

#### Memo

COMMERCIAL IN CONFIDENCE

То	Jane Frances, Office of Hon. Shane Jones	14 August 2020
From	Greg Miller, KiwiRail Group Chief Executive	

# DEVELOPING A RELIABLE COST AND COMMERCIAL ESTIMATE – WAIROA TO GISBORNE RAIL

#### **PURPOSE**

- 1. This paper outlines the investigations and costs required for KiwiRail to develop a reliable basis for assessing potential investment in Wairoa to Gisborne rail.
- 2. This work is required to ensure the full costs of the proposal are understood and to provide a definitive view of the infrastructure investment required.

#### **ANALYSIS**

- 3. The attached table shows an estimate of the investigations and costs required, at a total of \$3,680,000.
- 4. We draw your attention to the following items:
  - Any analysis of potential investment needs to consider the corridor Gisborne to <u>Napier in its entirety</u>, \$9(2)(g)(i) - free and frank opinion



- In the Gisborne to Wairoa section there are specific sites that need a concept design, based on appropriate geotechnical investigation to get a credible estimate. This is the case for
  - Each slip site in particular, the major washouts
  - The 15km section between 345km and 360km which has 12 tunnels, 7 bridges (albeit small ones) and various slopes
- In the Gisborne to Wairoa section the Kopuawhara Viaduct will at some time need a large investment. This may not be an immediate issue, but it is important to understand the likely size of the liability that will need to be funded in the context of the Wairoa to Gisborne proposal.

- We need to establish an estimate for a road/rail interchange at Matawhero.
   Any benefits that come from the line will be by modal shift. This means a partnership with the road transport operations based on a hub from which rail does the line haul to Gisborne. This is best located outside of the township.
- We have also taken the position that the line should open at 18 tonne axle
  weight and hi cube capable. This contrasts with the stance taken for
  Northland for the section Whangarei to Otiria which opens at a lower axle
  weight and is progressively upgraded. s9(2)(0)(i) free and frank opinion

For this reason, our proposal for the Wairoa to Gisborne assessment is based on getting costs for;

- Full upgrade of the section Wairoa to Gisborne prior to re-opening
- Progressive upgrade of the Wairoa to Napier section over a 5 year period
- To the extent it is not needed at day one progressive replacement of all bridges within 15 years (same principle as Northland)
- We also need to understand the costs of creating a radio and communications network that would allow KiwiRail to move to single person crewing on the trains. This would improve the overall economics of the line.

### **CONCLUSION**

5. The investigations and costs required for KiwiRail to develop a reliable basis for assessing potential investment in Wairoa to Gisborne rail as outlined in Appendix One require PGF funding of \$3,680,000 to proceed.

# Investigation Cost

### 1.0 Major Items to be Costed in Wairoa to Gisborne Section

# 1.1 Land Acquisition and Creation of Yard/CT at Matawhero

# 1.2 One time fix and forget for the 15km section between 345km and 360km

### Tunnels 14-26

- Clearance scans
- Condition excavations floor
- Core samples (if necessary) tunnel walls

<u>Bridges</u> - unit rate based on Northland experience to exit timber

Weather Proofing

### 1.3 Kopuawhara Viaduct

- Condition Assessment and preliminary concept for life extension/strengthening
- (Note this may show no work required for some time but will be big cost eventually)

### 1.4 Major Slip Sites

- Preliminary concept design and costs estimates (assuming 3 major and 6 lesser)

# 1.4 General cost assessments - using rates from Northland

- One time upgrade to closed track making it 18 tonne axle capable
- Unless needed upfront Over 15 year period fully replacing the timber bridge stock
- One time upgrade for general civil/drainage weather-proofing works



Sub Total \$ 2,360,000

## 2.0 Known Major Works in Napier to Wairoa Section that will materially influence overall line economics

### 2.1 Westshore Bridge

- Preliminary Concept Design and cost estimate

#### 2.2 Tunnels 6-13

- Clearance scans
- Condition excavations floor
- Core samples (if necessary) tunnel walls

#### 2.3 Mohaka Viaduct

- Condition assessment
- Escalated cost assessment for renewals using Makatote Viaduct as the base case

# 2.4 General cost assessments - using rates from Northland

- Over 5 years making the track 18 tonne axle capable
- Over 15 year period fully replacing the residual timber bridge stock
- General civil/drainage weather-proofing works



