

Bridge of the Month No52, April 2015 Dundas Aquaduct



It has taken me a long time to get here. A meeting at the University of Bath, and a sunny day, provided me with the opportunity to cycle along the towpath from Bath Spa station. The same journey featured last <u>week on BBC4</u>. It looks a <u>strange route</u> but the towpath makes a gentle ride. Getting up the hill to the university at the end was more difficult.

As usual there is a pdf copy to print off <u>here</u>.



So what is special enough to warrant the effort? The first view isn't much, though there are very few of those cast iron pillar cranes still complete.

Clamber down the steps to the river level though and the impression is rather greater.



There are many indications of the hand of John Rennie here, for example, the pilasters and the scale of the corbel.

I was travelling light and without my Disto so depend on Wikipedia for limited dimensions. They give the main span as 64ft and 65ft in different places. The arc looks to be circular, though I couldn't get a square shot. There is one here and an older one (soot stained) here.

A square view of the side arches is more manageable. At first glance I put that as a true ellipse but look at the voussoirs sizes. Presumably they vary so much to take account of the beds of sound stone available.



The arch soffit shows signs of a lot of water damage, though it is thoroughly dry now. Wiki says it it had a major upgrade not long ago, the canal itself having stood empty for many years.





My guess would be that this patch of deep damage is where the water hit the top of the backing and flowed through.

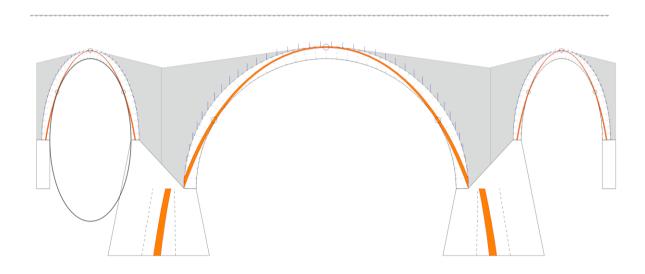


Otherwise, the stone is in remarkably good condition, with the mason's marks still clearly visible.



The sweep on the wing wall is very elegant as well as structurally welcome. The masons must have been a bit tested by ashlar in a double curved surface like that.

One question I can't answer from looking is how far down those ellipses go.



This Archie model shows the basic thrust. I have overlaid a complete ellipse on the left hand span. I think that the foundation probably does go right underneath. I wonder whether, like Brunel at Maidenhead later, he keyed the base in.

So, there we go for another month. Sorry it's late.