

## 8 Background to Project Studies

In the last two decades there have been several strategic studies of State Highway 1 within Kapiti Coast District.

### 8.1 Approved Alignment for Upgrade between Pukehou Bridge and Peka Peka

In the late 90's Maunsell's recommended a four lane highway between Peka Peka and Levin. A subsequent scheme assessment completed in 2002 resulted in recommendations to the Transit NZ board for a preferred alignment (the improved Eastern Route) to the east of railway and existing State Highway. The preferred option was developed on the basis that it is the cheapest option and results in least impact on residents or businesses. It also provides good separation between local and arterial (State Highway) traffic. This option was accepted by the Transit NZ Board; however the route was not designated. The following paragraphs present the key features of the adopted alignment which is also shown in Appendix D.

#### **Eastern Route – Taylors Road to Otaki Gorge Road**

From Taylors Road, north of Otaki, the improved Eastern Route extends existing alignment in a straight line towards Otaki effectively straightening the existing horizontal deviations en-route to Otaki. Immediately north of Otaki, the alignment curves eastwards towards the existing railway over bridge. New structures would be required as the new State Highway crosses the railway.

Within the northern part of Otaki, between the existing SH1 / County Road intersection and the southern extremity of the town, the railway would be relocated towards the west. This would allow the new SH1 alignment to pass between the railway and County Road maintaining good local access. From here, the preferred alignment remains on the eastern side of the railway and crosses the Otaki River on a new four lane bridge east of the existing rail bridge.

At the time, the improved eastern route was the preferred option as it has the greatest chance of obtaining a designation given its greater distance from residential and commercial areas. The preliminary assessment of environmental effects also found that it had least impact on residential areas and is generally situated in undeveloped land. It was also the cheapest in comparison with the other alignments in terms of total project costs, coming in 11.3 % less expensive than the most expensive options.

#### **Eastern Route – Otaki Gorge Road to Peka Peka**

South of the Otaki River, the eastern alignment would cross the railway in the vicinity of Otaki Gorge Road and stay parallel with the railway until south of Gear Road. It would cross the railway line in the vicinity of Mary Crest and follow the "western route" to Peka Peka Road.

A new four lane carriageway would be constructed to the east of the existing highway and railway until south of Mary Crest where the existing SH1 pavement would used for the

southbound carriageway. A grade separated interchanges (local roads dropping below the new SH1) is proposed providing access to Otaki Gorge Road and Addington Road.

A parallel local access road would be formed to the west of the new expressway making use of the existing SH1 corridor between the Otaki River Bridge and Mary Crest. Another grade separated intersection is proposed between SH1 and Gear Road, at Te Horo. Here the local road connecting the eastern and western parts of Te Horo would pass over the highway and railway corridor and provide access to the four lane SH1. Along this length there would be no other intersections on SH1 and private access would be relocated to the parallel access roads.

South of Mary Crest a new parallel access road would be developed to link with Peka Peka Road. A new parallel access road although not continuous would be provided on the eastern side of the expressway.

Of the options considered this alignment was considered most effective because it would not require the relocation or demolition of existing businesses along the existing state highway corridor. It also provides safe cross-corridor access for local movements. The scheme assessment also concluded that this option provide most benefits in terms of staging and compatibility with options north of the Otaki River. Downgrading the existing highway for use as a parallel local service road was also seen as making best use of infrastructure. Potential disadvantages of the eastern alignment were that it would disrupt the character of the rural community east of the existing rail corridor and would increase the physical and psychological severance of the Te Horo community.

The eastern option had less effect on businesses, land use and the landscape. It was reported that during the consultation phase the Otaki Community board favoured an eastern option although this was never formally advised. There was very little difference between the costs of options between the Otaki River and Peka Peka. A deciding factor was that if both eastern options are adopted, connectivity across the Otaki River becomes much simpler.

## 8.2 Improvement Options between Peka Peka and MacKays Crossing

As with the northern part of the study area, there have been several previous studies investigating options for improving SH1. The Pukehou to MacKays Crossing Strategic Study (2001) investigated various options for a 4-lane highway to the east of the railway and existing SH1 alignment. The 2004 Western Corridor Strategic Study assessed options for a motorway, expressway or localised upgrades with grade separation at Paraparaumu, Waikanae & Otaihanga Road. Kapiti District Council also held facilitated workshops in 2006 in which community representatives and local stakeholders were asked to contribute their thoughts on urban design frameworks for the three key settlements in Kapiti District.

Although the Western Corridor Study recommended upgrading SH1 to a four lane highway, a preferred alignment has not been agreed at Transit NZ Board level or by KCDC. Assessment of the consultation responses received as part of this study concluded that the community favoured the concept of upgrading SH1 to four lanes.