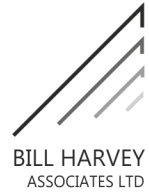


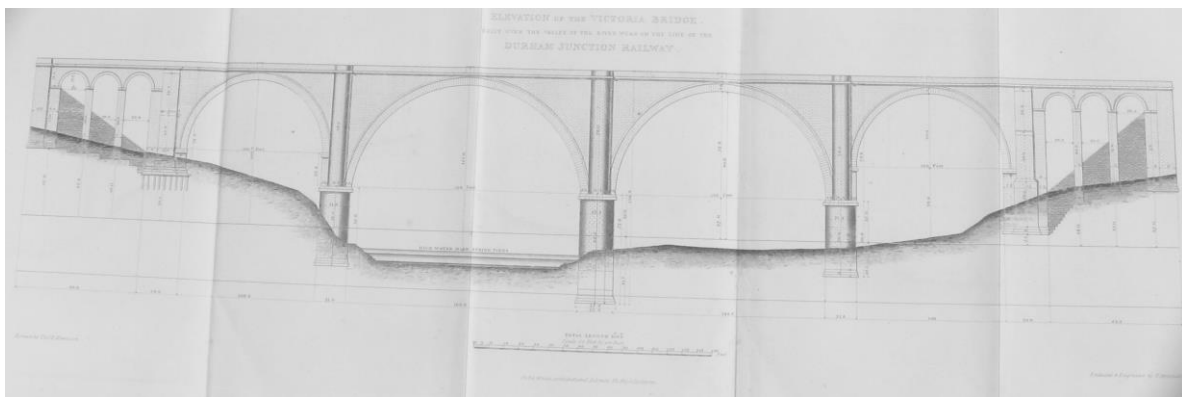


Bridge of the Month No78, June 2017 Victoria Bridge, River Wear



Here is one I have wanted to get to for many years. A couple of weeks ago I had to leave a site at the Lambton Estate at 1800 which left a short bike ride and plenty of light to get to [Victoria](#). I am pretty sure it is disused, was only ever single track but it is the biggest railway arch in England. [Ballochmyle](#) is 20ft longer see [Bom No3, March 2011](#).

In a place like this, photography is really quite limited so here is a drawing to show the whole bridge. This, and many others, was published by John Weale. All four main spans are big. Note how the springing levels are adjusted so the crowns match.



This is a view from the East. The wide flood plain is on the northern (left) bank of the river. It looks as though the end three spans each side are only 20ft. All the piers seem to be founded on rock but the south main abutment is shown as piled. I have been told, though I couldn't find them in my brief visit, that the inclined planes which preceded the bridge are still visible alongside.

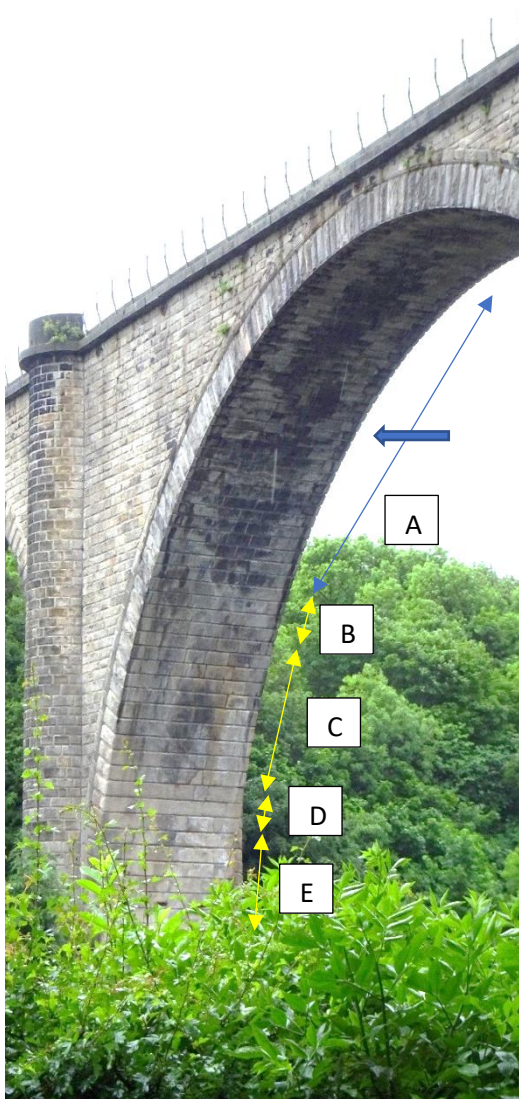
Anyway, you will want some photographs.



Lots of vegetation this late spring day means that views are severely restricted. I had to cycle right past and look back to get a decent view. The angle of view disguises the fact that the middle of these three spans is the big one.



Looking a little closer shows the generality of construction. Large voussoirs the full depth of the ring, an expressed ridge above, the rusticated stonework dressed in more or less (but definitely not quite) equal courses. Interesting that the black soot covering that must have been overall a mere 40 years ago is now reduced to those semi-circular pier extensions up to the refuges above.



This view, though confused by the size of the span, shows how narrow the arch is. Note the differential water staining which surely provides some indication of the internal construction.

Bands B and D are relatively narrow. There may even be another similar one picked out by an arrow in band A. I suspect that these might be cross walls surmounted by a mini viaduct inside the spandrel walls. Looking back to the first picture there is definitely differential staining of the spandrel walls.



What I think I see is highlighted below





But what is going on here. It really doesn't look at all good.

What with the trees and all it proved quite hard to get a good photo but my trusty Sony HX90 got me there.

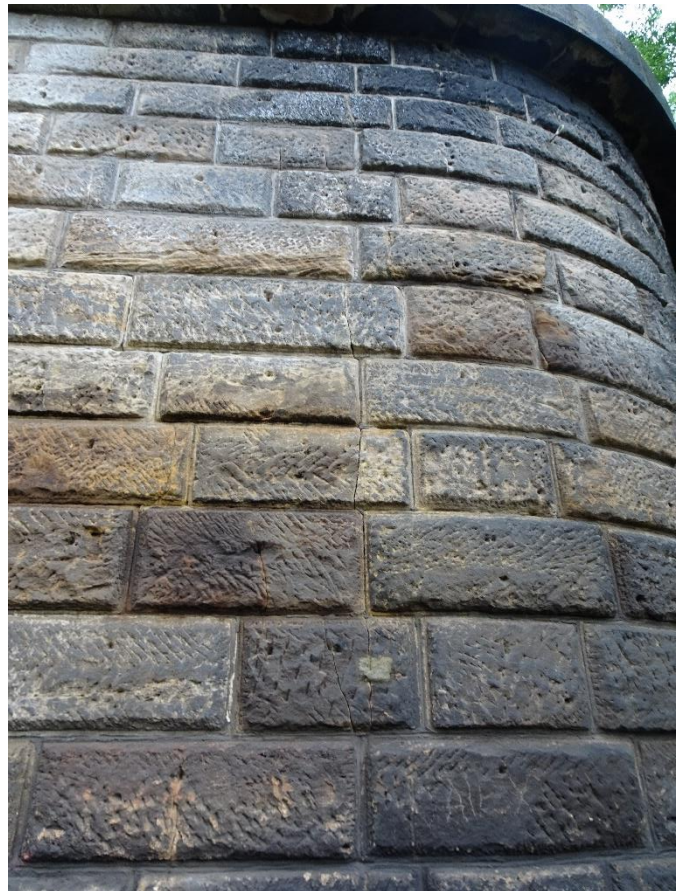


I have deliberately shrunk this to disguise the poor focus but it is good enough to see that it is almost certainly a fault in the stone. It just happens to occur in four voussoirs closely spaced.



This half meter extension poles gives an idea of the scale of the stones in the pier and the voussoirs are similar.

This crack leaves little doubt that the sudden change in section at the top of the pier/ bottom of the arch is not a good thing.



And finally, what are those brackets about?



Well, that's been a quick review this month. I am on a train home from Manchester after a wind up meeting on a major project there but there is still a big one in Co Durham needing attention. Our daughter and her 5 children have just arrived from New Zealand. 3 days in London with them this week. Frankly, I am tired. Expect a second, shorter note this month with diary events etc.