

A2 Shore Road, Belfast

# Resolving a major bottle neck for peak time traffic

**£25.6m**

/ Project value

**March 2013**

/ The project commenced

**October 2016**

/ The project was completed

Named as the 'Construction Project of the Year' at the Plant and Civil Engineer Awards, the A2 Shore Road scheme has significantly eased long-standing traffic congestion on this strategic network route between Belfast and Carrickfergus – a route that carries over 35,000 vehicles each day. Completed on time and on budget, this project comprised of the design and build of 1.9km online and 1.6km offline road widening. These important upgrade works were complemented by the construction of a new overbridge and five new at-grade junctions, including four traffic signals. Our robust traffic management on the scheme was commended by the Department for Infrastructure (DfI) and the Police Service of Northern Ireland (PSNI).

## The Brief

This was a 'NEC 3 ECC Contract Option A: Priced Contract with Activity Schedule' on behalf of the DfI. The Department's twin priorities focused on the maintenance of smooth traffic flow throughout the works and its on-time completion to fulfil commitments made to local residents and the surrounding community.



**"Drivers are now benefiting from reduced journey times. I would hope traffic jams here would be a thing of the past,"**

Michelle McIlveen  
Transport Minister  
(September 2015 – May 2016)



“Progress on this major investment is outstanding and as work reaches its 500,000 working hours point I congratulate everyone who is helping to successfully deliver this project. This scheme will significantly ease the long-standing traffic congestion on this busy route,”

Danny Kennedy  
Transport Minister  
(May 2011 – September 2015)

### The challenges

The successful transportation of 35,000 vehicles per day presented the most consistent challenge throughout the 32-month programme. As per the pre-existing functionality of the route, we maintained one lane of traffic in each direction during the hours of 6am to 8pm. In advance of the main online widening and tie-into the offline works, we introduced partial-depth carriageway reconstruction. We also negotiated early access to carry out accommodation and narrow-widening works. This meant that ‘roadspace’ was created early and enabled traffic to run normally on the narrow-widened sections of the route while tie-in works, and major online widening, were completed.

### GRAHAM's solution

The A2 Shore Road project has significantly reduced commuter journey times and confined lengthy traffic jams to a “thing of the past” since it was realised in October 2015. Awarded Gold (2016) and Bronze (2015) at the Considerate Constructor's Scheme National Site Awards, the project also earned a CEEQUAL Excellent rating, achieving a score of 85.4% as part of the evidence-based sustainability assessment. As a sign of our close collaboration and partnership with the client, no contractual disputes were raised. Completed in 1,093,680 ‘manhours’, the project centred on widening 1.9km of the A2 Shore Road and upgrading this section of the road into an urban dual carriageway. In addition, an entirely new dual carriageway of 1.6km was constructed between Station Road and Seapark, with four new roundabouts connecting the new section of road to the existing network.

### Outputs & Benefits

- / **Value Engineering:** A £500k saving was achieved through the use of 300mm wide limestone coping detail to 2.5km of walls as opposed to the original proposal of 600mm wide basalt cope stones
- / **Innovation:** For the first time in NI, the specification for ‘Passively Safe’ lighting columns was agreed and thermal imaging security cameras on a large scale were installed at the PSNI's Seapark Station
- / **Traffic Management:** We received various commendations from the road authorities, police and stakeholders for minimising the impact of our work on existing traffic
- / **Ground Conditions:** We reduced the settlement period from three years to 15 months for an 8m high embankment by designing drainage blankets throughout the area



For more information on how we're delivering lasting impact:

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**GRAHAM**