Transport Scotland

A82 Pulpit Rock Improvement

STAG Review Report

March 2007

Prepared for:

TRANSPORT SCOTLAND

Transport Scotland

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1. INTRODUCTION

1.1 Background

1.1.1 Following a Route Action Plan Study of the A82 between Tarbet and Fort William, the Scottish Ministers, in 2006, announced the implementation of a number of short term measures and the commencement of design work for two projects, these being a new bypass scheme at Crianlarich and removal of the traffic lights at Pulpit Rock. This latter improvement will remove the notorious bottleneck at Loch Lomond and the traffic lights which have been there for 20 years.

1.1.2 It was decided that the most appropriate method of delivering the Scheme, along with others in the Trunk Road Programme is by use of a Multiple Framework Agreement.

1.1.3 In September 2006, Transport Scotland instructed Scott Wilson to take forward the A82 Pulpit Rock Improvement Scheme under the Multiple Framework Agreement 2003/1.

1.1.4 The current requirements of Transport Scotland's business plan are to secure implementation of the scheme by Quarter 2 of financial year 2010/11

1.1.5 A location plan showing the A82 at Pulpit Rock is provided on Figure 1.1.

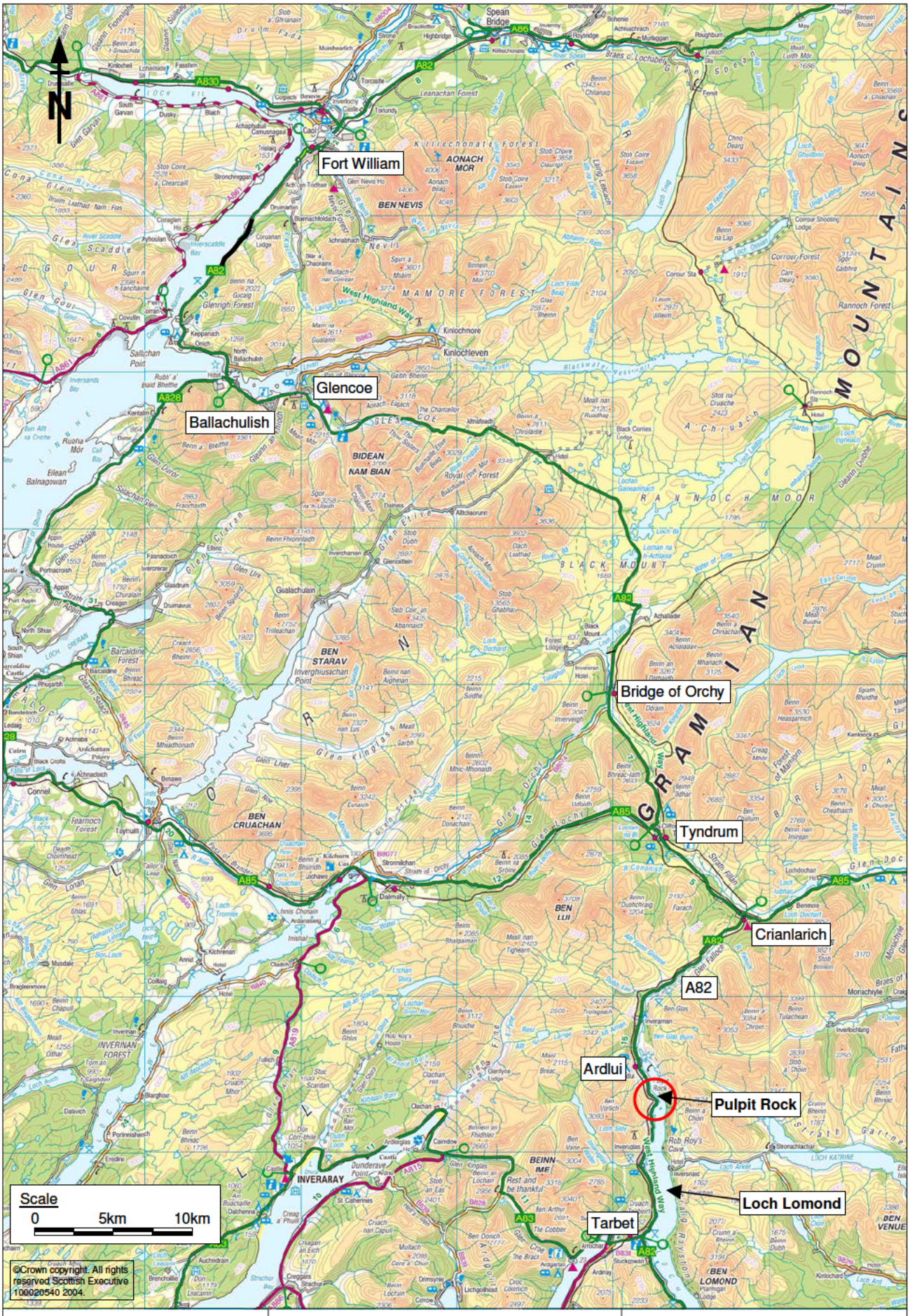
1.2 Report Scope

1.2.1 The Scheme Brief instructs Scott Wilson to:

"Review the A82 Route Action Plan Study, and any previous work undertaken on the scheme, and carry out any additional work required to update this to satisfy the requirements of STAG".

1.2.2 The requirements for a Part 1 STAG appraisal have effectively been covered by the previous work on the Route Action Plan Study resulting in entry of the scheme to the Trunk Road Programme and consequently it was proposed that only a review of STAG was required.

1.2.3 The scope of this report is to provide a short paper that includes an update of the Assessment Summary provided in the "Route Action Plan Study – Executive Summary" using the latest Small Scheme Appraisal Summary Tables (SSAST).



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A82 Pulpit Rock Improvement

Figure 1.1
Location Plan

2. STAG METHODOLOGY AND APPRAISAL

2.1 Background

2.1.1 STAG "provides a comprehensive source of advice on all aspects of the planning process from the earliest stages of planning, through appraisal and implementation to ex-post evaluation. It should be used by all organisations developing transport projects or policies for all types and sizes of transport planning exercises" [1].

2.1.2 The latest version of STAG was published in September 2003 and demonstrates the Scottish Executive's criteria in meeting their transport aspiration and support.

2.2 Objectives

2.2.1 STAG centres on five main objectives: Environment, Safety, Economy, Integration and Accessibility. In the last version of STAG, accessibility has been extended to take account of social inclusion issues. There is also a requirement to deal with Risk, Uncertainty and the Cost to Government. These five main objectives, often referred as Government Objectives, are summarised below:

- Environment – Noise and Vibration, Air quality, Water quality, Drainage, Flood defence, Geology, Biodiversity, Visual amenity, Agriculture and soils, Cultural heritage and Landscape.

- Safety – classified in two categories: Accidents and Security. Accident appraisal includes the analysis of the severity and the impacts in terms of annual rates. Security is appraised in qualitative terms and must take into account the perceived safety of all transport users. The appraisal should consider the impact on particularly vulnerable segments of the community such as children, the elderly or women travelling alone.

- Economy – divided into Transport Economic Efficiency (TEE) and Economic Activity and Location Impacts (EALIs). TEE appraisal follows established Cost-Benefit Analysis with the important proviso that the distribution of impacts is made explicit. Additionally, the impacts of a proposal on reliability of the transport system as experienced by its users is required. EALI analysis describes the wider economic impacts on income and employment. This includes displacement effects, effects upon particular geographic areas and social groups of interest.

- Integration – covering Transport Integration, Transport Land-Use integration and Policy integration. Transport integration in terms of providing choice, service co-ordination, quality of interchange, information provision and ticketing. Land-use integration requires basic checks of established land-use policy.

- Cost to Government – refers to all costs incurred by the public sector as a whole, net of any revenues. The total cost consists of investment costs, operating and maintenance costs, grant/subsidy payments, revenues and taxation impacts.

- Risk and Uncertainty – all risks and uncertainties associated with a proposal need to be fully taken into account within the appraisal process. The appraisal also requires explicit adjustments to reduce the level of optimism bias.

[1] Scottish Transport Appraisal Guidance: Executive Summary, paragraph 3 (Scottish Executive, September 2003)

2.3 Appraisal Process

2.3.1 STAG is a two-part appraisal (part 1 and part 2) process intended to minimise wasted effort by early testing of options against the Government Objectives prior to more detailed design analysis of options that demonstrate an ability to address the objectives of the scheme.

2.3.2 Part 1 is the initial appraisal and broad assessment of impacts designed to decide whether a proposal meets the planning objectives, fits with relevant transport, land use and other policies and hence should proceed to Part 2 which is the detailed appraisal against the Government's Objectives explained above (para. 2.2.1).

2.4 Appraisal

2.4.1 The improvement option on which this appraisal is based involves the provision of a new off-line single 2-lane 6.0m wide carriageway, with 1m wide hardstrips and 1m wide verges, including a 200m long tunnel through rock, as indicated in the Route Action Plan study. It will be necessary to investigate alternative options as the Scheme is developed.

2.4.2 The application of STAG to road schemes is set out in Appendix D7 to the Guidance. This states: "All major road projects are required to be subject to full STAG Appraisal". It also states "For smaller road schemes estimated to cost less than £5M where a multi-modal solution is evidently and demonstrably not applicable a full STAG Appraisal may not be appropriate". Evidently, a multi-modal solution is not pertinent in this case and although the A82 Pulpit Rock Improvement scheme's cost may exceed the £5M threshold it has been agreed with Transport Scotland that the Small Scheme Appraisal methodology should be applied.

2.4.3 As mentioned above (para. 1.2.3) an update on the ASTs provided in the A82 Route Action Plan will be demonstrated in this report, while ensuring this is in line with the current STAG philosophy.

2.4.4 An update from the Appraisal Summary Table provided in the A82 Route Action Plan is shown in Table A1 of Appendix A to this document.

3. CONCLUSIONS

3.1 STAG Compliance

3.1.1 Following a review of the A82 Route Action Plan (RAP) it is concluded that the work previously carried out is equivalent to the appraisal requirements outlined by STAG.

3.1.2 Reviews of other RAP Studies have been used during the development of the STAG assessment.

3.1.3 No new major issues or constraints have been identified as a result of the review.

3.1.4 It is considered that the requirements of a STAG Part 1 Assessment are met through the appraisal reported in the Route Action Plan and as updated by this report.

Appendix A

Small Scheme Appraisal Summary Table

Table A.1: Small Scheme Appraisal Summary Table

Proposal Name/Option:	A82 Pulpit Rock Improvement	**Promoter**	Transport Scotland
Background:	Following a Route Action Plan Study of the A82 between Tarbet and Fort William, the Scottish Ministers, in 2006, announced the implementation of a number of short term measures and the commencement of design work for two projects, these being a new bypass scheme at Crianlarich and removal of the traffic lights at Pulpit Rock. This latter improvement will remove the notorious bottleneck at Loch Lomond and the traffic lights, which have been there for 20 years.		
Scheme Description:	The proposed improvement of the A82 at Pulpit Rock is achieved by providing a tunnel, although other road options will also be considered as part of the scheme development.		

Planning Objectives	**Objective**	**Performance Against Planning Objective**
	Remove congestion at Pulpit Rock by realigning the A82 such that free flow of traffic is permitted without the use of the existing traffic signal controls.	The proposal will improve the free flow of traffic by improvement of the road alignment and removal of the existing traffic signals.
	Wherever practicable incorporate measures for non-motorised users. In particular, cycling proposals shall be designed in accordance with the "Trunk Road Cycling Initiative" which supports the Sustrans Millennium National Cycle Network	The specific needs of pedestrians and cyclists will be considered in relation to the community effects both during construction and operation.
	Maintain the asset value of the A82 route.	The A82 route will be enhanced by the improvement works at Pulpit Rock.
	Mitigate the environmental impact of the new works where practical.	Environmental Impacts will be fully assessed and mitigation measures will be included within the proposals as appropriate.
	Achieve good value for money for both taxpayers and transport users.	The scheme provides benefits by improving the carriageway alignment, removing the existing traffic signals and associated travel time delays and generally improving the overall route between Tarbet and Fort William.

Objective	**Sub-Objective**	**Qualitative / Quantitative & Distributional Impacts**	**Appraisal**
Environment	Noise & Vibration	Local in scale, likely to be of minor significance. No residential properties in the vicinity. The removal of the traffic lights will reduce noise and vibration levels as traffic flow will be constant.	Positive
	Air Quality	Local in scale, likely to be of minor significance. No residential properties in the vicinity. The removal of the traffic lights will improve air quality as traffic flow will be constant.	Positive
	Water Quality, Drainage & Flood Defence	Scheme in close proximity to Loch Lomond. Surface water drainage would outfall into Loch Lomond.	Negative
	Biodiversity	Scheme in close proximity to Loch Lomond. Possible effects on protected species (tbc), loss of habitat.	Negative
	Visual Amenity & Landscape	Potential visual impacts in Regional Scenic Area/ National Park.	Negative
	Cultural Heritage	Possible effects on setting of Scheduled Ancient Monument.	Negative

Table A.1: Small Scheme Appraisal Summary Table – Offline Option 2 (tunnel through rock)

Objective	Sub-Objective	Qualitative / Quantitative & Distributional Impacts	Appraisal Summary
Safety	Accidents	Slight improvement in accidents / 0.22M*	Slight Positive / 0.22M
Economy	Travel Time	Journey Reduction by 0.4min** / 2.88M**	Positive / 1.40M
	Vehicle Operating Costs	Slight savings in Vehicle Operating Costs / 1.26M*	Slight Positive / 0.06M
	Quality / Reliability Benefits	Minor improvement expected.	Slight Positive
Integration	Land-Use Transport Integration	Reduced travel time.	Slight Positive
Accessibility &Socia Inclusion	Accessibility & Social Inclusion	No rights of way affected.	Neutral
	Change in Severance	No existing access points affected	Neutral

* Based on NESA assessment assuming 25% Optimism Bias

** Based on Route Action Plan Design year of 2024