



Bridge of the Month No56, August 2015 Gt Barford



Great Barford is the next of my mediaeval bridge trip records from June. It is seen [here](#) on Google Maps. Like most ancient bridges it has been repaired, widened, broken down and rebuilt over many centuries.



This view from downstream shows only a few of the arches. Even here, though, the multiple patching is evident. It seems likely that the low span second from the left is more or less original. The lower string course actually corresponds with a shadow string course over span 2 (from the right).



Looking more closely, these two spans both have single rings and are set very low. The right hand one is slightly higher and has a very irregular shape so perhaps it, too, is a replacement. Note how much higher the adjacent spans spring.



This near span, though double ringed is set very low and pointed. The two rings spring from different levels and I am tempted to think this has actually been under-ringed rather than rebuilt. Looking at that dark band close over the arch, it could be an old string course that has just been snapped off.

A large part of the near spandrel is obvious rebuild. The next two spans are double ringed but circular arches and set quite high. The brick parapet is surely later. One wonders what the buttresses are supposed to do when they have no base to lever off.



Looking from upstream, this is obviously a much bigger bridge. Eight more spans visible to the right here. And also, of course, widened on this side. Let's look closer at that.



So the widened section sits entirely on the old cutwaters. Here is something I had never thought of before. The further out on the cutwater, the bigger the span. The stress levels are therefore going to be bigger on the outside edge and no matter how low the stresses are, creep is likely and the widened section will slowly lean out from the rest. The height of the main arch springing above the water is also obvious here.



Looking under this span raises all sorts of questions. The middle section of the arch here is neat and coursed while the edges are quite different. Those edges are surely later additions so perhaps this is a widened arch. This is the downstream navigation arch. The arch springs low. Those long stones are clearly not original but if the arch has been widened, the second ring above would be easy to install and might well not be present though the full width. It's hard to see but I suspect the long stones spring from the cutwater too.

It would be good to measure this in more detail but I can't think when I would be able to do that.