

First HS2 viaduct completes deck beam installation

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A viaduct in Northamptonshire has become the first on the HS2 project to have all its deck beams installed as work on the project continues to ramp up between London and the West Midlands.

The 163m long Highfurlong Brook Viaduct, near the village of Aston le Walls, is one of more than 50 major viaducts being built as part of the new rail project, which is designed to free up space on the most crowded part of the existing west coast mainline and boost economic growth.

Consisting of seven spans, the viaduct crosses the brook at a height of around 9m. Each span is made up of four beams weighing up to 56 tonnes, which were lifted into position over two months to form the backbone of the structure.

Each of the beams – which are up to 25m long – were manufactured off site before being delivered over night to reduce disruption for local road users. The deck – which will support the track and electrical systems – will be installed next year, as well as the parapets along either side.



The viaduct is one of 15 being built by HS2's main works contractor EKFB – a group made up of Eiffage, Kier, Ferrovial Construction and Bam Nuttall. They will also deliver the earthworks that will support the railway at either end.

Highfurlong Brook is a tributary of the River Cherwell, which joins the Thames at Oxford. The viaduct crosses both the brook and its floodplain.

Paul Cooper, HS2 Ltd's Senior Project Manager said: "Once complete, HS2 will transform journeys between London and the West Midlands, freeing up space on the busiest part of the west coast mainline and helping to boost growth around the major station sites.

"But it's also important that we reduce disruption for communities during construction. Off-site manufacturing of deck beams and out of hours delivery is an important part of that effort and it's great to see them all now in position at Highfurlong Brook."

Sean Lang, EKFB's Project Director, said: "We're making considerable progress with our structures and earthworks and to see the beams lifted into position at Highfurlong Brook Viaduct is testament to the ongoing collaborative effort of the Joint Venture and its supply chain partners. Utilising our network of internal access roads and on-site concrete batching plant, we're minimising our impact on the local communities that live close to our works."

The last few weeks has also seen significant progress at HS2's other major viaducts, with the first concrete poured for the approach viaducts at Birmingham Curzon Street station and the first beams installed at Thame Valley near Aylesbury.

In total, HS2 is building more than 500 bridging structures – ranging from small road bridges to massive viaducts like record-breaking Colne Valley Viaduct which will become the longest in the UK and recently passed the half-way point.

Photo credit: HS2 Ltd