The Hume Highway ‘Meccano Set’ finds new life

End of work | July 2019

Work to replace the historic southwestern Sydney landmark is now finished.

A new beginning for the Meccano Set

In 2015, the NSW Government asked the people of south western Sydney for their opinions on the future of the Hume Highway ‘Meccano Set’, as it is affectionately known. Around 90 percent of respondents said they wanted it to remain in place at the intersection with Woodville Road and Henry Lawson Drive at Lansdowne, where it had stood since 1962.

As a result, the NSW Government decided to replace the aging gantry with an identical structure. Detailed design work was undertaken and construction work began in January 2019.

This work is now complete and the Meccano Set again takes its place as one of the most recognisable landmarks on Sydney’s road network.

Building the Meccano Set – then and now

The 1962 structure was built without the benefit of modern design technology. It was designed on drafting tables in ‘imperial units’ – the pre-metric system that measured in feet and inches instead of metres and millimetres and in pounds and ounces instead of kilograms and grams.

Visit rms.work/meccanoset to watch the new Meccano Set take shape in time-lapse
Back then, the main beams were fabricated from 12 to 16 flat metal plates, each up to 2.4 metres wide. These were rolled and welded together to shape the 32 metre long beams. Cross bars were welded inside the cylinders to ensure the strength of each beam.

Meccano Set Facts:
The Meccano Set consists of four beams assembled in rhombus shape. Each beam is 32 metres long and weighs five tonnes.
The steel structure sits six metres above the road on four columns. The total weight of the new Meccano Set is about 25 tonnes.

In 2019, designers used 3D survey technology to scan the intersection and create accurate drawings of the structure. These were used by south western Sydney firm, Chess Engineering, to pre-fabricate the new gantry.

The 2019 fabrication process involved producing only three pipes for each 32 metre beam.

Once completed, the newly produced beams and the support columns were trucked to the intersection and lifted into place, one beam at a time over four consecutive Saturday nights in May and June 2019.

Contact us
If you have any questions or would like to know more about the Meccano Set upgrade, please contact our delivery partner, Ventia Boral Amey Joint Venture, by email nswenquiries@vbajv.com.au or by telephone on 1800 677 700.

We thank the community for their patience during our work.

If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask them to call us on 1800 677 700.