

Flood busting measures help protect vital railway line despite record river levels

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A stretch of railway through Oxford is continuing to support passengers who need to travel to work and is keeping vital freight moving thanks to a successful engineering project which has meant the railway has kept running during the recent flooding.

Since the start of February, residents in Oxfordshire have received more than 35 flood warnings and alerts as a result of the recent heavy rainfall. The severe weather has also resulted in the River Thames reaching record levels with residents urged to take 'immediate action'.

Despite this widespread flooding, the railway through Oxford remains flood-free and train services unaffected thanks to Network Rail's innovative project to tackle flooding in this area - known as the Hinksey Flood Alleviation scheme, which was completed in summer 2016.

In early 2016, Network Rail started work on the £21m scheme to raise the height of a 400 metre stretch of track underneath Old Abingdon Road in Oxford by around 400mm. Raising the track by this amount was above the maximum recorded flood levels on this stretch of railway.

A major aspect of this scheme alongside the raising of the height of the track, was the installation of two new culverts – tunnels carrying a stream under the railway – to allow excess water to run under the railway and prevent it from flooding.

The project was undertaken during a 16 day closure of the railway between Didcot and Oxford and involved a range of other infrastructure improvements including renewing a large amount of the railway track; installing a new bridge deck at Stroud's underbridge south of Old Abingdon Road, including raising it up above the flood levels and clearing out silt and debris below; and replacing signalling equipment – effectively a traffic light system for the railway – helping make the railway more resilient.

This section of railway at Hinksey had an extensive history of flooding, becoming inundated with floodwater 11 times in the preceding 14 years, causing disruption to passengers and freight services who rely on this route.

Prior to the start of the project, Network Rail worked closely with the Environment Agency to ensure the work being undertaken at Hinksey supported the Environment Agency's wider flood alleviation project – the [Oxford Flood Alleviation Scheme](#). This included building larger culverts to accommodate more flood water in an effort to try and minimise the impact of high water levels, both for the benefit of the railway and the local community.

Joanna Grew, Network Rail Industry Programme Director, said: “We are delighted to see the positive impact the Hinksey Flood Alleviation scheme is having in keeping the railway free from flooding and train services running.

“We are committed to delivering a safe and reliable railway for the benefit of our passengers and freight services, and the success of this project in protecting this stretch of railway from flooding is testament to the modelling and engineering efforts that went into completing this work.

“This was a major engineering feat and we are confident this work will continue to ensure the railway is free from flooding.”

Photo credit: Network Rail