Bridge Reconstruction 2013-14



After a life of 111 years, the Whitchurch Toll Bridge crossing the River Thames was completely rebuilt in 2013-14. The new design was closely similar in appearance to the old, but with greater load-carrying capacity..

Work started on site in July 2013, with the construction of a temporary pedestrian bridge. The toll bridge closed to traffic on 3rd October 2013 and was originally scheduled to re-open in April 2014. Delays, mainly due to river floods, caused the re-opening date to be postponed twice and the bridge re-opened on 19th September 2014. The temporary footbridge was then removed and the working area on the Pangbourne meadow restored.

The reconstruction project was managed by Oxfordshire County Council on behalf of the Whitchurch Bridge Company. The main contractor was Balfour Beatty Ltd. Detailed design and contract supervision were by Atkins UK. The cost of the project was expected to be £4.3 million but the delays caused an increase to more than £6 million. The Bridge Company was permitted to increase the car toll from 40p to 60p and set the concessionary toll for regular users at 40p.

The photograph above shows removal of a bridge beam on 19th December 2013.

Institution of Civil Engineers Award

The bridge reconstruction project won a prestigious award for engineering excellence from the Institution of Civil Engineers in 2015. The judges said: "We recognised the difficulties encountered in the construction of this project during a period of extreme weather. Overall a challenging project, well executed under very difficult conditions resulting in an aesthetically pleasing structure that will be used and enjoyed by the local community for many years to come."

Videos of the project:

- "A Bridge is Reborn", Nick Brazil's action-packed 3 minute video of the entire reconstruction project can be seen <u>here</u>.
- Nick's full video about rebuilding the bridge, is available on DVD at £12.50 (+£2 p&p). To order a copy, contact him on 0118 984 1602 or email.

Nick also made short videos of each stage of bridge reconstruction from October 2013.

Stage 1 - this covers the period up to closure day on 3rd October - view here Stage 2 - taken during October - view here Stage 3 - taken during November and December - view here Stage 4 - removal of lattice beams - 19th December 2013 - view here Stage 5 - river in flood - 7th January 2014 - view here Stage 6 - transport of lattice beams - 24th March 2014 - view here Stage 7 - last lattice beams removed - 4th April 2014 - view here Stage 8 - first piling for the bridge - April 2014 - view here Stage 9 - first two pilings are cast - 13th, 16th May 2014 - view here Stage 10 - night work - 19th, 20th May - view here Stage 11 - pumping concrete into piles on Whitchurch bank - view here - concreting abutment and other work - view here - 21st May 2014 Stage 12 - pumping piles mid river - 22nd May 2014 - view here Stage 13 - installing piers 10 to 16 - June 2014 - view here Stage 14 - girder delivery - 10th, 11th June 2014 - view here Stage 15 - girder placement - 13th, 14th June - view here Stage 16 - towards the Berkshire bank - 16th June - view here Stage 17 - river banks are joined once more - 23rd, 24th June - view here Stage 18 - return of the lattice beams - 26th June - view here

- Stage 19 first two lattice beams back in place 2nd, 3rd July view here
- Stage 20 lattice beams the endgame 7th to 9th July view here
- Stage 21 concreting the main deck 17th July view here

The bridge re-opens - 19th September 2014 - <u>view here</u> Blessing of the bridge by the Bishop of Oxford - 24th September 2014 - <u>view here</u>



Bridge deck under construction, 24th June 2014



Roadway surfaced, 26th August 2014