Report No: 2011R049

one and all onen hag oll
CORNWALL COUNCIL

# Henneward or Allansford Bridge, near Camelford, Cornwall

## Historic building assessment

**Historic Environment Projects**

# Henneward or Allansford Bridge, near Camelford, Cornwall

## Historic building assessment

| | |
|---|---|
| **Client** | **Highways, Cornwall Council** |
| **Report Number** | **2011R049** |
| **Date** | **April 2011** |
| **Status** | **Final** |
| **Report author(s)** | **Jo Sturgess** |
| **Checked by** | **Nigel Thomas** |
| **Approved by** | |

Historic Environment, Cornwall Council
Kennall Building, Old County Hall, Station Road, Truro, Cornwall, TR1 3AY
tel (01872) 323603 fax (01872) 323811 E-mail hes@cornwall.gov.uk
www.cornwall.gov.uk

**Acknowledgements**

This study was commissioned by Ali Mokarram of Highways, Cornwall Council and carried out by Historic Environment Projects, Cornwall Council.

The Project was managed by Jo Sturgess and Nigel Thomas.

The views and recommendations expressed in this report are those of Historic Environment Projects and are presented in good faith on the basis of professional judgement and on information currently available.

**Freedom of Information Act**

As Cornwall Council is a public authority it is subject to the terms of the Freedom of Information Act 2000, which came into effect from 1st January 2005.

Historic Environment, Cornwall Council is a Registered Organisation with the Institute for Archaeologists

**Cover illustration**

Allansford Bridge, looking north-west (taken on 4th April 2011).

# Contents

# List of Figures



# Abbreviations

| | |
|---|---|
| CRO | Cornwall County Record Office |
| EH | English Heritage |
| HER | Cornwall and the Isles of Scilly Historic Environment Record |
| HE | Historic Environment, Cornwall Council |
| NGR | National Grid Reference |
| OS | Ordnance Survey |
| PRN | Primary Record Number in Cornwall HER |
| RIC | Royal Institution of Cornwall |

# 1 Summary

Henneward or Allansford Bridge is situated in the small settlement of Allansford on a minor road leading from Stannon China Clay Works on the western edge of Rough Tor to Trecarne and beyond to the north-west. The road bridge spans two tributaries of the River Allan (Camel) and is located at NGR SX 11067 79995. It is a late 19th or early 20th century Grade II listed, 5-span, granite-built clapper bridge with iron hand rails which lies within an area protected by several designations. These designations include the bridge as part of a Site of Special Scientific Interest (SSSI), an Area of Outstanding Natural Beauty (AONB), and Area of Great Scientific Value (AGSV). The road bridge as it exists today is first shown on the Second Edition OS map of *c*1907. The First Edition OS map of *c*1880 shows that prior to this a foot bridge and ford had existed at the site.

The bridge has a limited carrying capacity for modern traffic weights so a strengthening programme is proposed by Cornwall Council. The proposed works will only affect the upper surface of the bridge and involve covering the existing granite beams with five orthotropic steel plates and resurfacing the road. As the structure is Listed at Grade II an historic building assessment was required to guide applications for Listed Building Consent and create a record of the structure prior to alterations. Historic Environment Projects, Cornwall Council (HE) were commissioned by Highways, Cornwall Council to undertake the historic building assessment prior to any alterations.

The proposed strengthening works should have little or no impact on the outward appearance of the bridge and little impact on the actual structure. It is suggested that no archaeological involvement is required during strengthening works.

# Introduction

## 1.1 Project background

HE Projects was commissioned by Ali Mokarram of Highways, Cornwall Council, to carry out an historic building assessment of Henneward or Allansford Bridge in the parish of Advent in North Cornwall. The building record was commissioned prior to strengthening works being undertaken on this Grade II listed structure.

## 1.2 Aims

The principal aim of the study was to provide an impact assessment of the proposed repair works to the bridge, so that this information could inform the planning/consent process. The objectives were to obtain a rapid historic building record of the site prior to alterations.

## 1.3 Methods

All recording work was undertaken according to the Institute of Field Archaeologists *Standard and Guidance for the Archaeological Investigation and Recording of Standing Buildings or Structures.*

The historic building assessment consisted of three stages: a desk-based study, followed by a site visit and analysis/report.

### 1.3.1 Desk-based study

This reviewed all readily available documentary and cartographic sources for the bridge itself and also its local historic landscape context. The study involved searches of the Cornwall HER as well as the following:

- Published sources, including local histories
- Historic maps, to include:
    - Thomas Norden's maps of Cornwall (1580s)
    - Joel Gascoyne's map of Cornwall (1699)
    - Thomas Martyn's map of Cornwall (1748),
    - OS 1 inch survey (c1810)
    - parish Tithe maps (c1840),
    - 1st and 2nd Editions of the OS 25 inch maps (c1880 and c1907)
- Modern maps
- English Heritage's Listed Building database
- Charles Henderson and Henry Coates *Old Cornish Bridges and Streams* (1928)
- Edward Kentley *Cornwall's Bridge and Viaduct Heritage* (2005)
- Oxford Archaeology's database of Cornish bridges

### 1.3.2 Site visit

A brief site visit was made to record information about the structure prior to any alterations. This was undertaken by means of an archive standard (monochrome film) photographic survey, supported by colour digital photography, with written notes to record form and architectural detail.

### 1.3.3 Post-fieldwork

During this phase the results of the fieldwork were collated for archiving and the results of the desk-based assessment and fieldwork were drawn together in this report.

# 2 Location and setting

The bridge is situated adjoining the tiny settlement of Allansford on the western edge of Bodmin Moor. It lies close to the source of the River Allan or Camel, at NGR SX 11067 79995 on the boundary of Advent and St Breward parishes but within the parish of Advent. It is possible that the road bridge may have been originally constructed to provide access for heavy vehicles from Stannon China Clay Works to areas to the north of the river. The bridge is located on the edge of Upland Rough Ground to the south and on the edge of Anciently Enclosed Land to the north (as identified by the Cornwall Landscape Assessment, Cornwall County Council 1996).

# 3 Designations

Henneward or Allansford Bridge is a Grade II listed building. The listing description is as follows:

> *Clapperbridge 100 metres to south-east of Allansford. GV II. Narrow road bridge at confluence of 2 tributaries of River Allan. C19 or earlier. Granite and stone rubble. 5-span bridge of clapper type construction. At confluence of 2 streams with 2 spans over stream from north and 3 spans over stream from east; stone rubble piers with wide pier near centre and spanning granite monolithic lintels.*

The structure is also located within a Site of Special Scientific Interest (SSSI), an Area of Outstanding Natural Beauty (AONB), and an Area of Great Scientific Value (AGSV).

# 4 Site history

Allansford is named as such on the Tithe Apportionment for the parish of Advent *c*1840 and Gover suggests the name is derived from the family 'Allen' which is found in the parish register from 1712 (Gover 1948). An alternative theory is indicated by Henderson and Coates who state that the River Camel was formerly called the Alan until the 18th century when it became more commonly known as the Camel, hence Allansford was named after a crossing on the River Allan (Henderson and Coates, 1928).

Gascoyne's map of 1699 is not detailed enough to show if there was a river crossing here at that date. Martyn's map of 1748 indicates that the settlement of Allansford existed at this date and also shows the road crossing the river here, suggesting the presence of at least a ford in the 18th century. Martyn's map also shows the river as the 'River Allan'. The OS map (1 inch to 1 mile scale) surveyed in 1805 is not very detailed but shows the road crossing the river at this date. By *c*1840 the settlement and crossing had become known as Allansford, and it is shown as such on the Tithe Map in the parish of Advent (Fig. 4). The Tithe Map for the parish of St Breward c1840 (Fig 5) depicts what is probably a footbridge crossing the southernmost tributary immediately to the west of the road which must have been a ford crossing at this time.

The 1st edition OS 25 inch map of *c*1880 (Fig 6) shows a complex of watercourses at Allansford and marks a 'Foot Bridge' crossing the northernmost tributary. At this date the main vehicle crossing was a long forded watercourse. By *c*1907 (Fig 7) the complex of streams shown on the *c*1880 OS map had been substantially altered with many of the channels being infilled to accommodate the new road bridge, associated causeway and abutments which exist today. The Second Edition OS 25 inch map of *c*1907 (Fig 7) also indicates that the walled ford area had also been built at the same time on the west side of the bridge. The current road bridge was built between 1880 and 1907, and is likely to have been constructed to improve the passage of heavy vehicles from Stannon China Clay Works to the east.

Since 1907 no apparent changes to the bridge have been identified through cartographic evidence. However, the bridge piers have been repointed with a cement mortar during the 20th century.

# 5 Bridge description

The present road bridge measures approximately 4.4m in width and is approximately 27m long. It has been constructed at the point where two tributaries meet and comprises 5-spans with two of the spans serving the northern tributary and the other three serving the southern tributary. On the west side of the bridge all five spans open into a single wide channel. The bridge appears to have a single construction phase with no notable alterations or repairs.

The entire structure is built from granite blocks and is of lintel (or beam) construction with simple square-ended pier bases in the streams and abutment walls on each of the riverbanks. The pier located at the convergence point of the two tributaries (second from the north) is slightly wider than the others and abuts land on the eastern side. The large roughly hewn granite lintels forming the tops of the spans show clear signs that they were quarried in the late 19th or early 20th century with many quarry drill splitting marks (approximately 2cm wide) of this date visible (see Figs 12 and 14). The average dimensions of one of these lintels is 2.05m long by 0.65m high by 0.5m wide and they are fixed together along the face of each elevation with iron ties for extra stability (see Fig 10). The spans are all square in profile and each measure approximately 1.2m wide by 1.1m high. The piers and revetment pier walls have been heavily pointed with modern cement mortar.

The bridge does not have built parapets; instead there are simple iron hand rails on either side which are likely to be original and part of the initial design. Beyond the spans to both the north and south the bridge continues for approximately 7m (as do the hand rails) as a raised causeway/road with retaining walls built from granite rubble and now mostly overgrown. The top of the bridge has a tarmac road surface and there are grass verges either side.

On the western side of the bridge there are the remains of a ford which is contemporary with the bridge but now fenced off and overgrown. It comprises a track leading from the river on either side approximately 2.5m wide. On the southern side this track is defined by a granite rubble retaining wall dug into the bank on the western side.

# 6 Significance

Henneward or Allansford bridge is a Grade II Listed structure built on the edge of Bodmin Moor adjoining a small historic settlement. The bridge was built in the late 19th or early 20th century replacing an earlier ford and footbridge. It seems possible that it was constructed to allow better access to the north for heavy vehicles coming from Stannon China Clay Works. The bridge has undergone hardly any repairs or alterations over the centuries, the main repair being the modern repointing of the piers. Historic features directly associated with the bridge include a ford on the western (downstream) side.

# 7 Impacts

The bridge has a limited carrying capacity for modern traffic weights so a strengthening programme is proposed by Cornwall Council. The proposed works will only affect the upper surface of the bridge. They involve removing the existing road surface, covering the existing granite beams with five orthotropic steel plates and resurfacing the road.

The proposed strengthening works should have little or no impact on the outward appearance of the bridge and little impact on the actual structure.

# 8 Mitigation measures

It is suggested that the proposed strengthening works do not require any further archaeological work as very little extra detail is likely to be revealed when the existing road surface is removed.

# 9 References

## 9.1 Primary sources

Ordnance Survey, *c*1880. *25 Inch Map* First Edition (licensed digital copy at HE)

Ordnance Survey, *c*1907. *25 Inch Map* Second Edition (licensed digital copy at HE)

Ordnance Survey, 2007. *Mastermap Digital Mapping*

Tithe Map and Apportionment, *c*1840. *Parish of Advent* (microfiche copy at HE)

Tithe Map and Apportionment, *c*1840. *Parish of St Breward* (microfiche copy at HE)

Joel Gascoyne's map of Cornwall (1699)

Thomas Martyn's map of Cornwall (1748)

OS 1 inch survey (c1810)

## 9.2 Publications

Gover, J.E.B., 1948, *Place-Names of Cornwall* (manuscript at RCM)

Henderson, C.G. and Coates, H., 1928, *Old Cornish Bridges and Streams* Bradford Barton reprint 1972, Truro

Kentley, E., 2005, *Cornwall's Bridge and Viaduct Heritage*, Truro

Padel, O. 1985, Cornish Place-Name Elements

## 9.3 Websites

http://www.imagesofengland.org.uk/ English Heritage's online database of Listed Buildings

# 10 Project archive

The HE project number is **2011041**

The project's documentary, photographic and drawn archive is housed at the offices of Historic Environment, Cornwall Council, Kennall Building, Old County Hall, Station Road, Truro, TR1 3AY. The contents of this archive are as listed below:

1. A project file containing site records and notes, project correspondence and administration.
2. Black and white photographs archived under the following index numbers: GBP 2174
3. Digital photographs stored in the directory ..\Images\Sites E-H\Henneward or Allansford Bridge 2011041
4. English Heritage/ADS OASIS online reference: cornwall2-98996

This report text is held in digital form as: G:\CAU\HE Projects\Sites H\ Henneward or Allansford Bridge assessment 2011041\ Henneward or Allansford Bridge assessment report 2011041

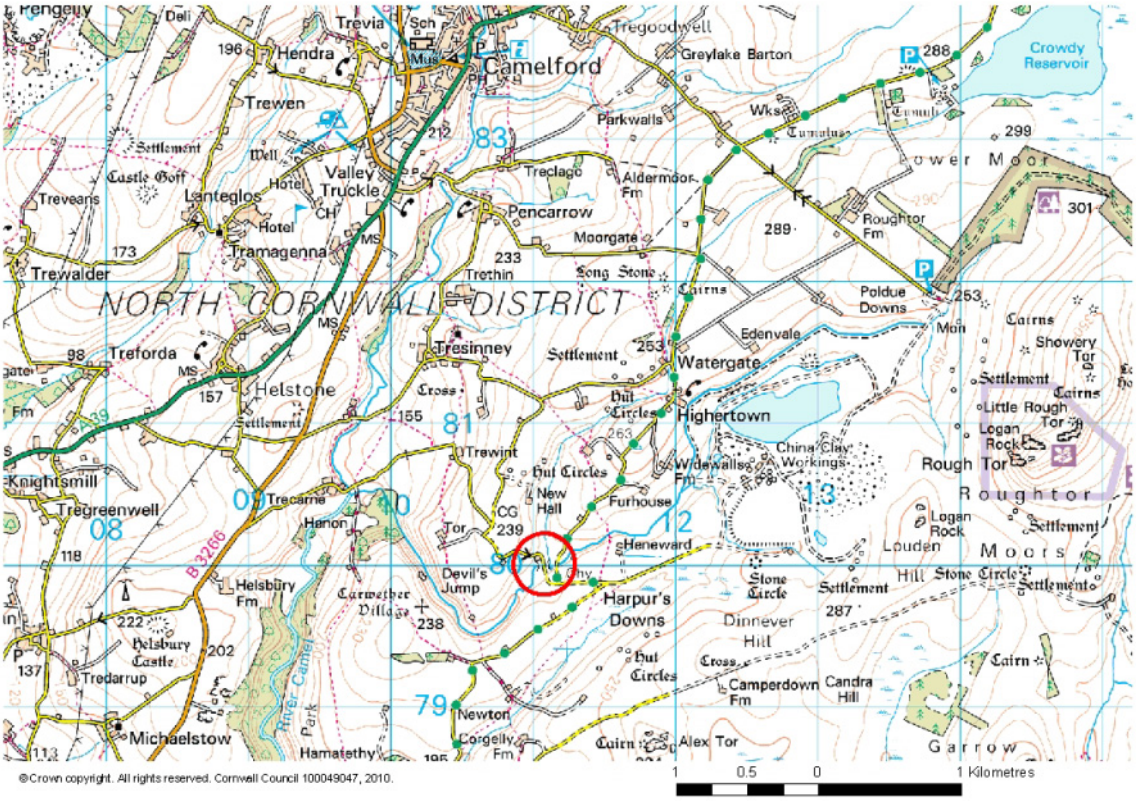


*Fig 1 Location map*

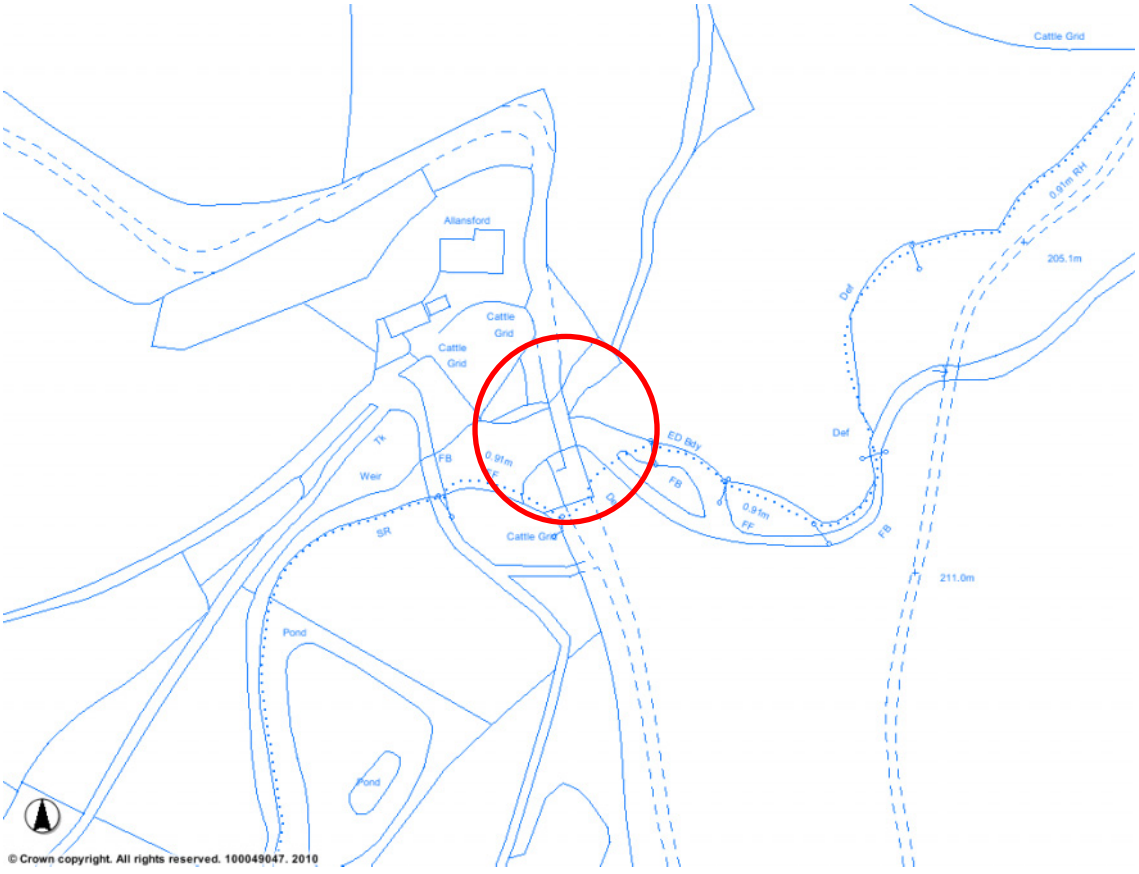


*Fig 2 Ordnance Survey digital mapping showing the site and its environs (2009)*


*Fig 3 Aerial photograph (2005) showing the bridge and its environs*

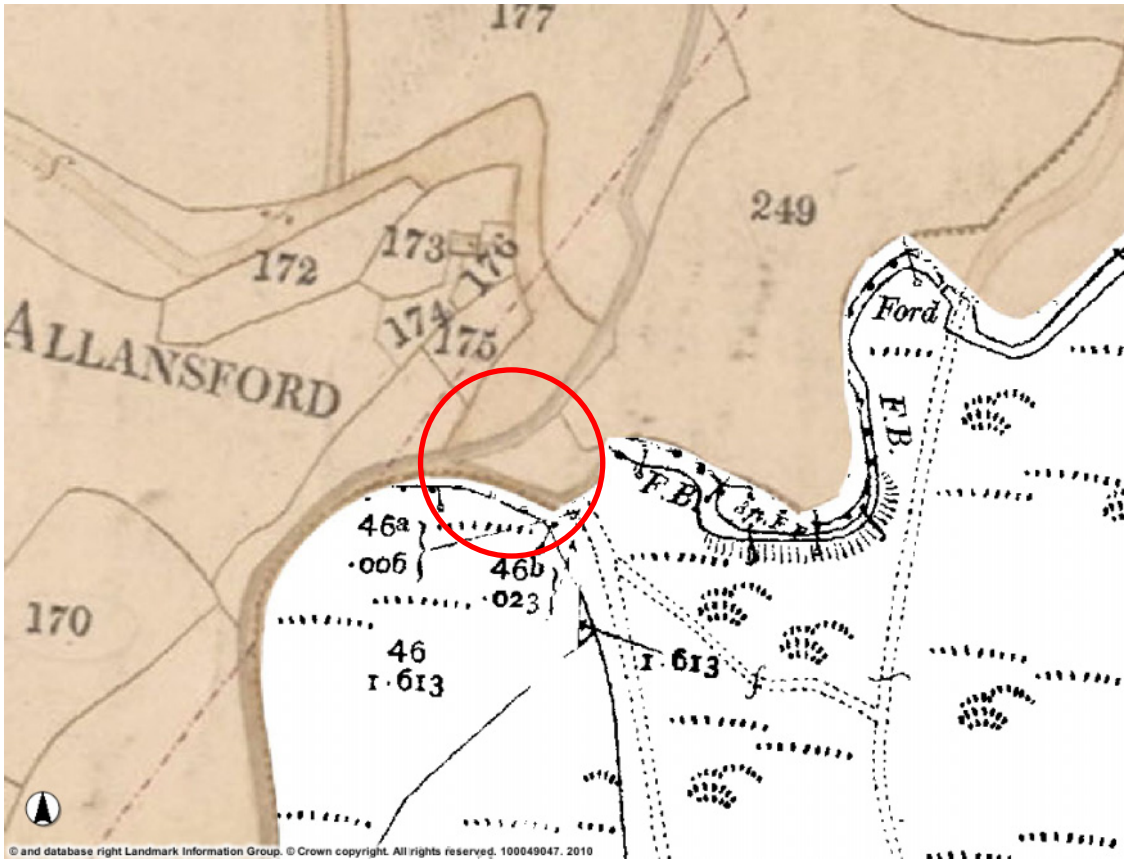


*Fig 4 Tithe Map for the parish of Advent, c1840*

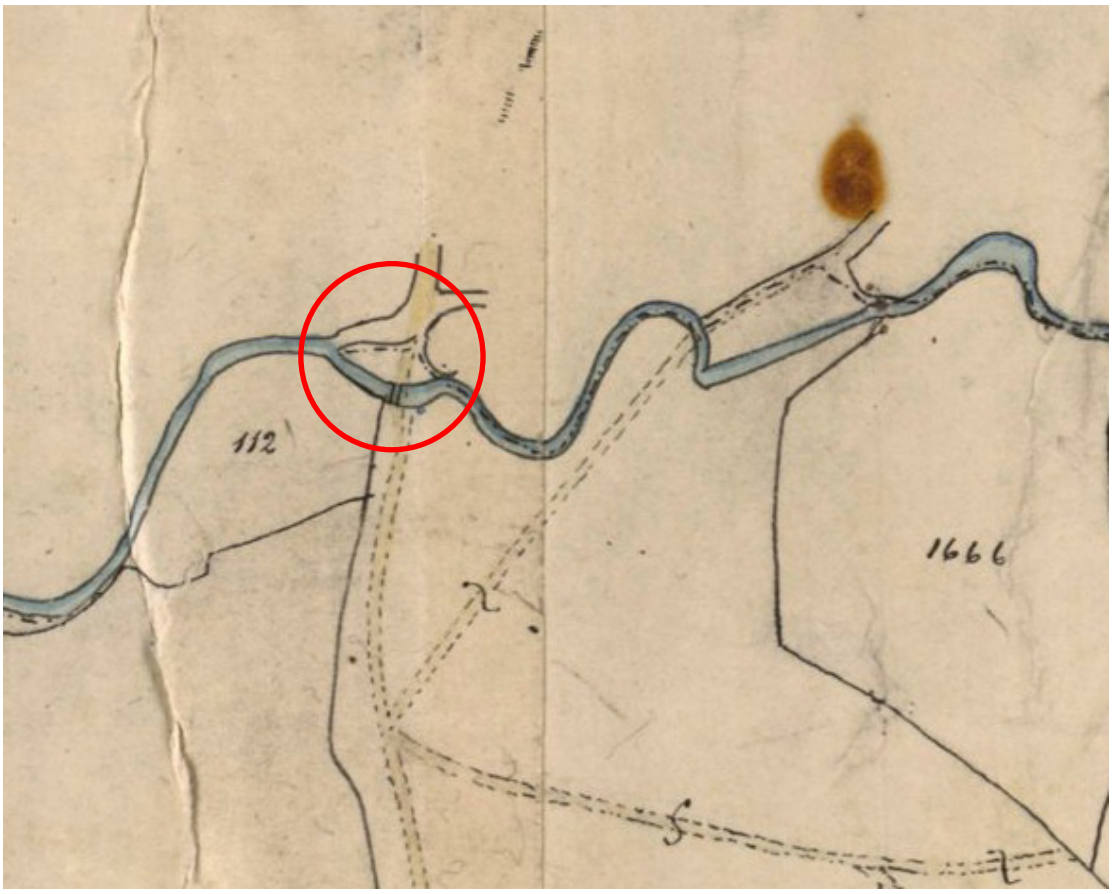


*Fig 5 Tithe Map for the parish of St Breward, c1840*

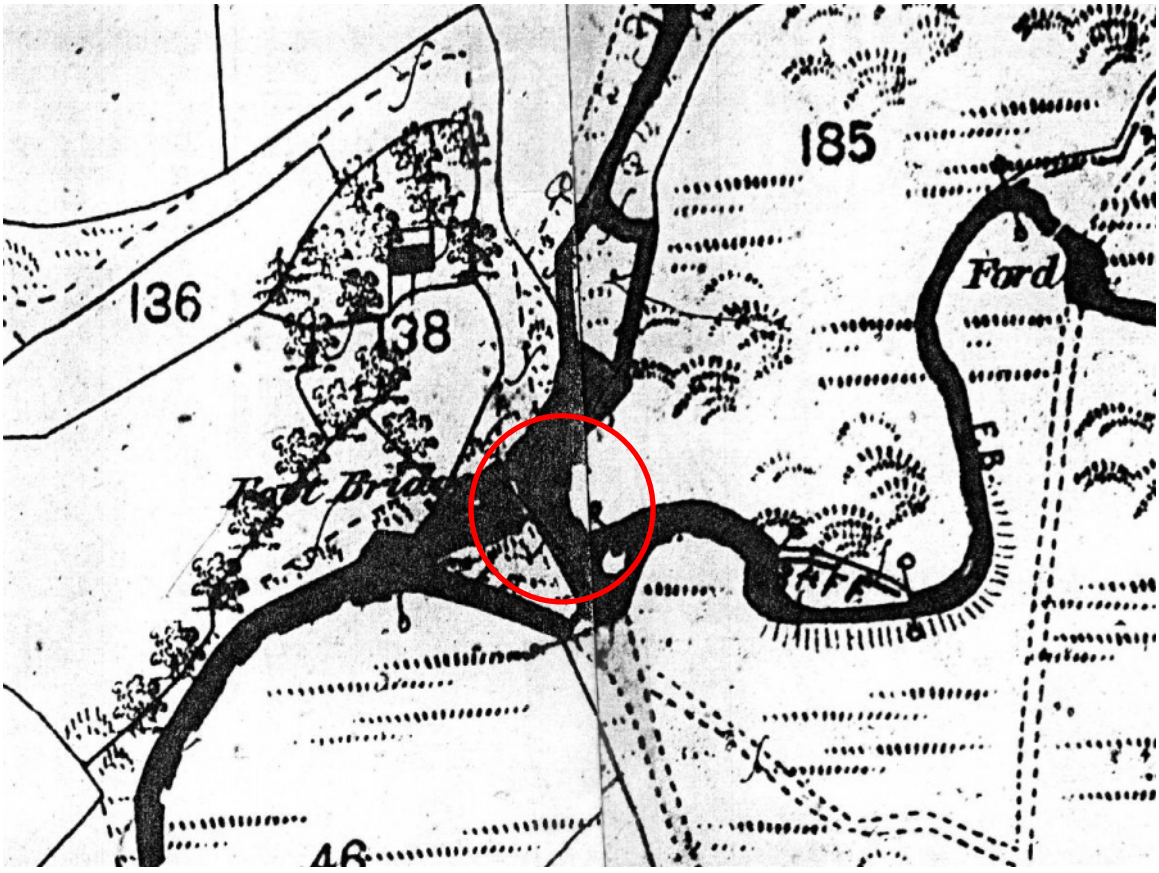


*Fig 6 First Edition of the Ordnance Survey 25 Inch Map, c1880*

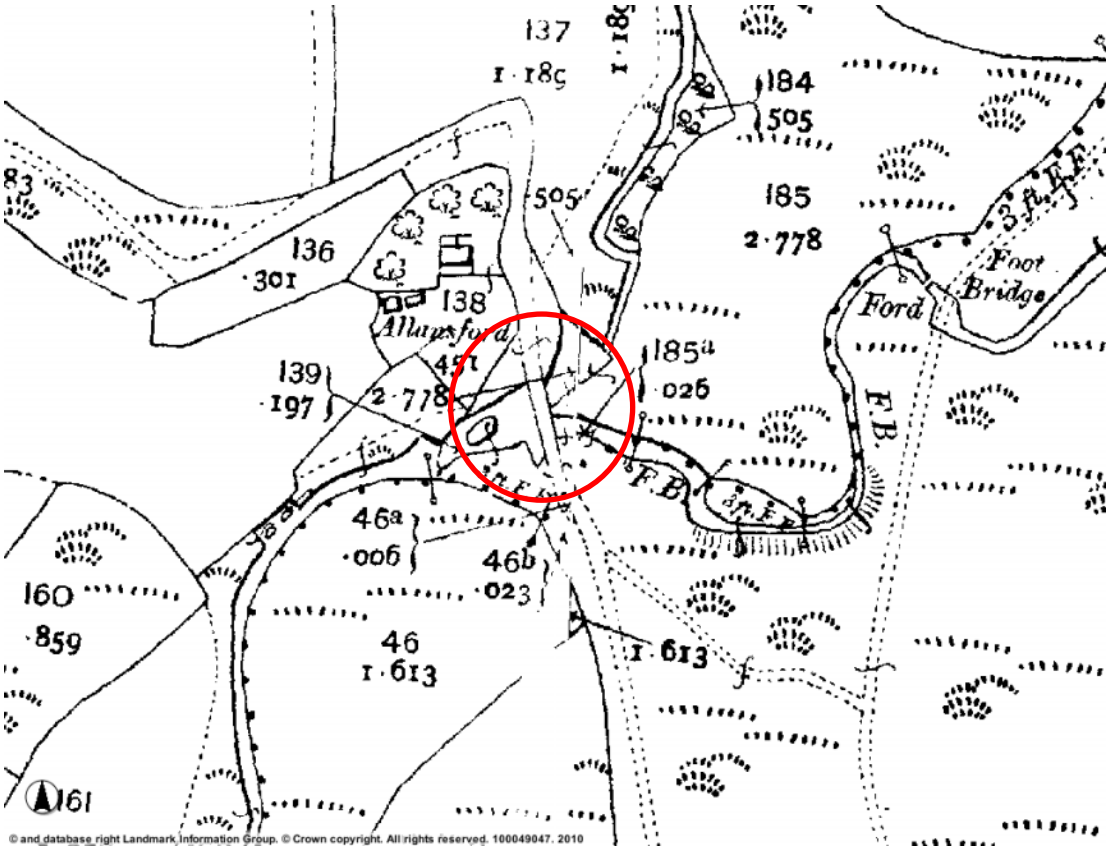


*Fig 7 Second Edition of the Ordnance Survey 25 Inch Map, c1907*

*Fig 8 View of the bridge looking north*

*Fig 9 West (downstream) elevation*

*Fig 10 West (downstream) elevation showing details of granite lintels and piers and iron ties*

*Fig 11 Northern half of east (upstream) elevation (two spans) showing iron parapet railings*

*Fig 12 Northern half of east (upstream) elevation (two spans) showing quarry drill marks on the granite lintel*

*Fig 13 Southern half of east (upstream) elevation (three spans)*

*Fig 14 View through southern span looking west and showing late 19th century quarry drill marks on one of the granite lintels*