# CONFEXTONE ARCHAEOLOGICAL SERVICES LTD

## Countess Wear Bridge Exeter Devon

Historic Building Recording

December 2016

**REPORT** 



### Information matrix

SITE DETAILS

Site address Countess Wear Bridge, Exeter, Devon.

Site postcode EX2 7DA

Site NGR Centred on SX 94197 89570

Site area N/A

Site aOD height (min/max.) c. 2m (on SW bank of river) and c. 9m (at top of NE bank of river)

Top of SW bank of river is slightly lower than top of NE bank of river

Ground conditions Banks - grass, low vegetation

Site geology (solid) Heavitree Breccia Formation and Dawlish Sandstone Formation of the

Permian Period with overlying Quaternary River Terrace deposits to the

north-east bank

Site geology (drift)

The soils on the south-western bank are characterised by freely

draining slightly acid sandy soils while those to the north-east are

characterised by freely draining slightly acid loamy soils

PROJECT DETAILS

Client Bridges and Structures Engineering Design Group, Devon County

Council

Client project reference N/A

Development proposal Construction of a cantilevered cycle/walkway supported off existing

bridge (upstream elevation)

Local Planning Authority Exeter City Council Listed building consent no. DCC/2918/2009

Listed building condition no. 3

INVESTIGATION

C1 site code C1/SBR/16/CWE

Investigation type Historic building recording of upstream elevation

N/A

Fieldwork dates 29 September 2016

Fieldwork team Dr Cheryl Green (Post-excavation Manager & Historic Buildings

Archaeologist) & Richard McConnell (Projects Director & Historic

**Buildings Archaeologist)** 

Archaeologist) & Tara Fairclough (Illustrator),

Post-excavation specialists

ARCHAEOLOGICAL DETAILS

Previous events for Site Desk-Based Assessment and Historic Building Recording (report

reference SBR/12/CWE, March 2013)

SBR\_12\_CWE WSI version 1.0

Written Scheme of Investigation (WSI)

Scheduled Monument Consent ref. N/A

Devon Historic Environment Record

reference

ARCH/CM/EX

Collecting Museum N/A
Museum accession code N/A

OASIS reference contexto1-271777

**REPORT** 

Draft report date TBA Final report date TBA

Prepared by Dr Cheryl Green Illustrations by Tara Fairclough

Internal review by TBA Checked and approved by TBA

**ARCHIVING** 

Site records Results of all recording incorporated into this report

Site images All images incorporated into this report

Artefacts N/A Environmental samples N/A



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### **Summary**

Context One Archaeological Services Ltd (COAS) carried out historic building recording at Countess Wear Bridge, Exeter, Devon (centred on NGR SX 94197 89570) on 29 September 2016. The work was commissioned and funded by the Bridges and Structures Engineering Design Group, Devon County Council.

The request for the archaeological works was made by Mr Bill Horner (County Archaeologist, Devon County Historic Environment Team (HET)). In accordance with paragraph 141 of the National Planning Policy Framework (2012) and the Devon County Strategic Plan Policy on archaeology, Listed Building consent was granted for the construction of a cantilevered cycle/walkway on the upstream elevation, conditional upon a programme of archaeological work being undertaken. The first phase of work carried out by COAS in 2012 comprised a desk-based assessment and historic building recording, the report recommending a further phase of historic building recording during construction works (Green 2013, 16). It was hoped this would result in a more accurate record of the phasing of the elevation.

The second phase of historic building recording has now confirmed the existence of five different types of construction to the upstream elevation as opposed to the four types identified during the first phase of works. These relate to at least three phases of activity comprising the original 18<sup>th</sup> century fabric, three area of re-facing (namely two of the cut-waters, the rubble patch, and the spandrels and masonry above the wide elliptical arch), and the 1935-38 parapet.

This report is produced solely for the benefit of an individual client and for the proposed uses stated in the report, and should not be relied upon for other purposes or by other parties unless specifically agreed by us in writing. The different elements of the report are designed to be integral to each other and therefore do not necessarily stand alone. Opinions and information provided in this report are on the basis of C1 using reasonable skill and care, however no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or less than fully representative information. This report is limited to the scope and limits agreed with the client under our appointment. Any investigative work undertaken as part of the commission will have been subject to limitations imposed by such factors as timescales, budgets, seasonal variations and weather conditions.

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### 1. Introduction

- 1.1 Context One Archaeological Services Ltd (COAS) carried out the second phase of a programme of historic building recording on the Grade II Listed Countess Wear Bridge, Exeter, Devon (the 'Site') (**Figure 1**), on 29 September 2016. The work was commissioned and funded by the Bridges and Structures Engineering Design Group, Devon County Council.
- 1.2 The historic building recording was requested by Devon Historic Environment Team (HET) on the advice of Mr Bill Horner (County Archaeologist), as a condition of Listed Building Consent for the construction of a cantilevered cycle/walkway on the upstream elevation of the bridge. In accordance with paragraph 141 of the National Planning Policy Framework (2012) and the Devon County Strategic Plan Policy on archaeology, Condition 3 of the Listed Building Consent required that:

"No works to which this consent relates shall commence until an appropriate programme of Historic Structure Recording and Analysis has been secured and implemented in accordance with a written scheme of investigation which has been submitted to and approved in writing by the County Planning Authority.

The Historic Structure Record and Analysis shall be submitted as a report to the County Planning Authority, and approved in writing by the County Planning Authority, County Historic Environment Service & English Heritage within 3 months of the commencement of works unless otherwise agreed by the County Planning Authority."

- 1.3 In 1768-69 an Act was passed authorising the construction of Countess Wear Bridge (HER no. 84879 & 10030) which was built in 1770. Given the archaeological and historic significance of the building, it was determined that a reasonable archaeological response in mitigation of the conversion works would be to carry out a Level 2 historic building recording survey of the upstream elevation with elements of Level 3 prior to development works. This was carried out in 2013, the report concluding that additional historic building recording would be desirable during conversion works when there would be an opportunity to access the upstream elevation via scaffolding. Specifically, this related to measuring the exact level of the division between the 18<sup>th</sup> century fabric and the top section of the elevation (parapet, refuges and coping) dated 1935-38. It was also suggested that the central section of the bridge might be further investigated to ascertain if this belonged to the original build or an additional phase.
- 1.4 The programme of archaeological works comprised six elements: the production of a Written Scheme of Investigation (WSI) which set out the project strategy; historic building recording prior to development works in 2013; report production (Green 2013; see **Appendix 2**); additional historic building recording; report production covering additional recording (this document); and archive deposition.
- 1.5 The Written Scheme of Investigation (WSI) was submitted to and approved by Mr Horner in 2013 prior to the commencement of the investigation.

### 2. Historical Background

- 2.1 The history of Countess Weir Bridge is fully set-out in the 2013 report (see **Appendix 2**). During the survey, four different types of construction were observed within the upstream elevation which were thought to relate to a minimum of two building phases. The original fabric of the late 18<sup>th</sup> century bridge survives in the lower parts of three cutwaters (**A** on **Appendix 2 Figs 3 & 4**), employing light cream-coloured ashlar below the level of the arch springers and for the arch piers. The documented collapse of one of the piers in 1772 and the subsequent building of new piers was not evident archaeologically. The arch voussoirs and barrel arches are of red sandstone ashlar and thought to be original. Limestone rubble is utilized for the spandrels and directly above the voussoirs of the small arches, together with the central sections of the cutwaters. This fabric was thought to be original although it was suggested that the change in construction between the lower and central sections of the cutwaters may indicate a different phase.
- 2.2 Architect drawings relating to the 1935-38 widening and remodelling of the bridge reveal plans to remove the existing parapet, to raise the new parapet and road to a higher level, and to undertake partial re-facing above the arches. The drawings reveal that the top of the old parapet was located at *c*. 1.46m above the



voussoirs of the wide arch and that the new parapet was planned at *c.* 2.07m. Modern architectural drawings show the parapet located at *c.* 2.1m above the arches. The fabric of the new parapet is distinguishable by the presence of red sandstone amongst the limestone random rubble facing, contrasting to the earlier work which appeared to only utilize limestone. The mix of red sandstone and limestone random rubble facing were recorded for the spandrels of the wide elliptical arch and the upper section of the elevation and cutwaters, the division between old and new apparent at *c.* 1.5m below the top of the parapet. It was suggested that refacing of two of the cutwaters (**B** on **Appendix 2 Figs 3 & 4**) may be contemporary with the 1935-8 phase of works.

### 3. Methodology

- 3.1 The historic building survey conformed to guidelines set-out in *Understanding Historic Buildings A guide to good recording practice* (Historic England, 2006), and in *Standard and Guidance for the archaeological investigation and recording of standing buildings or structures* published by the Chartered Institute for Archaeologists (CIfA), formerly the Institute for Archaeologists (IfA) (December 2014a). COAS adhered to the *Code of Conduct* of the CIfA (1985, rev. 2000, 2014), and *Regulations for Professional Conduct* (CIfA, 2014, rev. 2015) at all times during the course of the archaeological works. Current Health and Safety legislation and guidelines were followed on site. The fieldwork methodology is summarised below.
- 3.2 The building survey conformed to recording Level 2 with elements of Level 3 as set out in *Understanding Historic Buildings A guide to good recording practice* (Historic England, 2016). This states:
- 3.3 "This is a descriptive record, made in circumstances similar to those of Level 1 but when more information is needed. It may be made of a building which is judged not to require any fuller record, or it may serve to gather data for a wider project. Both the exterior and the interior will be viewed, described and photographed. The examination of the building will produce an analysis of its development and use and the record will include the conclusions reached, but it will not discuss in detail the evidence on which this analysis is based. A plan and sometimes other drawings may be made but the drawn record will normally not be comprehensive and may be tailored to the scope of a wider project." (para 5.2.1)

"Level 3 is an analytical record, and will comprise an introductory description followed by a systematic account of the building's origins, development and use. The record will include an account of the evidence on which the analysis has been based, allowing the validity of the record to be re-examined in detail. It will also include all drawn and photographic records that may be required to illustrate the building's appearance and structure and to support an historical analysis." (para 5.3.1)

"The information contained in the record will for the most part have been obtained through an examination of the building itself. The documentary sources used are likely to be those which are most readily accessible, such as historic Ordnance Survey maps, trade directories and other published sources. The record may contain some discussion of the building's broader stylistic or historical context and importance. It may form part of a wider survey of a number of buildings which will aim at an overall synthesis, such as a thematic or regional publication, when the use of additional source material may be necessary as well as a broader historical and architectural discussion of the buildings as a group. A Level 3 record may also be appropriate when the fabric of a building is under threat, but time or resources are insufficient to allow for detailed documentary research, or where the scope for such research is limited." (para 5.3.2)

- 3.4 Recording work was restricted to the main section of the bridge stretching across the River Exe, and did not include the section above the eastern river bank. Scaffold platforms encompassed each of the five cutwaters (1-5 on Figure 1) extending a short distance on either side of each cutwater but not running continuously along the elevation (Plate 1). Although this meant the central part of each arch could not be directly accessed and recorded, it was still possible to make observations from the platforms.
- 3.5 The photographic survey comprised digital images in .jpg format captured using a Nikon DS40 SLR camera. Digital photographs were taken in accordance with Historic England's guidelines for Digital Image and Capture (https://www.historicengland.org.uk/images-books/publications/digital-image-capture-and-file-storage/).
- 3.6 The upstream elevation was photographed methodically from south-west to north-east between (and on either side of) cutwaters 1 to 5 (see **Appendix 1**). Images were taken with an appropriately sized scale where possible. Where scales were used, identical images were taken without a scale for reporting purposes only



and these are not replicated in the Appendix. Information recorded in the photographic register is replicated in the photo captions in section **4.** and in captions accompanying the full photographic record in **Appendix 1**. Note: to avoid losing the scales through gaps in the scaffold boards, the scales had to be physically held in place.

3.7 The photographic survey was accompanied by observational notes/description and the completion of a photographic register. Plans and elevations provided by the Client were used as a basis for annotation.



Plate 1. General shot of scaffolding around cutwaters (from SW)



### 4. Results

- 4.1 For the purposes of this report, the cutwaters are referred to as CW. The full sequence of photographs capturing the elevation from south-west to north-east are reproduced in **Appendix 1**. The photographs used in the following account are identical to those within **Appendix 1** but without scales, as these were not suitable for reproduction in the main body of the text (see above).
- 4.2 The division between the 1935-38 parapet and the 18<sup>th</sup> century work was visible along the entire elevation, although **Figure 1** only shows the area where accurate measurements could be taken from the scaffold platforms. In places this join is represented by a slight ledge, the older masonry protruding slightly from the newer work, or by a course of thin small rubble. As suggested by the 2013 survey, the line of the division was slightly undulating. This ran just above the arch voussoirs on either side of CW1 (**Plates 2** & **3**), before rising towards CW2 (**Plate 4**) and continuing at a fairly even level throughout the remainder of the elevation (**Plates 5** to **9**). To the south-west of CW1, the division was recorded at 2.34m below the coping, rising to 2.22m to the north-east of CW1. This rose to 1.3m on the western side of CW2, before dropping again to between 1.53m and 1.95m to the north-east of CW5. The division skims just above the head of the main wide arch, which is slightly higher than the other arches.
- 4.3 The masonry above the wide arch but beneath the re-built parapet differs in character to the other arches, containing fairly regularly spaced red sandstone blocks in addition to the grey limestone which dominates the 18<sup>th</sup> century rubble facing throughout the remainder of the bridge (**Plates 6 & 7**). This is indicative of an earlier phase of re-facing.
- 4.4 In addition to the re-built parapet, a small strip comprising smaller rubble ran beneath the base of the parapet between CW1 and CW2 (**Plate 3**). This might relate to re-facing during reconstruction works, however it is quite different to the larger rubble pieces utilized for the parapet suggesting it might relate to an earlier episode of re-facing or repair.



Plate 2. Arch to west of CW1 (from NE)





Plate 3. Arch between CW1 & CW2 (from NW)



Plate 4. East face of CW2 (from NE)



Plate 5. Arch east of CW2 (from NW)





Plate 6. Main wide arch between CW3 & CW4 (from NW)



Plate 7. Main wide arch between CW3 & CW4 (from NE)





Plate 8. Elevation east of CW4 (from NW)



Plate 9. Elevation east of CW5 (from NW)



### 5. Discussion

- 5.1 The second phase of historic building recording at Countess Wear Bridge has confirmed the location of the division between the re-built 1935-38 parapet, although close inspection of the masonry revealed this is slightly more irregular than was evident from observations made in 2013 from the river bank. The undulations no doubt result from re-facing to various degrees beneath the base of the re-built parapet, with the southwest end of the elevation having the deepest re-construction.
- 5.2 Unsurprisingly, there is evidence of minor repair and re-facing elsewhere on the elevation. It was noted during the first phase of historic building recording that the random rubble walling of the spandrels and masonry above was constructed of limestone, with red sandstone seemingly reserved for the arch voussoirs and barrel arches. Detailed inspection of the walls generally confirms this view, with the presence of occasional red sandstone amongst the 18<sup>th</sup> century work probably relating to sporadic repair. However, the spandrels above the wide elliptical arch, and the masonry below the re-built parapet, contains regularly spaced red sandstone blocks amongst the grey limestone. This perhaps suggests a previous episode of re-facing. There is a strip consisting of smaller pieces of rubble in the area beneath the parapet between CW1 and CW2, possibly hinting at some previous work. Interestingly, both this patch and the wide elliptical arch are located above cutwaters identified in 2013 as having been re-faced.
- 5.3 As in 2013, there was no evidence in the elevation to identify the location of the documented collapse of one of the piers in 1772. It is likely this would require investigation of the underside of the barrel arches, which may in the future reveal a great deal about the phasing of the bridge. Nevertheless, the historic building recording carried out as part of this project has now confirmed the existence of five different types of construction to the upstream elevation as opposed to the four types identified during the first phase of works. These relate to at least three phases of activity comprising the original 18<sup>th</sup> century fabric, three area of refacing (namely two of the cut-waters, the rubble patch, and the spandrels and masonry above the wide elliptical arch), and the 1935-38 parapet.

### 6. Archive

- 6.1 As no archaeological evidence was encountered, all relevant data has been incorporated into this report. As such, the digital archive will either be held on the COAS cloud storage or destroyed.
- 6.2 Copies of this report will be deposited with the client/agent and included as part of the Devon Historic Environment Record. A digital copy of the report will also be deposited with the Archaeology Data Service, via OASIS (On-line Access to the Index of Archaeological Investigations <a href="http://oasis.ac.uk/england/">http://oasis.ac.uk/england/</a>).

### 7. Bibliography

Chartered Institute of Field Archaeologists (CIfA), December 2014	Code of Conduct. Reading: CIfA
Chartered Institute for Archaeologists (CIfA), December 2014 (rev. 2015)	Regulations for professional conduct. Reading: CIfA
Chartered Institute for Archaeologists (CIfA), December 2014 (rev. 2015)	Standard and Guidance for the archaeological investigation and recording of standing buildings or structures. Reading: CIfA
COAS, 2012	Written Scheme of Investigation for a Programme of Archaeological Works: Countess Wear Bridge, Exeter, Devon
Department for Communities and Local Government (DCLG) 2012	National Planning Policy Framework, London: Her Majesty's Stationery Office
Devon County Council (DCC), 2009	The Historic Environment and Development: Practice Note.  Devon County Council



Historic England https://www.historicengland.org.uk/images-

books/publications/digital-image-capture-and-file-storage/

Historic England, 2016 Understanding Historic Buildings. A Guide to Good Recording

*Practice.* Historic England



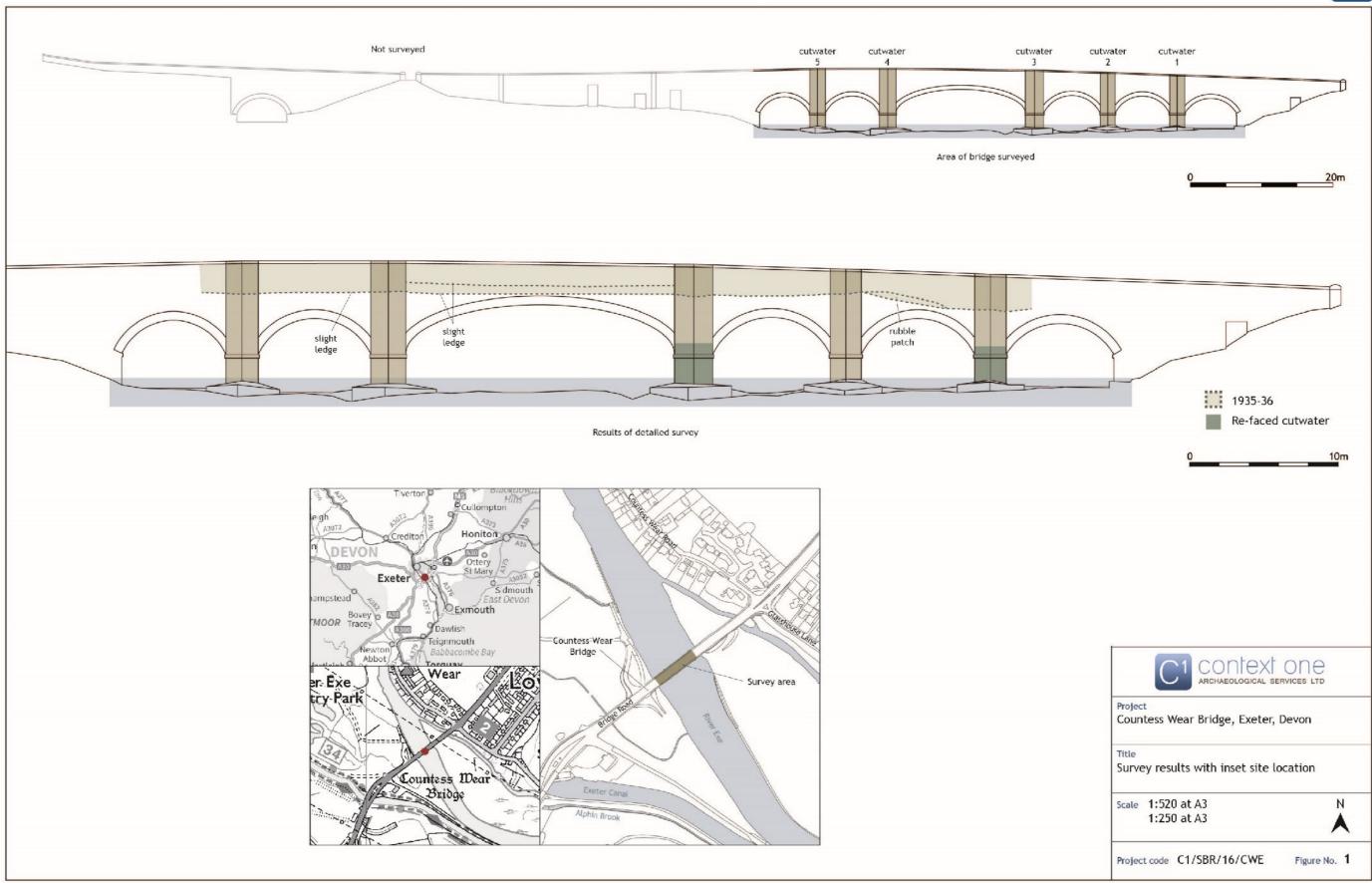


Figure 1. Survey results with inset site location

Countess Wear Bridge, Exeter, Devon.

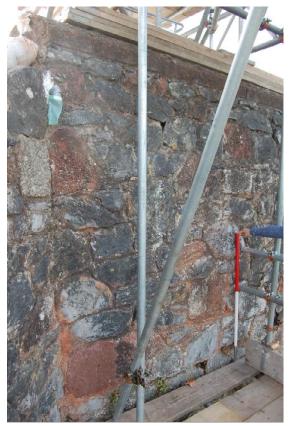


### Appendix 1: photographic record



DSC\_0109. North face of elevation west of CW1 (from NE) (Plate 2)





DSC\_0113. North face of elevation west of CW1 (1m scale, from NE)



DSC\_0117. North face of elevation east of CW1 (1m scale, from NW)



DSC\_0115. East face of CW1 (1m scale; from NE)



DSC\_0119. Arch between CW1 & CW2 (from NW) (Plate 3)





DSC\_0120. Arch 2 west of CW2 (from NE)



DSC\_0121. Elevation W of CW2 (1m scale; from NE)



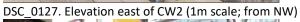
DSC\_0123. West face of CW2 (1m scale; from NW)



DSC\_0125. East face of CW2 (1m scale; from NE) (see Plate 4)









DSC\_0129. Arch east of CW2 (from NW) (Plate 5)



DSC\_0130. Arch 3 west of CW2 (from NE)



DSC\_0131. Elevation W of CW3 (1m scale; from NE)





DSC\_0133. W face of CW3 (1m scale; from NW)



DSC\_0137. Elevation E of CW3 (1m scale; from NW)



DSC\_0135. East face of CW3 (1m scale; from NE)





DSC\_0139. Main arch of bridge between CW3 & CW4 (from NW) (Plate 6)



DSC\_0140. Main arch of bridge between CW3 & CW4 (from NE) (Plate 7)



DSC\_0141. Elevation W of CW4 (1m scale; from NE)



DSC\_0143. West face of CW4 (1m scale; from NW)







\_0145. East face of CW4 (1m scale; from NE)

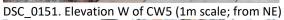


DSC\_0149. Elevation E of CW4 (from NW) (Plate 8)

DSC\_0150. Elevation W of CW5 (from NE)









DSC\_0155. East face of CW5 (1m scale; from NE)



DSC\_0153. West face of CW5 (1m scale; from NW)



DSC\_0157. Elevation east of CW5 (1m scale; from NW)





DSC\_0159. Elevation to east of CW5 above east river bank (from NW) (Plate 9)



### Appendix 2: 2013 report

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