# Archaeological watching brief of additional service trench works at Hartlebury Castle, Hartlebury, Worcestershire







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# Worcestershire Archaeology

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Status: Version 1

Date: 15<sup>th</sup> December 2017

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Project reference: P4695 + P5198

Report reference: 2511

HER reference: WSM68500 / WSM69555

Oasis id Fieldsec1-27661

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# Archaeological works at Hartlebury Castle, Hartlebury, Worcestershire

Graham Arnold (project leader)

With contributions by Rob Hedge

Illustrations by Carolyn Hunt

# Summary

An archaeological watching brief was undertaken at Hartlebury Castle, Hartlebury, Worcestershire (NGR SO 8363 7124) on additional works following a new car park, drainage and services for an adjacent café and visitor centre. It was commissioned by the Hartlebury Castle Preservation Trust. A planning application was granted by Wychavon District Council (W/14/0159), subject to archaeological monitoring. Groundworks for the car park, paths and drainage were reported in June 2017.

A separate planning application for an above ground gas tank was submitted by Hartlebury Castle Preservation Trust to Wychavon District Council for permission for the installation of an above ground gas tank and enclosure fence (17/01358/FUL). The proposed tank is in the vicinity of an underground ice house related to the castle.

It was considered by the Aidan Smith, Archaeology and Planning Advisor for Wychavon and Malvern Hills District Councils, that construction of the proposed tank had the potential to have an adverse impact on the ice house.

A ground penetrating radar survey was carried out to establish the location of the ice house and inform the application (SUMO 2017). This survey revealed the presence of features in the footprint of the gas tank which were thought to have the potential to represent the ice house. Mr Smyth advised that further evaluation was required to establish whether the identified features relate to the ice house. A 1m test pit in the location of the gas tank was originally proposed.

A new service trench was also being excavated in the same location and these works were monitored by an archaeologist as part of the on-going watching brief. This revealed a 20<sup>th</sup> Century demolition deposit from a brick boundary wall and related buttressing.

No structural evidence of the underground ice house was revealed during the works and it was concluded that the structure will not be impacted by the proposed installation of an above ground gas tank. No further significant archaeology was revealed during the monitoring of additional service pipe trench in the open field to the northwest of the car park.

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# Report

# 1 Background

### 1.1 Reasons for the project

An archaeological watching brief was undertaken at Hartlebury Castle, Hartlebury, Worcestershire (NGR SO 8363 7124) on additional works following a new car park, drainage and services for an adjacent café and visitor centre. It was commissioned by the Hartlebury Castle Preservation Trust. A planning application was granted by Wychavon District Council (W/14/0159), subject to archaeological monitoring. Groundworks for the car park, paths and drainage were reported in June 2017.

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It was considered by the Aidan Smith, Archaeology and Planning Advisor for Wychavon and Malvern Hills District Councils, that construction of the proposed tank has the potential to have an adverse impact on the ice house.

A ground penetrating radar survey was carried out to establish the location of the ice house and inform the application (SUMO 2017). This survey revealed the presence of features in the footprint of the gas tank which could potentially represent the ice house but could be rubble or made ground. Mr Smyth advised that further evaluation was required to establish whether the identified features relate to the ice house.

The project conforms to the requirements of the Wychavon District Council Planning Officer and for which a project proposal (including detailed specification) was produced (WA 2017).

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

#### 2 Aims

The aim of the project was to:

- To record any archaeological evidence relating to the Civil War.
- To record any other archaeological evidence that may be identified during the course of the works.
- Gather information and prepare a report which, beyond reasonable doubt, will inform decision making.

The objectives of the project were to:

- Determine the presence or absence of archaeological deposits, in particular whether features identified by Ground Penetrating Radar survey relate to the ice house, another structure or are natural in origin.
- Identify their location, nature, date and preservation.
- Assess their significance.
- Assess the likely impact of the proposed development.

#### 3 Methods

#### 3.1 Personnel

The project was led by Graham Arnold (BA (hons.), MSc); who joined Worcestershire Archaeology in 2009 and has been practicing archaeology since 2002, assisted by Jamie Wilkins (BA (hons.)). The project managers responsible for the quality of the project was Tom Rogers (BA (hons.); MSc), and Robin Jackson (BA (hons.); ACIfA). Illustrations were prepared by Carolyn Hunt (BSc (hons.); PG Cert; MCIfA). Finds analysis and photography was undertaken by Rob Hedge (MA Cantab).

#### 3.2 Documentary research

An archaeological desk-based assessment (DBA) was undertaken on behalf of The Hartlebury Castle Preservation Trust (Cornah and Robson-Glyde 2014). A Ground Penetrating Radar Survey was undertaken in the area of the proposed gas tank due to the vicinity of the Ice house (SUMO 2017). This highlighted anomalies, with a proposal to dig a 1m hand test pit in the area. It transposed that the pipe trench for a new LV cable ran over this area and was monitored by an archaeologist.

#### 3.3 Fieldwork strategy

A detailed specification has been prepared by Worcestershire Archaeology (WA 2017).

Fieldwork was undertaken between 13 November and 23 November 2017. The site reference number used by the Historic Environment Record to record archaeological "events", and site code used in the archive is WSM 68500 and WSM 69555.

One pipe trench was monitored in the area of the proposed gas tank., amounting to just over 57m in length and 0.60m wide, a maximum of 1.15m deep. The location of the trench is indicated in Figure 5. The location of the proposed gas tank is also highlighted. A further pipe trench 0.60m wide and 1.20m deep was also monitored across the open field to the north-east, with natural topsoil, subsoil and geology noted. No finds or features were recovered or observed.

Deposits considered not to be significant were removed under 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). On completion of excavation, 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

#### 3.5.1 Artefact recovery policy

Recovery of artefacts was undertaken according to standard Worcestershire Archaeology practice (WA 2012). In the event no artefacts pre-dating the modern period were identified. with 19<sup>th</sup> or 20<sup>th</sup> Century modern glass, brick, clinker and cbm from a former retaining wall recorded. The bricks were machine made with modern mortar and measured 9" x 4 1/2" x 3". Only a sample of artefacts were retained, which included blue and white porcelain and an engraved bone toothbrush.

#### 3.6 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

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#### 4 Results

#### 4.1 Structural analysis

The trench recorded is shown in Fig 5.

#### Main deposit descriptions

#### Trench 4

Maximum dimensions: Length: 57.00m Width: 0.60m Depth: 0.74 – 1.15m

Orientation: E-W

Context	Classification	Description	Depth below ground surface (b.g.s) – top and bottom of deposits
400	Topsoil	Dark greyish brown friable sandy loam with frequent glass cbm charcoal and vegetation rooting.	0.00 – 0.48m
401	Made ground	Loose dark brownish black ash, clicker layer in a silty sand matrix with frequent bricks from wall, glass, charcoal and porcelain. 20 <sup>th</sup> Century dump deposit from demolition of brick revetment / retaining wall and buttress.	0.48 – 0.70m
402	Made ground	Compact mid brownish orange clayey sand with frequent charcoal. Made ground or bank material from up cast related to moat in north. Modern disturbance.	0.70 – 1.15m +

# 5 Synthesis

The archaeological monitoring of groundworks in the area of the proposed gas tank indicated that anomalies highlighted on the GPR survey (SUMO 2017 – Appendix 1) related to 20<sup>th</sup> Century demolition rubble. This is thought to be from an outbuilding in the area first recorded on the 1821 inclosure map (Cornah and Robson-Glyde 2014). This was later replaced by a brick boundary or retaining wall and buttressing by the time of the 1888 OS map and still existed on the 1927 OS map. This suggests an early 20<sup>th</sup> Century date for the date of demolition. The bricks were machine made with modern mortar and measured 9" x 4 1/2" x 3". Only a sample of artefacts were retained, which included two fragments of blue and white porcelain and an engraved bone toothbrush (Plate 3). These deposits corresponded with the anomalies on the GPR survey (SUMO 2017).

No structural evidence of the underground Ice house was revealed during the works and the structure will not be impacted by the proposed installation of an above ground gas tank. No further significant archaeology was revealed during the monitoring of the additional service pipe trench in the open field to the north-west of the car park.

# **6** 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 watching brief was undertaken on behalf of Hartlebury Castle Preservation Trust at Hartlebury Castle, Hartlebury, Worcestershire (SO 8363 7124). The works related to additional service trenches related to previous works in constructing a car park and the proposed installation of an above ground gas tank and enclosure fence, in close proximity to an underground Ice house relating to the castle. A ground penetrating radar survey was carried out to establish the location of the ice house and inform the application. This survey revealed the presence of features in the footprint of the gas tank which could potentially represent the ice house but could be rubble or made ground. A service trench running across this location was monitored by an archaeologist, which revealed the anomalies related to the 20<sup>th</sup> Century brick rubble. This is thought to be from an outbuilding in the area first recorded on the 1821 inclosure map. This was later replaced by a brick boundary or retaining wall. and buttressing. This suggests an early 20<sup>th</sup> Century date for the date of demolition. A sample of artefacts were retained from the deposit, which included two fragments of blue and white porcelain and an engraved bone toothbrush. No evidence of the Ice house structure was revealed during works and no further significant archaeology was present in the other service trenches in the open field to the north-west of the car park.

# 7 Acknowledgements

Worcestershire Archaeology would like to thank the following for their kind assistance in the successful conclusion of this project, Gary Kelly, Foreman and Jason Grant, Works Manager, Walsh Construction, Ross Hetherington, Rodney, Melville and Partners, Peter White, Fresh Life Consulting and Aidan Smyth, Archaeology and Planning Officer for Wychavon and Malvern Hills District Councils.

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Figures			

Hartlebury Castle, Hartlebury, Worcestershire

# **Plates**



Plate 1 Trench 4 through proposed gas tank location.  $2 \times 1m$  scales looking west. Gas tank location is at 1m scale in the foreground.



Plate 2 Sample section of trench 4, showing topsoil, clinker demolition deposit and disturbed natural at base.



Plate 3 Bone toothbrush retrieved from deposit (401) 8cm scale.



Plate 4 Proposed gas tank location fenced off around trench 4.  $2 \times 1 \text{m}$  scales.



Plate 5 Sewer service trench in carpark with modern hardcore, surfacing and natural sands.



Plate 6 Location of service trench after backfilling. Ran across open field to existing sewer. View Southeast towards Hartlebury Castle.

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Appendix 1			

Hartlebury Castle, Hartlebury, Worcestershire

# Appendix 2 Technical information

# The archive (site code: WSM 68500 and 69555)

The archive consists of:

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3	Field progress reports AS2
3	Photographic records AS3
119	Digital photographs
1	Drawing number catalogues AS4
1	Scale drawings
4	Trench record sheets AS41
1	Box of finds
1	CD-Rom/DVDs

# The project archive is intended to be placed at:

Worcestershire County Museum

Copy of this report (bound hard copy)

Museums Worcestershire

Hartlebury Castle

Hartlebury

Near Kidderminster

Worcestershire DY11 7XZ

Tel Hartlebury (01299) 250416



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