



# **Congdons Bridge, St Gennys, Cornwall Archaeological Assessment**



**Cornwall Archaeological Unit**



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## **Acknowledgements**

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The Project Manager was Jo Sturgess.

The views and recommendations expressed in this report are those of Cornwall Archaeological Unit and are presented in good faith on the basis of professional judgement and on information currently available.

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Cover illustration

*Congdons Bridge, facing downstream (March 2015)*

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## **Contents**

<b>1</b>	<b>Summary</b>	<b>1</b>
<b>2</b>	<b>Introduction</b>	<b>1</b>
2.1	Project background	1
2.2	Aims	1
2.3	Methods	1
<b>3</b>	<b>Location and setting</b>	<b>2</b>
<b>4</b>	<b>Designations</b>	<b>2</b>
4.1	National	2
<b>5</b>	<b>History of Congdons Bridge</b>	<b>2</b>
<b>6</b>	<b>Bridge description</b>	<b>3</b>
<b>7</b>	<b>Significance</b>	<b>4</b>
<b>8</b>	<b>Impacts</b>	<b>4</b>
<b>9</b>	<b>Recommendations/Mitigation measures</b>	<b>4</b>
<b>10</b>	<b>References</b>	<b>5</b>
<b>11</b>	<b>Project archive</b>	<b>5</b>

## **List of Figures**

- Fig 1 Location map
- Fig 2 Ordnance Survey digital mapping showing the site and its environs
- Fig 3 1813 1 inch to 1 mile Ordnance Survey showing the road and river at 'Kents'
- Fig 4 Tithe Map for the parish of St Gennys, c1840
- Fig 5 First Edition of the Ordnance Survey 25 Inch Map, c1880
- Fig 6 Second Edition of the Ordnance Survey 25 Inch Map, c1907, showing a change in bridge design, possibly the first stone bridge.
- Fig 7 Plan and upstream elevation of Congdons Bridge
- Fig 8 East (upstream) elevation
- Fig 9 West (downstream) elevation showing square end of the cutwater pier
- Fig 10 West (downstream) elevation showing span lintels with quarry drill marks
- Fig 11 East (upstream) elevation showing span lintels
- Fig 12 South abutment, upstream side showing evidence or earlier abutment walling
- Fig 13 South abutment, downstream side showing evidence or earlier abutment walling beneath tree roots
- Fig 14 North abutment, upstream side showing evidence or earlier abutment walling beneath and to east of tree roots
- Fig 15 Detail of rubble core above span lintels
- Fig 16 The bridge facing south
- Fig 17 The bridge facing north
- Fig 18 Detail of iron rails, downstream side
- Fig 19 Weir and pipe, downstream

## 1 Summary

Congdons (or Kents) Bridge carries a minor road (U6188) from Middle Crackington to Crackington Haven over a river in the parish of St Gennys and is located at NGR SX 15360 96400 (Figs 1 and 2). The bridge may have been rebuilt several times with the present structure consisting of a two span granite slab structure with granite beams supported by masonry abutments and a single masonry cutwater pier. A bridge is indicated on both the 1<sup>st</sup> edition OS 25 inch map of c1880 and the 2<sup>nd</sup> edition of 1907 (Figs 5 and 6) but does not appear on the 1840 Tithe Map (Fig 4) for St Gennys. However, a documentary record suggests a bridge in existence in 1711 (Parnall 1973). The bridge has been scheduled for strengthening works by Cornwall Council.

## 2 Introduction

### 2.1 Project background

The bridge has a limited carrying capacity for modern traffic weights so a strengthening programme is proposed by Cornwall Council. It was assessed as part of the County Assessment Programme and has failed and been given a live loading of less than three tonnes. During the initial consultation with relevant parties, the Senior Development Officer, Historic Environment (Phil Copleston) recommended that an archaeological assessment should be carried out prior to any works. Cornwall Archaeological Unit (formerly Historic Environment Projects) was approached by Jonathon Darch, acting on behalf of Cormac Solutions Ltd (and Cornwall Council) to undertake the work. Following agreement of the costs a Written Scheme of Investigation was prepared setting out the approach, methods and standards of the work and these were agreed by the Senior Development Officer.

### 2.2 Aims

The purpose of the assessment is to:

- Provide an assessment of the archaeological and historical importance of the bridge.
- Assess the archaeological impact of the strengthening scheme.
- Give recommendations for any necessary further investigation and recording.

### 2.3 Methods

All recording work was undertaken according to the Chartered Institute for 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.

#### 2.3.1 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 (Historic Environment Record) as well as the following:

- Published sources, including local histories
- Historic maps, including:
  - 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),

- 1<sup>st</sup> and 2<sup>nd</sup> Editions of the OS 25 inch maps (c1880 and c1907)

- Modern maps
- Charles Henderson and Henry Coates *Old Cornish Bridges and Streams* (1928)
- Oxford Archaeology's database of Cornish bridges

### **2.3.2 Site visit**

A site visit was made in order to assess survival of historic fabric of both the bridge and surrounding area and identify impacts that the strengthening work might have. This was undertaken by means of a photographic and sketch survey, together with written notes. The field visit was made on 4<sup>th</sup> March 2015.

The sketch survey comprised redrawing and annotating existing elevations and plans of the bridge using AutoCAD. A photographic record was made to illustrate those areas that may be affected by strengthening works (including any parts of the bridge which will be taken down and rebuilt) and included general illustrative site photographs.

### **2.3.3 Post-fieldwork**

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

## **3 Location and setting**

The bridge carries a minor road between the medieval settlements of Higher Crackington and St Gennys and crosses a fast flowing river which emerges at Crackington Haven 1km to the north-west (Figs 1 and 2). The bridge is located on the edge of Anciently Enclosed Land to the south and Steep Sided Valleys to the north (as identified by the Cornwall Landscape Assessment, Cornwall County Council 1996).

## **4 Designations**

### **4.1 National**

Congdons Bridge is not a listed building but it does lie within an Area of Outstanding Beauty which stretches from Pentire Point to Widemouth and it also lies within an area of Heritage Coast.

#### **HER entry**

MCO47985 CONGDONS BRIDGE AND WEIR - Congdons Bridge or 'Kent' Bridge is one of St Gennys' most important bridges, with references back to 1711, when it was repaired (Parnall 1973). The bridge has been rebuilt on several occasions. The present bridge carries a road and has two spans of drill-split granite lengths laid on rubble masonry heads and pier with a breakwater; earlier heads are visible upstream to the east. A built weir survives approximately 3m downstream to the west of the bridge (RIS-PCH field note 566).

The Cornish Bridge Project states:

"A slab bridge built high over a fast flowing river. It is raised on tall slatestone retaining walls with wide granite beams above. The bridge is 2 span with a cutwater US and an extensive concrete apron. Modern steel railings are set into the concrete beams" (Oxford Archaeology 2003).

(Source: Heritage Gateway website [www.heritagegateway.org.uk](http://www.heritagegateway.org.uk))

## **5 History of Congdons Bridge**

Neither the Gascoyne (1699) or Martyn (1748) maps are detailed enough to show the river or road in this location. The 1813 1" to 1 mile Ordnance Survey map (Fig 3) is the first to show the river and road in detail although no bridge is shown and the river runs



across the road suggesting a ford. The 1840 Tithe Map for St Gennys (Fig 4) shows the same road layout with a possible ford crossing the river but the first map to clearly show the presence of a bridge is the 1880 First Edition Ordnance Survey (Fig 5). Both this and the 1907 second edition map (Fig 6) show a bridge spanning the river with a possible ford on the east side. There is very little apparent change between these and the modern mapping suggesting that the layout of bridge and road has changed minimally over the last 135 years. Most of the ground descends steeply to either side of the stream and whilst the river bank slopes more gradually to the east of the bridge on its south side, possibly indicating the location of a ford, this is by no means certain (and this modification of ground level may be due to the presence of a relict riverside structure – see below).

The settlement of Kents appears on the 1" to 1 mile Ordnance Survey of 1813 (Fig 3) 120m along the road to the north of the bridge but is not named on the 1840 Tithe Map or later Ordnance Survey maps, and at an unknown date (possibly 20th century) the place name is changed to Congdons, the name of the modern settlement (recorded on the 2009 Mastermap, Fig 2). Despite the lack of map evidence for a bridge the earliest reference to a crossing in this location appears in churchwarden's accounts of 1711 for the parish of St Gennys, for repair work where fourpence was paid for "a pole to make a raile for kent's Bridge" (Parnall 1973, 90).

Subsequent references to the bridge occur in churchwarden's accounts throughout the 18th century, in 1717 "a raile and posses for Kent's bridge" (*ibid* 92); 1731 " for rapaireing the bridg £10" (*ibid* 95); 1749 "pd. for 5 seams of freath (fence) and stakes for Kents Bridge 7/-" (*ibid* 96); 1750 "a seam of pols for Kents bridg" (*ibid* 97); 1754 "for a tree for Kents bridge cutting squaring and drawing down ye same and posts £1" (*ibid* 97); " 1773 "for Kents Bridge 11/-, for cutting and drawing same 6/-" (*ibid* 116) ; 1780 "for timber for Kents Bridge 3/6, the carpenter one day repairing the same ¼, for attendance and expenses 1/6"; and finally in 1781 "cost 1/ to repair" (*ibid* 119).

References are also made to additional payments relating to the bridge; for payment in ale, "pd. for a bush of malt and pound of hops for Kents bridge 7/-"; "paid for a Doz. of ale about ye sd bridge 1/-" as well as the churchwarden's own costs "for my own labour about Kents bridge 2 days 1/8" (*ibid* 97). These references clearly refer to a timber bridge of sufficient importance (believed to be the only bridge crossing the stream at the time) to require frequent maintenance or rebuilding and it appears that the bridge suffered fairly regular flood damage, which may have been extensive at times. The substantial 1731 payment of £10 suggests large-scale repair work and possibly a total rebuild of the bridge. Parnall (writing in 1973) records that the late Richard Goodman of Congdons remembered a timber bridge before the present stone structure (*ibid* 117). It is possible that a ford was present adjacent to the timber bridge (perhaps on the upstream side where the land descends more gradually to the river bank). This is suggested by the 1880 map, but by 1907 the bridge appears to have changed, becoming more 'solid' with solid lines drawn on both upstream and downstream sides.

The timber bridge recorded in the 18th century accounts may still have been present in 1880 and it is likely that this was the bridge remembered by Richard Goodman. This would have been present at the time of the earlier 19th century mapping but not indicated.

Although the HER records that "earlier heads are visible upstream to the east" these were not evident at the time of the field visit and it is unknown exactly what was visible at the time of the HER record.

The documentary and physical evidence suggests that the original bridge and adjacent ford were replaced directly by the stone bridge at some point between 1880 and 1907.

## 6 Bridge description

The present road bridge (Figs 7 and 8) measures approximately 3.9m in width, is 5m long between abutments and appears to have a single construction phase with no

notable alterations or repairs, although fragments of earlier drystone abutment walling can be seen on both the northern and southern sides (Figs 12-14).

The structure is built from a mix of killas and granite blocks and is of lintel (or beam) construction with a single simple cutwater pier and abutment walls on each of the riverbanks (Figs 7-9). The pier has a pointed end upstream and is square-ended downstream (Figs 8 and 9). Seven roughly hewn granite lintels (Figs 10 and 11) form the tops of each of the spans and show clear signs that they were quarried in the late 19<sup>th</sup> or early 20<sup>th</sup> century with many quarry drill splitting marks (approximately 2cm wide) visible. The lintels measure at least 2.15m long (the width of a span), ranging between 0.36m and 0.46m wide and 0.3m high. The cutwater pier and abutment walls have been heavily pointed with modern cement mortar incised with horizontal and vertical pointing lines.

In both upstream and downstream elevations the three perpendicular lintels are visible above the span lintels with rubble walling either side – this is filled with rubble (visible between the lintels from below the bridge, Fig 15) to form the superstructure of the bridge. A low concrete kerb runs either side into which are fixed iron hand rails (Figs 16-18), possibly dating to the first phase of the stone bridge and reused when the concrete kerbs were constructed. Beyond the spans the kerb and rails extend 1.4m to the north and 1.7m to the south. The top of the bridge is surfaced with tarmac. On the southern bank to the east of the bridge a platform suggests the location of a riverside structure, now demolished, although nothing is marked on the maps. A concrete surface above the riverbank and an old pipe emerge into the river at this point.

The riverbed beneath the bridge is laid with concrete extending downstream to a weir adjacent to the bridge, although in places the underlying rock is visible where the concrete has eroded/fractured. There is extensive erosion of the riverbank on both the north and the south sides downstream of the weir, with a large drainage pipe issuing into the river on the northern side (Fig 19).

## **7 Significance**

The present bridge is of probable late 19<sup>th</sup> – early 20<sup>th</sup> century date and was constructed to carry road traffic across the fast flowing stream at the bottom of the steep sided valley on a meandering road connecting the medieval settlement of St Gennys to the north and Crackington to the south. Documentary evidence shows the existence of a timber bridge at least as early as the 18<sup>th</sup> century. The present bridge is a single build probably dating to the latter half of the 20<sup>th</sup> century re-using most of the elements of an earlier stone bridge (granite lintels, handrail). The only indications of this first phase of the stone bridge are remnants of stone revetment in southern and northern banks.

## **8 Impacts**

It is believed that the proposed works will only affect the upper surface of the bridge. Work will 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.

## **9 Recommendations/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.

However, an attempt should be made to leave the outward appearance of the bridge unchanged and the iron railings should be retained as they are a characterful feature in

good condition and possibly contemporaneous with the first stone construction. If ground is disturbed to the landward side of either abutment a watching brief should be carried out by a suitably qualified archaeological contractor as these areas have the potential for elements of the earlier timber bridge or road surfaces to survive.

## 10 References

### 10.1 Primary sources

Ordnance Survey, c1880. *25 Inch Map* First Edition (licensed digital copy at HE)

Ordnance Survey, c1907. *25 Inch Map* Second Edition (licensed digital copy at HE)

Ordnance Survey, 2007. *Mastermap Digital Mapping*

Tithe Map and Apportionment, c1840. *Parish of Advent* (microfiche copy at HE)

Tithe Map and Apportionment, c1840. *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)

Oxford Archaeology 2003, Cornish Bridge Project

### 10.2 Publications

Cornwall County Council 1996. *Cornwall Landscape Assessment*

Pamall, R, 1973. *Wreckers and Wrestlers A History of St Gennys Parish*

### 10.3 Websites

<http://www.heritagegateway.org.uk/gateway/> English Heritage's online database of Sites and Monuments Records, and Listed Buildings

## 11 Project archive

The CAU project number is 146466

The project's documentary, digital, photographic and drawn archive is maintained by Cornwall Archaeological Unit, Cornwall Council, Fal Building, County Hall, Treyew 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. Digital photographs stored in the directory ..\Images\Sites C\Congdons Bridge 146466
3. English Heritage/ADS OASIS online reference: **cornwall2-205966**
4. This report text is held in digital form as: G:\CAU\HE Projects\Sites C\Congdons Bridge Bridge assessment 146466\Congdons Bridge assessment report 146466

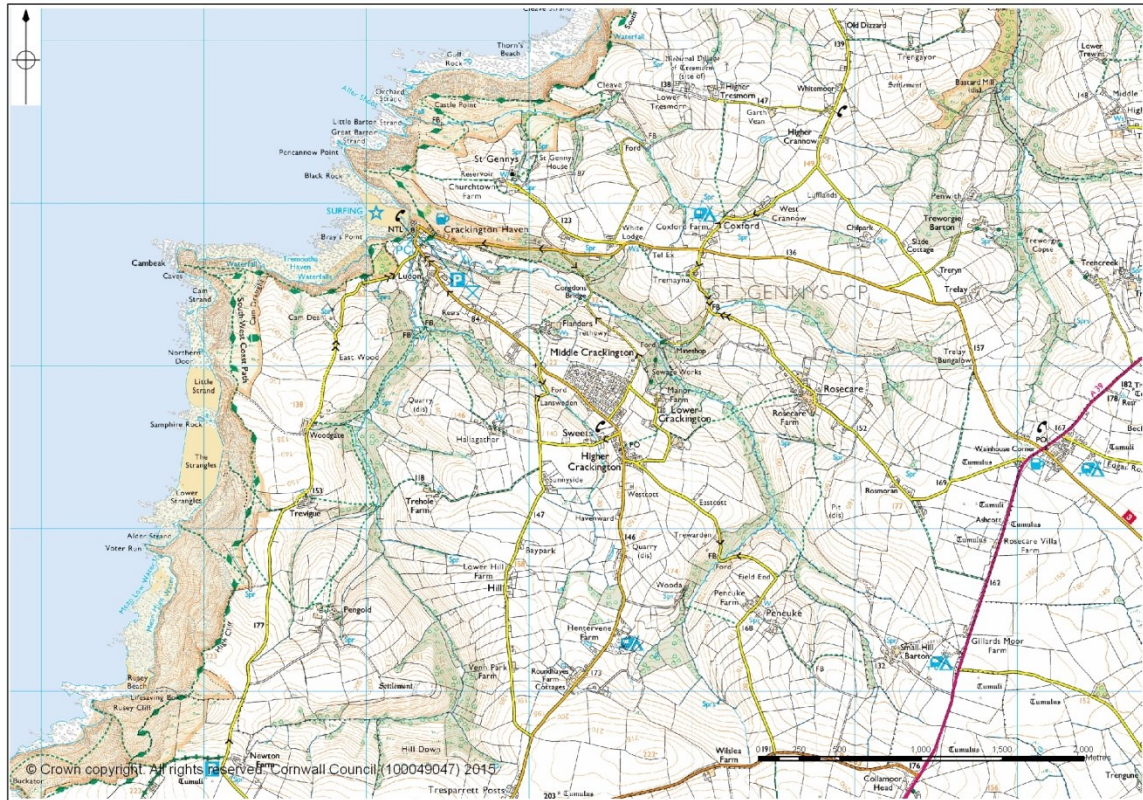


Fig 1 Location map

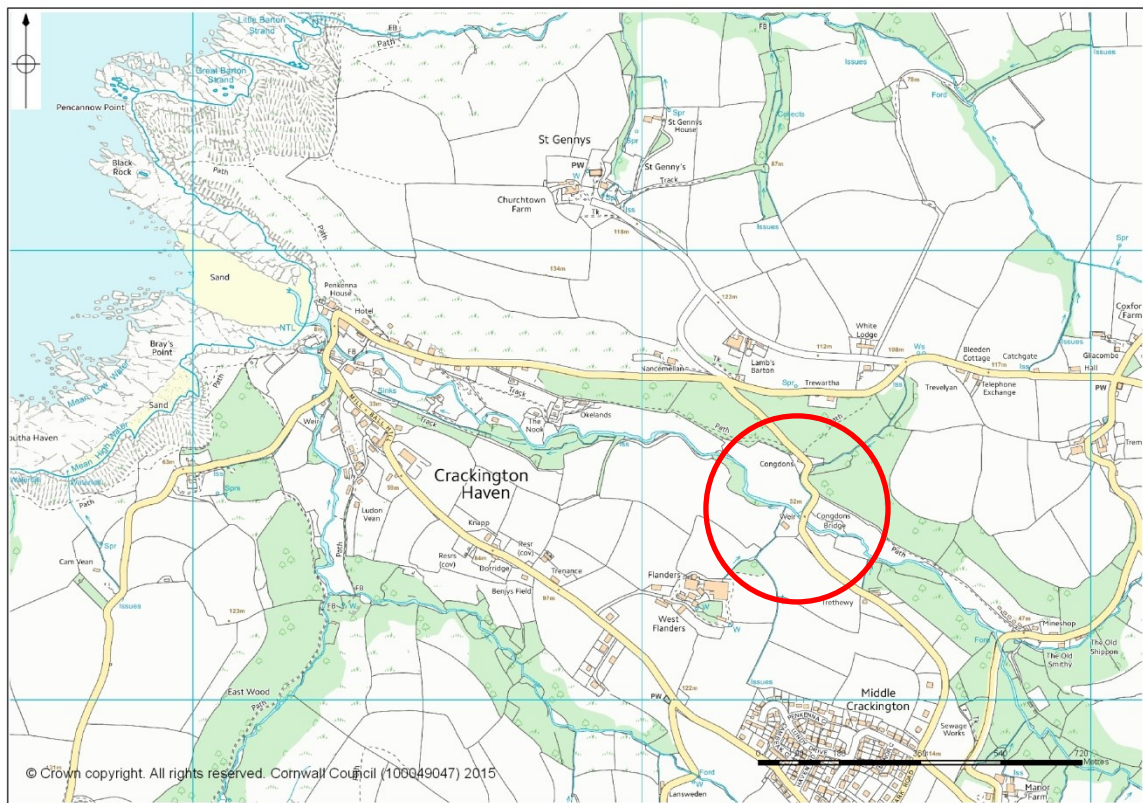


Fig 2 Ordnance Survey digital mapping showing the site and its environs





Fig 3 1813 1 inch to 1 mile Ordnance Survey showing the road, river and settlement known as 'Kents'



Fig 4 Tithe Map for the parish of St Gennys, c1840

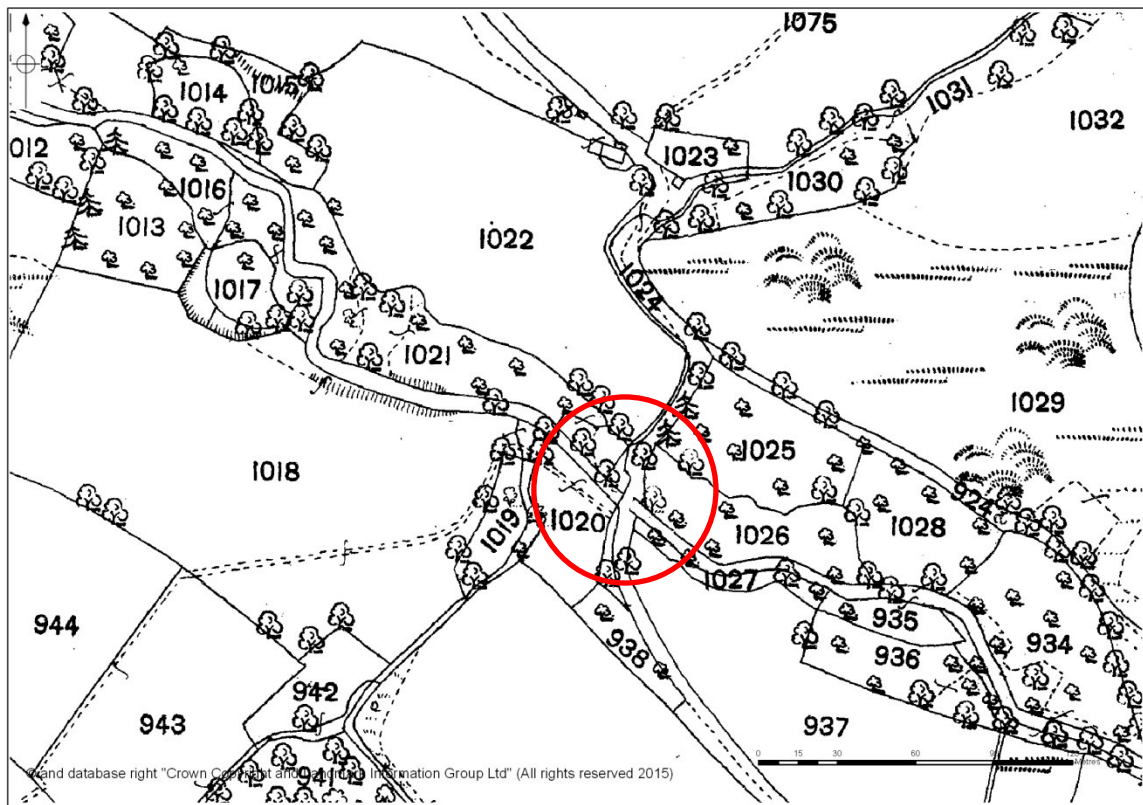


Fig 5 First Edition of the Ordnance Survey 25 Inch Map, c1880

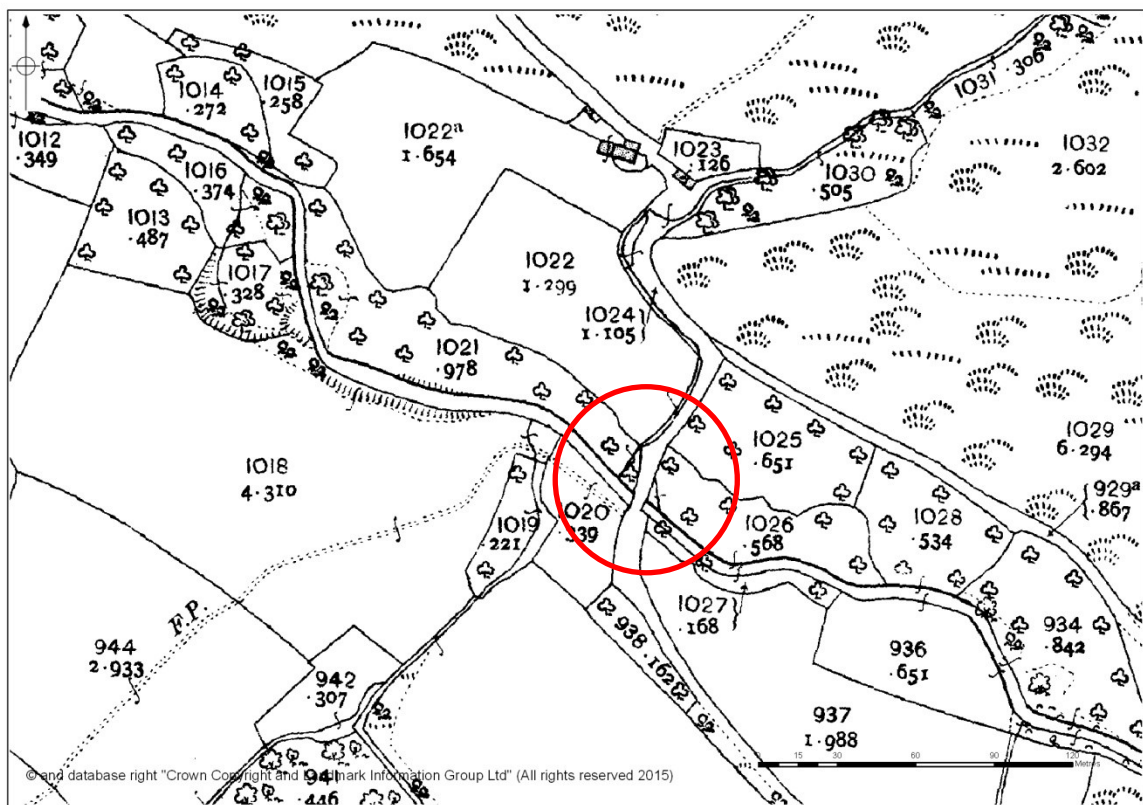


Fig 6 Second Edition of the Ordnance Survey 25 Inch Map, c1907, showing a change in bridge design, possibly the first stone bridge.

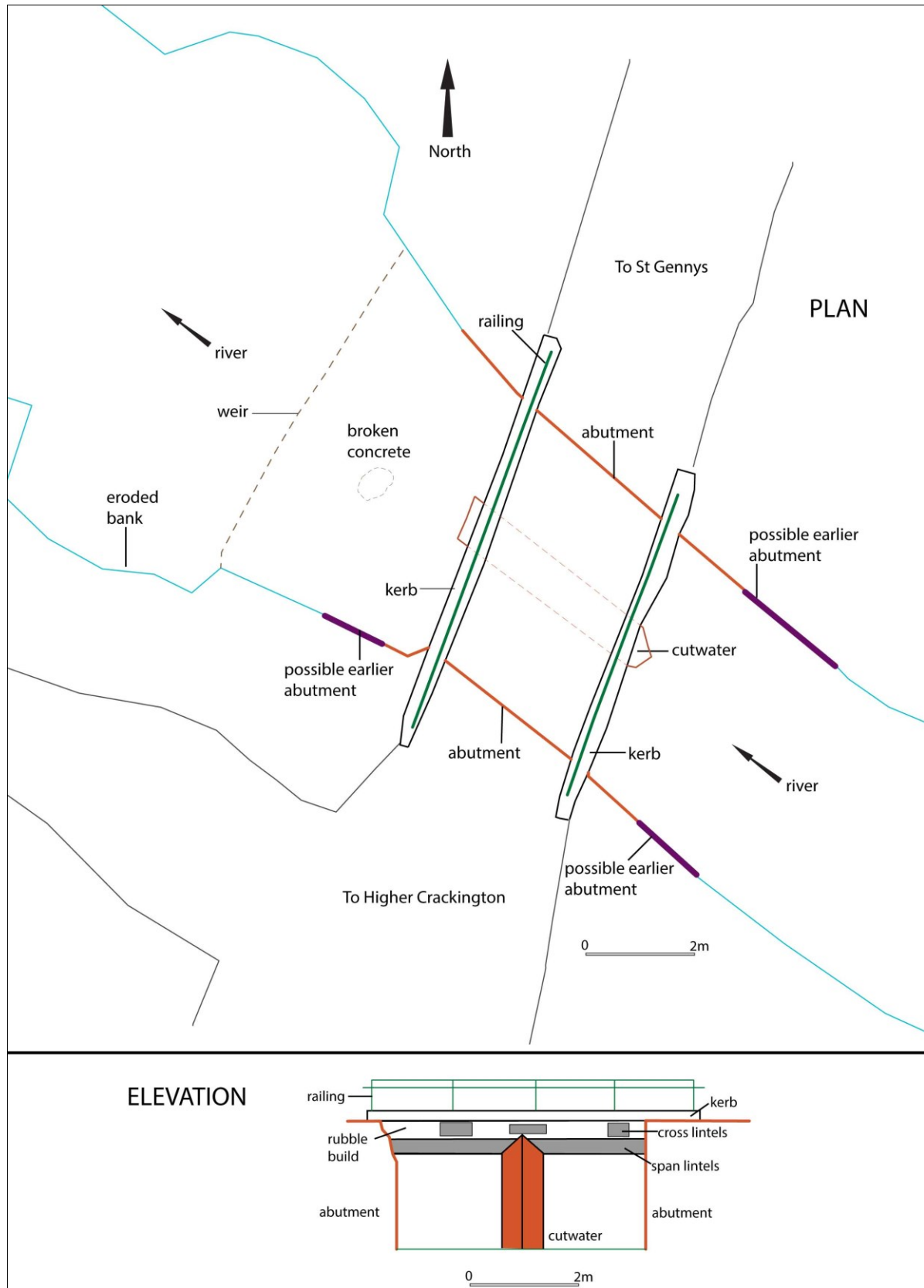


Fig 7 Plan and upstream elevation of Congdons Bridge





*Fig 8 East (upstream) elevation*



*Fig 9 West (downstream) elevation showing square end of the cutwater pier*





*Fig 10 West (downstream) elevation showing span lintels with quarry drill marks*



*Fig 11 East (upstream) elevation showing span lintels*





*Fig 12 South abutment, upstream side showing evidence or earlier abutment walling*



*Fig 13 South abutment, downstream side showing evidence or earlier abutment walling beneath tree roots*





*Fig 14 North abutment, upstream side showing evidence of earlier abutment walling beneath and to east of tree roots*



*Fig 15 Detail of rubble core above span lintels*





*Fig 16 The bridge facing south*



*Fig 17 The bridge facing north*





*Fig 18 Detail of iron rails, downstream side*



*Fig 19 Weir and pipe, downstream*