



Memorandum

☒ **Auckland**
Level 3, IBM Centre
82 Wyndham Street
PO Box 91250, 1142
+64 9 358 2526

☐ **Hamilton**
PO Box 1094, 3240
+64 7 960 0006

☐ **Tauranga**
PO Box 13373, 3141
+64 7 571 5511

☐ **Wellington**
PO Box 11340, 6142
+64 4 385 9315

☐ **Christchurch**
PO Box 110, 8140
+64 3 366 8891

☐ **Queenstown**
PO Box 1028, 9348
+64 3 441 1670

☐ **Dunedin**
PO Box 657, 9054
+64 3 470 0460

Attention: Roc Liang

Company: Build Rich Ltd

Date: 21 December 2021

From: Dr Lee Shapiro

Message Ref: Wetland feature on the southern boundary of 1 Silverwater Drive

Project No: BM210389

Background

Build Rich Ltd are planning to lodge and gain resource consent to undertake a residential subdivision at 1 Silverwater Drive, Silverdale (Lot 7 DP 545151), Auckland. Boffa Miskell Ltd was engaged to undertake an ecological values survey of the property focused on an evaluation of prospective wetland features with respect to the Resource Management Act (RMA) and National Policy Statement for Freshwater Management 2020 definition¹.

Wetland Values

Field assessments identified a wetland feature located adjacent to the southern boundary of the property that extends into the neighbouring property. Vegetation met the 'rapid test' (i.e., all dominant species have a wetland indicator status of OBL or FACW) and the feature meets the criteria of a natural wetland under the NPS-FM protocols and was assessed as a natural wetland. At the lower extent of the wetland (the most western point) it is dominated ($\geq 95\%$) by *Glyceria maxima* (an exotic weed) interspersed with buttercup and bindweed (Figure 1a) and the flow path crosses to the neighbouring property where it becomes channelised and surrounded by rank grasses and herbs. The middle of the wetland is characterised by the same make up of vegetation communities but with some surface water evident. At the upper extent of the wetland (the most eastern point) the *Glyceria* abruptly gives way to kikuyu (Figure 1b) and meets an ephemeral watercourse. In its current state we have assessed the wetland as having Low ecological value.

Wetland inputs

The proposed residential subdivision will involve the development of the land surrounding the wetland on all three sides within the Project Site. The current inputs into the wetland are from an ephemeral flow path to the east and it is our understanding that this flow path will be reclaimed as part of the proposed development and that the inputs to this wetland will be maintained post-development using stormwater flows from the neighbouring house lots. The key consideration is ensuring that pre-development levels of inputs to the wetland are maintained and that the wetland remains wet for the same periods as it currently does. The stormwater outlet into the wetland will also need to allow for flows from large storm events to bypass the wetland to avoid potentially damaging flows.

Restoration

As part of the proposed development, the wetland will be restored and enhanced by controlling the current exotic plant species and undertaking restoration planting with native wetland plants. It is our understanding

¹ MfE (Ministry for the Environment) (2020). National Policy Statement for Freshwater Management. <https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-freshwater-management/>

that the proposed restoration planting of native wetland plants will include *Carex virgata*, *Phormium cookianum*, *Melicytus ramiflorus*, *Coprosma robusta*, *Carex lessionianna*, *Carex secta*, *Cordyline australis* and *Apodasmia similis*.

The proposed restoration planting areas and the setback distance for the development on the land surrounding the wetland varies due to the topography and the surrounding proposed subdivision layout. It is our understanding that in some areas the restoration planting will extend >20 m from the edge of the wetland and at the closest point the proposed house lots will have a setback approx. 2.5 m from of the edge of the wetland.

Overall, the effect of the proposed restoration planting around the margin of the wetland will be to provide a buffer and the restoration planting within the wetland will improve the vegetation values as it is currently dominated by exotic weeds. Provided that the restoration planting is undertaken as proposed and that the flows to this wetland are maintained post-development, then we have assessed that the overall level of ecological effect will be a net gain as the wetland will be restored to a more functional state from its currently degraded state.



Figure 1 (a & b). Wetland with (a) *Glyceria maxima* dominated area and (b) upper extent of wetland where *Glyceria maxima* (left side of photo) meets kikuyu (right side of photo).