

13 August 2025

Selwyn Chang
Principal Civil Engineer (Timaru Lead)
Davis Ogilvie Ltd

By email: selwyn@do.nz

Attn Selwyn

Stormwater Approval –Coniston Park Farm Road Subdivision Plan Change Application PC003.23

Documents Reviewed

We have reviewed the DO Ltd drawings and documents:

- *OP01: Updated Plan Change ODP;*
- *OP02 & OP03: Supporting cross-sections and additional technical information for Council submission;*
- Previous written and verbal correspondence from DO Ltd including *Response to Request Further Information 2 September 2024*, dated 2 May 2025.

Review Summary

We have reviewed the stormwater Management Areas (SMA)s shown on OP01, OP02 & OP03:

1. We have assumed that both basins have a design depth of 0.65 m based on the provided cross section and high groundwater (GW) level information provided previously. This gives less than 1m separation to GW, which is acceptable provided no GW intercepts the basin. A geotech engineer may need to provide a pond liner at the design stage. Provided the levels work for the drain outfall the geotech *may* also be able to deepen the ponds - again, provided they are lined. Based on this, the ponds need to be extended detention first flush systems (empty at a controlled rate, but within 48 hrs) rather than filtration ponds.
2. The updated SMAs are approx. 8,600 sq.m and 12,100 sq.m for the west and east basins respectively. This was scaled by us and is therefore approximate. It was not clear whether the pedestrian walkway is within basin or on the top of bank, which affects the area. We have calculated that the basins would need to be roughly 1.0 ha and 1.3 ha respectively to accommodate the 48-hour 1% AEP event.
3. The SMA sizing check above does not consider:
 - Maintenance strips (there are roads surrounding the SMA, so arguably maintenance strips could be minimal), shaping factors, or the question related to “pedestrian / cycle link” discussed above, provided in the ODP drawings.
 - Tailwater effects of the orifice connection i.e. water may not be able to discharge at the assumed rate to Wakanui Creek.

- Complications with combining first flush function with attenuation in a single pond – the first flush portion needs to empty within 48 hours, but attenuation can empty at a rate to suit the time of concentration of the creek receiving water.
4. Our calculations indicate that drain-down times for both basins would be longer than 48 hours.

Conditional Approval

ADC approves operative stormwater discharges in principle under the ADC global stormwater consent CRC186263 based on the concept design shown on OP01, OP02 & OP03 subject to approval of detailed design and the following requirements:

- The basins in the SMA are to be 'extended detention'. There must be an appropriate separation to the highest recorded groundwater level.
- The SMAs are to be designed for the 1% AEP + climate change.
- Any relevant Ecan consents are granted.

Please contact me with any questions.

Yours faithfully



Andrew Tisch
Development Stormwater Consultant

021 90 65 38