

Report

Subject: **Future of the Bulls Water Tower**

To: Assets / Infrastructure Committee

From: Arno Benadie

Date: 10 November 2020

File Ref: Bulls Water Tower project files

1 Executive Summary

The purpose of this report is to present the results of the consultation undertaken regarding the future of the Bulls water tower, the impacts of the two options that were consulted on, and provide recommendations for Council decision.

2 Context

2.1 Background

Several years ago, the Bulls water tower, which is an earthquake-prone structure, was decommissioned. It was built circa 1956-1959 in response to the growing number of defence force families stationed at Ohakea and is well known to locals and travellers on SH1.

Concrete structures like this generally have a life expectancy of between 50 and 100 years. As the tower is currently 64 years old, it is considered to be at the end of its life. At best, the structure has an expected remaining life of 35 years.

Council has started to construct a new reservoir next to the tower, and asked the community what their view was for the future of the existing water tower. The decision regarding the tower affects the construction and location of the pump station building for the reservoir. The pump station build is more complex if the tower is retained.

3 Consultation

3.1 Options Presented

There were two options that were presented to the Community:

- Demolish the tower at a cost of an estimated \$250,000;
- Strengthen the tower at the cost of an estimated \$250,000 – however in 35 years' time, the tower will need to be demolished costing significantly more than if it is removed now.

The public was also advised to keep the following in mind:

- Concrete structures like this generally have a life expectancy of between 50 and 100 years.
- The Tower was constructed in 1956-1959 and is currently 64 years old. At best the structure has an expected remaining life of 25 years.
- Once the new reservoir and pump house are built it will become more difficult and costly to remove the old tower once it has reached the extent of its life.
- The cost of strengthening the structure will be lost when the tower is ultimately removed.

3.2 Format and Notification of Consultation

Consultation was undertaken via a hardcopy submission form and online submissions until early November 2020. The survey did not determine age or resident status of the responders.

Hardcopy submission forms were available at the Bulls Open Day, then at Te Matapihi. Notices were put in the Bulls Bulletin and District Monitor.

3.3 Consultation Results:

Option	Number of Votes	Percentage
Tower Demolition	48	37%
Strengthen Tower	83	63%
TOTAL	131	

4 Impact of options

4.1 Option benefits and dis-benefits:

Option	2020 Cost	Benefits	Dis-benefits
Remove Tower	\$250,000 (approx.)	Ease of construction of new reservoir infrastructure. Lower cost and simpler demolition removed before new reservoir is complete. Eliminates risks associated with the earthquake-prone nature of the tower.	Only 37% public support.

Retain and strengthen Tower	\$250,000 (approx.)	63% public support. Heritage / Historic value.	<p>Tower is near the end of its life, and the cost is significantly higher than the asset's residual value.</p> <p>Tower must be removed within 35 years when it reaches its maximum expected life. This is a future cost that is unable to be determined now.</p> <p>Strengthening work will be redundant in future when tower is removed.</p> <p>Increased removal cost and complexity in future.</p> <p>With the new reservoir on the site the tower has to be strengthened to IL4, even if it remains empty.</p>
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5 Staff Recommendation

Staff acknowledge the 63% public support of the 138 people who responded to the survey, however believe the removal of the tower now presents a lower cost and lower risk long term option, and provides for an easier and lower risk construction of the new Bulls reservoir.

6 Report Recommendation

6.1 That the report on the future of the Bulls water tower be received.

6.2 That the Assets / Infrastructure Committee recommend to Council:

1. That the Council endorse proceeding with removal of the Bulls Water Tower now for an estimated cost of \$250,000 and subject to a future Council recommendation when costs are precise;

or

2. That the Council endorse proceeding with strengthening of the Bulls Water Tower now for a quoted price of \$181,540 and subject to a future Council recommendation when costs are precise; and removal of the tower within 35 years at a yet to be determined cost to Council.

Arno Benadie

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