

Before the Independent Hearing Panel
appointed by Environment Southland and
Gore District Council

Under the Resource Management Act 1991

In the matter of an application by Gore District Council for resource consent to
establish the Longford Bridge across the Mataura River

Statement of evidence in reply of Matthew Paul Bayliss

29 January 2021

Applicant's solicitors:

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**anderson
lloyd.**

Introduction

- 1 My full name is Matthew Paul Bayliss.
- 2 I am the 3 Waters Asset Manager at the Gore District Council (**GDC** or the **Council**). I have prepared a statement of evidence dated 2 December 2020. My qualifications and experience are set out in that statement. I confirm that this supplementary evidence is also prepared in accordance with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014.

Scope of evidence

- 3 This evidence in reply addresses:
 - (a) Costs associated with provision of the water supply pipeline at various alternative bridge locations discussed during the hearing; and
 - (b) Costs associated with directional drilling.

Assessment of pipeline costs associated with alternative bridge alignments

- 4 During the Longford Bridge consent hearing held 16th and 17th December 2020 a number of alternative alignments were discussed. These alternatives were called Option A (Rock Street), Option B (Denton Street), and Option C (Maitland Street) as shown in the figure below (this is Figure 1 of the evidence provided by Michael Pentecost).



Figure 1: Alternative Bridge Locations (Extract from M. Pentecost evidence)

5 I discuss below connection of the water supply pipeline through each of these options.

6 Option A – Rock Street:

- (a) This will be the longest pipeline option compared with the most direct Maitland Street route, adding an extra 1150m compared to the preferred location.
- (b) The floodplain in the Rock Street area is significantly narrower than the other three options. Furthermore there is existing water and wastewater infrastructure on either side of the river in this area. These factors have the potential to make the pipe connections on either side of the bridge more challenging (and therefore expensive).

7 Preferred option – Surrey Street:

- (a) This will be the third-longest pipeline option compared to the most direct Maitland Street (extra 1370m) and Denton St (extra 490m) routes.
- (b) While the site is the third farthest structure from the most direct pipeline route (Maitland St. and Denton St.), the pipeline can be easily buried in the bare ground up the river flats.

8 Option B – Denton Street

- (a) This is the second shortest pipeline option compared to the most direct Maitland Street route (an extra 880m).

9 Option c – Maitland Street

- (a) This location provides the most direct route for connection of the water supply pipeline.

Pipeline costs associated with alternative bridge alignments

- 10 The pipeline length and the estimated cost for the preferred location and alternative bridge location options are reflected below. Estimates of bridge costs are based on the evidence in reply of Mr Crocker.

Location	Bridge span m	Pipe length m	Estimated Cost		Total Estimated Cost
			Bridge	pipeline	
Option A, Rock Street	155	4050	\$5,500,000	\$3,527,550	\$9,027,550
Preferred location, Surrey Street	90	2900	\$3,700,000	\$2,525,900	\$6,225,900
Option B, Denton Street	90	2410	\$4,700,000	\$2,099,110	\$6,799,110
Option C, Maitland Street	100	1530	\$5,000,000	\$1,332,630	\$6,332,630

- 11 Mr Standing's evidence in reply addresses implications of NZTA funding on the total cost to GDC ratepayers.

Direct Drilling

- 12 During the hearing, several submitters discussed their view that the Council should pursue direct drilling for the water pipeline crossing of the Maitland River. A submitter, Mr Weir, particularly commented that Council has not disclosed the cost of a directional drilling option.
- 13 I can confirm that due to the risk and uncertainty associated with this work the suppliers were reluctant to provide a fixed and unconditional price for the directional drilling. Some of the comments made by the suppliers were as follows:
- (a) We cannot provide a fixed price all risk inclusive figure as this would be based on pure guess work and would be irresponsible.
 - (b) Unforeseen soil types such as shingle, rock, tree stumps or boulders will be treated as unforeseen. Assumptions are that there are good soil conditions for drilling and any price estimate can only be based on assuming good soil conditions at the location.

Dated this 29th day of January 2021

Matthew Paul Bayliss