

Bridge of the Month No62, February 2016 Teuchat Hillock



ASSOCIATES LTD

Well, <u>here is a blast from my past</u>. I was reminded of this by a chance encounter earlier in the week. I went back specially in 2013 to get the photographs then never used them. There was a line, now long gone, from Arbroath to Friokheim in Angus and the bridges were rather special. The bigger ones have been removed but this is left in place, despite the severe angles in the highway. And when I look more closely, this is actually north of Friokheim over the old main line from Perth to Aberdeen, so maybe there are more somewhere.

From above it looks perfectly normal.



The elevation is a little unusual. Is this multi centred or a true ellipse? At least through the end voussoirs, the angles obviously change stone by stone so a true ellipse seems certain. I have included so much to the right to show how the road bends.



So far so what, but look a little closer and the content of the shadow is revealed.



I have heard of ribbed arches but this is quite unusual and I am left wondering why would you do that.

Look up from below and even more is revealed.



That deck is obviously a replacement. I can only guess that it was originally timber, but why would you do that?



The final shot is pushed a little to show the cross ties in the highest part of the walls.

So why? Six individual rings but crosslinked so that it isn't possible to build them one at a time. There must have been six centring frames. The ribs could be set up fairly quickly and the centring be removed and moved to the next bridge while the apprentices were left to put up the rough walls.

So far as style and detail are concerned, it seems to me to represent the reverse of the usual pattern. The Iron Bridge is an arch, following the technology of stone, but built with joints and links that relate more closely to timber. Here we see something very much like the iron bridge rendered in stone.

And that is maybe shorter than usual but, even in a leap year, February is a short month and for me it has been a heavy one. Ongoing work at Linton/Collingham in Yorkshire and Brougham, Eamont, Sprint and others in Cumbria, all with Mott Macdonald in the lead. Also moving forward with an arch lift at Moco Farm with Freyssinet for RSSB. Assessments to do at Newbridge in Oxfordshire (the oldest bridge over the Thames) and Auldshields near Motherwell.

We've had the first delivery of our new logger, designed by Hamish as part of a fast, lightweight deflection pole system. The logger is fully self contained and battery powered. Control by Wi-Fi from a phone or tablet, where a real time graph of output is displayed. Each box provides 8 channels, and they coordinate to allow synchronised sampling across any number channels. A complete kit with one logger, eight poles, and eight gauges packed in a quiver is an easy carry for one person. If you'd like to know more, <u>drop Hamish an email by clicking here</u>.

We're also making serious headway with 3D models from photographs and starting to think about extracting useful information from what is often an ocean of data. Again, if you're interested, <u>email</u> by clicking here.