



## Brent Cross West Station

**Continuous Flight Auger (CFA), spliced steel Circular Hollow Section (CHS), piles and temporary cased bored cast in place piles**

**📍 Brent Cross, London**

**For our client Volker Fitzpatrick we recently completed both the on and off-track piling works at the new Brent Cross West Station, London.**

### Project background

After supporting the client with design options, our works included the foundation installation for the robust platforms, link bridges, the central raft foundation, the main station structure, as well the new canopies and waiting shelter to the north and south of the larger concourse area.

### Customer challenges

Safe delivery of on-track and any line open (ALO) working was key to the success of this project and our teams were regularly working in restricted areas next to live lines with trains running at more than 100mph.

Despite access constraints and resources challenges during the pandemic, our team delivered the project ahead of programme; through a variety of weekend, Bank Holidays and night time shifts, coordinating activity to reduce risk and to ensure a zero accident and incident record.

### Van Elle Solution

Our on-track team installed spliced steel CHS piles using a Movax vibratory pile driver and tracked Colmar road rail vehicles.

The off-track team used a Klemm 709 3G tracked rig to deliver a programme which included 12 piles to the east bridge trestle, 56 piles to the western entrance, 130 piles to platform 1/2 and 125 piles to platform 3/4. Temporary cased bored cast in place piles varied from 450mm to 508mm diameter and various lengths up to 20m.

A key factor in the delivery of these works was the control measures and considerations put in place to avoid and mitigate the potential for disturbance our activities could have on the local area and users of the station. Impacts from potential noise, dust and emissions were carefully planned and communicated with residents and businesses to ensure minimum disturbance and disruption.

### Social value commitments

In support of our client and the local community, we involved local businesses as part of our supply chain and were delighted to gain their support in bringing apprentices into our work programme.

Through our social value commitment to Volker Fitzpatrick, we have developed a series of 'masterclass' sessions on health and safety awareness for Barnet and Southgate Colleges. The courses outlined the importance of Health & Safety when stepping out onto a construction site in the early months of training, and those embarking on a career in engineering and construction.

In addition to the masterclass sessions we also led the painting work at a local community centre in time for the grand reopening at the end of the year.

### Key Benefits

Delivery: **Complex rail project delivered on time with no incidents during COVID pandemic, requiring complex piling techniques in restricted access conditions**

Social Value: **Control measures in force to restrict disturbances to the local community and businesses**

**H&S master classes for students**

**Volunteer painting day at Burnt Oak Community Centre**

### Project stats

Client: **Volker Fitzpatrick**

Value: **£1.9m**

Date: **Autumn 2020—Spring 2021**

Rig/Kit: **Tracked Colmar RRV and Movax vibratory pile driver, and Klemm 709 3G in reduced headroom (7m) due to ALO working.**

