

## 21.7.25 LAKE DUNSTAN WATER SUPPLY PROJECT REPORT

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### Public Excluded

<b>Section under the Act</b>	The grounds on which part of the Council or Committee may be closed to the public are listed in s48(1)(a)(i) of the <i>Local Government Act 2002</i> .
<b>Sub-clause and Reason:</b>	s7(2)(i) - the withholding of the information is necessary to enable Council to carry on, without prejudice or disadvantage, negotiations (including commercial and industrial negotiations).

### 1. Purpose of Report

To provide an update on the contract negotiations for the Lake Dunstan Water Supply treatment and bore field upgrade construction, and expected project completion date.

### Recommendations

That the Council

- A. Receives the report and accepts the level of significance.
- B. Notes a review of the project scope, and contractor and material supply estimate is underway.
- C. Approves ordering the membrane plant materials.
- D. Authorises the Chief Executive to enter a contract for supply and installation of the membrane plant up to a value of \$3.7 million.
- E. The contents of this report be released once a contract is entered into for the construction of the remaining bore field and treatment work.
- F. That a media statement be released to update the public on the current project status and expected completion.

### 2. Background

Council considered a report in March 2021 regarding procurement of early contractor involvement in completion of the Lake Dunstan water supply treatment and bore field design, and construction (Appendix 1). The estimated construction cost of the upgrade at that time was \$9.2 million.

Council resolved to:

- A. Receives the report and accepts the level of significance.
- B. Approves negotiation with Fulton Hogan for direct appointment for a contract to construct the Lake Dunstan water treatment plant, bore water tanks and ancillary work subject to ensuring that their price is competitive and subject to receipt of written probity advice supporting direct appointment.
- C. Approves the appointment of SwitchBuild for SCADA services and Marshalls / Palls for membrane supply and installation and subject to receipt of written probity advice supporting direct appointment.

Receipt of written probity advice supporting the appointments was received from procurement and probity consultants Morrison Low on the 30th of March (Appendix 2).

Staff and the design team then proceeded to work through a Hazard and Operability Study for the Lake Dunstan Water Supply scheme. This is a systematic way to identify possible hazards in a work process and allows further design optimisation. Following those steps completion of the detailed design with Stantec, SwitchBuild, Fulton Hogan and Pall Marshall Water Consortium took place.

An overall estimate and programme has been developed and was submitted by Fulton Hogan on the 6th of September 2021. The construction estimate for the final design that has been prepared by Fulton Hogan and the suppliers is \$17.2 million.

### **3. Discussion**

There are a number of factors which are resulting in an increased cost. These include:

- Changes in project scope that were made during the hazard and operability study
- Inclusion of previously excluded renewals work
- Significant cost increases in materials due to national and international market conditions
- Possible consultant underestimating
- Reduction in the original contingency by council officers

A comprehensive review of the construction estimate is required to quantify the value of each of these factors. This will include:

- A review of the changes that were made to the project scope, an estimate of the cost of each change, an explanation of the reason for the change, and prioritisation of the importance of each change.
- A breakdown of the renewals work, and costs of this that has been included in the upgrade costs
- An assessment of the percentage change in materials and labour costs due to current market conditions
- An assessment of the consultant's estimate
- A review of the contingency figures included in the consultant's estimate, council officer's report, and the contractor's estimate.

This work will take longer to complete than the time available between receiving the estimate and the Council meeting. Council staff are working with Stantec, Fulton Hogan, and the suppliers to do this review.

An independent review of the costs by another consultant is proposed to provide Council with confidence that the rates that have been submitted are fair and reasonable.

This information will be presented to Council on 3 November.

### **4. Overall Programme and Membrane Supply**

The overall programme is largely driven by the lead-in time on supply and then installation and commissioning of the membranes. Lead in time is currently nine months (membranes

are manufactured in Germany), then five months installation time, and six weeks for commissioning. If the membranes are ordered in early October, then completion will occur in December 2022.

The original consultant estimate for the membranes was \$3.22 million, and the current construction estimate is \$3.647 million. This is a cost increase of 13%. This percentage increase is considered reasonable within the current market which is experiencing considerable increases in prices across a range of construction products

In order to reduce further delays to the project, it is proposed that council proceeds with ordering the membranes. Review of the remaining project components and costs can then continue, for review at the November Council meeting.

## 5. Options

### Option 1 – proceed with ordering the membranes (Recommended)

Advantages:

- Review of costs for remaining components can occur during the membrane lead-in time.
- Delivery of the membranes will not delay plant commissioning

Disadvantages:

- Ordering the membranes commits Council to proceeding with the project before the end of project costs are fully understood.

### Option 2 – Delay ordering the membranes until after a review of the remaining components is undertaken

Advantages:

- Council will have a greater understanding of end of project costs before committing to further significant expenditure

Disadvantages:

- Delay to the procurement of key materials which are required to be sourced from overseas, increasing the risk of construction time delays and further cost increases.

## 6. Public Communication

There is a high level of public interest in this project. This report has remained confidential while council staff work through the finalised design with the contractor and suppliers, and while contract cost negotiations are underway.

If council approve proceeding with awarding the contract for the supply of the membranes, then it is proposed that a media statement be released following the 22 September meeting which advises the public:

1. The contract for supply and installation of the membranes has been awarded, and the value of this.

2. Due to international supply and shipping issues, the membranes are expected to take nine months to arrive from Germany, five months to install, and six weeks to commission. Based on this timeline, the current go-live date is expected to be December 2022.
3. Negotiations are currently underway with other key suppliers and contractors to enable construction to commence on the remaining project components.

## 7. Compliance

<b>Local Government Act 2002 Purpose Provisions</b>	This decision promotes the social, cultural, economic, and environmental wellbeing of communities, in the present and for the future by providing a safe and resilient water supply.
<b>Financial implications – Is this decision consistent with proposed activities and budgets in long term plan/annual plan?</b>	<p>The procurement of the membranes is \$427k (13%) higher than the original estimate, but within the funding available for this project this financial year.</p> <p>A recommendation regarding funding the remaining work to complete the project will be included in the report to council on 3 November 2021.</p>
<b>Decision consistent with other Council plans and policies? Such as the District Plan, Economic Development Strategy etc.</b>	Yes
<b>Considerations as to sustainability, the environment and climate change impacts</b>	The membrane plant will increase energy consumption required to deliver compliant water to homes and businesses. A new water take consent will be required for this project, and a water demand management plan will be required as a consent condition. This will include measures and education that will be undertaken to minimise water use, and loss.
<b>Risks Analysis</b>	<p>If council does not proceed with the project then the water that is delivered to a peak population of approximately 10,000 people will not be compliant with the legal requirements.</p> <p>Proceeding with ordering the membranes prior to finalising the end of project costs potentially commits Council to a higher level of expenditure than has been consulted on in the 2021-31 Long Term Plan.</p> <p>There are further risks to the timeline if there was another COVID-19 outbreak, further issues at ports, or the availability of sub-contractors to undertake electrical work.</p>

<p><b>Significance, Consultation and Engagement (internal and external)</b></p>	<p>The Corporate Services Executive Manager has been consulted on the financial implications in preparing this report.</p> <p>This project was consulted on in the 2018-28 Long Term Plan, and funding was included in the 2021-31 Long Term Plan. Council is not required to consult to increase its debt levels to fund the expected increased costs on this project.</p> <p>If increased funding is required to complete the project then this will be included in future annual plans.</p>
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## 8. Next Steps

The work outlined under section 3 of this report will be undertaken over the next three weeks. A report will then be prepared for the 3 November meeting for council to consider the scope of the project and the cost.

A recommendation regarding funding, and timing of this will be provided in the November report.

Subject to council approval, the contract for supply of the membrane plant will be signed by the Chief Executive.

## 9. Attachments

**Appendix 1 - March 24th 2021 Council Report**

**Appendix 2 - Lake Dunstan Water Supply Probity Letter - March 2021**

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9/09/2021

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10/09/2021