

BBRH19



# BEWDLEY BANK RESERVOIR, BURGHILL, HEREFORDSHIRE

## ARCHAEOLOGICAL WATCHING BRIEF

PLANNING REF. 184286  
EHE NO. EHE80401

commissioned by JN Bentley Management Systems

July 2019



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### PROJECT INFO:

HA Project Code **BBRH19** / HAS No. **1346** / NGR **SO 48760 44510** / Parish **Burghill** / Local Authority  
**Herefordshire Council** / OASIS Ref. **headland3-354756** / Archive Repository **Hereford Museums Service**

### PROJECT TEAM:

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Approved by **Luke Craddock-Bennett**



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## PROJECT SUMMARY

An Archaeological Watching Brief was undertaken by Headland Archaeology (UK) Ltd during groundworks associated with the construction of a covered reservoir at Bewdley Bank, Burghill, Herefordshire. The investigation identified the remains of a single, former hedge line, possibly associated with former strip fields. A general paucity of artefactual material was observed, with evidence of limited arable agricultural use of the site suggested.

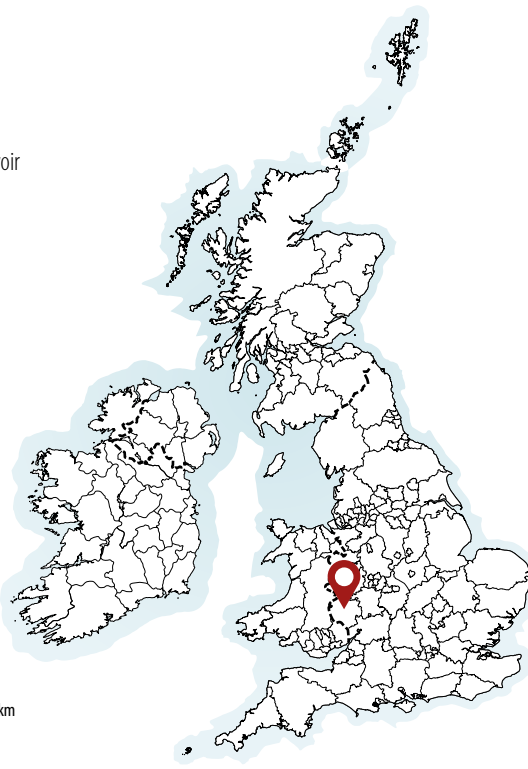
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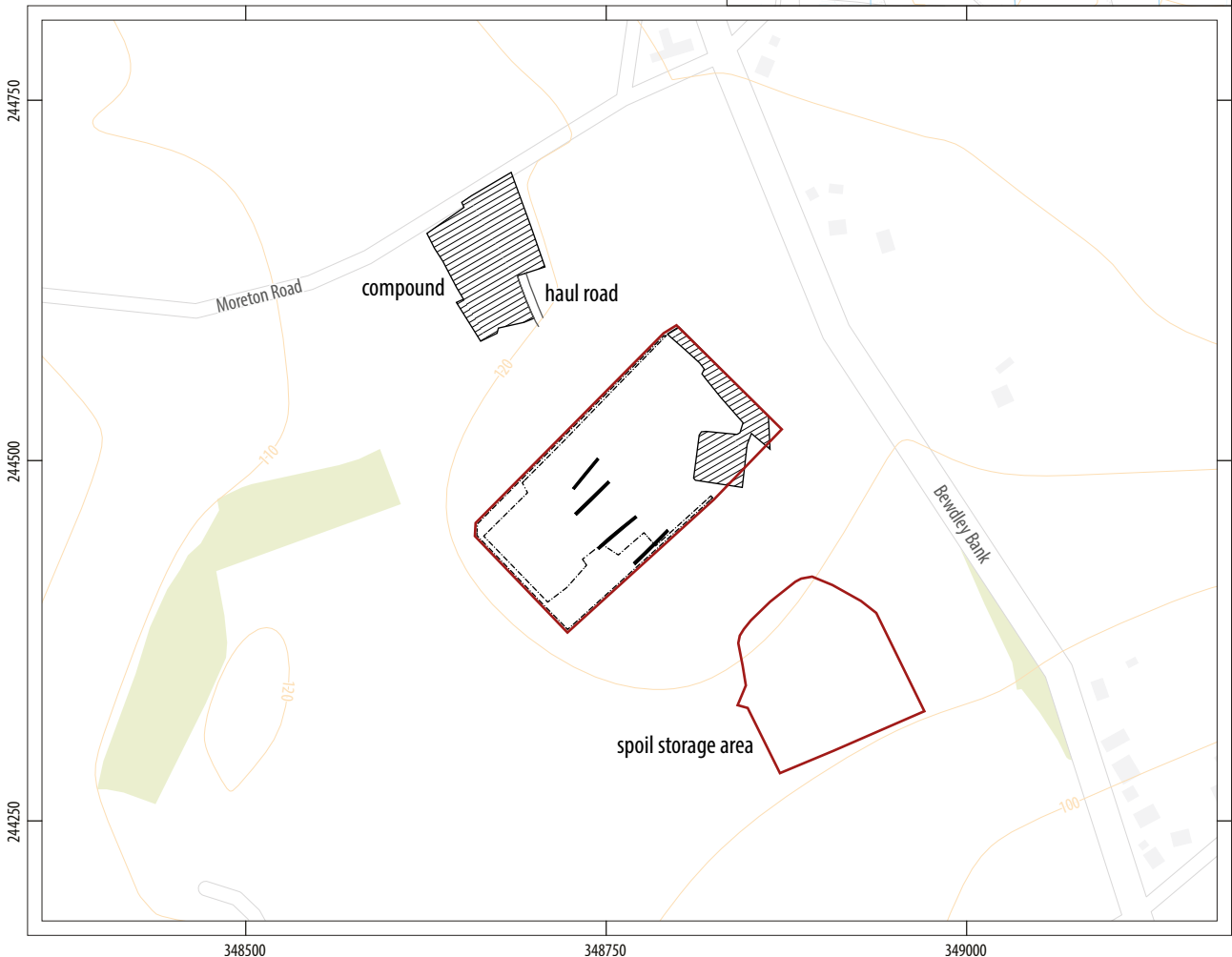
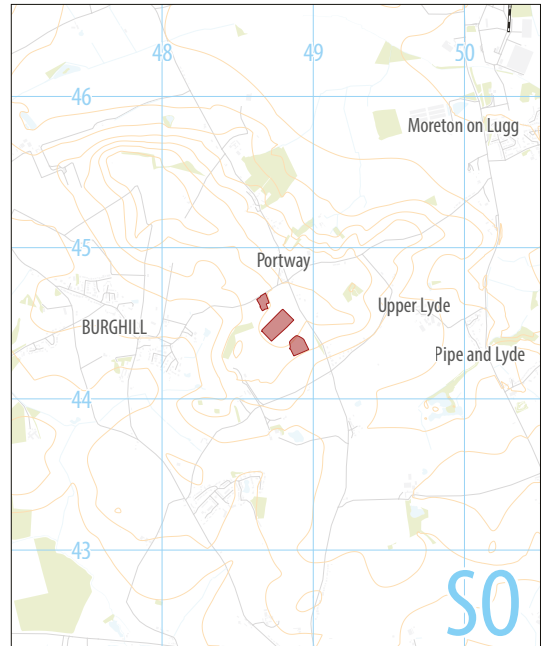
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Bewdley Bank Reservoir  
 Burghill  
 Herefordshire



0 200km  
 1:12,500,000 @ A4



0 100m  
 1:5,000 @ A4

- monitored area
- trench location
- previously excavated area
- area stripped by mechanical excavator



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ILLUS 1 Site location



# BEWDLEY BANK RESERVOIR, BURGHILL, HEREFORDSHIRE

## ARCHAEOLOGICAL WATCHING BRIEF

### 1 INTRODUCTION

Headland Archaeology was commissioned by JN Bentley Management Systems, to undertake an archaeological watching brief during groundworks associated with the construction of a new covered reservoir near the village of Burghill in Herefordshire. This report presents the results of that work.

#### 1.1 PLANNING BACKGROUND AND OBJECTIVES

A heritage statement (Adams 2019) was prepared to inform a planning application (ref: 184286), as requested by Herefordshire County Council. Consultation with the Herefordshire Council Archaeological Advisor, Mr Julian Cotton, agreed that an archaeological investigation in the form of an archaeological watching brief would be undertaken during groundworks associated with the scheme.

Specifically, planning condition 11 required all works to be undertaken in accordance with an Archaeological Written Scheme of Investigation (WSI).

A Written Scheme of Investigation was prepared by Mott MacDonald (Ricchi 2019) and approved by the Archaeological Advisor. An archaeological method statement (Thomson 2019) was subsequently produced in line with the requirements of the WSI. The WSI identified a monitoring requirement for the reservoir and ancillary areas identified as a valve house; sodium hypochlorite dosing kiosk; sustainable drainage including attenuation basin; access road and any intrusive, associated soft landscaping. The ancillary areas formed part of the overall strip footprint (Illus 2).

This report meets the requirements of section 6 of the WSI and will be submitted to the OASIS online database and Herefordshire Historic Environment Record (HER).

The WSI also referred to works and monitoring requirements associated with a buried outfall pipeline, due to commence at a later date, and not subject to this report.

#### 1.2 SITE LOCATION, DESCRIPTION AND SETTING

The development area is located 0.60km to the east of the village of Burghill and 2.10km to the north-west of Hereford, centred around Ordnance Survey Grid Reference SO 48760 44510 (Illus 1). It is situated within the undulating, rural landscape to the north of Hereford. The location of the proposed covered reservoir itself is situated on a high point within the locale at a height of around 125m above Ordnance Datum (aOD).

The bedrock of the proposed development area comprises Raglan Mudstone Formation; a sedimentary rock formed approximately 424 to 419 million years ago in an environment dominated by rivers. Above this the superficial deposit varies across the proposed development area.

In the vicinity of the proposed covered reservoir, glaciofluvial deposits of sand and gravel are recorded. These were formed up to 2 million years ago in Ice Age conditions. These deposits form beds, channels, plains and fans associated with meltwater (BGS 2019).

## 1.3 ARCHAEOLOGICAL BACKGROUND

Detailed assessment of the site was presented in the Heritage statement (Adams 2019). A summary of the archaeological potential and background given below is derived from that document. Despite the proximity to one of four known Romano-British small towns within Herefordshire (Stretton Sugwas, 2km south-west of the proposed development area), only a small number of Romano-British records are present within the wider area. The closest remains comprise linear cropmarks, interpreted as a continuation of Canon Pyon Road, 100m south of the development area. The heritage statement identified that three Roman coins have been recovered through metal detecting within the study area but their exact findspots are protected. The only record on medieval activity with the proposed development area refers to lynchets located on the north-eastern corner. According to the HER and the site visit, these were 'obliterated by ploughing'. The proposed development site is likely to have formed part of the surrounding agricultural landscape of Burghill.

The historic landscape characterisation of the area describes the majority of land within the proposed development area as 'closes dominated by small regular broad closes'. The available historic mapping supports this and shows that the majority of the larger field boundaries that survive pre-date enclosure. The Tithe map of 1846 shows that the area within which the proposed covered reservoir would be located is largely divided up into strip fields and therefore had not yet been enclosed. The majority of these strip fields share the same name 'In Windmill Field', indicating that there was potentially a former windmill within this field. This map also shows a path in the same location as the modern footpath running around the larger field boundaries.

## 2 AIMS AND OBJECTIVES

In general, the purpose of the investigation was to record and advance understanding of the significance of any identified heritage assets before they were lost. In accordance with the WSI and Method Statement, this would be achieved by determining and understanding the nature, function and character of any remains on the site, disseminating the results of that work and archiving the material and paper records.

The objectives of the investigation were as follows:

- › To ensure the excavation and recording of any archaeological remains that would be disturbed by the development;
- › To produce and deposit a satisfactory archive and disseminate the results of the work via grey-literature reporting and publication as appropriate.

The resulting archive (finds and records) have been organised and will be deposited with Herefordshire Museum Service, to facilitate access for future research and interpretation for public benefit.

## 3 METHOD

The fieldwork was conducted in accordance with the above mentioned WSI and method statement and in accordance with the following documents:

- › Code of Conduct (Chartered Institute for Archaeologists, 2014a)
- › Standards and Guidance for Archaeological Field Evaluations (Chartered Institute for Archaeologists, 2014b)

A variable methodology of machine excavation was employed over an area of approximately 21,000m<sup>2</sup>. The southern, western and northern perimeters of the reservoir and ancillary facilities were defined and stripped by removal of between 0.25 and 0.45m of overburden, using a 2.50m wide, bladed grading bucket on a 35tonne tracked mechanical excavator. Two further rectangular areas were also stripped with a bladed grading bucket (Illus 2). The rest of the reservoir area and a soil storage area were stripped using a D6T bulldozer (Illus 3). Inspection of bulldozed areas was undertaken when approximately 20m wide areas were stripped and the bulldozer clear of the areas. Visual inspection of the areas to identify artefact distributions and exposed soil horizons was undertaken, supported by hand excavation of small areas to confirm whether subsoil or geological deposits were exposed.

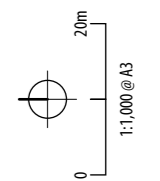
Thereafter, ground reduction continued to formation depths, between 1.20 and 4.00m below ground level (BGL). The access road was stripped of topsoil between 0.20 and 0.30m depth using a 13.5tonne, tracked excavator fitted with a bladed ditching bucket.

Given the methodology to achieve formation depths and in light of observations from initial stripping, a series of trenches across the area of highest potential and visible colluvial subsoil deposits was excavated. This was carried out by a 13.5tonne tracked excavator fitted with a bladed ditching bucket under archaeological control and supervision to identify any archaeological remains or horizons.

Part of the eastern end of the footprint, measuring approximately 2,600m<sup>2</sup>, had previously been stripped and disturbed by a replacement water-pipe easement and small compound area. Similarly, to the north of the reservoir footprint, a compound area had been constructed prior to the commencement of archaeological monitoring. These works did not form part of this scheme and did not fall within the remit of the planning condition and WSI.

The fieldwork was carried out between 13th and 30th May 2019.

All recording followed standard archaeological guidelines as set out by the Chartered Institute for Archaeologists (CIfA). The recorded contexts were assigned unique numbers and recording was undertaken on Headland Archaeology pro forma trench and context record sheets. A photographic record comprised black and white prints supplemented by corresponding digital photographs, with a graduated metric scale clearly visible in each photograph. An overall plan of the site and recorded features was digitally produced and was accurately linked to the National Grid and heights to OD. Digital surveying was undertaken using a Trimble dGPS system.



- monitored area
- trench location
- colluvial subsoil
- previously excavated area
- area stripped by mechanical excavator
- hedge
- sondage





**ILLUS 3** General view of bulldozer stripping reservoir area, looking north-east

## 4 RESULTS

### 4.1 GENERAL STRATIGRAPHY

The earliest deposits encountered represented geological deposition in the form of glacio-fluvial gravel deposits (003), variable patches of reddish brown, stoney clay (004) and a reddish grey agglomerate-stone outcrop (005).

Located towards the centre of the reservoir footprint, an approximately 25 to 30m wide band of light pinkish brown slightly sandy, silty clay (006) (Illus 2) was identified which was located in a natural topographic depression in the hill, dropping away to both the north and south of the hill-top. The deposit was at least 0.30m thick and identified as deriving from colluviation and general hill-wash. Four, approximately 30m long, 1.80m wide trenches were excavated across the deposit and feature to fully determine its nature (Illus 4). A few fragments of ceramic building material (CBM) were observed within a generally sterile deposit containing little in the way of inclusions.

Across the rest of the strip area, a patchy, shallow subsoil deposit (002) survived variably between 0.05 and 0.20m thick and was in turn sealed by a variably 0.20–0.25m thick topsoil. The interface between the latter deposits being observed as irregular and occasionally diffuse.

A general paucity of artefactual material was noted relative to both the subsoil and topsoil deposits with only a few modern glazed

ceramics and cbm fragments observed. A single clay pipe stem fragment and shard of bottle glass were also observed. The items were not retained, with a photographic record made of selected, representative items.

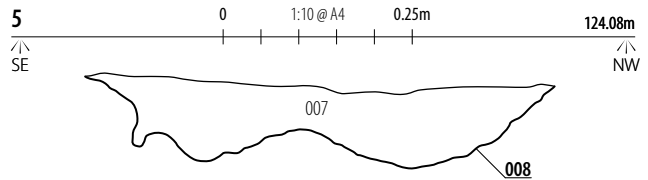
Stripping of the access/haul road to the north of the reservoir area revealed the same stratigraphic sequence of a shallow (0.05–0.10m thick) subsoil overlying glacio-fluvial gravels and sealed by a 0.20–0.25m thick topsoil.

### 4.2 ARCHAEOLOGICAL REMAINS

Recorded broadly centrally to the reservoir footprint within Trench 03 of four excavated, a linear feature [008] was identified within colluvial subsoil deposits (006). The feature was oriented broadly northeast-southwest, slightly meandering, and measured 0.62m wide by a maximum of 0.12m deep and was interpreted as the remnants of a former hedge-line (Illus 5). It continued beyond the limits of the trenched area but was not visible in other stripped areas, suggesting a high degree of truncation and denudation of the soils. The feature had irregular sides and an uneven base and contained a single, sterile fill (007). No dateable material was recovered.

## 5 DISCUSSION

The most noticeable factor identified during the course of the watching brief, was the paucity of artefactual material, including more recent and post-medieval artefacts. This would appear to



**ILLUS 4** View of Trench 4 through colluvial subsoil, looking west  
**ILLUS 5** North-east facing section through former hedge line [008]

suggest limited, arable agricultural use of the land, with no density of evidence of practices such as manuring of the fields. Similarly, the often, shallow topsoil depth and the largely irregular interface between the topsoil and surviving subsoil deposit suggested a lack of intensive recent plough activity, somewhat borne out by the lack of cultural material. However, fragments of coal and occasional plough-scarred stones observed within subsoil deposits, attested to the likelihood of some post-medieval ploughing on the site.

The topography of the site may also have had an effect on the soil profiles and levels of artefactual material observed, with colluviation likely to have occurred to the north, south and west of the site, within an undulating hill-scape (Illus 6). The denudation of soils was apparent from the evidence of a former hedge line identified within a hill gully, which did not continue outside of the confines of the topographic feature where glacio-fluvial gravels were identified. A shallow soil profile was also noted during stripping of the haul road, with patchy subsoil survival and geological gravel deposits variably visible (Illus 7).

The single archaeological feature identified, in the form of a former hedge line attests to minor land division, probably relating to earlier agricultural use of the land. The orientation of the feature was noted to be parallel to an existing hedge on the north-west edge of the site. Whilst no dateable material was recovered from the feature, it may suggest that narrow, strip like fields existed, as identified in

the Heritage Statement for the site (Adams 2019) and the hedge line originated in the medieval period, though this cannot be positively attested.

Despite, the field name of 'Windmill Hill', no evidence of any potential former windmill structure was identified during the course of the investigation and it may be that such evidence lies outside of the stripped area, potentially on slightly higher ground to the east of the reservoir, or that such evidence no longer survives.

## 6 CONCLUSION

Archaeological investigation during groundworks associated with the construction of a new covered reservoir at Burghill identified only a single former hedge line, potentially originating in the medieval period and forming part of a wider strip field system. The soil profile indicated limited former agricultural use of the land, with colluviation and probable erosion, in the form of hillwash, of soils having occurred.

## 7 REFERENCES

Adams P 2019 *Bewdley Bank Reservoir Heritage Statement* Mott McDonald [unpublished client document]



6



7

**ILLUS 6** General view of stripped reservoir area, looking west **ILLUS 7** View of haul/access road stripping, looking south

Chartered Institute for Archaeologists (CIfA) 2014a *Code of Conduct* (Reading) <http://www.archaeologists.net/sites/default/files/CodesofConduct.pdf> accessed May 2019

Chartered Institute for Archaeologists (CIfA) 2014b *Standard and guidance for an archaeological watching brief* (Reading) [http://www.archaeologists.net/sites/default/files/CIfAS&GWatchingbrief\\_2.pdf](http://www.archaeologists.net/sites/default/files/CIfAS&GWatchingbrief_2.pdf) accessed May 2019

Natural Environment Research Council (NERC) 2018 *British Geological Survey* <http://www.bgs.ac.uk> accessed May 2019

Ricchi S 2019 *Bewdley Bank Reservoir Archaeological Written Scheme of Investigation* Mott McDonald Ltd [unpublished client document]

Thomson S 2019 *Bewdley Bank Reservoir, Burghill, Herefordshire Method Statement for Archaeological Watching Brief* Headland Archaeology [unpublished client document]

## 8 APPENDICES

### APPENDIX 1 CONTEXT SUMMARY

CONTEXT	DESCRIPTION	INTERPRETATION
001	Mid-brownish grey, clayey silt containing frequent sub-rounded gravel 0.15–0.25m thick	Topsoil
002	Mid-reddish brown slightly sandy, silty clay containing frequent sub-rounded gravel and occasional sub-angular stones, variably 0.20–0.30m thick	Subsoil
003	Light-reddish brown gravel and silty clay	Glacio-fluvial geological deposit
004	Mid-brownish red clay and mudstone	Glacio-fluvial geological deposit
005	Light reddish grey agglomerate stone exposed in linear band 4.50m x 1.00m	Geological deposit
006	Light-pinkish brown silty clay containing frequent sub-rounded stone and gravel, occasional manganese fragments, approx. 30–40m wide, >30m long, >0.30m thick	Colluvial/hillwash deposit
007	Mid-grey silty clay containing occasional sub-angular stones and lenses/patches of pink clay, 0.12m deep	Single fill of former hedge line [008]
008	Linear feature, uneven, gradually sloping sides, uneven/irregular base. E-W oriented, >10m long x 0.62m wide, 0.12m deep max.	Former hedge line



## APPENDIX 2 OASIS ENTRY DETAILS

OASIS ID: *headland3-354756*

Project details	
Project name	Bewdley Bank Reservoir, Burghill
Short description of the project	An Archaeological Watching Brief was undertaken by Headland Archaeology (UK) Ltd during groundworks associated with the construction of a covered reservoir at Bewdely Bank, Burghill, Herefordshire. The investigation identified the remains of a single, former hedge line, possibly associated with former strip fields. A general paucity of artefactual material was observed, with evidence of limited arable agricultural use of the site suggested.
Project dates	Start: 13-05-2019 End: 30-05-2019
Previous/future work	No / Yes
Any associated project reference codes	BBRH – Sitecode
Any associated project reference codes	HAS-1346 – Contracting Unit No.
Type of project	Recording project
Site status	None
Current Land use	Cultivated Land 1 – Minimal cultivation
Monument type	DITCH Uncertain
Significant Finds	NONE None
Investigation type	“Watching Brief”
Prompt	Direction from Local Planning Authority – Direction 4
Project location	
Country	England
Site location	HEREFORDSHIRE HEREFORDSHIRE BURGILL Bewdley Bank Reservoir, Burghill
Postcode	HR4 8NG
Study area	2 Hectares
Site coordinates	SO 48760 44510 52.096141455354 -2.748069410357 52 05 46 N 002 44 53 W Point
Height OD / Depth	Min: 125m Max: 125m
Project creators	
Name of Organisation	Headland Archaeology (UK) Ltd
Project brief originator	Archaeological Advisor to LPA
Project design originator	Headland Archaeology (UK) Ltd.
Project director/manager	Luke Craddock-Bennett
Project supervisor	Steve Thomson
Type of sponsor/funding body	client
Type of sponsor/funding body	Water Authority/Company
Name of sponsor/funding body	Welsh Water
Entered by	Steve Thomson (Stephen.thomson@headlandarchaeology.com)
Entered on	10 June 2019







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