

Maentwrog goes aerial!

Two 18 metre-long bridge beams, each weighing 1.7 tonnes, were lowered onto prepared foundations with 25mm precision.

The bridge has been replaced four times since the Maentwrog began generating carbon-free electricity in 1928. Its exposed mountainside location runs between the plant's two high pressure pipelines that surge 4,000 gallons a second driving the two turbines below.

Andy McAteer, Maentwrog Manager, said:

Weather conditions were near perfect for the operation and it was mesmerising to watch the helicopter pilot skillfully lift the bridge beams into position between the pipelines. It is a great credit to our supply chain partners, Mona Lifting and Heli-Lift Services, for their extensive planning to ensure the installation was successful.

Magnox CEO, Gwen Parry-Jones, added:

Magnox has launched its first sustainability strategy which sets out the actions we will take over the next five years to carry out our mission to create a legacy that future generations are proud of. We will continue to invest in Maentwrog Hydro-Electric plant's operational infrastructure to ensure it contributes to this legacy by generating renewable energy for as long as possible.

The design and fabrication of the footbridge took six months at the Mona facility in Anglesey. This included a mock-up and full trial air lift to ensure dimensional accuracy and slinging trials to guarantee that all the components could be safely lifted by helicopter.

Gethin Jones, Mona Lifting Operations Manager, commented:

A team of 12, including two apprentices, worked on this unique project which began with a 3D dimensional scan of the site to ascertain the abutment points the new bridge would be attached to. We reformed one of the degraded abutments, erected scaffolding for site access and removed the former wooden structure.

All operations were carried out to approved Safe Systems of Work, RAMS and Lift Plans generated by the Mona Team.

The Mona Group has worked with Magnox Limited for sixteen years manufacturing cranes, bespoke lifting devices, mechanical components and carrying out decommissioning work. The Maentwrog footbridge installation was a challenging and exhilarating experience for us and one that we were very proud to have been involved with.

You can watch the timelapse footage as the bridge constructed and installed below.

[Watch timelapse footage of the footbridge construction through to installation](#)