

POPE of Major Schemes Summary Report

Scheme Title	A38 Dobwalls Bypass
Opening Date	December 2008
POPE Stage	One Year After Study

Scheme Description

The A38 Dobwalls Bypass opened on 19th December 2008, and consisted of the construction of a 2 mile long dual carriageway to the north of the village of Dobwalls in Cornwall. The key additional features of this scheme are:

- A new roundabout at the western end of the bypass to link with the A390;
- A new 0.6 mile link road for the A390 to join with the new roundabout, including a new bridge over the London Penzance railway line;
- Two junctions to allow access to and from the bypass at the eastern end;
- Environmental mitigation measures, including two bat 'bridge' structures across the bypass; and
- Provision of two bridges to carry local roads over the bypass.

Objectives (DfT Roads Review, 1997)

Objective Achieved?

- | | |
|---|-----|
| • To Provide additional capacity and reduce congestion | Yes |
| • To enhance road safety | Yes |
| • To improve the environment of the village by removing through traffic | Yes |

Key Findings

- The objectives of this scheme have been met – to reduce congestion, improve road safety and improve the village environment.
- One year after opening, observed journey times on the bypass are between 1.5 minutes and 5 minutes less than those observed on the former A38 route prior to scheme opening. The most significant savings were seen in the westbound direction in peak times.
- On the whole, traffic flows across the corridor were in line with predictions, although the level of traffic expected to remain on the former A38 through Dobwalls was underestimated.
- The observed safety benefit seen across the network at the one year after stage is in line with predicted benefits, saving approximately 10 personal injury accidents in the opening year.
- Although no changes were made to the local bus services as a result of the scheme, feedback received indicates that bus reliability has greatly improved due to reduced congestion.
- The additional costs of the scheme are largely due to delays during construction due to adverse weather.

- The reduction in traffic through the village of Dobwalls has enabled the local authority (with funding from the HA) to implement measures such as reducing carriageway width and speed limit to restore the village environment, as expected. The reduction in HGVs in Dobwalls has also improved air quality and noise levels in the village.
- The use of Cornish hedges are a distinctive feature of the scheme, and their use adds local character in an Area of Great Landscape Value (AGLV), however the choice of materials used for some drainage channels detracts from the local rural landscape character.
- The use of shillet in the landscaping has resulted in a bare appearance as little vegetation growth is evident at the one year after stage. It is considered that this will have improved by the five years after stage.

Summary of Scheme Impacts

Traffic

- The scheme has successfully rerouted a significant amount of traffic (83-87%) away from the village of Dobwalls, only slightly less than the prediction of 90%.
- Screenline analysis shows an overall increase in traffic in the A38 corridor of 4.4% (990 vehicles) which may be as a result of the scheme.
- One year after opening, observed journey times on the bypass are between 1.5 minutes and 5 minutes less than those observed on the former A38 route prior to scheme opening. The most significant savings were seen in the westbound direction in peak times.
- Traffic flows on the bypass in the opening year are very close to those predicted for the low growth scenario.
- The bypass has successfully removed the majority of HGVs from the village, reducing from over 1,860 per day to just 130 per day.

Safety

- In the one year period after the opening of the bypass, there has been a reduction of 10 personal injury accidents (PIAs) in the area covered by the appraisal;
- Casualty numbers have also reduced by 15, from an annual average of 61 to 46 per year. No fatal accidents have been noted since the bypass opened.
- Post opening there has been a large reduction in accidents occurring on the former A38. The accident rates for the former A38 and for the new bypass are 19% and 43% below the national average, respectively, for roads of a similar type.

Environment

- Environmental impacts on most sub objectives were as expected.
- The removal of traffic from the village of Dobwalls has had a beneficial impact on noise and air quality for the majority of residents, as well as improving the village environment for pedestrians and cyclists.
- The use of hydro-seeded shillet¹ throughout (in preference to topsoil) for seeded areas has had mixed effects – it has been effective in weed control; however establishment of grass is slow with large areas offering little greening at this OYA stage.
- Potential for immediate impact to create a gateway to the village at Dobwalls roundabout has been diluted by a combination of a lack of greening and use of tree specimens that are relatively small in relation to the scale of space.
- Environmental mitigation measures are in place and monitoring of bats, dormice and translocated reptiles/amphibians is being undertaken in accordance with the CEMP.

¹ Coarse soil with pieces of slate

Accessibility

- Severance has been reduced by the removal of more than 80% of the traffic from the village of Dobwalls; and
- Over 80% of respondents to the residents survey agreed that the environment had improved for pedestrians and cyclists since the bypass opened.

Integration

- The scheme's objectives are in line with historical as well as current regional and local policies, including the Cornwall LTP and the Caradon Local Plan².

Summary of Scheme Economic Performance

All in 2002 prices, discounted to 2002	Low Growth Predicted	High Growth Predicted	Post Opening Re Forecast
Safety PVB	£33.26m	£39.72m	£38.46m
Economy PVB ³ includes VOC	£34.32m	£80.21m	£22.82m
Total 60 year PVB	£67.60m	£119.93m	£61.28m
Investment cost ⁴	£30.49m	£30.49m	£38.8m
Indirect Tax	-£8.09m	-£8.07m	-£8.09m
PVC	£22.40m	£22.42m	£30.71m
BCR	3.02	5.35	2.0

- The scheme's economy benefits of £22.82 million were lower than forecast, although is considered to be a conservative estimate as this only considers the impact of changes on the A38 route, and not the wider area. It is also lower due to a probable underestimation of the pre scheme situation during the busy summer months;
- The scheme has performed well in terms of safety, with the benefits being higher than the low growth forecast for the opening year;
- The schemes reforecast PVC is £30.71m, with the inclusion of the low growth predicted indirect tax revenue; and
- The schemes outturn BCR is 2.0 which represents good value for money, despite the increase in costs.

This document summarises the findings of the One Year After post opening evaluation study completed July 2011.

² The statutory development plan for the Caradon District at 31st March 2009 - Caradon Local Plan

³ This figure includes the impact of vehicle operating costs, the outturn economy PVB has been calculated using the proportions of VOC given in the low growth scenario.

⁴ The outturn spend profile for this scheme was derived from the HA Regional Finance Manager (in March 2010). The forecast costs are from the Economic Appraisal Report (August 2004).