

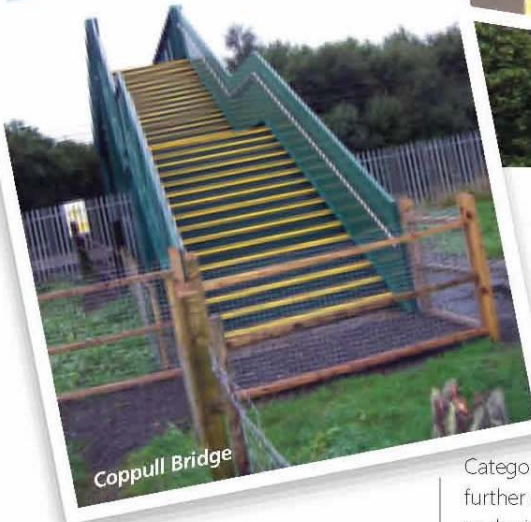
# WEC Group's innovative designs are making their mark

The WEC Group is currently a leading force in providing innovative design, fabrication and installation services to the rail industry. Their unique approach to design has led to the introduction of slim-line and ultra-light-weight signal gantries, a first within the sector. Along with their commitment to progress, this has ensured they are continually at the forefront of their industry

### Company profile

● Founded in 1979, the WEC Group has grown into one of the largest groups of its type in the North West. A company with over 250 employees, £19 million turnover, a 100,000 square foot facility and the rarity of still being privately owned, the Group comprises five divisions, each specialising in different aspects of fabrication engineering.

**A** supplier to Network Rail, WEC has been active in the rail industry for the past six years working with the likes of AMCO Rail, Atkins, Birse Rail, Balfour Beatty and Corus Rail. Well known for their innovative design solutions and commitment to achieving on-time delivery, WEC employs an in-house design team, supported by their fabrication and PTS-trained installation team,



29 years of in-house experience and knowledge, it made sense to offer these skills to the rail sector. Our clients benefit from a 'one-stop shop' offering transparency at all stages of the project and we have recently become involved in providing Form B Approvals and

Category 2 structural calculation checks to further demonstrate our commitment to the industry."

to provide a 'one-stop shop' for their clients, enabling them to manage an entire project from one site.

Since achieving Link-Up Approved status in 2002, WEC has provided a turnkey service within the rail sector offering solutions for both design and fabrication. They plan with 'easy to install' in mind, providing generic designs that offer the client a flexibility of use.

"We've invested heavily over the past six years to provide a first-class service to the rail industry," explains Derrick Connolly, manufacturing director of WEC. "With over

Involved in various projects, for example, signal structures, footbridges, LOC platforms and OLE structures, WEC offers a variety of signal structures to suit all requirements. Their design team has the capabilities to develop bespoke structures for particular location difficulties. General or specific, they provide a number of signal structure options including one, two, three, four & five-track portal gantries, one & two-track cantilevers and single-post signal structures.

The future looks bright for WEC with current projects including Newport Area Signalling Renewal (NASR) and the

### Basingstoke Infrastructure Upgrade.

Working with AMCO Rail on the Newport Area Signalling Renewal, WEC were tasked with the design, fabrication & installation of eight gantries and four cantilevers. Implementing a different design approach than the industry standard, the WEC team designed an innovative slim-line and ultra-light-weight signal gantry for the project. Slimmer and 40 per cent lighter than a traditional signal structure, the gantry withstands the wind speed of passing trains better than a



*Four-track gantry*

conventional gantry and provides ease of installation due to its weight.

John Clements, senior project manager for WEC, is clearly proud of WEC's design ethos: "At WEC we pride ourselves in our ability to approach design issues with a lateral way of thinking and not to get caught up in the 'we have always done it that way' mentality. Historically, fabrication designs are produced by draftsmen and qualified engineers. The common-sense approach is to have the fabrication engineer designing a fabrication piece due to the experience and skills they possess. We have been fortunate to work with several companies who appreciate the logic of this approach."

The entire process took five months from design to installation and clearly AMCO Rail were pleased with the results. "WEC's approach to solving problems and the speed at which they produce designs, drawings and manufacture structures is commendable," explains Eddie Webb, design manager for AMCO Rail. "They have been a major factor in helping to keep the project on target."

The Basingstoke Infrastructure Upgrade, which is part of Network Rail's £1.5 billion investment in signalling across the country, will see the modernisation of signalling equipment along a 60-mile section of track from Grateley to Farnborough and

Mortimer to Litchfield Tunnel (north of Micheldever).

Working with Atkins on the Basingstoke project provided WEC with an opportunity to design, build and manufacture over 129 signal structures. Not ones to conform to industry standard, the design team introduced circular hollow sections (CHS) in place of industry standard two universal columns, providing a unique resistance to torsional wind-loading. With the design since being adopted within the industry, Derrick is more aware than ever that WEC's approach to design is unique. "Having worked at WEC for more than 20 years, it gives both the team and myself a great sense of accomplishment when our designs are adopted by forward-looking companies such as Network Rail and Atkins."

Les Atkins, senior project manager of Atkins, confirms WEC's commitment to its clients: "Their willingness to get the job done and efforts in achieving their tasks has been second-to-none and much appreciated by the site staff they have been working with and by the management teams planning and reporting on progress. The work has been particularly successful and well received."

The WEC group is not only known for their approach to design, but their commitment and need to 'go that extra mile.' WEC was contacted in early December 2007 with an urgent request for a signal structure installation team for the West Coast Main Line at Nuneaton on Christmas Day and Boxing Day. The WEC team rose to the challenge and provided a team for the holiday period, much to the delight of Network Rail. WEC Group is proud to have played a part in delivering the Nuneaton programme on time and with no accidents or incidents."

With the continuous investment in facilities and staff, WEC is focused on providing a first-class service to the rail industry and is looking forward to introducing further innovative designs and solutions in the near future. ■

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*Basingstoke cantilever signal gantry*