A737/A738 Trunk Road (Dalry Bypass)
Environmental Statement

Non-Technical Summary
July 2013
Introduction

The A737 trunk road forms a strategic link from the M8 motorway, at Paisley, to Ayrshire. Significant traffic congestion occurs at peak times on this route between Johnstone and Kilwinning, where the A737 trunk road passes through the town centre of Dalry. Such congestion could lead to eventual operational breakdown of the road network in this area.

Transport Scotland is therefore promoting the construction of a new road to bypass Dalry, referred to as the Proposed Scheme.

The key objectives of the scheme are to:

- Improve the level of service and safety by reducing the effects of driver stress and journey times.
- Eradicate the conflicts between long distance users and local traffic on the road network.
- Stabilise average peak journey time without detriment to conditions in Dalry Town Centre.
- Stabilise average bus journey times through Dalry at peak hours.
- Wherever practicable incorporate measures for non-motorised users (pedestrians/cyclists).
- Mitigate the environmental impact of the new works where possible.
- Achieve good value for money for both taxpayers and transport users.
Environmental Impact Assessment

The design of Proposed Scheme is currently being developed and assessed in accordance with guidance provided in the Design Manual for Roads and Bridges (DMRB), this includes engineering and environmental assessment. The findings of the environmental assessment for the proposed scheme are reported in the A737 Dalry Bypass Environmental Statement.

This Non-Technical Summary outlines the principal environmental impacts identified during the assessment and the proposed mitigation.

Consultation

Consultation on the Proposed Scheme has been undertaken through a public exhibition in Dalry. Specific consultations (by letter, email and face-to-face meetings) have also been carried out with landowners and affected parties as well as environmental regulators.

The purpose of the consultation exercise was to establish existing site conditions and assist in defining the key environmental issues associated with the proposed scheme. Feedback from consultations has helped inform the design of the scheme and environmental protection measures.

Alternatives

Three potential corridor options for the location of a bypass to the east of Dalry were identified for initial assessment. A fourth corridor was also identified to form a western bypass but given engineering, environmental and economic constraints, this corridor option was not considered further. For the three route corridor options taken forward for assessment, eight bypass route alignment options were developed and assessed. Seven of the options were along a similar alignment east of Dalry, from Highfield to the north of the town passing beneath Blair Road and over the Glasgow to Ayr railway line and the River Garnock, to Hillend south of Dalry. The remaining option followed a more easterly curved alignment as it passed under Blair Road and to the east of Stoopshill Farm, cutting through part of the Blair Estate woodland.

From the comparative assessment of the eight alternative route options no obvious preferred scheme emerged in environmental terms. Although there were slight differences where one or other option provided a lesser impact at particular locations, none of these in themselves was enough to determine that any one option was substantially better or worse than the others. The exception to this was Option 5 which had the most significant adverse impact. The process of selecting the preferred option was therefore undertaken based upon an assessment of engineering and economic benefits and the extent to which each fulfilled the scheme objectives.

Existing Environment

The town of Dalry is centred on the A737 and lies between Johnstone and Kilwinning. The town sits in the valley bottom of the River Garnock corridor and its associated tributaries, such as the Caaf Water and Coalheughglen Burn. The area around Dalry was extensively mined throughout the 18th and 19th centuries with open quarries to the north of the study area and shaft coal mining in the centre of the study area with numerous coal pits.
Key residential areas comprise Dalry, the Blairland housing estate to the southeast of the town, a group of several houses in the Highfield area and a number of scattered farmsteads including Hillend, Blairland, Highfield, Coalheughglen and Stoopshill. Other than those within the town itself, the main commercial premises are the Wilson car auction site to the south of Dalry and Drakemyre Works situated to the east of the town beyond the railway line.

Dalry is accessed by two main roads, the A737 and the B780. Both these roads pass through the centre of Dalry, channelling traffic together, which can make the centre congested at times. Blair Road links Dalry and the Blairland housing estate to the northwest with the Blair Estate to the southeast. The C93 is located to the southeast of Dalry and the Proposed Scheme and runs north to south down the east boundary of Blair Estate. The B707 connects to the A737 and travels east away from Dalry. The Glasgow to Ayr railway line runs to close to River Garnock and both run north to south to the east of Dalry centre.

The area surrounding the town is characterised by farmland (both pastoral and arable use), well maintained old stone walls and hedgerows and small patches of coniferous and mixed woodland, including some copse trees around field boundaries. A large area of woodland is the Blair Estate, located to the southeast of Dalry, and the estate is designated as a Designed Landscape and a Site of Importance for Nature Conservation/provisional Wildlife Site. Blairland Bing Site of Importance for Nature Conservation/Wildlife Site is situated between the River Garnock and the railway line, immediately south of the Proposed Scheme.

This area is also utilised for informal recreational purposes. There are a number of public access routes in proximity to the Proposed Scheme, including National Cycle Network (NCN) Route 7, an alternative protected cycle route (not implemented but protected in the Local Plan) and several routes identified as Core Paths by North Ayrshire Council. There are no formally designated Rights of Way.

The designated Blair Estate Garden and Designed Landscape is located to the southeast of the Proposed Scheme and outwith the area of land required to construct the Scheme. There are a number of listed buildings; a row of cottages at Hillside; the North Lodge to the Blair Estate; and an additional 13 listed buildings in the wider area. Other features of some heritage interest have been recorded in the area but these are generally considered to be of low value.

The River Garnock and its tributaries the Caaf Water and the Coalheughglen Burn are the main watercourses in proximity to the Proposed Scheme. Other more minor land drains are also present. The watercourses, trees and field boundaries provide suitable habitat for wildlife, including fish, otter, bats and birds.

**The Proposed Scheme**

The scheme is illustrated in Appendix A. It involves the construction of approximately 3.8km of new carriageway from a proposed roundabout on the existing A737 (located between the Wilson car auction site junction and the A737 bridge over the Caaf Water) to a proposed tie in to the existing A737 approximately 500m northeast of Birkentop Cottage. There would be a second roundabout where the bypass intersects with the B707. The bypass would be bridged over by one existing local road (Blair Road). Sections of three roads would be closed in the Highfield area: the C93 where is passes through Highfield, the B707 and the existing A737. A new viaduct structure would carry the new road over the River Garnock and the Glasgow to Ayr rail line.
A cattle underpass at the northern end of the scheme alignment and a cattle pass on the Blair Road overbridge would provide continued farm access. Culverts would be provided where watercourses would be crossed by the bypass.

Environmental Impacts and Mitigation

The Proposed Scheme and associated mitigation measures have been designed to minimise adverse environmental effects. Nonetheless some impacts would arise from the proposals, as summarised below:

Air Quality

The construction works have the potential to create dust. However, this would be localised and of short term duration as construction activities would be phased and works would be split so as not to occur continuously in all areas, thereby controlling the potential level of dust emission. Construction activities would incorporate standard measures aimed at reducing dust emissions thereby reducing the risk of disturbance or nuisance.

The overall impact of the scheme, once operational, would promote an improvement in air quality within Dalry town centre as traffic uses the new bypass route. Only a small number of people would experience deterioration in air quality.

During the construction phase, measures aimed at reducing dust emissions and the associated disturbance and nuisance would be implemented to mitigate any potential impacts.

Cultural heritage

There are no significant features of known cultural heritage interest affected by the Proposed Scheme. Some minor features of cultural heritage interest would be affected, although these sites are of low value. For affected features, further archaeological investigation would be undertaken as necessary prior to the commencement of the construction works with surveys and photographic records undertaken where appropriate.

If significant cultural heritage assets/archaeological features were encountered during construction appropriate mitigation would be put in place.

Landscape

The main landscape impacts of the Proposed Scheme relate to a change to the setting of the River Garnock by construction of the viaduct over the valley and a change to the existing undulating farmland character (including a change in landform and severance of field boundaries). There would be views of the viaduct structure and of the road where it is on embankment.

Northwards beyond the viaduct the proposed bypass would be screened from surrounding residential properties, recreational routes and local road users through a combination of earth bunds, engineered slopes and soft landscape features including hedgerows, hedgerow trees and woodland planting. These features would help to integrate the scheme into the existing landscape.

Nature Conservation

The Proposed Scheme would result in loss of mainly agricultural land (improved grassland) of low ecological value. Some trees/woodland areas close to the railway
line and field boundary hedgerows would be affected. These features provide bird nesting habitat and are used by foraging bats. The scheme will cross the Coalheugh Glen Burn and a smaller unnamed watercourse in the central part of the route and culverts will be installed here beneath the new road.

Appropriate landscaping (including tree and hedgerow planting) would be undertaken to compensate for affected habitat. Trees/groups of trees affected would be inspected for signs of bats and relevant licences obtained if any bat roost were to be disturbed. Newly planted hedges would link to remaining hedgerows to create new bat habitat corridors and, where such corridors cross the new road, planting would be located such to encourage bats to fly above the traffic. Vegetation/tree removal would either be undertaken outside the bird breeding season or trees and scrub checked for the presence of breeding birds/active nests prior to site clearance. Bird boxes would be erected.

Water quality would be protected by the implementation of appropriate pollution control measures during the construction period.

**Geology, soils and contaminated land**

Potential impacts during construction include compaction of soils (through the use of heavy plant and equipment) and this may result in increased erosion with the risk of pollution to surface waters. Inappropriate soil stripping, storage, handling and reinstatement of soils can also result in degraded soil condition. Site works would be undertaken in accordance with good practice construction guidelines to minimise the potential impacts on soils. All material to be used or reused during construction would be stockpiled in designated areas, with appropriate containment and protective measures in place, and would be carefully transported and handled. Although it is unlikely that there would be disturbance to any contaminated land that would pose a risk to human health, a range of good practice measures would be implemented to ensure any risk is minimised.

**Noise**

Properties located in close proximity to the Proposed Scheme may experience short term elevated noise/vibration during construction. However, construction activities would incorporate standard measures aimed at controlling noise emissions and reducing the risk of disturbance or nuisance. Local residents will be provided with advance notice of any construction work activities that are likely to cause disruption. In addition, a community liaison officer will be appointed as a point of contact for residents.

Once operational, noise and vibration benefits are predicted to occur for properties where traffic will reduce as a consequence of the scheme, in particular properties in the vicinity of the existing A737 as it passes through Dalry. The bypass is predominantly in a cutting along its length and, as such, this road design feature has reduced the potential noise and vibration impacts of the scheme. Some residential properties will experience an increase in noise, although for all of these properties predicted traffic noise will still be below the threshold whereby any noise reduction mitigation may be required.

**All Travellers**

During construction of the Proposed Scheme safe diversions would be implemented where local access roads and designated paths area affected. Traffic management measures (such as traffic signalisation, controlled access, signage, etc.) would be
implemented to minimise disruption to the use of public roads and to existing access arrangements.

Although driver stress on local roads would likely increase to a degree during construction because of traffic management and temporary diversions, once the scheme is operational driver stress would be reduced as congestion and journey times would be reduced. The views from the new road once completed would consist of both restricted views whilst the scheme is in cutting and open views whilst the scheme passes over the viaduct structure. The cuttings would be landscaped to improve the views from the road.

A new permanent multi-user crossing facility will be provided to maintain the route of NCN 7 in the Highfield area.

Access to fields and farms for property in rural locations on the outskirts of the town would be affected; however local access would be improved through Dalry Town Centre due to the reduction of congestion, especially at rush hour times.

**Community & Private Assets**

The Proposed Scheme as a whole would transfer traffic away from the centre of Dalry, making access to community facilities easier for residents, particularly during peak hour periods.

There would be loss of farmland as a result of the construction of the Proposed Scheme. There would also be some alteration to existing access to properties and farmland access with some routes severed by the new road. Severance will be limited due to the incorporation of new access routes, cattle passes and field gates.

During construction there would be temporary disruption to public access routes (including Blair Road, NCN 7 and other paths), existing field accesses and a limited number of residential properties in the locality of the scheme. Diversions and alternative accesses would be implemented where required during the construction phase to mitigate the impact and permanent measures provided for when the scheme is complete.

**Water Environment**

During the construction period there is potential for sediments and other pollutants (such as chemicals, fuels, oils, concrete) to enter the River Garnock and its tributaries area as a result of vehicle movements, earth moving and building activities or accidental spillage. There is also the potential for sediment release due to physical disturbance of existing riverbanks and riverbed, particularly on those smaller watercourses where diversion and installation of culverts is proposed.

Water quality would be protected by the implementation of appropriate pollution control measures throughout the construction period. Careful reinstatement, replacement and, where possible, enhancement would ensure that river banks are recreated so as to allow vegetation to re-establish. In addition, similar riverbed characteristics would be restored where appropriate to enable colonisation by aquatic vegetation.

Road drainage would be included within the Proposed Scheme to ensure that road surface water run-off is appropriately treated and controlled before discharge to any watercourse.
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Environmental Commitments

The Environmental Statement has identified the following key measures to be included as commitments as part of the proposed scheme, with a view to reducing potential impacts identified during the assessment:

- Maintain existing access arrangements or provide alternative access arrangements during the construction period.
- Reinstate or provide new permanent access routes to ensure that access in and around the new bypass is available.
- Re-use of excavated materials, where possible, in earth embankments and landscaping.
- Restoration of land temporarily disturbed during construction.
- Appropriate handling, storage, re-use and disposal of excavated materials, as applicable.
- Good construction site practices to be implemented to control noise, dust and the risk of pollution.
- Monitor dust emissions and measure noise levels where necessary.
- Low noise road surfacing.
- Appropriate pollution control procedures to reduce the risk of sediment and other pollutants entering watercourses.
- Measures to deal with fuel and oil transport and storage, such as the inclusion of appropriately bunded areas and spillage trays.
- Emergency/contingency procedures to deal with any accidental spillages.
- Implement water quality monitoring.
- Landscaping strategy including tree, hedgerow and shrub planting and grassland seeding to integrate the road into the surrounding landscape.
- Careful bank/watercourse restoration to include: landscaping (seeding and planting); re-use of river bed material; carefully designed bank reprofiling.
- Planting to maintain bat foraging routes and to encourage access over the new road.
- Archaeological investigation of sites affected by construction works, including surveys and photographic records undertaken where appropriate.
A full copy of the Environmental Statement is available for public viewing, free of charge, at the following address during normal office hours and also on the Transport Scotland website at www.transportscotland.gov.uk

Transport Scotland
Buchanan House
58 Port Dundas Road
Glasgow
G4 0HF

Printed copies of the Environmental Statement may be obtained, on written request, from the above address at a charge of £150. A CD is available for £10.

Copies of the Non-Technical Summary of the Environmental Statement are available free of charge.
Appendix A - General Scheme Overview