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Building the Meccano Bridge

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After Liam's epic struggle with the design of the bridge, we finally got to work on site in October 2012. We had hoped to build the bridge in the warmth of autumn, but the various delays meant that the bridge itself was not built until December! The Canal Society was the Principal Contractor for Bolton Council, with our Working Party Organiser Steve Dent as Principal Sub-Contractor in charge of the works.

Work began on site on 20th October with clearing vegetation from the site and digging out the lock beneath the bridge site to a depth of well over a metre. The south abutment was in very poor condition and the bricklayers had to rebuild most of it; scaffolding was erected progressively as work went higher.

It is important to note that the only professional contractors used were two bricklayers (for two weeks) and the scaffolders – everything else was done by Society members and local volunteers. The bridge was to sit on concrete foundations behind the brick abutments, and the foundations were finished in November. Work also began on building the wing walls.

The Meccano parts were all made in Bolton; the 338 8mm thick steel plates were made by Folsana Pressed Sections and the 720 nuts and bolts by Velden Precision Engineers. The galvanising and painting were also done locally. The parts soon



Figure 1: Starting work.



Figure 2: Rebuilding the south abutment.

arrived on site, and a trial erection took place on 3rd December. Scaling Meccano parts up ten times means that the weight of each piece is 1000 times heavier than the original! The yellow triangular pieces are called 'trunnions'; there are 48 of them in the bridge.

Construction of the bridge began on 8th December, building the base first, then adding the sides to give the bridge its full strength. What many people don't realise is that the bridge is made up of five sections bolted together sideways; there are no steel beams crossing the whole span. Essentially the bridge was completed in only four days, but due to a cold spell we had to wait for a weekend to lower the bridge, glue it in place and fix the decking.

The wing walls were then built up to the bridge, and bollards were installed to prevent vehicle access. Although the bridge was essentially finished in December, snow then held up progress, not least delaying the removal of the scaffolding. We had always wanted a picnic area here, and there was enough money left over to make two picnic tables (in Meccano of course!); they were erected in early February. Yolande Baxendale's new monumental milestone 8 was installed at the same time. During February, stone setts were installed at the approaches to the bridge.

The new brickwork had been built using cement, but for heritage reasons the Canal & River Trust wanted lime mortar to be used as grout. So at the start of March the C&RT organised a lime mortar training day, and the insides of the wing walls were grouted. In mid-March, coping stones found on site were installed on the wing walls, and with a digger on site the edges of the lock were dug out and the old path removed. Two gardens were put in



Figure 3: Trial erection with Liam and Steve.



Figure 4: Bridge construction, day 2.



Figure 5: Bridge construction, day 4.

at either side of the picnic tables, and an interpretative sign and new bridge plate were installed. Meanwhile the Society published a new edition of its *Towpath Guide* in time for the opening of the bridge.

The 'Grand Opening' was held on Saturday 6th April 2013; more than 400 people attended. During the opening ceremony Liam Curtin said: "Not only am I proud of the bridge, but I am very proud of the lovely volunteers who have made this dream a reality. It has been a great effort by a great set of people, who have helped to regenerate a section of canal, which will hopefully be a catalyst for more regeneration in the area."

As Canal Society Chairman I said: "This bridge belongs to many people, including the Society and other volunteers who put in over 3,000 hours of work. But above all this bridge now belongs to Little Lever, and I hope you will look after it and use it well." I surprised Liam by making him an Honorary Life Member of the Society.

The Mayor of Bolton, Cllr Guy Harkin, said: "You have to grow old, but you don't have to grow up, so seeing a Meccano bridge is great. I think we've lost a great deal of our history when we allowed these canals to be closed, and one of my ambitions is to get this canal running back to Church Wharf in Bolton." The Mayor then opened the bridge by cutting the red ribbon with a pair of Meccano scissors! The North West Meccano Guild was on site with working toy Meccano models, and Eagley Brass Band entertained the crowds.

But the story does not end there! In 2014 money was raised at two funerals as donations to the Canal Society. The two people who had died were John Lynn, who had been a member of the Society's Council, and Philip Wakerley, a local man who simply loved the canal. After



Figure 6: Liam and Paul.



Figure 7: Volunteer in the snow.



Figure 8: Meccano picnic table.

some discussion it was agreed to install a Meccano bench at a new viewing area to be created on the side of the second lock down. Liam was pressed into design action again, and the bench was installed in June 2015. The viewing area is part of ongoing work to make the canal and locks much more visible.

It was an amazing experience to be part of the team of volunteers building the Meccano Bridge. To visit the Meccano Bridge, go to the centre of Little Lever and make your way to the end of Boscow Road; the postcode is BL3 1AB. Why not take a picnic? And if you do, then take a few boiled eggs – the picnic tables have handy holes which make great egg-cups!



Figure 9: Bridge plate with Paul and Liam.



Figure 10: The mayor with Liam and Paul.



Figure 11: The Meccano bench construction team.