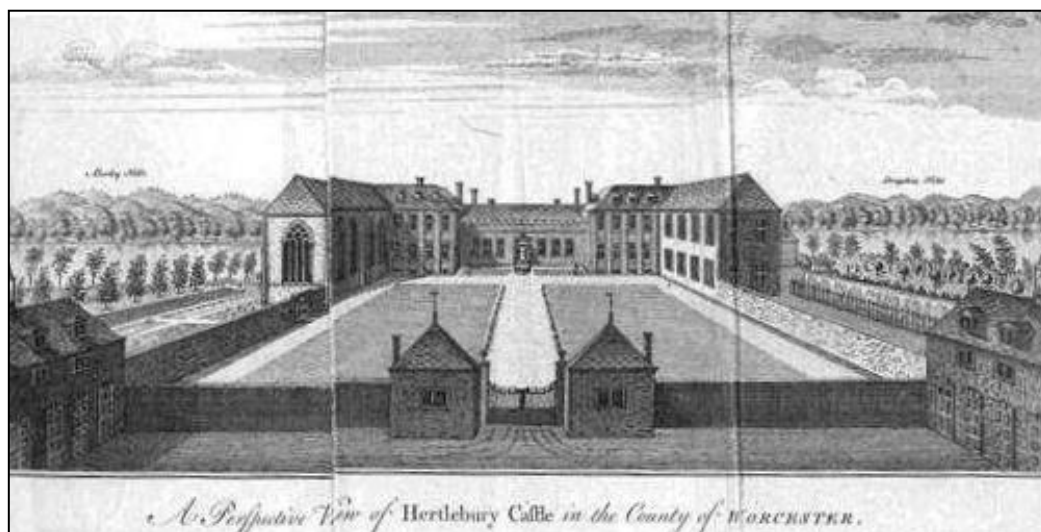


**REPORT ON  
AN ARCHAEOLOGICAL EVALUATION  
AT  
HARTLEBURY CASTLE,  
HARTLEBURY,  
WORCESTERSHIRE**



Murray Andrews, Terry Chandler, Francesca Llewellyn,  
Rod Sproat, and Hazel Whitefoot

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## **Summary**

An archaeological evaluation was undertaken at Hartlebury Castle, Hartlebury, Worcestershire (NGR SO 83634 71249) in October 2013. It was undertaken on behalf of the Friends of the Bishop's Castle, who intend to site a marquee(s) within the area of the carriage circle outside the Bishop's Palace.

Four trenches were excavated on the site, targeting features indicated by earlier geophysical survey and documentary evidence. The evaluation revealed evidence of late medieval to modern date, including most significantly a series of post-medieval garden features composed of an east-west aligned sandstone pathway running towards the castle and an associated garden bed depicted on a 1731 engraving by Nathaniel Buck. These arrangements were subsequently remodelled c.1759-74 into the carriage circle arrangement visible in the present day. In addition, a small finds assemblage of medieval to post-medieval date was uncovered whose composition is consistent with the documented high-status domestic activity known in the vicinity of the site.

## **1 Introduction**

An archaeological evaluation was undertaken on the area of the carriage circle outside the Bishop's Palace at Hartlebury Castle in Hartlebury, Worcestershire (SO 83634 71249) on behalf of the Friends of the Bishop's Castle. The evaluation was intended to identify evidence of archaeological features within the area of the carriage circle, the proposed location of a marquee for events held at the Bishop's Palace.

## **2 Aims**

The main aim of the project was to locate and investigate possible archaeological remains existing within the carriage circle, an area that has not been previously investigated archaeologically. In particular, the project aimed to identify possible medieval and post-medieval features in the vicinity of the Bishop's Palace, including garden features and a wide path leading from the gateway to the front door of the palace depicted on a 1731 etching by Nathaniel Buck. In particular, the project aimed to establish whether this garden arrangement was ever created, or was in fact a design that was never completed. In addition, the project aimed to provide a hands-on opportunity for members of the Worcestershire Young Archaeologist's Club (WYAC) to learn about archaeological excavation.

## **3 Methods**

### **3.1 Documentary research**

Documentary research was conducted to identify possible areas of archaeological interest in advance of evaluation, and in turn was used to interpret the evidence recovered during the evaluation. These included maps, archives and works of local history held in the Worcestershire Local Studies and Archaeology library at The Hive and webpages produced by the Worcestershire Museums Service and Hartlebury Castle Preservation Trust. These are cited in text and listed in the bibliography.

### **3.2 Fieldwork strategy**

The fieldwork was conducted in three phases in Autumn 2013. The first phase consisted of a dumpy-level survey of the carriage circle area conducted by the North Worcestershire Archaeology Group (NWAG). The second phase consisted of a geophysical survey of the carriage circle area conducted by the South

Worcestershire Archaeological Group (SWAG) in conjunction with NWAG. This aimed to identify features of archaeological interest that might be studied in more detail during the evaluation. The results of these investigations have been published by NWAG (Sproat 2013). The third phase consisted of archaeological evaluation conducted via trial trenching, the locations of which were informed by the earlier geophysical survey which had identified six locations for possible trenching, of which four (T01, T02, T03 and T06) were ultimately investigated. Trenching was conducted between the 19th and 23rd of October 2013.

Four trial trenches, totalling approximately 6.03m<sup>2</sup> in area and representing a sample of approximately 0.04%, were excavated inside the carriage circle. The locations of these trenches are illustrated in Fig 1, being positioned to examine features visible on the geophysical survey.

The site was excavated using hand tools. Clean surfaces were inspected and deposits excavated to retrieve artefactual and environmental material and to determine their nature. At all stages drawn, written and photographic records were made following NWAG recording procedure, based on MOLAS standards (MOLAS 1994). On completion of evaluation trenches were reinstated by replacing excavated soil and turf.

### **3.2.1 Personnel**

Onsite excavation was conducted by the Worcestershire Young Archaeologists Club (WYAC), supervised by the leaders of WYAC and the North Worcestershire Archaeology Group (NWAG). Finds processing was conducted onsite by WYAC, and post-excavation analysis conducted by NWAG.

### **3.3 Structural analysis**

All fieldwork records were checked and cross-referenced, and analysis conducted by combining structural, artefactual and ecofactual evidence with information derived from documentary sources.

### **3.4 Artefact methodology, by Hazel Whitefoot**

#### **3.4.1 Artefact recovery policy**

All finds from Test Pits 1, 2, 3, and 6 were collected, bagged, and labelled according to context.

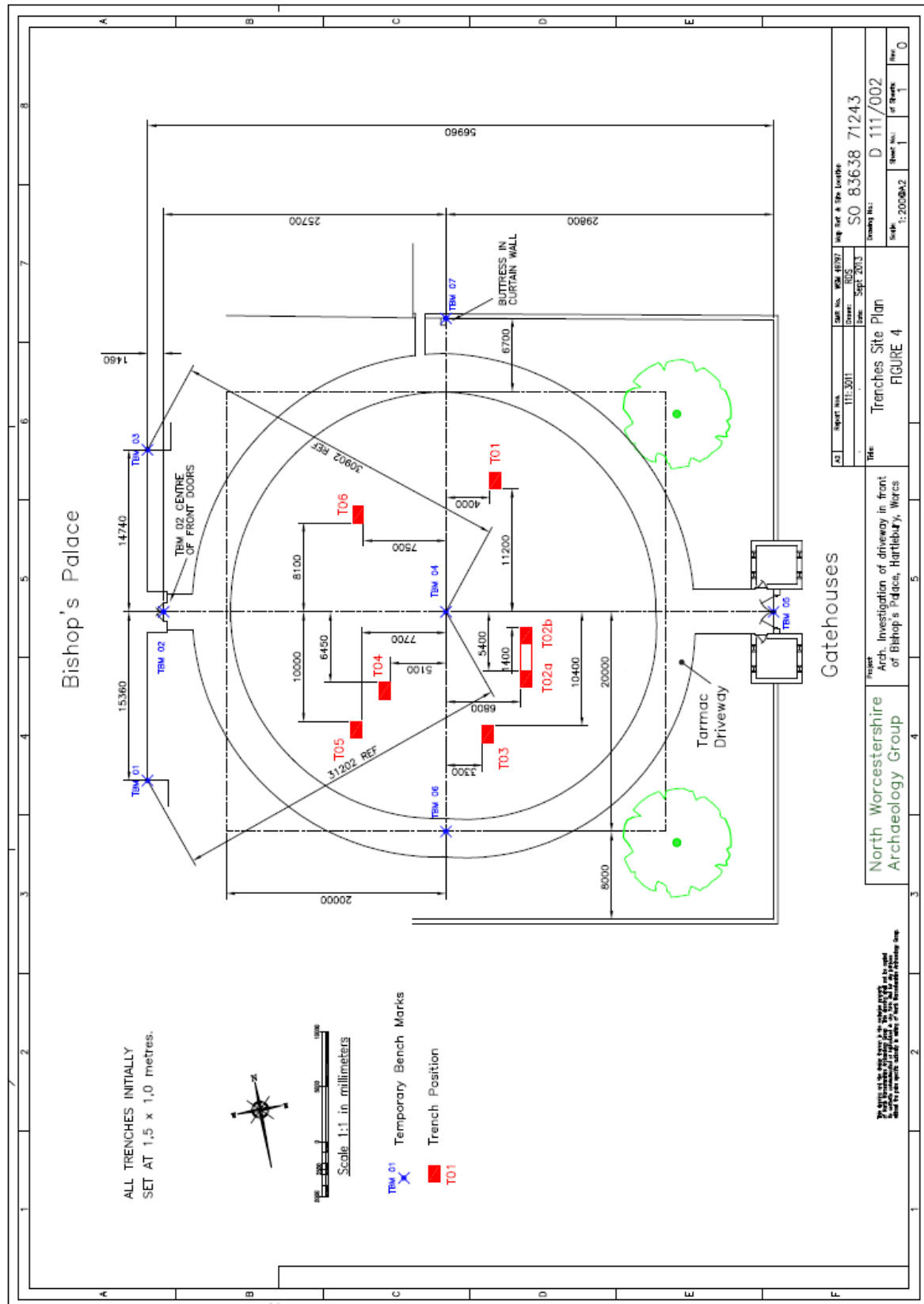


Figure 1: Site plan and trench locations

### **3.4.2 Method of analysis**

All finds were identified, quantified and dated to period where possible. The pottery and ceramic building material was examined under x20 magnification and, where possible, has been identified by fabric with reference to the Worcestershire type series (WAAS 2014).

### **3.4.3 Discard policy**

The following materials will be discarded after a period of six months following the submission of this report, unless retention is requested (subject to policy of the depository):

- unstratified material;
- post-medieval finds, and;
- where material has no obvious reason for retention.

## **3.5 Statement of confidence in the methods and results**

The methods used provide a strong degree of confidence that the aims of the project have been achieved, and that the archaeology of this site has been characterised as best as is reasonably possible under the conditions of excavation and post-excavation analysis.

## **4 Site background**

### **4.1 Geology, by Rod Sproat**

Hartlebury Castle stands on a spur of early Triassic sandstone of the Sherwood Sandstone Group, Bromsgrove Sandstone Formation (Earth Heritage Trust 2008). The Castle and Hartlebury Church, and many other churches and halls in this part of north Worcestershire are constructed of this material. A cutting 410 metres west of Hartlebury Castle shows a stratum of 6 metres of brown and reddish brown sandstone with hard conglomeratic bands on 4.6 metres of soft red sandstone. The beds dip to the south-east to east by about 9°. Other cuttings to the south-east of the castle show red sandstone with irregular conglomeratic bands of pebbles of quartz and micaceous red sandstone.

The castle moat is naturally occurring and is part of an ancient watercourse running north-east to south-west towards the River Severn. The channel bed contains alluvium dating from the Pleistocene to recent times. The area surrounding the



castle and to the east is light sandy loam. To the north of the castle the ground composition is red sandy soil.

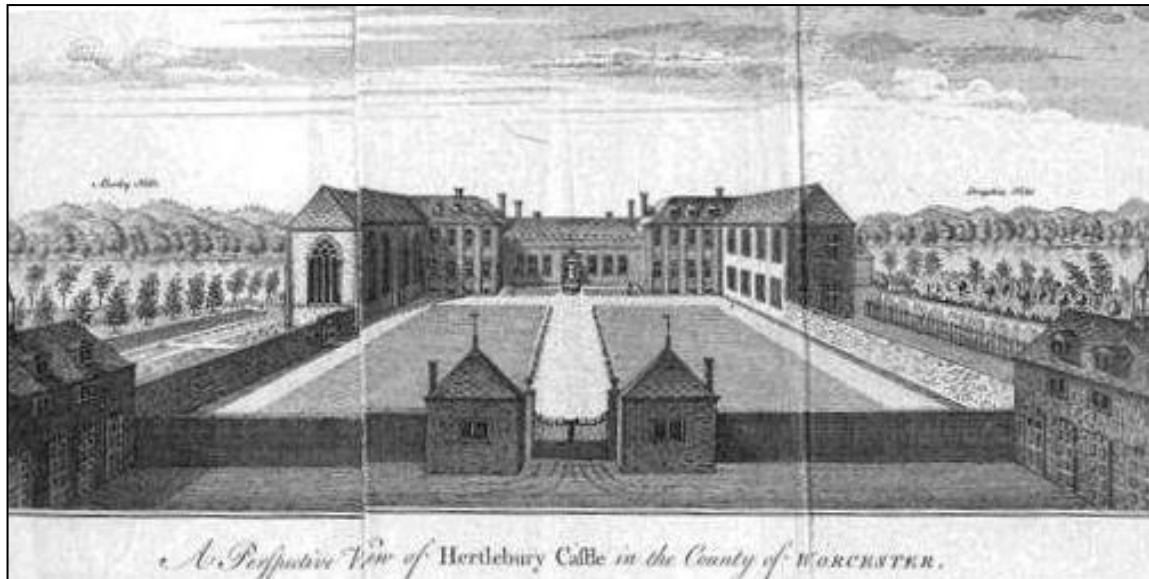
#### **4.2 Historical summary, by Francesca Llewellyn**

The land upon which the castle (WSM07075) stands was granted in c.850 to Aelhun, Bishop of Worcester by Burghred, King of the West Mercians. By the early 13th century an unfortified manor house stood on the site. Subsequently several Bishops of Worcester fortified and improved the castle - Walter de Cantilupe excavated the moat and Godfrey Giffard obtained a license to crenellate (Molyneux 2010). Henry Wakefield built the Great Hall and John Carpenter built a gatehouse and drawbridge. During the early Tudor period, the king granted the castle to the Duke of Northumberland in 1553 and he sold it on, but by 1579, the castle had been secured for the diocese. Elizabeth I slept at the castle in 1575 (Walker 1987).

During the Civil War, Bishop John Prideaux, who was a supporter of the King, allowed the castle to be garrisoned by Captain William Sandys. However, he surrendered the castle without a shot in 1646. The castle was used as a prison by the Parliamentary forces, especially in 1648 when Colonel Turton, the governor of the castle, prevented a Royalist plot. Parliament surveyed the castle in 1647 and decided that it was more profitable to sell the castle rather than demolish it. It was sold in 1648 to Thomas Westrowe, but in 1660 the castle was restored to the Bishop.

However, it was not until 1675 that the rebuilding of the castle was begun by James Fleetwood. Between then and the end of the 18th century, the castle was rebuilt, remodelled and refurnished by various Bishops of Worcester. This work included remodelling the chapel by Bishop Maddox and the creation of the library by Bishop Hurd. In the middle of the 19th century the castle became the residence of the Bishops which continued up to 2007. In 1964 the north wing of the castle was leased to the County Council so that a new County Museum could be developed which opened in 1966 (Wychavon District Council 2008).

Bishop Fleetwood rebuilt the north end of the castle which balanced the chapel at the other end and built the two lodges (WSM05836) and the walls surrounding the forecourt (EH List No. 1215524). The forecourt originally had a straight drive from



**Figure 2: Nathaniel Buck's 1731 engraving of Hartlebury Castle**

the lodges to the entrance porch, visible on a 1731 engraving by Nathaniel Buck (Fig 2). There were lawns on each side with statues either side of the door. The existing layout of a turning circle with a lawn inside was created c.1759-74 (WSM35179). The flower beds by the walls were also created at the same time.

### 4.3 Archaeological context

The Worcestershire and Worcester City HERs record 15 sites of archaeological significance in the immediate vicinity of Hartlebury Castle. Those of particular relevance to this evaluation include the park and garden (WSM07075), the pleasure grounds (WSM35179), two 18th-century outbuildings around the entrance (WSM01984) and the nearby museum offices (WSM35795). These features, mostly relating to Hartlebury's more recent history, have been well studied by documentary (Hartlebury Castle Preservation Trust 2013) and architectural historians (Molyneux 2010). In addition two archaeological investigations have been conducted in the vicinity of the Bishop's Palace, including a recent watching brief at the groundworks (WSM 34417; Miller 2007, Miller 2008) and an earlier earthwork survey (Montgomerie 1971). The area of the carriage circle, however, does not appear to have been subjected to any previous archaeological study.

#### **4.4 Current land-use**

The area of excavation continues to be occupied by a garden, the area of excavation consisting of a lawn encircled by a tarmac drive. This follows the layout of the turning circle created c.1759-74.

### **5 Results**

#### **5.1 Stratigraphic and structural analysis**

Descriptions of the deposits encountered during the excavation are given in Appendix 1. The trenches and features are illustrated in Figs 3-9.

##### **5.1.1 Phase 1: Natural deposits**

A bedrock deposit (104) was exposed at the bottom of a sondage through an extensive silty sand layer (103) in Trench 1, consisting of flaky mid-brownish brown sandstone consistent with the early Triassic Bromsgrove sandstone formation identified in the geological survey.

##### **5.1.2 Phase 2: Medieval deposits**

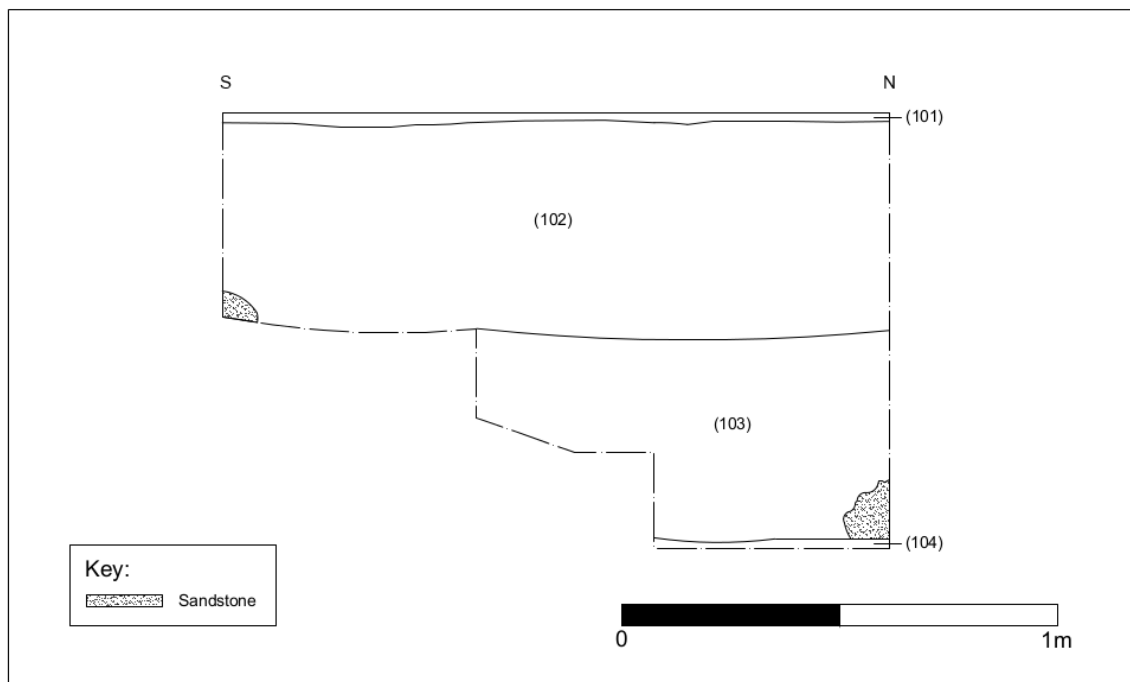
Despite extensive documentary evidence for the medieval significance of Hartlebury Castle little corresponding archaeological material was encountered during excavation, consisting of 8 sandy-glazed ware potsherds and 9 fragments of medieval window glass. All these finds derived from modern subsoil contexts strongly affected by earthworm-induced bioturbation, and may either be residual finds from medieval soil layers or introduced by deposits of bedding soil c.1759-74 for the lawn of the new carriage circle arrangement. Given the consistency of this finds assemblage with high-status domestic refuse, the first option seems most probable.

##### **5.1.3 Phase 3: Post-medieval deposits (17th to mid-18th centuries)**

Excavation in Trench 2 revealed a linear pathway of rough-faced sandstone blocks on an east-west alignment (204). The blocks were of mixed size and randomly coursed. This feature coincides both spatially and stratigraphically with the pathway illustrated on Buck's 1731 etching, and can most likely be identified with it despite an absence of artefactual evidence to confirm its date. The pathway was butted to the south by a made ground context (205) which is likely to be a contemporary landscaping feature, most probably a bed for the turfed garden

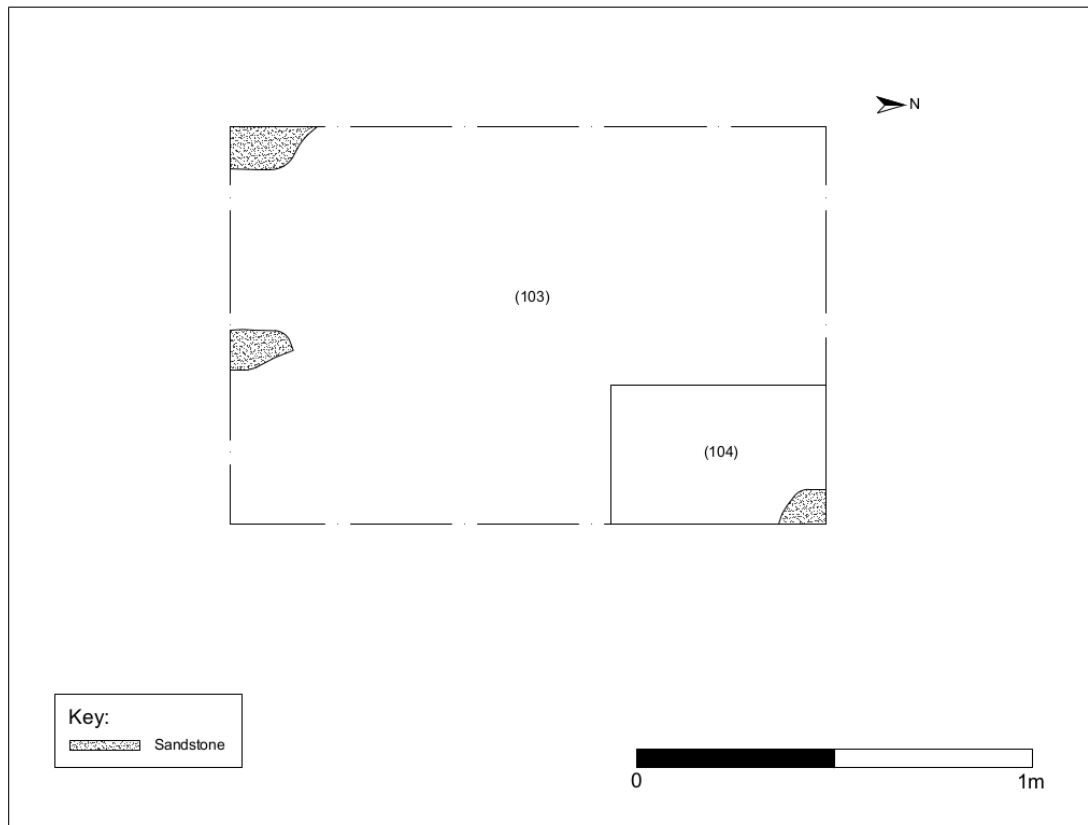


**Figure 3: Trench T01. South view (vertical scale 1m, horizontal scale 0.5m).**



**Figure 4: Section of Trench T01.**

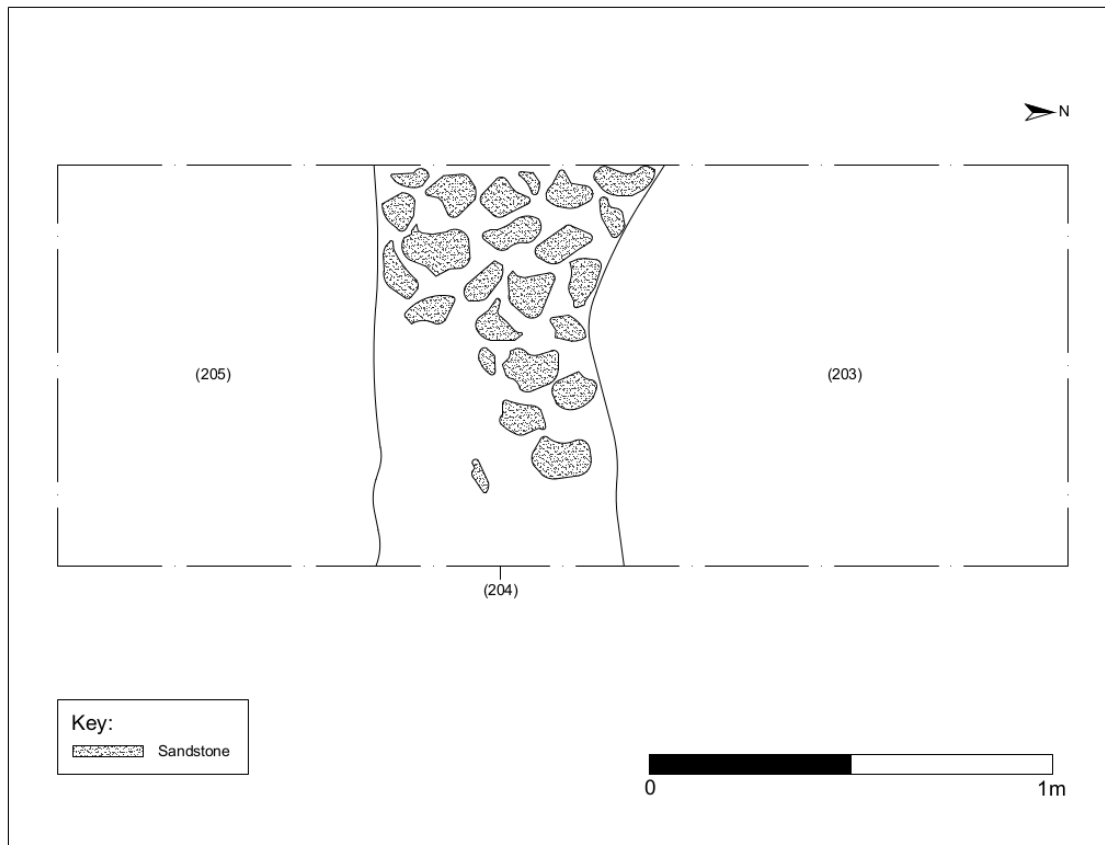




**Figure 5: Plan of Trench T01.**



**Figure 6: Trench T02. North view (scale 1 m).**



**Figure 7: Plan of Trench T02**



**Figure 8: Trench T03. West view (scale 0.5m).**





**Figure 9: Trench T06, North view (scale 1 metre).**

illustrated on the etching. While neither feature yielded post-medieval artefactual evidence, residual specimens of the latter were found in modern subsoil deposits, including post-medieval red wares (201, 301) and clay tobacco pipes (201).

#### **5.1.4 Phase 4: Modern deposits (mid-18th to 21st centuries)**

The modern deposits encountered were fairly homogenous across the site, consisting of sandy made ground. The dating of these deposits is problematised by both their composition and the impact of bioturbation – in several instances heavily obscuring the interface between contexts, resulting in a strong degree of artefact residuality – but on stratigraphic and artefactual grounds most can probably be dated to the period of construction of the carriage circle in the mid-late 18th centuries (203) or subsequent landscaping or gardening thereafter (101, 102, 201, 202, 301, 302, 601, 602). It is highly likely that these contexts form two unified subsoil layers (101, 201, 301, 601; 102, 202, 302, 602) arbitrarily divided into separate contexts by the nature of test pitting. Several of these contexts yielded a

range of artefacts of mixed date, with later post-medieval/modern termini post quem.

One notable feature attributed to this phase were two dumps of sandstone building rubble (303, 603). These deposits could not be dated on artefactual grounds, although on stratigraphic grounds may predate the existing carriage circle arrangement and probably postdate the earlier linear avenue arrangement (c.1731-1759/74). The origin of this building rubble is unclear, but may feasibly have formed part of the fabric of the west face of the hall and bishop's residence that was removed during alterations to the buildings in the mid-late 18th centuries (Brooks and Pevsner 2007, 361) which are otherwise documented in the 1731 and 1773 etchings. This is a tempting possibility given the close proximity of the deposits to the site of the building work, and if true might suggest that at least this phase of building work had been completed before that resulting in the construction of the carriage circle, the rubble forming part of the landscaping material underlying the circle arrangement. An alternative possibility is that the rubble may have originated in an as-yet unidentified earlier building, although at present there is no further evidence for this.

## 5.2 Artefactual analysis, by Hazel Whitefoot

The artefactual assemblage, from eight contexts, consists of pottery, brick, tile, glass, clay pipe, metal and bone as shown in Table 1. The pottery sherds are generally in good condition with low levels of abrasion except in one case.

Period	Material class	Material subtype	Object Specific type	Count	Weight (g)
Medieval	Ceramic	-	Pot	8	53.8
Medieval	Glass	-	Window	9	6.1
Late medieval/ post-Medieval	Ceramic	-	Pot	2	4.0
Medieval/ post-medieval	Ceramic	-	Roof tile	10	756.7
Medieval/	Stone	-	Roof tile	10	764.7



post-medieval					
Post-medieval	Ceramic	-	Brick	17	91.6
Post-medieval	Ceramic	-	Clay pipe	2	10.2
Modern	Ceramic	-	Pot	1	2.2
Undated	Mortar	-	Lime mortar	14	677.0
Undated	Metal	Iron	Nail	1	6.7
Undated	Metal	Iron	Unidentified	1	37.6
Undated	Bone	Animal bone	-	5	8.1
<b>Totals:</b>				<b>80</b>	<b>2418.7</b>

**Table 1: Quantification of the assemblage.**

The pottery consisted largely of medieval sherds, with two post-medieval and one of probable modern date, as summarised in Table 2.

Period	Fabric Code	Fabric common name	Count	Weight (g)
Medieval	64.1/64.2	Sandy glazed wares	8	53.8
Post-Medieval	78	Red ware	2	4.0
Post-medieval/ modern	100	Miscellaneous post-med/modern wares	1	2.2
<b>Totals:</b>			<b>11</b>	<b>60.0</b>

**Table 2: Quantification of the pottery by fabric type**

## 5.2.1 Summary of artefactual evidence

### **Pottery**

All pottery sherds dating from the medieval period were discovered in the upper two contexts of Test Pit 1 (see Figures 10 and 11). Three of the four sherds found in context 101 are conjoining, with a glazed fabric that is essentially hard-fired orange with some reduced grey, particularly under the glazing. Examination under a microscope reveals abundant quartz with sandstone inclusions indicating that these sherds are most likely to be Worcester type sandy glazed ware (fabric 64.1) which was in production from the 11th to 14th centuries, although it flourished

mainly in the 13th and 14th centuries. Two of these sherds represent 15% of a rim of approximately 120mm diameter; one sherd has the beginnings of a handle indicating the vessel is likely to have been a jug or pitcher.

The remaining sherd from context 101 is unglazed but is similarly hard-fired orange with a reduced grey core. As it was found with medieval pottery and is of a broadly similar fabric it is assumed to be from the same period, although there remains a possibility that it is actually Severn Valley Ware from the Roman period.

Of the four sherds found in context 102, one would also appear to be fabric 64.1 with a green glaze similar to the sherds from 101, and could be from the same vessel. Two further sherds have a grey-buff fabric with an orange interior surface, and a thin green glaze with some darker green speckles; these characteristics would seem to indicate an identification of fabric 64.2. This type of pottery has been identified in quite large quantities in Worcester and has been dated to 13th – early 14th centuries. The fabric of the remaining sherd is, however, more orange in colour than the other sherds but it has a similar green glaze identifying it as Medieval in date; it is probably, again, fabric 64.1.

Test Pit 2 produced two sherds of pottery from its upper layer (context 201). One sherd has a hard-fired orange fabric throughout with a smooth exterior surface and a relatively smooth interior. This would appear to be a piece of a relatively modern plant pot (fabric 100). The second sherd has a reddish-orange fabric, with quartz and occasional sandstone inclusions which would indicate that this is post-medieval red ware (fabric 78), of 17th–19th century date.

Test Pit 3 produced one sherd of pottery from its upper layer (301). Its orange-red fabric with quartz and occasional sandstone inclusions would indicate that this can be identified as post-medieval red ware (fabric 78) according to the Worcestershire fabric series with this type of pottery being assigned a date of late 15th – 16th century. This sherd appears, however, to have the remains of a black glaze on the exterior surface. Redware pottery with black or dark brown glaze is commonly found in Worcestershire and is normally assigned to fabric 78. However, this type of pottery is referred to as Cistercian Ware or Midland Black Ware in other counties (e.g. Leicestershire) and this type is assigned a later date of 16th – 17th century.

### ***Clay pipe***

Although recovered from the same context (201) the two fragments of clay pipe stem represent two different pipes. With no diagnostic pipe bowls having been found, only a general date range of 1600—1900 can be assigned to these artefacts.

### ***Metal***

Two corroded iron artefacts were recovered; one from the upper context (201) of Test Pit 2 can be identified as a nail; rectangular in cross-section this nail is either a hand-made nail (pre-1800) or a cut nail (c1800-1890). A larger piece of iron, from the upper context (601) of Test Pit 6 is too corroded to be identified.

### ***Charcoal***

Charcoal fragments were recovered from Test Pits 1 (contexts 101 and 102) and 3 (301).

### ***Bone***

All fragments of bone recovered were from Test Pit 2 (context 202); one is part of a tooth, the others have not been identified. Although not examined in detail, they are most likely the remains of domesticated animals.

### ***Brick/Tile (CBM)***

Fragments of both ceramic and stone roof tiles are present amongst the assemblage with one example of each including a nib (although a nib may be accidental on stone). A fragment of sandstone roof tile with part of the peg hole used to attach it to the roof is also present (see Figure 18). No complete tiles were found. Examining the ceramic tile fragments under x20 magnification reveals abundant quartz sand; this being the case it is difficult to state a possible source of production (e.g. evidence of Malvernian rock in the fabric would indicate production in the Malvern area) but they were probably produced relatively locally.

Only relatively small fragments of brick were recovered; with none providing any indication of brick size these fragments are undiagnostic



**Figure 10: Pottery – context 102.**



**Figure 11: Pottery – context 101**



**Figure 12: Pottery – context 301**



**Figure 13: Glass – context 601**



**Figure 14: Charcoal – context 101**



**Figure 15: Bone – context 202**



**Figure 16: Sandstone roof tile with part of peg hole - context 202**



**Figure 17: Clay pipe stems – context 202**



**Figure 18: Stone roof tile with nib – context 101**



**Figure 19: Ceramic roof tile – context 202**

### **Glass**

The glass recovered from the upper layer (601) of Test Pit 6 is flat, approximately 1mm in thickness, with eight of the nine fragments having the same green colour. The largest piece is much paler in colour and exhibits some iridescence, owing to surface degradation. Taking these characteristics into consideration it is possible that these fragments are medieval window glass created from wood ash and silica, with the paler piece being a later potash glass (D Williams pers. comm.)

### **Fired clay**

Two pieces of unidentified fired clay were recovered from Test Pit 1 (contexts 102 and 103). Probably from a hearth surface, this clay had been heated to a very high temperature, leading to vitrification. This material exhibited no magnetic tendency, and appears to be too low in density to be slag waste from metal processing hence the identification as fired clay.

## **5.2.2 Conclusion**

Although not part of a large assemblage, the pottery found during this test-pitting exercise provides evidence of domestic activity in the vicinity of Hartlebury Castle during the medieval period. This is also supported by the presence of window glass which would indicate the existence of a building of relatively high status for the period on this site. The post-medieval finds indicate later occupation and use on or near this site.

Test Pit	Context	Material class	Count	Weight (g)	Interpretation
1	101	Pottery	4	39.6	Medieval, 3 x glazed (inc. 2 x rim sherds), 1 x unglazed (Worcester fabric 64.1)
1	101	Charcoal	7	3.7	-
1	101	Stone	1	213.8	Stone roof tile – with nib
1	101	Stone	3	143.8	Stone tile (probable)
1	102	Pottery	4	14.2	Medieval, green-glazed (64.1/64.2)
1	102	Fired clay	1	49.2	Unidentified but highly fired clay
1	102	CBM	1	2.5	Brick/tile
1	102	Stone	1	131.5	Sandstone roof tile with part of peg hole
1	102	Charcoal	1	0.6	-
1	103	Fired clay	1	94.0	Unidentified but highly fired clay
2	201	Pottery	2	4.2	1 x modern plant pot, 1 x red ware (fabric 78)
2	201	CBM	12	80.7	Brick/tile fragments
2	201	CBM	11	617.7	Roof tile
2	201	Metal	1	6.7	Nail
2	201	Clay Pipe	2	10.2	Stem fragments
2	201	Mortar	3	76.5	Lime mortar
2	202	CBM	9	664.8	Roof tile
2	202	Mortar	11	252.8	Lime mortar
2	202	Bone	5	8.1	Probably domesticated animal
3	301	Pottery	1	2.0	Black glazed red ware (fabric 78)
3	301	Charcoal	10	<0.1	-
3	301	CBM	1	91.9	Roof tile with nib
6	601	Glass	9	3.1	Window glass



6	601	CBM	1	4.4	Brick/tile
6	601	Metal	1	37.6	Unidentified iron – very corroded
6	602	Stone	1	66.0	Roof tile (sandstone)
6	603	Stone	4	209.6	3 x roof tile, 1 x floor tile?

**Table 3: Finds summary by context**

## **6 Synthesis**

### **6.1 Discussion**

The results of this evaluation provide a small but significant contribution to our understanding of landscape features in the vicinity of Hartlebury Castle in the post-medieval to modern period, providing independent archaeological confirmation for the existence of garden features illustrated on Buck's 1731 etching. Furthermore, it extends knowledge of these features by providing evidence that the linear pathway at the centre of the garden arrangement was made of randomly-coursed sandstone paving, whose materials were probably locally sourced. The additional discovery of building rubble deposits (303, 603) probably dating c.1731-1759/1774 may also be significant. If, as has been argued, these represent elements of the fabric of the Bishop's Residence removed during mid-late 18<sup>th</sup> century remodelling and deposited in layers associated with landscaping for the carriage circle, it suggests that the construction of the carriage circle was not undertaken solely for reasons of accessibility but instead formed part of a wider program of alterations undertaken by the bishops to convert the former castle into something more approaching a countryside estate, a phenomenon that is certainly not unknown in contemporary lay estates (Milln 2003).

While little medieval evidence has been recovered in this evaluation compared to previous fieldwork at Hartlebury Castle (e.g. Miller 2008), the information provided by a small medieval finds assemblage provides a useful illustration of the living standards of the medieval Bishops of Worcester, whose refuse included high-status glazed ceramics and broken window glass. This evidence, while limited, corresponds with what is known of the wealth of the medieval Bishopric from the documentary sources (Dyer 2008)

## **6.2 Research frameworks**

The West Midlands regional research framework for early post-medieval archaeology (English Heritage 2003) explicitly refers to the need to investigate the transformation of medieval features like castles and monasteries into estates and landscape features, a theme in which Hartlebury Castle - as both a prominent castle and seat of the Bishop of Worcester – is arguably of unparalleled county-wide importance. This evaluation offers a limited contribution to the framework by providing archaeological confirmation of garden features – including a pathway and probable garden bed – otherwise recorded by documentary sources, in particular Buck's 1731 engraving. However, the results have not provided any evidence to establish the date at which this garden arrangement was initially constructed or to confirm the historical evidence for its date of remodelling into the present carriage circle arrangement.

## **7 Significance**

### **7.1 Nature of the archaeological interest in the site**

The trenches excavated during the evaluation demonstrated the survival of structures and deposits related to post-medieval and later garden features on the site. The archaeology corresponded extremely well with documentary evidence, and suggests that further evidence of the post-medieval garden features recorded in the documentary sources may be present elsewhere within the carriage circle.

### **7.2 Relative importance of the archaeological interest**

The structural remains identified in the evaluation provide independent archaeological confirmation for the garden arrangements illustrated in Buck's 1731 etching, and therefore have a degree of localised significance for the understanding of the post-medieval development and landscape of Hartlebury Castle. Beyond this however the archaeology adds little to the existing knowledge of the complex in the medieval to modern periods

### **7.3 Physical extent of the archaeological interest in the site**

A limited number of archaeological remains were revealed in each trench and were found at least 0.4m below an accumulation of mid-18 th century and later made ground surfaces. The full extent of remains is unknown, although the pathway feature in Trench 2 (204) continued eastwards and westwards beyond the limits of

excavation at the same level, and may be presumed to continue along the linear route indicated in Buck's etching. The preservation of buried structures and finds was good.

## **8 Publication summary**

An archaeological evaluation was conducted at Hartlebury Castle between 19th and 23rd October 2013 (WSM 49798; SO 83634 71249). The project aimed to investigate buried remains within the carriage circle, an area hitherto unexplored archaeologically, with a particular aim towards identifying medieval and post-medieval garden features illustrated in a 1731 etching by Nathaniel Buck.

The excavation revealed limited evidence predating the early post-medieval period, but as anticipated uncovered evidence for the garden features illustrated by Buck in the form of a pathway running towards the palace entrance and a turfed garden to its south. This confirms that the etching was a depiction of built features rather than an unexecuted plan, although the date at which the pathway was constructed remains unclear. The excavation also yielded a limited number of artefacts of later medieval to later post-medieval/modern date

## **9 The archive**

A project archive has been created and prepared in accordance with English Heritage Guidelines outlined in the 'Management of Archaeological Projects' (1991), Appendix 3. The archive consists of:

15	Context records
1	Field progress report
1	Photographic record catalogue
1	Context number catalogue
1	Drawing number catalogue
1	Photographic record catalogue
1	Sheet of plans and section drawings
1	Box of finds
1	Bound copy of this report

The project archive is intended to be deposited at:

Worcestershire County Museum

Hartlebury Castle

Hartlebury

Worcestershire

DY11 7XZ

Tel: (01299) 250416

## 10 Acknowledgements

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## Appendix 1: Trench descriptions

### Trench 1

Maximum dimensions: Length: 1.40m Width: 1.0m Depth: 1.0m

Orientation: North-south

Main deposit description

Context	Description	Interpretation	Date	Max depth below ground surface
101	Turf and topsoil layer	N/A	Modern	0.02m
102	Loose dark brownish brown medium-fine sand. Frequent medium-large subangular sandstone and cobblestone frags; occasional CBM, pottery and slag (5>%).	Fine sandy bedding layer for turf.	Modern	0.50m
103	Soft mid-brownish brown silty sand. Occasional-moderate sandstone frags (<15%).	Subsoil above natural bedrock.	Unknown – Post Medieval?	0.90m
104	Soft mid-brownish brown flaky sandstone.	Natural bedrock	Early Triassic	1.00m

## Trench 2

Maximum dimensions: Length: 2.0m Width: 1.0m Depth: 0.4m

Orientation: North-south

Main deposit description

Context	Description	Interpretation	Date	Max depth below ground surface
201	Turf and topsoil layer	N/A	Modern	0.03m
202	Loose dark reddish brown medium-fine sand. Frequent medium-large subangular sandstone frags and CBM/mortar (c.10%); occasional animal bone (5>%).	Fine sandy bedding layer for turf.	Modern	0.4m
203	Loose mid-orangey brown sandy silt.	Landscaping covering old driveway.	Post-Medieval / Modern	0.4m+
204	Unbonded and rough-faced sandstone blocks of mixed size (c.16x15cm - 9x7cm). Aligned E/W, random coursing, infilled with soil.	Driveway surface.	Post-Medieval	0.4m+
205	Loose mid-orangey brown sand. Occasional sandstone blocks of mixed size.	Landscaped ground surface contemporary with (204).	Post-Medieval	0.4m+



### Trench 3

Maximum dimensions: Length: 1.13m Width: 1.0m Depth: 0.5m

Orientation: North-south

Main deposit description

Context	Description	Interpretation	Date	Max depth below ground surface
301	Turf and topsoil layer. Occasional small frags pottery and charcoal (5>%). Heavy bioturbation.	N/A	Modern	0.2m
302	Loose mid-brownish brown silty sand. Occasional frags sandstone and charcoal.	Fine sandy bedding layer for turf.	Modern	0.35m
303	Soft mid-brownish brown silty sand. Frequent sandstone frags (c.5-15cm, <15%).	Mixed rubble dump	Post-Medieval/ Modern?	0.5m

## Trench 6

Maximum dimensions: Length: 1.50m Width: 1.0m Depth: 0.4m

Orientation: North-south

Main deposit description

Context	Description	Interpretation	Date	Max depth below ground surface
601	Turf and topsoil layer.	N/A	Modern	0.05m
602	Loose dark brownish-red sandy silt (c.50%). Frequent sandstone frags (c.50%); occasional glass, metal and CBM.	Sandstone rubble layer beneath turf.	Modern	0.2m
603	Loose to firm dark brownish-red sandstone (<.5cm-5cm, mixed shapes, c.80%), c.20% red sand. Occasional CBM.	Mixed rubble dump	Post-Medieval / Modern?	0.4m

## Appendix 2: Site matrix

