APPENDIX A – Engineering assessment and recommended conditions

Copy for RMA/2020/2000 RMA/2019/2440 70/74 Rue Balguerie Land Use Consent for Earthworks **Engineering Comments:**

This report is confined to the relevant engineering matters under Chapter 8 of the District Plan.

The application is for the earthworks to provide room for the construction of a retaining wall and associated access ramps including a lift and decking to a café building for which a building consent will be sought, and a general extension of the gardens.

The 53m³ of earthworks required that exceeds that allowed by Table 9 as a Permitted Activity is understood by the applicant to be outside any exemption under rule 8.9.3 of the District Plan as it is not needed for the support of any work to be covered by the building consent.

The site slopes in a number of steps and presents as a number of features that have been built over the years including a large timber retaining wall supporting the garden area and some stairs built relatively recently. The plans indicate some surveyed levels but these may not be sufficient to demonstrate other than the engineering issues.

The site is mapped in the Remainder of the Port Hills and Banks Peninsula Slope Instability Management Area and is clear of any rockfall risk.

However a detailed geotechnical report on file indicates that while the loess silt subsoil typical of the area provides a stable medium for specifically engineered piled foundations, care is required to ensure that surface water runoff is controlled and water is prevented from entering excavations.

The Assessment of Environmental Effects (AEE) refers to the possibility of dust nuisance soiling properties and that suppression will be undertaken by timely watering down as practical and in accordance with best practice. Excessive noise from excavating machinery and haulage is not considered likely and otherwise would have less than a minor and temporary effect.

The AEE also informs that storm water will be able to be controlled with an assumed available network connection and will be managed to avoid inundation or the stability of neighbouring properties or to the detriment of adjoining land.

Based on the information provided or on file, and subject to the adoption of conditions for the conduct of the work, which should be under professional engineering control, it is considered that the applicable provisions of Chapter 8 of the District Plan can be satisfied to enable consent to be granted.

A draft list of engineering conditions is appended for discussion with and agreement by the applicant for inclusion in the consent document.

Bill Dray **Civil Engineer Specialist Engineering Services Team Consenting and Compliance Group**

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- All filling and excavation work shall be carried out in accordance with a site specific Erosion and Sediment Control Plan (ESCP), prepared by a suitably qualified and experienced professional, which follows the best practice principles, techniques, inspections and monitoring for erosion and sediment control contained in ECan's Erosion and Sediment Control Toolbox for Canterbury http://esccanterbury.co.nz/. The ESCP must be held on site at all times and made available to Council on request.
- 2. Run-off must be controlled to prevent muddy water flowing, or earth slipping, onto neighbouring properties, legal road, or into a river, stream, drain or wetland. Sediment, earth or debris must not fall or collect on land beyond the site or enter the Council's stormwater system. All muddy water must be treated, using at a minimum the erosion and sediment control measures detailed in the site specific Erosion and Sediment Control Plan, prior to discharge to the Council's stormwater system.
- 3. The ESCP shall be implemented on site and maintained over the construction phase, until the site is stabilised (i.e. no longer producing dust or water-borne sediment). The ESCP shall be improved if initial and/or standard measures are inadequate. All disturbed surfaces shall be adequately topsoiled <u>and</u> vegetated as soon as possible to limit sediment mobilisation.
- 4. Dust emissions shall be appropriately managed within the boundary of the property in compliance with the *Regional Air Plan*. Dust mitigation measures such as water carts or sprinklers shall be used on any exposed areas. The roads to and from the site, and entrance and exit, must remain tidy and free of dust and dirt at all times.
- 5. The consent holder must notify Christchurch City Council no less than three working days prior to works commencing, (email to rcmon@ccc.govt.nz) of the earthworks start date and the name and contact details of the site supervisor.

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APPENDIX B – Urban design assessment

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