

A82 Tarbet to Inverarnan Preferred route option

Route options assessment continued

DMRB Stage 2 Assessment Outcomes

A summary of the findings is provided below.

Topic	Consideration	Route Option 1 Online	Route Option 2 Inland sections	Route Option 3 Over-loch sections	Route Option 4 Fewest bends
Engineering	Route option length	16.85km	16.65km	16.78km	16.52km
	Number of structures required	2 viaducts, 9 bridges	1 viaduct, 9 bridges	3 viaducts, 9 bridges	10 viaducts, 9 bridges
	Number of retaining walls required	25	24	22	12
	Percentage with two levels of drainage treatment	62	62	64	52
	Percentage of proposed route offline from current route	5%	20%	20%	30%
Environment	Overall assessment of impact on scheduled monuments	Minor	Minor	Minor	Moderate
	Overall assessment of impact on the landscape	Minor/moderate	Moderate	Moderate	Moderate
	Overall assessment of impact on otter habitat	Large	Large	Large/very large	Large/very large
	Overall assessment of impact on ancient woodland	Large	Large	Moderate	Moderate
	Overall assessment of impact on fish	Slight	Slight	Moderate	Moderate
Traffic/economics	Estimated Journey time savings on opening	2 min 52 secs	3 min 12 secs	3 min 3 secs	3 min 26 secs
	Predicted personal injury accidents reductions over 60 years	408.2	411.2	409.8	412.8

Engineering

Route Option 1 has the lowest volume of earthworks (excavations and construction of embankments) and provides good levels of drainage treatment.

Route Options 1, 2 and 3 have comparable requirements for structures, although Route Option 3 may also require deep piling into the loch bed. Route Option 4 requires the largest earthworks and 'over-loch' construction.

Environment

Route Option 1 has the lowest number of long-term significant effects on the landscape and visual impact. This is because it is comprised mainly of localised widening along the existing route.

Route Options 3 and 4 are expected to have the highest level of adverse impacts on nature conservation, mainly relating to disturbance to otters.

Route Option 1 is preferred due to its opportunity to maximise improvements or remove existing pressures on the water environment.

Safety

All the route options will significantly improve road safety. In addition to reducing the number of personal injury accidents, the upgrade is also expected to reduce their severity.

Traffic & economics

Route Option 1 is predicted to offer the best economic return of the four route options.

Scheme objectives

All route options meet the scheme objectives.

The preferred route option

Based on the route options assessment process, Route Option 1 – online upgrade – is to be taken forward as the preferred route option.

Further consideration will be given to the following as part of the design and development of the preferred option (DMRB Stage 3 assessment process):

- Inclusion of two short off-line sections near Ardvorlich
- The alignment will be developed to reduce impact on properties and landowners
- The alignment will also be adjusted to assist construction and reduce impact on road users
- A carriageway width of 6 metres and 7.3 metres (both with 1 metre hardstrips) will be considered.

What happens next?

Transport Scotland will now take forward the development and assessment of the preferred route option for the scheme.

The next stage of the assessment process will include:

- Consultation with stakeholders, affected landowners and the general public
- Design development of the preferred route option
- Identification of the land required for the scheme and preparation of Draft Orders which will define the line of the developed preferred route option
- Environmental impact assessment of the developed preferred route option and preparation of Environmental Statement
- Development of suitable mitigation measures to reduce impacts on the environment.

As part of the work to improve this section of the A82 in advance of the upgrade scheme, Transport Scotland and the trunk road operating company, BEAR Scotland, will also be undertaking an intensive programme of short-term improvements which will include vegetation and tree canopy clearance, clearance and improvement of the existing drainage system, and the removal of loose stones and rocks from the verge of the existing A82. The feasibility of further medium-term interim improvements – such as localised schemes to widen the road at tight bends and additional improvements to the drainage system along the route – will also be investigated.

Comments and feedback

Thank you for your interest in the A82 Tarbet to Inverarnan Upgrade project. We welcome your comments and feedback on the preferred route option presented.

Comments can be sent by email to A82upgrade@ch2m.com or by post to:

A82 Tarbet to Inverarnan Upgrade
CH2M Fairhurst Joint Venture
386 Alexandra Parade
Glasgow
G31 3AU

Please return your comment sheet by 13 November 2015.

For further information on the A82 Tarbet to Inverarnan Upgrade scheme please visit the Transport Scotland website: www.transportscotland.gov.uk/project/a82-tarbet-inverarnan-upgrade



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A82 Tarbet to Inverarnan



Introduction

The A82 between Tarbet and Inverarnan is set within the dramatic landscape of the Loch Lomond and The Trossachs National Park.

The existing 17 kilometres of trunk road closely follows the shoreline of Loch Lomond and includes a number of issues that are not appropriate for a modern trunk road. These include narrow road widths, poorly sited accesses, tight bends, poor forward visibility and slippery road conditions in places. All these issues contribute to low journey speeds, a high accident rate and poor journey time reliability.

Improvements to the A82 were identified within the Strategic Transport Project Review published in 2008, which set out the Scottish Government's transport investment priorities over the coming decades.

Transport Scotland appointed CH2M Fairhurst Joint Venture (CFJV) in 2013 to undertake design and assessment work for the proposed upgrade of the A82 trunk road between Tarbet and Inverarnan.

Following the completion of the Design Manual for Roads and Bridges (DMRB) Stage 1 assessment in early 2014, which recommended the on-line corridor, DMRB Stage 2 was progressed to assess route alignment options within the preferred corridor.

Scheme objectives

The route option assessment process has taken into account the scheme objectives and the Scottish Government's five appraisal criteria, namely, **environment, safety, economy, integration, and accessibility and social inclusion.**

The following scheme objectives have been set, in consultation with stakeholders, to address the main issues encountered along this section of the A82:

Journey time – To improve journey times for A82 trunk road users between Tarbet and Inverarnan.

Safety – To reduce personal injury accident numbers and their severity on the A82 between Tarbet and Inverarnan.

Stopping places – To provide appropriate stopping opportunities to aid driver comfort for visitors and for all trunk road users on the A82 between Tarbet and Inverarnan, taking account of the unique setting of the route within the National Park.

Accessibility – Seek to provide opportunities for enhanced access by sustainable modes of travel along the A82 corridor between Tarbet and Inverarnan.

Maintenance – To reduce disruption to road users resulting from the undertaking of routine maintenance activities on the A82 between Tarbet and Inverarnan.

Scheme assessment process

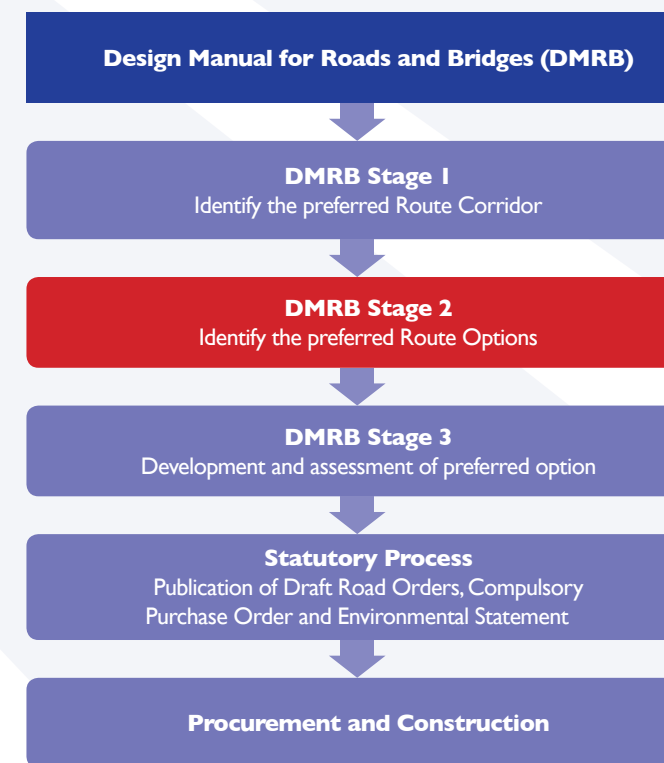
Transport Scotland carries out a rigorous assessment process to establish the preferred option for a trunk road improvement scheme.

The preparation and development of trunk road schemes follows the scheme assessment process set out in the DMRB.

This is a three-stage assessment process that considers traffic, engineering, environmental and economic implications. Throughout the assessment process consultation is carried out with a large number of people and interested groups.

The DMRB Stage 1 assessment was completed in May 2014, identifying the existing A82 as the preferred route corridor.

The DMRB Stage 2 route option assessment to identify the preferred route option has now been completed. The outcome is summarised at this exhibition, in addition to displaying the preferred route option for the scheme.



Route options assessment

A number of route options and sub options were considered and sifted. Four route options were then developed for assessment:

- Route Option 1 – an online route
- Route Option 2 – an online route with inland sections
- Route Option 3 – an online route with over-loch sections
- Route Option 4 – an option with fewest bends.

DMRB Stage 2 Assessment

Surveys and studies have been carried out to inform the assessment and development of route options.

In addition, workshops and consultations were held with statutory bodies and stakeholder groups. These include the Loch Lomond and The Trossachs National Park Authority, Scottish Natural Heritage and local community councils, amongst many others.

The following summarises some of the key work carried out to date:

Engineering surveys and studies

- Topographic and structures surveys
- Exposed rock outcrop survey
- Preliminary ground investigation

- Loch level monitoring
- Flood risk assessment
- Review of construction techniques
- Development of route options alignments.

Environmental surveys and studies

- Ecology surveys (bats, otters, birds, fish, pine martens, red squirrels, reptiles and water voles)
- Fisheries surveys within the loch and its watercourses
- National vegetation classification survey
- Landscape and visual appraisal
- Noise and air quality assessments.

Traffic & economic surveys and studies

- Traffic surveys
- Parking surveys
- Review of accident data
- Journey time assessment
- Consultations with individual stakeholders
- Local and wider area business surveys
- Economics assessment.