



BRIDGES
FORGING CONNECTIONS

INTRODUCTION



The Ordsall Chord, Manchester

TRANSPORT INFRASTRUCTURE BRIDGES



London Luton Viaduct



M8 Footbridge, Glasgow

DESIGN. BUILD. COLLABORATE.

Here at Severfield, we are committed to building a better future for communities and their people. As the UK's leading structural steel experts, we've forged our legacy in some of the country's most iconic buildings, spaces and creative

solutions for critical infrastructure. We are built on a foundation of outstanding customer service; we're responsive, dependable and flexible in order to meet diverse engineering needs and project demands.

With multiple operations now across the UK, we can deliver unrivalled capacity and capability to meet your project needs and we have the skills and know-how to deliver engineering solutions for various types of bridge infrastructure projects, throughout the UK and internationally.



M8 Footbridge, Glasgow



Eastwick and Sweetwater, London

CAPABILITIES



Our capabilities have enabled us to work on some iconic bridge infrastructure projects throughout the UK. These include: The Ordsall Chord in Greater Manchester, Barking Riverside extension, Ely Southern Bypass, London Luton Viaduct as well as a series of bridges for both Network Rail, HS2 and National Highways.

Our bridge team offers a vast and diverse range of expertise, which means we are uniquely placed to work closely with you in a collaborative way, to deliver an impressive suite of services.

Our bridge infrastructure project capabilities include:

- > Rail and transit
- > Airports
- > Roads and highways
- > High speed and intercity rail
- > Bike and pedestrian
- > Viaducts

DESIGN

Our highly skilled and motivated structural and civil engineers have exceptional specialist knowledge of structural steelwork design for bridges. Our team have worked on a wide range of complex infrastructure projects, which include both permanent and temporary works. Their skills, combined with extensive experience in the sector, mean Severfield is in a position to offer first class solutions for our clients - based on both value engineering and innovative concepts.



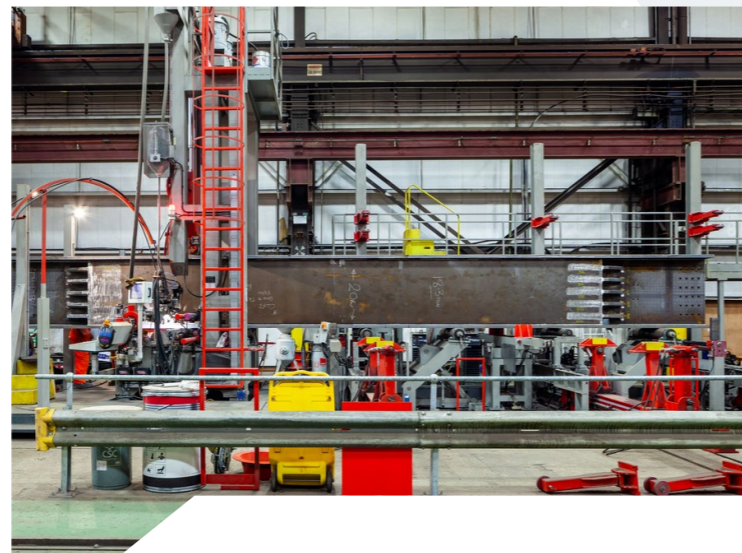
MANUFACTURE

Our fabrication facilities are second to none. From our expansive stockyards, to in-line cutting, fabrication, welding and painting; we have some of the largest finished goods storage areas in the industry.

A significant investment in market-leading technology allows us to handle the manufacture of diverse steel requirements and continuously offer market-leading solutions to the most varied and challenging of briefs.

The great work we do would simply not be possible without the hard work and extensive skills of our manufacturing experts. Some of these

projects require incredible expertise to ensure complex briefs and large-scale projects can be completed efficiently, effectively and within budget. We are confident we have the very best people for the job, and we invest in their development, continuously, to ensure we stay ahead of the curve and at the forefront of our industry.

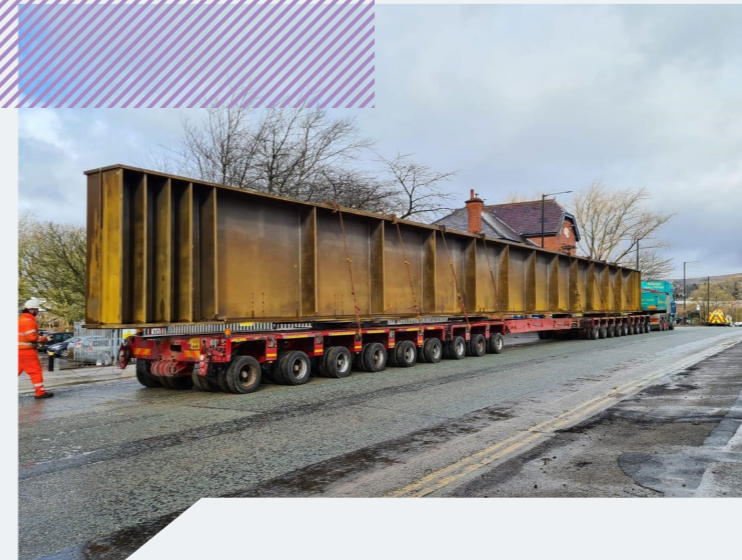


DELIVERY

WS Transportation (WST) is our haulage partner for most of our steel products. We also utilise several other specialist heavy haulage contractors to transport our bridges safely to some of the most challenging locations with in the UK.

Our hauliers boast a range of modern and advanced equipment, such as new multi-axle trailers, specialist trailers with steering capabilities, bespoke safety equipment including exclusion zone barriers, cycle aware cameras and audible warning features for urban locations.

Our services include swept path analysis, police and local escorts for abnormal loads and full liaison with all stakeholders to ensure our bridges are delivered safely on time without exception.



CONSTRUCTION

We boast a highly trained construction workforce, many of whom have years of bridge construction experience utilising a multitude of erection techniques, such as traditional crane lifts, Self-Propelled Modular Transporters (SPMTs), launching and strand jacking.

With a focus and passion for optimum health and safety on all of our sites, we understand we must place an emphasis on the quality of the people we employ.

By ensuring the relevant industry-leading training of our employees is maintained, we can be confident when delivering performance excellence whilst meeting and exceeding health and safety standards. We also work closely with equipment manufacturers to ensure that efficiency and safety

are always at the forefront of our operations and that our employees are provided with the correct equipment.

All our sites are consistently monitored to ensure essential standards are maintained. We have also developed our own unique Seversafe systems - these include a safety handrail solution 'Seversafe Edge Protection System', our 'Seversafe Off-load System' for the safe loading and unloading of steelwork, as well as a tool-tethering system to further boost our safety performance.



CLIENTS

We are committed to working with all our construction partners to deliver the UK infrastructure works associated with National Highways, Transport for Scotland, Transport for London, Welsh Assembly Government, HS2 and Network Rail as well as the private and Local Authority led schemes throughout the length and breadth of the UK.

Our recent works to date include supporting the National Highways Regional Delivery Partnership (RDP) programme, HS2 - including both enabling and permanent works structures, as well as other schemes such as SCAPE, private development works, airport infrastructure and general utilities.



SUSTAINABILITY

We have been monitoring and reporting our carbon performance since 2013 and have since launched our strategic business improvement scheme in 2016 to ensure we are 'smarter, safer and more sustainable' in every aspect of our business going forward. The strategic team focus on working sustainably, reducing our energy consumption, investing in new technologies and ensuring that we care for our environment.

specifying, or stocking 100 per cent net zero steel by 2050, with certain interim targets to be achieved by 2030.

By recognising climate related risks and opportunities, we've been able to reduce our overall footprint, cost save through making our processes more efficient and our clients are more aware of our environmental focus.

In August 2021, we achieved our current year target to be accredited as carbon neutral by the Carbon Trust and we have strengthened our commitment to reducing our carbon emissions by signing up to SteelZero, a global initiative to speed up the transition to a net zero steel industry. By signing up, we are making a public commitment to transition to procuring,

For our projects, we also realise that embodied carbon calculations are becoming more popular in order to gather data on the carbon footprint of a build. That's why we encourage early contract involvement (ECI) with the client to get an idea on their own carbon aspirations. It's also likely that by having these discussions at design stage, it could provide solutions for lower carbon options.

SUPPLY CHAIN

A key ingredient for the long-term success of any business is the ability to forge strong and lasting relationships with supply chain partners, which provides clients with high value and consistent reliability.

With a growing international presence, we realise the importance of engaging successfully with clients and the supply chain wherever we operate in order to improve the interfaces between disciplines, as we strive to optimise construction value and performance both now and in the future.

Our vendor on-boarding process is category based against a minimum requirement and covers a whole host of things including CSR, sustainability, environmental management, tax evasion, responsible sourcing and modern slavery to name but a few.



APPRENTICESHIPS

We're really passionate about recruiting apprentices and graduates where we can. We thrive on being able to offer young people with their first step onto the construction/engineering career ladder – offering them the opportunity to work on iconic projects throughout the UK and Europe.

We understand the many benefits in welcoming apprentices into Severfield, and have been operating a scheme to offer apprenticeships since 2010. Some of the apprenticeship positions we have recruited for over the last few years cover several roles, such as construction site management, metal fabrication and IT – to name a few.



SOCIAL VALUE

It's great to know that many of the projects we work on will be beneficial to the surrounding community, contributing to the long-term wellbeing and resilience of individuals, communities and society in general. Where possible, we collaborate with clients and suppliers on supporting local charities/causes near our projects, and have done this on a number of occasions previously.

We also support local charities that have been nominated by each of our manufacturing locations and we have our very own registered charity, The Severfield Foundation. The Foundation raises funds for, and offers practical assistance to, charitable bodies throughout the UK, mainly through the activities of Severfield employees and companies.

It is our intention to deliver more sustainable solutions for our people, our customers and the wider community and environment in which we work and live. All of these things really matter to us, and we know it does to our clients too - so we stay on top of this by running our own Sustainability Committee. The Committee comprises of our Group SHE Director, Group HR Director, Group Chief Operating Officer, Group Finance Director, Group Procurement Manager, and our Group Sustainability Manager, all of whom, with the exception of the managers, also sit on the plc executive board.

This Committee's purpose is to ensure we stick not only to the guidelines and regulations, but to the extremely high standards we set for ourselves. We regularly review and update our processes, taking into account any relevant changes or considerations relating to social, environmental, ethical and health and safety matters.



LONDON LUTON VIADUCT

(AIRPORT MASS TRANSIT SCHEME)

Steeling the transport infrastructure

About this project:

- > The scope of our works included the fabrication and supply of 830 tonnes of steelwork
- > We supplied and installed an eight-span viaduct carrying a light rail system - 310 metres-long overall
- > The viaduct features an impressive curvature and on site construction was completed with very limited space
- > The design was a ladder beam configuration; three girder spans across viaducts one-three, then twin girder spans on viaducts four-eight
- > The girders were typically 1,900mm deep with fabricated section cross beams and diaphragms
- > The viaduct was constructed using weathering grade steel



London Luton Viaduct

BARKING TO RIVERSIDE EXTENSION, LONDON

Getting you from A to B

About this project:

- > The London overground to Barking Riverside extension forms part of the Mayor's Transport Strategy to extend the public transport network to serve new and growing areas
- > We have provided 3,200 tonnes of structural steel for this extension, which will help produce 4.5km of new track as one of several transport measures designed to serve the emerging development area at Barking Riverside
- > We fabricated and installed nine heavy plate girder bridges running over rail, roads and the HS1 tunnels
- > At 41 metres long and three metres deep, the heaviest girders weigh 122 tonnes each



Barking to Riverside Extension, London

THE ORDSALL CHORD, MANCHESTER

Crucial connections

About this project:

- > 4,500 tonnes of steel
- > Overall, eight structures linking Manchester Piccadilly and Victoria train stations
- > 100% approved and fabricated in BIM (Building Information Modelling); a Network Rail first
- > Project critical; impact on Grade 1 listed Liverpool Road Station (World's first terminal station) and bridge over River Irwell
- > Northern Hub Alliance project working with Network Rail, Skanska, BAM, Siemens and Mott MacDonald



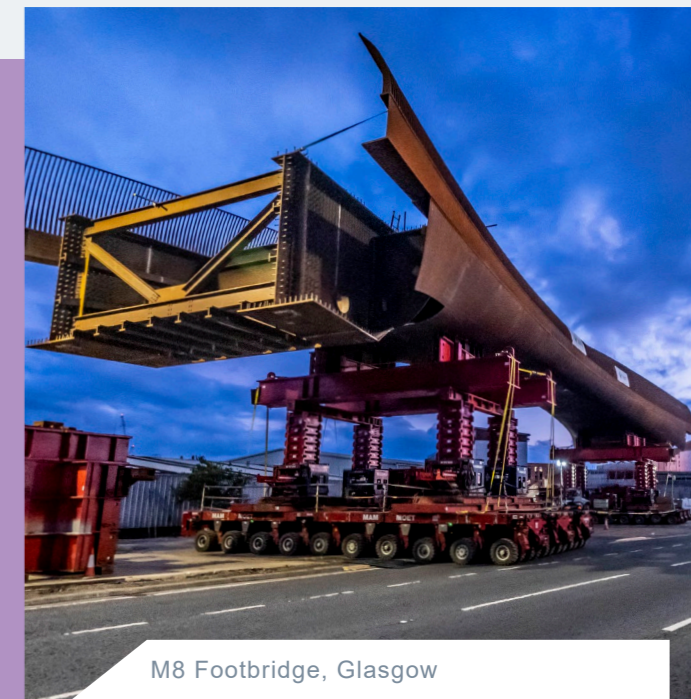
The Ordsall Chord, Manchester

M8 FOOTBRIDGE, GLASGOW

Street in the sky

About this project:

- > This project brief was for supply and erection of structural steelwork for a 60 metre-long footbridge
- > All of the bridge's handrails were delivered in six sections
- > This project was built offline on temporary trestles, utilising a complete scaffold encapsulation for welding work
- > A SPMT was required to move the bridge into position during a motorway closure
- > The footbridge is being created to reconnect Sighthill to the nearby city centre



M8 Footbridge, Glasgow

ELY SOUTHERN BYPASS

The fast way around

About this project:

- > The bypass is a 1.7km road arching around the southern edge of Ely. It includes composite steel bridges over a railway line, the River Great Ouse and its floodplains
- > There are two main structures, a rail over-bridge and a road bridge involving 692 and 1,138 tonnes respectively
- > For the rail bridge we required a 750-tonne crawler crane - this crane was delivered in smaller sections to the pre-build location before being assembled by a smaller 100-tonne slave crane
- > Altogether, the viaduct consists of 12 sections, ranging from 75 tonnes to 109 tonnes each and we had a team of up to 14 welders working in sequence in order to allow for the bridge to expand and contract during construction



Ely Southern Bypass

STAPLETON ROAD, BRISTOL

A bridge apart

About this project:

- > Stapleton Road Viaduct is a replacement of a Victorian viaduct and is a crucial part of Network Rail's Filton Bank Four Tracking project, which is an expansion of the track between Dr Days Junction and Filton Abbey Wood station, allowing intercity traffic to overtake the local stopping trains
- > The bridge structure consists of a standard Network Rail 'half through' composite deck in weathering steel, approximately 18 metres long with 2 metres deep main girder
- > The steelwork was fully assembled and the concrete deck cast off-line on temporary supports. The fully constructed bridge was then able to be installed using SPMTs during a weekend road closure



Stapleton Road, Bristol

M20, J10A MOTORWAY

The right route

About this project:

- > This project involved constructing the new junction 10a on the M20, 700 metres south-east of the existing junction 10
- > We provided the fabrication and construction of two bridges, each made up of three braced pairs of weathering steel plate girders and a combined weight of 587 tonnes
- > This was one of the first projects to benefit from our multi-million-pound investment in the latest plate girder manufacturing technology using our T & I line, which includes the fully integrated process flow of pre-blasting facility, CNC and drilling and edge rounding
- > Installation of the bridges took place over two separate 51-hour weekend motorway closures in January 2019, with the use of a 500-tonne mobile crane to lift the steelwork in to position



M20, J10A Motorway



SCAN QR CODE TO VIEW OUR BRIDGES VIDEO

IF YOU WOULD LIKE TO DISCUSS YOUR NEXT
BRIDGE PROJECT, PLEASE GET IN TOUCH.

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