

Students name HS2 mini-TBM 'Lizzie'

April 29, 2022



HS2 today confirmed that the first of two mini tunnelling machines that will be used near Great Missenden will be named 'Lizzie' after the name was chosen by students from the nearby The Misbourne school.

The Year 8 students visited the site this week to see the arrival of the 19 tonne Tunnel Boring Machine (TBM) which they suggested naming after the Queen.

At just 8.9 meters long, the TBM is a miniature version of the two giant 170m machines - named 'Florence' and 'Cecilia' - that are currently excavating the 10-mile-long Chiltern tunnel for the high-speed rail project which will link London with Birmingham and the North.

Set to be launched in the coming weeks, 'Lizzie' is being used to dig a 300m long drainage tunnel close to the north portal of the Chiltern Tunnel at South Heath. The vast majority of the route north of the Chiltern tunnel from South Heath to Wendover is set low in the landscape in a series of cuttings to protect views across the countryside, with the drainage tunnel needed to help rainwater run-off.

As well as seeing the arrival of the machine, the students - who suggested the five shortlisted names - got to meet the engineers working on the project and learn more about how the machines will operate.

Helen Hill, Business and Economics Teacher at The Misbourne said: “We have been working with EKFB on a number of occasions this year to enhance our students’ understanding of the construction industry. Students can’t know of a career they may like to pursue (e.g. Civil Engineer) until they have an understanding what that role entails. How many of us knew what a Civil Engineer did when we were at school?

“EKFB ran an hands-on engineering workshop with Year 11 students earlier in the year; they will be speaking to Year 7 about construction on 4 May at our ‘Ask an Employer’ event and Year 8 found out about the tunnelling project and were able to enter a competition to name the TBM.

“Five of the students with shortlisted entries received the opportunity to see the TBM up close and investigate the roles of the workers involved in the programme. We see HS2 developments every day as we travel to school but it’s good for the students to understand the careers available in a local growth industry.”

HS2 Ltd’s Project Client Rohan Perin said: “With construction now well underway, it’s great to be able to welcome students from The Misbourne to site and hopefully inspire them to look at careers in science and technology. Lizzie may be significantly smaller than our other TBMs, but she will still play a vital role in the delivery of the new railway.”

Identical in many ways to her larger cousins, ‘Lizzie’ will both excavate and line the tunnel with 120 concrete jacking pipes at a speed of around 5m per day. While ‘Florence’ and ‘Cecilia’ each have a crew of up to 17 people, ‘Lizzie’ will be operated by just six people.

The drainage tunnel is being built by HS2 Ltd’s main works contractor, EKFB – a team made up of Eiffage, Kier, Ferrovial Construction and BAM Nuttall – working with specialist tunnelling contractors Active Tunnelling.

EKFB’s Skills, Employment & Education Co-Ordinator Laurie Michel said: “Collaborating with The Misbourne school to name the mini TBM has meant that the children who live in the local community get the opportunity to learn more about the important work EKFB is doing in their area. Our engineers also enjoyed speaking to the year 8 group about careers in the industry and we hope to have inspired the next generation of civil engineers.”

A second identical machine, to be named ‘Marsha’ after African-American gay and transgender rights activist Marsha P Johnson, will be launched at the end of May to complete the other 450 metres of the drainage tunnel.