

Bespoke parapets and barriers for Herring Bridge, Great Yarmouth

Varley & Gulliver successfully delivered a bespoke solution on the Great Yarmouth 3rd River Crossing project.

Working closely with the Main Contractor, BAM Farrans JV, Varley & Gulliver developed, supplied and installed a range of solutions:

- Pedestrian and vehicle parapets (managed & delivered by Varley & Gulliver)
- Pedestrian Guardrail Package (managed by Varley & Gulliver and delivered by Littlewood Fencing)
- Vehicle Barrier Package (managed by Varley & Gulliver, sourced from Hill & Smith Barriers and delivered by Littlewood Fencing)

Commissioned by Norfolk County Council, the crossing links the A47 to the port and enterprise zone and has been designed specifically to ease traffic congestion, shorten journey times and support wider plans to maximise investment, regeneration and economic growth in the borough.

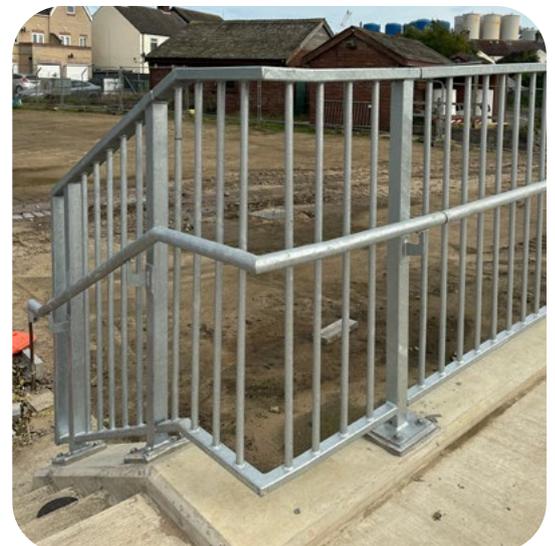
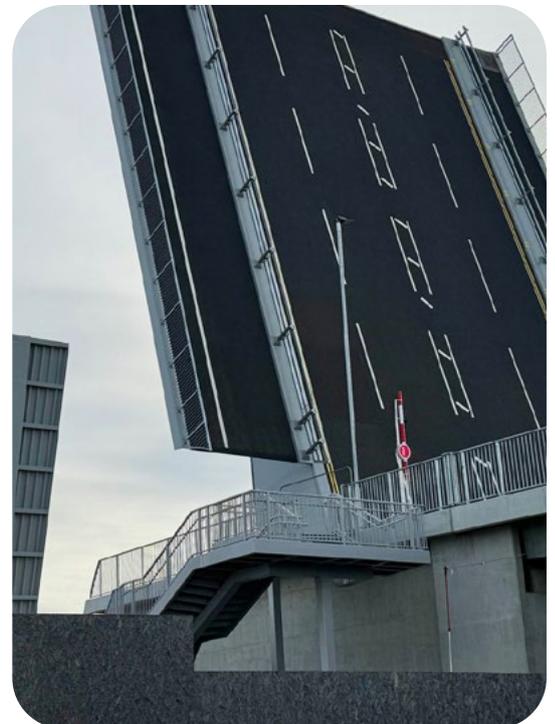
The challenge

An iconic design, featuring new carriageways to both sides of the bridge, and two unique steel leaves enabling the bridge to open for the passing of ships, the project required bespoke products that would meet both the pre-requisite for architectural design combined with compliance against stringent safety standards, specifically EN1317 and BS7818, which stipulate the performance and safety criteria for Vehicle and Pedestrian Restraint Systems respectively. The systems need to integrate seamlessly from a safety performance and bridge operational performance.

A three-year project, the scheme has been one of Varley & Gulliver's largest projects to date and has seen the business deliver the largest range of bespoke products on one single job.

Products installed:

- Pedestrian and vehicle parapets
- Pedestrian Guardrail Package
- Vehicle Barrier Package.



The solution

Early engagement and close collaboration between the scheme designers, the main contractor BAM Farrans, and Varley & Gulliver's drawing office resulted in best product fit and integration in the wider scheme.

Development of bespoke solutions

Bespoke solutions have been developed to meet the complexity of the design being a bascule bridge and requiring several breaks to allow for opening. All products were manufactured in the company's factory in the West Midlands and galvanised at Joseph Ash, a sister company also part of Hill & Smith PLC's group of companies. This allowed full control of the manufacturing process and ensured consistent product quality.

- The manufacture, and installation of 1400m of bespoke pedestrian and vehicle parapets
- The manufacture of bespoke panels to integrate with the steel leaves of the bridge
- The production of curved parapet sections to align perfectly with the concrete surface
- The installation of pedestrian guard rails and staircases around various pedestrian crossings.
- The installation of galvanised solid infill sheeting to mitigate headlight glare into adjacent housing

Strong collaboration between all parties involved

Project management and co-ordination across the supply chain ensured minimum disruption:

- The securing of a river possession placing the bridge in a closed position for three nights. This required teams to work through the night, at pace with both strong collaboration and project management to enable the installation of parapet on both the East and West leaves and to ensure zero disruption to ship traffic.

The Outcome

The project has enabled Varley & Gulliver to demonstrate its vast range of capabilities and to meet a number of bespoke requirements. These have included the manufacture and installation of extensive pedestrian and vehicle parapets together with the production and installation of curved sections and bespoke panels to integrate with unique steel leaves which open and close the bridge to ship crossings.

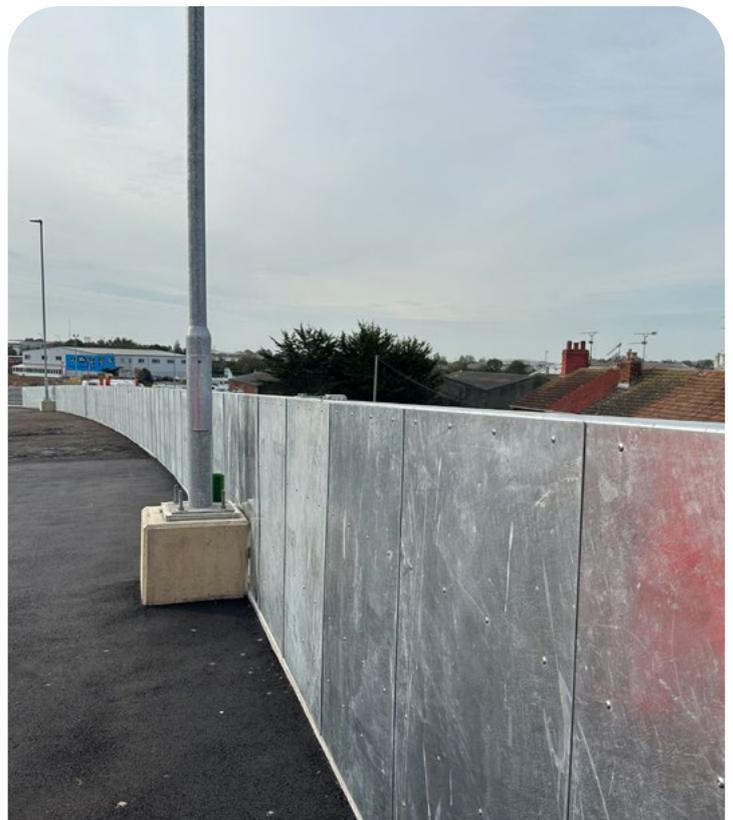
Successful collaboration delivering Norfolk's most iconic landmark

Varley & Gulliver fostered extensive partnership involving all contractors on the project combined with the local supply chain.

This enabled the company to contribute to the successful delivery on what will be one of Norfolk's most iconic landmarks and which will significantly boost trade and communities across the borough.



The crossing links the A47 to the port and enterprise zone and has been designed specifically to ease traffic congestion, shorten journey times and support wider plans to maximise investment, regeneration and economic growth in the borough.



Why Varley & Gulliver

- Extensive and market leading product range across parapets, vehicle restraint systems (VRS), guard rails, passive sign supports and pedestrian systems
- A business underpinned by and part of Hill and Smith VRS and which brings together 2 leading VRS faces to market: Hill and Smith Barriers and Varley and Gulliver Parapets
- Delivering projects across the UK and worldwide with a reputation for exceptional service, quality and expertise and with a commitment to protecting people and infrastructure.



“The successful delivery of vehicle and pedestrian restraint systems for the project is proof that close collaboration between scheme designers, manufacturers and contractors is paramount when developing bespoke systems for complex schemes. We are proud to have provided a wide range of products all developed to meet the specific design of the bridge structure.”

Steve Dugar, Head of Services, Hill & Smith Infrastructure.

Find out more

For more information on Vehicle Restraint Systems (VRS) and Parapet Solutions, contact info@hill-smith.co.uk

HILL & SMITH VRS

VARLEY & GULLIVER
PARAPETS

HILL & SMITH
BARRIERS