

## Value for Money Initiative: Innovative solution to use steel barriers for temporary traffic management for the duration of the SH16 Causeway Upgrade project.

### Opportunity

The use of steel barriers compared to traditional concrete barriers for the temporary traffic management has resulted in significant time and cost savings connected with the barrier transportation; deployment; and ongoing barrier management for the project.

### Solution

Approximately 11.8km of lightweight steel barriers will be used across the project instead of the traditional heavier concrete barriers. This realises the following benefits for the project:

- whole of life benefits due to a much higher residual value at the end of the project and re-use;
- quicker and easier to deliver; deploy; and manage during construction;
- increased flexibility for construction methodology within the tight corridor since it is easier to move and relocate than heavier concrete barriers;
- less disruption to road users due to less closures and quicker installation and removal;
- more economic transportation costs and environmental benefits during delivery and removal;
- Improved safety; COPTTM approved; and provides TL4 protection (rather than TL3);
- It is possible to deploy 300m of steel barrier per hour compared to the 46m of concrete barriers. The project has procured its own Hi-Ab truck thus negating the need for external subcontract transport contractors. The project has secured a guaranteed minimum buy back from the manufacturer of the barriers at 41% of the original purchase price. The steel barriers have an estimated life of 25 years.



### Estimated Costs & Benefits

Approx \$1.7m

### Contributors

The Causeway Alliance – Designers/Constructors/Estimators

Highways Strategic Priority	Impacts
Safe Journeys	Yes
Efficient & Reliable Journeys	Yes
Social & Environmental Responsibility	Yes
People & Processes	Yes
Efficient Delivery of Works	Yes