

# Harthope Viaduct

Lanarkshire,  
Scotland

## Project Information

**Client**  
Network Rail

**Temporary Works Designer**  
Skanska UK

**Permanent Works Designer**  
Scott Wilson Railways Ltd /  
Skanska UK

**Main Contractor**  
Skanska UK

**Dates**  
2005 - 2006

**Construction Value**  
£6m

## Further information

Maple Cross House  
Denham Way  
Maple Cross  
Rickmansworth  
Hertfordshire  
WD3 9SW

31 Old Field Road  
Bocam Park  
Pencoed  
Bridgend  
CF35 5LJ

skanska.technology@skanska.co.uk  
www.skanska.co.uk



Harthope Viaduct lies on the West Coast Mainline approximately 50 miles south of Glasgow.

In 2005, Skanska was awarded the contract to replace the existing 130 year-old, six-span viaduct with a new 84m long two-span bridge. During a five-day blockade of the line over Easter 2006, the existing viaduct was demolished and the new bridge deck, complete with track and ballast and weighing 3,500 tonnes, was slid into position. In addition, 1,500 metres of track on both sides of the bridge were renewed to upgrade the line speed, and the overhead power system was modified accordingly.

Skanska's design team was responsible for the design of the temporary works required to support the new deck structure alongside the existing bridge and to slide the new bridge into its final position. The design team also undertook re-design of elements of the permanent works necessary to enable the bridge to be erected and slid into position using the proposed construction methods. In this way, the permanent and temporary works design could be fully integrated with the proposed method of construction.

Replacement of the bridge was completed successfully during the blockade and the line handed back an hour earlier than planned on 19<sup>th</sup> April 2006. □