

A1 JUNCTION IMPROVEMENTS BANBRIDGE ROAD, DROMORE

DRD ROADS SERVICE, SOUTHERN DIVISION

Environmental Statement, Volume 1

November 2005

Non Technical Summary

Introduction

The Department for Regional Development (DRD) Roads Service has recognised that the A1 between Hillsborough and Loughbrickland which forms part of the Euro Route between Belfast and Dublin, is of strategic importance and has specified safety improvements that it wishes to adopt along the route. These improvements include changing four junctions so that travellers do not need to cross up to four lanes of oncoming traffic. This is achieved with what is known as a grade separated junction, which requires either an overbridge or underbridge. One of the junctions identified is at Banbridge Road, Dromore.

This Non-Technical Summary presents a brief overview of the findings of the Environmental Statement, which reports on the environmental impacts, mitigation proposals and general effects of the A1 junction improvement at Banbridge Road, Dromore.

Scheme Objectives

The main objectives of the Scheme are:

- To improve safety by reducing the number and severity of road accidents
- To accommodate increasing traffic flows by assisting the flow of traffic from the minor roads onto the A1

The Proposed Scheme

Eight potential junction options for Banbridge Road, Dromore were initially considered. Following technical, economic and environmental assessment of the seven options, the preferred option was identified as Option 7. Other options were rejected for a variety of reasons including cost, impacts on properties and local community, buildability etc.

The proposed scheme is an underbridge option. The merge and diverge access points would be located close to the existing location. A deep cutting is required as the underbridge emerges to the west of the A1. The underbridge would be sited immediately to the north of the existing junction and an adoption of standard radii would attempt to minimise the impact on land take. A ghost island junction is proposed at the junction of the A1 southbound loop with Banbridge Road.

Effects of the Scheme on the Environment

Air Quality

Local air quality impacts were considered at Stage 2 of the assessment, which concluded that National Air Quality Standards will not be exceeded with regard to Carbon Monoxide, Hydrocarbons, Oxides of Nitrogen and Particulate Matter. Results for 2010 are lower than those presented for the year of opening because background concentrations for all the regulated pollutants are expected to decline in future years, as a result of Government and EU policies and legislation to reduce pollutant emissions.

It is concluded that the proposed new junction would lead to an insignificant increase in regional pollution levels when compared to the existing junction opening year (2008) and design year (2023). The marginal increase is attributable to the introduction of a new road link and the resultant increase in total distance travelled. Observable increases or decreases in total emission levels reflect the relative balance between traffic growth and emission forecasts inherent in the National Atmospheric Emissions Inventory.

Cultural Heritage

The alteration of the junction at Dromore would be unlikely to impact upon any known archaeological remains. There remains the potential for previously unrecorded archaeological sites to be found during excavation. If remains are discovered, a mitigation strategy entailing

trial trenching prior to construction and archaeological monitoring of topsoil during removal will be implemented.

Disruption due to Construction

During the construction stage of the project, traffic using the A1 may be affected through minor road closures however this will be minimised by the introduction of temporary traffic management schemes. Over the course of the contract, import of material for embankment construction etc and removal of excess material from the site will generate an increase of around 1.63% of annualised daily vehicle movements along the local stretch of A1.

As with any construction scheme, there will be noise, vibration, visual and air quality impacts in the immediate vicinity of the works. Construction works will result in the excavation of grassland and woodland habitats but these areas are of low conservation value. No adverse effects on sites of archaeological or historical importance are predicted. Disruption to properties caused by construction works will be minimised by contractual requirements that will encompass working hours, noise pollution, public safety, traffic management and other best working practices. All borrow pits, disposal sites and site compounds proposed by the Contractor will be subject to appropriate approval.

Ecology and Nature Conservation

Overall, the majority of land affected by the proposed Scheme is arable land of low ecological value. Some hedgerows and trees would be lost but replacements are planned as part of the Scheme.

Landscape and Visual Amenity

The existing A1 already imposes a degree of visual impact on properties and the wider landscape. The proposed junction would not only have similar levels of landscape and visual impact but it would alter current views; increasing the degree of visual impact until mitigating measures become effective. There would be relatively little loss of agricultural land but a loss of important existing roadside vegetation.

Only three out of 51 receptors have been identified as likely to experience moderate adverse visual effects on the day of opening. All but one can be sufficiently mitigated against to result in the effects reducing to neutral by Year 15.

Landscape proposals will as far as possible reduce the predicted impacts, enhance the wider landscape and integrate the proposed junction into the surrounding landscape through the creation of ponds and new native plantings.

The proposed development would have slight adverse impacts on the landscape.

Land Use

The junction improvement will result in the demolition of one dwelling and associated outbuilding, as a result of encroachment onto development land at Dromore. No community land will be taken.

The existing habitat is predominantly improved grassland and through mitigation, the quality of the ecology of the area will be improved resulting in greater species diversity. Loss of agricultural land which is of Best and Most Versatile (BMV) quality equates to approximately 21600m².

The development would be beneficial to the development of the Quillyburn Business Park.

The scheme will result in a field track being severed, however as part of the mitigation associated with the junction construction, it will be reinstated.

Traffic Noise and Vibration

Due to the high existing noise environment influenced by the A1, it is predicted that the proposed junction will not result in a significant contribution to the future noise environment.

Some properties located close to the A1 are currently exposed to noise levels that exceed the values used for determining eligibility for statutory sound insulation. None of the properties close to the proposed junction are affected by increases in noise impact that would lead to this noise threshold being exceeded. It is therefore not necessary to provide any mitigating measures.

The potential noise impact of temporary construction noise has been assessed and a number of mitigation measures and best practice guidelines have been provided to minimise the noise impact.

Pedestrians, Cyclists, Equestrians and Community Effects

The work will include the creation of a safe crossing point for pedestrians along the A1 at Dromore and as a result it will decrease community severance associated with Rowantree Road.

The improvements would have a beneficial impact on the community as a whole.

Vehicle Travellers

The impact on views from the road would be neutral. Overall, driver stress levels would be significantly reduced. The underbridge removes the requirement to cross up to four lanes of traffic to get onto the opposite carriageway and will relieve the build up of queues on Banbridge and Rowantree Roads. The overall significance score for quality of journey has been established as being of Moderate Beneficial Effect as the number of travellers affected by the proposed scheme is between 500 and 10,000/day.

Water Quality and Drainage

Drainage provisions will maintain a low and acceptable level of risk of serious pollution incidents arising from the junction improvement. Furthermore, the provision of improved pollution prevention and control measures within the drainage system will have a significant positive benefit for long term water quality within the area of the improved junction. The provision of a retention pond and other discharge control measures will improve the capability for local flood control.

Geology and Soils

The main effect on geology and soils of the proposed scheme is the loss of best and most versatile agricultural soils within the bounds of the new construction. The scheme will also have a localised, limited impact on regionally extensive soil, drift and bedrock structures.

Proposed mitigation measures will reduce the potential extent and degree of soil degradation and should reduce the significance of adverse effects.

Policies and Plans

The A1 is part of a Regional Strategic Transport Network identified in 'Shaping Our Future – Regional Development Strategy for Northern Ireland 2025' and any improvements to its current condition will help to safely facilitate future growth both on the locality around Dromore and as part of a network covering Belfast to Dublin. Through this, the scheme complies with the national policy relating to transport. The design and development of the scheme implements mitigation measures designed to reduce the environmental impacts on the area. The scheme is therefore generally in accordance with the policies and plans of the authorities concerned. The overall impact is beneficial.

Conclusions

The Scheme supports regional and local transport planning objectives. Key benefits of the Scheme are:

- Significant improvements in safety and reduction in delays resulting from having to cross Banbridge Road to Rowantree Road
- Increased access to amenities for community members

- Underbridge removes the requirement to cross up to four lanes of traffic to access the carriageway

The Scheme would have some adverse effects, including:

- Loss of range of habitat types, however all are of low conservation value
- Loss of a small area of Best and Most Versatile land
- Potential increase in localised flooding through increased run-off, but this can be managed with retention ponds etc.
- Some disruption during the construction phase

Significant mitigation measures are proposed to minimise the environmental impact of the Scheme.