

CAMBRIDGE SOUTH SIGNAL SIGHTING INFRASTRUCTURE ENHANCEMENTS PROJECT

Client: North South Rail



"Working with True North Rail and their TrueSight™ Tool has been highly effective. Its realistic driver's eye view significantly aids the signal sighting committee in risk assessment and mitigation, enabling swift adjustments to meet tight project deadlines. TrueSight's accuracy was confirmed during the Christmas 2023 stage commissioning and subsequent blanking board installation, making it our preferred choice for future signal sighting projects."

Dean Mansell - Signal Sighting Chair & Director North South Rail



OVERVIEW

We were proud to be working alongside North South Rail, Murphy & Alstom assisting with their Signal Sighting requirements for the new railway station being built by Network Rail for Cambridge South.

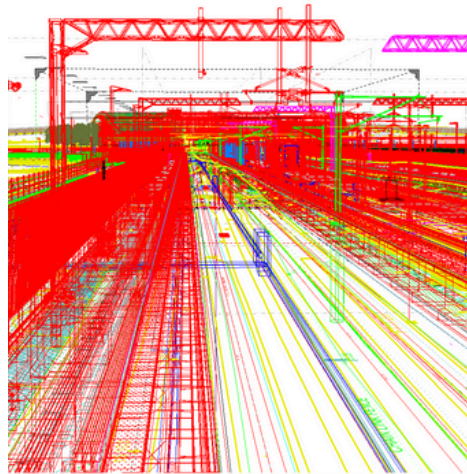
Cambridge is one of the UK's most successful and fastest growing cities. The new station will connect the Cambridge Biomedical Campus with potential destinations such as central London, London Stansted Airport & Birmingham. The station will be managed and served by Greater Anglia, with other existing train operators expected to call at the new station.

The station will also provide access to a growing area of high-quality employment and help relieve congestion in the local area by supporting the development of environmentally sustainable transport in Cambridge.

It is also anticipated that in the future, East West Rail services from Bedford to Cambridge could also serve the new station.

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Client: Murphy



OUR ROLE

We achieved successful facilitation of the Signal Sighting Process for the Cambridge South Infrastructure Enhancements Project, achieving full sign-off of all sighting forms. We achieved this by creating a 5km virtual world integrating local GIS data with all the clients project BIM data (including intelligent PWay infrastructure with interactive "physically correct" S&C and client 3D design models).

Leveraging our TrueSight™ platform, we positioned circa 80 signalling assets as fully intelligent, interactive objects within minutes. TrueSight™ powerful photorealism bridges the gap between the virtual and the real world, fostering trust and confidence amongst all internal project personnel and external stakeholders. This not only accelerates stakeholder buy-in but significantly reduces the need for on-site presence, aligning perfectly with Network Rail's MVP policy for safer and more efficient operations.

Our BIM to TrueSight™ software transformed the complex CAD data from this project into a realistic, accessible, VR model with detailed life-like images. All of which highlighted the precision & complexities of the project without compromising on engineering accuracy. We also significantly reduced project timescales, avoiding any rework whilst generating substantial cost savings.

"Understanding that for complex signalling projects this interactive media can be used to conclude signal sighting assurance (incl. temporary/interim arrangements/scenarios) and provide driver training prior to the project entering in to service, it makes sense to undertake this work early in the preconstruction phases so that designers and contractors understand what they're up against to maintain compliant and safe railway throughout the programme of works; these models help to eliminate risks and allow people to understand and overcome issues much earlier in the programme"

**Andrew Ratcliffe - Senior
Engineering Manager
Murphy**