

THE COUNTY BRIDGE PAPERS

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The various Turnpike Trust records to be found in the Somerset County Records Office and elsewhere have long provided source material for the student of the development of Somerset's highway network. A supplementary source, perhaps less well-known, is the collection of County Bridge Papers connected with the Quarter Sessions records. This article is an attempt to illustrate, with reference to one bridge, the type and variety of information contained in these papers.

From very early times the duty of repairing bridges of public utility was primarily imposed upon the county, rather than the parish which was at common law bound to repair all public highways; hence the expression "county bridge". In addition, the highways at the ends of county bridges built prior to the Highways Act of 1835¹ were considered as extensions of the bridges themselves and were accordingly repairable with the bridges by the county. The Statute of Bridges of 1530 specified three hundred feet from the ends of bridges².

Hurstbow Bridge is located on the south-western outskirts of Martock (ST 4582 1894), carrying the Martock to Crewkerne road (now the B3165) over Hinton Meads Brook. The length of this road from Martock through Hurst and Bower Hinton to the Fosse Way was turn-

piked in 1760. The road branching westwards immediately to the south of the bridge towards South Petherton via Cary's Mill Bridge over the River Parrett was turnpiked in 1802. However Hurstbow Bridge, at that time a masonry structure of two arches, was a county bridge.

The County Bridges Act of 1815³ empowered the justices of the peace at their quarter sessions to enter into contracts for the repair of county bridges, for terms not exceeding seven years. Such a contract, dated 25th August 1847, is found in the Bridge Papers for Yeovil Division, in which Charles Harris and John Wheeler Bourne, both of Ilchester and described as "Road Surveyors", contracted with the Clerk of the Peace for Somerset for "keeping in repair the Parapet Walls and Roads of certain County Bridges in the Magisterial Division of Yeovil for 5 years from 20th October 1846 at £37.8.10 per annum".⁴ The bridges involved were Haselbury, Frickers, Hurstbow, Mudford, Yeovil and Ilchester.

However, at the Epiphany Quarter Sessions held at 4th January 1848, a report was read of Hurstbow Bridge being "represented as requiring improvement and widening".⁵ The bridge would be "presented" at that Session and the Turnpike Commissioners had agreed to pay half the expenses. The "presentment" of a county bridge was one method of enforcing the county to repair a bridge, the Highways Act of 1773⁶ enabling a

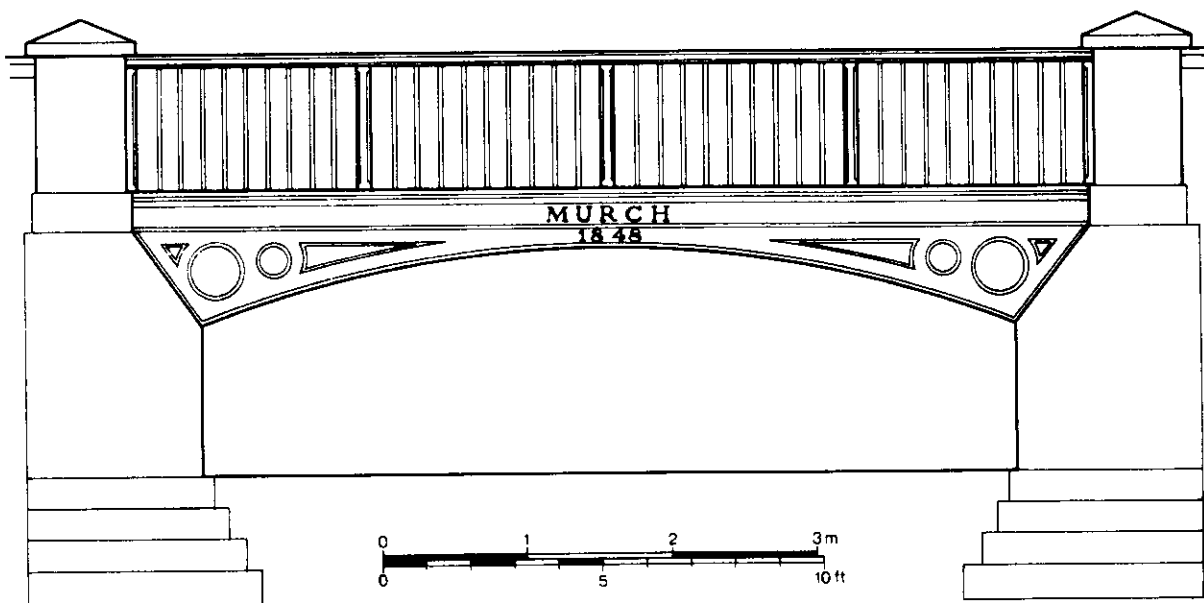


Fig.1 HURSTBOW BRIDGE, MARTOCK

Elevation based on Richard Carver's drawing of 1848

single justice of the peace, either on his own view or on information, to present at quarter sessions any bridge not well and sufficiently repaired. Moreover, the County Bridges Act of 1803⁷ enabled the justices to order the rebuilding of a county bridge so as to be more convenient to the public, provided that the bridge had been presented as being insufficient, inconvenient or in need of repair. Accordingly the County Surveyor, Richard Carver, was ordered to inspect the bridge and "report thereon at the next Session as to its present Condition and the requisite repairs to be made thereto, together with an Estimate of the Costs thereof".

The County Surveyor's report having been read at the Spring Session on 28th March, 1848, the Court consented to allow a sum not exceeding ninety pounds towards the expenses of rebuilding the bridge, and "for the purpose of widening and improving the Roadway and approaches thereto according to the Plan of the County Surveyor . . . Upon Condition that the remainder . . . be provided by the Trustees of the Martock Roads". Acquisition of a small area of land was required for the improvement but it appeared "there will be no difficulty in arranging with the Owner to give up the corner of a shed to the old Turnpike House in Exchange for a piece of Ground to be taken in by reversing the line of Pallisade in front of Mr. Humphrey's Garden".

The Turnpike Trustees having approved the plan in a letter of 30th May, Carver prepared a specification and working drawings, dated 20th June, presumably in time for the Midsummer Session of 27th June. At that session, it was "ordered that the [order of Court made at the last session] be rescinded and upon reading and considering a Presentment now made to this Court by Mr. John Wood that the said Bridge is insufficient and inconvenient and in want of due reparation and amendment . . . This Court doth consent to allow out of the public monies of this County a Sum not exceeding Ninety pounds towards the expense of taking down and rebuilding such Bridge . . . according to the Plan of the County Surveyor now produced and approved". The condition that the remainder of the sum be provided by the Turnpike Trustees was repeated, and the Clerk ordered to prepare a Conveyance for the land required. It would appear that the statutory procedure regarding a presentment had not been carried through at the two previous sessions, making it necessary for John Wood, a magistrate, to present the bridge formally at this session.

In a Memorandum dated 8th July 1848,

George Pearce, "a Mason and Builder of Martock", agreed "for the sum of one hundred and eighty pounds (one half to be paid me by the County of Somerset and the residue by the Trustees of the Martock Roads) to pull down and remove, and provide a temporary Bridge for the Public, and rebuild the Bridge known as Hurstbow Bridge and to complete the work by the Michaelmas Quarter Sessions next ensuing". The agreement is witnessed by Nathaniel Thomas, Surveyor of Martock Turnpike. Pearce agreed also to enter into a Bond with Edwin Lovell, the Clerk of the Peace, "for the due and punctual performance of the several works so contracted", with Edward Murch the Bridgwater iron founder as his surety⁸. In sending the final plans and specification to Lovell for attaching to the Contrast on 13th July, Carver stated he was "perfectly satisfied with the ability of [Pearce] to execute the work properly."

The contract drawings and specification show the bridge to consist of Hamstone abutments carrying two external and six intermediate cast iron ribs to support the roadway (Figures 1 and 2). The skew span of the ribs is 18ft. 6ins., although due to the heavy skew the square span is 16ft.; the roadway width is 24ft. The "external or face ribs including the arched piece flanch and two beads up to the capping line to be each rib of the weight of twenty hundred of 112 lbs each" and the "intermediate arched flanch ribs to be suently⁹ cast of the average of 36 lbs to the foot superfital . . . the entire space between the Cast ribs . . . to be covered with full $\frac{3}{8}$ inch Cast Iron Plates arched widthways to Camber $1\frac{1}{2}$ inch". Wrought balusters were to be screwed and rivetted between cast iron cappings on the outer ribs and cast cappings serving as the handrails. The parapet walls and piers were also of Hamstone. "The six intermediate ribs and plating and the inside of the face ribs and binding rods to be Painted twice with Coal Tar and the face of the outside ribs, the edges thereof, and the two lines of capping and the Balustrade to the Painted Stone Color three Coats in Oil".

A dispute now seems to have developed between Carver and William Palmer regarding the value of Palmer's land which was proposed to be taken for the works, until the Clerk of the Peace confirmed on 24th August that Mr. Wood had settled the dispute, and that £8 was agreed. The following day Lovell wrote to Pearce enclosing the draft Contract and Bond for his perusal, and on 4th September wrote again, asking for the return of the draft. Pearce replied the same day, returning the documents and stating that he hoped to complete the work at the end of that week—excellent progress considering that the

original agreement had been signed but two months previously.

The Michaelmas Quarter Session was held on 17th October 1848, when Carver's Certificate was read that the works were completed, although "in the progress of the work it had been found prudent to increase the strength of the Ironwork in a slight degree and that one of the fence Wing Walls had been materially lengthened beyond the spot laid down on the Plan to protect the public against apprehended flood water", necessitating the expenditure of an additional twenty pounds five shillings and ninepence. The Treasurer was ordered to pay Pearce the Contract sum of ninety pounds, and in addition seven pounds thirteen shillings and ninepence, the Trustees of Martock Turnpike Roads having agreed to pay the sum of twelve pounds and twelve shillings. With the order to the Treasurer to pay William Palmer eight pounds the records of the rebuilding end.

The Quarter Sessions records reveal that a Bridge Committee was set up in 1851 and that this committee recommended an inspection by Richard Carver of all county bridges, with a report on the condition and an estimate of the repairs for the next seven years. Carver's report for Hurstbow Bridge, dated 25th October 1851, states "This Bridge has been lately rebuilt and made commodious by Stone Piers, an Iron Arch and Pallisade, and is in perfect and substantial repair".¹⁰ He estimated £3 to paint the ironwork, plus 7s.6 per annum for maintenance of the bridge and £3.10.0 for repairing the road surface of the approaches.

The Bills and Salaries listed for the Michaelmas Quarter Session of 1852 include a sum of £1.7.6, paid to Nathaniel Thomas for "repairing Hurstbow Bridge", although the repairs are not described. Amongst the Bridge Papers for Yeovil Division, a "report of the Yeovil Highway Board as to the condition of the structure of every County Bridge within its District and the condition of the road over each of such Bridges", includes for Hurstbois (sic) Bridge as at 30th May 1868, "The Iron fence, Stonework, Masonry and Road are in good Condition". Similar comments are made for the report of 3rd June 1869.

Finally, mention should be made of two volumes of county bridge plans prepared by the County Surveyor, by then Arthur Whitehead, for the Midsummer Quarter Session of 1874.¹¹ In the volume for the western area, Hurstbow Bridge is illustrated by a simplified elevation and cross-section, with a plan at a scale of 1 chain to the inch showing the extent of the approach roads which were repairable with the bridge.

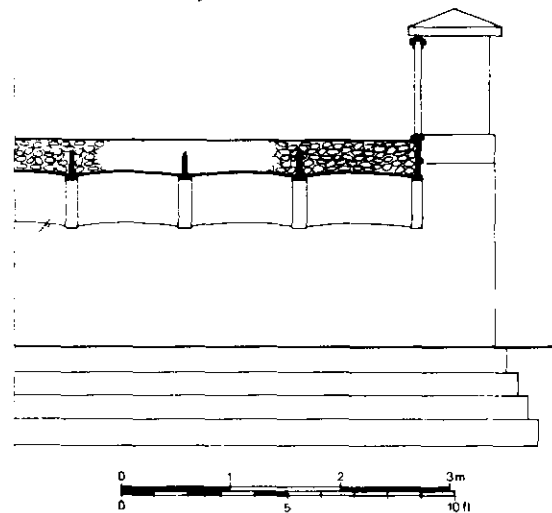


Fig. 2 HALF SECTION THROUGH DECK (after Carver)

Bringing the story up to date, during a route inspection by the County Council's Bridge Inspector in 1975, cracks were found in the bottom flanges of most of the intermediate ribs and, in the interests of safety, a weight restriction of 5 tons was placed on the bridge while a remedial scheme was being prepared. The scheme involved stripping out the intermediate ribs and the cambered plates carried by them, and their substitution by a reinforced concrete deck. During these works, the actual construction features of the bridge were compared with Carver's original drawings and specification, and found to match in all respects, except for slight modification of the rib's bearing on the abutments. With the exception of the cracked flanges, all the components were found to be in good order. The new deck was designed to be hidden by the outer ribs when viewed in elevation, and the final appearance of this handsome structure is exactly as its original, with the substitution of white paint for the original "stone color".

Carver's elevation drawing shows the outer ribs to be decorated with moulded features, but the actual ribs carry in addition the moulded legend "MURCH 1848", which taken with Murch's obvious financial interest in securing the carrying out of the work provides strong evidence that all the ironwork was supplied by Murch (see Figure 1).

So amongst this representative selection of records will be found an interesting collection of civil engineering drawings and land plans, with references to the Martock Turnpike Trust and the "old Turnpike House" adjacent to the bridge, added interest being provided by the personalities. Of particular interest at this time are the references to John Wheeler Bourne, referred to in this *Journal* in another context,¹² and Edward Murch, whose name and work live on in cast iron.

Notes and References

1. Highway Act, 1835 (5 & 6 Will. 4, c.50).
2. Statute of Bridges, 1530 (22 Hen. 8, c.5)—section 7" . . . suche parte and porcion of the high wayes . . . as lye next adjoynnyng to any to any endes of any bridges within this realme distaunt from any of the said endes by the space of CCC fote, be made repayred and amended as often as nede shall requyre . . .".
3. County Bridges Act, 1815 (55 Geo. 3, c.143, section 5).
4. Somerset County Records Office—Q/AB, Bridge Papers for Yeovil Division 1813—1897.
5. References to the proceedings of Quarter Sessions are taken from Somerset County Records Office—Q/AO, Somerset Order Book, Civil Concerns of the County, commencing Spring 1847, ending Michaelmas 1852. All other information relating to the rebuilding of Hurstbow Bridge is from reference 4 above.
6. Highway Act, 1773 (13 Geo. 3, c.78, section 24).
7. Lord Ellenborough's Act, 1803 County Bridges) (43 Geo. 3, c.59, section 2).
8. Edward Murch appears in Pigot's Directory (1830) under 'Brown, Watson & Murch, iron founders, Eastover, Bridgwater'. Bragg's Directory of 1840 names only Edward Murch and the business does not appear to alter its title until 1861 when it is referred to as Murch and Spence 'iron and brass founders, mechanical engineers and agricultural implement makers' (Kelly's Directory). Millwrighting is also added in the same directory for 1875 but after this date no further entries to the company can be traced. P. J. Squibbs, 'A Bridgwater Diary' (Bridgwater, 1968) p.122, refers to the business of Murch and Culverwell in the 1880's but trade directory evidence does not support this. There was, however, a James Culverwell, engineer and iron founder, in Bridgwater at this time and it is probable that his company was the successor to that of Murch and Spence.
9. Suently, from suent, variation of suant—"even, smooth, regular" (S.O.E.D.).
10. Somerset County Records Office—Quarter Sessions, County Bridges, Surveyor's Reports (alphabetical) 1851.
11. Somerset County Records Office—Q/AB, Plans of the County Bridges and Bridge Roads in Somersetshire Laid Down from Original Surveys made by Arthur Whitehead MICE County Surveyor and submitted to the Court of Quarter Sessions Midsummer 1874.
12. See C. A. Buchanan, 'A Patent Road Scraper'.

Acknowledgement

The information regarding the re-decking works of 1975 was supplied by my colleagues Michael White and

Barrie Baker, in the Somerset County Council's Bridge Section, whose interest and help ensured that the structure has been recorded.