



# **Brent Knoll Reservoir** Somerset

Archaeological Watching Brief Report





## **Archaeological Watching Brief Report**

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### **QUALITY ASSURANCE**

SITE CODE	79330	ACCESSION CODE	CLIENT CODE
PLANNING APPLICATION REF.	07/11/00015	NGR	333250 151700

VERSION	STATUS*	PREPARED BY	APPROVED BY	APPROVER'S SIGNATURE	DATE	FILE
01	E	JS	SF	SF-	10.11.2011	X:\PROJECTS\79330\REPORT\79330_V01.DOC
02	I	SF	RAC	Ab	11/11/11	X:\PROJECTS\79330\REPORT\79330_V02.DOC

<sup>\*</sup> I= INTERNAL DRAFT E= EXTERNAL DRAFT F= FINAL



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## **Archaeological Watching Brief Report**

## **Summary**

Wessex Archaeology was commissioned by Bristol Water plc to undertake an archaeological watching brief during groundworks associated with the proposed extension to the existing Brent Knoll reservoir (hereafter, 'the Site'), centred on National Grid Reference 333250 151700.

The watching brief was undertaken within three areas and comprised the topsoil removal within **Areas 1** and **2** and the topsoil strip, followed by excavation of the new reservoir within **Area 3**.

Although the Site is situated in the vicinity of Brent Knoll hillfort, no archaeological features, finds or deposits were observed during the fieldwork.

Across the majority of **Areas 1** and **2**, the topsoil strip was insufficient to expose the underlying geology. Within **Area 3**, modern made ground layers were recorded to overlie natural geology. A possible former horizontal truncation of the natural deposit within the area, which might have removed archaeological deposits, was indicated during the investigation.

The fieldwork was undertaken between 27<sup>th</sup> October 2011 and 4<sup>th</sup> November 2011.



## **Archaeological Watching Brief Report**

## Acknowledgements

This watching brief work was commissioned by Bristol Water plc and Wessex Archaeology would like to thank Gareth Lloyd in this regard. Wessex Archaeology would also like to thank Graham Marsland of Dyer and Butler (Principal Contractor) and the construction team of Axmister Excavators for their assistance during the fieldwork.

The fieldwork was conducted by Julia Sulikowska, who also compiled this report. The figures were prepared by Ken Lymer. The project was managed on behalf of Wessex Archaeology by Sue Farr.



### **Archaeological Watching Brief Report**

#### 1 INTRODUCTION

#### 1.1 Project Background

- 1.1.1 Wessex Archaeology was commissioned by Bristol Water plc (the Client) to undertake an archaeological watching brief during groundworks associated with the proposed extension to the existing Brent Knoll reservoir (hereafter, 'the Site'), centred on National Grid Reference (NGR) 333250 151700 (Figure 1).
- 1.1.2 A planning application (Ref. 07/11/00015) was submitted to Sedgemoor District Council for the construction of a covered storage reservoir and associated external works at the existing reservoir site.
- 1.1.3 The Site lies in close proximity to Brent Knoll Iron Age hillfort, a Scheduled Monument (SM Number 24001), and the Senior Historic Environment Officer (HEO) at Somerset County Council (SCC) advised an archaeological watching brief should be maintained during the initial groundworks.
- 1.1.4 Condition 7 of the planning consent stated:

No development shall take place within the area indicated (this would be the area of archaeological interest) until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority. Reason: To safeguard the Nation's heritage

- 1.1.5 A Written Scheme of Investigation (WSI), setting out the methodologies and standards to be implemented during the watching brief, was prepared by Wessex Archaeology in advance of the fieldwork (Wessex Archaeology 2011). In format and content it conformed with current best practice and to the guidance outlined in Management of Research Projects in the Historic Environment (MoRPHE, English Heritage 2006) and the Institute for Archaeologists' Standards and Guidance for Archaeological Watching Briefs (IfA 2008).
- 1.1.6 The WSI was submitted to and approved by the HEO at SCC prior to any works commencing. In addition, all works were carried out in accordance with the SCC Heritage Service Archaeological Handbook (SCC 2011).
- 1.1.7 The fieldwork was undertaken between 27<sup>th</sup> October 2011 and 4<sup>th</sup> November 2011.

## 1.2 Site location and geology

1.2.1 The Site is located in Sedgemoor District, to the west of Brent Knoll hillfort (**Figure 1**) and includes Bristol Water's operational reservoir site and two



- adjacent fields. The Site is bounded to the north, south and west by open pasture fields and to the east by an existing access track.
- 1.2.2 The existing reservoir comprises two service reservoirs and associated underground pipework/apparatus and is used to store water for supply to the Brent Knoll area. The adjacent fields form part of Manor Farm and are primarily used for grazing horses. The Site is accessed from Hill Lane via a private access track through Manor Farm.
- 1.2.3 The underlying geology of the Site comprises Jurassic Upper Lias (Geological Survey of Great Britain (England & Wales) 1:50,000 sheet 279).

## 1.3 Archaeological Background

- 1.3.1 A rapid search of the Somerset Historic Environment Record identified several archaeological features in close proximity to the Site, but none within the Site itself.
- 1.3.2 Brent Knoll hillfort and an associated field system are recorded to the east of the Site. The hillfort is defended by a bank and outer ditch with a counterscarp bank and a second bank on the north-east side of the monument. Although the interior of the fort has been extensively quarried, excavations in the late 18<sup>th</sup> and early 19<sup>th</sup> century recorded a substantial building of probable Romano-British date.
- 1.3.3 To the north-east of the Site a deserted farm site is recorded. Low earthworks forming a fragmentary complex of sub-rectangular enclosures have been recorded and further features have been transcribed from aerial photography.
- 1.3.4 Immediately to the north of the access track to the Site, a former windmill is recorded on the tithe map.

#### 2 AIMS AND OBJECTIVES

2.1.1 The aim of the watching brief was to provide further information concerning the presence/absence, date, nature and extent of any buried archaeological remains and to investigate and record these within the proposed development areas.

#### 3 METHODOLOGY

#### 3.1 Introduction

3.1.1 The fieldwork was carried out in accordance with the *Written Scheme of Investigation* (Wessex Archaeology 2011), the standards outlined in the Institute for Archaeologists' *Standard and Guidance for an Archaeological Watching Briefs* (2008) and in accordance with the SCC Heritage Service Archaeological Handbook (SCC 2011).

### 3.2 Health and Safety

3.2.1 The work was undertaken in accordance with the Health and Safety at Work Act 1974 and the Management of Health and Safety Regulations 1992. A health and safety Risk Assessment was produced by Wessex Archaeology prior to the commencement of the watching brief.



### 3.3 Fieldwork

- 3.3.1 The watching brief was undertaken in three areas (**Figure 1**):
  - Area 1: temporary dumper access track;
  - Area 2: soil storage area; and
  - Area 3: new reservoir.
- 3.3.2 The machine excavation was undertaken using a 360° mechanical excavator equipped with a toothless bucket.
- 3.3.3 Within **Areas 1** (measuring approximately 80m x 9m) and **2** (approximately 250m x 26m), the groundworks associated with the topsoil removal were undertaken under intermittent archaeological supervision, due to limited potential for archaeological features to be exposed during the strip.
- 3.3.4 Within **Area 3** (approximately 30m x 40m) the groundworks, which comprised the topsoil removal and subsequent excavation of the new reservoir, were undertaken under continuous archaeological supervision until such time that it was apparent that the potential for archaeological remains to be exposed has been exhausted. The excavated material was also inspected for finds.
- 3.3.5 The archaeological features and deposits were recorded using Wessex Archaeology's *pro forma* recording system, without causing unreasonable delay to the groundworks programme. A digital photographic record was maintained throughout the fieldwork, illustrating both the detail and the general context of the Site as a whole.

#### 4 RESULTS

#### 4.1 Introduction

4.1.1 This section includes information on the natural deposits encountered and any archaeological features and deposits recorded during the watching brief. Details of the excavated contexts and features are retained in the project archive and a detailed summary of the deposits encountered is included in **Appendix 1**.

### 4.2 Areas 1 and 2

- 4.2.1 The stratigraphic sequence within **Areas 1** and **2** comprised topsoil overlying possible natural deposits (**Plates 1-3**).
- 4.2.2 Topsoil was characterised by a mid greyish brown clay loam, on average *c.* 0.3m deep. In areas where topsoil was completely removed, it was observed to overlie a pale greyish yellow clay deposit with sparse limestone blocks, which was interpreted as natural geology.
- 4.2.3 No archaeological features were observed in the limited areas where the underlying geology was exposed. No finds, with the exception of sporadic modern material (not retained) were observed in the topsoil.



#### 4.3 Area 3

- 4.3.1 The stratigraphic sequence within **Area 3** comprised topsoil overlying layers of made ground and natural deposits.
- 4.3.2 A mid greyish brown clay loam topsoil, which was on average 0.3m deep, overlay a modern made ground deposit (**Plate 4**). The made ground layer comprised material redeposited from previous reservoir excavations and was characterised by pale grey clay with common limestone inclusions and modern debris. It overlay a thin layer of gravel/hardcore, which was sealing the natural deposit comprising pale greyish yellow clay with sparse limestone inclusions (**Plate 5**).
- 4.3.3 The presence of hardcore indicates that **Area 3** was likely used as a compound or working area during the former reservoir construction works. The hardcore lay immediately over the natural deposit and therefore the area must have been subject to previous topsoil removal, which, possibly, included a certain degree of horizontal truncation of the natural geology. However, it was not possible to establish the level of that truncation during these excavation works.
- 4.3.4 No archaeological features, finds or deposits were observed during the watching brief.

#### 5 DISCUSSION

- 5.1.1 Although the Site is situated in the vicinity of Brent Knoll hillfort, no archaeological features, finds or deposits were observed during the fieldwork.
- 5.1.2 Across the majority of **Areas 1** and **2**, the topsoil strip was insufficient to expose the underlying geology. Within **Area 3**, modern made ground layers were recorded to overlie natural geology. A possible former horizontal truncation of the natural deposit within the area, which might have removed archaeological deposits, was suggested during the investigation.

## 6 ARCHIVE

- 6.1.1 The project archive was prepared in accordance with the guidelines outlined in Appendix 3 of *Management of Archaeological Projects* (English Heritage 1991) and in accordance with the *Guidelines for the preparation of excavation archives for long term storage* (Walker 1990). The excavated material and archive, including plans, photographs and written records, are currently held at the Wessex Archaeology offices under the project code 79330. It is intended that the archive should ultimately be deposited with Somerset County Museum.
- 6.1.2 Details of the Site have been submitted online to the OASIS (Online Access to the Index of Archaeological Investigations) database (**Appendix 2**).

#### 7 COPYRIGHT

7.1.1 This report may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which we are able to provide for limited



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#### 8 REFERENCES

- IfA 2008: Standard and Guidance for an Archaeological Watching Brief.
  Institute for Archaeologists
- Geological Survey of Great Britain (England and Wales) 1980: Westonsuper-Mare, Solid and Drift, sheet 279, 1:50,000
- SCC 2011: Heritage Service Archaeological Handbook, http://www1.somerset.gov.uk/archives/hes/downloads/SomersetHandbook0311.pdf
- Walker, K. 1990: Guidelines for the Preparation of Excavation Archives for Long-Term Storage, UKIC Archaeology Section
- Wessex Archaeology 2011: Brent Knoll Reservoir, Somerset. Written Scheme of Investigation for an Archaeological Watching Brief, client report ref. 79330.01



## **APPENDIX 1: CONTEXT SUMMARY TABLES**

Area	Dimensions: c.80m x c.9m x 0.35m (max.) deep				
1	Location: Temporary dumper access track				
Context	Category	Category Description Depth (m)			
100	Layer Topsoil: mid greyish brown clay loam 0 – 0.33				
101	101 Layer Natural geology: pale greyish yellow clay with sparse to common limestone cobbles 0.33+				
No archaeological components					

Area	Dimensions: c.250m x c.26m x 0.30m (max.) deep				
2	Location: Soil storage area				
Context	Category	Category Description Depth (m)			
200	Layer	Layer Topsoil: mid greyish brown clay loam 0 – 0.25			
201	201 Layer Natural geology: pale greyish yellow clay with sparse limestone inclusions 0.33+				
No archaeological components					

Area	Dimensions: c.40m x c.30m x 1.0m deep				
3	Location: Reservo	Location: Reservoir			
Context	Category	Description	Depth (m)		
300	Layer	Topsoil: mid greyish brown clay loam	0 - 0.30		
301	Layer	Made ground: redeposited natural deposit comprising pale to mid grey clay with common limestone inclusions and modern debris (brick, rubber, concrete)	0.30 - 0.80		
302	Layer	Made ground: a thin layer of gravel and hardcore	0.80 - 0.87		
Solution 1988 Layer Natural geology: pale greyish yellow clay with sparse limestone/mudstone cobbles			0.87+		
No archaeological components					

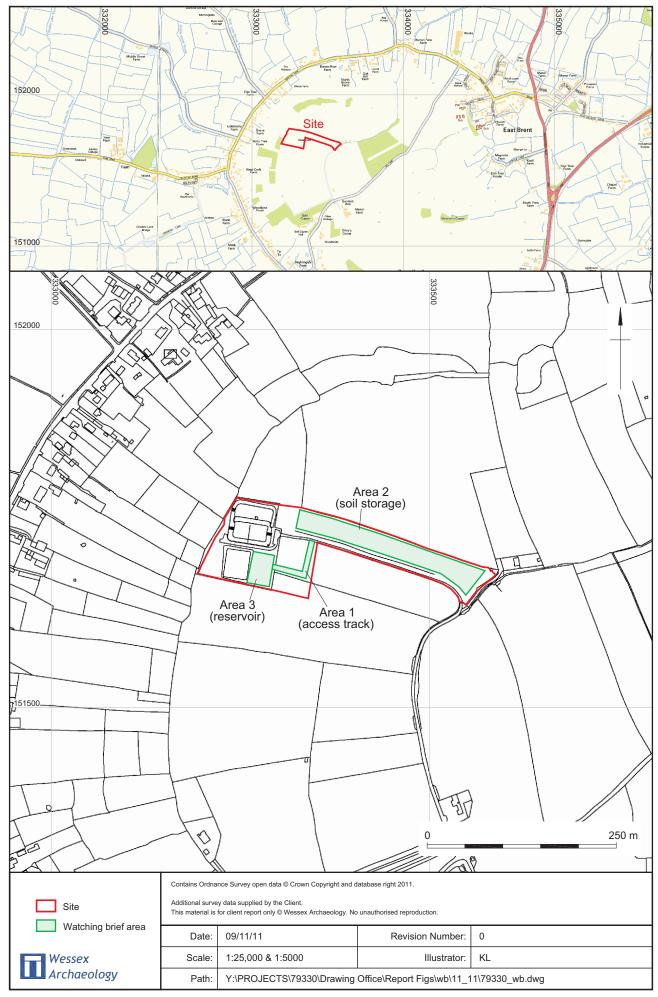
## **APPENDIX 2: OASIS REPORT**

## OASIS ID - wessexar1-113497

Versions					
View	Version	Completed by	Email	Date	
View 1	1	Sue Farr	s.farr@wessexarch.co.uk	10 November 2011	
View 2	2	Sue Farr	s.farr@wessexarch.co.uk	10 November 2011	
Completed	sections in curr	ent version			
Details	Location	Creators	Archive	Publications	
Yes	Yes	Yes	Yes	1/1	
Validated sections in current version					
Details	Location	Creators	Archive	Publications	



No	No	No	No	0/1		
File submis	File submission and form progress					
Grey lite submitted?	erature report	: No	Grey literature ifilename/s	report		
lmages sub	mitted?	No	Image filename/s			
Boundary fi	le submitted?	No	Boundary filename			
HER signed	off?		NMR signed off?			



Site location plan Figure 1







Plate 2: North facing representative section of Area 1



Plate 3: South facing representative section of Area 2



Plate 4: General view of Area 3 after topsoil removal, view from north



Plate 5: South facing representative section of Area 3 showing made ground and natural geology



Date:	09/11/11	Revision Number:	0
Scale:	n/a	Layout:	KL
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