

Contact our HS2 Helpdesk team on **08081 434 434**

HS2 Update

Chiltern Tunnel | Summer 2024

ALIGN
Working in
partnership with **HS2**

Chiltern Tunnel progress update



Miners from Florence looking through the cutterhead after breakthrough

Our Tunnel Boring Machines (TBMs), named Florence and Cecilia, ended their journeys through part of the Chiltern Hills earlier in spring this year.

The first machine began tunnelling in May 2021 and over two and a half years later, on 7 February 2024, Florence broke through at the North Portal in South Heath, near Great Missenden, having safely completed her 10 mile journey. She was followed by Cecilia on 26 March 2024.

Between them, the two 2,000 tonne machines have built the twin bore tunnel at depths of up to 80 metres and excavated three million cubic metres of chalk. Each machine operated like an underground

factory, able to excavate the tunnels and line them with 56,000 pre-cast concrete tunnel segments, grouting them into place and moving forward at an average speed of 16 metres per day.

A crew of 17 operatives kept the machines running, working in shifts and supported by over 100 people at the main compound, managing the logistics and maintaining the smooth progress of the tunnelling operation.

Tunnel facts and figures

- Diameter of cutterheads – 10.26m
- Internal diameter – 9.1m
- Length of tunnel boring machines – 170m
- Weight of each machine – 2,200 tonnes
- Average distance mined each day – 16m
- Best production figure (Oct 2023): 44m in one day, 232m in one week, 842m in one month
- Five shafts
- 38 cross passages between each tunnel bore
- Chalk from the tunnel is being used to create 127ha of chalk grassland at the South Portal. This area is called the Western Slopes and will be a new public amenity around the operational railway.

For more information on how the twin bore Chiltern Tunnel was created visit <https://www.hs2.org.uk/building-hs2/tunnels/tunnel-drives/chiltern-tunnel/>



Next community drop in

Thursday 5 September 2024

5 – 7pm Amersham Free Church, Woodside Road, Amersham, HP6 6AA

Tuesday 24 September 2024

5 – 7pm Great Missenden Memorial Hall, Link Road, Great Missenden, HP16 9AE

Align starts works on C1-North

On 8 July 2024 Align JV began work on the South Heath Cutting, in addition to the works that are already underway building the porous portals and ancillary building.

The works in South Heath mean that Align is now the contractor responsible for delivering approximately 1.2 million cubic metres of cut and fill earthworks, three bridges and two culverts, between the North Portal of the Chiltern Tunnel and Leather Lane.

Align will be working closely with HS2 Ltd, Buckinghamshire Council and the local community representatives to deliver a design ready for construction which takes account of concerns about specific environmental impacts of the railway on the local bat populations and established trees near Leather Lane.

Piling for the foundations of the two overbridges GMI/2 and GMI/12 is now underway with earthworks commencing in August.

Align will be sharing the updated designs for the new Leather Lane green bridge at our public engagement events in autumn 2024. Completion of these works is planned for June 2027.

Changes to boundary fencing in C1-North

Now that earthworks have commenced, we are upgrading the site fencing and security to better secure the site and protect the public.

Works to improve the existing site 'post and rail' fencing around the boundary to rigid mesh security fencing began in July and will be completed by the end of September.

The site hoarding that is already installed will remain unchanged.

Footpaths

There has been no change to the footpath arrangements in this area.

As a reminder, this is the current status of the footpaths in the area from the South Heath Cutting to Leather Lane:

GMI/2 is open

GMI/12 is currently closed

GMI/13 is currently closed

Site progress at our tunnel portal and shaft sites

With tunnel boring operations now complete, works to finish the structure of the operational buildings above the five ventilation/intervention shafts continue.

The pictures below demonstrate how the building work above ground is progressing. Chalfont St Peter will be the first of these operational buildings to be finished, early in 2025. These structures will house ventilation equipment and systems that will maintain airflow through the Chiltern Tunnel, as well as providing access to the tunnel below for maintenance and emergency services.

South Portal (near West Hyde, Herts)

Work at the South Portal site continues to create the porous portal structures which will dissipate noise and air pressure at the southern entrance to the 10 mile long tunnel.



Chalfont St Peter

Chalfont St Peter is the most advanced in programme of our ventilation shaft sites. Work to create the main building metal deck has been completed, and work continues on the fitting of internal doors and fittings.



Chalfont St Giles

External cladding works have now been completed on the headhouse and ancillary buildings above the Chalfont St Giles ventilation shaft.

Amersham

Waterproofing works (pictured right) are underway on the tunnel and ventilation shaft connection beneath the surface.

Above ground we will dismantle and remove the tower crane at our Amersham vent shaft site from 5.30am on Saturday 11 August 2024. Works will continue across the weekend and are expected to be finished by 8pm on Sunday 12 August.

To carry out the removal of the crane safely, a full road closure of Whielden Lane between Whielden Street and A404 will be implemented.



Little Missenden

Construction of the main and ancillary building at Little Missenden is ongoing, with walls and roofs to be completed by August.



Chesham Road (intervention shaft)

Structural steel works are underway for the site buildings. Firefighting facilities are due to be installed in the next few months for future emergency service access.

Site visits

We have hosted many visits this year at our shaft sites with a range of stakeholders. Students, village associations, and residents are amongst some who have attended site and had the opportunity to engage with site engineers who were pleased to share their knowledge with interested parties.

If you live near one of our sites or the Chiltern Tunnel and you would like to arrange a site visit, please send an email to: communityengagement@alignjv.com. We are always happy to share the engineering and construction expertise being applied to the construction of HS2 in your area. Please be aware that there is a high demand for visits to our sites and there may be a waiting list, but we will do our best to accommodate your request.

Community Investment

Align JV is active in the local community. Here are some of the ways we have helped the communities we work in over the last few months.

Road Farm concrete pour

Road Farm, a working farm near Great Missenden which offers educational visits to the local community, asked for some support in creating a new hardstanding on their site to ensure maximum accessibility for their visitors. We extend our thanks and gratitude to our supply chain partners, Tarmac, for their support in completing this community investment activity.



Foodbanks

We are continuing to work with the local foodbanks and collect contributions by staff and suppliers on a fortnightly basis for distribution to select local foodbanks. We are encouraging colleagues to keep up the good work in contributing to these sources of food for local residents in need.

Social Value

Here at Align JV we are passionate about supporting local people. We regularly carry out litter picks, support with road closures, collect donations at fundraising events, and can help paint and decorate communal areas. Reach out to us if you think we could help: communityengagement@alignjv.com

HS2 also has its own community funding. For information on HS2's Community and Environment Fund (CEF) and the Business and Local Economy Fund (BLEF) please visit the HS2 website – <https://www.hs2.org.uk/in-your-area/community-funding/>



Sandbags delivered in February 2024

Sandbags for Chalfont St Giles

A parish councillor alerted our stakeholder engagement team to the adverse impact of heavy rainfall and subsequent flooding on residents and businesses in Chalfont St Giles High Street earlier this year. Our surface teams promptly supplied 50 sandbags to support the parish council in their efforts to protect homes and residents in the community.

Pumpkin's Wildlife Hospital – hedgerow

A large team of volunteers from HS2, Align JV and our supply chain partners attended Pumpkin's to plant a future hedgerow. The ground conditions were tough due to the very cold weather in January, but the team managed to finish the installation of the donated saplings for the hedgerow.



Some of the volunteers planting a future hedgerow at Pumpkin's Wildlife Hospital in January 2024

Keeping you informed

We are committed to keeping you informed about work on HS2. This includes ensuring you know what to expect and when to expect it, as well as how we can help you.

The Residents' Commissioner

The independent Residents' Commissioner oversees and monitors our commitments to you.

The commissioner's reports and our responses can be found at www.gov.uk/government/collections/hs2-ltd-residents-commissioner

The Residents' Commissioner makes sure we fulfil the commitments in the HS2 Community Engagement Strategy (<https://bit.ly/3oOA25j>).

The Residents' Commissioner can be contacted on: residentscommissioner@hs2.org.uk

Construction Commissioner

The independent Construction Commissioner regularly meets our Chief Executive Officer to raise any concerns or emerging trends across HS2.

The Construction Commissioner's role has been developed to monitor the way we manage and respond to construction complaints.

The commissioner mediates on disputes about construction, involving individuals and organisations, that we can't resolve. The commissioner advises members of the public about how to make a complaint about construction.

The Construction Commissioner can be contacted on: complaints@hs2-cc.org.uk

Property and compensation

You can find out about HS2 and properties along the route by visiting:

www.gov.uk/government/collections/hs2-property

Find out if you can claim compensation at: www.gov.uk/claim-compensation-if-affected-by-hs2

Holding us to account

If you are unhappy for any reason you can make a complaint by contacting the HS2 Helpdesk. For more details on our complaints process, please visit: www.hs2.org.uk/in-your-area/contact-us/how-to-complain/

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High Speed Two (HS2) Limited, registered in England and Wales.

Registered office: Two Snowhill, Snow Hill Queensway, Birmingham B4 6GA.

Company registration number: 06791686. VAT registration number: 888 8512 56

Contact us

Contact our HS2 Helpdesk team all day, every day of the year on:

 Freephone 08081 434 434

 Minicom 08081 456 472

 Email HS2enquiries@hs2.org.uk

Write to:
FREEPOST
HS2 Community Engagement

Website www.hs2.org.uk

To keep up to date with what is happening in your local area, visit:

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