## 2 SCHEME NEED, OBJECTIVES AND ALTERNATIVES

#### 2.1 INTRODUCTION

This chapter describes the need for a bypass of Crianlarich, sets out the objectives of the scheme and describes the options which have been considered in the selection of the scheme being promoted.

#### 2.2 NEED

The entire A82 Tarbet to Fort William route is acknowledged by road users to have difficult operating conditions in particular areas and at certain times. In 2003 the A82 RAP Study<sup>19</sup> was undertaken and the findings published in 2006 (see Section 1.4). Crianlarich was identified as a key operational problem area due to:

- queuing at the Glenfalloch Road/Callander Road junction;
- delays due to the two constrained railway bridges; and
- a higher than average accident rate although the majority of accidents are minor.

The RAP recommended the provision of a western bypass of Crianlarich and in June 2006 Transport Scotland instructed Grontmij to proceed with its development (see Section 1.4).

#### 2.3 SCHEME OBJECTIVES

The scheme objectives which were developed for the small scheme STAG<sup>20</sup> appraisal (see Section 1.4) are as follows:

- to improve strategic transport links to support economic growth;
- to reduce road traffic accidents in Crianlarich;
- to safeguard and where possible enhance the environment of Crianlarich;
- to facilitate links to interchange between transport modes in Crianlarich; and
- to improve local and strategic accessibility for all types of road users in and around Crianlarich.

Section 2.4.4 demonstrates how the scheme which is assessed in this ES meets the objectives.

#### 2.4 SCHEME ALTERNATIVES

#### 2.4.1 Introduction

Table 2.1 provides a summary of the options that have been considered. Section 2.4.2 describes the options appraisal undertaken over the recent period in the development of the current preferred scheme. Section 2.4.5 provides an overview of the development of the preferred scheme.

<sup>&</sup>lt;sup>19</sup> Scott Wilson, 2006. A82 Tarbet to Fort William Route Action Plan Study. Transport Scotland

<sup>&</sup>lt;sup>20</sup> A small scheme is one estimated to cost under £5 million at the time of the assessment. Scottish Executive, 2003. Scottish Transport Appraisal Guidance

Period	Description	Summary of Conclusions
1985	Six route options identified, five bypass routes of the village and one to improve the existing trunk road system	There were minimal options for traffic management measures on the existing trunk road through the village and this option was not considered worth pursuing In terms of environmental assessment
1993	Six route options from 1985 reviewed and a further four developed to proceed through a Stage 1 DMRB assessment	that three route options, grey (western), orange (southern) and pink (northern) should be taken forward for further assessment
1994	Three routes, grey 2 (western with traffic calming measures on the A85), orange (western and southern) and pink (western and northern) were taken forward to DMRB Stage 2 Assessment	Grey 2 taken forward to environmental assessment however only the traffic calming measures were carried through to construction in 1997/8. The other elements were not taken forward pending the outcome of the Strategic Roads Review in 1999
1999	Strategic Roads Review 1999	The review concluded that the Crianlarich Bypass should not be taken forward at that time, with other schemes subject to review taken forward as priorities for funding and implementation
2006	An A82 Route Action Plan published	Recommended that the western bypass of Crianlarich is further considered
2007	<ul> <li>Stage 2 Addendum undertaken reviewing and updating work to date. Three options were reviewed:</li> <li>Option 1 – western bypass</li> <li>Option 2 – western and southern bypasses</li> <li>Option 3 – western and northern bypasses</li> </ul>	Option 1 was recommended to be taken forward to Stage 3 Assessment including EIA
2007	A Small Schemes STAG Assessment was undertaken	The appraisal confirmed that Option 1 the western bypass met the scheme objectives

Table 2.1: Scheme Options 1980s-2004<sup>21</sup>

### 2.4.2 Options

In 2007 the previous work was reviewed and the options updated to take into account changes since 1994 in design standards, environmental constraints and legislation. The options assessed in the Stage 2 Addendum, 2007 report are shown in Figures 2.1a-c.

# 2.4.2.1 Option 1

Option 1 was a western bypass of the A82 (see Figure 2.1a). The proposed route would leave the A82 at the southern edge of the village and travel north and west, cutting through the edge of the Ewich Forest block and rejoining the A82 west of Crianlarich. Access into the village from the south would be provided via a junction connecting the A82(T) to the Glenfalloch Road. At the northern edge of the village access onto the A82(T) from Crianlarich and to the village from the trunk road would be via a junction located north west of Tyndrum Terrace.

<sup>&</sup>lt;sup>21</sup> Initial information taken from original Stage 3/EIA work. Carl Bro Group and Turnbull Jeffrey Partnership, 1995. Crianlarich Project: Stage 2 Scheme Assessment Report. The Scottish Office Industry Department

# 2.4.2.2 Option 2

Option 2 consisted of both a western and southern bypass of the village (see Figure 2.1b). The southern arm would leave the A82 at a roundabout connecting it to the western bypass and then sweep north–easterly, over the Glenfalloch Road, crossing the railway (the West Highland Line) south of Crianlarich Station and east to meet the A85 Callander Road to the east of the village. Access to the village from the north and east would be provided by junctions on the A82(T) and the A85 respectively.

## 2.4.2.3 Option 3

Option 3 consisted of a northern bypass as well as a western bypass (see Figure 2.1c). The northern bypass would leave the A85 at the eastern edge of the village just west of Ben More Lodge and then cross the old Callander railway line and run parallel to and across the alluvial plain of the River Fillan, underneath the Glenbruar viaduct. It would then run west across the Fort William Branch Line and the Oban Branch Line to tie into the existing A82 at a roundabout north of The Shieling. Access to the village from the north and south would be provided by junctions off the A82(T). Access from the A82(T) on to the Callander Road at the east side of the village would be via a slip road to the east of Meadow Grove.

### 2.4.3 Recommendation

Option 1 was recommended to be taken forward to Stage 3 and EIA because it provided a benefit to the village and also had the least environmental impact from the new works of the three options. Option 2 performed the best operationally but was considered along with Option 3 to have higher impacts than Option 1 on the environment.

OBJECTIVE	PERFORMANCE
To improve strategic transport links to support economic growth	The western bypass would reduce travel time and improve journey reliability by taking traffic away from the A82/A85 junction and also the constraining railway bridges
To reduce road traffic accidents in Crianlarich	Reduction in traffic through the village where there is increased potential for accidents because of pedestrians and local traffic movements
To safeguard and where possible enhance the environment of Crianlarich	The scheme has been designed with environmental mitigation considered throughout, resulting in a layout that seeks to minimise significant adverse environmental effects and provide opportunities for environmental enhancement
To facilitate links to interchange between transport modes in Crianlarich	The bypass has junctions at either end such that bus services can access the existing bus stops in the village
To improve local and strategic accessibility for all types of road users in and around Crianlarich	The road would reduce traffic in the village resulting in improved and safer access for pedestrians and other non-motorised users in the village

# 2.4.4 Meeting the Scheme Objectives

### 2.4.5 Scheme Refinements

As part of the Stage 3 process the vertical and horizontal alignment of the road was developed to provide road geometry which complied with standards and minimised the volume of cut material on the scheme.

A line for the western bypass was also briefly considered through the Ewich Forest further away from the edge of the village. A site visit indicated that there was no obvious line and that ground conditions were difficult with outcrops of rock. The ecological surveys indicated more protected species interests in the forest (see Appendices 9.1 and 9.2) and the team considered that a line away from the village might deter some people from making a detour into the village to use the facilities. In addition, the topography of the ground would make it a difficult route to engineer that would be likely to require substantial construction works resulting in a 'heavily engineered' solution as well as introducing departures from standards.

Various options for junctions were considered and the roundabouts included in the scheme were considered to be those that best met access and safety needs.

Subsequent consultation with the Forestry Commission resulted in a spur added to the western side of the southern roundabout to facilitate future access via a forest road to the Ewich Forest Block (see Figures 3.1a and b).





