



**Location**  
Birmingham

**Client**  
HS2

**Main Contractor**  
Balfour Beatty VINCI  
Joint Venture (BBV)

**Engineer**  
Mott MacDonald

**Tonnage**  
1,631 tonnes

## Lawley Middleway Viaduct Birmingham

**Lawley Middleway Viaduct is a landmark structure shaping the final approach to Curzon Street Station on the HS2 line, leaving a lasting positive impact on communities for generations to come. At 112 metres long, it was one of five bridges awarded to Severfield as part of a 5,300-tonne steel package.**

Delivered in three phases, the viaduct combined scale with complexity. Phase 1, weighing 1,361 tonnes and stretching 112 metres, was launched into position using a specialist method led by Mammoet. Phases 2 and 3, weighing 510 and 656 tonnes, were constructed in situ, rising to 14 metres above ground level.

Transporting the girders to the site was a logistical challenge on an entirely different scale. With many pieces standing 6.1 metres tall, and 64 girder sections delivered for Phase 1, most required private police escorts. This involved detailed coordination with multiple police forces and stakeholders to ensure timely deliveries, feed the crane, and maintain momentum on site.

To support the girders during construction, Severfield developed a bespoke overturning restraint system. Adaptable and mobile, it could be repositioned as each bay of the bridge became stable, allowing the build to progress safely and efficiently.

What truly set Lawley Middleway Viaduct apart was the launch of Phase 1. This complex, multi-stage operation showcased the very best of modern engineering. The bridge was first jacked to a height of 5.6 metres, then transferred to self-propelled modular transporters (SPMTs) and rotated 90 degrees into position. Over nine consecutive nights, it was skidded out over the dual carriageway, inching into its final location.

Installation took place during nighttime road closures, with the skidding system reset during the day to allow traffic to flow. The operation required seamless coordination among Severfield, Mammoet, BBV, HS2, and Birmingham City Council, with every stakeholder playing a crucial role in bringing this ambitious vision to life.

As part of HS2's transformative infrastructure, Lawley Middleway Viaduct will help reshape how people travel across the UK, delivering faster, greener journeys and unlocking new opportunities for Birmingham and beyond.