3 Alternatives Considered

3.1 Introduction

3.1.1 The context for dualling of the A9 was established in studies undertaken between 1995 and 2009, which, as explained in Chapter 2 (Need for the Scheme), included a Route Action Plan (RAP), a Route Improvement Strategy Study (RISS) and a Strategic Transport Projects Review (STPR).

3.1.2 This chapter provides a summary of subsequent work commissioned by Transport Scotland emerging from the national context for improvements, and includes an overview of the assessment work undertaken in the selection of a preferred route corridor. A summary of the development of the proposed scheme is also provided.

3.2 The Proposed Scheme – Assessment and Development

Strategic Planning Study and DMRB Stage 2 Corridor Report (2009)

3.2.1 At the same time as the STPR appraisal was being undertaken, further work to support the STPR and develop the strategy for the A9 between Luncarty and Pass of Birnam was carried out by Atkins as part of a Strategic Planning Study (Atkins, 2009a, 2009b).

3.2.2 The purpose of the Strategic Planning Study was to progress design of this section to an appropriately advanced stage to fully understand the challenges involved should it emerge from the STPR as a priority intervention.

3.2.3 The A9 Dualling Luncarty to Pass of Birnam Strategic Planning Study - Stage 2 DMRB Engineering Report (Atkins, 2009a) and Environmental Assessment Report (Atkins, 2009b) detail the assessment work undertaken to facilitate the selection of a preferred option. The reports document the factors taken into account in the progression of the remaining route corridor options, considering the engineering, environmental, traffic and economic advantages/disadvantages and constraints associated with each corridor option, with cognisance of the scheme objectives.

Stage 2 Options

3.2.4 The Stage 2 reports rejected offline options for widening due to excessive costs and because of the potential adverse effects on the local environment. Four options were assessed: Option 1A, Option 1B, Option 3A and Option 3B. It was stated that each of these options would provide a compact grade-separated junction for access to Stanley, Tullybelton and Luncarty. In addition, a separate option to provide a grade-separated junction at Bankfoot was accommodated within each option.

3.2.5 The four options are summarised in the following paragraphs; the chainages (ch) given are approximate. A further option (Route Option 2) was also developed at the initial stages of design, and considered the optimum possible horizontal curvature. However, following discussions with Transport Scotland's Standards Branch, this option was not carried forward to Stage 2 as it required a larger land-take and provided no practical benefit in carriageway standard over the other options being considered (Atkins, 2009a).

Option 1A

3.2.6 From south to north, Option 1A dualling would involve widening to the west of the A9 from Luncarty (ch0) to the property of Ladner (ch2400). From Ladner to ch5900, the widening would take place on the east side of the existing A9, partly to avoid the village of Bankfoot. From ch5900 to the existing dualled section of the A9 at Pass of Birnam, the widening would take place to the west of the existing A9, to reduce any impact on the property of Broompark and Cairnleith Moss Site of Special Scientific Interest (SSSI). Vehicles travelling to/from Luncarty would access the A9 via the B9099.

Option 1B

3.2.7 Option 1B was similar to Option 1A, but would provide a direct link from Tullybelton/Stanley for those travelling to/from Luncarty. This link road would run to the rear of the land surrounding the property of Ladner before joining the existing road from Luncarty.

Option 3A

3.2.8 Option 3A would entail construction of an adjacent carriageway to the east of the existing A9 for the entire length of the scheme. Vehicles travelling to/from Luncarty would access the A9 via the B9099.

Option 3B

3.2.9 Option 3B was similar to Option 3A, but would provide a direct link from Tullybelton/Stanley for those travelling to/from Luncarty. This link road would run to the rear of the land surrounding the property of Ladner before joining the existing road from Luncarty.

Assessment Results

Engineering Assessment

3.2.10 The Stage 2 assessment (Atkins, 2009a) concluded that from an engineering perspective there was a preference for Options 3A or 3B, due to the greater ease of construction. During construction of these options, the existing A9 could largely remain open whilst the new carriageway is built to the east.

Environmental Assessment

3.2.11 The Stage 2 environmental assessment (Atkins, 2009b) concluded that, in environmental terms, Options 1A and 1B were preferable due to the reduced effect on a number of properties. Option 1A was judged to be preferable to Option 1B because of the reduced land-take required.

Traffic and Economic Assessment

3.2.12 From a traffic and economic viewpoint, the four options performed similarly, although Option 3B was considered to provide marginally better value for money (Atkins 2009a).

Public Exhibition and Further Assessment of Options

3.2.13 In January 2012, Transport Scotland held a public exhibition, presenting two options from the Strategic Planning Study; Options 1B and 3B. A number of comments regarding these options were received from members of public attending the exhibitions.

Strategic Planning Study – Stage 2 Addendum Report (2013)

3.2.14 Jacobs was commissioned by Transport Scotland, in August 2012, to undertake an assessment of the preferred route and provide services for publication of an ES and scheme orders.

3.2.15 Prior to undertaking the DMRB Stage 3 assessment, Jacobs undertook a review of the comments received for the public exhibitions to establish whether these could be addressed by amending the previously identified preferred route. The main concerns were in relation to the proximity of the road alignment to adjacent properties, and a refined design was therefore developed to move the road away from properties as far as reasonably practicable whilst still maintaining current design standards and achieving the constructability benefits provided by Option 3B. Following discussions with Transport Scotland, revisions to the preferred Option 3B design were assessed and a Stage 2 Addendum Report was completed (Jacobs, 2013). The preferred option was presented to the public at exhibitions in June 2013 for comment and further input.

3.2.16 The refined design, referred to as 'Option 3B Addendum', provided slightly increased separation and reduced land-take for properties in close proximity to the A9. Option 3B Addendum is shown on Figure 3.1. It was considered likely to result in marginally lower environmental effects than Stage 2 Option 3B for the following parameters:

- Disruption due to Construction;
- Landscape and Visual;
- Land Use; and
- Traffic Noise and Vibration.

3.2.17 Marginal increased road drainage and water environment effects were anticipated, due to a slight overall increase in cuttings.

A9 Dualling: DMRB Stage 1 Assessment

3.2.18 As noted in Chapter 2 (Need for the Scheme), Jacobs was appointed by Transport Scotland under a separate contract to undertake Preliminary Engineering Services for the A9 dualling between Perth and Inverness, including DMRB Stage 1 assessment of indicative corridor options.

3.2.19 The recommendation of the DMRB Stage 1 Assessment is that the Luncarty to Pass of Birnam section should be taken forward. The report for this work will be published in Spring 2014.

Development of the Scheme Design

3.2.20 Option 3B Addendum was taken forward to DMRB Stage 3, and has been subject to ongoing design refinement informed by a range of considerations, including environmental assessment. The DMRB Stage 3 proposed scheme is described in Chapter 4 (The Proposed Scheme).

3.3 References

Atkins (2009a). A9 Dualling: Luncarty to Pass of Birnam Strategic Planning Study - Engineering Report.

Atkins (2009b). A9 Dualling: Luncarty to Pass of Birnam Strategic Planning Study - Stage 2 Environmental Assessment Report.

Jacobs (2013). A9 Dualling: Luncarty to Pass of Birnam Strategic Planning Study - Stage 2 Addendum Report.

Scottish Executive (2003). Scottish Transport Appraisal Guidance.

Scott Wilson (2005). A9 Perth to Blair Atholl, Route Improvement Strategy Study.