

# Archaeological Watching Brief at the former Toby Tavern site, 9, Sansome Street, Worcester

Worcestershire Archaeology  
*for Lam Group Limited*

December 2019



Find out more online:  
[www.explorethepast.co.uk](http://www.explorethepast.co.uk)



 worcestershire  
county council

# FORMER TOBY TAVERN SITE, 9, SANSOME STREET, WORCESTER

## Archaeological Watching Brief Report

---



©Worcestershire County Council

Worcestershire Archaeology  
Worcestershire Archive & Archaeology Service  
The Hive  
Sawmill Walk  
The Butts  
Worcester  
WR1 3PD

Explore  
the Past

## SITE INFORMATION

---

Site name: Former Toby Tavern site, 9, Sansome Street, Worcester

Local planning authority: Worcester City Council

Planning reference: P17D0502

Central NGR: SO 84985 55163

Commissioning client: Nick Carroll Architects Limited

WA project number: P5366

WA report number: 2633

HER reference: WCM 102302

Oasis reference: fieldsec1-333645

Museum accession number: tbc

---

### DOCUMENT CONTROL PANEL

Version	Date	Author	Details	Approved by
1	18/10/2019	Tim Cornah	Draft for comment	Tom Vaughan
2	19/12/2019	Tim Cornah	Draft for comment	Tom Vaughan

This report is confidential to the client. Worcestershire Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

# CONTENTS

---

<b>SUMMARY</b> .....	<b>1</b>
<b>REPORT</b> .....	<b>2</b>
<b>1 INTRODUCTION</b> .....	<b>2</b>
1.1 Background to the project .....	2
1.2 Site location, topography and geology.....	2
<b>2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND</b> .....	<b>2</b>
2.1 Introduction .....	2
2.2 Roman to early-medieval.....	2
2.3 Medieval .....	3
2.4 Post-medieval and modern .....	3
<b>3 PROJECT AIMS</b> .....	<b>4</b>
<b>4 PROJECT METHODOLOGY</b> .....	<b>4</b>
<b>5 ARCHAEOLOGICAL RESULTS</b> .....	<b>5</b>
5.1 Introduction .....	5
5.2 Trench descriptions.....	5
5.2.1 Trench1a .....	5
5.2.2 Trench 1b .....	5
5.2.3 Trench 2 .....	6
5.2.4 Trench 3 .....	6
5.2.5 Trench 4 .....	7
5.2.6 Trench 5 .....	7
5.2.7 Trench 6 .....	8
<b>6 ARTEFACTUAL EVIDENCE, BY LAURA GRIFFIN</b> .....	<b>8</b>
6.1 Artefact methodology, by Laura Griffin .....	8
6.1.1 Recovery policy .....	8
6.1.2 Method of analysis .....	9
6.1.3 Discard policy .....	9
6.2 Artefactual analysis, by Laura Griffin .....	9
6.2.1 Summary of artefactual evidence by period .....	10
6.2.2 Roman .....	10
6.2.3 Medieval .....	10
6.2.4 Late medieval/early post-medieval.....	11
6.2.5 Post-medieval .....	14
6.2.6 Modern .....	15
6.2.7 Discussion .....	15
<b>7 ENVIRONMENTAL EVIDENCE</b> .....	<b>19</b>
<b>8 DISCUSSION</b> .....	<b>19</b>
8.1 Phase 1 Natural .....	19
8.2 Phase 2 Medieval .....	19
8.3 Phase 3 Late medieval to early post-medieval.....	19
8.4 Phase 4 Later post-medieval to early modern .....	20

<b>9</b>	<b>CONCLUSIONS .....</b>	<b>20</b>
<b>10</b>	<b>PROJECT PERSONNEL .....</b>	<b>20</b>
<b>11</b>	<b>ACKNOWLEDGEMENTS .....</b>	<b>21</b>
<b>12</b>	<b>BIBLIOGRAPHY .....</b>	<b>21</b>

**FIGURES**

**PLATES**

**APPENDIX 1: TRENCH DESCRIPTIONS**

**APPENDIX 2: SUMMARY OF PROJECT ARCHIVE**

**APPENDIX 3: SUMMARY OF DATA FOR HER**

## Archaeological Watching Brief at the former Toby Tavern site, 9, Sansome Street, Worcester

Tim Cornah

With contributions by Laura Griffin, ACIfA

Illustrations by Carolyn Hunt, MCIfA

### Summary

An archaeological watching brief was undertaken at the former Toby Tavern site, 9, Sansome Street, Worcester (NGR SO 84985 55163). It was commissioned by Lam Group Ltd, who have demolished part of the former public house on the site and redeveloped it as new commercial premises, for which a planning application has been submitted.

The monitoring of foundation trenches within this site has revealed the presence of archaeological features on the site from the medieval period onwards. These fit closely with the potential identified within the desk-based assessment of the site, most notably remains relating late medieval and early post-medieval tile production. Some tentative evidence for the clearance of the site at the time of the Civil War in the middle of the 17<sup>th</sup> century was present, as well as the site quickly being brought back into use through the post-medieval era. The site was further developed with the addition of the buildings recently demolished that formed part of the former Toby Tavern and remained in the form of foundations.

# Report

## 1 Introduction

### 1.1 Background to the project

An archaeological watching brief was undertaken by Worcestershire Archaeology (WA) in July 2018 at the former Toby Tavern site, 9 Sansome Street, Worcester (NGR SO 84985 55163). This comprised of the monitoring of ground beam trenches for archaeological deposits and features. The project was commissioned by Lam Group Ltd, who have demolished part of the former public house on the site and redeveloped it as new commercial premises. A planning application has been submitted to Worcester City Council (planning reference P17D0502).

The archaeological advisor to the local planning authority considered that the proposed development had the potential to impact upon possible heritage assets. Research into the site suggested the possibility of multiple phase deposits on the site, but most notably late medieval to early post-medieval settlement and industrial activity (Bradley 2017).

No brief was provided but the scope of the project was agreed with the archaeological advisor to the local planning authority. The project also conforms to the industry guidelines and standards set out by the Chartered Institute for Archaeologists in *Standard and guidance: for an archaeological watching brief* (CIfA 2014a), and the *Guidelines for archaeological work in Worcester* (Worcester City Council 2016).

### 1.2 Site location, topography and geology

The site is located at the northern edge of the historic city centre and covers an area of approximately 410m<sup>2</sup>. It is bounded by historic Grade II listed properties on the west, namely 3-7 and 7a, Sansome Street, and 1 and 2, Foregate Street; includes the Grade II listed 3, Foregate Street within the site, and connects to the Grade II listed 4, Foregate Street to the north. There is a small car park with access road to the east whilst the south frontage of the site faces onto Sansome Street.

The site contained an unoccupied commercial property. This included a late 20th century single storey red brick flat roofed building facing onto Sansome Street, connected to the Grade II listed three storey building comprising the rear of 3, Foregate Street, a combined property formerly known as Toby's Tavern.

The development site lies on generally flat land, at a height of approximately 23.30m above Ordnance Datum (AOD). The underlying bedrock geology is mapped as that of the Sidmouth Mudstone Formation, overlain by sand and gravels of the Worcester Terrace (BGS 2018).

## 2 Archaeological and historical background

### 2.1 Introduction

An archaeological desk-based assessment (DBA) of the site was previously undertaken by WA (Bradley 2017). The findings presented in the DBA are summarised below.

### 2.2 Roman to early-medieval

Whilst being some way from the known areas of Roman occupation within the city, there have been sporadic finds of this date in the vicinity, including Roman finds insecurely located in the vicinity of Foregate or Berkley's Hospital, 50m to the south-west (WCM 101035) and a possible Roman quern from 16-18, Sansome Street (WCM 101260). Around 40m south of the site, at Hopmarket Yard an assemblage of Roman pottery of 2nd century or later date was identified along with Roman pottery residual in later features (WCM 100557 and WCM 100816).

The site is located c 200m north of the projected Saxon burh defences. It is likely that the area was peripheral to the early medieval settlement. A single sherd of residual late Saxon pottery was identified at the Hopmarket Yard, just to the south (WCM 100557).

### 2.3 Medieval

Medieval finds and deposits are more frequently recorded in the study area around the site, which is on the northern edge of the medieval urban core of Worcester and just outside the defended area. This is not unexpected, as immediately to the south, the route of Sansome Street, formerly known as Port Dich or Town Ditch, has medieval origins (WCM 96301) and follows the line of the city ditch.

It is likely that this area close to the Foregate and city wall, similar to other extra-mural areas such as Lowesmoor, was used for a mixture of small-scale craft, trade, extraction, and livestock-related activity, as well as more intensive industrial work including ironworking and tile manufacture.

Documentary sources mention a tile kiln, of late medieval origin, belonging to the Chantry of the Holy Trinity and located on Sansome Street with another belonged to the Priory which was located on the north corner of Shaw Street, just to the west of the site.

Of particular relevance in this regard is the excavation of a single evaluation trench in the car park immediately east of the current site in 1988. This identified a medieval pit, a ditch and an agricultural soil, all with 12th to 13th century pottery, animal bone and slag. These features were cut by a series of pits that included broken tile and kiln brick as well as a tile-built feature described as a 'tank' (WCM 100075). This description is clearly indicative of tile manufacture on or adjacent to the site, although the report suggests that these features are 18th century in origin, despite it not being evident as to how this was established. Similar structural remains and deposits have more recently been shown to be the site of tile kilns dating from the late medieval to early post-medieval period (15th to 17th centuries) in other suburban sites around the city, such as along the Tything 350m to the north (WCM 101002) and at Silver Street, Lowesmoor, 200m to the south-east.

### 2.4 Post-medieval and modern

Documentary evidence indicates that the area just outside the city gates was occupied by small traders, cottages and garden plots in the 16th century. Any earlier buildings that may have been present in the area probably suffered from clearance during the period of the English Civil Wars (1642–51), which is reported to have removed many structures in the suburbs around the city, as appears to be shown in contemporary maps.

After the disturbance of the Civil Wars, the city defences appear to have been infilled. As discussed above, post-medieval pits have been recorded (WCM 100075), and 17th to 18th century pits were identified to the south at Hopmarket Yard (WCM 100557). Excavation on the site of the former GPO building on Sansome Walk exposed adjacent post-medieval sand extraction pits, containing several fills (WCM 101560 and WCM 101637).

During the investigations at 16-18, Sansome Street (WCM 101260), the area was shown to be extensively disturbed by post-medieval sand extraction, and the pits contained a varied and important assemblage of early to mid-18th century waste. This included a late 17th or early 18th century pottery saggars and a small quantity of clay tobacco pipe manufacturing waste. Although no kiln was found, the clay pipe waste demonstrated the presence of a kiln in the immediate vicinity, operating during the period 1680-1720 (WCM 98627).

It was during the latter half of the post-medieval period when many of the historic buildings that now exist in the area were developed. The building that remained extant on the site was a late 19th century refurbishment and extension of the hop market which included space for markets, commercial storage, a hotel and a bank (NHL 1390197). Historic mapping for the site shows two large buildings that remain consistent on the 1<sup>st</sup> edition 1886, the 1901, and 1928 Ordnance Survey maps, but were removed by 1940. These were listed as hop merchants until at least 1922, and are shown in detail on the 1900 surveyor's plan which shows the uses of individual rooms for samples, warehouse space



and offices. The two main properties formerly within the site area are indicated as numbers 4, 5 and 6, Sansome Street, occupied by J W Buckland and Co (hop and seed merchants), Thorntons and Pope (hop merchants), and Piercy and Longbottom (hop and seed merchants) respectively. Later road widening means that the former frontages of these are now under the pavement and part of the roadway on Sansome Street.

The site became a car park in the mid-20th century before late 20th century development and the construction of the current premises known as Hooper's Bar, and later Toby's Tavern.

### 3 Project aims

The aims of the investigations were to observe and record archaeological deposits, and to determine their extent, state of preservation, date and type, as far as reasonably possible within the constraints of the Client's groundworks.

### 4 Project methodology

No brief was prepared by the archaeological advisor, nor written scheme of investigation required, but this project conformed to the standard brief and written scheme of investigation documents previously issued. The scope and nature of the works was agreed in discussion with the archaeological advisor. Fieldwork was undertaken between 4 June and 21 August 2018.

It was originally envisaged that the development would not require excavation below the concrete slab for the previous buildings on the site. However this was revised, the slab was entirely removed and pile foundations sunk. The watching brief was due to commence when ground reduction was undertaken although in the event only the excavation of ground beam foundations between the piles was made available for observation, and these not in their entirety.

Six trenches were excavated over the approximately 294m<sup>2</sup> site. The location of the trenches is indicated in Figure 2. The trenches on the western half of the site were excavated and backfilled with prior to monitoring. They were not therefore observed. In mitigation, it was determined by the archaeological advisor that Trench 4 be excavated to understand the deposits in this area.

Deposits considered not to be significant were removed under constant archaeological supervision using a 360° tracked excavator, employing a toothless bucket. Subsequent excavation was undertaken by hand. Clean surfaces were inspected and selected deposits were excavated to retrieve artefactual material and environmental samples, as well as to determine their nature. Deposits were recorded according to standard Worcestershire Archaeology practice (WA 2012) and trench and feature locations were surveyed using a differential GPS with an accuracy limit set at 0.04m when possible.

All fieldwork records were checked and cross-referenced. Analysis was undertaken through a combination of structural and artefactual evidence, allied to the information derived from other sources.

The project archive is currently held at the offices of Worcestershire Archaeology. Subject to the agreement of the landowner it is anticipated that it will be deposited with Museums Worcestershire.

## 5 Archaeological results

### 5.1 Introduction

The features recorded in the Trenches 1 to 6 are shown in Figures 2-5 and Plates 1-11. The trench and context inventory is presented in Appendix 1.

### 5.2 Trench descriptions

#### 5.2.1 Trench 1a

##### Natural

The natural undisturbed geology consisted of a yellowish red sand (115), consistent with Worcester Terrace material, from approximately 0.60m depth.

##### Late medieval to early Post-medieval

A shallow tile dump feature [114] and a possible ditch [112] (Figure 3) both ran under the wall of the building to its north, which is likely to be of later 18<sup>th</sup> or early 19<sup>th</sup> century date.

A possible shallow pit [114] (Plate 2) was up to 0.62m in width, filled by deposit (113) which contained roof tile and pottery of late 15<sup>th</sup> to 16<sup>th</sup> century date. No dating was recovered from possible ditch [112] (Plate 3) which was aligned broadly north to south, extended to a depth of at least 1.30m and was at least 1.22m in width. It was filled by deposits (109 to 111). This feature did not clearly extend as far as trench 1b, indicating a possible terminus or that it was a large pit as opposed to a ditch.

Feature [112] was cut by a circular feature [105] (Plate 3) potentially of up to 1.80m in diameter and 1.46m in depth. Its fills (101 to 104) suggested a possible use as a cess pit and contained pottery of late 16<sup>th</sup> to 17<sup>th</sup> century date. It is therefore probable that all of the deposits within this trench pre-date the Civil War in the mid-17<sup>th</sup> century.

##### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (100) within this trench.

#### 5.2.2 Trench 1b

##### Natural

Natural consisted of a yellowish red sand (115), consistent with Worcester Terrace material, from approximately 0.60m depth.

##### Late medieval to early post-medieval

A brick and tile constructed feature (121) was present, standing to a height of twenty two courses, 0.82m deep, 1.80m long orientated east to west and 1.23m wide (Plate 4 and Plate 5) (Figure 3). Its exterior facing was roughly coursed and its interior neatly coursed, implying a dug in feature. On its northern side, to a depth of four courses from its top, was a neatly coursed opening 0.33m in width, potentially suggesting a continuation of the structure to the north. The bonding between the coursing was a grey green sandy silt, more consistent with cess material than the more typical clay bonding of a tile kiln. No heat affected areas were visible on or within this feature. Many of the bricks used to construct the feature had sagged from heat exposure, but were thought to be earlier re-used waste material. The brick and tile from this structure dated to the late 15<sup>th</sup> to 17<sup>th</sup> centuries and was sealed by deposit (120) which contained material of broadly similar date.

To the east of feature (121) was a further pit [119] (Figure 3), filled by deposit (118), which was up to 1.50m wide. Nothing could be clearly said of its shape or orientation although it extended for a depth of over 0.63m. No dating was recovered from this feature. It was below brick wall (117) which is orientated east to west, turning slightly to run towards the north-east.

### Later post-medieval

Wall (117) fits broadly with the rear of a property shown on the Ordnance Survey maps and closely with a plan of the building in 1900.

### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (100) within this trench.

## 5.2.3 Trench 2

### Natural

Natural consisted of an orange yellow sand (316), consistent with Worcester Terrace material, from approximately 0.50m depth.

### Later post-medieval

Deposit (210) was overlain by charcoal rich deposit (209) (Plate 6) which together comprised two layers up to approximately 0.50m in depth. No dating was recovered from these. It is possible that these were part of a cut feature, potentially the same as pit [119] with fill (118) within trench 1.

Within the northern section of the trench two small pits were present [205], 0.34m deep, and [207], 0.30m deep. The fill of the later (206) contained cement fragments, so a late post-medieval date was suggested. These in turn were overlain by made ground deposit (203) which was cut by a 20<sup>th</sup> century pit [202].

### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (200) within this trench.

## 5.2.4 Trench 3

### Natural

Natural consisted of a yellow orange sand (115), consistent with Worcester Terrace material, from a depth of approximately 0.80m.

### Post-medieval

Within the northern section of this trench was a pit [314] over 1.86m in width and over 0.59m in depth. Its fills (311-313) contained green silt elements, characteristic of cess material. It was therefore interpreted as a cess pit. This was in turn cut by pit [310], whose fills (307-309) suggested the same cess pit function. This feature was broadly oval in plan and over 1.14m in length and over 0.60m in depth. This feature contained material culture of 19<sup>th</sup> century date in its top fill (307). Both pits [314 and 310] were largely seen only in section (Plate 7). This was overlain by deposit (306) and also cut by pit [325] which was 1.25m wide and 0.45m deep though contained no dating though was truncated by the construction cut [323] for the east to west aligned wall (322), which was in turn abutted by deposit (321), which contained material of mid-late 18<sup>th</sup> century date. Wall (322) turned in the centre of the trench to run towards the south, in an alignment that fits closely with the historic Ordnance Survey maps of 1886 and 1901. The same is true of the wall on the northern boundary of the site (301=303) which abutted, in a parallel east to west alignment, wall (315) (Plate 8) which was a rectangular brick built structure which originally formed an access structure into the extant building through a blocked door to the west. The extant building is considered to be of late 18<sup>th</sup> or early 19<sup>th</sup> century date.

Within the eastern section of this trench was a possible relict subsoil (326) which was greater than 0.40m in depth and a possible former topsoil (330), also 0.40m in depth. No dating was recovered

from these though they were cut by the construction cut [329] for wall (327) which formed a brick tank structure filled by 19<sup>th</sup> to 20<sup>th</sup> century deposit (328), from which no material was retained.

### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (320) within this trench with a modern tarmac surface recorded at the limit of excavation (300).

## 5.2.5 Trench 4

### Natural

Natural consisted of an orange yellow sand (426), consistent with Worcester Terrace material, from approximately 0.68m depth.

### Medieval

A single pit [425] of medieval date was identified within this trench. It was 2.8m in length, with a width greater than 0.82, and was aligned east to west. It was excavated to a depth of 0.60m but extended beyond the excavation limit (Plate 9) (Figure 4). It was filled by banded silt deposits (420-424) which contained material spanning the 14<sup>th</sup> to 15<sup>th</sup> centuries, plus a single sherd of residual Roman pottery. Cut into this was a smaller pit [419] up to 0.60m in length and 0.14m in depth and again extending beyond the excavation limit. The dating of this feature is not clear but a medieval origin is considered probable. No clear alignment to these features could be suggested due to the narrowness of the excavation area.

### Late medieval to early post-medieval

Deposits (415, 416 and 417) sealed features (416 and 417). They are considered to possibly be the same deposit consisting of a silty former plough or garden soil, of up to 0.38m depth and possibly contemporary with sand deposit (404).

These were in turn cut by two pits [407] and [414]. Pit [407] was 1.50m in length and 0.70m in depth, orientated broadly east to west. Its fills (405 and 406) contained pottery and tile of 15<sup>th</sup> or 16<sup>th</sup> century date. It is noticeable for the quantity of roof tile within (406), so it is possible that the feature was excavated as a waste material dump. [414] was filled by deposit (413), the feature was 0.74m in length and 0.24m in depth. It was seen only in section so its interpretation is unclear.

A compact white chalky deposit (403) up to 0.18m in depth partially existed within the southern section of the trench that may have been a floor layer. The upper edge of this exhibited some black burnt material and was in turn sealed by a 0.18m deep deposit (402) which also contained loose ash with charcoal with possible burnt wood within a sandy matrix. The was in turn overlain by a small area of deposit (401) which contained a certain amount tile rubble of late 15<sup>th</sup> century date onwards. It is possible that (401 and 402) (Plate 10) represent a horizon of Civil War demolition, when this area is known to have been cleared.

Two intercutting pits [410] and [412] could not be stratigraphically determined to either pre- or post-date the possible Civil War horizon, although [410] contained a considerable amount of tiles of late 15<sup>th</sup> century date onwards.

### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (400) within this trench.

## 5.2.6 Trench 5

The natural undisturbed geology was not observed within this trench.

### Late medieval to early post-medieval

Within the eastern section of this trench a deposit rich in dumped tiles (502) up to 0.40m in depth was present that dated to the late 15<sup>th</sup> century onwards. This was sealed by deposit by a 0.16m deep black ash and charcoal deposit (501) which, similar to deposits (401 and 402), potentially relate to a horizon of Civil War destruction.

### Post-medieval

Within the southern end of the trench, a soil layer of greater than 0.40m was present and contained post-medieval material. It was cut by an east to west aligned brick wall (506) which is considered to have been part of the buildings depicted on the historic Ordnance Survey maps of 1886 and 1901.

### Modern

Modern made ground deposits covered the entirety of the site and represented levelling immediately before the groundworks observed within this project were commenced. These deposits were numbered (500) within this trench.

## 5.2.7 Trench 6

The natural undisturbed geology was not observed within this trench.

### Medieval

Deposit (604) was present within the northern section of this trench and extended for a depth of over 0.60m. Material culture from the 12<sup>th</sup> to 14<sup>th</sup> centuries was present within this. The interpretation of this deposit is difficult but an agricultural or garden soil layer is possible.

### Late medieval to early post-medieval

Cut into the top of deposit (604) was a small section of a wall (602) 0.76 in depth and 0.45m in width, constructed with two sandstone blocks at its base with seven courses of tiles above (Plate 11). These were bonded with a greyish clay. These were interpreted as part of a tile kiln although as with structure (121), no evidence of direct heat was present. This was abutted to its north by deposit (603) and cut on its south side by pit [606] which was over 0.60m deep and over 1.24m wide. Its fill (605) contained tile dumps which dated from the late 15<sup>th</sup> century onwards. These were sealed by a 19<sup>th</sup> to 20<sup>th</sup> century made ground deposit (601).

### Modern

A tarmac surface present at the limit of the excavation was numbered as (600).

## 6 Artefactual evidence, by Laura Griffin

### 6.1 Artefact methodology, by Laura Griffin

The finds work reported here conforms to the following guidance: for finds work by ClfA (2014c), for pottery analysis by PCR/SGRP/MPRG (2016), for archive creation by AAF (2011), and for museum deposition by SMA (1993).

#### 6.1.1 Recovery policy

The artefact recovery policy conformed to standard Worcestershire Archaeology practice (WA 2012; appendix 2).

Due to the large quantity of building material excavated, a decision was taken to retrieve only a representative sample, concentrating primarily on fabric, form and presence of any distinguishing marks such as stamps. As a result, 136 roof tiles and four bricks were retrieved and analysed.

### 6.1.2 Method of analysis

All hand-retrieved finds were examined. They were identified, quantified and dated to period. A *terminus post quem* date was produced for each stratified context. The date was used for determining the broad date of phases defined for the site. All information was recorded on a Microsoft Access database.

The pottery and ceramic building material was examined under x20 magnification and referenced as appropriate by fabric type and form according to the fabric reference series maintained by Worcestershire Archaeology (Hurst and Rees 1992, Hurst 1992 and [www.worcestershireceramics.org](http://www.worcestershireceramics.org)).

### 6.1.3 Discard policy

Artefacts from topsoil and subsoil and unstratified contexts will normally be noted but not retained, unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'). All artefacts will be collected from stratified excavated contexts, except for large assemblages of post-medieval or modern material (see Recovery policy above), unless there is some special reason to retain such as local production. Such material may be noted and not retained, or, if appropriate, a representative sample may be collected and retained. Discard of finds from post-medieval and earlier deposits will only be instituted with reference to museum collection policy and/or with agreement of the local museum.

See the environmental section for other discard where appropriate.

## 6.2 Artefactual analysis, by Laura Griffin

The assemblage recovered from the site totalled 317 finds weighing 57.54kg (see Tables 1 and 3). The majority of the assemblage was of medieval and early post-medieval date. Level of preservation was good with finds displaying low levels of surface abrasion. This was reflected in an exceptionally high average sherd weight of 29.3g, suggesting very little post-depositional disturbance of the site.

period	material class	material subtype	object specific type	total	weight (g)	sample taken for analysis
Roman	ceramic		pot	2	27	
Roman	slag	slag(Fe)	smelting slag(tap)	5	728	
medieval	ceramic		pot	84	1483	
medieval	ceramic		ridge tile	1	369	
medieval	ceramic		roof tile(flat)	30	5634	
medieval	ceramic		tile	1	12	
late med/early post-med	ceramic		?kiln furniture	2	1393	
late med/early post-med	ceramic		?ridge tile	1	427	
late med/early post-med	ceramic		pot	15	210	
late med/early post-med	ceramic		roof tile	2	133	X
late med/early post-med	ceramic		roof tile(flat)	103	31578	X
post-medieval	ceramic		brick	4	6500	X
post-medieval	ceramic		object	1	1000	

post-medieval	ceramic		pipe	15	65	
post-medieval	ceramic		pot	11	332	
post-medieval	glass		vessel	3	47	
post-medieval	glass		window	1	1	
post-medieval	metal	cual	?button	1	5	
modern	ceramic		drain	2	292	
modern	ceramic		pot	7	1432	
modern	glass		vessel	2	261	
undated			mortar	9	2	
undated	coal			5	6	
undated	metal	iron	?nail	3	33	
undated	metal	iron	nail	2	10	
undated	stone	red sandstone		5	5564	

Table 1: Quantification of the assemblage

### 6.2.1 Summary of artefactual evidence by period

Below is a discussion of the finds and of their associated location or contexts by period. Where possible, dates have been allocated, and the importance of individual finds commented upon as necessary.

#### 6.2.2 Roman

All material of Roman date was unstratified. Finds included two undiagnostic sherds of oxidised Severn Valley ware (fabric 12; contexts 418 and 421) dated mid-1st-4th century AD and five pieces of iron smelting slag (contexts 217, 421, 423, 406 and 604).

#### 6.2.3 Medieval

##### Pottery

A total of 84 sherds (1483g), accounting for 70% of the pottery assemblage, were identified as being medieval (Table 3). Preservation was good, largely due to low levels of residuality. This was also reflected in a notably high average sherd weight of 17.6g, suggesting minimal disturbance following initial discard. The assemblage was entirely of local production with a relatively narrow range of forms identified (see Table 2).

fabric number	fabric common name	total	weight (g)
55	Worcester-type sandy unglazed ware	10	197
56	Malvernian unglazed ware	9	93
64.1	Worcester-type sandy glazed ware	12	301
69	oxidized glazed Malvernian ware	53	892

Table 2: Quantification of the medieval pottery by fabric type

The assemblage comprised four local fabric types: unglazed Worcester-type ware (fabric 55), unglazed Malvernian ware (fabric 56), sandy glazed Worcester-type ware (fabric 64.1) and oxidised glazed Malvernian ware (fabric 69). All of these fabric types have been described, dated and discussed at length by Hurst and Rees (1992; Upwich, Droitwich), and by Bryant (2004; Deansway,

Worcester). The range of forms identified was narrow, as normal for this period, and with all sherds of unglazed fabrics coming from cooking pots of 12th–14th century date. Some of the latter displayed blackening and soot deposits characteristic of this vessel type.

Glazed wares were dominated by those of Malvernian production. This may suggest a peak in medieval activity on the site c 14th–15th century, with the production of pottery in Worcester thought to have ceased around the mid-14th century. This is thought to have resulted from the increase in the availability and popularity of metal cooking pots at all levels of society (Le Patourel 1968; Bryant 2004, 290). However, the Malvernian industry appears to have diversified and bucked this trend by producing more specialised forms, allowing it to continue into early 17th century. Such forms seen in this assemblage included a pipkin and skillet (context 406).

### **Ceramic building material**

Medieval ceramic building material amounted to 32 fragments (6.015kg) and consisted entirely of roof tile of Worcester production. The group fell into two fabric groups; 2a and 2b, and included one ridge tile (context 406). Remaining fragments were of a long-lived flat tile form. All were unglazed, including the ridge tile but the majority were sanded. A fairly large proportion of tiles were diagnostic, displaying either nibs or holes, or a combination of the two. Nibbed tiles and nib and peg tiles are thought to have been the earliest form of flat roof tile, being produced from the 13th century onwards. These appear to have been superseded by pegged forms by the 14th century in some areas of England, which became virtually universal by the end of the 15th century (Fagan 2004, 345; Drury 1981, 131).

A total of 25 tiles could be identified as of fabric 2a. Diagnostic features included 26 pierced square holes, one with a nail still in situ (context 406), two unpierced square holes, two nibs and one fragment with both nib and pierced square hole. Tile thickness varied between 12–19mm and one complete width could be measured as 178mm. The group included two burnt, warped fragments (context 406) but it was not clear whether this was a result of a high temperature building fire or an indication of production on the site or nearby during this earlier period.

The remaining seven tiles were of fabric 2b and typical of the type, having a coarse, sandy fabric and being buff or brown in colour at the surfaces with a dark grey, reduced core. Diagnostic features included a partial dog paw print (context 418) and one nibbed and pegged fragment with a circular pierced hole (context 406).

## **6.2.4 Late medieval/early post-medieval**

### **Pottery**

A small assemblage of 15 sherds could be dated between the late 15th and 17th centuries. However, once again, preservation of sherds in this group was good with low levels of abrasion, as reflected in the average sherd weight of 14g.

The only locally produced wares by this period were of oxidised glazed Malvernian ware, reflecting the regional dominance and expansion of this industry during this period, with distribution stretching as far afield as the south of Bristol and along the coast of South Wales by the early 17th century (Vince 1977, 286).

Other fabric types seen in smaller quantities (see Table 3) included Tudor green ware (fabric 70) and brown-glazed speckled ware (fabric 72).

The range of forms was narrow but consistent with what would be expected for a domestic assemblage of this date. Malvernian sherds included fragments from a dripping dish and chafing dish, whilst those of brown-glazed speckled ware comprised two cup sherds.



fabric number	fabric common name	total	weight (g)
69	oxidized glazed Malvernian ware	11	156
70	Tudor green ware	1	1
72	brown glazed speckled ware	3	53

Table 3: Quantification of the late medieval/early post-medieval pottery by fabric type

### Ceramic building material

Only a selection of the ceramic building material present on the site was retained for analysis from this late medieval/early post-medieval phase. All diagnostic pieces were retained, all on site discard was undertaken with the input of a finds specialist.

#### *Roof tile*

A total of 106 fragments of roofing tile (32.14kg) could be identified as being of fabric 2c. Tiles of this type have a distinctive fabric containing soft, pink inclusions and are known to have been produced in a number kilns in Worcester from the late 15th century onwards, including at 9–10 The Tything (Miller et al. 2004) and St Martin's Quarter, Lowesmoor (Hurst et al 2018).

Just two ridge tiles were present, the remainder were flat. A single complete example was retrieved and measured 360 x 170 x 19mm. In general, thickness ranged from 12–21mm, with the majority falling between 16 and 18mm. All were sanded and just two flat tiles were glazed, albeit very thinly.

As per the methodology above, tiles with diagnostic features or complete dimensions were retained and as a result, the examples included in this report serve to give a good cross-section of the tile assemblage in its entirety.

Diagnostic features included 27 nibbed fragments, three with round, pierced peg holes, four examples of nibbed and pegged tiles (two with round, pierced and two with square, pieced holes) and six stamps. The stamps were particularly interesting due to this assemblage being related to a possible kiln structure on the site. In addition, a small number of 'waster' tiles were retrieved, the majority from the tile-rich fills of a large pit (contexts 408 and 409). These tiles were distinctive for being heavily overfired to a dark purplish brown colour and distorted.

#### *The stamps*

The assemblage included six stamps. All but one came from the tile-built structure (context 121) and a large ?tile dump (context 113). The remaining example was on one of the 'waster' tiles (see above) waster, being over-fired to a dark purplish brown colour and distorted. All stamped tiles were of fabric 2c, and two types have been identified within other excavated tile assemblages from Worcester (Fagan 2004; Griffin 2015).

**Stamp 1: 'OG'** Two examples of this stamp were identified within the assemblage (contexts 113 and 121). It is possible that it represents the initials of the tiler who made these tiles. However, there are good documentary records for tile kilns and tilers in Worcester from the 14th century onwards and no one with the initials 'OG' is identified in connection with this specific kiln or the industry as a whole. Therefore, at this time, it is not possible to speculate usefully about the meaning of this particular stamp.

**Stamp 2: 'O'** One example of this stamp was identified (context 121). Further examples have been previously noted from Newport Street, Worcester (Griffin 2015, fig. 5.13, nos. 8 and 9). Both of these were also on tiles of fabric 2c and from contexts of 16th–17th century date.

**Stamp 3: 'C'** Two examples of this stamp were present (contexts 113 and 408). Further examples of this type were recorded on tiles of fabric 2c at Deansway, Worcester where they were referred to as being of 'horseshoe' shape and varied from 'a clear U-shape, to a more nearly rounded C-shape' (Fagan 2004, 359, stamp 13). The example from this site is clearly an example of the latter. The presence of one of these stamps on a waster tile is of particular note and would suggest that some, if not all, tiles with this mark from other sites in the city were actually produced here.

**Stamp 4: 'X inside rectangle'** Once more, just one example of this stamp was identified (context 113). No parallels have been identified from Worcester, although a similar X inside a circle was recorded at Deansway (ibid, stamp 17).



*Tile stamps with scales below showing 1cm divisions*

#### *Brick*

Four bricks were collected, three complete and one partial. Three came from the tile structure itself (context 121) and the other from the foundation wall of a later post-medieval building (context 117).

Those from the tile structure included two which were warped and dark purplish brown in colour due to exposure to very high temperatures. However, above, there were no obviously heat-affected areas visible on or within the feature itself, which would indicate these bricks to have been re-used, possibly from an earlier kiln structure on the site.

None of these bricks had frogs, all appeared sand-moulded and measurable dimensions indicated them to be of late 16th-17th century date (9.75 x 4.5 x 2.125 inches).

The brick from the foundation wall was over an inch shorter than the above examples (8.5 x 4.25 x 2.25 inches), also appeared to have been sand-moulded and had lime-mortar adhered to the surfaces.

#### *?Kiln furniture*

Two thick tiles/slabs, one of which appeared to have been subjected to high temperatures, were thought to come from a kiln structure (contexts 120 and 504). Such slabs have been previously noted from the kiln site at 9–10 The Tything, where a number were recorded in-situ as part of the kiln floor (Miller et al 2004, 15).

#### *Ceramic object*

A solid ceramic object of unknown function was retrieved from the site (unstratified; see below). The fabric of the object contained the same distinctive inclusions as tile fabric 2c, suggesting it to be contemporary with the late medieval/early post-medieval roof tile assemblage. The object is incomplete, appearing to have split down the middle and sheared off at the top. However, the general profile survives and it can be seen to have had a diameter of c.140mm at the base when complete.

This tapers towards what survives of the top of the object and there is a squared 'collar' running around the circumference, which is decorated with a series of 'O' stamps similar to that seen on the flat roof tile described above. There is some evidence of burning or exposure to heat in the form of blackening on the exterior. It is not clear whether this object represents a failed firing or was actually used on the site and subsequently broken.



*Ceramic object with scale below showing 1cm divisions*

In addition, the underside of the base has further 'O' stamps and what appears to be an incised 'W' or inverted 'M'. It is not clear what this letter represents but there are two main possibilities, the first being the initial of the maker. Alternatively, it has been suggested that it is an apotropaic mark (R Bradley, pers comm). Such marks are known from the mid-16th–18th centuries and most common during the 17th century, which would fit in with suspected date of this object. In addition, the most common marks take the form of conjoined 'V's forming a 'W' or 'M' (thought to represent the Virgin Mary), as well as circles, both of which are represented on this object (Somerset Vernacular Building Research Group, <http://svbrg.org.uk/witch.php>).

Although the exact function of this object is unknown, its shape would lend it to being some sort of pedestal or plinth. Indeed, the basic profile is reminiscent of a staddle stone (R Hedge pers comm). Although clearly too small to have been used for holding a large building such as a barn, staddle stones were also used for smaller structures including beehives and small grain storage silos (Foster 1988, 9; Peters 2003). It could also have been used as a pedestal or plinth for a garden ornament or pot, the use of such objects becoming more widespread during early post-medieval period (J Dinn, pers comm).

Another possibility is that the object was used or intended to be used in a hearth or fireplace (J Evans, pers comm), with the presence of soot and ash deposits on the external surface supporting this theory. Ceramic fire dogs are known to have been produced by the North Devon potteries in the early post-medieval period and it is possible that this object is evidence of similar production here in Worcester (D Hurst pers comm). This would fit in with the marks on the underside being apotropaic, with such marks commonly located in doorways, windows, stairways and hearths as these features were considered to be places where 'evil' could enter buildings.

### Stone building material

Five pieces of red sandstone building material was retrieved from contexts of late medieval/early post-medieval date. The largest of these was thought to be part of a door jamb and had been reused in the construction of the tile structure (context 121).

## 6.2.5 Post-medieval

### Pottery

A total of eleven sherds of mid 17th-18th century date were identified. All were of commonly identified fabric types, including black-glazed red sandy ware (fabric 78), tin-glazed ware (fabric 82) and post-

medieval buff ware (fabric 91). All were from common domestic forms such as jars, flared bowls and press-moulded dishes.

fabric number	fabric common name	total	weight (g)
78	post-medieval red sandy ware	4	151
81	unidentified stoneware	2	57
82	tin-glazed ware	3	55
91	post-medieval buff ware	2	69

Table 4: Quantification of the post-medieval pottery by fabric type

#### Other finds

Other finds of post-medieval date included 15 fragments of clay pipe, two pieces of vessel glass and one of window glass.

#### 6.2.6 Modern

Material of modern date included seven sherds of pottery, two pieces of drain and bottle glass, including a complete blue medicine bottle embossed with 'Clements, Handly & Co. Aurogentine'.

fabric number	fabric common name	total	weight (g)
81.4	miscellaneous late stoneware	2	1318
84	creamware	4	100
85	modern china	1	14

Table 5: Quantification of the modern pottery by fabric type

#### 6.2.7 Discussion

The presence of a large quantity of tile and the remains of a possible kiln structure on the site is consistent with what is known about this part of Worcester from the results of previous fieldwork and documentary evidence (see above). The remains of the tile-built structure is very similar in construction to that of another kiln of similar date on the St Martin's Quarter site, with alternating courses of flat tile and brick (pers obs).

It has not been easy to ascertain whether evidence for the Civil War clearance can be identified from this assemblage. There is certainly pottery of mid-17th century date from the site but only in small quantity. Some of the roof tile and other building material could have resulted from demolition of buildings but it is not possible to definitively separate this material from that relating to the tile production, which might well have continued to that date.

context	material class	material subtype	object specific type	count	weight (g)	start date	end date	finds tpq
0	ceramic		object	1	1000			
103	ceramic		pipe	1	1			L16-17C
103	ceramic		pot	8	65	L16C	17C	
103	ceramic		pot	1	3	16C	17C	
103	glass		vessel	1	17			
113	ceramic		pot	1	66	E15C	16C	L15-L16C
113	ceramic		pot	3	53	15C	L16/E17C	

113	ceramic		roof tile(flat)	3	3333	L15C+			
117	ceramic		brick	1	2000			Post-med	
120	ceramic		?kiln furniture	1	862	L15C+		L15C+	
120	ceramic		pot	1	22	15C	16C		
120	ceramic		roof tile(flat)	3	1462	L15C+			
121	ceramic		?ridge tile	1	427	L15C+		L15- ?L16/17C	
121	ceramic		brick	3	4500	?L16C	?17C		
121	ceramic		roof tile(flat)	4	2452	L15C+			
121	stone	red sandstone		1	5000				
307	ceramic		drain	1	126			19-20C	
307	ceramic		pipe	4	26				
307	ceramic		pot	2	57	17C	18C		
307	ceramic		pot	2	50	17C	18C		
307	ceramic		pot	1	14				
307	ceramic		pot	1	7	17C	18C		
307	glass		vessel	2	30				
307	metal	Cu al	?button	1	5				
321	ceramic		pot	4	100	M18C	L18C	M-L18C	
321	ceramic		roof tile(flat)	1	460	L15C+			
321	glass		vessel	1	144	M18C	L18C		
401	ceramic		roof tile(flat)	8	1955	L15C+		L15C+	
402	ceramic		roof tile(flat)	6	347	L15C+		L15C+	
402	stone	red sandstone		1	10				
405	ceramic		roof tile(flat)	2	102	13C	15C	13-15C	
405	metal	iron	?nail	2	15				
406	ceramic		pot	2	32	L11C	M14C	L15- M16C	
406	ceramic		pot	1	18	12C	14C		
406	ceramic		pot	28	407	13C	14C		
406	ceramic		pot	15	303	13C	15C		
406	ceramic		pot	6	135	15C	M16C		
406	ceramic		ridge tile	1	369	13C	15C		

406	ceramic		roof tile(flat)	2	387	L15C+		
406	ceramic		roof tile(flat)	12	3478	13C	15C	
406	ceramic		roof tile(flat)	1	604	13C	15C	
406	ceramic		roof tile(flat)	5	1351	L15C+		
406	coal			5	6			
406	metal	iron	?nail	1	18			
406	slag	slag(Fe)	smelting slag	1	472			
408	ceramic		pot	1	9	13C	14C	L15C+
408	ceramic		pot	1	3	12C	14C	
408	ceramic		roof tile(flat)	9	1394	L15C+		
408	metal	iron	nail	1	5			
409	ceramic		roof tile(flat)	7	1106	L15C+		L15C+
417	ceramic		pot	1	3	13C	15C	13-15C
417	ceramic		tile	1	12	13C	15C	
417	slag	slag(Fe)	smelting slag(tap)	1	24			
418	ceramic		pot	1	9	M1C	4C	L15C+
418	ceramic		pot	1	42	L11C	M14C	
418	ceramic		pot	4	54	13C	14C	
418	ceramic		pot	2	30	12C	14C	
418	ceramic		roof tile(flat)	9	948	13C	15C	
418	ceramic		roof tile(flat)	3	270	13C	15C	
418	ceramic		roof tile(flat)	9	698	L15C+		
418	stone	red sandstone		3	554			
421	ceramic		pot	1	18	M1C	4C	14-15C
421	ceramic		pot	3	39	12C	M14C	
421	ceramic		pot	3	57	L11C	M14C	
421	ceramic		pot	3	26	12C	14C	
421	ceramic		pot	5	69	12C	14C	
421	ceramic		pot	1	10	14C	15C	
421	ceramic		roof tile(flat)	3	232	13C	15C	
421	metal	iron	nail	1	5			

421	slag	slag(Fe)	smelting slag	1	85			
423	ceramic		pot	1	19	13C	14C	13-14C
423	slag	slag(Fe)	smelting slag(tap)	1	125			
500	ceramic		drain	1	166			L17-18C
500	ceramic		pipe	1	5			
500	ceramic		pot	1	1	15C	16C	
500	ceramic		pot	1	103	L17C	18C	
500	ceramic		pot	1	9	M17C	18C	
500	ceramic		pot	1	62	L17C	18C	
500	ceramic		roof tile	2	133	L15C+		
500	ceramic		roof tile(flat)	6	3026	L15C+		
500	glass		vessel	1	117			
502	ceramic		pot	1	157	12C	E13C	
502	ceramic		roof tile(flat)	18	8158	L15C+		
503	ceramic		pipe	1	10			17C+
504	ceramic		?kiln furniture	1	531	L15C+		L15C+
504	ceramic		roof tile(flat)	3	1056	L15C+		
601	ceramic		pipe	8	23			19-E20C
601	ceramic		pot	2	39	M17C	18C	
601	ceramic		pot	2	1318	19C	E20C	
601	ceramic		pot	1	5	L16C	18C	
601	ceramic		roof tile(flat)	10	3187	L15C+		
604	ceramic		pot	1	27	12C	M14C	14C
604	ceramic		pot	1	4	12C	14C	
604	ceramic		pot	1	5	12C	14C	
604	ceramic		pot	1	13	13C	15C	
604	slag	slag(Fe)	smelting slag	1	22			
605	ceramic		pot	1	21	13C	15C	L15C+
605	ceramic		roof tile(flat)	9	1206	L15C+		
605	glass		window	1	1			

Table 6: Summary of context dating based on artefacts

## 7 Environmental evidence

Environmental sampling was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event it was considered that the resources available for this watching brief project should be focussed on the artefactual assemblage, so environmental analysis was not undertaken.

## 8 Discussion

### 8.1 Phase 1 Natural

Orangey red and yellow sands were visible in most of the trenches and numbered as follows (115, 208, 316, and 426). These are consistent with the Worcester terrace materials, from approximately 22.10m AOD.

### 8.2 Phase 2 Medieval

Medieval finds and deposits are frequently recorded around the site, which is on the northern edge of the medieval urban core of Worcester and just outside the defended area with the Town Ditch to the immediate south. A single large pit of unknown function, but medieval date, existed within Trench 4 and contained material spanning the 13th to 15th centuries along with a single sherd of residual Roman pottery. Cut into this was a smaller pit of probable medieval origin.

The presence of a plough or garden soil layer within Trench 6 with material culture from the 14th to 15th centuries may be the same deposit as an agricultural soil with 12th to 13th century pottery, animal bone and slag revealed in a single evaluation trench in the car park immediately east of the current site, excavated in 1988.

### 8.3 Phase 3 Late medieval to early post-medieval

It is likely that this area, close to the Foregate and city wall, was used for a mixture of small-scale craft, trade, extraction, and livestock-related activity, as well as more high-risk industrial work including ironworking and tile manufacture. Documentary sources mention a tile kiln, of late medieval origin, belonging to the Chantry of the Holy Trinity located on Sansome Street, while another belonging to the Priory was located on the north corner of Shaw Street, just to the west of the site. The previously mentioned agricultural soil within the single evaluation trench excavated in 1988 to the immediate east of the site was cut by series of pits that included broken tile and kiln brick as well as a tile-built feature described as a 'tank' (WCM 100075). This description is clearly indicative of tile manufacture.

The sequence of deposits recorded in the 1988 evaluation were again directly comparable to the deposits recorded within Trench 6 in which the plough soil had been partially truncated by a small section of a wall constructed with two sandstone blocks at its base with seven courses of tiles above, bonded with a greyish clay. These were interpreted as part of a tile kiln though no evidence of direct heating was present. The clay bonding is noticeably similar to kilns located at 9-10, The Tything (Miller, Griffin and Pearson 2004) and again at Lowesmoor (Dalwood and Hurst 2016).

A brick and tile constructed feature was present within Trench 1. This was a cut in feature, neatly coursed in its interior with a small opening on its northern side which suggests a continuation of the feature in that direction. No heat affected areas were visible on or within this feature, possibly suggesting a tank as recorded within the 1988 evaluation. Many of the bricks used to construct the feature had sagged from heat exposure, but were clearly earlier re-used waste material. The brick and tile from this structure dated to the 16th to 17th centuries and was sealed by a deposit which contained material of broadly similar date. This bears little direct comparison to other tile kilns in the city (The Tything and Lowesmoor) or further afield. A comparison may be drawn to a feature present at the 9-10, The Tything, kiln site, where the feature was of the later medieval period. It was similarly dug in, rectangular in shape with alternating brick and tile coursing although no clear function could be established. The coursing of the structure recorded here was also noticeably similar to parts of the



late-medieval to early post-medieval tile kiln at Lowesmoor. Given this similarity of construction, it was therefore very likely that the feature identified here was part of a kiln, though confirming this or suggesting its function was problematic.

Pits were present within Trenches 1, 4, 5 and 6 that contained high concentrations of broken tiles and some brick that clearly represent the dumping of wasters and give the clearest evidence of tile production on or close to the site. These consistently dated to between the 15<sup>th</sup> and 16<sup>th</sup> centuries.

A single undated possible ditch [112] was present within Trench 1 running north to south, and cut by a cess pit [105] of 16<sup>th</sup> to 17<sup>th</sup> century date. These features are likely to be broadly contemporary or slightly post-dating three pits and a possible floor layer within Trench 4 which were sealed by burnt deposits which may relate to destruction and clearance during the Civil War in the mid-17<sup>th</sup> century when the area of the site is considered to have been raised. A similar interpretation of Civil War destruction may be given for a black ash and charcoal deposit sealing a tile dump within Trench 5.

#### 8.4 Phase 4 Later post-medieval to early modern

After the disturbance of the Civil War, the city defences to the south of the site are thought to have been infilled and the evidence from the site suggests it was used for latrines and rubbish pits as well as structures. This is shown within the northern section Trench 3, where two intercutting pits contained green silt elements, characteristic of cess material. The latter of these contained material culture of 17<sup>th</sup> to 18<sup>th</sup> century date in its top fill.

The activity continued in the form of various small pits in Trenches 2 and 3, although the main focus was upon walls in Trenches 1, 3, and 5 which link closely to the structures seen on the historic maps, as well as a brick tank structure in trench 3.

## 9 Conclusions

The monitoring of foundation trenches within this site has revealed the presence of archaeological features on the site from the medieval period onwards. These fit closely with the potential identified within the desk-based assessment of the site, most notably remains relating late medieval and early post-medieval tile production. The pottery evidence suggested a peak in medieval activity in the 14<sup>th</sup> to 15<sup>th</sup> centuries, which the assemblage reducing somewhat into the 15<sup>th</sup> to 17<sup>th</sup> centuries, The tile evidence was predominantly within the latter period. This evidence adds significantly to the known areas of production within the city, as well as adding to a known body of forms and types. Some tentative evidence for the clearance of the site at the time of the Civil War in the middle of the 17<sup>th</sup> century was present, as well as the site quickly being brought back into use through the post-medieval era. The site was further developed with the addition of the buildings recently demolished that formed part of the former Toby Tavern and remained in the form of foundations.

The methods adopted allow a reasonable degree of confidence that the aims of the project have been achieved. Conditions were not always suitable in all of the trenches to identify the presence or absence of archaeological features, their extent and nature, while some of the trenches were initially dug before monitoring was known to be required. This was mitigated to some degree by the excavation of Trench 4. It is, however, broadly considered that the nature, density and distribution of archaeological features provide an accurate characterisation of the site as a whole.

## 10 Project personnel

The fieldwork was led by Tim Cornah, ACIfA, assisted by Pete Lovett, ACIfA, and Richard Bradley, MCIfA.

The project was managed by Tom Vaughan, MCIfA. The report was produced and collated by Tim Cornah. Specialist contributions and individual sections of the report are attributed to the relevant authors throughout the text.

## 11 Acknowledgements

Worcestershire Archaeology would like to thank the following for the successful conclusion of this project: Joe Collins and Paul Collins (DJC Build), Sebastian Lam (Lam Group Ltd), Nick Carroll (Nick Carroll Architects Ltd) and James Dinn (Archaeological Officer, Worcester City Council).

## 12 Bibliography

AAF 2011 Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation, <http://www.archaeologyuk.org/archives/>

BGS, 2018 Geology of Britain viewer. <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> accessed: 12 November 2018

Bradley, R, 2017 An archaeological desk-based assessment of the former Toby's Tavern site, 9, Sansome Street, Worcester, Worcestershire Archaeology, Worcestershire County Council, unpublished report **2509**, dated 22 November 2017, WCM 102276, P5218

Bryant, V, 2004 Medieval and early post-medieval pottery, in H Dalwood and R Edwards, Excavations at Deansway, Worcester, 1988-89: Romano-British small town to late medieval city. CBA Res Rep, 139, 281–339

ClfA, 2014a Standard and guidance: for an archaeological watching brief. Reading: Chartered Institute for Archaeologists. Reading: Chartered Institute for Archaeologists

ClfA, 2014b Standard and guidance: for the creation, compilation, transfer and deposition of archaeological archives. Reading: Chartered Institute for Archaeologists

ClfA 2014c Standard and guidance for the collection, documentation, conservation and research of archaeological materials. Reading: Chartered Institute for Archaeologists

Dalwood, H and Hurst, D 2016 Assessment and Updated Project Design for a programme of archaeological mitigation at St Martin's Quarter, Worcester. Worcestershire Archaeology, Worcestershire County Council

Drury, P J, 1981 The production of brick and tile, in D W Crossley (ed), *Medieval Industries*, CBA Res Rep **40**, 126–42

Fagan, L, 2004 Medieval roof tiles, in H Dalwood and R Edwards (eds.), Deansway, Worcester. Romano-British small town to late medieval city, CBA Res Rep 139, 342–361

Foster, A M, 1988 Bee boles and bee houses, Shire Publications

Griffin, L, 2015 Ceramic building material: medieval, post-medieval and modern roof tile, in P Davenport (ed), Excavations at Newport Street, Worcester, 2005. Roman roadside activity and medieval to post-medieval urban development on the Severn floodplain, Cotswold Archaeology Monograph 4 with Worcestershire Archaeology, 135–141

Hurst, J D, and Rees, H, 1992 Pottery fabrics; a multi-period series for the County of Hereford and Worcester, in S G Woodiwiss (ed), Iron Age and Roman salt production and the medieval town of Droitwich, CBA Res Rep, 81, 200–9

Hurst 1992, J D, 1992 Ceramic building material, in S G Woodiwiss (ed), Iron Age and Roman salt production and the medieval town of Droitwich, CBA Res Rep, 81, 155–157

Hurst, D and Dalwood, H, 2018 Assessment and updated project design for a programme of archaeological mitigation at St Martin's Quarter, Worcester, Worcestershire Archaeology P3310

Le Patourel, H E J, 1968 Documentary evidence and the medieval pottery industry, *Medieval Archaeol*, 12, 1010–26

Miller, D, Griffin, L, and Pearson, L, 2004 Programme of Archaeological Work at 9-10 The Tything, Worcester, Archaeological Service, Worcestershire County Council, report 1150

PCRG/SGRP/MPRG, 2016 A standard for pottery studies in archaeology

Peters, J E C, 2003 Discovering traditional farm buildings, Shire Publications

SMA 1993 Selection, retention and dispersal of archaeological collections, available at <http://www.swfed.org.uk/wp-content/uploads/2015/05/selectionretentiondispersalofcollections1-SMA.pdf>

Somerset Vernacular Building Research Group, Ritual Protection Marks in Vernacular Buildings: 'House Magic", <http://svbrg.org.uk/witch.php>

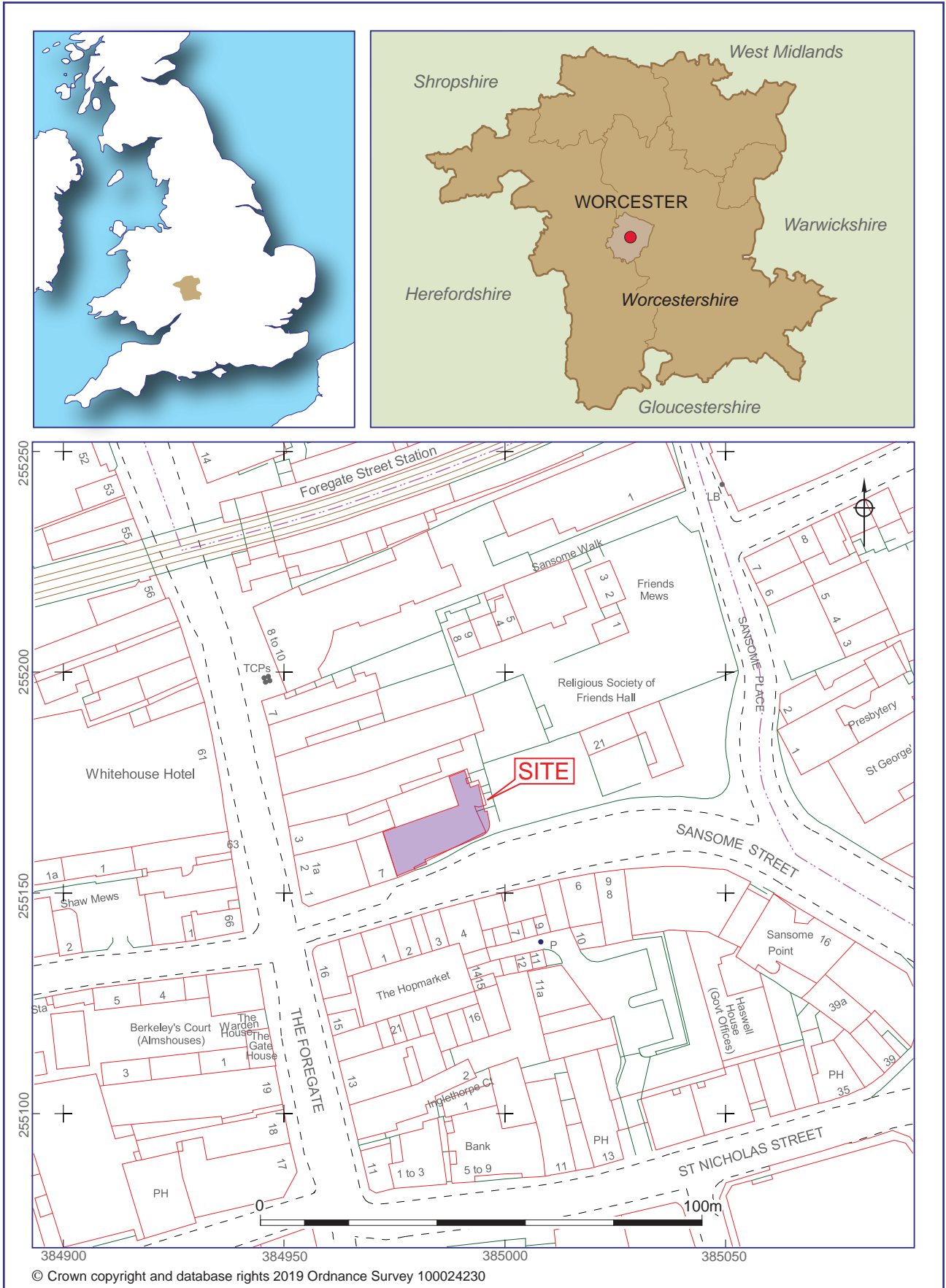
Vince, A, 1977 The medieval and post-medieval ceramic industry of the Malvern region: the study of a ware and its distribution, in D P S Peacock (ed), Pottery and early commerce, characterisation and trade in Roman and later ceramics, Academic Press, 257–305

Worcester City Council 1999 Statement of standards and practices appropriate for archaeological fieldwork in Worcester,

Worcester City Council 2016 Guidelines for archaeological work in Worcester, Worcester City Council

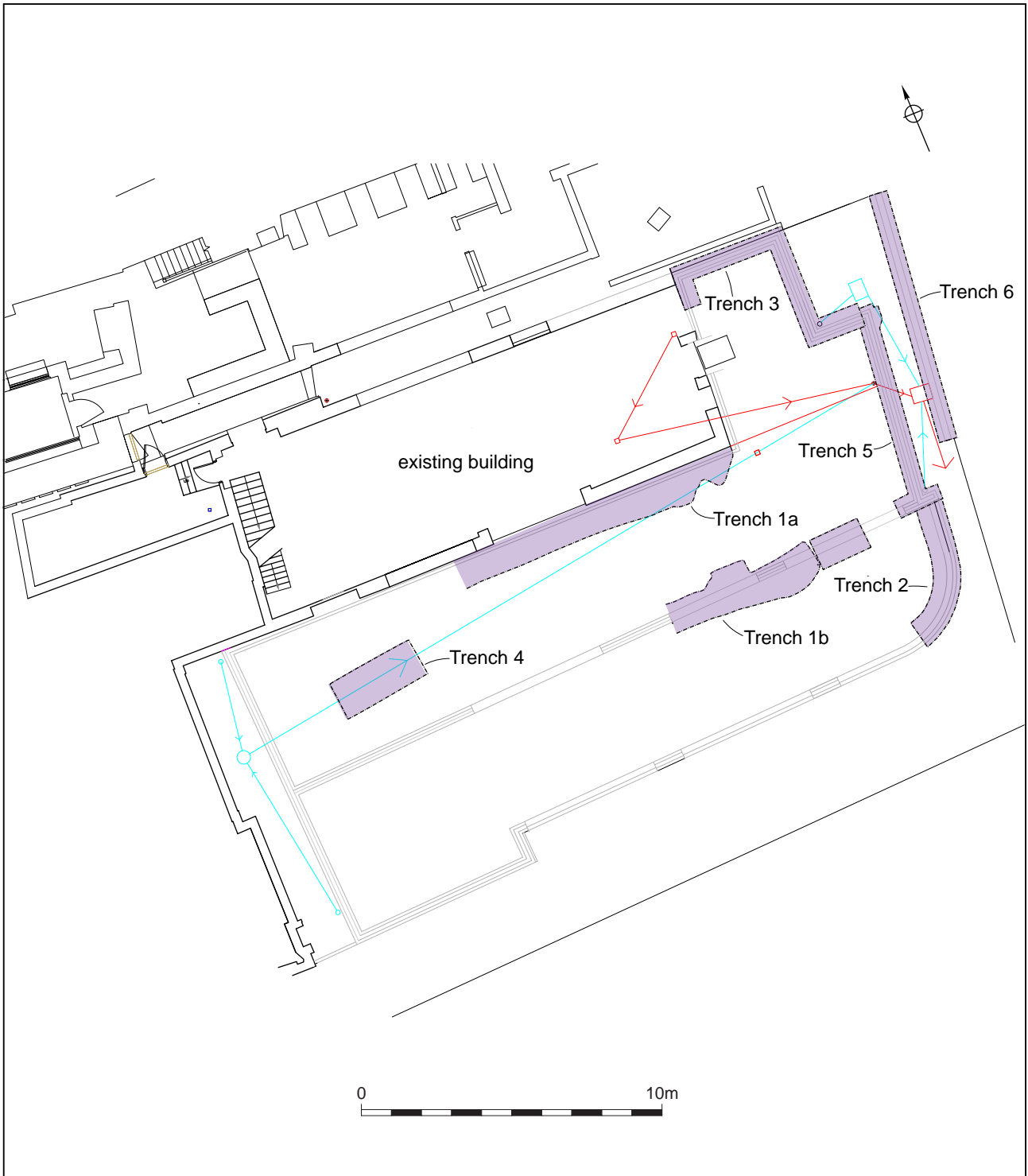
WA, 2012 Manual of service practice, recording manual. Unpubl report, Worcestershire Archaeology, Worcestershire County Council, **1842**

## Figures



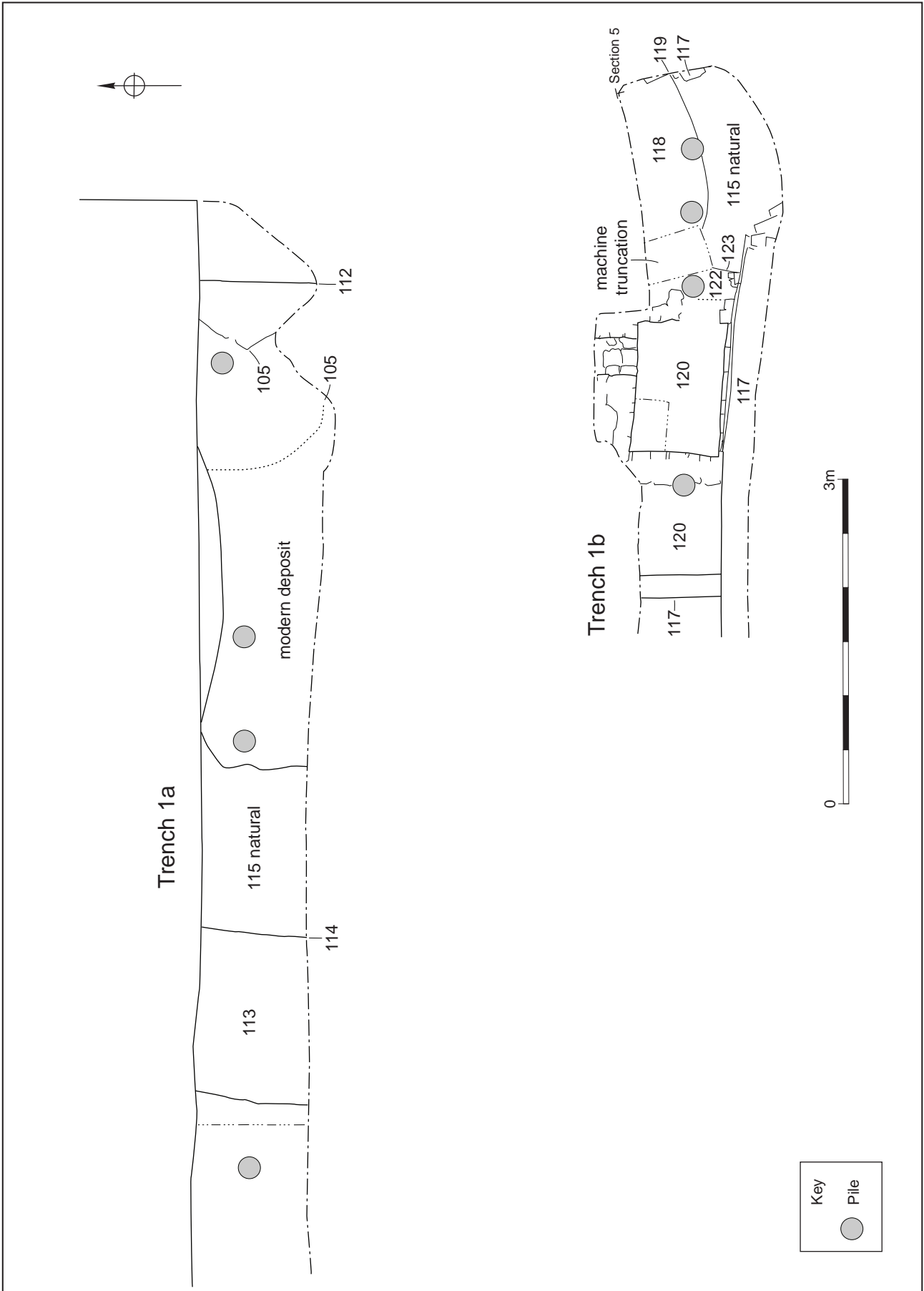
Location of the site

Figure 1



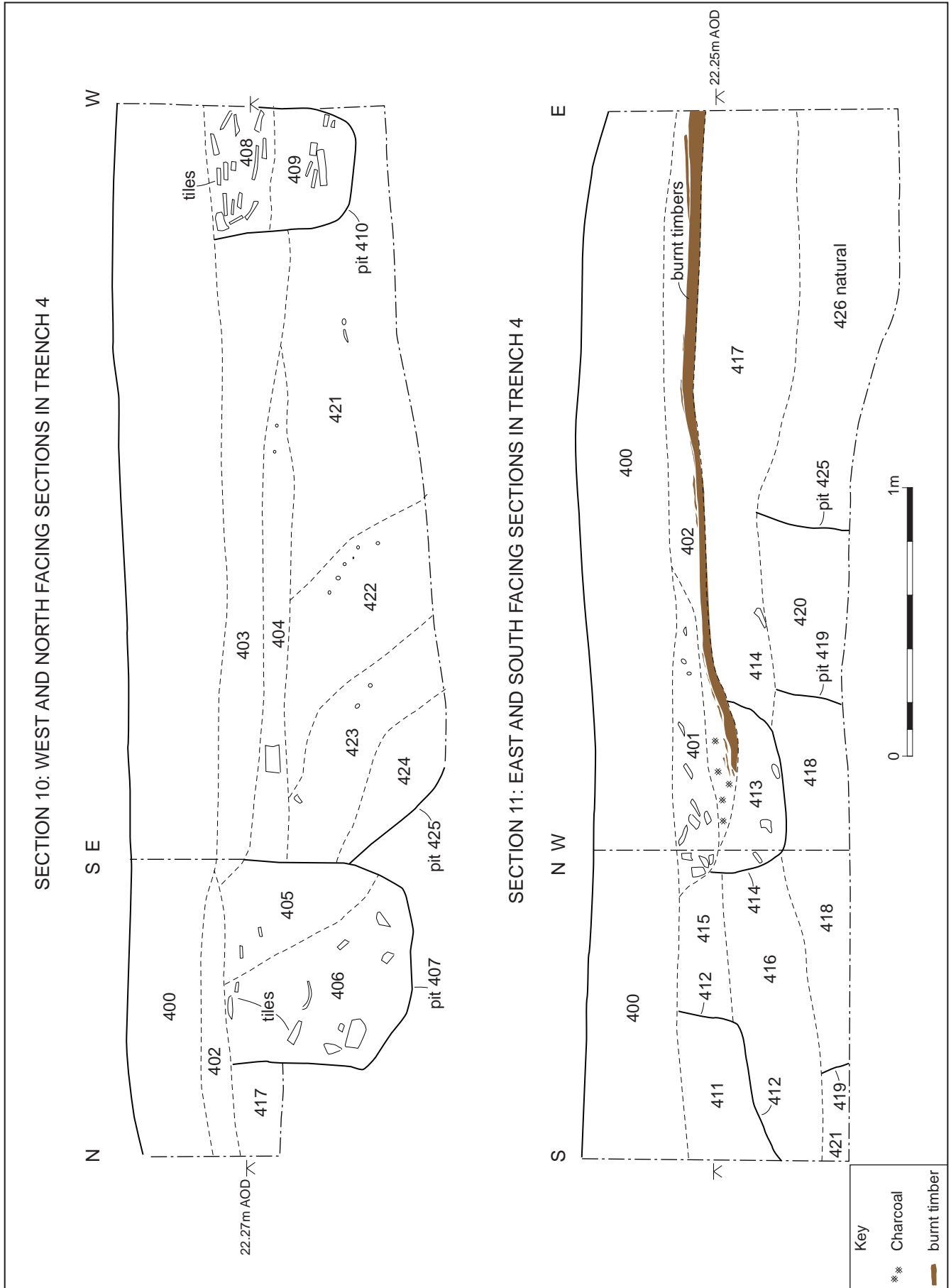
Trench location plan (based upon Nick Carroll Architects Drg No 1726BR-06)

Figure 2



Plan of Trench 1

Figure 3

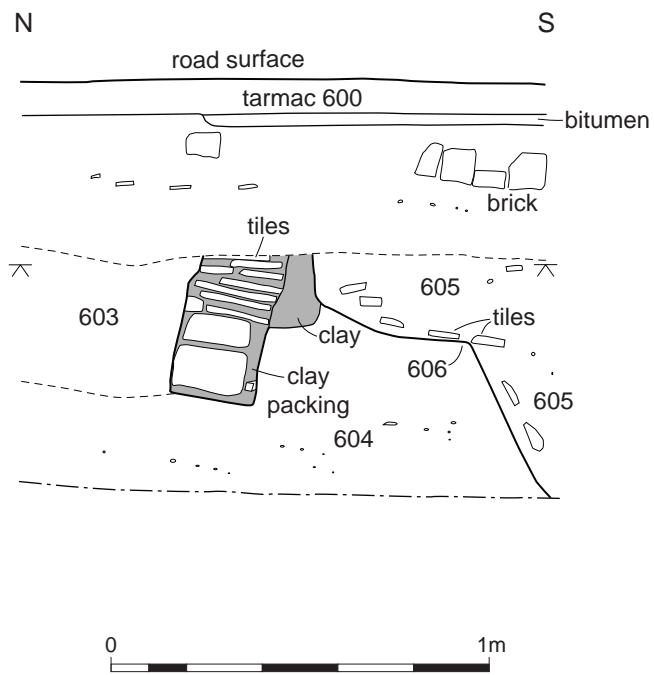


Trench 4: sections

Figure 4



SECTION 12: NORTH END OF TRENCH 6



Trench 6:section

Figure 5

## Plates



*Plate 1 The site, looking west*



*Plate 2 Tile dump within pit [114], looking north, scale 1m*



*Plate 3 Pit [105] cutting possible ditch [112], looking north-west, scale 1m*



*Plate 4 Brick and tile structure (121), looking north, scale 1m*



*Plate 5 Brick and tile structure (121) showing detail of coursing within a sondage, looking north, scale 0.5m*



Plate 6 Deposits (209 and 210), looking north, scales 1m and 0.5m



Plate 7 Pits [314 and 310] visible in the section below later wall (301) and cut by wall (315), looking north, scale 1m



*Plate 8 Wall (315), constructed as part of an opening to the adjacent building, looking west, scales 1m and 0.50m*



*Plate 9 Pit [425] within the section of trench 5, looking south, scales 2x1m*



*Plate 10 Layers (401 and 402) within the northern section of trench 4, looking north, scales 2x1m*



*Plate 11 section of wall (602), looking east, scale 0.50m*



## Appendix 1: Trench descriptions

Trench 1 a and 1 b				
Context	Context type	Description	Interpretation	Height/Depth
100	Layer	greyish brown	Modern levelling	0.10m
101		greyish brown sandy silt	Inclusions = coal & CBM	0.92m
102	Fill	greenish grey silt	Possibly former cess?	0.05m
103	Fill	grey sandy silt	Inclusions = coal & CBM	0.20m
104	Fill	grey sandy silt	As (103) but with more sand lensing	0.09m
105	Cut	Roughly round cut feature	Possible cess pit? Post-med. Unclear extent	
106	Structure	Brick wall	Extant brick building to the north of trench 1a	
107	Fill		Backfill of [108]	1.26m
108	Cut	East-west aligned construction cut	Construction cut for (106)	1.26m
109	Fill	greyish brown clay silt	Top fill of [112]	0.80m
110	Fill	grey sandy silt	Middle fill of [112]	0.24m
111	Fill	greyish brown sandy silt	Base fill of [112]	0.06m
112	Cut	Roughly north south aligned ditch, only seen on its western side	Probable ditch cut at least 1.80m wide with relatively shallow sides but running N-S. Possibly the same as [119]?	>1.80m
113	Fill	Mid grey brown sand silt with high tile content	Tile dump feature?	
114	Cut	Slightly rounded cut feature	Tile dump feature?	
115	Layer	Yellow red sand	Natural	
116	Fill	greyish black clay silt	Inclusions = coal & CBM	0.32m
117	Structure	East-west aligned wall which turns to run slightly towards the north-east from its east end	Lime-bonded brick wall aligned E-W. Uses various bricks - mostly parts up to . Mostly 0.21m x 0.10m x 0.055m (2 1/2") wide. Surviving to 5 courses. Built over 121. 0.45m deep at most. Wall visible on OS maps.	0.3m
118	Fill	greyish brown sandy silt		0.64m
119	Cut	Possible round pit cut	Same as [112]?	
120	Fill	Dark grey brown sand silt	Frequent charcoal & tile. Post-demolition backfill after 121 abandoned.	
121	Structure	Brick, tile and stone-built structure aligned broadly E-W, at least 1.90m long and 1.20m wide though extends to north with a possible flu(?). At this point not much obvious heat affection but was not at bottom. Stood to 22 courses max. Maximum excavated ditch of 0.82m (to it's base). Used lots of reject, warped bricks - bricks 0.24m x 0.105m x 0.05m (2" wide). Banded with a grey green sandy silt, almost cessy. Some possible heat affected stones built in but not obvious.	Possibly part of a tile kiln though this is problematic due to its lack of being directly heated and direct comparisons. The builders certainly had access to kiln waster materials	0.82m
122	Fill		Backfill around structure 121 ("tank)	Not excavated
123	Cut		Construction cut for 121	Not excavated

Trench 2				
Context	Context type	Description	Interpretation	Height/Depth
200	Layer	Loose greyish brown sandy silt	Made ground	0.22m
201	Fill	Loose reddish brown silty sand	Fill of pit [202]	0.4m+
202	Cut		?Pit. C19th-20th	0.4m+
203	Layer	Soft greyish brown sandy silt	Inclusions = moderate brick fragments. Made ground layer.	0.08m

## Trench 2

Context	Context type	Description	Interpretation	Height/Depth
204	Fill	Moderately Compact blueish grey sandy silt	Fill of pit [205]	0.32m
205	Cut		Steep-sided pit. Seen in section only.	
206	Fill	Soft brownish grey sandy silt	Fill of pit [207]. Inclusions of brick, cement & tile.	
207	Cut		Cut of small pit.	
208	Layer	Soft orange sand	Natural	
209	Layer	Moderately Compact greyish brown sandy silt	Charcoal interface with (210). Possible layer.	0.13m
210	Layer	greyish brown sandy silt	Possible layer.	

## Trench 3

Context	Context type	Description	Interpretation	Height/Depth
300		Concrete slab.	Modern ground surface	0.10m
301	Structure	Brick wall foundation. Irregular bond with hard, off-white mortar. Bricks 240mm x 95mm x 55mm, 14 courses high within cut [302]	Part of a boundary wall seen on the historic mapping	1.02m
302	Cut		Construction cut for wall 301.	
303	Structure		Brick wall. In hindsight probably the same as 301.	0.34m
304	Cut		Construction cut for wall 303	0.34m
305	Fill		Mixed deposit with frequent brick & mortar. Probably construction cut backfill for wall 301/303	
306	Fill	Moderately Compact blueish grey sandy silt	Fill had a cessy green nature.	0.10m
307	Fill	Firm blueish grey sandy silt	Fill of possible cess pit [310]. Inclusions = occasional tile fragments	0.56m max
308	Fill	Soft yellowish brown silty sand	Fill of [310]	0.04m
309	Fill	Firm blueish grey sandy silt	As (307) but fewer tiles.	0.05m
310	Cut		Possible cess pit.	
311	Fill	Firm blueish grey sandy silt	As (307). Fill of possible cess pit [314].	0.52m
312	Fill	Soft yellowish brown silty sand	As (308). Fill of pit [314]	0.20m
313	Fill	Moderately Compact blueish grey sandy silt	As (307). Fill of pit [314].	0.08m
314	Cut		Cut of possible cess pit.	
315	Structure		Red brick structure connected to extant building on it's western side. Leads to bricked-up cellar entrance. Probable cellar entrance/chute. No steps. Bricks 245mm L x 120mm x 70mm. Softish light pinky-white mortar. Headers over stretchers. 2.1m long internal, 0.98m wide. c0.2m to brick-lined base (below ? ?)	
316	Layer	Yellow-orange gravel.	Natural	0.08m
317	Fill	Loose	Mixed loose backfill of structure 315.	
318	Fill		Backfill of construction cut [319] for 315.	
319	Cut		Construction cut for 315.	
320	Layer		Loose rubble layer.	
321	Fill		Charcoal & clinker backfill of chamber 322.	
322	Structure		Red brick wall. 230mm x 115mm x 55mm	
323	Cut		Construction cut of wall 322.	
324	Fill		Loose rubble fill of pit [325].	
325	Cut		Cut of pit.	
326	Fill	Soft yellowish brown sandy silt	Possible relict subsoil.	
327	Structure		Red brick chamber	

### Trench 3

Context	Context type	Description	Interpretation	Height/Depth
328	Fill		Mortar & rubble.	
329	Cut		Construction cut for 327	
330	Fill	brownish grey sandy silt	Possible garden soil.	

### Trench 4

Context	Context type	Description	Interpretation	Height/Depth
400	Layer	Soft sandy silt	Soft, loose sandy silt rubble. Includes brick, plastic, tiles etc - part of recent construction works. Recent made ground dump of material.	0.40m
401	Layer	Loose grey sandy silt	Demolition layer, possibly associated with ash & timber (Civil War?). Post-medieval in date.	0.16m
402	Layer	Loose	Loose ash & orange sand with spread of charcoal (burnt timber?) and occasional CBM. Demolition/fire layer. Could be Civil War in date? Distinct horizon.	0.14m
403	Layer	Firm whiteish grey	Firm grey-white ashy, chalky band. Could be floor layer? Burnt	0.24m
404	Layer	Friable orangey brown sand	Bedding layer below (403).	0.16m
405	Fill	orangey brown sandy silt	Fill of pit [407]	0.56m
406	Fill	yellowish brown silty clay	Fill of pit [407]. Inclusions = tile & CBM	0.66m
407	Cut		Elongated oval pit. U-shaped profile.	0.66m
408	Fill	Loose greyish brown	Upper fill of pit [410]. Tile-rich	0.25m
409	Fill	Loose greyish white	Lower fill of pit [410]. Tile-rich	0.31m
410	Cut		Cut of U-shaped pit in corner of trench. Tile-rich fills. Irregular in plan.	0.56m
411	Fill	orangey brown clayey sand	Fill of pit [412]. Possibly cut by [410].	0.36m
412	Cut		Cut of pit.	0.36m
413	Fill	Soft greyish brown sandy silt	Fill of pit [414]	0.28m
414	Cut		Pit cut below burnt layer (402)	0.28m
415	Layer	Friable greyish brown sandy silt	Soil horizon.	0.20m
416	Layer	Soft greyish brown silt	Soil layer below (415). Cut by pit [414]. Probably the same as (417)	0.36m
417	Layer	Soft greyish brown silt	Soil layer below (415). Cut by pit [414]. Probably the same as (416)	0.36m
418	Fill	yellowish grey	Fill of pit [419]	>0.32m
419	Cut		Irregular-shaped pit cut into (420) & (421).	>0.32m
420	Fill	sandy silt	Banded sandy silt fill of pit [425]	>0.34m
421	Fill	sandy silt	Fill of pit [425]	>0.54m
422	Fill	sandy silt	Fill of pit [425]	>0.54m
423	Fill	sandy silt	Fill of pit [425]	>0.55m
424	Fill	sandy silt	Fill of pit [425]	>0.39m
425	Cut		Cut of large, deep pit. Medieval?	0.6m+
426	Layer	Yellow red sand	natural	

### Trench 5

Context	Context type	Description	Interpretation	Height/Depth
500	Layer	Loose sandy silt	Soft sandy silt & rubble layer including plastic, bricks etc. Tiles collected as sample. Bricks appear to be heat-affected (pic 84). Made ground dump of material extending across site area. Mixed up recently.	0.36m

### Trench 5

Context	Context type	Description	Interpretation	Height/Depth
501	Layer	Soft black ash	Thin dump of black, soft ash & charcoal with clinker & CBM. Loose spread, shallow & visible in section at north end of Trench 5. Possible Civil War destruction horizon?	0.16m
502	Layer	Soft greenish brown sandy silt	Layer containing tile, clay & pot. Also sandstone blocks 260mm x 260mm x D190mm (pics 82-3). Medieval - late medieval in date. Directly above sand. Possible pit? Probably associated with kiln. Some tiles bonded with clay.	0.40m max
503	Layer	Soft grey silt loam	Soil layer - possibly late medieval/post-medieval soil horizon? Visible in west-facing section only.	0.4m+
504	Layer	Firm pinky brown clay	Possible dump layer? Containing tile. Could be service or modern intrusion? Visible in corner of Trench 5 only. Date not clear.	0.2m+
505	Layer	Loose brownish yellow sand	Natural?	0.2m+
506	Structure		Brick wall in corner, partially visible. Bricks L220m x W110mm x D70mm. Part of warehouses?	

### Trench 6

Context	Context type	Description	Interpretation	Height/Depth
600	Layer	Tarmac	Indurated tarmacadam (access road) on bitumen bedding layer, plus hardcore.	0.08m
601	Layer	Friable greyish brown sandy silt	Mixed made-ground layer with CBM & rubble; modern material also found. Bricks in top may be former surface. Pipework and recent disturbance.	0.40m
602	Structure		Wall of sandstone block with bonded layers of tile and clay (firm, greenish grey) interbedded. 10 courses of tiles + 2 courses of sandstone below. Possibly part of the kiln? Medieval - late medieval in date. Possibly cut through (603)? Could relate to (502) nearby?	0.38m
603		Friable grey sandy silt	Situated at side of wall 602. May abutt 602	0.4m
604		Friable greenish brown silty sand	Possible medieval layer? Situated under wall 602. Possibly cut by [606]?	0.4m+
605	Fill	Firm brownish grey	Main fill of pit [606] Containing tiles & CBM. Possible demolition dump?	0.6m+
606	Cut		Cut of a possible pit containing (605).	0.6m+

## Appendix 2: Summary of project archive

TYPE	DETAILS*
Artefacts and Environmental	Animal bones, Ceramics, Industrial
Paper	Context sheet, Correspondence, Diary (Field progress form), Drawing, Matrices, Photograph, Plan, Report, Section
Digital	Database, GIS, Geophysics, Images raster/digital photography , Survey, Text

---

\*OASIS terminology

## Appendix 3 Summary of data for Worcestershire HER/OASIS

WCM 102302 (event HER number)

P5366

Artefacts

period - note 1	material class	object specific type	start date	end date	Count	weight (g)	specialist report? (note 2)	key assemblage? (note 3)
Roman	ceramic	pot	M1C	4C	2	27	N	N
Roman	slag	smelting slag(tap)			2	149	N	N
?Roman	slag	smelting slag			3	579	N	N
medieval	ceramic	pot	12C	14C	14	155	Y	N
medieval	ceramic	pot	12C	E13C	1	157	Y	N
medieval	ceramic	pot	12C	M14C	4	66	Y	N
medieval	ceramic	pot	13C	14C	34	489	Y	N
medieval	ceramic	pot	13C	15C	18	340	Y	N
medieval	ceramic	pot	14C	15C	1	10	Y	N
medieval	ceramic	pot	15C	M16C	6	135	Y	N
medieval	ceramic	pot	L11C	M14C	6	131	Y	N
medieval	ceramic	ridge tile	13C	15C	1	369	Y	N
medieval	ceramic	roof tile(flat)	13C	15C	30	5634	Y	N
medieval	ceramic	tile	13C	15C	1	12	Y	N
late med/early post-med	ceramic	?kiln furniture	L15C+		2	1393	Y	Y
late med/early post-med	ceramic	?ridge tile	L15C+		1	427	Y	Y
late med/early post-med	ceramic	pot	15C	16C	2	23	Y	N
late med/early post-med	ceramic	pot	15C	L16/E17C	3	53	Y	N
late med/early post-med	ceramic	pot	16C	17C	1	3	Y	N
late med/early post-med	ceramic	pot	E15C	16C	1	66	Y	N

late med/early post-med	ceramic	pot	L16C	17C	8	65	Y	N
late med/early post-med	ceramic	roof tile	L15C+		2	133	Y	Y
late med/early post-med	ceramic	roof tile(flat)	L15C+		103	31578	Y	Y
late med/early post-med	stone	building material			5	5564	N	N
post-medieval	ceramic	brick			1	2000	Y	Y
post-medieval	ceramic	brick	?L16C	?17C	3	4500	Y	Y
post-medieval	ceramic	object			1	1000	Y	Y
post-medieval	ceramic	pipe			15	65	N	N
post-medieval	ceramic	pot	17C	18C	5	114	Y	N
post-medieval	ceramic	pot	L16C	18C	1	5	Y	N
post-medieval	ceramic	pot	L17C	18C	2	165	Y	N
post-medieval	ceramic	pot	M17C	18C	3	48	Y	N
post-medieval	glass	vessel			3	47	N	N
post-medieval	glass	window			1	1	N	N
post-medieval	copper alloy	?button			1	5	N	N
modern	ceramic	drain			2	292	N	N
modern	ceramic	pot			1	14	N	N
modern	ceramic	pot	19C	E20C	2	1318	N	N
modern	ceramic	pot	M18C	L18C	4	100	N	N
modern	glass	vessel			1	117	N	N
modern	glass	vessel	M18C	L18C	1	144	N	N
undated	coal				5	6	N	N
undated	iron	?nail			3	33	N	N
undated	iron	nail			2	10	N	N

## Notes

- 1) In some cases the date will be "Undated". In most cases, especially if there is not a specialist report, the information entered in the Date field will be a general period such as Neolithic, Roman, medieval etc (see below for a list of periods used in the Worcestershire HER). Very broad date ranges such as late Medieval to Post-medieval are acceptable for artefacts which can be hard to date for example roof tiles. If you have more specific dates, such as 13th to 14th century, please use these instead. Specific date ranges which cross general period boundaries can also be used, for example 15th to 17th century.

<b>period</b>	<b>from</b>	<b>to</b>
Palaeolithic	500000 BC	10001 BC
Mesolithic	10000 BC	4001 BC
Neolithic	4000 BC	2351 BC
Bronze Age	2350 BC	801 BC
Iron Age	800 BC	42 AD
Roman	43	409
Post-Roman	410	1065
Medieval	1066	1539
Post-medieval	1540	1900
Modern	1901	2050

<b>period specific</b>	<b>from</b>	<b>to</b>
Lower Paleolithic	500000 BC	150001
Middle Palaeolithic	150000	40001
Upper Palaeolithic	40000	10001
Early Mesolithic	10000	7001
Late Mesolithic	7000	4001
Early Neolithic	4000	3501
Middle Neolithic	3500	2701
Late Neolithic	2700	2351
Early Bronze Age	2350	1601
Middle Bronze Age	1600	1001
Late Bronze Age	1000	801
Early Iron Age	800	401
Middle Iron Age	400	101
Late Iron Age	100 BC	42 AD
Roman 1st century AD	43	100
2nd century	101	200
3rd century	201	300
4th century	301	400
Roman 5th century	401	410
Post roman	411	849



Pre conquest	850	1065
Late 11th century	1066	1100
12th century	1101	1200
13th century	1201	1300
14th century	1301	1400
15th century	1401	1500
16th century	1501	1600
17th century	1601	1700
18th century	1701	1800
19th century	1801	1900
20th century	1901	2000
21st century	2001	

2. Not all evaluations of small excavation assemblages have specialist reports on all classes of objects. An identification (eg clay pipe) and a quantification is not a specialist report. A short discussion or a more detailed record identifying types and dates is a specialist report. This field is designed to point researchers to reports where they will find out more than merely the presence or absence of material of a particular type and date.

3. This field should be used with care. It is designed to point researchers to reports where they will be able to locate the most important assemblages for any given material for any given date.