RAIL LIVES

SAFETY BY THE BOOK

She wasn't born when it happened but Charlotte Dartnell has the Clapham Junction Rail crash in the back of her mind when it comes to doing her job safely

THE 1988 Clapham Junction Rail crash, the result of a signalling failure caused by a wiring fault, was a turning point for signalling safety.

Among the improvements brought in as result was the Signalling Works Testing Handbook (SWTH) used across the railway today. "This handbook provides all the procedures we need to make sure we test everything correctly and safely," explains signalling project engineer Charlotte Dartnell.

Charlotte, who works for Colas Rail, is currently planning the renewal of two crossovers and two turn outs at Southend. Enabling works start in August and the first of three core signalling works testing (SWT) weekends are due in the middle of October.

MULTIPLE DISCIPLINES

Charlotte explains: "I get to work with designers, particularly for Switches and Crossing (S&C) track renewals and refurbs, I plan resources in terms of staff, plant, materials, I do the paperwork around access,

testing limits, competencies and I also oversee fatigue management. I love the fact that my role is different every day and that I get to be out on site as well as in an office. I meet so many characters and it's like we're just one big family. It's one of the reasons I joined the railway."

Another area that has improved since the 80s is welfare facilities. Female toilets for example would have been almost unheard of on sites back then but as Charlotte notes, availability of facilities for women is no longer an issue on well run sites like Southend.

That's not to say, work doesn't have its share of challenges. "The works will take place over eight weekends with three of them core SWT which requires access for 52 hours each time. The rest are p-way stages but there are still signalling elements involved so we need to assist in that," continues Charlotte.

The team has also had to request midweek night access, as it is Red Zone prohibited, during which a team carried out de-vegetation

work in the cess so temporary magnetic fencing could be installed to keep workers away from the track when the line is open.

"For us it's all about working safely so site time, travel, fatigue, working at height and working alongside the track are all factored in," says Charlotte. "Our SPWEE (safety precautions when working with electrical equipment) training is vital, as is following the Lifesaving Rule of test before touch. One of our biggest risks is over running. We have to come in and take all the equipment out before p-way work can begin and then we have to test everything again after they've finished."

STILL LEARNING

"We try and mitigate this by having more people do the work, but safety has to come first. If p-way finishes late then our testing times become shorter but it's vital we complete all our checks properly – we'd rather over run than cut corners."

Charlotte joined Colas Rail's graduate scheme in 2017 after completing a degree

in Mechanical Engineering at university.

She now works with a contracts responsible engineer, two supervisors and a graduate on the Southend project.

"I took the graduate under my wing, teaching him everything I know and everything everyone else knows," she says. "It makes me realise that I know what I'm doing and when he asks something I don't know I'm not afraid to ask someone more experienced which means I'm still learning too."

Charlotte's ambitions don't stop at Southend. She's currently doing a Masters in Railway Systems Engineering and Integration at Birmingham, funded through Colas Rail's apprenticeship programme. In October she'll take the International Rail Signalling Engineers exam. "My aim is to get chartered, which gives me the option to move abroad."

She adds: "When I left university I knew I wanted to work in engineering. It was only when I interviewed at Colas Rail that I realised the railway was where I wanted to be."