

Collis hits 50 NOT OUT



LESLEY
BROWN

Having opened its doors in 1970, Collis Engineering is celebrating 50 years in business this year. From its local steelwork origins to a multi-disciplined specialist in civil engineering, consultancy, contracting and steelwork fabrication, the company has come a long way over the decades...

Founded by Peter Collis, the company received its very first rail enquiry in 1973 - to supply a signal structure for a local British Rail depot. The job was well done, and further rail-related opportunities followed. Collis was, thereafter, officially a rail business.

The company reached another milestone in 1997 when, after identifying an opportunity in the market, Collis opened a civil engineering arm to provide an on-site presence to partner with its design and fabrication business.

Collis Civil Engineering boasts extensive, on-site capabilities. In this field, services provided include the installation of both concrete and piled solutions, covering all Network Rail's recognised piling methods, structure erection, modification and refurbishment, the supply and installation of LOC (location case) platforms and walkways, level crossings, as well as general ground works and bespoke steelwork solutions.

In 2019 Collis was awarded a Network Rail principal contractor license [PCL]. The first works being undertaken through this PCL are on the North London lines project, with the replacement of nine upper-quadrant mechanical signal structures and all the associated site works, including ground investigations and surveying, piled and

concrete foundations, structure installations, ballast retention and the commission and testing works.

An expansion in design capabilities has resulted in Collis now offering a comprehensive consultancy service that includes sub- and superstructure design, structural assessments, 3D modelling, site surveys, 3D scanning, ground investigation, and reporting.

In 2020, the firm's activities are split into two main areas:

- » Fabrication of points operating equipment and other related components, for which Collis holds a Network Rail framework agreement;
- » Design and fabrication of railway signalling support structures (posts, cantilevers, gantries), with all associated civil engineering requirements.

Right people, right places

The company has always operated from its Alfreton site in Derbyshire, expanding periodically to meet the demands of its customers. It currently employs around 100 staff.

That expansion led to the formation of the Signal House Group in 2003. A new senior management team took over the Collis business, along with its sister organisation Signal House.

The Signal House Group and its operational companies - Collis Engineering, Collis Civil Engineering, and Signal House - hold the following quality, safety and environmental certifications:

- » ISO 9001:2008 - Quality Management Systems
- » ISO 14001:2004 - Environmental Management Systems
- » OHSAS 18001:2007 - Occupational Health & Safety Management Systems
- » ISO 1090-2:2008 - CE Marking, Structural Steel - Execution Class 2 & 3
- » RISQS - Qualified by audit for 61 categories

A specialist LED lighting company, SH Lighting, was formed in 2008 and, in 2017, the acquisition of the design and engineering consultancy Michael Evans and Associates was completed. Today, the group employs approximately 130 staff across three offices in Alfreton, Derby, and Leighton Buzzard.

Given the changing face of the railway market, and increased competition in particular, to have been in the business for 50 years still going strong is a terrific achievement and a tribute to the group's hard-working members of staff.

Collis and the entire Signal House Group has always considered itself a family. The companies have very low staff turnover and awarding employees with long-service awards for 25 years with the company has become the norm. Currently, 16 members of staff have achieved this, with the longest-serving employee currently at 40 years.

Similarly, training the next generation of engineers has always been a priority to drive the business forward. Collis' apprenticeship program, which is both challenging and varied, gives employees the opportunities to work within design, fabrication, machining, quality and assurance or civil engineering.



Future forward

A diverse product range and a history of successful project deliveries has established Collis as a leader in its specialist fields, with the company building on its past achievements. Several Network Rail framework agreements, the recently awarded PCL and an innovative new product will drive the company through Control Period 6 (CP6, from 2019 to 2024) and beyond.

With regards to innovation highlights, Collis introduced its hinged lightweight signal post to the market in 2012, a hugely successful innovation that has been utilised on hundreds of Network Rail projects - estimates suggest more than 2,500 posts currently reside on the network. As well as being a completely maintenance-free structure, engineered to last 35 years, it accepts any signal head and offers the health and safety advantage of avoiding working at height. Network Rail has approved two versions - the standard and a heavyweight alternative for accommodating more signalling arrays - that are used extensively across the UK, including in OLE and DC electrified areas.

2020 will bring something new again. In collaboration with Signal House, Collis will

be launching 'Fibre LED' to the market. A combined product of signal structure and LED signal head, the signal aspects are displayed using fibre optics with the LED light source being located at ground level. The product is classified as zero maintenance and will change the way signalling works are delivered.

In parallel, Collis' on-site capabilities - such as the first installations of 610mm diameter driven tubular piles, a recent addition to its piling capabilities and comprehensive list of piling solutions - continue to grow. The company is already established as a supplier and installer of hand-driven mini piles, designed to reduce the time and costs associated with smaller piling requirements.

One step ahead

Moving with the times, anticipating future needs and investing in research and innovation are all key to long-term business success - factors Collis has clearly taken on board over the past 50 years.

Given the impacts of climate change, building flood resilience into railway networks is set to become increasingly important. Hence the pertinence of Collis' embankment platform, suitable for areas susceptible to flooding. A standard

structure mounted on top of custom-height stilt legs, it has an enclosed cable trough. This design ensures the equipment being supported is positioned above flood water levels and, should flooding occur despite this, the potential damage is kept to a minimum, resulting in much lower repair costs. This type of platform has already been installed at Hinksey, Westerleigh, Cowley Bridge and Bridgewater.

With an eye to the future requirements of the digital railway and Wi-Fi, Collis is also planning to expand into additional areas of work such as telecommunications masts. These will be used both within the rail environment and externally in the wider telecoms field, with the roll-out of new 5G networks driving requirements.

The company's engineered hinged antenna mast provides a maintenance-free, easy-to-use structure to support a variety of radio antennas. It is already being installed as part of the Four Lines Modernisation (4LM) project, run by London Underground, to transform the Circle, District, Hammersmith & City and Metropolitan lines by 2023.

Whilst always seeking new opportunities, Collis Engineering prides itself on quality products and service. This quality is confirmed by the amount of repeat business from satisfied customers. Collis is considered a key supplier both to Network Rail directly and through many of the signalling-focused Tier 1 businesses.

Here's looking forward to the next five decades in action...◆