

Features of the Canal – Number 1 – Longdon-on-Tern Aqueduct

Longdon-on-Tern Aqueduct is the oldest cast iron aqueduct in the world. That is not to say that it was the first – quite. It is now commonly accepted that a much smaller cast iron aqueduct opened on the Derby Canal some weeks earlier, but that one no longer survives.

The iron aqueduct at Longdon should in fact never have been. Josiah Clowes was engineer for the Shrewsbury Canal and just like most other canal aqueducts built up until that time he designed, and began to build, a substantial masonry structure sufficient to carry its own weight, that of the water and a thick lining of puddled clay to retain the water. Between 10-12 February 1795 however the works were washed away by an abnormal flood but, perhaps fortunately, Clowes had just died.

So, who did the canal company turn to – yes, Thomas Telford. He was appointed on 28 February 1795 to take over construction of the canal but just 14 days later the company approved the erection of an iron aqueduct at Longdon by William Reynolds & Co., the cost not to exceed £2000. It was stated that the plan was to be approved by Telford and, although often attributed to him, it seems unlikely that the idea was actually his. Indeed he himself later wrote that the idea was that of Thomas Eyton, chairman of the company, and the design determined by Reynolds and Telford – it does perhaps look as if it was designed by a committee! The fact remains that the aqueduct was designed and built in very quick time.

The iron plates were cast at Ketley and the aqueduct built between the surviving masonry ends of Clowes aqueduct by March 1796. The trough was 62 yards long and 16 feet high – or rather the troughs, as the towpath ran in what is virtually a second trough alongside, the horse's feet being at the same level as the bottom of the canal! Beneath, cruciform-section struts spring in all directions to support the trough.

Even if Longdon was not Telford's idea, its success certainly gave him the knowhow which allowed him to build Pontcysyllte Aqueduct (1007 yards long and 121 feet high – slightly larger!) on the Ellesmere Canal just a few years later.

Today the aqueduct still stands across the Tern but looking rather forlorn without the approach embankments. It is now a listed Ancient Monument. If visiting the site please note that it is on private land and that permission should be sought, although it can be seen from the road to Wellington just outside the village.

It is very unlikely that the original aqueduct could be used again in the restoration. But what an opportunity for a modern day Telford (or Eyton or Reynolds!), to design something equally innovative and spectacular to cross the river alongside. Perhaps in another 200 years that could also be an Ancient Monument!

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