

# Archaeological Evaluation of land adjacent to Keppel Gate, Defford, Worcestershire



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## **Archaeological Evaluation of land adjacent to Keppel Gate, Defford, Worcestershire**

Richard Bradley

With contributions by Rob Hedge and Elizabeth Pearson

### **Summary**

An archaeological evaluation was undertaken on land adjacent to Keppel Gate, Defford, Worcestershire (NGR SO 92109 43437). It was undertaken on behalf of G Herbert Banks LLP, who intends residential development of the site for which a planning application has been submitted.

The proposed development site is located in a topographically favourable location for settlement and in close proximity to Defford itself, which has Saxon origins. Four 30m long trenches were excavated across the field, positioned as widely as possible, but restricted by existing live services in various locations. The trenches were not specifically targeted, but arranged in a broad array to cover a sample of the land.

Overall, there were limited archaeological features and it is suggested that the land was previously agricultural in use for a considerable period of time. A series of post-medieval pits, one of which contained 17<sup>th</sup> to 18<sup>th</sup> century pottery, were identified in the western part of the field but these are thought to represent either small-scale sand and gravel extraction or part of a small orchard. In addition however, a spread of burnt stone, albeit undated, is likely to represent a shallow burnt mound, was also identified in this area and may represent a focus of prehistoric activity. This exhibited many of the known characteristics identified for burnt mounds and likely forms an isolated but significant element of a wider prehistoric landscape. As similar features are normally located at some distance from settlement it is probable that more intensive occupational activity is located away from the site. There is also potential that a trough for retaining water, or associated pits, will survive in the vicinity of the burnt stone, but no indication of these was found during the trial trenching.

## Report

### 1 Background

#### 1.1 Reasons for the project

An archaeological evaluation was undertaken on land adjacent to Keppel Gate, Defford, Worcestershire (NGR SO 92109 43437). It was commissioned by G Herbert Banks LLP in response to a brief prepared by the Planning Advisory Section of Worcestershire County Council, dated 19 January 2016 (WCC 2016). The brief results from the submission of a planning application to Wychavon District Council that proposes residential development on the site, alongside access and associated works (reference number W/13/02202).

The proposed development site is located in a topographically favourable location for settlement and in close proximity to Defford itself, which has Saxon origins (WCC 2016, 4). Therefore, the site was considered to have the potential to include heritage assets with archaeological interest, the significance of which may be affected by the application (WSM 37450).

The project conforms to the aforementioned brief prepared by the Planning Advisory Section of Worcestershire County Council (WCC 2016) and for which a project proposal (including detailed specification) was produced (WA 2016).

The project also conforms to the *Standard and guidance: Archaeological field evaluation* (ClfA 2014a) and *Standards and guidelines for archaeological projects in Worcestershire* (WCC 2010)

The event reference for this project, provided by the HER is WSM 67665.

### 2 Aims

The aims of this evaluation, as detailed in the brief, were to:

- Identify the date, approximate form and purpose of any archaeological deposit together with its likely extent, localised depth and quality of preservation;
- Evaluate the likely impact of past land uses, including the extent of any ground disturbance/truncation arising from the previous use of the site, and the possible presence of masking colluvial/alluvial deposits;
- Establish the potential for the survival of environmental evidence;
- Provide sufficient information to construct an archaeological mitigation strategy, if required.

The evaluation only assessed heritage assets which were of archaeological interest. The project does not include consideration of Listed Buildings, Conservation Areas, or historic hedgerows.

### 3 Methods

#### 3.1 Personnel

The project was led by Richard Bradley (BA (hons.), MA; ACIfA), who joined Worcestershire Archaeology in 2008 and has been practicing archaeology since 2005. Fieldwork assistance was provided by Elspeth Iliff (BA (hons.); MSc) and Nina O'Hare (BA (hons.)). The project manager responsible for the quality of the project was Tom Vaughan, (BA (hons.); MA; ACIfA). Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA). Elizabeth Pearson (MSc; ACIfA) contributed the environmental report and Robert Hedge (MA Cantab) the finds report.

#### 3.2 Documentary research

Prior to fieldwork commencing a search was made of the Worcestershire Historic Environment Record (HER) within a 1000m radius of the site, which detailed numerous historic buildings dating from the 13<sup>th</sup> century onwards (49, of which 14 of these are listed) and other heritage assets, particularly cropmark evidence, as well as unstratified finds. This search also included a number of

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historic maps for the area, dating from the 1774 Inclosure Plan of Birlingham and the 1775 Inclosure Plan of Defford onwards. Other published and grey literature sources are listed in the bibliography.

### **3.3 Fieldwork strategy**

Fieldwork was undertaken between 28th and 29th January 2016, following the detailed specification prepared by Worcestershire Archaeology (WA 2016).

Four trenches, amounting to just over 180m<sup>2</sup> in area, were excavated across the site area of approximately 0.45ha, representing a sample of 4%. Based on the initial interpretation of the features identified in Trench 3, this trench was extended by 24m<sup>2</sup> using a contingency allocation so as to further expose and understand the archaeological remains. The trenches were broadly arranged, rather than targeted on anything specific, but were restricted in placement due to the existing buried services in various locations (storm water run-off and foul water pipes, plus electricity cables), space for access and egress into the field, and two overhead electricity wires. The location of the trenches is indicated in Figure 2.

Deposits considered not to be significant were removed using a JCB wheeled mechanical excavator, employing a toothless bucket and under constant archaeological supervision. 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 trenches were located using a differential GPS (Leica NetRover) with an accuracy limit set at <0.04m. On completion of excavation, the trenches were reinstated by replacing the excavated material.

### **3.4 Structural analysis**

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

### **3.5 Artefact methodology, by Rob Hedge**

The finds work reported here conforms with the relevant sections of *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2014b), with archive creation informed by *Archaeological archives: a guide to the best practice in the creation, compilation, transfer and curation* (AAF 2011); and museum deposition by *Selection, retention and dispersal of archaeological collections* (SMA 1993).

#### **3.5.1 Artefact recovery policy**

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

#### **3.5.2 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 *pro forma* sheets.

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 and [www.worcestershireceramics.org](http://www.worcestershireceramics.org)).

#### **3.5.3 Discard policy**

The following categories/types of material will be discarded after a period of 6 months following the submission of this report, unless there is a specific request to retain them (and subject to the collection policy of the relevant depository):

- where unstratified
- post-medieval material in general, and;
- generally where material has been specifically assessed by an appropriate specialist as having no obvious grounds for retention.

### **3.6 Environmental archaeology methodology, by Elizabeth Pearson**

The environmental project conforms to relevant sections of the *Standard and guidance: Archaeological field evaluation* (ClfA 2014a), *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011), and *Environmental archaeology and archaeological evaluations* (AEA 1995).

The aims of the assessment were to determine the state of preservation, type, and quantity of environmental remains recovered from the samples and information provided. This information will be used to assess the importance of the environmental remains.

#### **3.6.1 Sampling policy**

Samples were taken according to standard Worcestershire Archaeology practice (2014). A single sample (of 40 litres) was taken from a possible burnt mound (context 305).

#### **3.6.2 Processing and analysis**

The sample was processed by flotation using a Siraf tank. The flots was collected on a 300mm sieve and the residue retained on a 1mm mesh. This allows for the recovery of items such as small animal bones, molluscs and seeds.

The residue was fully sorted by eye and the abundance of each category of environmental remains estimated. A magnet was also used to test for the presence of hammscale. The flot was scanned using a low power MEIJI stereo light microscope and plant remains identified using modern reference collections maintained by Worcestershire Archaeology, and a seed identification manual (Cappers *et al* 2012). Nomenclature for the plant remains follows the *New Flora of the British Isles* (Stace 2010).

Charcoal was examined under a low power MEIJI stereo light microscope in order to determine the presence of oak and non-oak charcoal.

#### **3.6.3 Discard policy**

Remaining sample material and scanned residue will be discarded after a period of 6 months following submission of this report unless there is a specific request to retain them.

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

The methods adopted allow a high degree of confidence that the aims of the project have been achieved.

## **4 The application site**

### **4.1 Topography, geology and current land-use**

The site is located to the west of the main Pershore to Upton road, on the north-eastern edge of the village of Defford. It comprises a small area of pasture surrounded by existing residential properties and domestic gardens, accessed from the road which forms the eastern boundary to the site (Fig1; Plate 1). The site has a gentle slope from west to east, towards the valley of the Bow Brook that feeds into the River Avon to the south.

The bedrock geology of the site comprises the Charmouth Mudstone Formation, which is overlain by superficial deposits of the New Inn Sand and Gravel Member (BGS 2016). Alluvium deposits follow the course of the Bow Brook from north to south, just to the east of the site. The soils in this



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vicinity are mapped as those of the Bishampton Association, being brown sandy clay loams with impeded drainage that are prone to waterlogging (Ragg *et al* 1984, 100-101)

## 4.2 Archaeological context

The landscape context for the site is characterised by sloping lowland topography, with nucleated settlements surrounded by modern expansion. Much of the area has only recently been developed for more substantial settlement, having previously been mainly agricultural since at least the Saxon period. The field system of the area is made up of small and medium pockets of piecemeal enclosure, with larger amalgamated fields, meadow and enclosed land surrounding this.

Defford is recorded as *Depeford* at the time of the Domesday Book (1086), when it included eight villagers, ten smallholders and four ploughmen, along with two lord's plough teams, six men's plough teams and ten acres of meadow (Thorn and Thorn 1982, 8). The village has Saxon origins, originally known as *Deopanforda*, meaning 'deep ford', which attests to the proximity of the nearby brook and river (Mawer and Stenton 1927, 194). It is likely that the Saxon settlement (WSM 37450), which is recorded in 972, was established in the area of the later, medieval village and the 13<sup>th</sup> century Church of St James (WSM 07717).

In the wider surroundings, numerous cropmarks indicative of settlement remains of prehistoric and Roman date are recorded on the gravel terraces associated with the brook and the river. Of those in the more immediate area, 290m to the west is a possible Iron Age site (WSM 30508), 500m to the east is a possible Roman trackway with adjacent enclosures (WSM 30222) and 600m to the south, cropmarks combined with fieldwalking finds suggest a late Iron Age to Saxon settlement (WSM 30225). There are also several areas of medieval ridge and furrow recorded (WSM 31128; WSM 31129; WSM 31130; WSM 35336). Across the road, to the east of the site, a smithy of unknown date is marked on the 1<sup>st</sup> edition Ordnance Survey map (WSM 38388).

There have been no previous detailed archaeological assessments or fieldwork projects on the development site. In the local area, although two small watching briefs were carried out in 2002 and 2012 to the immediate west (WSM 39478; WSM 47434) and the site is within the search area for two larger DBA assessments (WSM 50199; WSM 67367), there is limited pre-existing archaeological information regarding the potential of the site.

## 5 Structural analysis

The trenches and features recorded are shown in Figures 2 and 3. The results of the structural analysis are presented in Appendix 1.

### 5.1.1 Phase 1: Natural deposits

The natural substrate was encountered in all four of the trenches excavated. This was slightly variable in the western part of the site area, where it was lighter yellow grey sand, but was consistently identifiable as a compact mid yellow grey sandy silt to the north and east of the site. The trenches had a moderate depth of deposits above the natural, which was encountered between 0.46-0.63m below the current ground surface.

### 5.1.2 Phase 2: Prehistoric deposits

Despite an absence of clear dating evidence, it is considered that a feature identified to the west of the centre of the site (Trench 3) was of prehistoric date. Although water inundation prohibited extensive investigations, the remains are thought to be the shallow remnants of a possible burnt mound (Plates 5-7). This comprised a 4.26m long and 2.46m wide irregular oval shaped spread of dark, charcoal-rich burnt material with frequent heat-cracked stones within (305). It only survived to a maximum of 0.18m in thickness (Plate 5) and was sealed below later subsoil and modern topsoil.

### 5.1.3 Phase 3: Post medieval/modern deposits

In all trenches, a friable mid orangey brown sandy silt subsoil layer was identified that was 0.25-0.41m in depth, probably formed in the post-medieval period. Two partially exposed pits were identified that cut through this deposit. Pit [303], in Trench 3, had clearly originally been excavated during the period of subsoil formation, but did not contain any finds (Plate 8). In Trench 4, pit [408] could only be partially investigated due to the ground water level but contained 17<sup>th</sup> to 18<sup>th</sup> century pottery and also truncated the subsoil (Plate 9). Although not investigated and thus undated by finds, two further features observed at the very edge of Trench 4 [404 and 406] contained a similar mid grey brown sandy silt fill to that in pit [408] and are thought to be contemporary.

There were also a number of 19<sup>th</sup> or 20<sup>th</sup> century land drains noted across Trench 1 and Trench 2. The current topsoil across the fields comprised friable mid greyish brown sandy silt and varied from 0.20-0.36m in depth.

### 5.1.4 Phase 4: Undated deposits

A single small oval post-hole was identified in Trench 1 [103]. This was very shallow (0.11m maximum depth) and 0.20m wide. No finds were recovered.

## 5.2 Artefact analysis, by Rob Hedge

The artefactual assemblage recovered is summarised in Finds Tables 1 and 2.

The assemblage came from four stratified contexts and could be dated from the Roman period onwards (see Finds Table 1). Using pottery as an index of artefact condition, this was generally fair, with the majority of artefacts displaying moderate levels of abrasion.

period	material class	material subtype	object specific type	count	weight(g)
Roman	ceramic		oven	1	47
medieval/post-medieval	ceramic		brick/tile	1	2
post-medieval	ceramic		pot	1	15
post-medieval	ceramic		roof tile	1	78
modern	slag	slag(fe)	slag	1	549
undated	bone	animal bone		7	44
Totals:				12	735

Finds Table 1: Quantification of the assemblage

Broad period	fabric code	Fabric common name	count	weight(g)
Romano-British	3.1	Slab-built Malvernian ware	1	47
Post-medieval	78	Post-medieval red ware	1	15
Total:			2	62

Finds Table 2: Quantification of the pottery by fabric

### 5.2.1 Artefactual evidence by period

For the finds from individual features, including specific types of pottery, consult Finds Tables 3 and 2 in that order and in combination.

#### Roman

A single fragment of an oven plate of hand-made, slab-built Malvernian ware (fabric 3.1), with characteristic smooth upper surface and rough, sandy underside, was present within subsoil (301). These are considered to be 3<sup>rd</sup>/4<sup>th</sup> century in date.

#### *Medieval/Post-medieval*

A very small undiagnostic piece of brick/tile from pit fill (407) may be medieval in origin but is considered more likely to be 17<sup>th</sup> or 18<sup>th</sup> century in date, along with a sherd of redware (fabric 78) from the same context and a fragment of roof tile from land drain (204).

#### *Modern*

A piece of iron slag from subsoil (401) with traces of modern cement adhering to it probably pertains to modern construction in the vicinity.

#### *Undated*

A small assemblage of undiagnostic fragments of mammal bone was recovered from (401).

context	material class	material subtype	object specific type	count	weight(g)	start date	end date	TPQ date range
204	ceramic		roof tile	1	78	1600	1800	1600-1800
301	ceramic		oven	1	47	200	410	200-410
401	bone	animal bone		7	44	1850	2000	1850-2000
	slag	slag(fe)	slag	1	549			
407	ceramic		brick/tile	1	2	1600	1800	1600-1800
	ceramic		pot	1	15			

*Finds Table 3: Summary of context dating based on artefacts*

### **5.2.2 Summary**

The artefactual assemblage recovered is consistent with low-level domestic activity in and around the site area in the post-medieval period. Of note is the discovery of Roman ceramic oven material: although not associated with contemporary features or deposits, it is an indicator of Roman occupation in the vicinity.

### 5.3 Environmental analysis, by Elizabeth Pearson

The environmental evidence recovered is summarised in Environmental Tables 1 and 2.

context	sample	residue mesh size (mm)	residue volume (L)	charcoal	artefacts	comments
305	1	1	6	abt	abt fire-cracked stone, ?chert fused with charcoal	Other = ?chert

Environmental Table 1: Summary of remains from bulk sample

context	sample	preservation type	species detail	category remains	quantity/diversity	comment
305	1	?wa	<i>Chenopodium glaucum/rubrum</i> , unidentified root fragments, unidentified wood fragments	misc	+++/low	probably modern and intrusive
305	1	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low	poorly preserved, ?vitrified

Environmental Table 2: Plant remains from context (305)

#### Key:

preservation	quantity
ch = charred	+++ = 51 - 100
?wa = waterlogged or uncharred	

Charcoal, which appears to have vitrified with sediment and heat-cracked stone, was abundant in the sample residue. A sample of this material was identified as oak (*Quercus robur/petraea*), but was poorly preserved as a result of the vitrification. Very few pieces were accessible for identification, being largely encased in sediment. Uncharred remains, consisting of mainly root fragments, are assumed to be modern and intrusive as they are unlikely to have survived in the soils on site for long without charring or waterlogging.

## 6 Synthesis

A limited number of archaeological features were recorded and much of the site appeared to have been undisturbed by intrusive activity. It is therefore likely that the site occupies an area of land previously used for mostly rural agricultural activity (mainly pasture) at the edge of settlement, with no indication of direct occupation due to the limited number of features and the relative absence of cultural material remains from any period. A series of post-medieval pits, one of which contained 17<sup>th</sup> to 18<sup>th</sup> century pottery, were identified in the western part of the field and it is possible that these represent small-scale sand and gravel extraction, or perhaps were part of a small orchard at the edge of the settlement at Defford. The area is well-known for a market-garden economy and historic mapping suggests numerous fields in the surroundings of the site were used for fruit trees.

Cropmarks thought to represent prehistoric activity are also known from the wider area, and the possible burnt mound remains noted in the western half of the field are likely to form a small element of this prehistoric landscape. Despite the lack of secure dating evidence, the feature exhibited many of the known characteristics for burnt mounds; it was comprised of charcoal and heat-cracked stone, no artefacts were found, was located in the vicinity of a water source (the Bow Brook) and was positioned in a waterlogged area (Barfield and Hodder 1987, 370; Barfield and

Hodder 2010, 40). Whilst burnt mounds have remained poorly represented in the record for south and west areas of the Midlands region, outside of the recognised focus of such features in the greater Birmingham area (Hurst 2011, fig 3.1), they have previously been identified in Worcestershire (e.g. at Clifton; Mann and Jackson forthcoming). They are generally radiocarbon dated in the range 1700-1000 cal BC, in the Middle to Late Bronze Age (Hodder 2002, 1), although recently excavated examples at Meriden Quarry in Warwickshire have shown they that can date to the Late Neolithic/Early Bronze Age (c 3000 – 1500 BC; Bradley 2014). Various functions for burnt mounds have been put forward, including for cooking (Hedges 1975), saunas (Barfield and Hodder 1987), areas of craft activities such as textile production (Jeffery 1991) or metallurgy (Bradley 2007). More recently experiments have shown how they may have been used to produce beer (Quinn and Moore 2009), or have suggested that they were multi-functional ritual sites (Loktionov 2013). Despite these numerous ideas, the exact function is still unclear.

The lack of other notable features of prehistoric date across the site area, and the waterlogging, suggests that the area may not have been ideal for earlier occupation, particularly in winter (despite the favourable topography). It is suggested, therefore, that the possible burnt mound is likely to fit into a previously identified typology; one that is not located in direct physical association with a settlement site, but close to such occupation (as yet not securely located) that is positioned somewhere in the surrounding area (see Hodder 2002, 2; Barfield and Hodder 2010, 40).

## 7 Significance

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

A limited number of archaeological features were recorded on the site, which appears to have been largely agricultural in use for a considerable period of time. The artefactual assemblage reflects typical low-level post-medieval and modern domestic activity, introduced onto the site through manuring or other agricultural use, and supports the indication that the site has remained largely undisturbed. Although only a single find from the subsoil, the presence of a small fragment of ceramic oven plate is potentially indicative of Roman domestic activity in the vicinity of the site.

The spread of burnt stone, likely to represent a shallow burnt mound that may date to the Bronze Age, is of more interest however and suggests that there is a focus of prehistoric activity in the western part of the field. As similar features are normally located at some distance from settlement it is likely that more intensive activity is located away from the site. The presence of a former channel of the Bow Brook or perhaps another subsidiary stream that once fed into the brook (ie a palaeochannel), could be considered likely to exist in the more immediate surroundings, given the known association between burnt mounds and water, but as the brook is only 300m away from the site then this is not conclusive. It is also possible that a trough for retaining water, or associated pits, will survive in the vicinity of Trench 3, but no indication of these was found during the trial trenching.

### 7.2 Relative importance of the archaeological interest in the site

The features observed during the evaluation demonstrate an archaeological site of variable importance, with some features of low significance and others that suggest a higher potential. The post-medieval pits are likely to reflect the local agricultural economy in this period and are of limited interest. More archaeological importance can be attached to the possible burnt mound, which is likely to be of local significance as a feature in isolation, but could provide information to improve understanding of such archaeology in the surrounding region. Burnt mounds, whilst becoming more recognised and more frequently identified in Worcestershire and the surrounding areas, have generally been seen to be more prominent in the greater Birmingham region to the north and north-east (Hurst 2011, fig 3.1) so this example (although shallow and relatively small) could be an important addition to the known distribution.

The artefactual assemblage was of low significance and most of it is not considered worthy of retention. However, understanding of the distribution and function of Malvernian ceramic ovens in

the Roman period is still in its infancy and as such the example discovered here should be retained as a relatively uncommon example of an unusual artefact class.

The environmental remains were of low significance on account of the poor preservation and because only oak was identified, hence information on woodland resources in use would be limited. Suitability for radiocarbon dating is low as oak is a long-lived tree and, therefore, would potentially add an 'old wood' bias to the results.

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

The main archaeological interest is restricted to the features identified in the western part of the field, particularly in Trench 3. Although a number of pits were identified in Trench 4, these are all of post-medieval date. An undated small possible post-hole was located to the east (Trench 1), but this part of the site was otherwise devoid of archaeological features.

It can therefore be suggested that the extent of archaeological remains will be focused upon and around the burnt stone spread (305).

## **8 The impact of the development**

The scope of the proposed development includes residential property (6 open market units, 3 affordable units) alongside access and associated works (planning reference W/13/02202/OU), although the exact depth and extent of foundations and service trenches are, at present, unknown. Despite this uncertainty, it is still possible to determine that archaeological deposits will be vulnerable to any intrusive works on site of greater depth than 0.40m.

## **9 Publication summary**

Worcestershire Archaeology has a professional obligation to publish the results of archaeological projects within a reasonable period of time. To this end, Worcestershire Archaeology intends to use this summary as the basis for publication through local or regional journals. The client is requested to consider the content of this section as being acceptable for such publication:

*An archaeological evaluation was undertaken on behalf of G Herbert Banks LLP of land adjacent to Keppel Gate, Defford, Worcestershire (NGR SO 92109 43437; HER ref WSM 67765).*

*The proposed development site is located in a topographically favourable location for settlement and in close proximity to Defford itself, which has Saxon origins. Four 30m long trenches were excavated across the field, positioned as widely as possible but restricted by existing services in various locations. The trenches were not specifically targeted, but arranged in a broad array to cover a sample of the land.*

*Overall, there were limited archaeological features and it is suggested that the land was previously agricultural in use for a considerable period of time. A series of post-medieval pits, one of which contained 17<sup>th</sup> to 18<sup>th</sup> century pottery, were identified in the western part of the field but these are thought to represent either small-scale sand and gravel extraction or part of a small orchard. In addition however, a spread of burnt stone, albeit undated, is likely to represent a shallow burnt mound, was also identified in this area and may represent a focus of prehistoric activity. This exhibited many of the known characteristics identified for burnt mounds and likely forms an isolated but significant element of a wider prehistoric landscape.*

## **10 Acknowledgements**

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## **11 Bibliography**

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

- 
- AEA 1995 *Environmental archaeology and archaeological evaluations. Recommendations concerning the environmental component of archaeological evaluations in England*, Working Papers of the Association for Environmental Archaeology, **2**
- BGS 2016 *Geology of Britain Viewer*, <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>, British Geological Survey, accessed 3 January 2016
- Barfield, L, and Hodder, M, 1987 'Burnt mounds as saunas, and the prehistory of bathing', *Antiquity*, **61**, 370-9
- Barfield, L, and Hodder, M, 2010 'Burnt mounds in south Birmingham: excavations at Cob Lane in 1980 and 1981, and other investigations', *Transactions of the Birmingham and Warwickshire Archaeological Society*, **114**, 13-46
- Bradley, R, 2007 *The prehistory of Britain and Ireland*, New York
- Bradley, R, 2014 *Meriden Quarry, Meriden, Warwickshire. Archaeological Watching Brief (Phases 1 and 4): Interim Report*, Worcestershire Archaeology, Worcestershire County Council, report **2045**
- Cappers, R T G, Bekker, R M , Jans, J E A, 2012 *Digital seed atlas of the Netherlands*. Groningen Archaeological Studies, **4**, Barkhuis Publishing and Groningen University Library, Groningen
- CIfA 2014a *Standard and guidance: Archaeological field evaluation*, Chartered Institute for Archaeologists, <http://www.archaeologists.net/codes/ifa>
- CIfA 2014b *Standard and guidance for the collection, documentation, conservation and research of archaeological materials*, Chartered Institute for Archaeologists, <http://www.archaeologists.net/codes/ifa>
- DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government
- DCLG/DCMS/EH 2010 *PPS5 Planning for the historic environment: historic environment planning practice guide*, Department for Communities and Local Government/Department for Culture, Media and Sport/English Heritage
- English Heritage 2011 *Environmental archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*, Centre for Archaeology Guidelines
- Hedges, J, 1975 'Excavation of two Orcadian burnt mounds at Liddle and Beaquoy', *Proceedings of the Society of Antiquaries of Scotland* **106**, 39-98
- Hodder, M A, 1990 'Burnt Mounds in the English West Midlands', in Buckley, V (ed.) *Burnt Offerings: International contributions to Burnt Mound Archaeology*, Dublin, 105-111
- Hodder, M A, 2002 'Burnt mounds and beyond: the later prehistory of Birmingham and the Black Country', *West midlands regional research framework for archaeology, seminar 2*
- Hurst, D, 2011 'Middle Bronze Age to Iron Age: a research assessment overview and agenda', in Watt, S (ed) *The Archaeology of the West Midlands: A Framework for Research*, Oxford: Oxbow, 101-126
- Hurst, J D, and Rees, H, 1992 Pottery fabrics; a multi-period series for the County of Hereford and Worcester, in Woodiwiss, S G (ed), *Iron Age and Roman salt production and the medieval town of Droitwich*, CBA Res Rep, **81**, 200-9
- Jeffery, S, 1991 'Burnt mounds, fulling and early textiles', in M A Hodder and L H Barfield (eds) *Burnt Mounds and Hot Stone Technology. Papers from the Second International Burnt Mound Conference, Sandwell, 12th-14th October 1990*, West Bromwich, Sandwell Metropolitan Borough Council, 97-107
-

Loktionov, A, 2013 *Something for everyone: a ritualistic interpretation of Bronze Age burnt mounds from an ethonographic perspective*, The Post Hole, **26**, available at [http://www.theposthole.org/sites/theposthole.org/files/downloads/posthole\\_26\\_187.pdf](http://www.theposthole.org/sites/theposthole.org/files/downloads/posthole_26_187.pdf), accessed 3/2/2015

Mann, A and Jackson, R, forthcoming *Clifton Quarry, Worcestershire (2006-09), Pits, pots and cereals: The archaeology of the central Severn Valley*, Oxbow Books

Mawer, A, and Stenton, F M, 1927 *The place-names of Worcestershire*, Cambridge University Press, London

Quinn, B and Moore, D, 2009 'Fulacht fiadh' and the beer experiment', in M Stanley (ed) *Dining and Dwelling*, NRA Monograph Series **6**, Dublin, 43-53

Ragg, J M, Beard, G R, George, H, Heaven, F W, Hollis, J M, Jones, R J A, Palmer, R C, Reeve, M J, Robson, J D, and Whitfield, W A D, 1984 *Soils and their use in midland and western England*, Soil Survey of England and Wales, **12**

SMA 1993 *Selection, retention and dispersal of archaeological collections*, <http://www.socmusarch.org.uk/publica.htm>

Soil Survey of England and Wales, 1983 *Midland and Western England*, sheet 3, scale 1:250,000 + Legend for the 1:250,000 Soil Map of England and Wales (A brief explanation of the constituent soil associations)

Stace, C, 2010 *New flora of the British Isles*, Cambridge University Press, 3<sup>rd</sup> edition

Thorn, F, and Thorn, C, 1982 *Domesday Book - Worcestershire*, Chichester

Topping, P, 2011 *Burnt mounds*, English Heritage, Introductions to Heritage Assets

VCH I, Page, W (ed), 1913 *Victoria History of the County of Worcestershire*, I

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

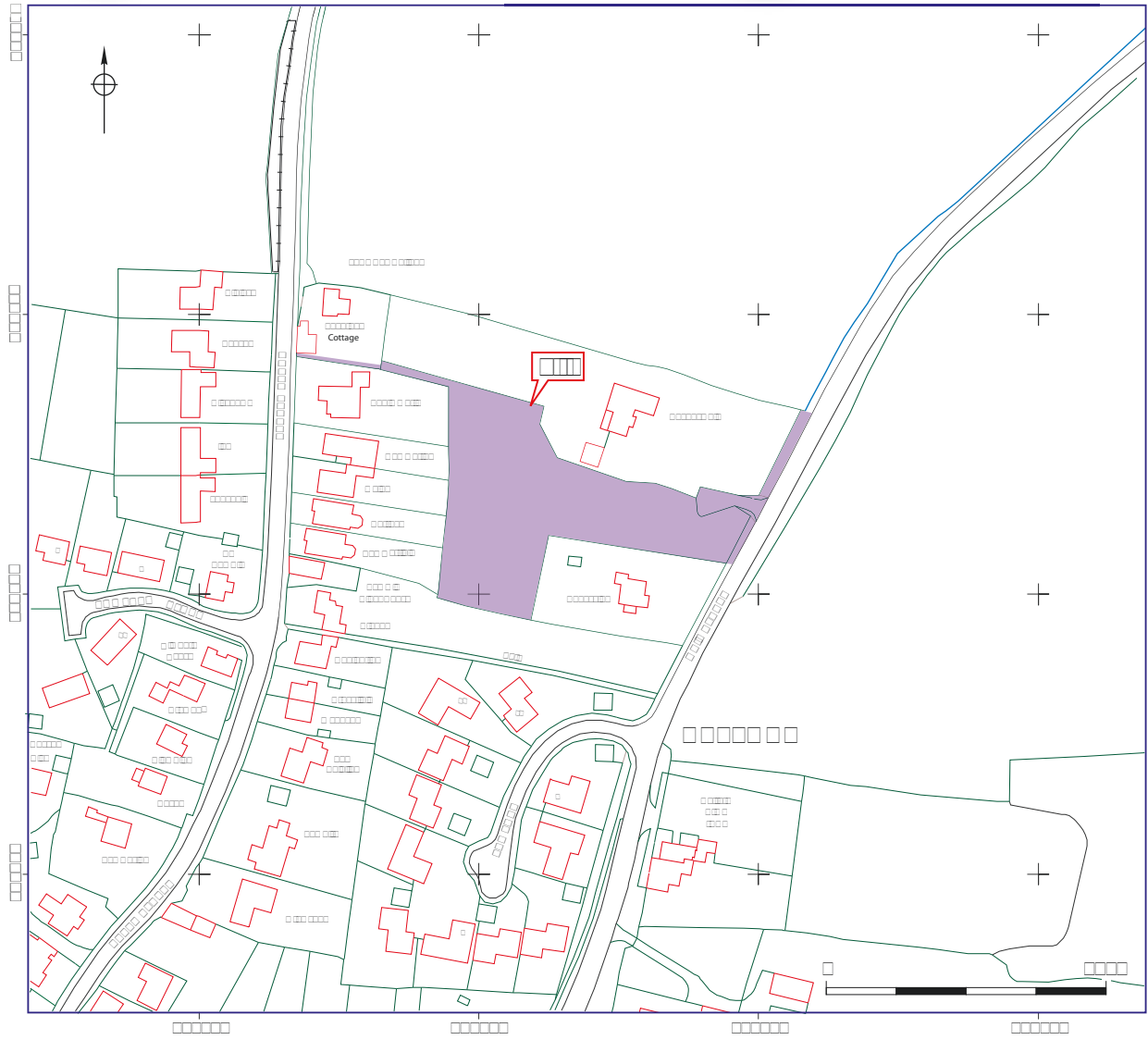
WA 2016 *Proposal for an archaeological evaluation on land adjacent to Keppel gate, Upton Road, Defford, Worcestershire*, Worcestershire Archaeology, Worcestershire County Council, unpublished document dated 20 January 2016, **P4761**

WCC 2010 *Standards and guidelines for archaeological projects in Worcestershire*, Planning Advisory Section, Worcestershire Archive and Archaeology Service, Worcestershire County Council unpublished report **604**, amended July 2012

WCC 2016 *Requirements for an archaeological evaluation on land adjacent to Keppel gate, Upton Road, Defford, Worcestershire*, Information and Advisory Section, Archive and Archaeology Service, Worcestershire County Council unpublished document dated 19 January 2016



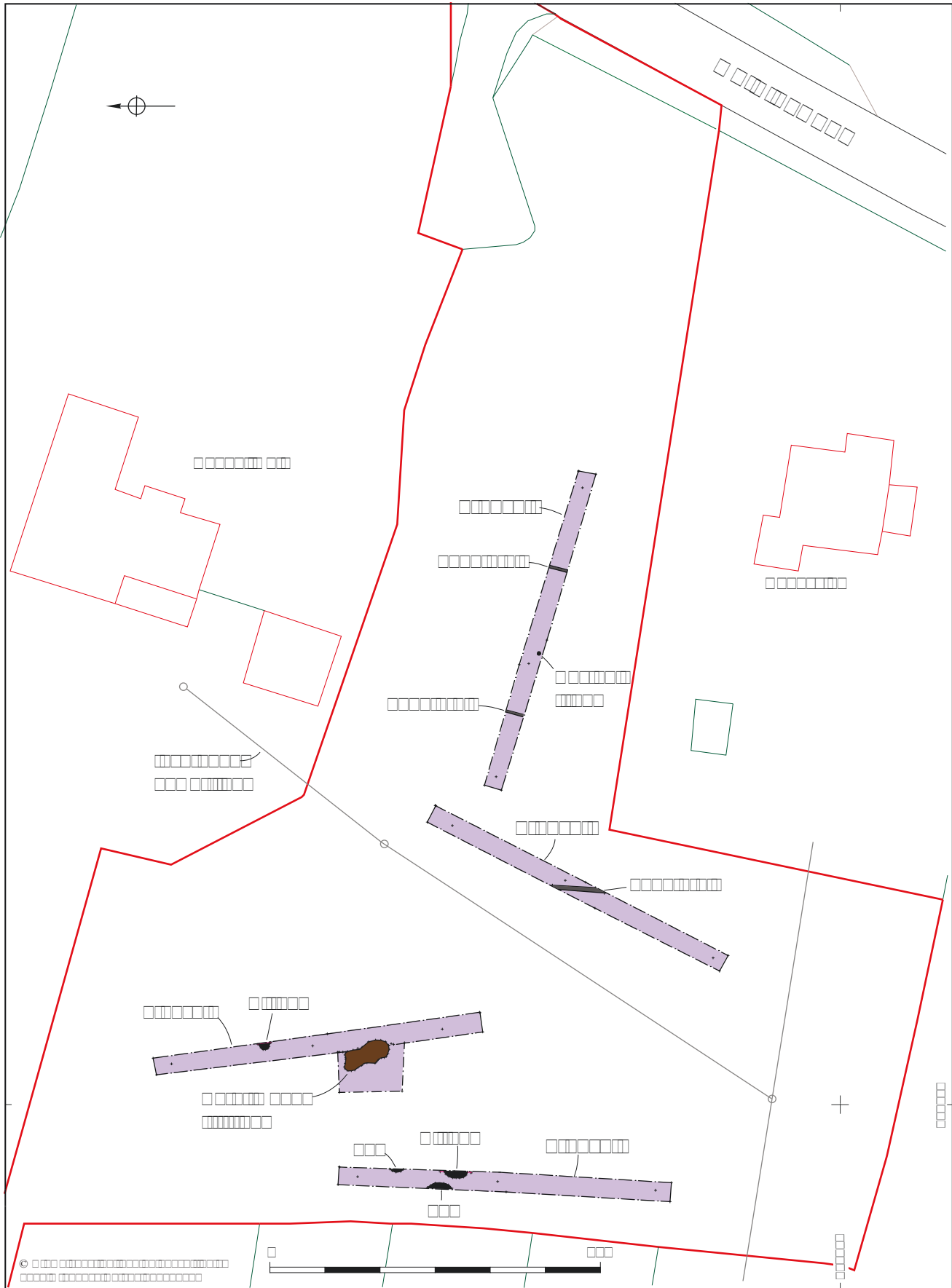
**Figures**



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**Plates**



*Plate 1: The site viewed facing south from the north-west corner*



*Plate 2: Trench 1 facing west*

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*Plate 3: Trench 3 facing south-east*



*Plate 4: Trench 4 facing south*



*Plate 5: Burnt mound deposit 305 in section*



*Plate 6: Burnt mound deposit 305 during machining in Trench 3 extension*

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*Plate 7: Burnt mound deposit 305 fully exposed*



*Plate 8: Post-medieval pit 303 in Trench 3*





*Plate 9: Post-medieval pit 408 in Trench 4*



*Plate 10: Roman oven material from subsoil 301 in Trench 3*

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## Appendix 1 Trench descriptions

### Trench 1

Length: 30m

Width: 1.6m

Orientation: North-west to south-

#### Context summary:

Context	Feature	Type	Description	Height/ depth	Interpretation
100	Topsoil	Layer	Friable mid greyish brown sandy silt	0.22m	Accumulated topsoil creating surface of grassy field.
101	Subsoil	Layer	Friable mid orangey brown sandy silt	0.41m	Subsoil
102	Natural	Layer	Compact mid yellowish grey sandy silt	0.11m +	Natural
103	Posthole	Cut		0.11m	Cut of small post-hole, probably modern. Maybe related to the domestic garden use, rather than agricultural or being part of a substantial structure.
104	Posthole	Fill	Friable light brownish grey sandy silt	0.11m	Fill of small post hole [103].
105	Field drain	Cut			Cut of land drain, aligned N-S.
106	Field drain	Fill			Fill of land drain [105]. Contains ceramic pipe. Probably modern.
107	Field drain	Cut			Cut of land drain, aligned N-S.
108	Field drain	Fill			Fill of land drain [107] at west end of trench. Contains ceramic pipe. Probably modern.

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## Trench 2

Length: 30m

Width: 1.6m

Orientation: North to south

### Context summary:

Context	Feature	Type	Description	Height/ depth	Interpretation
200	Topsoil	Layer	Friable mid greyish brown sandy silt	0.26m	Topsoil - same as (100)
201	Subsoil	Layer	Friable mid orangey brown sandy silt	0.27m	Subsoil - same as (101)
202	Natural	Layer	Compact mid yellowish grey sandy silt	0.07m +	Natural - same as (102)
203	Field drain	Cut			Cut of land drain. Straight sided linear containing (204).
204	Field drain	Fill			Fill of land drain [203]. Probably Victorian due to shape of ceramic drain. 1 piece of tile in fill.

**Trench 3**

Length: 30m

Width: 1.6m

Orientation: North to south

**Context summary:**

<b>Context</b>	<b>Feature</b>	<b>Type</b>	<b>Description</b>	<b>Height/ depth</b>	<b>Interpretation</b>
300	Topsoil	Layer	Friable mid greyish brown sandy silt	0.20m	Topsoil - same as (100) and (200)
301	Subsoil	Layer	Friable mid orangey brown sandy silt	0.26m	Subsoil - same as (101) and (201)
302	Natural	Layer	Compact mid yellowish grey sandy silt	0.10m +	Natural - same as (102) and (202)
303	Pit	Cut		0.10m	Cut of small pit containing fill (304). Pit has been cut through the subsoil during its formation, so dates to whenever that process occurred. Probably post medieval. Function of pit unclear, but cut is fairly regular in plan with steep sides.
304	Pit	Fill	Friable mid brownish grey sandy loam	0.10m	Fill of pit [303]. Pit is unlikely to have been a domestic refuse pit given the lack of finds and the un-humic natural of the fill. May have been deliberately back-filled as fill is fairly homogenous.
305	Burnt Mound	Layer	Moderately Compact mid brownish grey sandy silt	0.18m	Burnt mound layer containing abundant heat cracked stones and moderate charcoal. No dating evidence found but possibly Bronze Age. Proximity to water and level of burning suggest that this may have been used to heat water, possibly for cleaning purposes, cloth dying, or similar. Fairly small and irregular shape.

## Trench 4

Length: 30.50m      Width: 1.6m      Orientation: North to south

### Context summary:

Context	Feature	Type	Description	Height/ depth	Interpretation
400	Topsoil	Layer	Friable mid greyish brown sandy silt	0.36m	Soft mid grey brown sandy silt with frequent bioturbation, occasional CBM and moderate sub-rounded medium stones. Topsoil - same as (100), (200) and (300)
401	Subsoil	Layer	Soft mid orangey brown sandy silt	0.25m	Subsoil - occasional CBM, slag, and bone. Same as (101), (201) and (301)
402	Natural	Layer	Soft light yellowish grey sand	0.06m +	Sand natural with occasional gravel patches. Same as (102), (202) and (302).
403	Pit	Fill			Fill of possible pit [404]. Same fill as (405).
404	Pit	Cut			Pit feature at edge of trench.
405	Pit	Fill	Mid greyish brown silty sand		Silty fill of [406].
406	Pit	Cut			Pit cut at edge of trench.
407	Pit	Fill	Soft mid greyish brown sandy silt	0.90m +	Fill of pit [408]. Pottery suggests post-med date. Not fully excavated due to water table level which flooded feature as soon as dug into. Similar homogenous fills seen at edge of trench to NW and N. Full extent not visible.
408	Pit	Cut		0.90m +	Cut of possible pit feature. Extends beyond baulk so not fully visible. Likely post-med / modern in date based on finds and that it cuts subsoil. Similar to another feature at limit of excavation to the NW. Could not be fully explored due to water in ground filling it up rapidly.
409	Layer	Layer	Moderately Compact light brownish grey silty clay	0.22m	Clayey layer in vicinity of pit [408]. Seals fill (407). Likely to be relatively modern in date as pit [408] cuts the subsoil. Does not appear in western side of trench so probably fairly localised.

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## **Appendix 2 Technical information**

### **The archive (site code: WSM 67665)**

The archive consists of:

- 8 Context records AS1
- 1 Field progress reports AS2
- 2 Photographic records AS3
- 65 Digital photographs
- 1 Drawing number catalogues AS4
- 8 Scale drawings
- 1 Sample number catalogues AS18
- 4 Trench record sheets AS41
- 1 Box of finds
- 1 CD-Rom/DVDs
- 1 Copy of this report (bound hard copy)

The project archive is intended to be placed at:

Worcestershire County Museum  
Museums Worcestershire  
Hartlebury Castle  
Hartlebury  
Near Kidderminster  
Worcestershire DY11 7XZ  
Tel Hartlebury (01299) 250416

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## Summary of data for Worcestershire HER

WSM 67765 (HER event number)

P4761 (Worcestershire Archaeology internal project code)

### Environmental

context	sample	residue mesh size (mm)	residue volume (L)	charcoal	artefacts	comments
305	1	1	6	abt	abt fire-cracked stone, ?chert fused with charcoal	Other = ?chert

Environmental Table 1: Summary of remains from bulk sample

context	sample	preservation type	species detail	category remains	quantity/diversity	comment
305	1	?wa	<i>Chenopodium glaucum/rubrum</i> , unidentified root fragments, unidentified wood fragments	misc	+++/low	probably modern and intrusive
305	1	ch	<i>Quercus robur/petraea</i> wood	misc	+++/low	poorly preserved, ?vitrified

Environmental Table 2: Plant remains from context (305)

### Artefacts

period	material class	material subtype	object specific type	count	weight(g)	start date	end date	specialist report? (note 2)	key assemblage ? (note 3)
Roman	ceramic		oven	1	47	200	410	Y	N
medieval/post-medieval	ceramic		brick/tile	1	2	1200	1800	Y	N
post-medieval	ceramic		pot	1	15	1600	1800	Y	N
post-medieval	ceramic		roof tile	1	78	1600	1800	Y	N
modern	slag	slag(fe)	slag	1	549	1850	2000	Y	N
undated	bone	animal bone		7	44			N	N