

HS2 viaduct build passes one mile mark

November 8, 2023



HS2 has passed the half-way point of main construction on Britain's longest railway bridge, as a new report highlights the progress made so far on the high-speed railway.

The viaduct near Denham (Bucks) – one of HS2's landmark structures – will carry high speed trains at speeds of up to 200mph for over two miles across the Colne Valley between the line's London and Chiltern tunnels.

Construction of its 56 piers to carry the deck across both land and water began in December 2021. For the past 18 months a massive launching girder has been working its way south across the valley, one pier to the next, to lower and fix into place the viaduct's deck segments.

News of the Colne Valley Viaduct passing its halfway point coincides with today's publication of **HS2's Construction Review**. It highlights project progress across 350 worksites between London and the West Midlands since main works construction began in Autumn 2020. Building work has started on two thirds of the railway's 55 viaducts. Over 20 miles of single-bore tunnels – more than a third of the total – have been driven, supported by 160,000 tunnel segments.

Weighing up to 140 tonnes each, more than 500 of the Colne Valley Viaduct's 1,000 deck segments have been installed. Each one is uniquely shaped to enable the structure to gently curve as it carries the railway 2.1 miles over land, lakes and the Grand Union Canal.

Sir Jon Thompson, HS2 Ltd's Executive Chair, said: "HS2 is by far the biggest and most ambitious infrastructure project in the UK and it's fantastic to see phenomenal feats of civil engineering like the Colne Valley Viaduct taking shape. The enormous progress made in the last three years along the length of the route between London and the West Midlands is testament to the skill and dedication of the thousands of people who work on this transformational project every day."

HS2 Ltd senior project manager Billy Ahluwalia said: "I pay tribute to the teamwork, professionalism and dedication of everyone involved in getting this landmark viaduct to its halfway mark. There's still a long way to go to complete the viaduct; which I know will be achieved with the same dedication of everyone in the Align JV and its supply chain partners."

The Colne Valley Viaduct construction is led by HS2 Ltd's main civil works contractor Align JV – a team made up of Bouygues Travaux Publics, Sir Robert McAlpine and VolkerFitzpatrick.

Align's Surface Operations Director, Derek van Rensburg said: "To have manufactured and installed over 500 segments, which equates to over one mile of the viaduct deck, is another great achievement for the Align team involved, working with our supply chain partners and in particular VSL. It is also important to note that we have delivered this work safely and in the process we have endeavoured to minimise any disruption for the local community."

Photo credit: HS2 Ltd