

A8 Belfast to Larne Dualling, Northern Ireland

The A8 is a strategically significant European Route (E01) forming the **principal route between Belfast and the Port of Larne** (the second largest freight port in Northern Ireland). The completion of the A8 dual carriageway not only improves Northern Ireland's connectivity to Great Britain and Europe but it also **ensures that the A8 is future proofed and retains the long-term viability of the port.**



N. Ireland
Roads Service
Authority



£113m



2012
– 2015



Design
& Build

The existing A8 highway had reached capacity, with a high volume of heavy vehicles resulting in lower than average speeds. The impact of this was surges in flow resulting in platooning of traffic and a high proportion of fatal road traffic collisions.

We upgraded the 14.4km section of the A8 highway to a high-speed, dual two-lane, all-purpose (D2RAP) carriageway standard to address this critical situation. We delivered the scheme under a NEC3 Option C contract, following a two phase Early Contractor Involvement (ECI) approach. We advised on early design and buildability assessment in phase one, then delivered the design and construction works in phase two to meet a demanding delivery timescale. The project was the client's first ECI contract and the first implementation of the Eurocodes on a highway scheme in Northern Ireland.

We closely monitored and managed complex environmental constraints on the online and offline aspects of the project, such as ensuring continuity of salmon fishing areas, achieving CEEQUAL Excellent for environmental and social performance.

Design improvements included careful selection of overbridges or underbridges to reduce material import and associated environmental impacts. Close stakeholder engagement was key, where our team worked closely with the community and integrated local SMEs into the project. 100% of the subcontracted construction works were delivered by SMEs.



ADDED VALUE

- We reduced journey times by up to 25% and enhanced journey time reliability
- With over 2 million RIDDOR-free hours we were recognised with three Gold RoSPA award
- We achieved £6.6m client savings to the agreed Target Price through value engineering
- We achieved earthworks balance by changing one of the structures from an over bridge to an underbridge, reducing materials and lorries to site
- We reinvested cost savings from the scheme to improve LED lighting, pave the central reserve and traffic islands and redesign structures as integral bridges (omitting the need for bearings) and long term maintenance
- Two Considerate Constructors Scheme Gold Awards recognising sites' exceptional standards of consideration towards local communities, the workforce and the local environment



I wish to express my appreciation for the excellent work carried out by your team who, in co-operation with Roads Service staff, have delivered a really excellent piece of work within a very demanding timescale.



John White

Director of Strategic Programming,
Northern Ireland Roads Service

1st ECI project
for Northern Ireland Roads
Service

9 structures
six overbridges and three
underbridges for local roads,
watercourses

14.5km
of online widening and new
offline bypasses

46 sites
of cultural heritage within
500m of the proposed
scheme

5
grade-separated
junctions

174 landowners
engaged throughout design
and delivery to facilitate
successful delivery