

Memo

To:	Geoffrey Everitt, Alyson Hutton
From:	Richard Powell
Date:	Wednesday, 28 June 2023
cc:	
Subject:	PC0054 – Northlake Private Plan Change – Property and Infrastructure comment

To Geoffrey and Alyson,

Introduction

My full name is Richard Robert Powell. I hold a degree in Land planning and Development from University of Otago. I have 15 years' experience in Civil Engineering, 13 of those years working within the Queenstown Lakes District. I am employed as a Senior Infrastructure Development Engineer at Queenstown Lakes District Council (QLDC) and have been employed by QLDC since 2019.

My current role at QLDC involves assessing how proposed developments can be serviced. This requires a degree of knowledge around existing constraints within the networks as well as being aware of programmed upgrade works. This is similar to the assessments I have undertaken to produce this evidence.

Scope

I have been asked to provide evidence on infrastructure-related effects in relation to the proposed Northlake Private Plan Change (PC54).

Wastewater

The effects that PC54 would have on the wastewater network have been modelled, the conclusion of the modelling report is that there is sufficient capacity within the network to accommodate the additional flows expected should PC54 be approved as proposed, no upgrades to the local network are required.

There are standard provisions within the Subdivision and Land Development Code of Practice (5.3.3) that ensures a suitable wastewater solution that anticipates additional flows from 'upstream' development areas, this solution should expressly allow for all necessary easements for allowing 'upstream' developments to connect and any required upgrades to the network to accommodate.

Water Supply

An already constrained water network within the north Wanaka area would be further impacted by intensifying demand through additional zoned land as proposed. While there is a standard provision within the Subdivision and Land Development Code of Practice that the applicant would need to demonstrate a suitable servicing solution and undertake required upgrades – in this case it goes beyond typical conveyance or upsizing of existing to headworks.

It would be imperative that as a condition of this zoning, Council would be able to increase supply from the lake to the new treatment plant to meet growing demands, and as such the necessary headworks and trunk infrastructure network upgrades and easements for those works would need to be provisioned over the applicant's neighbours land. Council has conducted some investigations into a preferred alignment; not yet concluded but acknowledging close trade-offs between three viable options. All options require cooperation from Northlake and their neighbours to gain access to the lake via easements over their neighbours land.

The applicant should provide, on terms acceptable to Council, easements for at least two options for an easement to be exercised over the optioned alignments including neighbour land, either Sticky Forrest or the land owned by Alex Fraser Urquhart and Dunmore Trustees Ltd.

The relevant options are D1 and D3, and possibly B1.

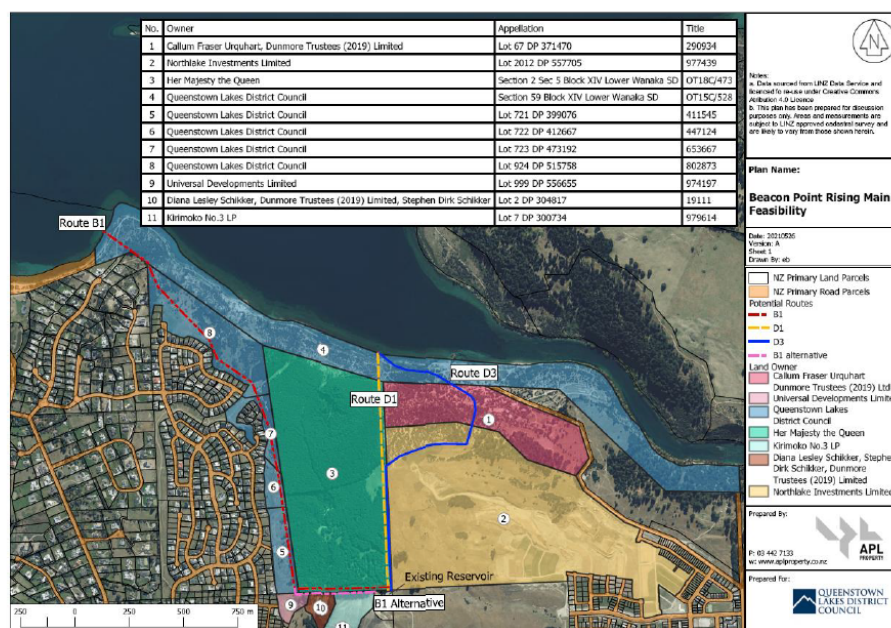


Figure 1: Rising main route options evaluated (Source APL Property)

Based on the information provided as part of the plan change application I accept that the level of the 'high level' reservoir is such that fire fighting pressures can be achieved for the proposed plan change area.

I also accept the information provided where the 'high level' reservoir is able to provide residential pressures to part of the subject area however for the parts that are not able to be serviced with adequate residential pressures we would require the 'high level' reservoir to be raised to enable it to provide adequate pressures or a secondary higher reservoir will need to be included to supply the upper areas.

I accept the above to be a feasible solution with the details to be worked through at the time of detailed design.

Stormwater

The effects that additional development in this area will have on the existing Stormwater network and flow paths has been assessed in a separate report by Kate Purton (Beca). I accept Kates report and support the recommendations outlined in paragraph 38 of her report.

Richard Powell

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