

# HARRISONS

## QUANTITY SURVEYORS

### PROJECT MANAGERS

Independent. Always.

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21 August 2020

Lee Robinson  
Saunders Robinson Brown  
PO Box 39  
Christchurch 8140

Dear Lee,

**Re: - Akaroa Wastewater Project**

Thank you for the information you have provided.

On first review, it appears Council are simply attempting to increase costs for their least preferred option, the harbour outfall, whilst reducing costs for their preferred option, the Inner Bays.

I understand the harbour outfall is the simplest option, and has progressed some way through the Resource Consent process.

However, the considerable contingency allowance included for the harbour outfall option seems at odds with this, more so compared to the other, perhaps more difficult, options which contain lesser contingency allowances.

In their reports, BECA list a number of exclusions and assumptions. Most are fairly typical however some are not. The following are a number that stand out: -

- Foreign exchange rate fluctuations and costs (more so now considering C-19),
- All quantities and dimensions are approximate,
- Measurements are based on GIS and Google Maps,
- Estimates include allowances for land purchase based on average CCC Rateable Valuations
- Pond / dam excavated material to be stock piled onsite,
- The estimates are to be considered high level concept design estimates and as such BECA allow an accuracy range of -20% to +30%,
- BECA state they are solely reliable on the information provided by others, and have not sought to verify it.

These simply lead to pricing uncertainty and a real chance of significant variations.

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**Directors:**

Stewart Harrison Reg. QS, FNZIQS, MNZIOB  
Grant Moore Reg. QS, FNZIQS, MNZIOB

We will provide a more in-depth analysis of the reports you have provided in due course.

We expect the above assists and, should you have any questions, please do not hesitate to contact me.

Yours faithfully,

Stewart Harrison  
**Managing Director**