1	AD100-150	R IM; AS MONAGHAN 1997 FORM DD4 NO. 4023
4006	Eboracum white slipped	Bowl/Dish	-	-	FLP		1	AD100-150	BS
4006	Erratic pebbles broken up as temper 2	Closed Form	-	U	-	HM, B EXT	1	AD100-150	BS; R
4006	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	1	AD100-150	BS; R; THIN WALLED
4006	Erratic pebbles broken up as temper 2	Everted Rim Jar	EVR	OV	-	HM; ROUZ; B EXT	1	AD100-150	RIM SHLDR
4006	Erratic pebbles broken up as temper, finer than ETW2	-	-	U	-	HM	3	AD100-150	BS; R
4006	Erratic pebbles broken up as		SS	OPEN	-	HM	1	AD100-150	



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
	temper, finer than ETW2	Bowl Unclassified Form							RIM; R; MIMICKING CARINATED LEGIONARY BOWL FORM
4006	Erratic pebbles broken up as temper, finer than ETW2	Bowl/Dish	RD	OPEN	-	HM; B	1	AD100-150	RIM
4006	Erratic pebbles broken up as temper, finer than ETW2	Closed Form	-	U	-	ROUZ	1	AD100-150	BS; R
4006	Erratic pebbles broken up as temper, finer than ETW2	Closed Form	-	U	-	HM, B EXT	1	AD100-150	BS; R
4006	Miscellaneous grey wares	-	-	-	-		4	AD100-150	BS
4006	Miscellaneous grey wares	Closed Form	-	-	-		1	AD100-150	BS
4006	Miscellaneous grey wares	Closed Form	-	-	-		1	AD100-150	BS
4006	Miscellaneous grey wares	Necked Jar/Bowl	-	-	-		1	AD100-150	RIM



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4006	Miscellaneous grey wares	Everted Rim Jar	-	-	-		1	AD100-150	RIM SHLDR; HIGH SHLDR
4006	Miscellaneous grey wares?	-	-	-	-		1	AD100-150	BS
4006	Misc grey ware fabrics with rare shell	B334	-	-	-		1	AD100-150	RIM CARINATION
4006	Undifferentiated Samaian	37	-	-	-	MOULD	1	AD100-150	RIM
4006	Central Gaulish Samian	27	-	-	-		1	AD100-150	RIM
4007	Dr 20 amphorae	Amphora Unclassified Form	-	-	-		1	AD100-150	BS; GRITTY FABRIC
4007	Eboracum 1	-	-	-	-		4	AD100-150	BS
4007	Eboracum 1	Carinated Bowl?	-	-	-		1	AD100-150	RIM; AS YORK FORM BB
4007	Eboracum 1	Bowl/Dish	-	-	-		1	AD100-150	BASE



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4007	Eboracum 1	Rusticated Jar	-	-	-	RWEB	1	AD100-150	BS
4007	Eboracum white slipped	-	-	-	-		1	AD100-150	BS
4007	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	AD100-150	BS; IRF
4007	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	AD100-150	BS; IRF
4007	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	AD100-150	BS; IRF; THIN WALLED
4007	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	1	AD100-150	BS SHLDR; IRF
4007	Erratic pebbles broken up as temper 2	Everted Rim Jar	-	U	-	HM; ROUZ; B EXT	1	AD100-150	BS
4007	Erratic pebbles broken up as temper, finer than ETW2	Closed Form	-	U	-	HM; B EXT	1	AD100-150	BS; R
4007	Erratic pebbles broken up as	Jar Unclassified Form	-	U	-	HM	1	AD100-150	BASE; IRF



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
	temper, finer than ETW2								
4007	Miscellaneous grey wares	-	-	-	-		3	AD100-150	BS
4007	Miscellaneous grey wares	B334	-	-	-		1	AD100-150	BS CARINATION
4007	Miscellaneous grey wares	Necked Jar/Bowl	-	-	-		1	AD100-150	RIM
4007	Miscellaneous grey wares	Everted Rim Jar	-	-	-		1	AD100-150	RIM; HIGH SHLDR
4007	Undifferentiated Samian	37	-	-	-	MOULD	1	AD100-150	RIM
4015	Eboracum 1	-	-	-	-		2	2C	BS
4015	Eboracum 1	Bowl Unclassified Form	-	-	-		1	2C	RIM
4015	Erratic pebbles broken up as temper 2	-	-	U	-	HM	7	2C	BS; IRF



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4015	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	2C	BS; IRF; COARSE; LARGE GOLD MICA
4015	Miscellaneous grey wares	Small jar or beaker	-	-	-		1	2C	RIM
4015	Miscellaneous grey wares	Everted Rim Jar	-	-	-	RLIN	1	2C	RIM SHLDR
4017	Miscellaneous grey wares	Rusticated Jar	-	-	-	RWEB	1	L1-2	BS; AS YR02 FABRIC
4027	Coarse Greyware	-	-	-	-		1	Roman	BASE
4028	Eboracum 1	Flagon Unclassified Form	-	-	-		1	AD100-150	RIM; AS YORK FORM FP
4028	Eboracum 1	Flagon/Jar Unclassified Form	-	-	FLT		1	AD100-150	BASE FTG
4028	Eboracum white slipped	Closed Form	-	-	-		1	AD100-150	BS; FABRIC YORK W1
4028	Erratic pebbles broken up as temper	Large Jar	-	-	-	HM	1	AD100-150	BS; BLACK FIRED
4028	Misc grey ware fabrics with rare shell	B334	-	-	-		1	AD100-150	BS; GREY RARE SHELL



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4029	IA type sandy wares	Small jar or beaker	-	-	-	HM	1	Roman?	BASE; BLACK FIRED WIPED SURFACES
4030	Undifferentiated Samian	-	-	-	-		1	AD70-110?	BS SCRAP
4031	Miscellaneous grey wares	Necked Jar	-	-	FLT		1	Roman	RIM
4045	Eboracum 1	Ringed Flagon	-	-	-		1	L1-E2?	RIM NECK BODY
4045	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	L1-E2?	BS; OX/R
4045	Erratic pebbles broken up as temper 2	-	-	U	-	HM	6	L1-E2?	BS; R
4045	Erratic pebbles broken up as temper 2	-	-	U	-	HM	8	L1-E2?	BS; R; FLAKES
4045	Erratic pebbles broken up as temper 2	-	-	U	-	HM	1	L1-E2?	BS; OX/R
4045	Erratic pebbles broken up as temper 2	Large Jar/Bowl	-	U	-	HM	1	L1-E2?	BS; OX; THICK WALLED
4045	Erratic pebbles broken up as	-	-	U	-	HM	10	L1-E2?	



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
	temper, finer than ETW2								BS; R; THIN WALLED; ?NO OF VESSELS
4045	Miscellaneous grey wares	-	-	-	-		2	L1-E2?	BS
4045	Miscellaneous grey wares	Necked Jar	-	-	-		1	L1-E2?	RIM
4045	Miscellaneous grey wares	Rusticated Jar	-	-	-	RUST	1	L1-E2?	BS
4045	Miscellaneous grey wares	Rusticated Jar	-	-	-	RNOD	1	L1-E2?	BS; AS YORK FABRIC YR02
4045	Vesicular fabric	-	-	U	-	HM	1	L1-E2?	BS; OX/R; ?EARLIER PREHISTORIC
4046	Eboracum 1	-	-	-	-		1	AD120+	BS
4046	Erratic pebbles broken up as temper 2	-	-	U	-	HM	10	AD120+	BS; R; MISC VESSELS
4046	Erratic pebbles broken up as temper 2	-	-	U	-	HM	4	AD120+	BS; R; MISC VESSELS
4046	Miscellaneous grey wares	Flange Rimmed Bowl (eg Gillam 1970 Types 218-220)	-	-	-		1	A D120+	RIM



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4046	Miscellaneous grey wares	Flange Rimmed Bowl (eg Gillam 1970 Types 218-220)	-	-	-		1	AD120+	RIM
4046	Miscellaneous grey wares	Closed Form	-	-	-		1	AD120+	BASE FTG
4046	Miscellaneous grey wares	Closed Form	-	-	-		1	AD120+	BS
4046	Iron Age-Sparry Mineral Calcite	-	-	U	-	HM	1	AD120+	BS; R; THIN WALLED
4046	Central Gaulish Samian	Mortaria Unclassified Form	-	-	-		1	AD120+	BS TRITS
4047	Eboracum 1	Closed Form	-	-	-		1	L1-3C	BS
4064	Erratic pebbles broken up as temper 2	-	-	U	-	HM	29	2C?	BS; IRF
4064	Erratic pebbles broken up as temper 2	-	-	-	-	HM	1	2C?	BASE; IRF



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4064	Erratic pebbles broken up as temper 2	-	-	U	-	HM	5	2C?	BS FLAKES; IRF
4064	Erratic pebbles broken up as temper 2	-	-	U	-	HM	14	2C?	BS FLAKES; IRF
4064	Erratic pebbles broken up as temper 2	-	-	U	-	HM	5	2C?	BS; IRF
4064	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	OV	-	HM	4	2C?	BS SHLDR; IRF
4064	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	9	2C?	BS; IRF
4064	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	-	-	HM	1	2C?	BASE; IRF; COARSE
4064	Erratic pebbles broken up as temper 2	Jar Unclassified Form	-	U	-	HM	4	2C?	BS; R; THIN WALLED; SMOOTHED EXT SURFACE
4064	Erratic pebbles broken up as temper 2	Everted Rim Jar	EVR	-	-	HM	1	2C?	RIM; IRF



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	OV	-	HM	1	2C?	RIM SHLDR; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	OV	-	HM	1	2C?	RIM SHLDR; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	-	-	HM	1	2C?	RIM; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	-	-	HM	1	2C?	RIM; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	-	-	HM	1	2C?	RIM; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	-	-	HM	1	2C?	RIM; IRF
4064	Erratic pebbles broken up as temper 2	Everted rim with	EVEB	-	-	HM	1	2C?	RIM; IRF



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
		external bevel							
4064	Erratic pebbles broken up as temper 2	Everted rim with external bevel	EVEB	-	-	HM	1	2C?	RIM; IRF
4064	Erratic pebbles broken up as temper 2	Upright Rim Jar	EVR	-	-	HM	1	2C?	RIM; IRF
4064	Iron Age-Sparry Mineral Calcite	-	-	U	-	HM	4	2C?	BS; IRF
5001	Eboracum 1	Closed Form	-	-	-		1	L1-3	BS
5001	Miscellaneous grey wares?	Jar/Bowl Unclassified Form	-	-	-		1	L1-3	BASE?
5003	Erratic pebbles broken up as temper 2	-	-	U	-		1	L1-3?	BS TINY SCRAP
5003	Miscellaneous grey wares	Jar Unclassified Form	-	-	-		1	L1-3?	BS SHLDR; ?ROMAN
5003	Misc. oxidized wares?	-	-	-	-		3	L1-3?	BS TINY SCRAPS



Context	Fabric	Form	Rim	Body	Base	Decoration	Vessels	Date range	Notes
6001	Eboracum 1	-	-	-	-		3	Med/Post-med/L1-2	BS
6001	Misc Medieval	-	-	-	-		1	Med/Post-med/L1-2	BS; GREEN GLAZED
6001	North Yorks Oxidised (York/Malton)	Mortaria Unclassified Form	-	-	-		1	Med/Post-med/L1-2	BS TRITS
6001	Misc. oxidized wares?	-	-	-	-		1	Med/Post-med/L1-2	BS
6002	Colour coated fabric 1	Everted Rim Beaker		-	-	-	1	M2+	RIM
6002	Eboracum 1	-	-	-	-	-	2	M2+	BS
6002	Miscellaneous grey wares	-	-	-	-	-	1	M2+	BS
6002	Misc uncategorised	-	-	-	-	-	1	M2+	RIM?; FABRIC POSS ETW2
	Total	99	15	43	3		247		



Appendix D: Finds catalogues

Table 6: Ceramic building material catalogue

Context	Material Type	Quantity	Weight (g)	Notes
0003	Ceramic building material	1	50	Tessera
0003	Ceramic building material	1	415	Brick
0003	Ceramic building material	1	764	Brick
0003	Ceramic building material	1	150	Flat
0003	Ceramic building material	1	462	Flat
0003	Ceramic building material	1	496	Imbrex
0003	Ceramic building material	1	62	Tegula
0003	Ceramic building material	1	154	Tessera
0003	Ceramic building material	1	346	Tessera
0003	Ceramic building material	1	73	Brick
0003	Ceramic building material	1	100	Flat
0003	Ceramic building material	1	168	Flat
0003	Ceramic building material	1	114	Imbrex
0003	Ceramic building material	1	94	Tessera
4001	Ceramic building material	1	6	B/T
4001	Ceramic building material	1	299	Brick
4004	Ceramic building material	1	430	Imbrex
4038	Ceramic building material	1	4	B/T
4046	Ceramic building material	1	14	Tessera
Total		19	4201	



Table 7: Animal bone catalogue

Context	Cattle	Pig	Sheep/goat	Dog	Domestic fowl	Total
4001		1	1			2
4006	1		8			9
4007		1		1	1	3
4012	2			2		4
4030	6					6
4045			1			1
4046		1	1			2
4070			1			1
Total	9	3	12	3	1	28



Table 8: Human bone catalogue

Context	Pres.	%	Skull	Dentition	Torso	Pelvis	Leg	Feet	Arms	Hand	Age	MNI	Comments
4018	Moderate	95	1	1	1	1	2	2	2	2	Feotal/neonatal	1	Neonatal largely complete
4034	Moderate	85	1	0	1	1	2	2	2	2	Feotal/neonatal	1	Dimensions suggest pre-term (feotal). Partial skull
4038	Poor	5	0	0	0	0	1	0	0	0	Adult	1	Likely to be above 4055,
4051	Moderate	75	1	1	1	1	2	2	2	2	Feotal/neonatal	1	Full term. Partial torso and skull
4055	Poor	50	0	0	1	0	3	1	3	0	Adult	1	Pit fill
Total			3	2	4	3	10	7	9	6			

Table 9: Shell catalogue

Context	Material Type	Quantity	Minimum number of individuals	Notes
4001	Shell	1	1	Oyster
4006	Shell	9	8	Oyster
4007	Shell	6	1	Oyster
4012	Shell	1	1	Snail
4038	Shell	12	1	Snail, Devil's toe nail, fossil marine bivalve
4050	Shell	15	1	Mussel, marine bivalve
Total		44	13	

Table 10: Flint catalogue

Context	Type	Quantity	Weight (g)	Period
4001	Blade	3	2.8	Mesolithic/Early Neolithic
4001	Circular scraper	1	12.3	Early Neolithic
4001	End-and-side scraper	1	2.8	Early Bronze Age?
4001	End-scraper on a flake	1	4.1	Industrial
4001	Flake	8	39.9	Mixed Mesolithic/Early Neolithic.
4001	Notched piece	1	11.5	Industrial
4001	Retouched blade	1	1.8	Mesolithic/Early Neolithic
4007	Flake	5	48	Mixed
4007	End-and-side scraper	10	87	Late Bronze Age/Iron Age?
4009	Blade	2	0.60	Mesolithic/Early Neolithic
4015	Flake	2	2	Industrial
4045	Flake	1	1	Mixed
4045	Retouched fragment	1	1	Industrial
4046	Blade	1	1	Mesolithic/Early Neolithic
4046	Blade-like flake	6	6	Mesolithic/Early Neolithic
4046	Chunk	1	1	Industrial
4046	Flake	2	2	Mixed
4046	Invasively-retouched knife	1	1	Early Neolithic
4046	Micro-denticulated bladelet	1	1	Mesolithic/Early Neolithic
4046	Single-platform bladelet core	8	8	Mesolithic
4050	Flake	1	1	Industrial
4064	Flake	1	1	Industrial
6001	Bladelet	1	1	Mesolithic/Early Neolithic
6001	Flake	1	1	Mixed
6002	Flake	1	1	Late Neolithic/Early Bronze Age-Late Bronze Age/Iron Age
0003	Retouched blade	1	1	Mesolithic/Early Neolithic
Total		63	240.80	

Table 11: Ferrous objects catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4001	Ferrous object	1	3	1 nail
4030	Ferrous object	1	16	1 cast iron fragment modern
4031	Ferrous object	1	3	1 nail modern
4046	Ferrous object	1	4	1 nail modern
5003	Ferrous object	1	5	1 nail modern
6002	Ferrous object	1	60	Cast iron fragment
Total		6	91	

Table 12: Stone catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4004	Stone	1	19	Natural water worn pebble possibly used as an architectural fragment
4004	Stone	1	3	1 fragment heat affected sandstone
4017	Stone	1	17	Natural water worn pebble possibly used as an architectural fragment
4017	Stone	2	3	2 fragments natural
4017	Stone	1	3	Fossil. Coral branch.
4038	Stone	1	8	Quartz pebble natural
4038	Stone	1	8	Fossil. Crushed shells.
4046	Stone	3	182	3 co-terminus pieces. Quartz natural artificially shattered by plough or mattock.
4046	Stone	3	18	Chalk natural
5001	Stone	1	16	Chalk broken stone natural
Total		15	277	

Table 13: Lead object catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4001	Lead object	1	21	1 round piece of folded lead possibly casting waste Medieval?



4030	Lead object	6	30	6 fragments casting waste Roman?
Total		7	51	

Table 14: Slag catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4001	Slag	2	107	Furnace waste?
4030	Slag	1	7	1 fragment of clinker
5003	Slag	2	24	Furnace waste?
6001	Slag	2	9	Furnace waste clinker?
Total		7	147	

Table 15: Copper alloy catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4030	Copper alloy	2	0.16	Fragments undiagnostic
Total		2	0.16	

Table 16: Daub catalogue

Context	Material Type	Quantity	Weight (g)	Notes
4004	Daub	3	107	3 fragments heat affected daub
4006	Daub	5	48	Heat affected daub
4007	Daub	10	87	Heat affected daub
4030	Daub	2	0.60	2 fragments heat affected daub
Total		20	242.60	

Appendix E: Palaeoenvironmental Assessment

Rosalind McKenna

Introduction

A programme of soil sampling was implemented during the excavation, which included the collection of soil samples from sealed contexts. The aim of the sampling was to:

- To assess the type of preservation and the potential of the biological remains (Aim 3, Q7 – Q8)
- To record any human activities undertaken on the site – both domestic and industrial (Aim 3, Q9)
- To provide information on the past environment of the area (Aim 3, Q10)
- To assess the state in which the palaeoenvironmental remains are being successfully preserved in-situ – is this being impacted by farming and bioturbation (Aim 4, Q13).

Methods

Following selection, subsamples of raw sediment from the selected samples were processed. The samples were examined in the laboratory, where they were described using a pro forma. The subsamples were processed by staff at DigVentures using their standard water flotation methods. The flot (the sum of the material from each sample that floats) was sieved to 0.3mm and air dried. The heavy residue (the material which does not float) was not examined, and therefore the results presented here are based entirely on the material from the flot. The flot was examined under a low-power binocular microscope at magnifications between x12 and x40.

A four point semi quantitative scale was used, from '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Data were recorded on paper and subsequently on a personal computer using a Microsoft Access database. The results of this can be seen in Table 3 at the end of this report.

Identification was carried out using published keys (Jacomet 2006, Biejerinkc 1976, Jones – unpublished and Zohary & Hopf 2000), online resources (<http://www.plantatlas.eu/za.php>), the authors own reference collection. Taxonomy and nomenclature follow Stace (1997). The full species list appears at Table 1 at the end of this report.

The flot was then sieved into convenient fractions (4, 2, 1 and 0.3mm) for sorting and identification of charcoal fragments. Identifiable material was only present within the 4 and 2mm fractions. A random selection of ideally 100 fragments of charcoal of varying sizes was made, which were then identified. Where samples did not contain 100 identifiable fragments, all fragments were studied and recorded. Identification was made using the wood identification guides of Schweingruber (1978) and Hather (2000). Taxa identified only to genus cannot be identified more closely due to a lack of defining characteristics in charcoal material.



Results

Five samples and two hand picked charcoal samples are the basis of this investigation. Charred plant macrofossils were present within two of the samples. A single indeterminate cereal grain was recorded in one sample, and this was identified based on its overall size and morphological characteristics, which may suggest a high degree of surface abrasion on the grains. This is indicative of mechanical disturbances that are common in features such as pits and ditches, where rubbish and waste are frequently discarded. Grass seeds were also present within another sample. The results of this analysis can be seen in Table 1 below. The samples produced a very small suite of plant macrofossils, both in terms of quantity and diversity. Due to this fact, other than to state their presence in the sample, nothing of further interpretable value can be gained.

The presence of root / rootlet fragments within most of the samples indicates disturbance of the archaeological features, and it may be due to the nature of some features being relatively close to the surface, as well as deep root action from vegetation that covered the site. The presence of earthworm egg capsules, together with the remains of insect fragments and snails within some of the samples further confirms this.

Charcoal fragments were present within all of the samples, scoring a '1' on the semi quantitative scale. The preservation of the charcoal fragments was very poor. The fragments were too small to enable successful fracturing that reveals identifying morphological characteristics. Where fragments were large enough, the fragments were very brittle, and the material crumbled or broke in uneven patterns making the identifying characteristics difficult to distinguish and interpret. Identifiable remains were absent from the samples.

Conclusion

The samples produced some environmental material of interpretable value, with the charred plant macrofossils from two of the samples. The deposits from which the samples derive, probably represent the deposition or build up of domestic waste associated with fires. The charred remains recovered are small in numbers and were of very poor quality - charred material that was within the samples appears to have been subjected to high temperatures of combustion, as the material tended to be abraded and fragmented, possibly as a result of post depositional disturbance and taphonomic processes.

The remains of plant macrofossils recovered from the sample showed the utilisation of indeterminate cereal grains. There is no evidence of cereal processing occurring at the site, or of any plant remains that may indicate some industrial use.

It is thought to be problematic using charcoal and plant macrofossil records from archaeological sites, as they do not accurately reflect the surrounding environment. Wood was gathered before burning or was used for building which introduces an element of bias. Plant remains were also gathered foods, and were generally only burnt by accident. Despite this, plant and charcoal remains can provide good information about the landscapes surrounding the sites presuming that people did not travel too far to gather food and fuel.



Recommendations

The samples have been assessed, and all interpretable data has been retrieved. No further work is required on any of the samples. Should future excavations occur at the site, it is recommended that a comprehensive sampling strategy is put in place. It is essential to collect samples from all types of deposit that are relevant to the aims of the sampling strategy. The best way of obtaining a representative sample of the material within a context is to take the sample from several different areas within the context (scatter sampling). If waterlogged features are excavated, then the samples from these ought to be processed for both waterlogged plant remains as well as insect remains. Any material recovered by further excavations should be processed to 0.3mm in accordance with standardised processing methods such as Kenward *et al.* 1980, and the English Heritage guidelines for Environmental Archaeology.

Archive

All extracted fossils and flots are currently stored with the site archive in the stores at Dig Ventures., along with a paper and electronic record pertaining to the work described here.

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<http://www.plantatlas.eu/za.php> - Online Digital Plant Atlas



Table 17: Full environmental sample list

https://digventures.com/elmswell-farm/ddt/browser.php?item_key=smp_cd

Sample number	Context	Sample Type	Sample size	Why taken?	Volume taken?	Comments	Processed?	Sample status
1	2010	General Bulk	< 5%	Recovery of plant macrofossils and organic remains	40	Dark 'peaty' fill	50%	processed
2	1003	General Bulk	5-20%	Recovery of plant microfossils to enable us to understand the nature of the local environment when the ditch was in use	40	Ditch aligned east to west in east end of trench	50%	processed
3	3007	General Bulk	5-20%	Plant macrofossil and artefact recovery	40	Lower ditch fill	50%	processed
4	3011	General Bulk	5-20%	Earliest feature stratigraphically on site. Recovery of plant macrofossils and artefacts	40	Fill of ditch running north-south	50%	processed
5	4037	General Bulk	5-20%		30	Basal fill of ditch [4005]	50%	processed
6	4017	Skeleton Recovery	80-100%	Sample taken from around the neonatal skeleton	20	Fill of grave [4016]		Not processed
7	4011	Skeleton Recovery	80-100%	Sample taken from around the neonatal skeleton	25	Fill of small pit [4010], neonate burial		Not processed
8	4033	Skeleton Recovery	80-100%	Sample from around Neonate	10	Fill of neonate grave at southeast of trench 4		Not processed



Sample number	Context	Sample Type	Sample size	Why taken?	Volume taken?	Comments	Processed?	Sample status
9		General Bulk	20-40%		30		50%	processed
10	4050	General Bulk	20-40%		40	Fill of rectangular pit orientated East-West in the Southeast of trench 4	50%	processed
11	4055		20-40%	From animal bone pit	10	Fill for a pit containing animal bones in east of trench 4	50%	processed
12	4029					Grey ash fill of ditch [4005] below (4028)		Not processed
13	4031					Fill of linear feature at e of trench 4 running n s	50%	processed
14	4039					Brown fill of a ditch running n s in the West of trench 4	50%	processed



Table 18: Plant Macrofossils - complete list of taxa recovered from excavations

Taxonomy and nomenclature follow Stace (1997) *lots of fragmentary grains, but preservation is too poor to identify

Sample Number	13	14	
Context Number	4031	4039	
Feature Number	F419	F407	
Feature Type	Ditch	Ditch	
Latin Binomial			Vernacular
POACEAE	3		Grass Family
Indeterminate Cereal		1	Indeterminate Cereal

Table 19: Components of the samples

Semi quantitative scale: '1' – one or a few specimens (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix).

Sample Number	5	9	11	13	14
Context Number	4037	4070	4055	4031	4039
Feature Number	F401	F421	F414	F419	F407
Feature type	Ditch	Beam slot	Pit	Ditch	Ditch
Charcoal	1	1	1	1	1
Earthworm egg capsules	1		1	1	1
Insect fragments			1		1
Plant macrofossils – charred				1	1
Root / rootlet fragments	4	4	4	4	4
Sand	2	2	3	3	3
Snails	2	2	1	2	2

