

# University of Otago

# Hākitekura Redevelopment – Academic Retreat and Conference Facility



Land Use Consent Application (RM200570) to the Queenstown Lakes District Council

Section 92 Response – Part 1

December 2020



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## TABLE OF CONTENTS

1	INTR	INTRODUCTION		
2	PLAN	INING (Q.1 TO Q.4)	1	
	2.1	NATURE AND SCALE OF ACTIVITIES / OPERATIONAL REQUIREMENTS (Q.1)	1	
	2.2	LANDSCAPING (Q.2)	4	
	2.3	LEGAL INSTRUMENTS (Q.3)		
	2.4	CONSENT HISTORY (Q.4)	5	
3	ENG	NEERING (Q.5)	5	
	3.1	INTRODUCTION		
	3.2	Access Road Upgrade (Q.5)	5	
4	TRA	ISPORT (Q.14 TO Q.22)	6	
	4.1	INTRODUCTION	6	
	4.2	MINIMUM PARKING REQUIREMENTS (Q.14)		
	4.3	COACH PARKING (Q. 15)	7	
	4.4	MANOEUVRING (Q.16)		
	4.5	OVERFLOW PARKING (Q.17)	9	
	4.6	LIGHTING FOR PARKING AREAS (Q.18)		
	4.7	Access (Q.19)	9	
	4.8	WOOLSHED ROAD - PLACE / LINK CONTEXT (Q.20)		
	4.9	TRAVEL DEMAND / MANAGEMENT OF THE UNIVERSITY AND THIRD PARTY USE (Q.21)		
	4.10	CYCLE SAFETY (Q.22)	15	
5	NOIS	Е (Q.23 TO Q.33)	15	
	5.1	INTRODUCTION		
	5.2	EVENT NOISE (Q.23 TO Q.29)		
	5.3	TRAFFIC NOISE (Q.30 TO Q.33)	16	
6	LANI	DSCAPING / BUILT FORM (Q.34 TO Q.42 AND 'GENERAL LANDSCAPE COMMENT')	18	
	6.1	LANDSCAPE PLAN (Q.34 TO Q.37)		
	6.1.1			
	6.1.2			
	6.1.3			
	6.1.4			
	6.2	BUILDINGS (Q.38 TO Q.42)		
	6.2.1			
	6.2.2			
	6.2.3			
	6.2.4			
	6.2.5			
	6.2.6			
	6.3	GENERAL LANDSCAPE COMMENT	21	

## **APPENDICES:**

Attachment 1A:	Vivian+Espie – Response to Landscape Issues
Attachment 1B:	Lane Neave – Legal RFI Responses
Attachment 1C:	Tim Kelly Transportation Planning Limited – Response to Transportation Issues

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Attachment 1D:Acoustic Engineering Services – Noise ResponseAttachment 1E:Kerr Ritchie – New and Updated Drawings



## **1** Introduction

The University of Otago (**the University**) lodged a resource consent application, with the Queenstown Lakes District Council (**QLDC**), in July 2020. The application seeks a land use consent to construct and operate an academic retreat and conference facility on the land that the University was gifted at Woolshed Bay beside Lake Wakātipu.

A request for further information (**RFI**), in accordance with section 92 of the Resource Management Act 1991 (**RMA**), was received from the QLDC on 5 October 2020. This report, and associated attachments, is the first part (i.e., Part 1) of a two-part response to the RFI. The following sections of this Part 1 response respond to the following RFI questions:

- Section 2 Planning. This section of this document, and associated Attachments 1A and 1B, responds to Q.1 to Q.4.
- Section 3 Engineering. This section of this document, and associated Attachment 1B, responds to Q.5, which relates to the proposed 'access road upgrade'.
- Section 4 Transport. This section of this document, and associated Attachment 1C, responds to Q.14 to Q.22, although further information in relation to Q.16, which relates to on-site manoeuvring, will be provided in Part 2 of the RFI response.
- Section 5 Noise. This section of this document, and associated Attachment 1D, responds to all the event noise (Q.23 to Q.29) and traffic noise (Q.30 to Q.33) questions contained in the RFI.
- Section 6 Landscaping / Built Form. This section of this document, and associated Attachments 1A and 1E, responds to Q.34 to Q.42 as well as the 'general landscape comment' provided at the end of the RFI.

The second part (Part 2) of the RFI response, which will be provided as soon as the outstanding information comes to hand, will respond to the remaining RFI questions. The outstanding information to be provided in the Part 2 RFI response relates to the remaining 'engineering' questions (Q.6 to Q.13) and one of the 'transport' questions (i.e., Q.16 - manoeuvring).

In addition, the intention is to provide a revised and updated set of proposed consent conditions in Part 2 of the RFI response. The updated conditions will incorporate the changes, as outlined in the RFI response/s, to the consent conditions contained in Section 10 of the land use consent application and any new conditions suggested within the RFI response/s.

## 2 Planning (Q.1 to Q.4)

2.1 Nature and Scale of Activities / Operational Requirements (Q.1)

This information is requested to understand the scale of the Hākitekura Redevelopment -Academic Retreat and Conference facility including the private commercial activities/events proposed to operate on-site and how the variety of uses will work together or individually.

a) The AEE and Integrated Traffic Assessment states the proposed lecture theatre will accommodate a maximum of 120 people. Please confirm the maximum (or assumed



maximum) number of attendees for a private event and/or an event associated with the University, or is it this dictated by the lecture theatres capacity.

- b) Please confirm the maximum number of staff on-site to manage the University Retreat and conference facility and the maximum number of staff required to manage private events.
- c) The proposal seeks to use the facility for commercial hire as a venue for private bookings. Please confirm the number of private commercial events anticipated per annum.
- d) The operating hours are discussed within the AEE. Please confirm if the hours of operation include staff time to prepare for events.

The specific questions contained in Parts (a) to (d) of the above RFI question are responded to separately below.

## Maximum Visitor Numbers (Part (a))

As stated within this RFI question, the application outlines that the University's proposed academic retreat and conference facility, once fully operational, will be able to accommodate 120 visitors and up to five staff. The RFI requests confirmation of the maximum number of people (or assumed maximum) for events at the site. In asking this question, the RFI queries whether these numbers are dictated by the capacity of the lecture theatre.

While the seated capacity of the fully developed Hākitekura lecture theatre is 120 people, more people may be able to be accommodated in the lecture theatre under different seating/standing arrangements. The redeveloped Woolshed building could also accommodate between 50 to 60 people at any one time.

However, the University's Property Services, who will be responsible for, and manage, the facility once operational, advised that they could cater for up to 120 people in the lecture theatre, and up to 50 to 60 people in the Woolshed, but not at the same time. Therefore, it is operational considerations that have defined the 'maximum' number of the visitors to the site at any one time, not the seated capacity of the lecture theatre.

Given this operational guidance, the technical assessments prepared in support of the land use consent application, utilised these numbers, including the Integrated Transportation Assessment (ITA) (Appendix 5 of the application), to quantify the potential effects of the proposal and the mitigation required.

For the above reasons, the University confirms that the maximum number of people allowed on the site at any one time will be 120 people (excluding up to five staff, as discussed below). This maximum number of visitors will also apply to private events.

While identifying the maximum number of people that will be present on the site, it is important to recognise that the actual number of people attending any specific event, whether a University or private event, will generally be considerably less than 120 people. The University, in assessing the viability of the proposed Hākitekura redevelopment, considered that the average number of people associated with University run events (both internal and external) would range from around 10 to 45 people.

## Maximum Staff Numbers (Part (b))

The application for the Hākitekura redevelopment identified that the University will employ up to five staff to run the facility, with a least one of those staff members resident in the staff



accommodation to be provided on-site. This number of staff was identified by the University having considered the site's operational requirements.

In addition, the University recognises that it may be necessary to engage additional personnel to provide support during larger events, such as additional kitchen and waiting staff. However, given the above discussion in relation to the maximum number of 'visitors' to the site, any additional personnel required for such events will be counted as part of the 120 people restriction.

To reflect the maximum number of people, plus staff, restriction discussed above, the University offers that the following condition form part of the land use consent being sought:

There shall be no more than 125 people, including staff, present on the site at any time.

#### Annual Number of Commercial Events (Part (c))

The application for the proposed Hākitekura redevelopment identifies that:

To provide for the economic viability of the facility, when the facility is not in use by the University or associated institutions, the University propose to make the facility available for private bookings, for example weddings or bookings of the visitor accommodations units. This commercial use will only be available by prior arrangement with the University. On this basis, the facility will not be open to the general public, and any guest visits will be by appointment only, or for booked events.<sup>1</sup>

The RFI requests information on the number of commercial events anticipated each year. The University, when assessing the viability of the proposed redevelopment, considered that the following was likely:

- **Use of the visitor accommodation**. The University considers that the accommodation units will be available for external bookings around 35% of the time. At all other times, the accommodation units will be available for use by the University in support of its events.
- **Private events / weddings**. This relates to the use of the Woolshed building and the Hākitekura lecture theatre. The University considers that these facilities will be available for such events around 20 times a year. If the facility is being used for such an event, the visitor accommodation units will not be available for separate external bookings.

## **Operating Hours (Part (d))**

In relation to operating hours, Section 3.1 of the application<sup>2</sup> states:

The proposed facility's hours of operation, when hosting academic retreats and conferences will generally be from 8am to 6pm. Evening functions associated with retreats and conferences as well as other events hosted by the University, will be finished by midnight. Any private events at the facility will also be required to take place during these hours (i.e., between 8am to midnight).

Given the proposed operating hours for the facility, the following condition was offered in the application:

*Except for the use of the visitor accommodation units, the facility must only operate between* 8.00am to 12.00am (midnight) Monday to Sunday inclusive<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> Third paragraph in Section 3.1 of the land use consent application.

 $<sup>^{2}\,</sup>$  Fourth paragraph in Section 3.1 of the land use consent application.

<sup>&</sup>lt;sup>3</sup> Condition 4 in Section 10 of the land use consent application.



The RFI requests clarification on whether or not the proposed hours of operation applies to staff preparing for events at the facility. The proposed 'hours of operation' reflect the facilities' 'opening hours'. That is, when visitors or guests, would be able to access the facility.

It is anticipated that the facilities' staff, except for the staff member resident in the 'staff accommodation' (i.e., house), will arrive or depart from the site either side of these hours. This would also be the case for any contractors (i.e., caterers etc) assisting with private events occurring at the site.

As identified above under the heading 'maximum staff numbers', the number of staff and/or hired personnel are small in comparison to the number of visitors or guests that may be present at the site at any one time.

The expert noise and traffic assessment for the University has confirmed that there are no implications in terms of noise and traffic effects of staff accessing the site and undertaking any set up or pack down activities outside of the proposed operating hours for the facility. The level of activity is unlikely to be much greater than that associated with the past long-standing residential use of the property.

To provide more clarity around the proposed restriction on 'operating hours', or the hours that the facility is open for visitors and guests, the following amendment to the 'operating hours' condition is proposed:

Except for the use of the visitor accommodation units, the facility must only operate be open to visitors / quests between 8.00am to 12.00am (midnight) Monday to Sunday inclusive.

## 2.2 Landscaping (Q.2)

The majority of existing landscaping along the lake foreshore area is within Crown land administered by LINZ. The boundaries between the lakeshore and the subject site were planted by the previous owners of the Woolshed and Shearers Quarters and while they are an established feature, they contribute significantly to the visual screening of the existing and proposed buildings being relied about to some degree to mitigate adverse visual and landscape effects. The V+E landscape report states "The applicant does not have control over this land but has no intention to alter its current treatment. It appears particularly unlikely would seek to remove this existing vegetation.

Please outline how the applicant seeks to ensure/provide certainty that this established planting can be legally relied upon as currently the Applicant has no control over this land, therefore the established vegetation cannot be relied upon for mitigation for this proposal. While, it is understood the risk might be low that this vegetation would ever be removed, the consequences in terms of visual effects when viewed from the lake would be substantially altered if this did eventuate. The Applicant is to determine whether the landscape assessment needs to be revised on this basis.

Vivian+Espie have responded to this question (Q.2 of the RFI) in a memorandum dated 23 November 2020. Vivan+Espie's memo is attached to this report as **Attachment 1A**.

In addition, Lane Neave has commented from a legal perspective that given the lake foreshore area is reserve land vested in the Crown, removing the vegetation in this area would be contrary to the purpose for which it is held.



## 2.3 Legal Instruments (Q.3)

Please provide details and copies of legal instruments (covenants, easements etc) that are relevant to this subject site.

Lane Neave has responded to this question (Q.3 of the RFI) in a memorandum dated 17 December 2020. Lane Neave's memo is attached to this report as **Attachment 1B**.

## 2.4 Consent History (Q.4)

Please confirm and outline if there are any relevant underlying resource consents for the subject site.

Lane Neave has responded to this question (Q.4 of the RFI) in a memorandum dated 17 December 2020. Lane Neave's memo is attached to this report as **Attachment 1B**.

## 3 Engineering (Q.5)

### 3.1 Introduction

The RFI, under the 'engineering' heading states:

To ensure that the subject site can be safely accessed and service connections to the subject site are feasible, please provide evidence or respond to the following:

Part 1 of the RFI response, as contained in this document, responds to Q.5 of the engineering RFI questions. The remaining 'engineering' questions, namely Q.6 to Q.13, will be responded in the second part (Part 2) of the RFI response.

## 3.2 Access Road Upgrade (Q.5)

It is proposed to upgrade the access road to a 3.5m formed width with passing bays at 200 to 250m intervals, to support two way traffic flow. This will involve works within the neighbouring properties (Lot 2 DP 452315 & Lot 5 DP 452315) and written approval has not been provided for these neighbouring properties to confirm these works can be undertaken. Please provide written approval from the affected landowners endorsing the accessway upgrade works to proceed. Please also provide a copy of any relevant ROW easements associated with the access drive.

Lane Neave has responded to this question (Q.5 of the RFI) in a memorandum dated 17 December 2020. Lane Neave's memo is attached to this report as **Attachment 1B**.



## 4 Transport (Q.14 to Q.22)

## 4.1 Introduction

The RFI, under the 'transport' heading states:

WSP have been engaged to undertake a peer review of the ITA prepared by Tim Kelly Transportation Planning Ltd to ensure the parking supply being proposed to service the development can adequately cater for the traffic demand generated by the activities and adverse effects on the safety and functioning of the private accessway can be mitigated. Please provide a response to the RFI items listed below which have been informed by the WSP peer review document (Attachment A to this letter) and those that are considered relevant when considering the planning context are outlined below:

The WSP peer review is responded to in relation to the specific questions below.

## 4.2 Minimum Parking Requirements (Q.14)

As discussed in the ITA prepared by Tim Kelly, the proposed development does not cleanly fit within an activity category when calculating the District Plan parking requirements under the ODP and PDP. The traffic generation assessment in the ITA has been carried out on the basis there would be a maximum of 125 people on site, which is based on the expected future capacity of the lecture theatre (120 people) and 5 staff. Assumptions have been made assuming specific proportions of people arriving by minivan, private car and taxi/shuttle, however it is not clear how the proportions were determined and what activities they are based on.

a) Please provide further information on the actual parking demand for the proposed activities on-site – refer to Comment 01 and 08 of Attachment A.

In assessing the actual parking demand for the activities, WSP agree with the methodology used by the Applicant but have recommended the Applicant carry out sensitivity testing on the parking demand to determine the upper limit of the expected parking demand – refer to Comment 14 of Attachment A.

b) Please provide further justification as to how the traffic generation and specific proportions of guests arriving on-site by minivan, private car and taxi/shuttle was derived. WSP have recommended sensitivity testing should be carried out to determine an upper limit of traffic generation for the proposed development - refer to Comment 17 of Attachment A.

Tim Kelly Transportation Planning Limited (**TKTP**) have responded to this question (Q.14 of the RFI) in a letter dated 17 December 2020. TKTP's letter is attached to this report as **Attachment 1C**.

While a technical response has been provided by TKTP, it is also important to recognise that in the future, in accordance with the National Policy Statement on Urban Development 2020 (**NPS-UD 2020**), minimum parking requirements will have to be removed from the Proposed Queenstown Lakes District Plan (**PDP**)<sup>4</sup>. The NPS-UD 2020 came into force in August 2020.

<sup>&</sup>lt;sup>4</sup> Although the PDP is subject to appeal, as the PDP is the QLDC's future district plan, the above NPS-UD 2020 assessment has not referred to the Operative Queenstown Lakes District Plan (**ODP**) within this response. However, it is noted, that if the ODP's minimum car park requirements are still operative at the time QLDC decides, or is



Clause 3.38 of the NPS-UD 2020 requires tier 1, 2 or 3 territorial authorities to remove all minimum car parking provisions (i.e., objectives, policies and rules), except for accessible car park requirements, from district plans, as soon as practicable and by February 2022 at the latest<sup>5</sup>. The removal of minimum car parking provisions from district plans are to be made without using the process contained in Schedule 1 of the RMA. The NPS-UD 2020 identifies that the QLDC is a tier 2 local authority.

Given the requirements of the NPS-UD 2020, it is considered that the current minimum parking requirements of the PDP (as well as the Operative Queenstown Lakes District Plan (**ODP**)) will be removed in the near future.

## 4.3 Coach Parking (Q. 15)

The ITA states that "the University is not permitting visitation by coaches and therefore specific parking areas for coaches is unnecessary and no adverse effects would arise". It is noted that due to the width of the private accessway, large coaches would have difficulty accessing and manoeuvring around the subject site and it does not seem practical to provide for coaches. Please confirm how the Applicant intends to manage/prevent coaches from arriving on-site, particularly when the site is being used for third party events and also to elaborate on why demonstrate why visitation by coaches is not anticipated to serve the development (Refer to Comment 2).

TKTP have responded to this question (Q.15 of the RFI) in a letter dated 17 December 2020 as contained in **Attachment 1C**.

TKTP's response identifies that the University is offering, as part of this RFI response, that a Transportation Management Plan (**TMP**) condition be attached to the land use consent being sought for the Hākitekura redevelopment.

The proposed condition is as follows:

At least 15 working days prior to the opening of the academic retreat and conference facilities to visitors / guests, the Consent Holder shall submit a Transportation Management Plan (TMP) to the QLDC's Monitoring and Enforcement Team for review and certification that the TMP achieves the objectives set out in this condition. The objectives of the TMP are to manage travel to and from the site for various users / transport modes and to manage the parking demands generated by the activities undertaken and events held at the facility.

The matters that the TMP shall address include, but are not limited to:

- (a) The management of vehicles, including staff vehicles, entering and exiting the site for Consent Holder activities and events;
- (b) The management of vehicles, including staff vehicles, entering and exiting the site for private accommodation stays and events, including through the Consent Holder's booking system;
- (c) The management of the use of Woolshed Road, including the passing bays, including appropriate signage indicating the low-speed environment and the availability of the passing bays at certain distances;

required to remove these requirements, then the minimum car park requirements would need to be removed from the ODP as well.

<sup>&</sup>lt;sup>5</sup> The timeframes for implementing NPS-UD 2020 provisions are specified in Clause 4.1.



- (d) The use of the permanent and overspill parking areas by visitors / guests and staff, including appropriate signage of the overspill parking area when it is required to be used;
- (e) The restriction on full-size coaches accessing the site, including through the Consent Holder's booking system and through signage located at the intersection between Maori Jack Road and Woolshed Road; and
- (f) The safety of cyclists accessing the site, including through the installation of warning signage at either end of Woolshed Road to warn motorists of the potential presence of cyclists.

The operation of the facility shall be undertaken in accordance with the most current version of the TMP as accepted as suitable by the QLDC.

(<u>Advice Note</u>: For the purpose of this consent, a full-sized coach is a coach that has a seating capacity in excess of 20 people, excluding the driver).

The proposed TMP condition, which includes management objectives, requires the University to develop TMP procedures, as part of the TMP, that will meet the proposed management objectives (as outlined above). This will include procedures that will ensure that full-sized coaches do not access the site and will also ensure that proposed Condition 3, as contained in Section 10 of the land use consent application, is complied with. As outlined in TKTP's response, as the University, through its booking system, has control over who access the site and how they access the site, it is considered that preventing coaches from entering the site can be achieved.

The final part of this RFI question asks why coaches will be prevented from accessing or serving the site. The University committed to this restriction following discussions with the other parties that use Woolshed Road to access their properties.

## 4.4 Manoeuvring (Q.16)

*Please demonstrate that sufficient on-site manoeuvring can be provided for the following scenarios:* 

- a) Where parking spaces are in the immediate vicinity of circulation roadways please provide swept path diagrams.
- b) The ITA states a manoeuvring area will be provided adjacent to the Woolshed building to enable minivans / taxis to turn around when dropping off or collecting passengers. This will also enable service vehicles to turn around. Please confirm where this location is an annotate it on the site plan and please provide swept path diagrams for a larger service vehicle (8m truck) manoeuvring into and out of the service area for loading/unloading.

TKTP have responded to this question (Q.16 of the RFI) in a letter dated 17 December 2020 as contained in **Attachment 1C**. As noted in TKTP's response, drawings showing the manoeuvring areas are being prepared and will be provided in Part 2 of the University's RFI response.



## 4.5 Overflow Parking (Q.17)

Please clarify the location and number of parking spaces within the parking overflow area and the likelihood that these spaces will be utilised to determine the full extent of the parking shortfall.

TKTP have responded to this question (Q.16 of the RFI) in a letter dated 17 December 2020 as contained in **Attachment 1C**. The 'carpark plan' (Dwg. No. 10-03c) referred to in TKTP's response is contained in **Attachment 1E** of this report.

## 4.6 Lighting for Parking Areas (Q.18)

Please confirm compliance can be achieved with the illumination standards in to the ODP (Rule 14.2.4.1 xvii) and PDP (Rule 29.5.12).

An assessment of compliance with these ODP and PDP illumination standards was provided in the land use consent application lodged with QLDC (refer to Table 1 in Section 4.4.3 and Table 2 in Section 4.5.3 of the application).

The compliance assessment concluded, while recognising that detailed design of the proposed Hākitekura redevelopment is still be undertaken by the University, that the University will ensure that these lighting standards (and other lighting standards) are complied with. For this reason, these standards were not included as a consent trigger for the land use consent application.

It is noted that a proposed consent condition was offered in the land use consent application requiring site lighting to be designed and installed in a manner that complies with QLDC's Southern Lighting Strategy (refer to Condition 17 in Section 10 of the land use consent application).

For completeness, the compliance assessment contained in Tables 1 and 2 respectively of the land use consent application state:

The illumination standard (Site Standard 14.2.4.1(xvii)) requires all parking areas to be illuminated to a minimum maintained level of 3 lux, with high uniformity, during hours of operation. The University will ensure that this standard, as well as QLDC's Southern Lighting Strategy, is complied with.

The lighting of parking areas standard (Standard 29.5.12), where relevant to this proposal, requires all parking areas: to be adequately lit and to comply with QLDC's Southern Lighting Strategy. The University will ensure that this standard is also complied with.

## 4.7 Access (Q.19)

Please provide an assessment of the vehicle crossings and access against the relevant Transport Rules under the ODP and PDP to determine compliance or if resource consents will be required as the proposal is for a non-complying activity in this zone and is of a scale that is not anticipated under both the ODP and PDP. The ITA states that these standards are not applicable to the proposed development because it utilises an existing access road with no new vehicle crossings being proposed, however as the proposed activities will increase traffic generation to and from the site, it is important to understand if the existing access arrangements are sufficient, therefore should be assessed in greater detail (refer to comment 07 and 11).



TKTP's letter, as contained in **Attachment 1C**, provides a technical response to the capacity and safety considerations associated with the access to the University's site. To ensure that the above question has been fully responded to from both a planning and technical perspective, an assessment of the relevant district plan access and vehicle provisions that apply to the site is also provided below.

A Consent Order, signed by the Environment Court on 23 October 2020, means that many of the provisions of Chapter 29 (Transport) of the PDP are now required to be treated as operative (and the previous rules as inoperative) under section 85F of the RMA, including the access and vehicle crossing rules and standards of the PDP. On this basis, an assessment of the access and vehicle crossing provisions of the ODP is not necessary and therefore has not been undertaken.

Under the PDP, 'access' and 'vehicle crossing'<sup>6</sup> are defined as follows:

**Access** - Means that area of land over which a site or lot obtains legal vehicular and/or pedestrian access to a legal road. This land may include an access leg, a private way, common land as defined on a cross-lease or company-lease, or common property (as defined in section 2 of the Unit Titles Act 2010).

**Vehicle Crossing** - Means the formed and constructed vehicle entry/exit from the carriageway of any road up to and including that portion of the road boundary of any site across which vehicle entry or exit is obtained to and from the site, and includes any culvert, bridge or kerbing.

Woolshed Road is a private road, not a public road. The University, as landowner of Lots 1 and 3 DP 452315, has a legal right by way of an easement (refer to the Q.3 and Q.5 responses) to use Woolshed Road to access its site. This right of access applies to all parties that the University gives permission to access its site, both now and in the future once the proposed academic retreat and conference facility is operational, assuming consent is granted. It is understood that the statutory definition of a 'road' is a road which the public can access. This interpretation is supported by Rule 29.3.2.1 of the PDP which states that any land vested in the Council or the Crown as road is deemed to be a 'road'.

On the above basis, Woolshed Road is considered to be the access to the University's site as it provides 'access' to Māori Jack Road, and the intersection of Woolshed Road and Māori Jack Road is considered to be the 'vehicle crossing' for the purposes of applying the relevant PDP provision.

An assessment of relevant PDP access and vehicle crossing rules and standards, as contained in Chapter 29 of the PDP, that potentially apply to the University's site is provided in **Table 1** below. The assessment also comments, where potentially relevant, on the applicability of the rules / standards if it was considered that the site access (and associated vehicle crossing) was at the boundary of the University's property.

Given the assessment of relevant PDP rules, it is considered there are no transport related 'access' or 'vehicle crossing' rules or standards that give rise to additional consent triggers for the University's proposed Hākitekura redevelopment.

However, if QLDC reaches a different conclusion in relation to the rules and standards listed below, it is considered that any necessary additional consent triggers fall within the scope of the application given that the nature of the activity, the existing transport network and the access via, and proposed upgrades to, Woolshed Road are already fully described in the application.

<sup>&</sup>lt;sup>6</sup> The PDP's definitions for 'access' and 'vehicle crossing' are not under appeal and therefore can be deemed to be operative.



Table 1 – Assessment of Access and Vehicle Crossing PDP Rule Applicability.

PDP Rules/Standard	Applicability to Hākitekura Redevelopment				
Chapter 29 – Transport	hapter 29 – Transport				
29.4 – Rules - Activities					
Rule 29.4.4 - Loading and access. Activity Status – Permitted.	The assessment of potentially relevant PDP standards has not identified any access related standards that trigger the need to seek resource consent for this aspect of the proposal.				
	Therefore, the conclusion reached within the land use consent application in relation to this rule (refer to Table 2 in Section 4.5 of the application document), remains the same. That conclusion was that as access to the site is already established by way of Woolshed Road, this rule is not relevant to, or triggered by, the proposal.				
29.5 – Rules – Standards for activities outside roads					
<ul> <li>Standard 29.5.14 - Access and Road Design <ul> <li>a. All vehicular access to fee simple title lots, cross lease, unit title or leased premises shall be in accordance with Table 3.2 (Road Design Standards) of the QLDC Land Development and Subdivision Code of Practice 2018, including the notes within Table 3.2 and Appendices E and F; except as provided for in 29.5.14b below.</li> <li>b. All shared private vehicular accesses serving residential units and/ or visitor accommodation units in the High Density Residential Zone, Medium Density Residential Zone, and Low Density Residential Zone shall comply with the following standards:</li> <li>c. No private way or private vehicle access or shared access in any zone shall serve sites with a potential to accommodate more than 12 units on the site and adjoining sites.</li> </ul> </li> </ul>	As Woolshed Road is already established, it is considered that this standard (in particular Parts (a) and (e)) is not directly relevant to the University's proposal. It is also noted that the adequacy of Woolshed Road would have been considered and assessed by QLDC when the University's allotments were created during subdivision. In any case, it is noted that the University proposes to upgrade Woolshed Road to provide for a safe and efficient transportation network in the context of the proposed academic retreat and conference facility to be developed at the site. The upgrade includes widening the first 10m from Māori Jack Road intersection to 5.5m, providing five passing bays (5.5m wide), otherwise providing a uniform 3.5m width and road sealing. Part (b) of this standard is not relevant to the proposed Hākitekura redevelopment as the redevelopment site is not located within any of the				
<ul><li>d. Private shared vehicle accesses shall have legally enforceable arrangements for maintenance put in place at the time they are created.</li><li>e. All vehicle access design shall comply with Schedule 29.2.</li></ul>	specified zones. It is also noted that Parts (c) and (f), refers to 'units'. It is considered that the reference to 'units' means 'residential units' and therefore these standards also are not relevant to the University's proposal. However, in the context of				

#### University of Otago

Hākitekura Redevelopment – Academic Retreat and Conference Facility Land Use Consent Application (RM200570) – section 92 Response – Part 1



PDP Rules/Standard	Applicability to Hākitekura Redevelopment	
<ul> <li>f. The above access width rules do not apply to existing private shared vehicle accessways for the purpose of controlling the number of units that may be built using the accessways, unless the total land served by the accessway could provide for more than 12 units.</li> <li>Non-compliance status – Restricted Discretionary.</li> </ul>	these standards, it is noted that the University's proposal results in one less residential unit within its site (i.e., one residential unit compared to the two residential units currently on the site).	
Standard 29.5.15 – Width and design of vehicle crossings – urban zones Non-compliance status – Restricted Discretionary.	This standard is not relevant to the proposed Hākitekura redevelopment as the redevelopment site is not located in an urban zone.	
Standard 29.5.16 - Design of vehicle crossings – Rural Zone, Rural Residential Zone, Rural Lifestyle Zone, Wakatipu Basin Rural Amenity Zone, and the Wakatipu Basin Lifestyle Precinct Non-compliance status – Restricted Discretionary.	This standard is not relevant to the proposed Hākitekura redevelopment as the redevelopment site is not located within any of the zones specified within this standard.	
<ul> <li>Standard 29.5.17 – Maximum Gradient for Vehicle Access</li> <li>a. The maximum gradient for any private way used for vehicle access shall be 1 in 6.</li> <li>b. In residential zones</li> <li>c. The vehicle break-over angles shown in Diagram 2 of Schedule 29.2 shall not be exceeded over any part of the width of the vehicle access/ crossing. Non-compliance status – Restricted Discretionary.</li> </ul>	The maximum gradient for vehicle accesses under this standard is less than 16.7% (i.e., 1 in 6). Appendix 3 (Feasibility of Utility Services & Infrastructure) of the land use consent application contains drawings showing the longitudinal sections of Woolshed Road and the part of the access that is located within the University site (refer to Dwg. No. 193330-002-Rev. B). The drawing relate to the upgraded road. These drawings show that the gradient of the road ranges from +1% to -15%. On this basis, Part (a) of this standard is and will be complied with. Part (b) of the standard applies to accesses within residential zones and therefore is not relevant to University's site In relation to Part(c) of this standard, Diagram 2 of Schedule 29.2 (Standard 29.14.2) identifies that 'maximum breakover angles' for vehicle crossings where such crossings are associated with footpaths. Consistent with the open space nature of the area, there are no formed footpaths on Māori Jack Road at the intersection of Woolshed Road, nor are there any footpaths along Woolshed Road. For this reason, Part (c) of this standard does not apply to the area generally, or the proposal specifically.	
Standard 29.5.18 - Minimum Sight Distances from Vehicle Access on all roads other than State Highways.	Woolshed Road is already established and therefore this standard is not relevant to the University's proposed redevelopment.	



PDP Rules/Standard	Applicability to Hākitekura Redevelopment		
<ul> <li>a. The following minimum sight distances from any access, shall be complied with, as measured from the points shown on Diagram 11 of Schedule 29.2:</li> <li></li> <li>At a posted speed limit of 50km/hr, the sight distance for residential activity is 45m and 80m for other activities.</li> <li></li> <li>Non-compliance status – Restricted Discretionary.</li> </ul>	However, if the standard were relevant, it is noted that Māori Jack Road has a sign-posted speed limit of 40km/hr and therefore a minimum site distance of 80m would apply at the Māori Jack and Woolshed Roads intersection. As stated in the ITA, contained in Appendix 5 of the land use consent application, the sightlines for turning vehicle movements at this intersection, given the low speed environment in the area, are appropriate (refer to Section 2.2 of the ITA).		
Standard 29.5.20 - Maximum Number of Vehicle Crossings.The following maximum number of crossings shall be complied with:Frontage length (m)Number of vehicle crossings (for local roads)0 to 18m119 to 60261 to 100, and greater3Non-compliance status – Restricted Discretionary.	<ul> <li>Woolshed Road is already established and therefore this standard is not relevant to the University's proposed redevelopment.</li> <li>However, if the standard were relevant, it is noted that on the western side of Māori Jack Road, the only 'crossings' in the area are associated with Woolshed Road and the Jack's Point hiking parking area to the north of Woolshed Road. The parking area is approximately 60m to the north of the Māori Jack and Wools Roads intersection.</li> <li>It is also noted that the 'crossing' into the University site effectively forms the end of Woolshed Road. The 'crossing' into the Jardine's new residence at the Boathouse is located over 80m to the northeast from the entry into the University's site.</li> </ul>		
Standard       29.5.22       – Minimum       distances       of       Vehicle       Crossings       from         Intersections.       a.       No part of any vehicle crossing shall be located closer to the intersection of any roads than the following minimum distances permitted below and as shown in Diagram 12 of Schedule 29.2:          Non-compliance status – Restricted Discretionary.	Part (b) of the standard then specifies that the minimum distances from intersecting roads is 25m on local roads where the speed limit is less than 70km/hr. For similar reasons to those outlined above in relation to Standard 29.5.20, it is considered that this standard is also not relevant to the University's proposal.		



#### 4.8 Woolshed Road - Place / Link Context (Q.20)

WSP have noted that the current unsealed single carriageway providing access to the development provides limited passing opportunities. They have recommended that Woolshed Road be upgraded to provide for increased safety and better access. (Refer to Comment 12).

If the single-carriageway road is to be retained as-is then WSP agree that, due to the low speed environment and good forward visibility on Woolshed Road, passing bays could be provided further apart than 50m. However, they have advised that passing bays spaced at 200-250m will not provide adequate passing opportunities, particularly either side of the 90deg bend (Refer to Comment 13).

Please provide a response to the above having regard to the comments in the WSP review to demonstrate that Woolshed Road will provide suitable and safe access to serve existing uses and the proposed development. WSP have recommended a targeted approach is applied to determine the optimum locations for the passing bays along Woolshed Road. The ITA notes that the passing bay locations will be confirmed at the detailed design phase so a condition of consent volunteered by the Applicant may be appropriate at this stage.

TKTP's letter, as contained in **Attachment 1C**, provides a technical response to the proposed provisions of passing bays on the upgraded, but single lane, Woolshed Bay.

The University, in considering the provision of access to the site, considered the expert advice of its engineers, traffic engineer, landscape architects, as well as the needs of the other landowners who use Woolshed Road.

As described in the Landscape and Visual Assessment (Appendix 7 of the land use consent application), the University's site and the area over which Woolshed Road traverses, under the Homestead Bay Structure Plan (as contained in the PDP), is located within an open space area (Open Space Residential (North)). The land surrounding this area is also characterised by other open space areas (i.e., Open Space Foreshore, Open Space Golf and Open Space Landscape). The area surrounding the University's site is relatively open and generally characterised by pastoral landscapes with domestic elements, with the site and the land over which Woolshed Road traverses tucked under Jack's Point Hill (an area identified as an Outstanding Natural Landscape in the PDP).

It is considered that upgrading Woolshed Road to a dual carriageway would be out of character to the existing rural (and domestic) environment and the open space character anticipated under the PDP in this part of Homestead Bay.

The ITA, which is appended to the land use consent application (Appendix 5), concluded that provided Woolshed Road is upgraded in the manner proposed in the application, and full-sized coaches are prohibited from accessing the site, then the potential adverse effects of the proposal on the transportation network will be less than minor<sup>7</sup>. In this context, the retention of a single lane carriageway (upgraded to a uniform 3.5m width), with passing lanes, will ensure that the operational efficiency and safety of Woolshed Road and the wider road network is maintained.

On the above basis, it is considered that retaining Woolshed Road as a single lane carriageway road, subject to the upgrades proposed within the land use consent application, provides for a

<sup>&</sup>lt;sup>7</sup> As summarised in Section 6.6 of the land use consent application.



safe and efficient road network while maintaining the open space amenity anticipated for the area through which the road traverses.

## 4.9 Travel Demand / Management of the University and Third Party Use (Q.21)

Please provide further information on how the University of Otago intends to manage travel to/from the site for various users/transport modes and managing the parking demands generated by the proposed activities.

A travel management plan outlining the key objectives may be appropriate for an activity such as this to understand how traffic/people movements will be managed through measures implemented by the Applicant and operational requirements of the Universities facilities.

TKTP have responded to this question (Q.21 of the RFI) in a letter dated 17 December 2020 as contained in **Attachment 1C**.

## 4.10 Cycle Safety (Q.22)

WSP has recommended that due to the narrow road width of Woolshed Road, it would be appropriate to install warning signage at the either end of Woolshed Road to warn motorists of the potential presence of cyclists.

Please provide a response to the above confirming if the Applicant agrees to volunteer a condition that forms part of the proposal to install warning signage.

TKTP have responded to this question (Q.22 of the RFI) in a letter dated 17 December 2020 as contained in **Attachment 1C**.

## 5 Noise (Q.23 to Q.33)

## 5.1 Introduction

The RFI, under the 'transport' heading states:

*Styles Group have been engaged to undertake a peer review of the AES Acoustic Assessment. Please provide a response to the RFI items listed below:* 

## 5.2 Event Noise (Q.23 to Q.29)

Q.23 - AES have provided the assumed sound power levels of music and people noise as individual sources but the Assessment does not provide the derived noise rating levels in accordance with NZS 6802:2008 for comparison with the day and night-time permitted ODP noise limits. It appears that AES have added +5 dB to the internal "average SPL", which is not in accordance with Section 6.3.1 of NZS 6802:2008, which states that the + 5dB adjustment for special audible character is added to the representative LEQ sound level. Also, there is no reference to any duration corrections made for noise from the site that have been applied. Please provide the noise rating levels at the nearest receivers for the day and night time periods in accordance with NZS 6802:2008.



Q.24 - The AEE states that the event building will be constructed with "large expanses of glass will characterise both the northern and southern elevations of the building, with the glassed frontage on the southern (lake) side opening onto a covered wooden deck." Please confirm the large expanses of glass have been taken in to consideration in the noise model.

Q.25 - AES state that "The modelling has allowed for glazing elements to be partially open on the south facing facades of the Lecture Theatre and Woolshed buildings to provide for natural ventilation to those spaces if required". Please provide the assumed sound reduction and façade.

Q.26 - Please confirm how many large events/functions with amplified music are proposed each year/month/week.

Q.27 - AES state that the average SPL (98dB) "has been applied at all inside parts of the space to allow for the possibility of different function layouts depending on the required production values". We would normally use internal reverberant LAeq level to control internal entertainment noise, or if the speakers are outside we would use the LAeq level at a set distance (e.g. 10m) from speakers. Please confirm how the "average SPL" has been used in the noise model and if it is the same (or similar) to the internal reverberant LAeq level.

Q.28 - There are three outdoor areas proposed. Please confirm if there be any music played in any of the outdoor areas after 8.00pm. If yes, have outdoor speakers been included in the noise model. If yes, what noise levels have been assumed from the outdoor speakers in the noise model.

Q.29 - AES conclude regarding event noise that: We therefore expect the noise levels received at the boundaries of the neighbouring receivers to comply with the ODP and PDP night-time noise limit of 40 dB LAeq(15 min) and for the associated noise effects to be minimal during all time periods.

Please provide further comments on the noise effects to the closest receiver (Receiver A) and what is meant by "minimal", including comments about the character of the proposed noise from functions within the context of the existing noise environment (and if any measurements have been taken of the ambient LAeq and I90), in particular between 8.00pm – midnight.

Acoustic Engineering Services (**AES**) have responded to the each of the event noise questions (Q.23 to Q.29 of the RFI), in a letter dated 16 November 2020. AES's letter is attached to this report as **Attachment 1D**.

## 5.3 Traffic Noise (Q.30 to Q.33)

Q.30 - AES state that: "we expect the highest level of noise emission from traffic would occur prior to the start of events and again after the finish of events, over a period of approximately one hour at each of those times". The predicted noise levels at Receiver A from peak traffic (50 vehicle movements in 1 hour) is 54 dB LAeq at the boundary. Events are proposed until midnight. No reference has been made to existing ambient noise levels/traffic noise. Please provide more detail on how the noise effects from traffic noise from the private road have been assessed, in particular between midnight – 1.00am after



the events conclude. The assessment of effects must be made against the ODP noise standards for the exceedance of noise limits.

Q.31 - In regards to the assessment point, AES state that "Applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use." We agree that applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use. However, both the ODP and the PDP require the site boundary as the assessment point and this is what the assessment of effects must be based on. The ODP and PDP rules were developed through a consultation process and will be based on the objectives and policies for this local area. The assessment must, at least initially, assess the noise effects based on the requirements of the district plan. Noise rating levels can be provided at both notional and site boundaries for discussion purposes, but in terms of the assessment against the applicable ODP rules and determination of compliance, the applicable assessment point must be the site boundary. Please provide a brief assessment to address this.

Q.32 - In regards to the assessment point, AES state that "Applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use." We agree that applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use. However, both the ODP and the PDP require the site boundary as the assessment point and this is what the assessment of effects must be based on. The ODP and PDP rules were developed through a consultation process and will be based on the objectives and policies for this local area. The assessment must, at least initially, assess the noise effects based on the requirements of the district plan. Noise rating levels can be provided at both notional and site boundaries for discussion purposes, but in terms of the assessment against the applicable ODP rules and determination of compliance, the applicable assessment point must be the site boundary.

Q.33 - On page 14 of the Assessment, AES state that to "give confidence that noise emissions associated with the activity are maintained at appropriate levels, we recommend the following mitigations for the activities associated with the site:....."

Please confirm the following:

- What is defined as appropriate levels?
- Do the "appropriate levels" differ to the ODP noise limits?
- Are the recommendations set out on p14 required for compliance with the ODP noise limits?
- Have any conditions of consent been considered, other than draft conditions (15) and (16) in section 10 of the AEE?

Acoustic Engineering Services (**AES**) have responded to the each of the traffic noise questions (Q.30 to Q.33 of the RFI), in a letter dated 16 November 2020. AES's letter is attached to this report as **Attachment 1D**.



## 6 Landscaping / Built Form (Q.34 to Q.42 and 'General Landscape Comment')

## 6.1 Landscape Plan (Q.34 to Q.37)

## 6.1.1 Question 34

Given the nature of the re-development and site, understanding the existing site in terms of established trees / vegetation to be retained and relied on for mitigation purposes (in perpetuity) needs to be confirmed.

a) Please provide a detailed landscape planting plan confirming the details (location, species, approximate heights, botanical names) of any established or proposed trees/planting being maintained and relied upon for mitigation of the proposed development (All wilding and invasive species should be excluded).

Retaining an established tree context of value will be a key element for this proposal in terms of the landscapes ability to absorb development. The PDP places greater emphasis on native vegetation in the OSR activity areas, therefore it is important to understand and have a record of which elements of the existing vegetation is important in the context of built form and landscaping. The site is noted as complex, and trees / shrubs can be identified by groups if of the same species or same general form for example orchard trees.

- b) Please confirm if any trees of note are of heritage value or significance.
- c) From a landscape perspective, the area between the buildings and the lakeshore is a key area for details and how visual mitigation and landscape context will be established and what form it may take within the available space. There is a reliance on existing vegetation, largely the native vegetation along the foreshore for visual mitigation but no means to secure this vegetation long term. As noted in point 2 above, please outline/confirm how/if the Applicant intends to secure reliance on this vegetation as mitigation for the proposal.

A response to this question is provided in Vivian+Espie's memo attached to this report as **Attachment 1A** (refer to paragraphs 2 to 9). As requested, Vivian+Espie's response includes an updated Landscape Plan (Dwg. Ref. 1603-01) and Existing Plant Inventory & Plant Schedule (Ref. 1603-02).

In addition, Kerr Ritchie have updated a number of the Hākitekura redevelopment 'section' drawings to show the location of the trees located on the lakeshore. The drawings (Dwg. No's. 12-06, 13-04 and 13-05) are provided in **Attachment 1E** of this report.

## 6.1.2 Question 35

Please confirm if there are any wilding species that are prone to spread within the site.

A response to this question is provided in Vivian+Espie's memo attached to this report as **Attachment 1A** (refer to paragraphs 10 to 12).



### 6.1.3 Question 36

Provide an external lighting plan for the site identifying location of lighting within the landscape, parking and pedestrian areas, attached buildings and purpose of proposed lighting, light fittings etc.

As stated above in relation to RFI Q.18, the detailed design, which includes lighting design, of the proposed Hākitekura redevelopment has not yet been undertaken by the University. Detailed design is not usually required or appropriate at the resource consent stage, before an applicant has consenting certainty for a proposed project. On this basis, an external lighting plan has not yet been prepared.

An assessment of the proposal's compliance with various ODP and PDP lighting, glare and/or illumination standards was provided in the land use consent application (refer to Table 1 in Section 4.4.3 and Table 2 in Section 4.5.3 of the application). The assessment concluded that the University would be able to ensure that all site lighting complies with relevant rules and standards, as well as QLDC's Southern Lighting Strategy.

Therefore, lighting (and associated potential glare and illumination effects) were not included as a consent trigger for the land use consent application.

#### 6.1.4 Question 37

Please confirm if any measures will be in place to protect planting from grazing pest such as rabbits, possums, goats and deer.

A response to this question is provided in Vivian+Espie's memo attached to this report as **Attachment 1A** (refer to paragraph 13).

In response to Vivian+Espie's recommendation, the University offers that the following consent condition be attached to the land use consent being sought from QLDC. The proposed condition is as follows:

- (a) Within the first planting season after construction has been completed, the Consent Holder must plant the site in general accordance with the Landscape Plan (Ref. 1603-01 dated 26 November 2020) and Plant Schedule (Ref. 1603-02 dated 26 November 2020).
- (b) The Consent Holder must ensure that any pest grazing of new plants is reasonably managed.
- (c) The Consent Holder must ensure that the landscaping is maintained in general accordance with the Landscape Plan (Ref. 1603-01 dated 26 November 2020) and Plant Schedule (Ref. 1603-02 dated 26 November 2020). This includes replacing, wtihin the next planting season, any plant that dies or becomes diseased.

(<u>Advice note:</u> Pest management may include the installation of plant sheath protectors around individual plants and/or fencing.)



## 6.2 Buildings (Q.38 to Q.42)

#### 6.2.1 Introduction

The RFI, under the 'building' sub-heading states:

To understand and assess the potential visual effects of the proposed built form, please respond to the following:

#### 6.2.2 Question 38

Please provide a material palette detailing all external materials and colours including specifications for timber, concrete, plaster treatments etc. and all elements including spouting, trims, pergolas and retaining walls.

The materials palette for the proposed redevelopment was provided in the set of Resource Consent Drawings contained in Appendix 2 of the land use consent application. The Materials drawing identifies that the following materials will be used on the buildings:

- Central Otago stone cladding.
- Charred Abodo weatherboards, thermally treated pine.
- Sioux Abodo weatherboards, thermally treated pine.
- Corrugated true oak coloursteel in colour flaxpod G10.

In addition, the various elevation drawings provided a key which identified where on the various buildings the materials would be placed. Updated elevation drawings have been provided in **Attachment 1E** of this RFI response, with additional detail provided in relation to the material that will be used for the gutters and downpipes (i.e., G10 Flaxpod to match the coloursteel) on the new buildings associated with the proposed redevelopment.

In addition, the key to the updated 'Lakeside Rooms – Elevations and Sections' drawings (Dwg. No's. 13-04 and 13-05) identifies that the proposed pergola materials, namely a natural steel frame, black screens to match the timber cladding and use of the Sioux stain.

## 6.2.3 Question 39

Please provide cross section drawings through the site showing towards the lake edge showing height, context and relationship between existing and proposed buildings, and existing and proposed vegetation being relied upon for mitigation.

As outlined above in response to Q.34, Kerr Ritchie have updated a number of the Hākitekura redevelopment 'section' drawings to show the location of the trees located on the lakeshore. The drawings (Dwg. No's. 12-06, 13-04 and 13-05) are provided in **Attachment 1E** of this report.

## 6.2.4 Question 40

Please detail eaves over areas of glazing and recessed eaves in regard to potential effects arising from glare and internal lighting.

The first part of this question asks for details on the building's eaves. The elevation plans contained in the set of Resource Consent Drawings contained in Appendix 2 of the land use consent application and the updated elevation plans contained in **Attachment 1E** of this report



show the extent of the eaves on the buildings associated with the proposed redevelopment. It is noted that the accommodation buildings are generally clean simple 'shed like' forms without eaves. The new lecture theatre also does not have eaves although there is a large overhang on the south side of the building.

The second part of this question then asks about the glare and internal lighting effects arising from the proposed development, and it is assumed that the question about the eaves relates to the potential light pollution mitigation that the eaves could provide.

As discussed above in relation to Q.36, an assessment of the proposal's compliance with various ODP and PDP lighting, glare and/or illumination standards, was provided in the land use consent application lodged with QLDC. That assessment concluded that the University would ensure that all site lighting (indoor and outdoor) complies with relevant rules and standards, as well as QLDC's Southern Lighting Strategy.

#### 6.2.5 Question 41

Please define how glare from the proposed roofing material will be mitigated with paint finishes or any other mechanism.

The roofing material on all new buildings at the site will be coloursteel products, namely Flaxpod coloursteel G10 which is a low gloss product. This product has a light reflectance value (**LRV**) of 6% which complies with Standard 41.5.5.5(b) of the PDP. This standard requires that roof colours of buildings in the Jacks Point Zone have a LRV of 20% or less and are in the range of browns, greys and black. Flaxpod G10 coloursteel is a black colour.

It is noted that the proposed low reflective roofing material is similar to many other buildings/dwellings within the local Jacks Point environment.

#### 6.2.6 *Question* 42

Please accurately detail the interface between the built form and the lake foreshore boundary, including details of levels, structures or any fencing that is existing in this location.

As outlined above in response to Q.39 (which is similar to this question), Kerr Ritchie have updated a number of the Hākitekura redevelopment 'section' drawings to show the location of the trees and structures between the site's building and the lakeshore. The drawings (Dwg. No's. 12-06, 13-04 and 13-05) are provided in **Attachment 1E** of this report.

For clarity, there are no fences between the University's site and the lakeshore.

## 6.3 General Landscape Comment

The established vegetated context is a major part of the site and the sites ability to absorb development given the proposed activities, density of built form, building heights and areas of encroachment into boundary setbacks. There is substantial tree planting, mainly natives that are well established on site and are worthy of retention which is understood to be the intent of the application.

The proximity of buildings to the reserve boundary is of concern in terms of potential prominence of built form from the reserve and lake waters. There is a reliance on existing vegetation, largely the native vegetation along the foreshore for visual mitigation and



context but no means to secure this vegetation long term. The area could also do with potential management i.e removal of weeds species and poplars to give the native trees space to grow. There could be a future desire to prune or remove vegetation to open up views towards and access to the foreshore and ideally this would be undertaken in a managed way to protect vegetation and mitigation values. Some form of management / landscape plan and agreement with LINZ would be useful to support the application. The Applicant should also consider how the reduced boundary setbacks will be addressed in terms of the potential reinstatement and removal of buildings and landscaping.

Mitigation planting within the site needs further consideration, especially towards the east of the subject site where the visitor accommodation units are being proposed as the site is more open and exposed in this location. Towards the west, has greater ability to absorb development as there is the existing cluster of buildings and established vegetation to assist with integration of the built form into the site.

A response to this comment, along with Q.2 and Q.34, is provided in Vivian+Espie's memo attached to this report as **Attachment 1A** (refer to paragraphs 2 to 9).



## **ATTACHMENT 1A:**

## Vivian+Espie – Response to Landscape Issues

Memorandum dated 23 November 2020

# MEMO REGARDING LANDSCAPE ISSUES RAISED BY A REQUEST FOR FURTHER INFORMATION

RM200570 - UNIVERSITY OF OTAGO

Ben Espie (Landscape Planner) vivian+espie 23<sup>rd</sup> November 2020

## Introduction

1 This memo has been prepared in response to landscape-related issues raised by a Request for Further Information (**RFI**) dated 5 October 2020. This memo provides further information regarding the landscape and visual effects of the proposal and also regarding the proposed landscaping treatment of the site. It responds specifically to points 2, 34, 35, 37 and "General Landscape Comment" of the RFI.

# RFI Points 2, 34 and "General Landscape Comment" - Existing vegetation that provides mitigation of potential visual effects

- 2 An amended Landscape Plan that includes an inventory of existing plants is attached to this memo. That plan and inventory set out the existing vegetation on the site that provides some mitigation of the potential visual effects of the proposal. It is anticipated that conditions of resource consent will require this vegetation to be retained and suitably maintained. There is other considerable existing vegetation on site that does not perform any particular mitigatory function. Therefore, although there is no intention to remove any vegetation, only the vegetation shown on the attached plan is anticipated to be protected by any consent conditions.
- 3 There are a number of factors that mitigate the potential landscape and visual effects of the proposed activities and vegetation is only one of these. The primary mitigation comes from the setting and context in which the proposed activities will sit. They will repurpose and add to an existing collection of long-established buildings. Additionally, the activities will sit within the Homestead Bay area of the Jack's Point Zone within 400m of the Boating Facilities and Homestead Bay Village Activities Areas. No activities are proposed within the identified ONL and the built form of the redevelopment has been carefully designed to fit appropriately within its

landscape setting. As set out in my Landscape and Visual Assessment Report (dated 9/6/2020), these factors will mean that the proposed activities will tie in very well with their setting and will be backed by the vegetated hill landform of Jacks Point.

- As can be seen on the attached Landscape Plan (and as is discussed in my Landscape and Visual Assessment Report), some of the vegetation that provides mitigation of potential visual effects is on public land, not on the subject site, and therefore is not within the control of the applicant and cannot be subject to conditions of consent. This vegetation includes many large mature trees including long lines of planted native beech. I understand that the relevant public land is administered by LINZ. Free and easy public access along the lakeshore is available to the immediate south of this vegetation; the vegetation does not impede access. I understand that no trees on the site or in the vicinity of the site are of heritage value.
- 5 It appears particularly unlikely that LINZ would ever seek to remove all of this vegetation. However, I understand that they legally could do so without impediment.
- If we consider the landscape without taking any account of the vegetation that is on the LINZ administered land, then (with reference to the plan attached to this memo) the existing buildings on the subject site would be considerably more visible from the lake surface. All of the built form on the subject site would be relatively plainly visible from close points on the lake and foreshore. Again, the Boating Facilities and Homestead Bay Village Activities Areas would be close by. In that context, the proposed new buildings would be visible as extensions to the already-visible buildings. The overall extent of built form would mean that the Homestead Bay foreshore area looks relatively built and occupied and the proposed activities would be a (relatively minor) component of this overall quantum of built form.
- 7 It is noted that the relevant part of the lake is not frequently used. This may change in the future when development of the Boating Facilities and Homestead Bay Village Activities Areas proceeds, although in that instance, the landscape qualities of the relevant vicinity will also have correspondingly changed.
- 8 In the above scenario (i.e. if we disregard the existing vegetation on LINZ land), I would recommend some additional mitigatory vegetation in order to visually soften the proposed new built form and also to have a positive effect by doing the same in relation to existing built form, which in this scenario is considerably exposed. With reference to the attached Landscape Plan, I

envisage that planting of this sort might usefully take the form of informal hedging or mixed borders of native shrubs sweeping along the lake boundary of the site, with some stands of higher native trees punctuating this frontage.

9 I reiterate that it seems particularly unlikely that the existing vegetation on LINZ land would ever be removed, however, to deal with this eventuality, I would recommend the inclusion of a condition of consent to the effect of the following:

in the event that the existing vegetation on the LINZ land that is shown in red on the approved Landscape Plan is entirely or substantially removed, the consent holder shall submit a planting plan to the Council for approval showing a re-vegetative regime within the site that will achieve appropriate mitigation of visual effects of the proposed activities when viewed from the lake and foreshore.

Advice note: should the re-vegetation pursuant to this condition be required, it is important to recognise that full visual screening is not the outcome being sought as the buildings on the site which existed prior to this consent being granted, as well as all development provided for within the Jacks Point Zone, form part of the receiving environment.

## RFI Point 35 - Exotic vegetation that is prone to wilding spread

- 10 The northernmost portion of Lot 1 DP452315 (which is part of the subject site) takes in part of the rugged rounded hill landform of Jacks Point, which is categorised in the PDP as being part of an ONL. This hill landform is covered in unkempt vegetation that includes significant Sycamore and Rowan, both of which are listed in PDP provision 34.4.2 as being prohibited to plant (however, no provision requires the removal of existing vegetation).
- 11 There is also a scattering of Sycamore and Rowan in small numbers through the established garden of the subject site in the vicinity of where the proposed activities are located.
- 12 In relation to the above, the site is akin to many sites around the Wakatipu Basin; Rowan and Sycamore are common. I understand that the application does not propose to retain any of these species on site and also does not specifically propose to remove them. As part of its site operations, I understand that the University will hire staff or engage contractors who will have the responsibility of maintaining the grounds. In a practical sense, I consider that if the proposed activity proceeds, the grounds are likely to be more thoroughly maintained than they currently are.

## RFI Point 37 - Protection from animal pests

13 The grounds of the subject site have been managed as a productive garden for many years. Many young plants on the site appear to survive well despite (I understand) some rabbit presence. The proposal involves considerable planting of woody native vegetation (beech, kowhai, rata, cabbage tree and pittosporum). Planting of this sort can generally be successfully protected by individual plant sheath protectors. Alternatively, in the case of mass plantings (such as the proposed pittosporum hedges), it may be more cost effective to fence the outside of the hedge as a whole. In any event, I would expect a standard condition of consent requiring suitable pest protection and also the replacement of any plant shown on the proposed landscape plan in the event that it dies or becomes diseased.

Ben Espie vivian+espie 23<sup>rd</sup> November 2020

## LEGEND



Existing buildings to be retained and proposed buildings

Existing planters and vegetable garden to be retained

Proposed lawn



Proposed pittosporum hedge



Proposed paths and courtyards





Proposed Cordyline australis / cabbage trees

Proposed Nothofagas solandri / mountain beech

Proposed mixed native planting

Proposed Metroideros umbellata / southern rata



Proposed Sophora microphylia / kowhai-

Existing vegetation providing mitigation located inside the site

18

1603-01

DATE: 26.11.20 SCALE: 1:750 @ A3 17

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REF:



## Existing Plant Inventory & Plant Schedule

Otago University - Homestead Bay

## **EXISTING PLANT INVENTORY**

- 3 large spruce trees 6m
   10 pittosporum stevens island 5m
   15 Lombardy poplars 5m
- 4. 2 sequoia 6m
- 5. 12 silver birch 8m
- 6. 4 large olives 5m
- 7. 2 large pittosporum 4m
- 8. 1 large elm 6m
- 9. 3 ornamental cherries 4m
- 10. 7 Italian cypress 5m
- 11. 3 olives 2m
- 12. 8 Eucalyptus gunnii 20m
- **13.** 7 Eucalyptus globulus 25m
- 14. mass of Eucalyptus globulus 15m
- 15. 1 sequoia 20m
- 16. 7 large pittosporums 4m
- **17.** 1 kowhai 5m
- 18.2 red beech 7m
- 19. 2 large Griselinia littoralis 5m
- 20. 3 red beech 7m
- 21. 1 pseudopanax 4m
- 22. 8 mountain beech 5m
- **23.** 1 strawberry tree 4m
- 24. mass of coprosma 2.5m
- 25. 1 pittosporum 3m
- 26. 1 sequoia 12m
- 27.6 red beech 6m
- 28. 15 Lombardy poplars 25m
- 29. mass of red beech, pittosporum and kowhai 8m
- 30. mass of pittosporum 2-4m
- 31. line of 25 red and mountain beech 12m
- 32. mass of mountain beech with some pittosporum and pseudopanax 4-7m
- 33. mass of Olearia lineata 4m
- 34. mass of pittosporum, kowhai, wineberry 3-4m
- **35.** 32 juvenile mountain beech 2-3m
- 36. mass of juvenile mountain beech, griselinea, pseudopanax, coprosma & olearia 2-3m
- 37. 5 Pinus pinea 4m

### PLANT SCHEDULE

BOTANICAL NAME	COMMON NAME	SIZE	QTY	SPACING
Mixed Native Planting				
Phormium cookianum	NZ mountain flax	PB3	150	1.0m
Chionochloa rubra	Red tussock	PB3	150	1.0m
Pseudopanax crassifolius	NZ lancewood	20L	30	
Leptospermum scoparium	Manuka	5L	30	
Griselinia littoralis	Broadleaf	5L	30	
Coprosma propinqua	Mingimingi	5L	30	
Hebe salicifolia	Koromiko	5L	30	
Nothofagus solandri	Mountain Beech	2m	100	
Sophora microphylla	Kōwhai	1m	12	
Cordyline australis	NZ Cabbage tree	20L	30	
Pittosporum hedge		PB8	100	
<u>Metrosideros umbellata</u>	Southern rata	PB8	7	0.7m

REF: 1603-02 DATE: 26.11.20 resource management and landscape planning fivian+espie Limited Resource Management and Landscape Planning PO Box 2514 Physical Address 1/2118 Glenda Drive Frankton, Queenstown Tel +643 2411 4189 Fax +643 441 4190 Web www.vivianespie.co.r.g

vivian+espie



## **ATTACHMENT 1B:**

Lane Neave – Legal RFI Responses

Memorandum dated 17 December 2020

## Memo

To:	Christian German	Cc:	Carmen Taylor
From:	Lane Neave	Date:	17 December 2020
Client:	University of Otago		

## Subject: Hākitekura Redevelopment – Legal RFI Responses

## Introduction

1. On 5 October 2020 the University of Otago (**University**) received a Request for Further Information (**RFI**) from the Council in respect of its application for resource consent for the Hākitekura redevelopment (RM200570) (**Application**). This memorandum responds to questions 3, 4 and 5 of the RFI, which relate to legal matters.

## **Question 3 – Legal Instruments**

Please provide details and copies of legal instruments (covenants, easements etc) that are relevant to this subject site.

2. The subject site is legally described as Lot 1 DP 452315 (Lot 1) and Lot 3 DP 452315 (Lot 3). Copies of the legal instruments that apply to the subject site are attached to this memorandum as Appendix 1 (Lot 1) and Appendix 2 (Lot 3). The material details of the legal instruments are set out in the table below. For completeness, the table includes all of the instruments that apply to the subject site and the "Details" column indicates whether or not they are relevant to the Application.

Reference / Date	Type of Instrument	Details	Applies to
6128838.2 27/08/2004	Covenant	This is a private non-objection covenant in relation to planning framework for Lots 3 and 4 DP 337993 (Jacks Point). This covenant is not relevant to the Application.	Both lots
9227911.1 07/11/2012	Encumbrance	This encumbrance records a Public Works Act 1981 land exchange between the Council and Dick Jardine, Jillian Jardine and HGW Trustees Limited ( <b>the Jardines</b> ) under which Woolshed Road (Section 1 SO Plan 389253) was exchanged for a farm track that is now Maori Jack Road (Section 2 SO Plan 389253) to provide public access to Woolshed Bay. In the period before the exchanged land was vested in the Council and formed as a legal road, the Jardines allowed general public access to Woolshed Bay over the farm track. This encumbrance is only relevant to the Application to the extent it confirms it is Maori Jack Road, rather than Woolshed Road (the access to the Hākitekura site), that provides general public access to Woolshed Bay.	Both lots
9970250.2 9970250.3 04/03/2015	Covenants	These are private covenants between the Jacks Point Residents & Owners Association Incorporated ( <b>JPROA</b> ) and the Jardines (9970250.2) and the Jardines and Coneburn	Both lots

UNI10013 8960484

Reference / Date	Type of Instrument	Details	Applies to
		Water Land Limited (9970250.3). They record the agreement of the Grantors (JPROA and the Jardines) (or the University, to the extent it now owns the Jardines' land)), to abide by the relevant obligations under the "Tripartite Agreement". The Tripartite Agreement was signed in August 2003 in the context of Variation 16 (Jacks Point) to the then Proposed Queenstown Lakes District Plan. It relates to the intended manner of development of the wider Coneburn Land area, with which the Hākitekura project (as a redevelopment of the subject site) is generally consistent. The Council is not a party to these covenants.	
9970250.8 04/03/2015	Easement in gross	This is an easement providing rights in favour of Aurora Energy Limited ( <b>Aurora</b> ) to construct and maintain electricity cables and electricity transformers and ancillary equipment on Lot 1, and requiring the landowner not to place any building or other structure, plant any tree/shrub or alter the natural level of the land on the electricity cables or transformer sites without the prior written consent of Aurora. This easement/the location of the existing electricity infrastructure has been accounted for in Application and it is noted that Aurora has confirmed that a point of supply can be made available for the development.	Lot 1
9970250.9 04/03/2015	Easement	<ul> <li>This is an easement providing rights for and over various of Lots 1-7 DP 452315 to: <ul> <li>Convey water;</li> <li>Store water;</li> <li>Right of way;</li> <li>Convey electricity;</li> <li>Convey telecommunications and computer media; and</li> <li>Drain and dispose of sewage.</li> </ul> </li> <li>This easement has been accounted for, and relied upon where relevant, in the Application.</li> </ul>	Both lots
10441473.4 26/05/2016	Covenant	This is a private covenant between the owners (for the time being) of Lots 1-5 DP 452315 and Lots 6-7 DP 452315. It imposes obligations on the owners of Lots 6-7 DP 452315 to comply with the "Stakeholders Deed" (which was signed in August 2003, similarly in the context of Variation 16 (Jacks Point) to the then Proposed Queenstown Lakes District Plan) and not to object and to give Affected Party Approvals in respect of future development and planning processes. These aspects of the covenant do not apply to Lots 1 and 3 (the University's site). The covenant also addresses the allocation of	Both lots

UNI10013 8960484
Reference	Type of	Details	Applies
/ Date	Instrument		to
		site coverage as between the parties to the covenant (Lots 1-7 DP 452315). The Council is not a party to this aspect of the covenant.	

#### **Question 4 – Consent History**

Please confirm and outline if there are any relevant underlying resource consents for the subject site.

6. We have undertaken a search of the Council's eDocs system and confirm that for both Lot 1 and Lot 3, there is no record on eDocs of any relevant underlying resource consents. For completeness, we note that Lot 1 and Lot 3 were created from Sec 1 SO 389253 Lot 2 and Pt 6 DP 443832 through the subdivision consent RM061010, which was granted on 9 March 2007. We confirm that there are no remaining obligations under this subdivision consent that are relevant to the Application.

#### Question 5 – Access Road Upgrade

It is proposed to upgrade the access road to a 3.5m formed width with passing bays at 200 to 250m intervals, to support two way traffic flow. This will involve works within the neighbouring properties (Lot 2 DP 452315 & Lot 5 DP 452315) and written approval has not been provided for these neighbouring properties to confirm these works can be undertaken. Please provide written approval from the affected landowners endorsing the accessway upgrade works to proceed. Please also provide a copy of any relevant ROW easements associated with the access drive.

- 7. The owners of the neighbouring properties, Lot 2 DP 452315 and Lot 5 DP 452315, are the Jardines. As the Jardines gifted the subject site to the University for the purposes of enabling the Hākitekura project, the University is in ongoing communication and liaison with them as the project progresses.
- 8. Part of this ongoing liaison relates to access and the future accessway upgrade works. As outlined in the Integrated Transportation Assessment (AEE, Appendix 5), the proposed accessway upgrade works are necessarily indicative at the resource consent stage. Should consent be granted, these works will be fully assessed during the detailed design stage and confirmed by Council through the Engineering Acceptance process. The University will liaise with the Jardines before undertaking the final upgrade works. However, it is not considered appropriate or necessary to obtain their written consent to the upgrade works at this stage.
- 9. The relevant right of way easement associated with the access drive has been provided in response to Question 2 above. The reference for the relevant legal instrument is 9970250.9.
- 10. Related to this response, in respect of several other transport-related RFI questions, the University is offering a Transportation Management Plan (**TMP**) condition. We consider this an appropriate approach to manage the use of the access road by visitors/guests and staff, as well as the parking requirements for activities and events. The TMP condition is set out in the response to RFI Question 15 in the overarching Part 1 RFI Response by Planz Consultants Limited.

Appendix 1



## RECORD OF TITLE UNDER LAND TRANSFER ACT 2017 FREEHOLD

Search Copy



Identifier	577972
Land Registration District	Otago
Date Issued	04 March 2015

**Prior References** 607922

Estate	Fee Simple
Area	2.2954 hectares more or less
Legal Description	Lot 1 Deposited Plan 452315

## **Registered Owners**

University of Otago Foundation Trust

## Interests

Land Covenant in Transfer 6128838.2 - 27.8.2004 at 9:00 am

9227911.1 Encumbrance to Queenstown Lakes District Council - 7.11.2012 at 10:57 am

Land Covenant in Easement Instrument 9970250.2 - 4.3.2015 at 4:23 pm

Land Covenant in Easement Instrument 9970250.3 - 4.3.2015 at 4:23 pm

Subject to a right (in gross) to convey electricity over parts marked F, L and M all on DP 452315 and a right to transform electricity over part marked L on DP 452315 on DP 452315 in favour of Aurora Energy Limited created by Easement Instrument 9970250.8 - 4.3.2015 at 4:23 pm

The easements created by Easement Instrument 9970250.8 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right of way and rights to convey telecommunications and computer media over part marked F on DP 452315, a right to convey water over parts marked F and G both on DP 452315 and a right to store water over part marked G on DP 452315 created by Easement Instrument 9970250.9 - 4.3.2015 at 4:23 pm

Appurtenant hereto is a right of way, a right to store water and rights to convey water, electricity, telecommunications and computer media created by Easement Instrument 9970250.9 - 4.3.2015 at 4:23 pm

The easements created by Easement Instrument 9970250.9 are subject to Section 243 (a) Resource Management Act 1991

Land Covenant in Easement Instrument 10441473.4 - 26.5.2016 at 3:53 pm



Document Set ID: 6757383 Version: 1, Version Date: 01/02/2021

## Approved by Registrar-General of Land under No. 2002/1026 **Transfer instrument** Section 90, Land Transfer Act 1952

1

Land registration distric	et	Cpy - 01/01, Pgs - 003.26/08/04, Approval 02/1026EF 9 Cpt - 01/01, Pgs - 003.26/08/04, Cpt - 01/01, Pgs - 003.26/04, Cpt - 01/01, Pgs - 01/01, Cpt - 01/01, Pgs - 003.26/04, Cpt - 01/01, Pgs - 01/01, Cpt - 01/01, Pgs - 01/01, Cpt - 01/01, Pgs - 01/01, Cpt - 01/01, C
Jnique identifier(s) or C/T(s)	All/part	Area/description of part or stratum
156346 156347	AII AII	
ransferor		Surname(s) must be <u>underlined</u> or in CAPITALS
Dickson Stewart JAR	DINE, Jillia	n Francis JARDINE and Gerard Brendon BOOCK
ransferee		Surname(s) must be underlined or in CAPITALS.
acks Point Limited		
ate if fencing covenant i	mposed.	or easement(s) or <i>profit(s) à prendre</i> to be created
	Covenant as	s detailed on the Annexure Schedule
Derative clause The Transferor transf certificate(s) of title or c easement or profit à pres	ers to the omputer regis	<b>Transferee</b> the above estate or interest in the land in the above ster(s) and, if an easement or <i>profit à prendre</i> is described above, that d or created.
perative clause The Transferor transf certificate(s) of title or c easement or profit à prei Dated this	ers to the formputer regised of the formation of the second secon	Transferee the above estate or interest in the land in the above ster(s) and, if an easement or <i>profit à prendre</i> is described above, that d or created.
perative clause The Transferor transf certificate(s) of title or c easement or profit à prei Dated this	ers to the formputer regised of the formation of the second secon	<b>Transferee</b> the above estate or interest in the land in the above ster(s) and, if an easement or <i>profit à prendre</i> is described above, that d or created.

Solicitor for] the Transferee

REF: 7002 - AUCKLAND DISTRICT LAW SOCIETY

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"Mortgage", "Transfe	er", "Lease" etc	······································		
Transfer	Dated	-		Page 1 of 2 Pages
		(Continue	in additiona	I Annexure Schedule, if required.
Continuation of	'Estate or Easement to be cre	eated'		
		· · · · · ·		
	ntion to create for the benefit	of Lots 3 and 4 DP 3	337993 as des	cribed in Certificate of Title 156348
It is the Transferor's inter				cribed in Certificate of Title 156348 A over the land transferred in this
It is the Transferor's inter (referred to as "the Domin	nant Land") the land covenar	nt set out in the attac	hed Schedule	

such covenants against the owners for the time being of the Servient Land

<u>AND AS INCIDENTAL</u> to the transfer of the fee simple so as to bind the Servient Land and for the benefit of the Dominant Land the Transferee <u>COVENANTS AND AGREES</u> in the manner set out in the Schedule A so that the covenants run with the Servient Land for the benefit of the Dominant Land.

## SCHEDULE A

#### DEVELOPMENT

- 1) If Variation 16 to the Queenstown Lakes District Council Proposed Plan is confirmed in respect of the Dominant Land, the Transferee shall not, whether personally or through any agent or servant, directly or indirectly lodge or support any objection, submission or appeal to any resource consent or plan change or variation to the Queenstown Lakes District Council District Plan or Proposed Plan lodged or introduced in relation to the Dominant Land, provided that such resource consent, plan change or variation is consistent with the Coneburn Area Resource Study dated October 2002.
- 2) If the said Variation 16 is not confirmed in respect of the Dominant Land, the Transferee shall not, whether personally or through any agent or servant, directly or indirectly lodge or support any objection, submission or appeal to any resource consent or plan change or variation to the Queenstown Lakes District Council District Plan or Proposed Plan lodged or introduced to enable the development of the Dominant Land, unless such development is likely to generate significant adverse environmental effects on the Servient Land.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors mast sign or initial in this box.

REF: 7025 - AUCKLAND DISTRICT LAW SOCIETY

isert type of instrument Mortgage", "Transfer",	Anne» "Lease" etc	ture Schedule	<sup>•</sup> No. 2002/5032	Approval 02/5032EF
ransfer	Dated		Page 1	of 1 Pages
······································		(Continue in a	additional Annexure Sch	edule, if required.)
Signed by Jacks	Point Limited	ļ	A Contraction	
· .			Director	. )
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	·			,
f this Annexure Schedule solicitors must sign or ini	is used as an expansion of tial in this box.		signing parties and eithe	r their witnesses of

t.

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**View Instrument Details** 

Instrument No. Status Date & Time Lodged Lodged By Instrument Type 9227911.1 Registered 07 Nov 2012 10:57 Jack, Andrew Bryce Encumbrance



Affected Computer Registers Land District

555574

Otago

Annexure Schedule: Contains 10 Pages.

## **Encumbrancer Certifications**

I certify that I have the authority to act for the Encumbrancer and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

#### Signature

Signed by Andrew Bryce Jack as Encumbrancer Representative on 07/11/2012 10:56 AM

## **Encumbrancee Certifications**

I certify that I have the authority to act for the Encumbrancee and that the party has the legal capacity to authorise	V
me to lodge this instrument	

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

## Signature

Signed by Andrew Bryce Jack as Encumbrancee Representative on 07/11/2012 10:56 AM

\*\*\* End of Report \*\*\*

## Encumbrance instrument

(Section 101 Land Transfer Act 1952)

Affected instrument Identifier			2009/6232EF APPROVED Registrar-General of Land
and type (if applicable)	All/part	Area/Description of part or stratum	
555574	All		

#### Encumbrancer

Dickson Stewart Jardine (as to 3/20 share) and Jillian Frances Jardine (as to 3/20 share) and Dickson Stewart Jardine and HGW Trustee's Limited (as to 7/20 share) and Jillian Frances Jardine and HGW Trustees Limited (as to 7/20 share)

#### Encumbrances

Queenstown Lakes District Council

Estate or interest to be encumbered	Insert e.g. Fee simple; Leasehold in Lease No. etc.
Fee Simple	

Encumbrance Memorandum Number Not Applicable

Nature of security State whether sum of money, annuity or rentcharge and amount Rent charge being \$1.00 per annum if so demanded by the Encumbrancee.

#### Encumbrance

Delete words in [], as appropriate

The Encumbrancer encumbers for the benefit of the Encumbrancee the land in the above computer register(s) with the above sum of money, annuity or rentcharge, to be raised and paid in accordance with the terms set out in the [above Encumbrance Memorandum] [Annexure Schedule(s)] and so as to incorporate in this Encumbrance the terms and other provisions set out in the [above Encumbrance Memorandum] [and] [Annexure Schedule(s)] for the better securing to the Encumbrance the payment(s) secured by this Encumbrance, and compliance by the Encumbrance with the terms of this encumbrance.

REF: 7208 - AUCKLAND DISTRICT LAW SOCIETY INC.

Terms	
1 Length of term 99 years	
2 Payment date(s)On each anniversary of the date of this Encumbrance if so de	emanded by the
3 Rate(s) of InterestNii	Encumbrancee
4 Event(s) in which the sum, annuity or rentcharge becomes payable If there has been any breach of the covenants contained herein	
5 Event(s) in which the sum, annuity or rentcharge ceases to be payable If the covenants contained herein become obsolete, satisfied or no longer en	forceable.

Covenants and conditions Continued on Annexure Schedule 1

Continue in Annexure Schedule(s), if required

\*\*\*\*

Modification of statutory provisions

Continue in Annexure Schedule(s), if required

Continued on Annexure Schedule 1

REF: 7208 - AUCKLAND DISTRICT LAW SOCIETY INC.





2003/5038EF Approved Registrar General of Land

Page 1 of 7 pages

Encun	nbrance Continue in additional Annexure Schedule if required
A.	The Encumbrancer is the registered proprietor of all that land described in Certificate of Title 555574 ("the Land").
8.	The Encumbrancee is a local authority and the Land is within the Encumbrancee's district.
C.	The general public currently has access to Woolshed Bay, Lake Wakatipu over Section 1 SO Pian 389253 which is currently legal road, such road being vested in the Encumbrancee.
D.	The Encumbrancer and the Encumbrancee have agreed that the legal road described as Section 1 SO Plan 389253 shall be stopped and exchanged for part of the Land owned by the Encumbrancer and described as Section 2 SO Plan 389253, pursuant to the Public Works Act 1981 ("the Land Exchange").
E.	Following the Land Exchange Section 1 SO Plan 389253 will vest in the Encumbrancer and Section 2 SO Plan 389253 will vest in the Encumbrancee as legal road.
F,	Pending the vesting of Section 2 SO Plan 389253 in the Encumbrancee and the forming of that land as legal road, the Encumbrancer has agreed to allow the general public access to Woolshed Bay, Lake Wakatipu by way of an existing farm track ("the Farm Track") shown coloured red on the copy of SO Plan 389253 attached hereto.
G.	The Encumbrancer and the Encumbrancee have agreed that the Land Exchange shall proceed on the basis that the Encumbrancer will encumber the Land to the effect that the Encumbrancer will allow the Encumbrancee and the general public unrestricted access over the Farm Track, until such time as Section 2 SO Plan 369253 has been fully formed as legal road.
H.	The Encumbrancer has agreed to so encumber the Land.
1. 1.1	Operative Parts In this Encumbrance unless the context otherwise requires:
	"Encumbrancee" means Queenstown Lakes District Council.
	"Encumbrancer" means the registered proprietor of the Land or any part of the Land from time to time.
	"Farm Track" means those parts of the Land coloured red on the attached copy of SO Plan 389253
<b>8</b> 5	this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

Dated
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Page 2 of 7 pages

Encumbrance	Continue in additional Annexure Schedule if required
and	measuring not less than six (6) metres in width.
"Lar	id" means all the land described in Certificate of Title 555574.
Pub	id Exchange" means the exchanging of Sections 1 and 2 SO Plan 389253 in accordance with the lic Works Act 1981 including amalgemetion with adjoining land and the creation of all necessary aments.
"Lan	d Transfer Act" means the Land Transfer Act 1952.
*Pro	perty Law Act" means the Property Law Act 2007.
"Ren	t Charge" means the charges described in clause 2.
1.2 For t	he avoidanc <b>e o</b> f doubt:
(a)	Words importing the singular number include the plural and vice versa;
(b)	A covenant to do something is also a covenant to permit or cause that thing to be done and a covenant not to do something is also a covenant not to permit or cause that thing to be done;
(c)	References to the parties are references to the Encumbrances and the Encumbrancer;
(ď)	This Encumbrance binds or benefits the parties and their heirs, executors, successors and assigns in perpetuity;
(e)	References to clauses are to those named in this Encumbrance;
(1)	Headings are for convenience only and do not affect interpretation;
(9)	Statute, regulation or by-law includes all statutes, regulations or by-laws varying, consolidating or replacing them, and a reference to a statute includes all regulations or by- laws issued under that statute; and
(h)	A reference to "written" or "writing" includes facsimile communications.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

#### Dated

Page 3 of 7 pages

ncumbn	Ance Continue in additional Annexure Schedule if required
2. 2.1	Term and Rent Charge The term of this Encumbrance commences on the date of this Encumbrance and expires on that date which is 99 years from the date of this Encumbrance or until this Encumbrance is earlier discharged by the Encumbrancee pursuant to clause 2.5.
2.2	Subject to clause 2.4, the Encumbrancer encumbers the Land for the benefit of the Encumbrancee for the term, with an annual rent charge ("the Rent Charge") of \$1.00 to be paid on each anniversary of the date of this Encumbrance, if so demanded by the Encumbrancee.
	If during the year preceding the date of this Encumbrance and each successive year after that there has been no breach of the covenants and obligations of the Encumbrancer contained in this Encumbrance, the Rent Charge will be deemed to have been paid.
	The Rent Charge will determine immediately and the Encumbrancer will be entitled to a release of this Encumbrance if all covenants expressed in this Encumbrance become obsolete, satisfied or no longer enforceable or the Term has expired.
	For the avoidance of doubt, the Encumbrancee will be entitled to a release of this Encumbrance as soon as Section 2 SO Plan 389253 has been fully formed to the standards required by Queenstown Lakes District Council for vehicular and pedestrian road access.
.1	Covenants The parties covenant with each other to perform their respective obligations set out in clauses 4 to 9 (inclusive).
.1 .5	Successors in Title Subject to clause 2, this Encumbrance binds the Encumbrancer's successors in title so that contemporaneously with the acquisition of the Land all such successors in title must comply with the covenants of this Encumbrance.
2 ז נו	The Encumbrancer will do all things necessary to ensure that any invitees of the Encumbrancer on the Land and any lessees or occupiers of the Land comply with the provisions of this Encumbrance.
.1 T e	Access Over the Farm Track The Encumbrancer covenants with the Encumbrancee to allow the Encumbrancee, and by the extension, the general public, full, free, uninterrupted and unrestricted vehicular and pedestrian access over the Farm Track during the Term or until this Encumbrance is discharged by the
a 	Allension, the general public, full, free, uninterrupted and unrestricted vohil access over the Farm Track during the Term or until this Encumbrance is discha

witnesses or solicitors must sign or initial in this box.

8J-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

#### Dated

Page	4	of	7	pages
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Encum	brance Continue in additional Annexure Schedule if rec		
	Eno	umbrancee pursuant to clause 2.5.	
5.2	The is pr	Encumbrancee acknowledges that the vehicular and pedestrian access referred to in clause 5. ovided on the basis that:	
	(a)	the Encumbrancee will cause as little damage as possible to the Farm Track;	
	(b)	the Encumbrancee will not leave on the Farm Track or the Land any rubbish, litter, debris or obstruction;	
	(c)	the Encumbrancer will not be responsible for maintaining the Farm Track;	
	(d)	all users of the Ferm Track do so at their own risk with no liability attaching to the Encumbrancer for such use.	
<b>8.</b> 6.1		ute Resolution arty has any dispute with the other party in connection with this Encumbrance:	
	(a)	That party will promptly give full written particulars of the dispute to the others;	
	(b)	The parties will promptly meet together and in good faith and try and resolve the dispute.	
6.2	If the dispute is not resolved within 7 days of written particulars being given (or any longer period agreed to by the parties), the dispute will be referred to mediation.		
6.3	A pai legal	ty must use the mediation procedure to resolve a dispute before commencing arbitration or proceedings.	
6.4	The n	nediation procedure is:	
	(a)	The parties will appoint a mediator and if they fail to agree the mediator will be appointed by the president of the New Zealand Law Society or the president's nominee;	
	(b)	The parties must co-operate with the mediator in an effort to resolve the dispute;	
	(c)	if the dispute is settled, the parties must sign a copy terms of the settlement;	

we is used as an expansion of an instrument, all signing witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V11.N

2003/5038EF Approved Registrar General of Land

Dated

Page 5 of 7 pages

Encun	brance	Continue in additional Annexura Schedule if required
	(d)	If the dispute is not resolved within 14 days after the mediator has been appointed, or within any extended time that the parties agree to in writing, the mediation must cease;
	(e)	Each party must pay a half share of the costs of the mediator's fee and costs including travel, rom hire, refreshments etc.
6.5	The confi	terms of settlement are binding on the parties and override the terms of the deed if there is any ict.
6.6	The i	erms of settlement may be tendered in evidence in any mediation or legal proceedings.
6.7	discu	parties agree that written statements given to the mediator or to one another, and any ssions between the parties or between the parties and the mediator during the mediation period of admissible in any arbitration or legal proceedings.
6.8	Eithe	r party may commence arbitration proceedings when mediation ceases under clause 6.4(d).
6.9	If the	dispute is referred to arbitration:
	(a)	The arbitration will be conducted by one arbitrator appointed by the parties;
	(b)	If the parties cannot agree on arbitrator within 14 days, the appointment will be made by the president of the New Zealand Law Society or the president's nominee;
	(c)	The arbitration will be conducted in accordance with the Rules in Schedules 1 and 2 of the Arbitration Act 1996.
6.10	Neithe	er party will unreasonably delay the dispute resolution procedures in this clause 6.
6.11	This c	lause 6 does not apply to:
	(a)	Any dispute arising in connection with any attempted renegotiation of this Encumbrance; or
	<b>(</b> b <b>)</b>	An application by either party for urgent interlocutory relief.
6.12	Pendi perfor	ng resolution of any dispute the will perform this Encumbrance in all respects including mance of the matter which is the subject of dispute.
	lhis Ann	exure Schedule is used as an expansion of an instrument, all signing parties and aither their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V11.N

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2003/5038EF Approved Registrar General of Land

Dated

Page	6	of	7	pages
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Encumbrance		Continue in additional Annexure Schodule if required
7. 7.1	Part	ification of the Statutory Provisions 3 Subpart 8 of the Property Law Act applies in full to this Encumbrance but otherwise (and ut prejudice to the Encumbrancee's rights of action at common law as a rent-chargee):
	(a)	The Encumbrancee is entitled to none of the powers and remedies given to Mortgagees by the Land Transfer Act and the Property Law Act;
	(b)	No covenants on the part of the Encumbrancer and its successors in title are implied in this Encumbrance other than the covenants for further assurance implied by section 154 of the Land Transfer Act.
7.2	The B by the	Encumbrancee hereby consents to the registration of any of the following instruments executed Encumbrancer in respect of the Land:
	(a)	The creation, variation or surrender of an easement (section 90E (3) Land Transfer Act;
	(b)	The variation of a mortgage instrument or priority of mortgages (sections 102 (4) and 103 (3) Land Transfer Act);
	(0)	The registration of a lease, a lease variation instrument or the surrender of a lease (sections 115 (4), 116 (7) and 102 Land Transfer Aci); and
	(d)	The disposal of a licence or shares to which the licence relates (section 121 (1) Land Transfer Act), and this consent will be deemed to be the consent of the Mortgagee (which term includes Encumbrancee) as specified in the Land Transfer Act to the registration of a particular instrument specified in clauses (a) to (d) inclusive above.
7.3	consei	determined that written consent is required from the Encumbrances (rather than deemed of), then the Encumbrances will immediately, at the request of the Encumbrancer, give that consent.
8. 8.1	ាររលួកលើខ	r ilure by a party to enforce any clause of this Encumbrance, or any forbearance, delay or ence granted by that party to any other party will not be constructed as a waiver of the first ights under this Encumbrance.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

Dated

Page 7 of 7 pages

incum	brance Continue in additional Annexure Schedule if required	
9.	General	
9.1	Any notice required to be served on any party will be in writing and served in accordance with Property Law Act.	the
9.2	The Encumbrancer will pay the Encumbrancee's legal costs (as between solicitor and client) of incidental to the enforcement or attempted enforcement the Encumbrancee's rights, remedies powers in this Encumbrance and will indemnify the Encumbrancee against all claims proceedings arising out of the breach by the Encumbrancer of any of its obligations set out in Encumbrancee.	and and

if this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

9970250.2 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
262761	Otago
607922	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
Mortgage 8967860.4 does not affect the servient tenement, therefore the consent of the Mortgagee is not required	X
Encumbrance 9227911.1 does not affect the servient tenement, therefore the consent of the Encumbrancee is not required	V

## Signature

Signed by Kerry Amanda ODonnell as Grantor Representative on 04/03/2015 10:16 AM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

## Signature

Signed by Graeme Morris Todd as Grantee Representative on 27/02/2015 04:27 PM

\*\*\* End of Report \*\*\*

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## Easement instrument to grant easement or *profit à prendre*, or create land covenant (Sections 90A and 90F Land Transfer Act 1952)

2009/6229EF APPROVED Registrar-General of Land

#### Grantor

JACKS POINT RESIDENTS & OWNERS ASSOCIATION INCORPORATED

#### Grantee

Dickson Stewart JARDINE as to a 3/20th share, Jillian Frances JARDINE as to a 3/20th share, Dickson Stewart JARDINE and HGW TRUSTEE'S Limited as to a 7/20th share and Jillian Frances JARDINE and HGW TRUSTEE'S LIMITED as to a 7/20th share

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

#### Schedule A

Continue in additional Annexure Schedule, if required

			and and a most of constant, a required
Purpose (Nature and extent) of easement; profit	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
or covenant			
Land Covenant	Lot 102 DP 364700 (CFR 262761)	Lot 102 DP 364700 (CFR 262761)	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 38925 (CFR 607922)

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [ ] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### **Covenant provisions**

Delete phrases in [ ] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule 2 ]

See attached

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.

Page 3 of 4 Pages

2009/5043EF APPROVED Registrar-General of Land

Insert instrument type

Easement Instrument to grant easement or profit a pendre, or create land covenant

Continue in additional Annexure Schedule, if required

#### **ANNEXURE SCHEDULE 2**

## CONTINUATION OF COVENANT PROVISIONS

#### Background

- A. The Grantor is registered as proprietor of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

## **Operative** Part

#### 1. Interpretation

- 1.1 For the purposes of this instrument:
  - a) "Covenants means the covenants set out in this Instrument.
  - b) "District Plan" means the Queenstown Lakes District Council Plan.
  - c) "Dominant Tenement" means the dominant tenement set out in schedule A of this instrument.
  - d) "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - e) "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - f) "Instrument" means this easement instrument including the front page of this instrument, Schedule A and all annexure schedules.
  - g) "Servient Tenement" means the servient tenements set out in Schedule A of this instrument.
  - h) "Tripartite Agreement" means the agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

#### . Covenant

- 2.1 The Grantor covenants in favour of the Grantee that it will abide by the obligations of Jacks Point Limited under the Tripartite Agreement.
- 2.2 The Grantee acknowledges that the rights of Jacks Point Limited under the Tripartite Agreement have been previously assigned to Coneburn Water Land Limited by notice in writing to the Grantee (being the Grantee as at the date of registration of the Instrument) and as such any payment to be made to (or obligation owed to) Jacks Point Limited under the Tripartite Agreement must be made to Coneburn Water Land Limited (or its nominee).

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.

Page 4 of 4 Pages 2009/5043EF

**Registrar-General of Land** 

APPROVED

Insert instrument type

Easement Instrument to grant easement or profit a pendre, or create land covenant

Continue in additional Annexure Schedule, if required

## 3. General Covenants

- 3.1 The Grantor covenants and agrees:
  - a) to observe and perform all the Covenants contained in this Instrument at all times; and
    - b) that the Covenants contained in this instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

#### 4. Notice

4.1 Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

#### 5. Liability 5.1 Without

Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successor in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

9970250.3 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
308243	Otago
607922	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

Signatura	
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V
I certify that the Mortgagee under Mortgage 8967860.4 has consented to this transaction and I hold that consent	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V

#### Signature

Signed by Graeme Morris Todd as Grantor Representative on 27/02/2015 04:28 PM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

## Signature

Signed by Kerry Amanda ODonnell as Grantee Representative on 04/03/2015 10:16 AM

\*\*\* End of Report \*\*\*

Page 1 of 4

## Easement instrument to grant easement or profit à prendre, or create land covenant

(Sections 90A and 90F Land Transfer Act 1952)

Grantor

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grantee

Coneburn Water Land Limited

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or profit(s) à prendre set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

## Schedule A

Schedule A	Continue in additional Annexure Schedule, if required			
Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross	
Land Covenant	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 389253 (CFR 607922)	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 389253 (CFR 607922)	Lot 30 DP 376679 (CFR 308243)	

## Easement instrument to grant easement or *profit à prendre*, or create land covenant

## Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### Covenant provisions

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule 2]

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

## **ANNEXURE SCHEDULE 2**

#### **CONTINUATION OF COVENANT PROVISIONS**

#### Background

- A. The Grantor is registered as proprietor of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

## **Operative Part**

## 1. Interpretation

- 1.1 For the purposes of this Instrument:
  - a. "Covenants" means the covenants set out in this Instrument.
  - b. "District Plan" means the Queenstown Lakes District Council Plan.
  - c. "Dominant Tenement" means the dominant tenement set out in schedule A of this Instrument.
  - d. "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - e. "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - f. "Instrument" means this easement instrument including the front page of this instrument, Schedule A and all annexure schedules.
  - g. "Servient Tenement" means the servient tenements set out in schedule A of this Instrument.
  - h. Tripartite Agreement means the agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

## 2. Covenant

2.1 The Grantor covenants in favour of the Grantee that it will abide by the obligations of the parties named (collectively) as "Jardine" under the Tripartite Agreement.

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

2.2 The Grantee acknowledges that the rights of Jacks Point Limited under the Tripartite Agreement have been previously assigned to Coneburn Water Land Limited (the current Grantee) by notice in writing to the Grantor (being the Grantor as at the date of registration of the Instrument) and as such any payment to be made to (or obligation owed to) Jacks Point Limited under the Tripartite Agreement must be made to Coneburn Water Land Limited (or its nominee).

## 3. General Covenants

- 3.1 The Grantor covenants and agrees:
  - a. to observe and perform all the Covenants contained in this Instrument at all times; and
  - b. that the Covenants contained in this Instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

## 4. Notice

4.1 Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

## 5. Liability

5.1 Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successors in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this Instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

9970250.8 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer	Registers Land Distric
577972	Otago
577973	Otago
577975	Otago

Annexure Schedule: Contains 6 Pages.

## **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that the Mortgagee under Mortgage 8967860.4 has consented to this transaction and I hold that consent	V
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V

#### Signature

Signed by Graeme Morris Todd as Grantor Representative on 27/02/2015 04:33 PM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

## Signature

Signed by Stephen John Grant as Grantee Representative on 26/02/2015 05:53 PM

\*\*\* End of Report \*\*\*

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

(Sections 90A and 90F Land Transfer Act 1952)

Grantor

Dickson Stewart Jardine, Jillian Frances Jardine and HGW Trustees Limited

#### Grantee

AURORA ENERGY LIMITED

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or profit(s) à prendre set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A	Con	tinue in additional Annexure	Schedule, if required
Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
Right to Convey Electricity	"F", "L" and "M"	577972 (Lot 1 DP 452315)	in gross
	"E", "N", "O" "P", "Q", "S" and "T"	577973 (Lot 2 DP 452315)	
	"R" and "U"	577975 (Lot 4 DP 452315)	ln gross
Right to Transform Electricity	"L"	577972 (Lot 1 DP 452315)	In gross
	"T"	577973 (Lot 2 DP 452315)	In gross

Schedule A

Right to Transform Electricity	"U"	577975 (Lot 4 DP 452315)	In gross
	all shown on DP 452315		

Form B - continued

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

All rights and powers and the implied rights and powers are hereby **[varied]** [negatived] [added to] and or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule 2]

#### **Covenant provisions**

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule, if required



## CONTINUATION OF "EASEMENTS OR *PROFITS À PRENDRE* RIGHTS AND POWERS (INCLUDING TERMS, COVENANTS AND CONDITIONS)"

The Grantee shall have as easements in gross forever in favour of the Grantee the following rights:-

- (a) To convey electricity under and through the soil of those parts of the land in Certificates of Title 577972, 577973 and 577955 marked "E", "F", "L", "M" "N", "O", "P", "Q", "R", "S", "T", and "U" on Deposited Plan 452315 (hereinafter referred to as "the electricity cable easements"); and
- (b) To establish and maintain on those parts of the land in Certificates of Title 577972, 577973 and 577975 marked "L", "T" and "U" on Deposited Plan 452315 an electricity transformer and ancillary equipment (hereinafter referred to as "the transformer sites").

(the said Certificates of Title 577972, 577973 and 577975 are hereinafter referred to as "the servient lands").

#### TERMS, CONDITIONS, COVENANTS OR RESTRICTIONS IN RESPECT OF THE RIGHT TO CONVEY ELECTRICITY AND MAINTAIN ELECTRICITY TRANSFORMERS AND ANCILLARY EQUIPMENT

## A. ELECTRICITY CABLE EASEMENTS

#### The Grantee shall have the right

- (a) To lead and convey electricity and electric impulses without interruption or impediment (except during any periods of necessary renewal or repair) by means of conduits, cables, pipes and ancillary equipment laid or to be laid under the surface of and through the soil of the electricity cable easements.
- (b) To lay, place, inspect, repair, maintain, renew, upgrade and replace on and under the electricity cable easements such conduits, cables, pipes and ancillary equipment as may be necessary to convey such electricity and electric impulses by means of the said conduits, cables, pipes and ancillary equipment.
- (c) For the Grantee its servants, agents, workmen and contractors to enter and remain on such part or parts of the servient lands as may be necessary to secure access to the electricity cable easements and the said conduits, cables, pipes and ancillary equipment and on such parts of the servient lands as may be necessary for the purpose of laying, placing, inspecting, repairing, maintaining, renewing, upgrading and replacing the said conduits, cables, pipes and ancillary equipment together with full power and authority for the Grantee its surveyors, engineers, workmen, agents and servants with or without vehicles implements machinery and equipment from time to time and at all times to enter and remain on the said part or parts of the servient lands as may be necessary for the purpose of exercising and enjoying all or any of the rights privileges and easements granted in this instrument.

## B. ELECTRICITY TRANSFORMER EASEMENTS

#### The Grantee shall have the right

- (a) To construct, install, place, inspect, repair, maintain, renew, upgrade and replace on the transformer sites electricity transformers and ancillary equipment.
- (b) To lay, place, inspect, repair, maintain, renew, upgrade and replace on or under the transformer sites electric cables for the transmission of electrical energy together with the right to transmit electrical energy through and along the said electric cables.
- (c) For the Grantee its servants, agents, workmen and contractors to enter and remain on such part or parts of the servient lands as may be necessary to secure access to the transformer sites and the said electricity cables and on such parts of the servient lands as may be necessary for the purpose of constructing, installing, laying, placing, inspecting, repairing, maintaining, renewing, upgrading and replacing the said electricity transformers and ancillary equipment and the said electric cables together with full power and authority for the Grantee its surveyors, engineers, workmen, agents and servants with or without vehicles implements machinery and equipment from time to time and at all times to enter and remain on the said part or parts of the servient lands as may be necessary for the purpose of exercising and enjoying all or any of the rights privileges and easements granted in this instrument.

### 1. The Grantor covenants with the Grantee

- (a) Not to place any building or other structure or plant any tree or shrub or alter the natural level of the land on the electricity cable easements and the transformer sites without the prior written consent of the Grantee.
- (b) To take all reasonable steps to ensure that their tenants, agents and workmen do not do any wilful or negligent act or thing whereby the said conduits, cables, pipes and ancillary equipment and the electricity transformers and ancillary equipment and the said electricity cables shall be damaged or destroyed. If it is established that the damage was caused by the negligent or wilful act of the Grantor or their tenants, agents or workmen then the Grantor shall be responsible for the repair and/or replacement required. Any work so required shall be carried out by a Contractor selected by the Grantee.
- (c) Not at any time permit or suffer any act or thing whereby the rights, powers, liberties, licences and easements hereby granted to the Grantee may be interfered with or affected.
- (d) That the Grantee will not be required to erect or maintain a fence around the transformer sites or the said electricity transformers and ancillary equipment and except in respect of rubbish debris or obstruction left there by the Grantee the Grantee shall not be responsible for the normal maintenance of those parts of the transformer sites not covered by the said electricity transformers and ancillary equipment or keeping the same clean and tidy.

## 2. The Grantee covenants with the Grantor that upon the exercising of any of its rights the Grantee shall

- (a) Cause as little damage as possible to the servient lands and the occupiers of the servient lands;
- (b) Restore the servient lands as near as reasonably possible to its previous condition;
- (c) Make good at the Grantee's expense any damage done by the actions of the Grantee to the buildings, erections and fences of the Grantor.
- (d) Not except while work is being carried on upon the servient lands leave on that part of the servient lands not covered by the electricity transformers and ancillary equipment any rubbish or debris or obstruction.



**View Instrument Details** 

Instrument No. Status Date & Time Lodged Lodged By Instrument Type 9970250.9 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
555575	Otago
577972	Otago
577973	Otago
577974	Otago
577975	Otago
577977	Otago
577978	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that the Mortgagee under Mortgage 8967860.5 has consented to this transaction and I hold that consent	Ŷ
I certify that the Mortgagee under Mortgage 8967860.4 has consented to this transaction and I hold that consent	V
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V

#### Signature

Signed by Graeme Morris Todd as Grantor Representative on 01/05/2015 10:04 AM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	X
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

#### Signature

Signed by Graeme Morris Todd as Grantee Representative on 01/05/2015 10:04 AM

\*\*\* End of Report \*\*\*

# Easement instrument to grant easement or *profit à prendre*, or create land covenant (Sections 90A and 90F Land Transfer Act 1952)

2009/6229EF APPROVED Registrar-General of Land

## Grantor

Dickson Stewart JARDINE (as to a 3/20 share) Jillian Frances JARDINE (as to a 3/20 share) Dickson Stewart JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share), Jillian Frances JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share) REMARKABLES STATION LIMITED

#### Grantee

Dickson Stewart JARDINE (as to a 3/20 share) JIIIIan Frances JARDINE (as to a 3/20 share) Dickson Stewart JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share) JIIIIan Frances JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share)

## Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

#### Schedule A

Continue in additional Annexure Schedule, if required

Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
see attached			

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.
Purpose (Nature and extent) of easement; profit or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
	F,G	Lot 1 DP 452315 CFR 577972	Lots 2, 3 and 4 DP 452315 CFR 577973 577974 577975
	E, H, O, V, W, X, Y, Z, AA, AB, AC	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
Right to convey water	D, K	Lot 3 DP 452315 CFR 577974	Lots 1, 2 and 4 DP 452315 CFR 577972 577973 577975
right to convoy water	A	Lot 5 DP 452315 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
	С	Lot 8 DP 443832 CFR 555575	Lots 1, 2, 3, 4, 5, 6 and 7 DP 452315 CFR 577972 577973 577974 577975 577977 577978
	В	Section 1 SO 389253 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
Right to store water	G	Lot 1 DP 452315 CFR 577972	Lots 2, 3 and 4 DP 452315 CFR 577973 577974 577975
angin to store water	X, AB	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
	F	Lot 1 DP 452315 CFR 577972	Lot 2 DP 452315 CFR 577973
	H, AC	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
	ε	Lot 2 DP 452315 CFR 577973	Lots 1 and 3 DP 452315 CFR 577972 577974
Right of Way	D	Lot 3 DP 452315 CFR 577974	Lots 1 and 2 DP 452315 CFR 577972 577973
	А	Lot 5 DP 452315 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
	В	Section 1 SO 389253 CFR 577973	Lots 1, 2, 3, and 4 DP 452315 CFR 577972 577973 577974 577975
Rights to convey electricity	E, V	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
Rights to convey electricity	D, K	Lot 3 DP 452315 CFR 577974	Lots 1, 2 and 4 DP 452315 CFR 577972 577973 577975
	F	Lot 1 DP 452315 CFR 577972	Lot 2 DP 452315 CFR 577973
Right to convey telecommunications and	E	Lot 2 DP 452315 CFR 577973	Lots 1 and 3 DP 452315 CFR 577972 577974
computer media	D	Lot 3 DP 452315 CFR 577974	Lots 1 and 2 DP 452315 CFR 577972 577973
Right to drain and dispose of ewage	I, J, Q	Lot 2 DP 452315 CFR 577973	Lot 4 DP 452315 CFR 577975
	All on DP 452315		

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [ ] and insert memorandum number as required; continue in additional Annexuro Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

]

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule

#### **Covenant** provisions

Delete phrases in [ ] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule ]·

Page of Pages

2009/5043EF APPROVED Registrar-General of Land

Insert instrument type	
Easement Instrument	

Continue in additional Annexure Schedule, if required

For easements of Right to Take and Convey Water, Right to Convey Water and Right to Store Water the provisions set out in Schedule 4 of the Land Transfer Regulations 2002 are implied in respect of the easements specified in the within document, the provisions set out in Clauses 3 to 9 of Schedule 4 are implied in each class of easements to the extent indicated in those provisions:

But varied as follows:

**Rights and Powers** 

The right to convey water and the right to take water shall be amended as follows:

The full free uninterrupted and unrestricted right, liberty and privilege for the Grantee and their tenants (in common with the Grantor, their tenants and any other person lawfully entitled to do so), from time to time and at all times to take, convey and lead water including the right to occupy for the aforementioned purposes in a free and unimpeded flow (except when the flow is halted for any reasonable period necessary for essential repairs) from the source of supply or point of entry, as the case may be, and following the stipulated course (or courses stipulated) across the land over which the easement is granted or created.

**Monitoring Potable Water Supply** 

The registered proprietors from time to time being of the Servient and Dominant Tenements shall be responsible to ensure that the drinking water supplied is monitored in compliance with the Drinking Water Standards for New Zealand 2005 (Revised 2008) (or any standard, regulation or rule that replaces this standard). The results are to be forwarded by the registered proprietor to the Queenstown Lakes District Council (or any entity that replaces this body corporate or takes over its functions). The Ministry of Health shall approve the laboratory carrying out the analysis. Should the water not meet the requirements of the Standard then the registered proprietor of the Servient and Dominant Tenements shall be responsible for the provision of water treatment to ensure that the Drinking Water Standards for New Zealand 2005 (Revised 2008) are met or exceeded.

The registered proprietor shall only be responsible under this clause for the period that the registered proprietor is shown as such on the Computer Register.

**Minimum Potable Water Supply** 

The Dominant Tenements and the Servient Tenements shall be each entitled to draw a minimum of 3,000 litres of water per day.

Maintenance, Repair and Replacement

Any maintenance, repair or replacement of any water pump and associated pipes or electricity supply lines on the Servient Tenement that is necessary because of any act or omission of the Grantor or Grantee (which includes the agents, employees, contractors, subcontractors and invitees of the Grantor or Grantee) must be carried out by that party which caused the damage at their sole cost. Where the act or omission is the partial cause of the maintenance or repair or replacement, the costs payable by the party that caused the damage must be in proportion to the amount attributable to that act or omissions (with the balance payable in accordance with clause 11 of the Fourth Schedule) otherwise all costs (capital, operational or maintenance) associated with the water supply shall be met equally by the Dominant and Servient Tenement.

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

10441473.4 Registered 26 May 2016 15:53 Chivers, Katheryn Louise Easement Instrument



Affected Computer Registers	Land District	
577972	Otago	
577973	Otago	
577974	Otago	
577975	Otago	
577977	Otago	
577978	Otago	

Annexure Schedule: Contains 5 Pages.

### **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	X
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V

#### Signature

Signed by David James Smillie as Grantor Representative on 26/05/2016 02:24 PM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V	
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V	
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V	
	yearsy -	

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the V prescribed period

## Signature

Signed by David James Smillie as Grantee Representative on 26/05/2016 02:24 PM

\*\*\* End of Report \*\*\*

## Easement instrument to grant easement or *profit à prendre*, or create land covenant

(Sections 90A and 90F Land Transfer Act 1952)

#### Grantor

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grantee

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grant of Easement or Profit à prendre or Creation of Covenant

**The Grantor** being the registered proprietor of the servient tenement(s) set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, **or creates** the covenant(s) **set out** in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A				Ce	ontinue in additional Annexure	Schedule, if required
Purpose extent) of	(Nature	and	Shown reference)	(plan	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register)
easement; covenant	profit	or			Register)	or in gross
Land Cover	nant				Lots 6 & Lot 7 DP 452315 (CFR 577977 & CFR 577978)	Lot 1, Lot 2, Lot 3, Lot 4 and Lot 5 on DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 – 577975 inclusive)
					Lots 1 – 5 DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 – 577975 inclusive)	Lots 6 & Lot 7 DP 452315 (CFR 577977 & CFR 577978)

Form B - continued

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### **Covenant provisions**

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule. if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

Annexure Schedule 2

## Easement instrument to grant easement or *profit à prendre*, or create land covenant

#### ANNEXURE SCHEDULE 2

#### CONTINUATION OF COVENANT PROVISIONS

#### Background

- A. The Grantors are registered as proprietors of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

#### **Operative Part**

#### 1. Interpretation

- 1.1. For the purposes of this Instrument:
  - (a) "Covenants" means the covenants set out in this Instrument.
  - (b) "District Plan" means the Queenstown Lakes District Council Plan.
  - (c) "Dominant Tenement" means the dominant tenement set out in Schedule A of this Instrument.
  - (d) "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - (e) "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - (f) "Instrument" means this easement instrument including the front page of this Instrument, Schedule A and all annexure schedules.
  - (g) "Servient Tenement" means the servient tenements set out in Schedule A of this Instrument.
  - (h) "Stakeholder Deed" means the Jacks Point Stakeholders Deed dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited, Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock, and Queenstown Lakes District Council.
  - (i) "Tripartite Agreement" means the Agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

# 2. Stakeholders Deed Covenant – This Covenant only applies to Lots 6 & 7 DP 452315 (CFR 577977 & CFR 577978) as Servient Tenement and the Dominant Tenements are Lot 1-5 DP 452315 and section one survey office plan 389253 (CFR 577972-577975 inclusive)

2.1. The Grantor covenants in favour of the Grantee that it will abide by the obligations of the parties named (collectively) as "Jardine" under the Stakeholders Deed.

#### 3. No Objection Covenant

- 3.1. The Grantor covenants in favour of the Grantee that it shall not submit in opposition, nor support, finance, encourage or contribute to any submission in opposition to:
  - (a) any future development by the Grantee of the Dominant Tenement;
  - (b) any application by the Grantee to Queenstown-Lakes District Council for any plan change or resource consent for any activity in respect of the Dominant Tenement.
- 3.2. The Grantor shall, if called upon to do so, provide an Affected Party Approval under the Resource Management Act 1991 (or any legislation in place of or in substitution thereto) in respect of any plan change or application for resource consent referred to in clause 3.1.

#### 4. Site Coverage Covenant

- 4.1. The Grantor covenants in favour of the Grantee that, in terms of the operative Jacks Point zone of the Queenstown Lakes District Council as at 12 May 2016, the Homestead Bay site coverage maximum of 2.5% of the land area referred to in clause 3(d) of the Stakeholders Deed and clause 13(a) of the Tripartite Agreement shall be allocated between the Grantor and Grantee as follows:
  - (a) all of the 2.5% site coverage allowed within the Homestead Bay area of the zone (being 2.5% of the land area of Lots 1, 2, 3, 4, 5, 6 and 7 of Deposited Plan 452315) will be assigned to that part of the Servient Tenement being Lots 6 & 7 DP 452315 (CFR 577977 & CFR 577978), except for:
    - (i) the site coverage of the Grantee's buildings that exist as at 12 May 2016; and
    - the site coverage for seven (7) further dwellings (each having a maximum area of 500m<sup>2</sup> per dwelling) that may be developed by the Grantee on that part of the Dominant Tenement being Lots 1 5 DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 577975 inclusive);
  - (b) provided however that the parties' rights and obligations under this clause 4.1 shall end in the event that the 2.5% site coverage requirement ceases to have effect under all of the operative Queenstown Lakes District Council plan, the Stakeholders Deed and the Tripartite Agreement.

#### 5. General Covenants

- 5.1. The Grantor covenants and agrees:
  - (a) to observe and perform all the Covenants contained in this Instrument at all times; and
  - (b) that the Covenants contained in this Instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

#### 6. Notice

6.1. Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

#### 7. Liability

7.1. Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successors in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this Instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).

#### 8. Independent Trustee

8.1. If any person enters into this Instrument as trustee of a trust then, if that person has no right to or interest in any assets of the trust except in that person's capacity as a trustee of the trust, then that person's liability under this Instrument will not be personal and unlimited but will be limited to the actual amount recoverable from the assets of that trust from time to time.

#### 9. Vesting on Further Subdivisions

The Grantee hereby confirms and consents that upon subdivision of any of the Servient Tenements should there be a need for vesting of any land, either as local purposes, reserve or as a road into the local authority, the Grantee hereby irrevocably consents for such vesting and confirms that upon execution of this instrument the Grantee has given its irrevocable consent for such vesting without any necessity for obtaining another formal consent.

Appendix 2



## RECORD OF TITLE UNDER LAND TRANSFER ACT 2017 FREEHOLD

Search Copy



Identifier	577974
Land Registration District	Otago
Date Issued	04 March 2015

**Prior References** 607922

Estate	Fee Simple
Area	1.6427 hectares more or less
Legal Description	Lot 3 Deposited Plan 452315

## **Registered Owners**

University of Otago Foundation Trust

#### Interests

Land Covenant in Transfer 6128838.2 - 27.8.2004 at 9:00 am

9227911.1 Encumbrance to Queenstown Lakes District Council - 7.11.2012 at 10:57 am

Land Covenant in Easement Instrument 9970250.2 - 4.3.2015 at 4:23 pm

Land Covenant in Easement Instrument 9970250.3 - 4.3.2015 at 4:23 pm

Subject to a right of way and rights to convey telecommunications and computer media over part marked D on DP 452315 and rights to convey water and electricity over parts marked D and K both on DP 452315 created by Easement Instrument 9970250.9 - 4.3.2015 at 4:23 pm

Appurtenant hereto is a right of way, a right to store water and rights to convey water, electricity, telecommunications and computer media created by Easement Instrument 9970250.9 - 4.3.2015 at 4:23 pm

The easements created by Easement Instrument 9970250.9 are subject to Section 243 (a) Resource Management Act 1991

Land Covenant in Easement Instrument 10441473.4 - 26.5.2016 at 3:53 pm



Document Set ID: 6757383 Version: 1, Version Date: 01/02/2021

## Approved by Registrar-General of Land under No. 2002/1026 **Transfer instrument** Section 90, Land Transfer Act 1952

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		Section 90, Land Trai	nster Act 1952	T 6128838.2 Transfer
Land registration distri	ict		Approval	Cpy - 01/01, Pgs - 003,26/08/04,12:34
ΟΤΑGΟ			ADTS -	
Unique identifier(s) or C/T(s)	All/part	Area/description of	f part or stratum	DoelD: 110630444
156346 156347	AII AII		- <u>-</u>	
Transferor			Surname(s) mus	t be <u>underlined</u> or in CAPITALS.
Dickson Stewart JAR	DINE, Jillian	Francis JARDINI	E and Gerard Br	endon BOOCK
Transferee			Surname(s) mus	t be <u>underlined</u> or in CAPITALS.
Jacks Point Limited		······		
Fee simple plus Land Operative clause The Transferor trans certificate(s) of title or easement or profit à pre	fers to the T	ransferee the above er(s) and, if an easer	estate or intere	st in the land in the above andre is described above, that
· ·				
Dated this 16	day of	august	2004	
Attestation (If the trans Schedule).	feree or grante	e is to execute this	transfer, include	the attestation in an Annexure
		Signed In my p	resence by the Ti	ansferor
Dickson Stewart Jardine	95 Jac	Signature of with Witness to comp Witness name	olete in BLOCK lett	ers (unless legibly printed)
Hian Francis Jardine		Occupation	GRAEME MU LEGAL EXEC	RRAY STOUT
Signature [common se Transferor	al] of	Address	DUNEDIN	••••

Certified correct for the purposes of the Land Transfer Act 1952.

[Solicitor for] the Transferee

REF: 7002 - AUCKLAND DISTRICT LAW SOCIETY

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"Mortgage", "Transfe	<b>_</b>			
Transfer	Dated	·		Page 1 of 2 Pages
		(Continue	in additiona	al Annexure Schedule, if required.
Continuation of '	Estate or Easement to be c	reated'		
Continuation of '	Estate or Easement to be c	reated'		
			337993 as de	scribed in Certificate of Title 156348
It is the Transferor's inten	tion to create for the benefi	of Lots 3 and 4 DP 3		scribed in Certificate of Title 156348 e A over the land transferred in this

such covenants against the owners for the time being of the Servient Land

<u>AND AS INCIDENTAL</u> to the transfer of the fee simple so as to bind the Servient Land and for the benefit of the Dominant Land the Transferee <u>COVENANTS AND AGREES</u> in the manner set out in the Schedule A so that the covenants run with the Servient Land for the benefit of the Dominant Land.

## SCHEDULE A

#### DEVELOPMENT

- 1) If Variation 16 to the Queenstown Lakes District Council Proposed Plan is confirmed in respect of the Dominant Land, the Transferee shall not, whether personally or through any agent or servant, directly or indirectly lodge or support any objection, submission or appeal to any resource consent or plan change or variation to the Queenstown Lakes District Council District Plan or Proposed Plan lodged or introduced in relation to the Dominant Land, provided that such resource consent, plan change or variation is consistent with the Coneburn Area Resource Study dated October 2002.
- 2) If the said Variation 16 is not confirmed in respect of the Dominant Land, the Transferee shall not, whether personally or through any agent or servant, directly or indirectly lodge or support any objection, submission or appeal to any resource consent or plan change or variation to the Queenstown Lakes District Council District Plan or Proposed Plan lodged or introduced to enable the development of the Dominant Land, unless such development is likely to generate significant adverse environmental effects on the Servient Land.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors mast sign or initial in this box.

REF: 7025 - AUCKLAND DISTRICT LAW SOCIETY

sert type of instrun Mortgage", "Transfe	ent Anne Anne er". "Lease" etc	xure Schedule		Approval 02/5032EF
ransfer	Dated		Page 1	of 1 Pages
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		(Continue in at	dditional Annexure Sch	edule, îl required.)
Signed by Jac	cks Point Limited			
		/ -	Director	
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**View Instrument Details** 

Instrument No. Status Date & Time Lodged Lodged By Instrument Type 9227911.1 Registered 07 Nov 2012 10:57 Jack, Andrew Bryce Encumbrance



Affected Computer Registers Land District

555574

Otago

Annexure Schedule: Contains 10 Pages.

## **Encumbrancer Certifications**

I certify that I have the authority to act for the Encumbrancer and that the party has the legal capacity to authorise me to lodge this instrument

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

#### Signature

Signed by Andrew Bryce Jack as Encumbrancer Representative on 07/11/2012 10:56 AM

### **Encumbrancee Certifications**

I certify that I have the authority to act for the Encumbrancee and that the party has the legal capacity to authorise	V
me to lodge this instrument	

I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument

I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period

## Signature

Signed by Andrew Bryce Jack as Encumbrancee Representative on 07/11/2012 10:56 AM

\*\*\* End of Report \*\*\*

## Encumbrance instrument

(Section 101 Land Transfer Act 1952)

Affected instrument Identifier			2009/6232EF APPROVED Registrar-General of Land
and type (if applicable)	All/part	Area/Description of part or stratum	
555574	All		

#### Encumbrancer

Dickson Stewart Jardine (as to 3/20 share) and Jillian Frances Jardine (as to 3/20 share) and Dickson Stewart Jardine and HGW Trustee's Limited (as to 7/20 share) and Jillian Frances Jardine and HGW Trustees Limited (as to 7/20 share)

#### Encumbrances

Queenstown Lakes District Council

Estate or interest to be encumbered	Insert e.g. Fee simple; Leasehold in Lease No. etc.
Fee Simple	

Encumbrance Memorandum Number Not Applicable

Nature of security State whether sum of money, annuity or rentcharge and amount Rent charge being \$1.00 per annum if so demanded by the Encumbrancee.

#### Encumbrance

Delete words in [], as appropriate

The Encumbrancer encumbers for the benefit of the Encumbrancee the land in the above computer register(s) with the above sum of money, annuity or rentcharge, to be raised and paid in accordance with the terms set out in the [above Encumbrance Memorandum] [Annexure Schedule(s)] and so as to incorporate in this Encumbrance the terms and other provisions set out in the [above Encumbrance Memorandum] [and] [Annexure Schedule(s)] for the better securing to the Encumbrance the payment(s) secured by this Encumbrance, and compliance by the Encumbrance with the terms of this encumbrance.

REF: 7208 - AUCKLAND DISTRICT LAW SOCIETY INC.

Terms	
1 Length of term 99 years	
2 Payment date(s)On each anniversary of the date of this Encumbrance if so de	emanded by the
3 Rate(s) of InterestNii	Encumbrancee
4 Event(s) in which the sum, annuity or rentcharge becomes payable If there has been any breach of the covenants contained herein	
5 Event(s) in which the sum, annuity or rentcharge ceases to be payable If the covenants contained herein become obsolete, satisfied or no longer en	forceable.

Covenants and conditions Continued on Annexure Schedule 1

Continue in Annexure Schedule(s), if required

\*\*\*\*

Modification of statutory provisions

Continue in Annexure Schedule(s), if required

Continued on Annexure Schedule 1

REF: 7208 - AUCKLAND DISTRICT LAW SOCIETY INC.





2003/5038EF Approved Registrar General of Land

Page 1 of 7 pages

Encun	nbrance Continue in additional Annexure Schedule if required
A.	The Encumbrancer is the registered proprietor of all that land described in Certificate of Title 555574 ("the Land").
8.	The Encumbrancee is a local authority and the Land is within the Encumbrancee's district.
C.	The general public currently has access to Woolshed Bay, Lake Wakatipu over Section 1 SO Pian 389253 which is currently legal road, such road being vested in the Encumbrancee.
D.	The Encumbrancer and the Encumbrancee have agreed that the legal road described as Section 1 SO Plan 389253 shall be stopped and exchanged for part of the Land owned by the Encumbrancer and described as Section 2 SO Plan 389253, pursuant to the Public Works Act 1981 ("the Land Exchange").
E.	Following the Land Exchange Section 1 SO Plan 389253 will vest in the Encumbrancer and Section 2 SO Plan 389253 will vest in the Encumbrancee as legal road.
F,	Pending the vesting of Section 2 SO Plan 389253 in the Encumbrancee and the forming of that land as legal road, the Encumbrancer has agreed to allow the general public access to Woolshed Bay, Lake Wakatipu by way of an existing farm track ("the Farm Track") shown coloured red on the copy of SO Plan 389253 attached hereto.
G.	The Encumbrancer and the Encumbrancee have agreed that the Land Exchange shall proceed on the basis that the Encumbrancer will encumber the Land to the effect that the Encumbrancer will allow the Encumbrancee and the general public unrestricted access over the Farm Track, until such time as Section 2 SO Plan 369253 has been fully formed as legal road.
H.	The Encumbrancer has agreed to so encumber the Land.
1. 1.1	Operative Parts In this Encumbrance unless the context otherwise requires:
	"Encumbrancee" means Queenstown Lakes District Council.
	"Encumbrancer" means the registered proprietor of the Land or any part of the Land from time to time.
	"Farm Track" means those parts of the Land coloured red on the attached copy of SO Plan 389253
<b>8</b> 5	this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

Dated
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Page 2 of 7 pages

Encumbrance	Continue in additional Annexure Schedule if required
and	measuring not less than six (6) metres in width.
"Lar	id" means all the land described in Certificate of Title 555574.
Pub	id Exchange" means the exchanging of Sections 1 and 2 SO Plan 389253 in accordance with the lic Works Act 1981 including amalgemetion with adjoining land and the creation of all necessary aments.
"Lan	d Transfer Act" means the Land Transfer Act 1952.
*Pro	perty Law Act" means the Property Law Act 2007.
"Ren	t Charge" means the charges described in clause 2.
1.2 For t	he avoidanc <b>e o</b> f doubt:
(a)	Words importing the singular number include the plural and vice versa;
(b)	A covenant to do something is also a covenant to permit or cause that thing to be done and a covenant not to do something is also a covenant not to permit or cause that thing to be done;
(c)	References to the parties are references to the Encumbrances and the Encumbrancer;
(ď)	This Encumbrance binds or benefits the parties and their heirs, executors, successors and assigns in perpetuity;
(e)	References to clauses are to those named in this Encumbrance;
(1)	Headings are for convenience only and do not affect interpretation;
(9)	Statute, regulation or by-law includes all statutes, regulations or by-laws varying, consolidating or replacing them, and a reference to a statute includes all regulations or by- laws issued under that statute; and
(h)	A reference to "written" or "writing" includes facsimile communications.

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

#### Dated

Page 3 of 7 pages

ncumbn	Ance Continue in additional Annexure Schedule if required
2. 2.1	Term and Rent Charge The term of this Encumbrance commences on the date of this Encumbrance and expires on that date which is 99 years from the date of this Encumbrance or until this Encumbrance is earlier discharged by the Encumbrancee pursuant to clause 2.5.
2.2	Subject to clause 2.4, the Encumbrancer encumbers the Land for the benefit of the Encumbrancee for the term, with an annual rent charge ("the Rent Charge") of \$1.00 to be paid on each anniversary of the date of this Encumbrance, if so demanded by the Encumbrancee.
	If during the year preceding the date of this Encumbrance and each successive year after that there has been no breach of the covenants and obligations of the Encumbrancer contained in this Encumbrance, the Rent Charge will be deemed to have been paid.
	The Rent Charge will determine immediately and the Encumbrancer will be entitled to a release of this Encumbrance if all covenants expressed in this Encumbrance become obsolete, satisfied or no longer enforceable or the Term has expired.
	For the avoidance of doubt, the Encumbrancee will be entitled to a release of this Encumbrance as soon as Section 2 SO Plan 389253 has been fully formed to the standards required by Queenstown Lakes District Council for vehicular and pedestrian road access.
.1	Covenants The parties covenant with each other to perform their respective obligations set out in clauses 4 to 9 (inclusive).
.1 .5	Successors in Title Subject to clause 2, this Encumbrance binds the Encumbrancer's successors in title so that contemporaneously with the acquisition of the Land all such successors in title must comply with the covenants of this Encumbrance.
2 ז נו	The Encumbrancer will do all things necessary to ensure that any invitees of the Encumbrancer on the Land and any lessees or occupiers of the Land comply with the provisions of this Encumbrance.
.1 T e	Access Over the Farm Track The Encumbrancer covenants with the Encumbrancee to allow the Encumbrancee, and by the extension, the general public, full, free, uninterrupted and unrestricted vehicular and pedestrian access over the Farm Track during the Term or until this Encumbrance is discharged by the
a 	Allension, the general public, full, free, uninterrupted and unrestricted vohil access over the Farm Track during the Term or until this Encumbrance is discha

witnesses or solicitors must sign or initial in this box.

8J-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

#### Dated

Page	4	of	7	pages
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Encum	brance	Continue in additional Annexura Schedule if required		
	Eno	umbrancee pursuant to clause 2.5.		
5.2	The is pr	Encumbrancee acknowledges that the vehicular and pedestrian access referred to in clause 5. ovided on the basis that:		
	(a)	the Encumbrancee will cause as little damage as possible to the Farm Track;		
	(b)	the Encumbrancee will not leave on the Farm Track or the Land any rubbish, litter, debris or obstruction;		
	(c)	the Encumbrancer will not be responsible for maintaining the Farm Track;		
	(d)	all users of the Ferm Track do so at their own risk with no liability attaching to the Encumbrancer for such use.		
<b>8.</b> 6.1		ute Resolution arty has any dispute with the other party in connection with this Encumbrance:		
	(a)	That party will promptly give full written particulars of the dispute to the others;		
	(b)	The parties will promptly meet together and in good faith and try and resolve the dispute.		
6.2	If the dispute is not resolved within 7 days of written perticulars being given (or any longer period agreed to by the parties), the dispute will be referred to mediation.			
6.3	A party must use the mediation procedure to resolve a dispute before commencing arbitration or legal proceedings.			
6.4	The n	nediation procedure is:		
	(a)	The parties will appoint a mediator and if they fail to agree the mediator will be appointed by the president of the New Zealand Law Society or the president's nominee;		
	(b)	The parties must co-operate with the mediator in an effort to resolve the dispute;		
	(c)	if the dispute is settled, the parties must sign a copy terms of the settlement;		

we is used as an expansion of an instrument, all signing witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V11.N

2003/5038EF Approved Registrar General of Land

Dated

Page 5 of 7 pages

Encun	brance	Continue in additional Annexura Schedule if required
	(d)	If the dispute is not resolved within 14 days after the mediator has been appointed, or within any extended time that the parties agree to in writing, the mediation must cease;
	(e)	Each party must pay a half share of the costs of the mediator's fee and costs including travel, rom hire, refreshments etc.
6.5	The confi	terms of settlement are binding on the parties and override the terms of the deed if there is any ict.
6.6	The i	erms of settlement may be tendered in evidence in any mediation or legal proceedings.
6.7	discu	parties agree that written statements given to the mediator or to one another, and any ssions between the parties or between the parties and the mediator during the mediation period of admissible in any arbitration or legal proceedings.
6.8	Eithe	r party may commence arbitration proceedings when mediation ceases under clause 6.4(d).
6.9	If the	dispute is referred to arbitration:
	(a)	The arbitration will be conducted by one arbitrator appointed by the parties;
	(b)	If the parties cannot agree on arbitrator within 14 days, the appointment will be made by the president of the New Zealand Law Society or the president's nominee;
	(c)	The arbitration will be conducted in accordance with the Rules in Schedules 1 and 2 of the Arbitration Act 1996.
6.10	Neithe	er party will unreasonably delay the dispute resolution procedures in this clause 6.
6.11	This clause 6 does not apply to:	
	(a)	Any dispute arising in connection with any attempted renegotiation of this Encumbrance; or
	<b>(</b> b <b>)</b>	An application by either party for urgent interlocutory relief.
6.12	Pendi perfor	ng resolution of any dispute the will perform this Encumbrance in all respects including mance of the matter which is the subject of dispute.
	lhis Ann	exure Schedule is used as an expansion of an instrument, all signing parties and aither their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V11.N

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2003/5038EF Approved Registrar General of Land

Dated

Page	6	of	7	pages
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Encum	srance	Continue in additional Annexure Schodule if required		
7. 7.1	Part	ification of the Statutory Provisions 3 Subpart 8 of the Property Law Act applies in full to this Encumbrance but otherwise (and ut prejudice to the Encumbrancee's rights of action at common law as a rent-chargee):		
	(a)	The Encumbrancee is entitled to none of the powers and remedies given to Mortgagees by the Land Transfer Act and the Property Law Act;		
	(b)	No covenants on the part of the Encumbrancer and its successors in title are implied in this Encumbrance other than the covenants for further assurance implied by section 154 of the Land Transfer Act.		
7.2	The B by the	Encumbrancee hereby consents to the registration of any of the following instruments executed Encumbrancer in respect of the Land:		
	(a)	The creation, variation or surrender of an easement (section 90E (3) Land Transfer Act;		
	(b)	The variation of a mortgage instrument or priority of mortgages (sections 102 (4) and 103 (3) Land Transfer Act);		
	(0)	The registration of a lease, a lease variation instrument or the surrender of a lease (sections 115 (4), 116 (7) and 102 Land Transfer Aci); and		
	(d)	The disposal of a licence or shares to which the licence relates (section 121 (1) Land Transfer Act), and this consent will be deemed to be the consent of the Mortgagee (which term includes Encumbrancee) as specified in the Land Transfer Act to the registration of a particular instrument specified in clauses (a) to (d) inclusive above.		
7.3	If it is determined that written consent is required from the Encumbrancee (rather than deemed consent), then the Encumbrancee will immediately, at the request of the Encumbrancer, give that written consent.			
8. 8.1	Waiver Any failure by a party to enforce any clause of this Encumbrance, or any forbearance, delay or indulgence granted by that party to any other party will not be constructed as a waiver of the first part's rights under this Encumbrance.			

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN

2003/5038EF Approved Registrar General of Land

Dated

Page 7 of 7 pages

incum	brance Continue in additional Annexure Schedule if required	Continue in additional Annexure Schedule if required	
9.	General		
9.1	Any notice required to be served on any party will be in writing and served in accordance with Property Law Act.	the	
9.2	The Encumbrancer will pay the Encumbrancee's legal costs (as between solicitor and client) of incidental to the enforcement or attempted enforcement the Encumbrancee's rights, remedies powers in this Encumbrance and will indemnify the Encumbrancee against all claims proceedings arising out of the breach by the Encumbrancer of any of its obligations set out in Encumbrancee.	and and	

if this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or solicitors must sign or initial in this box.

BJ-382654-190-1-V1:LN



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

9970250.2 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
262761	Otago
607922	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	7
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
Mortgage 8967860.4 does not affect the servient tenement, therefore the consent of the Mortgagee is not required	V
Encumbrance 9227911.1 does not affect the servient tenement, therefore the consent of the Encumbrancee is not required	V

## Signature

Signed by Kerry Amanda ODonnell as Grantor Representative on 04/03/2015 10:16 AM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

## Signature

Signed by Graeme Morris Todd as Grantee Representative on 27/02/2015 04:27 PM

\*\*\* End of Report \*\*\*

## Easement instrument to grant easement or *profit à prendre*, or create land covenant (Sections 90A and 90F Land Transfer Act 1952)

2009/6229EF APPROVED Registrar-General of Land

#### Grantor

JACKS POINT RESIDENTS & OWNERS ASSOCIATION INCORPORATED

#### Grantee

Dickson Stewart JARDINE as to a 3/20th share, Jillian Frances JARDINE as to a 3/20th share, Dickson Stewart JARDINE and HGW TRUSTEE'S Limited as to a 7/20th share and Jillian Frances JARDINE and HGW TRUSTEE'S LIMITED as to a 7/20th share

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

#### Schedule A

Continue in additional Annexure Schedule, if required

			and and runnox and bone cane, "required
Purpose (Nature and extent) of easement; profit	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
or covenant	,		
Land Covenant	Lot 102 DP 364700 (CFR 262761)	Lot 102 DP 364700 (CFR 262761)	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 389253 (CFR 607922)

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [ ] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### **Covenant provisions**

Delete phrases in [ ] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule 2 ]

See attached

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.

Page 3 of 4 Pages

2009/5043EF APPROVED Registrar-General of Land

Insert instrument type

Easement Instrument to grant easement or profit a pendre, or create land covenant

Continue in additional Annexure Schedule, if required

#### **ANNEXURE SCHEDULE 2**

### CONTINUATION OF COVENANT PROVISIONS

#### Background

- A. The Grantor is registered as proprietor of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

## **Operative** Part

#### 1. Interpretation

- 1.1 For the purposes of this instrument:
  - a) "Covenants means the covenants set out in this Instrument.
  - b) "District Plan" means the Queenstown Lakes District Council Plan.
  - c) "Dominant Tenement" means the dominant tenement set out in schedule A of this instrument.
  - d) "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - e) "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - f) "Instrument" means this easement instrument including the front page of this instrument, Schedule A and all annexure schedules.
  - g) "Servient Tenement" means the servient tenements set out in Schedule A of this instrument.
  - h) "Tripartite Agreement" means the agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

#### . Covenant

- 2.1 The Grantor covenants in favour of the Grantee that it will abide by the obligations of Jacks Point Limited under the Tripartite Agreement.
- 2.2 The Grantee acknowledges that the rights of Jacks Point Limited under the Tripartite Agreement have been previously assigned to Coneburn Water Land Limited by notice in writing to the Grantee (being the Grantee as at the date of registration of the Instrument) and as such any payment to be made to (or obligation owed to) Jacks Point Limited under the Tripartite Agreement must be made to Coneburn Water Land Limited (or its nominee).

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.

Page 4 of 4 Pages 2009/5043EF

**Registrar-General of Land** 

APPROVED

Insert instrument type

Easement Instrument to grant easement or profit a pendre, or create land covenant

Continue in additional Annexure Schedule, if required

## 3. General Covenants

- 3.1 The Grantor covenants and agrees:
  - a) to observe and perform all the Covenants contained in this Instrument at all times; and
    - b) that the Covenants contained in this instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

#### 4. Notice

4.1 Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

#### 5. Liability 5.1 Without

Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successor in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

9970250.3 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
308243	Otago
607922	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

Signatura	
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V
I certify that the Mortgagee under Mortgage 8967860.4 has consented to this transaction and I hold that consent	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V

#### Signature

Signed by Graeme Morris Todd as Grantor Representative on 27/02/2015 04:28 PM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

## Signature

Signed by Kerry Amanda ODonnell as Grantee Representative on 04/03/2015 10:16 AM

\*\*\* End of Report \*\*\*

Page 1 of 4

## Easement instrument to grant easement or profit à prendre, or create land covenant

(Sections 90A and 90F Land Transfer Act 1952)

Grantor

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grantee

Coneburn Water Land Limited

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or profit(s) à prendre set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

## Schedule A

Schedule A	Continue in additional Annexure Schedule, if required		
Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
Land Covenant	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 389253 (CFR 607922)	Lot 2 DP 443832 & Part Lot 6 DP 443832 & Part Lot 6 DP 443832 & Section 1, Survey Office Plan 389253 (CFR 607922)	Lot 30 DP 376679 (CFR 308243)

## Easement instrument to grant easement or *profit à prendre*, or create land covenant

## Easements or *profits à prendre* rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### Covenant provisions

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule 2]

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

## ANNEXURE SCHEDULE 2

#### **CONTINUATION OF COVENANT PROVISIONS**

#### Background

- A. The Grantor is registered as proprietor of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

## **Operative Part**

### 1. Interpretation

- 1.1 For the purposes of this Instrument:
  - a. "Covenants" means the covenants set out in this Instrument.
  - b. "District Plan" means the Queenstown Lakes District Council Plan.
  - c. "Dominant Tenement" means the dominant tenement set out in schedule A of this Instrument.
  - d. "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - e. "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - f. "Instrument" means this easement instrument including the front page of this instrument, Schedule A and all annexure schedules.
  - g. "Servient Tenement" means the servient tenements set out in schedule A of this Instrument.
  - h. Tripartite Agreement means the agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

#### 2. Covenant

2.1 The Grantor covenants in favour of the Grantee that it will abide by the obligations of the parties named (collectively) as "Jardine" under the Tripartite Agreement.

## Easement instrument to grant easement or *profit à prendre*, or create land covenant

2.2 The Grantee acknowledges that the rights of Jacks Point Limited under the Tripartite Agreement have been previously assigned to Coneburn Water Land Limited (the current Grantee) by notice in writing to the Grantor (being the Grantor as at the date of registration of the Instrument) and as such any payment to be made to (or obligation owed to) Jacks Point Limited under the Tripartite Agreement must be made to Coneburn Water Land Limited (or its nominee).

## 3. General Covenants

- 3.1 The Grantor covenants and agrees:
  - a. to observe and perform all the Covenants contained in this Instrument at all times; and
  - b. that the Covenants contained in this Instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

## 4. Notice

4.1 Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

## 5. Liability

5.1 Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successors in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this Instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).



**View Instrument Details** 

Instrument No. Status Date & Time Lodged Lodged By Instrument Type 9970250.9 Registered 04 Mar 2015 16:23 Gilbert, Andrea Norma Easement Instrument



Affected Computer Registers	Land District
555575	Otago
577972	Otago
577973	Otago
577974	Otago
577975	Otago
577977	Otago
577978	Otago

Annexure Schedule: Contains 4 Pages.

## **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that the Mortgagee under Mortgage 8967860.5 has consented to this transaction and I hold that consent	Ŷ
I certify that the Mortgagee under Mortgage 8967860.4 has consented to this transaction and I hold that consent	V
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V

#### Signature

Signed by Graeme Morris Todd as Grantor Representative on 01/05/2015 10:04 AM

## **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	X
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V

#### Signature

Signed by Graeme Morris Todd as Grantee Representative on 01/05/2015 10:04 AM

\*\*\* End of Report \*\*\*
# Easement instrument to grant easement or *profit à prendre*, or create land covenant (Sections 90A and 90F Land Transfer Act 1952)

2009/6229EF APPROVED Registrar-General of Land

#### Grantor

Dickson Stewart JARDINE (as to a 3/20 share) Jillian Frances JARDINE (as to a 3/20 share) Dickson Stewart JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share), Jillian Frances JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share) REMARKABLES STATION LIMITED

#### Grantee

Dickson Stewart JARDINE (as to a 3/20 share) JIIIIan Frances JARDINE (as to a 3/20 share) Dickson Stewart JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share) JIIIIan Frances JARDINE and HGW TRUSTEE'S LIMITED (as to a 7/20 share)

#### Grant of Easement or Profit à prendre or Creation of Covenant

The Grantor being the registered proprietor of the servient tenement(s) set out in Schedule A grants to the Grantee (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, or creates the covenant(s) set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

#### Schedule A

Continue in additional Annexure Schedule, if required

Purpose (Nature and extent) of easement; <i>profit</i> or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
see attached			

REF: 7203 - AUCKLAND DISTRICT LAW SOCIETY INC.

Purpose (Nature and extent) of easement; profit or covenant	Shown (plan reference)	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register) or in gross
	F,G	Lot 1 DP 452315 CFR 577972	Lots 2, 3 and 4 DP 452315 CFR 577973 577974 577975
Right to convey water	E, H, O, V, W, X, Y, Z, AA, AB, AC	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
	D, K	Lot 3 DP 452315 CFR 577974	Lots 1, 2 and 4 DP 452315 CFR 577972 577973 577975
	A	Lot 5 DP 452315 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
	С	Lot 8 DP 443832 CFR 555575	Lots 1, 2, 3, 4, 5, 6 and 7 DP 452315 CFR 577972 577973 577974 577975 577977 577978
	В	Section 1 SO 389253 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
Right to store water	G	Lot 1 DP 452315 CFR 577972	Lots 2, 3 and 4 DP 452315 CFR 577973 577974 577975
	X, AB	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
	F	Lot 1 DP 452315 CFR 577972	Lot 2 DP 452315 CFR 577973
	H, AC	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
	ε	Lot 2 DP 452315 CFR 577973	Lots 1 and 3 DP 452315 CFR 577972 577974
Right of Way	D	Lot 3 DP 452315 CFR 577974	Lots 1 and 2 DP 452315 CFR 577972 577973
	А	Lot 5 DP 452315 CFR 577973	Lots 1, 2, 3 and 4 DP 452315 CFR 577972 577973 577974 577975
	В	Section 1 SO 389253 CFR 577973	Lots 1, 2, 3, and 4 DP 452315 CFR 577972 577973 577974 577975
Rights to convey electricity	E, V	Lot 2 DP 452315 CFR 577973	Lots 1, 3 and 4 DP 452315 CFR 577972 577974 577975
Rights to convey electricity	D, K	Lot 3 DP 452315 CFR 577974	Lots 1, 2 and 4 DP 452315 CFR 577972 577973 577975
	F	Lot 1 DP 452315 CFR 577972	Lot 2 DP 452315 CFR 577973
Right to convey telecommunications and	E	Lot 2 DP 452315 CFR 577973	Lots 1 and 3 DP 452315 CFR 577972 577974
computer media	D	Lot 3 DP 452315 CFR 577974	Lots 1 and 2 DP 452315 CFR 577972 577973
Right to drain and dispose of ewage	I, J, Q	Lot 2 DP 452315 CFR 577973	Lot 4 DP 452315 CFR 577975
	All on DP 452315		

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [ ] and insert memorandum number as required; continue in additional Annexuro Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

]

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule

#### **Covenant** provisions

Delete phrases in [ ] and insert Memorandum number as require; continue in additional Annexure Schedule, if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[Annexure Schedule ]·

#### Annexure schedule

Page of Pages

2009/5043EF APPROVED Registrar-General of Land

Insert instrument type	
Easement Instrument	

Continue in additional Annexure Schedule, if required

For easements of Right to Take and Convey Water, Right to Convey Water and Right to Store Water the provisions set out in Schedule 4 of the Land Transfer Regulations 2002 are implied in respect of the easements specified in the within document, the provisions set out in Clauses 3 to 9 of Schedule 4 are implied in each class of easements to the extent indicated in those provisions:

But varied as follows:

**Rights and Powers** 

The right to convey water and the right to take water shall be amended as follows:

The full free uninterrupted and unrestricted right, liberty and privilege for the Grantee and their tenants (in common with the Grantor, their tenants and any other person lawfully entitled to do so), from time to time and at all times to take, convey and lead water including the right to occupy for the aforementioned purposes in a free and unimpeded flow (except when the flow is halted for any reasonable period necessary for essential repairs) from the source of supply or point of entry, as the case may be, and following the stipulated course (or courses stipulated) across the land over which the easement is granted or created.

**Monitoring Potable Water Supply** 

The registered proprietors from time to time being of the Servient and Dominant Tenements shall be responsible to ensure that the drinking water supplied is monitored in compliance with the Drinking Water Standards for New Zealand 2005 (Revised 2008) (or any standard, regulation or rule that replaces this standard). The results are to be forwarded by the registered proprietor to the Queenstown Lakes District Council (or any entity that replaces this body corporate or takes over its functions). The Ministry of Health shall approve the laboratory carrying out the analysis. Should the water not meet the requirements of the Standard then the registered proprietor of the Servient and Dominant Tenements shall be responsible for the provision of water treatment to ensure that the Drinking Water Standards for New Zealand 2005 (Revised 2008) are met or exceeded.

The registered proprietor shall only be responsible under this clause for the period that the registered proprietor is shown as such on the Computer Register.

**Minimum Potable Water Supply** 

The Dominant Tenements and the Servient Tenements shall be each entitled to draw a minimum of 3,000 litres of water per day.

Maintenance, Repair and Replacement

Any maintenance, repair or replacement of any water pump and associated pipes or electricity supply lines on the Servient Tenement that is necessary because of any act or omission of the Grantor or Grantee (which includes the agents, employees, contractors, subcontractors and invitees of the Grantor or Grantee) must be carried out by that party which caused the damage at their sole cost. Where the act or omission is the partial cause of the maintenance or repair or replacement, the costs payable by the party that caused the damage must be in proportion to the amount attributable to that act or omissions (with the balance payable in accordance with clause 11 of the Fourth Schedule) otherwise all costs (capital, operational or maintenance) associated with the water supply shall be met equally by the Dominant and Servient Tenement.

REF: 7225 - AUCKLAND DISTRICT LAW SOCIETY INC.



**View Instrument Details** Instrument No. Status Date & Time Lodged Lodged By Instrument Type

10441473.4 Registered 26 May 2016 15:53 Chivers, Katheryn Louise Easement Instrument



Affected Computer Registers	Land District	
577972	Otago	
577973	Otago	
577974	Otago	
577975	Otago	
577977	Otago	
577978	Otago	

Annexure Schedule: Contains 5 Pages.

#### **Grantor Certifications**

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	V
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	X
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	V
I certify that the Encumbrancee under Encumbrance 9227911.1 has consented to this transaction and I hold that consent	V

#### Signature

Signed by David James Smillie as Grantor Representative on 26/05/2016 02:24 PM

#### **Grantee Certifications**

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	V	
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	V	
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	V	
	yearsy -	

I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the V prescribed period

#### Signature

Signed by David James Smillie as Grantee Representative on 26/05/2016 02:24 PM

\*\*\* End of Report \*\*\*

#### Form B

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

(Sections 90A and 90F Land Transfer Act 1952)

#### Grantor

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grantee

Dickson Stewart Jardine as to a 3/20<sup>th</sup> share, Jillian Frances Jardine as to a 3/20<sup>th</sup> share, Dickson Stewart Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share and Jillian Frances Jardine and HGW Trustees Limited as to a 7/20<sup>th</sup> share

#### Grant of Easement or Profit à prendre or Creation of Covenant

**The Grantor** being the registered proprietor of the servient tenement(s) set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, **or creates** the covenant(s) **set out** in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A	Schedule A Continue in additional Annexure Schedule, if required									
Purpose extent) of	(Nature	and	Shown reference)	(plan	Servient Tenement (Computer Register)	Dominant Tenement (Computer Register)				
easement; covenant	profit	or			Register)	or in gross				
Land Cover	nant				Lots 6 & Lot 7 DP 452315 (CFR 577977 & CFR 577978)	Lot 1, Lot 2, Lot 3, Lot 4 and Lot 5 on DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 – 577975 inclusive)				
					Lots 1 – 5 DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 – 577975 inclusive)	Lots 6 & Lot 7 DP 452315 (CFR 577977 & CFR 577978)				

Form B - continued

#### Easements or profits à prendre rights and powers (including terms, covenants and conditions)

Delete phrases in [] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2002 and/or Schedule Five of the Property Law Act 2007

The implied rights and powers are hereby [varied] [negatived] [added to] or [substituted] by:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

[the provisions set out in Annexure Schedule ]

#### **Covenant provisions**

Delete phrases in [] and insert Memorandum number as require; continue in additional Annexure Schedule. if required

The provisions applying to the specified covenants are those set out in:

[Memorandum number , registered under section 155A of the Land Transfer Act 1952]

Annexure Schedule 2

#### Form B

# Easement instrument to grant easement or *profit à prendre*, or create land covenant

#### ANNEXURE SCHEDULE 2

#### CONTINUATION OF COVENANT PROVISIONS

#### Background

- A. The Grantors are registered as proprietors of the Servient Tenement.
- B. The Grantees are registered as proprietors of the Dominant Tenement.
- C. The Grantor and the Grantees have agreed that the Servient Tenement shall be subject to the Covenants.

#### **Operative Part**

#### 1. Interpretation

- 1.1. For the purposes of this Instrument:
  - (a) "Covenants" means the covenants set out in this Instrument.
  - (b) "District Plan" means the Queenstown Lakes District Council Plan.
  - (c) "Dominant Tenement" means the dominant tenement set out in Schedule A of this Instrument.
  - (d) "Grantee" means the registered proprietor from time to time of the Dominant Tenement.
  - (e) "Grantor" means the registered proprietor from time to time of the Servient Tenement together with any tenants, occupiers or any invitees on the Servient Tenement.
  - (f) "Instrument" means this easement instrument including the front page of this Instrument, Schedule A and all annexure schedules.
  - (g) "Servient Tenement" means the servient tenements set out in Schedule A of this Instrument.
  - (h) "Stakeholder Deed" means the Jacks Point Stakeholders Deed dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited, Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock, and Queenstown Lakes District Council.
  - (i) "Tripartite Agreement" means the Agreement dated 29 August 2003 entered into between Jacks Point Limited, Henley Downs Holdings Limited and Jillian Frances Jardine, Dickson Stewart Jardine and Gerard Brendan Boock.

# 2. Stakeholders Deed Covenant – This Covenant only applies to Lots 6 & 7 DP 452315 (CFR 577977 & CFR 577978) as Servient Tenement and the Dominant Tenements are Lot 1-5 DP 452315 and section one survey office plan 389253 (CFR 577972-577975 inclusive)

2.1. The Grantor covenants in favour of the Grantee that it will abide by the obligations of the parties named (collectively) as "Jardine" under the Stakeholders Deed.

#### 3. No Objection Covenant

- 3.1. The Grantor covenants in favour of the Grantee that it shall not submit in opposition, nor support, finance, encourage or contribute to any submission in opposition to:
  - (a) any future development by the Grantee of the Dominant Tenement;
  - (b) any application by the Grantee to Queenstown-Lakes District Council for any plan change or resource consent for any activity in respect of the Dominant Tenement.
- 3.2. The Grantor shall, if called upon to do so, provide an Affected Party Approval under the Resource Management Act 1991 (or any legislation in place of or in substitution thereto) in respect of any plan change or application for resource consent referred to in clause 3.1.

#### 4. Site Coverage Covenant

- 4.1. The Grantor covenants in favour of the Grantee that, in terms of the operative Jacks Point zone of the Queenstown Lakes District Council as at 12 May 2016, the Homestead Bay site coverage maximum of 2.5% of the land area referred to in clause 3(d) of the Stakeholders Deed and clause 13(a) of the Tripartite Agreement shall be allocated between the Grantor and Grantee as follows:
  - (a) all of the 2.5% site coverage allowed within the Homestead Bay area of the zone (being 2.5% of the land area of Lots 1, 2, 3, 4, 5, 6 and 7 of Deposited Plan 452315) will be assigned to that part of the Servient Tenement being Lots 6 & 7 DP 452315 (CFR 577977 & CFR 577978), except for:
    - (i) the site coverage of the Grantee's buildings that exist as at 12 May 2016; and
    - the site coverage for seven (7) further dwellings (each having a maximum area of 500m<sup>2</sup> per dwelling) that may be developed by the Grantee on that part of the Dominant Tenement being Lots 1 5 DP 452315 and Section 1 Survey Office Plan 389253 (CFR 577972 577975 inclusive);
  - (b) provided however that the parties' rights and obligations under this clause 4.1 shall end in the event that the 2.5% site coverage requirement ceases to have effect under all of the operative Queenstown Lakes District Council plan, the Stakeholders Deed and the Tripartite Agreement.

#### 5. General Covenants

- 5.1. The Grantor covenants and agrees:
  - (a) to observe and perform all the Covenants contained in this Instrument at all times; and
  - (b) that the Covenants contained in this Instrument shall run with and bind the Servient Tenement for the benefit of the Dominant Tenement.

#### 6. Notice

6.1. Any notice required to be served on any party shall be in writing and in accordance with the Property Law Act 2007.

#### 7. Liability

7.1. Without prejudice to the Grantor's and Grantees' other rights, this Instrument binds the Grantor and the Grantor's successors in title so that contemporaneously with the acquisition of any interest in the Servient Tenement all such successors in title become bound to comply with this Instrument. However, the liability of any Grantor under this Instrument is limited to obligations and liabilities that accrue during that Grantor's time as registered proprietor of the Servient Tenement and only in respect of that part of the Servient Tenement owned by that Grantor. A Grantor will not be liable for any breach of this Instrument which occurs during any period prior to or after its term as registered proprietor of the Servient Tenement (however, for the avoidance of doubt, any Grantor shall remain liable for any such antecedent breach following the transfer of the Servient Tenement).

#### 8. Independent Trustee

8.1. If any person enters into this Instrument as trustee of a trust then, if that person has no right to or interest in any assets of the trust except in that person's capacity as a trustee of the trust, then that person's liability under this Instrument will not be personal and unlimited but will be limited to the actual amount recoverable from the assets of that trust from time to time.

#### 9. Vesting on Further Subdivisions

The Grantee hereby confirms and consents that upon subdivision of any of the Servient Tenements should there be a need for vesting of any land, either as local purposes, reserve or as a road into the local authority, the Grantee hereby irrevocably consents for such vesting and confirms that upon execution of this instrument the Grantee has given its irrevocable consent for such vesting without any necessity for obtaining another formal consent.



# **ATTACHMENT 1C:**

# Tim Kelly Transportation Planning Limited – Response to Transportation Issues

Letter dated 17 December 2020

17 December 2020

Campus Development Division – Operations Group University of Otago PO Box 56 DUNEDIN 9054

For the attention of: Christian German

[via email: Christian.german@otago.ac.nz]



Christian

### Proposed Hākitekura, Woolshed Bay, Queenstown (Ref = RM 200570) Response to Queenstown Lakes District Council Request for Further Information

### Background

An application has been lodged with the Queenstown Lakes District Council (**QLDC**) for an academic retreat and conference facility, Hākitekura at Woolshed Bay. The application material included an Integrated Transportation Assessment (**ITA**) dated May 2020.

QLDC has responded with a request for further information dated 5 October 2020. This includes a number of items relating to transportation matters.

The purpose of this letter is to provide a response to the transportation issues raised in paragraphs 14 - 22 of the QLDC letter. In relation to some of the transportation issues, other project team members have provided (or will be providing) part or all of the response. Where applicable, this has been noted.

#### Issue 14

<u>Request</u>: Minimum Parking requirements – As discussed in the ITA prepared by Tim Kelly, the proposed development does not cleanly fit within an activity category when calculating the District Plan parking requirements under the ODP and PDP. The traffic generation assessment in the ITA has been carried out on the basis there would be a maximum of 125 people on site, which is based on the expected future capacity of the lecture theatre (120 people) and 5 staff. Assumptions have been made assuming specific proportions of people arriving by minivan, private car and taxi/shuttle, however it is not clear how the proportions were determined and what activities they are based on.

a) Please provide further information on the actual parking demand for the proposed activities on-site – refer to Comment 01 and 08 of Attachment A.

In assessing the actual parking demand for the activities, WSP agree with the methodology used by the Applicant but have recommended the Applicant carry out sensitivity testing on the parking demand to determine the upper limit of the expected parking demand – refer to Comment 14 of Attachment A.

b) Please provide further justification as to how the traffic generation and specific proportions of guests arriving on-site by minivan, private car and taxi/shuttle was derived. WSP have recommended sensitivity testing should be carried out to determine an upper limit of traffic generation for the proposed development - refer to Comment 17 of Attachment A.

The following information responds to the above technical questions. As noted in Part 1 of the overarching s92 response prepared by Planz Consultants Ltd, the minimum parking requirements of the QLDC district plan are to be removed no later than 20 February 2022, in accordance with the requirements of the National Policy Statement for Urban Development 2020.

In relation to the specific technical questions, for a development of this type, some uncertainty exists around the associated patterns of transportation and therefore traffic generation and parking demand. Balance is also required between under-provision of parking (resulting in regular overspill) and over-provision (resulting in large areas of under-utilised parking).

As the district plan (both operative and proposed) requirements are of little assistance in determining actual parking requirements for this development, a 'first principles' approach was adopted. This involved assessment of a 'realistic worst-case' scenario, based upon the maximum attendance levels at the proposed facility and a likely split of travel by mode of transport (refer **Table 1**), based on previous experience of this type of facility and the proposed events.

For the proposed use by the University, this identified a maximum demand of 22 parking spaces, which is the number of spaces proposed to be provided. The uncertainty in the estimate has been acknowledged through the identification and availability of an area which can be used for overspill parking (refer response to **Issue 17** – this has a capacity of at least six spaces, increasing the total spaces to at least 28). This is regarded as a pragmatic response to achieving the balance described above.

As requested, sensitivity testing has been undertaken on the vehicle movement and parking demand estimates (refer **Table 1**). As the most critical variable is the percentage of visitors arriving by private car, this has been varied up and down by 10% with a corresponding adjustment to other vehicle types.

For the 'University Use' scenario, this shows that the resulting parking demand could vary between 16 and 28 spaces. For the 'Third Party Use' scenario, the corresponding parking demands could vary between 27 and 34 spaces.

It is emphasised that all of these calculations relate to a maximum-size capacity event. These results indicate that the parking demand associated with use by the University can be accommodated, using the overspill parking area if needed.

For Third Party use, there is a need to ensure that parking demand is managed through a combination of event size and requirements around travel. However, as the owner and operator of the venue, the University can provide information to potential clients regarding the availability of parking, especially for its staff (for example, encouraging them to share vehicles) and if necessary, include the provision of minibus services from the Queenstown / Frankton urban area, with only a small and controlled residual use of private cars.

#### **UNIVERSITY USE**

120 (excluding staff)

Maximum Persons on Site =

#### BASE CASE AS REPORTED IN ITA

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops	25%	30	3	10	10	0
off but does not park) Arrive by Minivan	50%	60	10	6	6	2
Arrive by Private / Rental Car	25%	30	2	15	15	15
Staff (resident)		1				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	125		37	37	22

#### WORSE CASE (10% HIGHER ARRIVALS BY PRIVATE / RENTAL)

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops	20%	24	з	8	8	0
off but does not park)	20/0		9	Ũ	5	Ŭ
Arrive by Minivan	45%	54	10	5	5	2
Arrive by Private / Rental Car	35%	42	2	21	21	21
Staff (resident)		1				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	125		40	40	28

#### BETTER CASE (10% LOWER ARRIVALS BY PRIVATE / RENTAL)

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops off but does not park)	30%	36	3	12	12	0
Arrive by Minivan	55%	66	10	7	7	2
Arrive by Private / Rental Car	15%	18	2	9	9	9
Staff (resident)		1				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	125		34	34	16

## **TABLE 1: SENSITIVITY TESTING**

#### **THIRD PARTY USE**

Maximum Persons on Site = **100** (excluding staff)

#### BASE CASE AS REPORTED IN ITA

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops off but does not park)	0%	0	3	0	0	0
Arrive by Minivan	30%	30	10	3	3	2
Arrive by Private / Rental Car	70%	70	3	23	23	23
Staff (resident)		0				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	104		32	32	30

#### WORSE CASE (10% HIGHER ARRIVALS BY PRIVATE / RENTAL)

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops off but does not park)	0%	0	3	0	0	0
Arrive by Minivan	20%	20	10	2	2	2
Arrive by Private / Rental Car	80%	80	3	27	27	27
Staff (resident)		0				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	104		35	35	34

#### **BETTER CASE (10% LOWER ARRIVALS BY PRIVATE / RENTAL)**

Assumed Splits	% Persons	Persons	Persons/Veh	Vehs Arr	Vehs Dep	Vehs Parked
Arrive by Taxi / Shuttle (drops off but does not park)	0%	0	3	0	0	0
Arrive by Minivan	40%	40	10	4	4	2
Arrive by Private / Rental Car	60%	60	3	20	20	20
Staff (resident)		0				1
Staff (not resident)		4	1	4	4	4
Service Vehicles				2	2	0
Totals	100%	104		30	30	27

### Issue 15

<u>Request</u>: Coach Parking – The ITA states that *"the University is not permitting visitation by coaches and therefore specific parking areas for coaches is unnecessary and no adverse effects would arise"*. It is noted that due to the width of the private accessway, large coaches would have difficulty accessing and manoeuvring around the subject site and it does not seem practical to provide for coaches. Please confirm how the Applicant intends to manage/prevent coaches from arriving on-site, particularly when the site is being used for third party events and also to elaborate on why demonstrate why visitation by coaches is not anticipated to serve the development (Refer to Comment 2).

It is proposed that a condition of consent be the development and implementation of a Transportation Management Plan (**TMP**). This will include proposals for the management of Third Party events – it is anticipated that as part of the venue booking process, the University's client will be advised that access to the venue will not be possible using coaches (this will be stipulated in the booking conditions).

A proposed TMP condition, including management objectives for the TMP, is provided in Part 1 of the overarching s92 response. It is confirmed that this has been reviewed and is considered to be appropriate from a transportation perspective.

### Issue 16

<u>Request</u>: Manoeuvring – Please demonstrate that sufficient on-site manoeuvring can be provided for the following scenarios:

a) Where parking spaces are in the immediate vicinity of circulation roadways please provide swept path diagrams.

b) The ITA states a manoeuvring area will be provided adjacent to the Woolshed building to enable minivans / taxis to turn around when dropping off or collecting passengers. This will also enable service vehicles to turn around. Please confirm where this location is and annotate it on the site plan and please provide swept path diagrams for a larger service vehicle (8m truck) manoeuvring into and out of the service area for loading/unloading.

The parking and manoeuvring areas, including for service vehicles, were assessed by Hadley Consultants Limited prior to the lodgement of the resource consent application. Hadley's confirmed that, subject to the on-site upgrades proposed (including earthworks), sufficient manoeuvring areas, including for larger service vehicles, would be provided within the site.

Hadley's is currently preparing drawings that show that sufficient on-site manoeuvring areas are available within the site. These drawings will be provided as part of Hadley's response to the RFI to be provided later in Part 2 of the overarching s92 response.

### Issue 17

# <u>Request</u>: Overflow Parking - Please clarify the location and number of parking spaces within the parking overflow area and the likelihood that these spaces will be utilised to determine the full extent of the parking shortfall.

**Figure 1** shows the intended location of the overspill parking area (extracted from the Parking Plan (drawing 10-03c) prepared by Kerr Ritchie and attached to Part 1 of the overarching s92 response).

The likelihood of use of this area is outlined in the response to Issue 14 above, including **Table 1**. It is anticipated that this area will be identified with signposting if/when needed. Depending upon the extent of usage, this parking could be made semi-permanent with the use of Grasscrete pervious pavers or similar.



Figure 1: Overspill Parking Location

#### Issue 18

<u>Request</u>: Lighting for Parking Areas - Please confirm compliance can be achieved with the illumination standards in to the ODP (Rule 14.2.4.1 xvii) and PDP (Rule 29.5.12).

This issue has been addressed by Planz Consultants Limited in Part 1 of the overarching s92 response.

### Issue 19

<u>Request</u>: Access – Please provide an assessment of the vehicle crossings and access against the relevant Transport Rules under the ODP and PDP to determine compliance or if resource consents will be required as the proposal is for a non-complying activity in this zone and is of a scale that is not anticipated under both the ODP and PDP. The ITA states that these standards are not applicable to the proposed development because it utilises an existing access road with no new vehicle crossings being proposed, however as the proposed activities will increase traffic generation to and from the site, it is important to understand if the existing access arrangements are sufficient, therefore should be assessed in greater detail (refer to comment 07 and 11).

It is assumed that this question relates to the Woolshed Road / Maori Jack Road intersection as this intersection is, in effect, the "vehicle crossing" into the University site. In this respect, this matter has been addressed by Planz Consultants Limited in Part 1 of the overarching s92 response, which discussed compliance with transport rules and standards contained in the ODP and PDP.

From a capacity perspective, even with the full anticipated (zoned) residential development in the Homestead Bay area, this intersection will be easily able to accommodate the additional vehicle movements associated with Hākitekura, noting that these will mostly take place outside of the typical weekday peak periods.

From a safety perspective, sightlines are good in this area in the context of the existing / intended speed environment. The proposal includes widening of the first 10m of Woolshed Road from the intersection to facilitate two-way movement and avoid a need for any vehicles turning into Woolshed Road to have to wait while any other vehicle exits.

Accordingly, this intersection will operate without adverse effects upon the safe or efficient operation of the adjoining section of Maori Jack Road.

#### Issue 20

<u>Request</u>: Woolshed Road place/link context - WSP have noted that the current unsealed single carriageway providing access to the development provides limited passing opportunities. They have recommended that Woolshed Road be upgraded to provide for increased safety and better access. (Refer to Comment 12).

If the single-carriageway road is to be retained as-is then WSP agree that, due to the low speed environment and good forward visibility on Woolshed Road, passing bays could be provided further apart than 50m. However, they have advised that passing bays spaced at 200-250m will not provide adequate passing opportunities, particularly either side of the 90deg bend (Refer to Comment 13).

Please provide a response to the above having regard to the comments in the WSP review to demonstrate that Woolshed Road will provide suitable and safe access to serve existing uses and the proposed development. WSP have recommended a targeted approach is applied to determine the optimum locations for the passing bays along Woolshed Road. The ITA notes that the passing bay locations will be confirmed at the detailed design phase so a condition of consent volunteered by the Applicant may be appropriate at this stage.

As outlined in Part 1 of the overarching s92 response, the retention of a single-carriageway road is proposed.

On this basis, there is agreement in principle that passing opportunities need to be provided along Woolshed Road. In proposing the general location of the passing bays, as identified in the ITA (Appendix 5 of the application) and the drawings contained in Appendix 1 of the Utility Services and Infrastructure Report (Appendix 3 of the application), the location of the passing bays did provide for a targeted approach. This approach identified locations where reasonable sightlines could be achieved, allowing drivers to view one another and wait as necessary.

It was anticipated that the detail of the location, spacing and design of these passing bays can be a subject of detailed design, as provided for by the proposed Condition 5 contained in Section 10 of the resource consent application. This proposed condition provides for QLDC approval of the proposed upgrade works to Woolshed Road.

### Issue 21

<u>Request</u>: Travel demand/management of the University and third party use - Please provide further information on how the University of Otago intends to manage travel to/from the site for various users/transport modes and managing the parking demands generated by the proposed activities.

A travel management plan outlining the key objectives may be appropriate for an activity such as this to understand how traffic/people movements will be managed through measures implemented by the Applicant and operational requirements of the Universities facilities.

As described above (**Issue 15**), it is proposed that a requirement for the preparation and implementation of a TMP be a condition of consent. The proposed TMP consent condition contains management objectives for the TMP, which address the management of travel to/from the site for various users/transport modes and the parking demands generated by the proposed activities.

#### Issue 22

<u>Request</u>: Cycle safety – WSP has recommended that due to the narrow road width of Woolshed Road, it would be appropriate to install warning signage at the either end of Woolshed Road to warn motorists of the potential presence of cyclists.

Please provide a response to the above confirming if the Applicant agrees to volunteer a condition that forms part of the proposal to install warning signage.

It is confirmed that the University would accept a requirement to manage cycle safety through the installation of appropriate warning signage as proposed by WSP. It is proposed that this requirement can, and should, form part of the TMP.

Yours sincerely,

T.m. Kelly

**Tim Kelly** Tim Kelly Transportation Planning Limited (*Phone: 027-284-0332, E-mail: tim@tktpl.co.nz*)



# **ATTACHMENT 1D:**

# Acoustic Engineering Services – Noise Response

Letter dated 16 November 2020



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Christchurch +64 3 377 8952

File Ref: AC20055 - 03 - 02

16 November 2020

Christian German University of Otago 111 Albany Street Dunedin 9054

Email:christian.german@otago.ac.nz

Dear Christian

#### Re: RM200570 - S92 Further information request

We have reviewed the comments in the further information request. Our review relates to comments arising from the technical peer review by Styles Group of our noise assessment report (AES report reference AC20055 – 02 - R1, dated 1 May 2020).

The comments from Styles Group appear to generally confirm that the methodology and findings of the noise assessment are reasonable, however they have asked for clarification on some technical matters.

The following outlines our response to the peer review comments (S92 Points 23 to 33):

#### Event Noise

**S92 Point 23** AES have provided the assumed sound power levels of music and people noise as individual sources but the Assessment does not provide the derived noise rating levels in accordance with NZS 6802:2008 for comparison with the day and night-time permitted ODP noise limits. It appears that AES have added +5 dB to the internal "average SPL", which is not in accordance with Section 6.3.1 of NZS 6802:2008, which states that the + 5dB adjustment for special audible character is added to the representative LEQ sound level. Also, there is no reference to any duration corrections made for noise from the site that have been applied. Please provide the noise rating levels at the nearest receivers for the day and night-time periods in accordance with NZS 6802:2008.

The noise rating levels at the nearest receivers (shown as the expected noise levels) are shown in table 3.2. These noise levels are cumulative and include noise from a number of sources all happening concurrently, as shown in table 3.1. The expected (rating) noise levels were then discussed in terms of the controlling acoustic criterion prescribed in both versions of the District Plan (see Section 2.0) in the text following the table. We note the noise limits in both versions of the District Plan have a prescribed 15-minute time period applied to the  $L_{Aeq}$  descriptor, and we presented the expected noise levels accordingly. During the daytime period some duration adjustment is likely to also apply, however the size of this adjustment will be different each day – theoretically ranging between 0 and -5 dB. This is why we described the levels in table 3.2 as "worst-case".

Regarding the application of a special audible characteristic adjustment, the adjustment was applied to the two event noise sources that were shown to control the representative noise levels at the receiver locations.

**S92 Point 24** The AEE states that the event building will be constructed with "large expanses of glass will characterise both the northern and southern elevations of the building, with the glassed frontage on the southern (lake) side opening onto a covered wooden deck." Please confirm the large expanses of glass have been taken into consideration in the noise model.

We confirm that the glazing element locations and sizes, as shown on the project architectural drawings, were considered when calculating the expected level of noise emission from events held inside both the Woolshed and Hākitekura buildings.

**S92 Point 25** AES state that "The modelling has allowed for glazing elements to be partially open on the south facing facades of the Lecture Theatre and Woolshed buildings to provide for natural ventilation to those spaces if required". Please provide the assumed sound reduction and façade.

An assumed sound reduction of 15 dB was used for all glazing elements on the south facing facades of both the Woolshed and Hākitekura buildings, to represent windows open 100 – 150 mm for ventilation.

**S92 Point 26** Please confirm how many large events/functions with amplified music are proposed each year/month/week.

Our understanding is that the University will hold an estimated 110 functions per year, and the venue would be available for approximately 20 casual functions per year, such as weddings. We estimate that 11 of the University functions and all of the casual functions could have amplified music, giving a total of 31 large functions per year (2-3 per month, up to 1 per week) that could have amplified music played inside the buildings.

**S92 Point 27** AES state that the average SPL (98dB) "has been applied at all inside parts of the space to allow for the possibility of different function layouts depending on the required production values". We would normally use internal reverberant LAeq level to control internal entertainment noise, or if the speakers are outside we would use the LAeq level at a set distance (e.g. 10m) from speakers. Please confirm how the "average SPL" has been used in the noise model and if it is the same (or similar) to the internal reverberant LAeq level.

We confirm that the "Average sound pressure level inside the Lecture Theatre", and, "Average sound pressure level inside the Woolshed" terminology that was used to describe the source noise level in the report is equivalent to the "Internal reverberant level L<sub>Aeq</sub> level".

**S92 Point 28** There are three outdoor areas proposed. Please confirm if there be any music played in any of the outdoor areas after 8.00pm. If yes, have outdoor speakers been included in the noise model. If yes, what noise levels have been assumed from the outdoor speakers in the noise model.

We understand there will not be any music played in any of the outdoor areas after 8:00 pm. There will not be outdoor speakers installed in any of the outdoor areas.

**S92 Point 29** AES conclude regarding event noise that: We therefore expect the noise levels received at the boundaries of the neighbouring receivers to comply with the ODP and PDP night-time noise limit of 40 dB LAeq(15 min) and for the associated noise effects to be minimal during all time periods.

Please provide further comments on the noise effects to the closest receiver (Receiver A) and what is meant by "minimal", including comments about the character of the proposed noise from functions within the context of the existing noise environment (and if any measurements have been taken of the ambient LAeq and I90), in particular between 8.00pm – midnight.

The noise effects specific to Receiver A have been described as minimal due to finding that the noise level external to the building at Receiver A is expected to comply with the District Plan noise limit. Further, we expect the resulting internal noise level in habitable spaces that face toward the development (the most exposed spaces) would be approximately 15 dB lower than the external noise level with windows open and at least 20 dB lower with windows closed (assuming single glazed window units).

Measurements of the ambient LAeq and L90 were not taken as part of this study. We consider that using overall noise levels including adjustments for the character of the noise in accordance with NZS6802:2008, as required by the District Plan, is an acceptable way to investigate the noise effects.

#### Traffic Noise

**S92 Point 30** AES state that: "we expect the highest level of noise emission from traffic would occur prior to the start of events and again after the finish of events, over a period of approximately one hour at each of those times". The predicted noise levels at Receiver A from peak traffic (50 vehicle movements in 1 hour) is 54 dB LAeq at the boundary. Events are proposed until midnight. No reference has been made to existing ambient noise levels/traffic noise. Please provide more detail on how the noise effects from traffic noise from the private road have been assessed, in particular between midnight – 1.00am after the events conclude. The assessment of effects must be made against the ODP noise standards for the exceedance of noise limits.

The expected peak event traffic flow volume (see report table 3.3) was used to determine an expected worstcase noise level from traffic movements, which was then used in the assessment. This noise level would occur before and after an event. The night-time period is 8:00 pm to 8:00 am according to the ODP and PDP. If the event finishes after 8:00 pm but before 8:00 am the next day (so between midnight and 1:00 am as mentioned by the reviewer) then the assessment outcomes, when considered in terms of the ODP noise standards, would be the same regardless of exactly what time the event finishes.

When considering the noise effects from traffic, we note that assessing noise levels at the property boundary, as required by the District Plan, does not give a reasonable indication of the noise effects which will be experienced at and in the areas immediately around the receiver dwelling. The noise level at the notional boundary of Receiver A (at 20 m from the dwelling) is expected to be less than 40 dB  $L_{Aeq(15 min)}$  during peak traffic flow conditions and well below the daytime and night-time noise limits during the events. These noise levels received at the dwelling notional boundary are consistent with the protection of sleep, the relevant effect during the night-time (including between midnight and 1:00 am), and will be acceptable during all periods and flow conditions. We therefore expect the associated noise effects from vehicles approaching and departing the site will be minimal.

**S92 Point 31** In regards to the assessment point, AES state that "Applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use." We agree that applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use. However, both the ODP and the PDP require the site boundary as the assessment point and this is what the assessment of effects must be based on. The ODP and PDP rules were developed through a consultation process and will be based on the objectives and policies for this local area. The assessment must, at least initially, assess the noise effects based on the requirements of the district plan. Noise rating levels can be provided at both notional and site boundaries for discussion purposes, but in terms of the assessment point must be the site boundary. Please provide a brief assessment to address this.

The report *Table 3.4 Expected noise levels at property boundaries* does show the receiver boundary noise levels for assessment purposes, as required by both the ODP and PDP. Discussion has been provided in the text following the table about the suitability of the assessment position and our view on the probable noise effects.

**S92 Point 32** In regards to the assessment point, AES state that "Applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use." We agree that applying the noise limit at the property boundary would effectively protect a part of the property that does not include a sensitive use. However, both the ODP and the PDP require the site boundary as the assessment point and this is what the assessment of effects must be based on. The ODP and PDP rules were developed through a consultation process and will be based on the objectives and policies for this local area. The assessment must, at least initially, assess the noise effects based on the requirements of the district plan. Noise rating levels can be provided at both notional and site boundaries for discussion purposes, but in terms of the assessment against the applicable ODP rules and determination of

compliance, the applicable assessment point must be the site boundary. Please provide a brief assessment to address this.

This appears to be a repeat of S92 Point 31, so we will consider it as addressed under S92 Point 31.

**S92 Point 33** On page 14 of the Assessment, AES state that to "give confidence that noise emissions associated with the activity are maintained at appropriate levels, we recommend the following mitigations for the activities associated with the site:....."

Please confirm the following:

- What is defined as appropriate levels?
- Do the "appropriate levels" differ to the ODP noise limits?
- Are the recommendations set out on p14 required for compliance with the ODP noise limits?
- Have any conditions of consent been considered, other than draft conditions (15) and (16) in section 10 of the AEE?

All the assessment information has been provided in the report and there is no new assessment information being presented in the Conclusion and Recommendations section, but instead the wording aims to summarise the assessment findings and offers the client recommendations for noise mitigation based on assumptions used in the assessment. The recommended mitigations have been adopted as draft conditions (15) and (16), as contained in Section 10 of the resource consent application.

Please do not hesitate to contact me if you have any queries or comments.

Kind Regards,

James Boland Senior Acoustic Engineer Acoustic Engineering Services Ltd



## **ATTACHMENT 1E:**

# Kerr Ritchie – New and Updated Drawings

(dated 1 December 2020)

Hākitekura – Carpark Plan (NEW Dwg. No. 10-03c) Hākitekura Building - Elevations (Amended Dwg. No. 12-04) Hākitekura Building Stage 1- Elevations (Amended Dwg. No. 12-05) Hākitekura Building – Sections (Amended Dwg. No. 12-06) Lakeside Rooms - Elevations (Amended Dwg. No. 13-03) Lakeside Rooms – Elevations and Sections (Amended Dwg. No. 13-04) Lakeside Rooms – Elevations and Sections (Amended Dwg. No. 13-05) Staff Accommodation 3 Bed House (Amended Dwg. No. 14-02)

Mini Bus Garage/Store (Amended Dwg. No. 15-01)

Hākitekura – Site Plan (Amended Dwg. No. 10-03b)

Bike/Plant Garage (Amended Dwg. No. 15-02)



Hakitekura, Queenstown

for University of Otago

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3.	Do not scale from drawings. All dimensions govern.
4.	Alterations to the drawings must be notified to the
	Architect in writing.

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SECTION A-A



SECTION M-M

Hakitekura, Queenstown

for University of Otago

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## HĀKITEKURA BUILDING - SECTIONS





SOUTH



NORTH

## LAKESIDE ROOMS - ELEVATIONS

Hakitekura, Queenstown

for University of Otago

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Hakitekura, Queenstown

for University of Otago



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NORTH

Hakitekura, Queenstown

for University of Otago

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Version: 1, Version Date: 01/02/2021





EAST

## STAFF ACCOMMODATION 3 BED HOUSE











#### MINI BUS GARAGE/STORE 9x9 totalspan or similar no partitions or insulation allowance for water and electric including charging -

- cars
- -
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Hakitekura, Queenstown

for University of Otago



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Version: 1, Version Date: 01/02/2021

L	KEY
	Tight stacked local schist
	horz shiplap cladding with sioox stain
	Colorsteel deep corrugated profile Colour: Coloursteel G10 Flaxpod gutters and downpipes to match

# allowance for gutters downpipes and fascia lag around all services to prevent freezing

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## NEW TRANSFORMER





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for University of Otago

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# University of Otago

# Hākitekura Redevelopment – Academic Retreat and Conference Facility



Land Use Consent Application (RM200570) to the Queenstown Lakes District Council

Section 92 Response – Part 2

February 2021


## **Planz Consultants**

## **Quality Assurance Statement:**

### **Prepared By:**

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Laylor

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Project Number:	15586
<b>Document Status:</b>	FINAL
Date:	12 February 2020

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### **TABLE OF CONTENTS**

1	INTF	RODUCTION 1	
2	ENG	INEERING (Q.6 TO Q.13)1	
	2.1	INTRODUCTION	
	2.2	Earthworks (Q.6)2	
	2.3	POTABLE WATER SUPPLY (Q.7)2	
	2.4	Firefighting (Q.8 and Q.9)2	
	2.5	STORMWATER DISPOSAL (Q.11)3	
	2.6	TELECOMMUNICATIONS SUPPLY (Q.12)3	
3	TRA	NSPORT (Q.16 – MANOEUVRING ONLY) 4	

### **APPENDICES:**

Attachment 2A:	Hadley Consultants Limited – Engineering Response
Attachment 2B:	Chorus Correspondence



### **1** Introduction

The University of Otago (**the University**) lodged a resource consent application, with the Queenstown Lakes District Council (**QLDC**), in July 2020. The application seeks a land use consent to construct and operate an academic retreat and conference facility on the land that the University was gifted at Woolshed Bay beside Lake Wakātipu.

A request for further information (**RFI**), in accordance with section 92 of the Resource Management Act 1991 (**RMA**), was received from the QLDC on 5 October 2020. A response to part of the RFI was provided to QLDC on 17 December 2020 (i.e., Part 1 of the RFI response). This document, and associated attachments, contains the response to all but two of the remaining RFI questions (i.e., Part 2 of the RFI response). The responses to the following RFI questions are contained in the following sections of this document:

- Section 2 Engineering. This section of this document, and associated Attachments 2A and 2B, responds to Q.6 to Q.9, Q.11 and Q.12. The response to the first RFI engineering question, that related to the 'access road upgrade' (Q.5), was provided in Part 1 of the RFI response.
- Section 3 Transport. As stated in Part 1 of the RFI response, this section of this document, and associated Attachment 2A, provides further information in relation to 'Q.16 Manoeuvring'.

The RFI response to the remaining two questions will be provided as soon as feasible. The outstanding information to be provided in the final RFI response (i.e., Part 3 of the RFI response) relates to the two remaining 'engineering' questions (Q.10 – effluent disposal and Q.13 – liquefaction hazard).

In addition, as stated in Part 1 of the RFI response, the intention is to now provide a revised and updated set of proposed consent conditions in the final RFI response. The updated conditions will incorporate the changes, as outlined in the RFI response/s, to the consent conditions contained in Section 10 of the land use consent application and any new conditions suggested within the RFI response/s.

### 2 Engineering (Q.6 to Q.13)

### 2.1 Introduction

The RFI, under the 'engineering' heading states:

To ensure that the subject site can be safely accessed and service connections to the subject site are feasible, please provide evidence or respond to the following:

As noted in **Section 1** of this document, a response to the first RFI engineering question (i.e., Q.5 - 'access road upgrade'), was provided in Part 1 of the RFI response provided to QLDC in December 2020. A response to the two remaining engineering questions, namely 'Q.10 – effluent disposal' and 'Q.13 – liquefaction hazard' will be provided as soon as feasible.



### 2.2 Earthworks (Q.6)

It is noted that up to 5700m<sup>3</sup> of earthworks are proposed, with areas of fill adjacent to the southern boundaries of Lot 1 DP 452315 & Lot 3 DP 452315 while areas of cut are shown adjacent to northern and eastern boundaries. Please provide comment from a suitably qualified engineer detailing how earthworks will be contained within the subject site (Lot 1 DP 452315 & Lot 3 DP 452315).

A response to this question is provided in Hadley Consultants Limited's (**Hadley**) memo attached to this report as **Attachment 2A**.

This question is also addressed by the proposed conditions of consent contained in Section 10 of the application, namely Conditions 10 to 13. In particular, Conditions 10 and 11 require all construction activities at the site to be carried out in accordance with a QLDC approved Construction Environment Management Plan (**CEMP**), which will ensure that erosion and sediment control measures are in place and that no significant dust emissions occur.

### 2.3 Potable Water Supply (Q.7)

Provision for a potable water supply is reliant upon a connection into future Council potable water infrastructure which is to be installed to service the neighbouring Homestead Bay development site however, it is noted this infrastructure does not yet exist and it is not currently within the Council long term plan (LTP). Please provide a feasible option for providing potable water to service the development.

A response to this question is provided in Hadley's memo attached to this report as **Attachment 2A**.

If an on-site water supply were to be used for the Hākitekura redevelopment (i.e., Option 2 as discussed in Hadley's memo), it is acknowledged that there will be an additional non-complying activity consent trigger for the proposal as the Jacks Point servicing standards of the Proposed Queenstown Lakes District Plan (**PDP**) (Standard 41.5.5.10<sup>1</sup>) will not be complied with. As this matter is also likely to arise in relation to Q.10, which will be addressed in Part 3 of the RFI response, this potential additional consent trigger and any scope considerations will be assessed fully in the proposed Part 3 Response.

It is also noted that the groundwater take associated with Option 2 is a permitted activity (Rule 12.2.2.4 of the Regional Plan: Water for Otago) and does not require a resource consent from the Otago Regional Council.

### 2.4 Firefighting (Q.8 and Q.9)

Q.8 - The application information indicates that firefighting provision for most buildings within the proposed development will be provided via an alternative fire fighting supply and fire sprinkler system with an expected flow rate of 700 litres/minute or 12.5 litres/second. Please provide written approval from FENZ (Fire Emergency New Zealand) endorsing the proposed alternate fire-fighting supply & sprinkler system and confirming

<sup>&</sup>lt;sup>1</sup> As Standard 41.5.5.10 is no longer subject to appeal, this standard can be deemed to be operative. Therefore, it is no longer necessary to consider the Operative Queenstown Lakes District Plan provision that relates to servicing in the Jacks Point Resort Zone (Zone Standard 12.2.5.2(v)(a)).



compliance with the NZ Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008.

Q.9 - For unsprinklered buildings within the site, it is noted that private hydrants are proposed within the subject site to meet FW3 fire water classification. Private hydrants are not permitted under FENZ standards. Please provide an operation and maintenance procedure for the hydrants signed off by FENZ (Fire Emergency New Zealand) or alternatively if the intention is to vest the hydrants with Council please provide the legal ability for Council to maintain the hydrants by way of easements.

A response to these questions is provided in Hadley's memo attached to this report as **Attachment 2A**.

Hadley's response has recommended that a consent condition be imposed requiring that the site's water supply meets relevant firefighting standards, or that approval in writing from FENZ is provided, once detailed design has been undertaken. Given this recommendation, a proposed new condition, is as follows:

The Consent Holder must ensure that the water supply engineering documentation submitted to QLDC for Engineering Acceptance in accordance with Condition X:

- (a) Complies with the relevant firefighting water supply standards; or
- (b) Alternatively, that approval in writing from Fire Emergency New Zealand confirming that the design is acceptable to Fire Emergency New Zealand is contained in the documentation.

### 2.5 Stormwater Disposal (Q.11)

The Hadleys Consultants report indicates that primary stormwater flows from the proposed development will be disposed of to ground via new onsite soakage systems. Please provide the locations and sizes of the newly proposed soak pit systems.

A response to this question is provided in Hadley's memo attached to this report as **Attachment 2A**.

This question is also addressed by the proposed conditions of consent contained in Section 10 of the resource consent application, namely Condition 7. It is noted that through Condition 7, QLDC will certify that the stormwater soakage devices are in accordance with the relevant drainage plans and that testing has been provided that subsurface soils are permeable and well drained.

### 2.6 Telecommunications Supply (Q.12)

In terms of telecommunication supply it is noted that the existing buildings onsite are currently serviced with existing telecommunication connections. To ensure these existing connections can be extended to the new buildings please provide written evidence from Chorus as confirmation that these existing connections can be extended.

Chorus have confirmed that they have infrastructure in the general land area associated with the University's site. Chorus have also confirmed that they are able to extend the network to provide connection available. This information is contained in the email contained in **Attachment 2B** of this response.



It is also noted that the University is already working with Spark, the University's proposed network infrastructure provider for the Hākitekura site. The University has quoted from Spark for the provision of the telecommunications services that it will need at the site.

### 3 Transport (Q.16 – Manoeuvring Only)

Q.16 - Please demonstrate that sufficient on-site manoeuvring can be provided for the following scenarios:

- a) Where parking spaces are in the immediate vicinity of circulation roadways please provide swept path diagrams.
- b) The ITA states a manoeuvring area will be provided adjacent to the Woolshed building to enable minivans / taxis to turn around when dropping off or collecting passengers. This will also enable service vehicles to turn around. Please confirm where this location is an annotate it on the site plan and please provide swept path diagrams for a larger service vehicle (8m truck) manoeuvring into and out of the service area for loading/unloading.

As noted in the Part 1 Response, including the attached response from Tim Kelly Transportation Planning Limited (Attachment 1C of the Part 1 Response), drawings/plans showing the manoeuvring areas were to be provided in this part of the response.

Accordingly, manoeuvring plans and associated comments are provided in Hadley's memo attached to this report as **Attachment 2A**.



### **ATTACHMENT 2A:**

### Hadley Consultants Limited – Engineering Response

Technical Memorandum dated 10 February 2021



### **TECHNICAL MEMORANDUM**

то:	University of Otago
FROM:	Nigel Lloyd, Senior Civil Engineer, Hadley Consultants Ltd
DATE:	10 February 2020
SUBJECT:	Hākitekura - QLDC Request For Further Information Response - RM200570
LOCATION:	86 Kingston-Garston Highway, Kingston
PROJECT:	193330 Woolshed Bay

### **Background**

Hadley Consultants Limited (HCL) have been engaged by the University of Otago (UoO) to investigate and assess various infrastructure servicing options for the proposed Hākitekura redevelopment. This is detailed in the Feasibility of Utility Services & Infrastructure Report dated 13 May 2020 that was included in the resource consent application prepared by others.

Subsequent to the submission of the resource consent application a Request for Further Information (RFI) was received from Queenstown Lakes District Council dated 5 October 2020 in regards a variety of matters relating to the application and proposed redevelopment. This document addresses the engineering related queries 6, 7, 8, 9, 11 and 16 that relate to earthworks, potable water supply, fire fighting, stormwater disposal and vehicle manoeuvring respectively in the following sections.

### <u>Earthworks</u>

Item 6 of the RFI in regard to earthworks is as follows:

It is noted that up to 5700m3 of earthworks are proposed, with areas of fill adjacent to the southern boundaries of Lot 1 DP 452315 & Lot 3 DP 452315 while areas of cut are shown adjacent to northern and eastern boundaries. Please provide comment from a suitably qualified engineer detailing how earthworks will be contained within the subject site (Lot 1 DP 452315 & Lot 3 DP 452315)

The earthworks associated with the project will be contained within the subject site including the associated access easements as required to allow for the proposed access upgrades. In regards to the earthworks that are indicated extending to the site boundaries we note that these are very minor in nature to cover items such as respreading of topsoil or road metal in the case of the northeastern area and intended to allow the proposed earthworks to be tied into and matched to the existing topography as gradually as possible in order to create a seamless natural appearance.

We confirm that based on our assessment to date and subject to detailed design and best practice construction the proposed earthworks can be contained within the subject site. We note that conditions of consent to this effect have been proposed as Conditions 10 to 13 of Section 10 of the resource consent application and we anticipate that these will be included with the consent.

#### Potable Water Supply

RFI item 7 in regard to potable water supply is as follows:

7. Provision for a potable water supply is reliant upon a connection into future Council potable water infrastructure which is to be installed to service the neighbouring Homestead Bay development site however, it is noted this infrastructure does not yet exist and it is not currently within the Council long term plan (LTP). Please provide a feasible option for providing potable water to service the development.

As noted in the original HCL report the site and surrounding properties are currently serviced by a water supply bore that is located between the proposed accommodation units to the east of the Woolshed building.

If area wide water reticulation is not available at the time of development it is proposed that a connection to the existing water supply bore will be made and/or an additional on-site bore constructed in similar suitable location adjacent to the lake margin as a water source to service the proposed development. Raw source water would then be pumped to a series of onsite buffer storage tanks and treated and reticulated throughout the proposed development. Fire fighting water could be provided for by static storage, fire pumps for sprinkler operation and fire service connection points for fire appliance connection.

The proposed Site Services Concept Plan Option 2 Independent Servicing depicts a feasible alternative on-site water servicing solution and is HCL drawing 193330-007-RevC that is included in the updated drawing set included with this memorandum as Attachment A.

We confirm that it is feasible to design, construct and implement a suitable on-site water supply in order to service the proposed development if necessary in the absence of a reticulated community water supply being available. Irrespective of what water supply servicing is adopted for the site we expect that conditions of consent will be included requiring the water supply to be undertaken in accordance with the necessary standards and detailed design information submitted for engineering acceptance prior to construction and agree with this approach.

### <u>Firefighting</u>

RFI items 8 and 9 are in regard to firefighting and these are as follows:

8. The application information indicates that firefighting provision for most buildings within the proposed development will be provided via an alternative firefighting supply and fire sprinkler system with an expected flow rate of 700 litres/minute or 12.5 litres/second. Please provide written approval from FENZ (Fire Emergency New Zealand) endorsing the proposed alternate fire-fighting supply & sprinkler system



and confirming compliance with the NZ Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008.

9. For unsprinklered buildings within the site, it is noted that private hydrants are proposed within the subject site to meet FW3 fire water classification. Private hydrants are not permitted under FENZ standards. Please provide an operation and maintenance procedure for the hydrants signed off by FENZ (Fire Emergency New Zealand) or alternatively if the intention is to vest the hydrants with Council please provide the legal ability for Council to maintain the hydrants by way of easements.

In regards to item 8 we note that the original servicing concept included connection to and extension of proposed future area wide water supply reticulation and a fully reticulated water servicing concept. We do not consider this to represent an alternative firefighting supply or solution. However, we note that this proposed servicing solution, along with the alternative on-site servicing as outlined above in the previous section has currently only been designed to a conceptual level in order to confirm feasibility.

We consider it is premature to request and require written approval from FENZ as this would require the detailed design of the proposed water supply to be completed. However, we note that by inspection if a reticulated community water supply was developed to service this area and extended to the site in order to service the proposed development it would be both feasible and possible to design and implement an adequate and compliant firefighting water supply to service the proposed development. Similarly, if an on-site water supply and servicing concept as outlined in the previous section was developed to service the site it would also be both feasible and possible to design and implement an adequate and compliant firefighting water supply to service the proposed development.

In order to ensure that fire fighting water supply provisions are adequately addressed and included in the proposed development we recommend that instead of written approval being required at this time which is considered to be premature and unnecessary instead suitably worded conditions of consent be included requiring that fire fighting provisions in accordance with the relevant standards are provided or written approval is obtained from FENZ once detailed design has been undertaken at the time of engineering acceptance.

In regards to item 9 we consider this to also relate to detailed design level issues. However, for the purposes of confirming feasibility of fire fighting supply at this stage, by inspection it is apparent that fire hydrants or fire service connection points could be readily provided in order to facilitate fire appliance connection with either water supply option. As such we have updated the original Site Services Concept Plan Option 1 – Connection to Council Services, HCL drawing 193330-006-RevC to note that the reticulated fire appliance connections are either hydrants or connection points. We consider that this can also be adequately addressed at this stage by suitably worded conditions of consent as recommended above in the response to item 8.



### Stormwater Disposal

RFI item 11 in regard to stormwater disposal is as follows:

11. The Hadleys Consultants report indicates that primary stormwater flows from the proposed development will be disposed of to ground via new onsite soakage systems. Please provide the locations and sizes of the newly proposed soak pit systems.

We consider that the sizes and locations of stormwater soak pits to serve the proposed development to represent detailed design level information that is not necessary or required at this stage.

However, we note that the soak pits will generally be located downslope of the proposed development in conjunction with the architectural drainage plan and anticipate that a series of individual soak pits will likely be created to service the various elements of the proposed development. We can also confirm that subsurface site investigations have confirmed that the subsurface soils in many areas across the site consist of highly permeable, well drained beach gravels that are very well suited to disposal of stormwater via on-site soakage to ground.

Noting that the adequate design and provision of stormwater soak pits will also be assessed through the future building consent processes, in order to provide surety to Council at this stage that the detailed design and implementation of stormwater soakage devices will be adequately addressed as a part of the proposed development we recommend that suitably worded conditions of consent, as provided for by proposed Condition 7 contained within Section 10 of the resource consent application, be included with the consent decision.

### **Manoeuvring**

RFI item 16 in regard to vehicle manoeuvring is as follows:

16. Please demonstrate that sufficient on-site manoeuvring can be provided for the following scenarios: a) Where parking spaces are in the immediate vicinity of circulation roadways please provide swept path diagrams.

b) The ITA states a manoeuvring area will be provided adjacent to the Woolshed building to enable minivans / taxis to turn around when dropping off or collecting passengers. This will also enable service vehicles to turn around. Please confirm where this location is an annotate it on the site plan and please provide swept path diagrams for a larger service vehicle (8m truck) manoeuvring into and out of the service area for loading/unloading.

With reference to HCL drawings Vehicle Manoeuvring Diagrams have been prepared and these are HCL drawings 193330-011 & 012-RevC that are included within Attachment A. We report as follows:

In regard to item 16a) we have considered three examples that are considered to represent the "worst case".

 Firstly, as depicted on Sheet 011, carpark 2 is likely to be utilised by a staff member using a B85 light vehicle. The vehicle wheel tracks and swept path diagram for the vehicle entering and leaving the carpark are shown along with compliant carpark and vehicle dimensions.



- Secondly, as depicted in the example on Sheet 012, carpark 8 is likely to be utilised by a guest visiting the site using a B85 light vehicle. The vehicle wheel tracks and swept path diagram for the vehicle entering and leaving the carpark are shown along with compliant carpark and vehicle dimensions.
- 3. The third example, as also depicted on Sheet 012 considers a B99 light vehicle such as a minivan entering and exiting carpark 16 within the proposed parking garage. The vehicle wheel tracks and swept path diagram for this vehicle entering and leaving the carpark are shown along with compliant carpark and vehicle dimensions.

In regard to item 16b) we have added annotation to the Car Parking Layout plan sheet 010 indicating where the service vehicle turning area is proposed to be located. The Vehicle Manoeuvring Diagram plan sheet 011 also includes the vehicle wheel tracks and swept path diagram for an 8m rigid truck entering and exiting this area.

Similar to the other matters we anticipate that suitably worded conditions of consent, as provided for by proposed Condition 6 contained within Section 10 of the resource consent application, will also be included with the consent decision in order to ensure that adequate provisions are progressed through the detailed design and implementation phases of this project.

Attachment A: HCL drawings 193330-001 to 012-Rev C



# HĀKITEKURA

# UNIVERSITY OF OTAGO

DRAWING No.	DRAWING TITLE
193330 - 000	COVER SHEET
193330 - 001	CIVIL WORKS OVERVIEW
193330 - 002	ROADING LONGSECTIONS
193330 - 003	WOOLSHED ROAD UPGRADES SHEET 1 OF 2
193330 - 004	WOOLSHED ROAD UPGRADES SHEET 2 OF 2
193330 - 005	SITE ACCESS & EARTHWORKS PLAN
193330 - 006	SITE SERVICES CONCEPT PLAN - OPTION 1
193330 - 007	SITE SERVICES CONCEPT PLAN - OPTION 2
193330 - 008	<b>EROSION &amp; SEDIMENT CONTROL PLAN</b>
193330 - 009	<b>EROSION &amp; SEDIMENT CONTROL TYPICAL DETAILS</b>
193330 - 0010	CAR PARKING LAYOUT
193330 - 0011	VEHICLE MANOEUVRING DIAGRAMS
193330 - 0012	VEHICLE MANOEUVRINGDIAGRAMS

# FOR RESOURCE CONSENT

# NOT FOR CONSTRUCTION





CONSULTING ENGINEERS STRUCTURAL / CIVIL / PROJECT MANAGEMENT / GEOTECHNICAL

44 Robins Road, PO Box 1356, Queenstown, New Zealand, P: +64 3 450 2140, F: +64 3 441 3513, W: www.hadleys.co.nz

# Project No. 193330



Notes:	issue	Description	By	Date	Project:		Client:		
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1	3	FOR RESOURCE CONSENT	FB	19,06 20		HANITEKUNA			
	9	FOR RESOUNCE CONSENT RETRESIVING	PD.	02.022	15		UNIVERSITY OF OTAGO	ha	EDING ENGINEERS
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LONGITUDINAL SECTION ACCOMMODATION PARKING ACCESS

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LONGITUDINAL SECTION WOOLSHED ROAD

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### **ATTACHMENT 2B:**

**Chorus Correspondence** 

Emails dated 21 December 2020

### **Carmen Taylor**

From:	Tim Henry <tim.henry@rubix.nz></tim.henry@rubix.nz>
Sent:	Monday, 21 December 2020 3:14 PM
То:	Carmen Taylor
Cc:	Christian German; Nigel Lloyd; Peter Soundy
Subject:	FW: Chorus Estimate Clarification: WPU61326 - 831 to 833 Woolshed Road, Jacks
	Point New Lodge

Hi Carmen,

Please find below the confirmation from Chorus that they can extend the connections for the total development.

This will address the below RFI from QLDC:

**Telecommunications Supply:** 

In terms of telecommunication supply it is noted that the existing buildings onsite are currently serviced with existing telecommunication connections. To ensure these existing connections can be extended to the new buildings please provide written evidence from Chorus as confirmation that these existing connections can be extended.

Tim Henry Senior Project Manager

T: +64 3 442 5430 M: +64 22 020 0323 tim.henry@rubix.nz www.rubix.nz

Level 2, 50 Stanley Street Queenstown 9300 PO Box 1871, Queenstown 9348



Our Rubix offices will be closed from midday on 23 December until 11 January 2021. Have a safe and enjoyable break!



We are a Toitū carbonzero certified business



From: Chorus Property Developments <develop@chorus.co.nz>
Sent: Monday, 21 December, 2020 15:09
To: Tim Henry <tim.henry@rubix.nz>
Subject: Chorus Estimate Clarification: WPU61326 - 831 to 833 Woolshed Road, Jacks Point New Lodge

Hi Tim

Thank you for providing an indication of your development plans in this area. I can confirm that we have infrastructure in the general land area that you are proposing to develop. Chorus will be able to extend our network to provide connection availability. However, please note that this undertaking would of course be subject to Chorus understanding the final total property connections that we would be providing, roll-out of property releases/dates and what investment may or may not be required from yourselves and Chorus to deliver the infrastructure to and throughout the site in as seamless and practical way as possible.

The cost involved would be a minimum of our current standard fee of \$1600 per lot excluding GST. This cost can only be finalised at the time that you are ready to proceed.

Chorus is happy to work with you on this project as the network infrastructure provider of choice. What this ultimately means is that the end customers (business and home owners) will have their choice of any retail service providers to take their end user services from once we work with you to provide the physical infrastructure.

Please reapply with a detailed site plan when you are ready to proceed.

Kind Regards

Catherine Maher Property Development Coordinator

T 0800 782 386 (Opt 1) E <u>develop@chorus.co.nz</u>



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# University of Otago

# Hākitekura Redevelopment – Academic Retreat and Conference Facility



Land Use Consent Application (RM200570) to the Queenstown Lakes District Council

Section 92 Response – Part 3

September 2021



## **Planz Consultants**

## **Quality Assurance Statement:**

### **Prepared By:**

Planz Consultants Ltd, 8 Stafford Street, Dunedin 9016 www.planzconsultants.co.nz

Waylor

Carmen Taylor (Consultant Planner (Associate)) E: <u>carmen@planzconsultants.co.nz</u> DDI: 03 929 1414

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### **TABLE OF CONTENTS**

1	INTR	RODUCTION	1
2	ENG	INEERING (Q.10, Q.13 AND ADDITIONAL QUESTIONS)	1
	2.1 2.2	Effluent Disposal (Q.10) Liquefaction Hazard (Q.13)	
	2.2	POTABLE WATER SUPPLY (ADDITIONAL QUESTIONS)	3
	2.4	FIREFIGHTING (ADDITIONAL QUESTIONS)	
3	B TRANSPORT (ADDITIONAL QUESTIONS) 6		
4	NOIS	NOISE (ADDITIONAL QUESTIONS)7	
5	PLA	NNING (ADDITIONAL QUESTIONS)1	1
6	CON	ICLUSION1	2

### **ATTACHMENTS:**

Attachment 3A:	Hadley Consultants Limited – Further Response
Attachment 3B:	Lane Neave – Covenant Condition and Wastewater Provision Memo
Attachment 3C:	Tim Kelly Transportation Planning Limited – Response to Additional Questions
Attachment 3D:	Acoustic Engineering Services – Response to Additional Questions
Attachment 3E:	Proposed Land Use Consent Conditions (as at 30 September 2021)



### **1** Introduction

The University of Otago (**the University**) lodged a resource consent application, with the Queenstown Lakes District Council (**QLDC**), in July 2020. The application seeks a land use consent to construct and operate an academic retreat and conference facility on the land that the University was gifted at Woolshed Bay beside Lake Wakātipu (**the site**).

A request for further information (**RFI**), in accordance with section 92 of the Resource Management Act 1991 (**RMA**), was received from the QLDC on 5 October 2020. Responses to parts of the RFI were provided to QLDC on 17 December 2020 (i.e., Part 1 of the RFI response) and 12 February 2021 (i.e., Part 2 of the RFI Response).

This document, which forms **Part 3 of the RFI Response**, contains a response to the two remaining RFI questions, namely Q.10 (Effluent Disposal) and Q.13 (Liquefaction Hazard), and also responds to additional questions received from QLDC, via email, on 3, 22 and 23 June 2021. These responses are provided within this document as follows:

- Section 2 Engineering, and associated Attachments 3A and 3B, contains the response to Q.10 (Effluent Disposal), Q.13 (Liquefaction Hazard) and the additional questions received from QLDC (email dated 3 June 2021) in relation to 'potable water supply' and 'firefighting'.
- Section 3 Transport, and associated Attachments 3B and 3C, contains the response to the additional transportation related questions received from QLDC (email dated 3 June 2021).
- Section 4 Noise, and associated Attachment 3D, contains the response to the additional noise related questions received from QLDC (email dated 23 June 2021).
- Section 5 Planning contains the response, which has already been provided to QLDC in an email (23 June 2021), to two points of clarification sought by QLDC (email dated 22 June 2021).
- **Section 9 Conclusion** provides an update to the University's application in relation to an additional consent trigger arising from potential changes to the proposed development.
- Attachment 3E contains a full updated set of proposed land use consent conditions. The proposed conditions include changes to the conditions included in Section 10 of the land use consent application, and new consent conditions, that have been recommended within the RFI responses provided to QLDC to date, including this response.

### 2 Engineering (Q.10, Q.13 and Additional Questions)

### 2.1 Effluent Disposal (Q.10)

Provision for a wastewater disposal is reliant upon a connection into future Council wastewater infrastructure which is to be installed to service the neighbouring Homestead Bay development site however it is noted this infrastructure does not yet exist and it is not currently within the Council long term plan (LTP). Please provide a feasible option for providing provision for wastewater disposal to the development.



A response to this question is provided in Hadley Consultants Limited's (**Hadley**) technical memorandum (**memo**) attached to this document as **Attachment 3A**, and also Lane Neave's memo attached to this document as **Attachment 3B**.

The site is not yet serviced by QLDC wastewater services. However, options exist for a connection to be provided to the site as follows:

- (a) connection to the confirmed future QLDC infrastructure that will be developed to service development in the Te Tapuae/Southern Corridor, which since lodgement of the application, has been identified in the Long Term Plan and is now a deliverable, feasible option; and
- (b) connection to existing QLDC wastewater infrastructure through the Jacks Point Village.

Despite this certainty, given the potential delay in the provision of QLDC's reticulated wastewater to the site, and some uncertainty in the connection through the Jacks Point Village, the University is now proposing a staged development and associated wastewater servicing approach, which is outlined in Hadley's memo. The memo (Attachment 3A), discusses and identifies the feasibility and appropriateness of providing wastewater servicing for an initial stage of development by way of storage tanks with the stored wastewater tankered off-site for disposal into a reticulated wastewater system.

It is proposed that an initial stage of development, consisting of redevelopment of the Woolshed and the construction of the three-bedroom residential unit (and any ancillary structures that do not require wastewater servicing), would be serviced in this manner, until such time as connection to reticulated wastewater becomes available. It is proposed that this restriction would be subject to a condition of the land use consent, with the fulfilment of this condition being entirely in the University's control. Occupation of the subsequent components of the proposed development, beyond this initial stage of development, would be restricted by conditions of consent until the site is connected to a QLDC reticulated wastewater system. The conditions proposed to achieve this outcome are provided in **Attachment 3E** (Conditions 1 and 13).

Lane Neave's memo (Attachment 3B) reviews this proposed solution and confirms that the relevant conditions are legally valid and sufficiently certain.

It is considered that the proposed interim wastewater solution for the initial stage of development complies with Standard 41.5.5.10 of the Proposed Queenstown Lakes District Plan (**PDP**). This standard is not subject to appeal and therefore must be treated as operative. This standard requires all dwellings to connect to reticulated infrastructure, including for the provision of wastewater <u>disposal</u> (emphasis added). Compliance with this standard is achieved as the interim system involves the wastewater being tankered off-site and disposed of into a reticulated wastewater system (i.e., there is no on-site disposal of the wastewater).

If it is considered that the interim wastewater solution does not comply with Standard 41.5.5.10 of the PDP, then an additional non-complying consent trigger, similar to the water supply consent trigger discussed in **Section 2.4** below, will apply.

It is considered that the effects of the proposed interim wastewater solution, given there is no discharge to the environment, will be **less than minor.** In terms of the relevant policy framework, it is considered that Policy 41.2.1.4(b) and (c) of the PDP would be relevant (refer to **Section 2.4** of this document). Given that there is no discharge to the environment at the site, this interim solution will not adversely affect water quality in the area or the values associated with the area's groundwater and Lake Wakātipu and therefore this aspect of the



proposal, should it be the option pursued, is consistent with relevant policy framework of the PDP (as well as higher level planning documents). In addition, the policies of the Operative Queenstown Lakes District Plan (**ODP**) are not directive in relation to the provision of reticulated wastewater. Therefore, the proposal would not be contrary to the policies contained in the ODP. Overall, if the interim wastewater system was considered to be an additional consent trigger, this aspect of the proposal would also pass both tests of section 104D of the RMA and does not put at risk the section 104D assessment for the proposal as a whole contained within the land use consent application (refer to **Section 5.4**).

Finally, as there is no discharge of treated wastewater to land or water at the site, there are no regional resource consent triggers associated with this aspect of the interim wastewater solution. The Regional Air Plan: Air for Otago does contain rules that relate to discharges from the storage or transfer (as well as treatment and disposal) of liquid-borne wastewater. It is considered that any potential discharges to air associated with the interim wastewater solution will comply with all of the requirements of permitted activity Rule 16.3.7.1 and therefore this aspect of the activity also does not trigger the need to seek a regional resource consent.

### 2.2 Liquefaction Hazard (Q.13)

The QLDC Hazard mapping database identifies that Lot 3 DP 452315 is located within a LIC 2 (P) risk to Liquefaction zone. Deep geotechnical investigations and reporting in accordance with NZ 3604 and DBH guidelines is required for this Liquefaction Zone. The Hadley Consultants Infrastructure report establishes a very low to negligible risk of liquefaction based on investigations and conclusions from an RDAgritech liquefaction assessment for the neighbouring Homestead Bay development site. Please provide a copy of the RDAgritech liquefaction assessment referred to in the Hadleys Consultants Infrastructure report along with a supporting comment from RDAgritech confirming the conclusions of their assessment applies to the subject site (Lot 1 DP 452315 & Lot 3 DP 452315.

A response to this question is provided in Hadley's memo attached to this document as **Attachment 3A**. The ENGEO geohazard assessment concludes that there is a negligible liquefaction and/or lateral spreading risk under Service Limit State seismic design conditions. Hadley's has found that some liquefaction could occur under Ultimate Limit State (**ULS**) seismic conditions. However, liquification of this nature is regularly and appropriately dealt with through engineering design of foundations

As recommended in Hadley's memo, a new consent condition has been proposed requiring the completion of a site-specific detailed geotechnical investigation to be completed, prior to construction commencing. The investigation identifies liquefaction/lateral spread hazards for any components of the development then mitigation measures to mitigate the risk must also be identified and implemented. The proposed condition is included as Condition 9 in **Attachment 3E**.

### 2.3 Potable Water Supply (Additional Questions)

The RFI contained Q.7 (Potable water supply) which requested *"a feasible option for providing potable water to serve the development"*, given that a reticulated water supply at the site is not currently available. A response to this question was provided in **Section 2.3** and **Attachment 2A** of **Part 2 of the RFI Response** (dated 12 February 2021). The response identified that, if



required, an on-site water supply from bores ('Option 2 – Independent Servicing' – Dwg. No. 193330-007, in **Attachment 2A**), was feasible.

QLDC, in an email (dated 3 June 2021), requested the following further information:

The RFI response indicates that if area wide reticulation is not available at the time of development then a connection to the existing bore water supply will be made or an additional onsite bore constructed to service the proposed development.

If a connection to the existing bore onsite will be made, please provide the following to ensure feasibility:

- Bore logs as evidence that additional demand generated by the new development can be drawn from the bore to supply the development.
- Water quality test results to show that the proposed supply meets NZ drinking water standards.
- Confirmation if ORC consent is required

If a new water bore is to be installed onsite, please provide:

- Bore logs as evidence that the proposed bore has sufficient capacity to supply the new development.
- Water quality test results to show that the proposed supply meets NZ drinking water standards.
- Confirmation if ORC consent is required

A response to this question is provided in Hadley's memo attached to this document as **Attachment 3A**. Hadley's memo confirms that the existing bore has sufficient capacity and will meet the New Zealand Drinking Water Standards. On this basis, no further reports in relation to any potential future bore is needed at this stage of the consent process, as sufficient ability to service the development by way of the existing bore has been demonstrated.

In relation to the question of whether an 'ORC consent is required' for the proposed groundwater take if an on-site water supply is to be used at the Hākitekura redevelopment, the following information was provided in **Section 2.3** of **Part 2 of the RFI Response**:

It is also noted that the groundwater take associated with Option 2 is a permitted activity (Rule 12.2.2.4 of the Regional Plan: Water for Otago) and does not require a resource consent from the Otago Regional Council.

As noted in **Section 2.3** of the **Part 2 of the RFI Response** (12 February 2021), if 'Option 2 – Independent Servicing' (i.e., on-site water supply provision) is implemented for the Hākitekura redevelopment, then this results in the following additional PDP consent trigger forming part of the application:

Non-complying activity, as Standard 41.5.5.10 of the PDP which requires all dwellings to connect to reticulated infrastructure including provision of water supply, is not complied with if an on-site water supply is provided for the Hākitekura redevelopment.

It is noted that a consent trigger in accordance with the equivalent rules of the ODP, in relation to this water supply issue, does not need to be considered or identified as part of the application. As Standard 41.5.5.10 of the PDP, at the University's site, is no longer subject to appeal, it must be treated as operative and there is no need to consider the equivalent ODP rules.



As outlined in **Attachment 3A**, if 'Option 2 – Independent Servicing' was developed as part of the proposal, the volume of water required for the Hākitekura redevelopment can be effectively sourced from an on-site bore/s, with the water being indirectly sourced from Lake Wakātipu (as it the case with the Jacks Point water supply bores located to the immediate east of the University's site). It is considered that the effects of the take, including on other bores in the area, given that the water will effectively be being taken from Lake Wakātipu, will be **less than minor.** This conclusion is supported by the fact that the take is a permitted activity in accordance with the Regional Plan: Water for Otago (i.e., Rule 12.2.2.4, provides for, the take and use of groundwater within 100m of Lake Wakātipu).

In terms of the PDP policy framework relevant to on-site provision of water, if this is the option pursued by the University (rather than connecting to an available reticulated water supply), Policy 41.2.1.4(b) and (c), which is not subject to appeal, seeks to:

- b. Ensure the efficient provision of servicing infrastructure, ....
- c. Ensure efficient provision of sewage disposal, water supply and refuge (sic) disposal services which do not adversely affect water quality or other environmental values.

Similar to the PDP, Policy 2.9 in Chapter 17 (Utilities) of the ODP aims to ensure that the District's water supplies 'achieve sustainability' by:

- encouraging water conservation
- ensuring development is able to be serviced by the water supply system
- assessing the impact of development on water quality and quantity.

The effects associated with providing an on-site water supply, as outlined above, will not adversely affect water quality in the area or the values associated with the area's groundwater and Lake Wakātipu. Therefore, this aspect of the proposal, should it be the option pursued, is consistent with relevant policy framework of the PDP and ODP (as well as higher level planning documents). As a result, this additional consent trigger, if given effect to, also passes both tests of section 104D of the RMA and does not put at risk the section 104D assessment for the proposal as a whole contained within the land use consent application (refer to **Section 5.4**).

Finally, given that an on-site water supply is a feasible option, amendments have been made to the proposed land use consent conditions (Condition 11) that provide for this option (alongside a reticulated water supply option). In addition, the condition originally included in Section 10 of the land use consent application, which specified that the proposal could not commence operation until the site was connected to a reticulated water supply has been deleted.

### 2.4 Firefighting (Additional Questions)

The RFI contained Q.8 and Q.9 which sought further information in relation to the provision of a compliant firefighting water supply at the site. A response to this question was provided in **Section 2.4** and **Attachment 2A** of **Part 2 of the RFI Response** (dated 12 February 2021). The response recommended a new consent condition (which was provided in **Section 2.4** of **Part 2 of the RFI Response**) which required the site's water supply to meet relevant firefighting standards, or the provision of written approval from FENZ, once detailed design of the system has been carried out. The proposed condition also required appropriate documentation to be provided to QLDC for engineering acceptance.


QLDC, in an email (dated 3 June 2021), requested the following further information:

Written approval from FENZ is required upfront to endorse the proposed alternate fire fighting supply & sprinkler system to ensure proposal is feasible and complies with NZ Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008.

Also for any new hydrants, please provide an operation and maintenance procedure for the private hydrants signed off by FENZ (Fire Emergency New Zealand) or alternatively if the intention is to vest the hydrants with Council please provide the legal ability for Council to maintain the hydrants by way of easements.

A response to this question is provided in Hadley's memo attached to this document as **Attachment 3A.** In short, Hadley's memo confirms that the proposed fire-fighting supply and sprinkler system is feasible and complies with the SNZ PAS 4509:2008 and NZS4541:2020. FENZ approval is not required to establish this compliance.

## **3** Transport (Additional Questions)

The RFI contained Q.14 to Q.22 which sought further information in relation to transport related considerations of the proposal. A response to these questions were provided in **Section 4** and **Attachments 1C** and **1E** of **Part 1 of the RFI Response** (17 December 2021), with additional information in relation to Q.16 (Manoeuvring) provided in **Section 3** and **Attachment 2A** of **Part 2 of the RFI Response** (dated 12 February 2021).

QLDC, in an email (dated 3 June 2021), requested the following further information in relation to the responses provided on parking (Q.14 and Q.15), coach parking (Q.16) and site access (Q.19 and Q.20). The further information requested is as follows:

- Parking shortfall. The proposed layout has 22 formed spaces and 6 in a grass overflow area. The sensitivity testing (which is considered very conservative) shows that 34 spaces are needed for Third Party Events, and this number is more in line with the DP Rules and industry data. Therefore we are recommending a minimum of 30 formed spaces and 4 overflow spaces be provided.
- Restriction of tour coaches as a consent condition versus a TMP. They are proposing a restriction of tour coaches be part of a TMP however it would sense to make this a consent condition instead so that it is monitorable/enforceable.
- Access Lack of measurable assessment of the "access" [which is considered to be the roading and aisle network between Māori Jack Road and the back Lot of the development]. I did a site visit and saw that there are a handful of spots along Woolshed Road where the sight distance is questionable due to horizontal curves and vegetation. The applicant merely states that the intersection is adequate and sight distance is fine but has not provided any measurable data nor compared it to the ODP/PDP Rules, which would be expected of any Integrated Transport Assessment.

Additionally it is still considered that it would be appropriate from a safety and link/place context to upgrade Woolshed Road to a two-lane road (5.5m unsealed is fine) per comment 12. The applicant has proposed to retain the single lane and install passing bays 250m apart with the final design being subject to QLDC review



and approval. If Council accepts this then Council should use the guidance from the Code of Practice that "passing bays are required every 100m IF visibility is available from bay to bay. If visibility is not available, passing bays every 50m'' (CoP 3.3.16) – see email below from Council's Development Engineer advising that Council are satisfied that a single lane carriageway is sufficient, however requires further assessment of the location and feasibility of the passing bays.

A response to these questions are provided in a letter prepared by Tim Kelly Transportation Planning Limited (**TKTP**) attached to this document as **Attachment 3C**.

TKTP's letter (**Attachment 3C**) identifies that a proposed parking monitoring condition and amendments to the QLDC approval of the Woolshed Road upgrade condition will be made to be included in this document. Given the recommendations made by TKTP, the following amendments have been made to the proposed land use consent conditions contained in **Attachment 3E** of this document:

- Parking monitoring condition. Amendments to Condition 8 and the Transportation Management Plan (TMP) condition (Condition 27) are proposed to accommodate TKTP's recommendations. Condition 8 now specifies that the University is to provide 22 formed parking spaces for cars (as originally proposed), and an overflow parking area that can accommodate at least an additional 6 cars and no more than 12 additional cars. The University only intends to provide for 6 cars in the overflow parking area initially (as originally proposed), as the provision of extensive parking areas within the site are not consistent with the landscape and visual amenity values associated with the site, and amenity values anticipated within the proposed redevelopment. However, Condition 8 then specifies that if parking monitoring carried out in accordance with procedures in the TMP (refer to (g) of Condition 27) shows that the criteria for additional parking has been met, then the University is to ensure that a further 6 parking spaces are provided for within the overflow parking area (i.e., 12 parking spaces in total).
- Passing bays Woolshed Road upgrade and QLDC approval condition (Condition 7). Part (b) of Condition 7 has been amended to provide more specific information around the design requirements for the proposed passing bays.

In addition, the above 'access' question appears to seek further assessment about the nature of the access into the 'back lot' (Lot 1 DP452315). The proposed Hākitekura redevelopment revolves around the site operating as one amalgamated land parcel (i.e., both Lots 1 and 3). As such, the University, as shown in the drawings contained in **Appendix 3** of the land use consent application, and **Attachment 2A** of **Part 2 of the RFI Response** (12 February 2021), will utilise the Lot 3 access to provide access into the site. On this basis, provision of continued access into Lot 1 is not required. Lane Neave, in the memo provided in **Attachment 3B**, discusses this issue further and suggests a proposed covenant condition which specifies that Lots 1 and 3, for the purposes of site access, must operate together. The proposed covenant condition (Condition 3) is also provided in the **Attachment 3E** of this document.

## 4 Noise (Additional Questions)

The RFI contained Q.23 to Q.33 which sought further information in relation to noise related considerations of the proposal. A response to these questions was provided in **Section 5** and **Attachments 1D** of **Part 1 of the RFI Response** (17 December 2021).



QLDC, in an email (dated 23 June 2021), identified that while the responses to Q.24, Q.25 and Q.27 have been accepted, further information was required in relation to the potential noise effects associated with the proposal. It is noted that Acoustic Engineering Services (**AES**), as noted in **Attachment 3D**, discussed the additional technical information requested with Styles Group (QLDC's technical reviewers) prior to preparing their response. The further information requested is as follows:

Q.1 (Q.23 and Q.30 of the RFI)

AES have confirmed their "expected levels" are the Rating Levels. This was an important point to clarify because rating levels are the levels that are compared to the noise limits after all the adjustments have been made. We do not normally use the term "expected levels" when undertaking assessments under NZS6802:2008.

AES predict that the rating level for noise from events at Receiver A is 40 dB  $L_{Aeq}$ . The ODP noise limit is 40 dB  $L_{Aeq}$ , so this is right on compliance. However, the expected level for traffic noise is 54 dB  $L_{Aeq}$ . Normally rating levels are presented as the predicted noise levels after all the adjustments have been made. So the overall rating level for Receiver A is 54 dB  $L_{Aeq}$ , which is a 14 dB exceedance.

This is contradictory to the s92 response. Can the applicant please confirm the predicted noise rating level from traffic noise.

Q.4 (Q.26 of the RFI)

AES state that a total of 31 large functions per year (2-3 per month, up to 1 per week) that could have amplified music played inside the buildings. There is no discussion about the level of noise effect on receiver A with regard to the number of events.

We can draft a recommended condition to limit the number of functions with amplified music. For example, conditions could look like this:

- A maximum of one function or event shall be held within any seven-day period
- The function centre will not hold more than XX functions with amplified music per calendar year.

Conditioning the number of functions or events is fairly standard for consents of this nature.

AES advise that the predicted noise from functions and events at Receiver A is 40 dB  $L_{Aeq}$  which is right on compliance with ODP noise limit of 40 dB  $L_{Aeq}$ .

Due to the tight predicted margin of compliance, we can also discuss the option of a review condition to check the noise levels during the first big event that has amplified music. Can the applicant please confirm their position on this and if such a condition is likely to be acceptable.

Q.6 (Q.28 of the RFI)

AES confirm that there will not be outdoor speakers installed in any of the outdoor areas. We recommend that this forms a condition of consent. Can the applicant please confirm if they agree to the inclusion of a condition to this effect.

Q.7 (Q.29 of the RFI)

The term "minimal" has been used in the AES report multiple times to describe the effects of the noise. Minimal is not a term that is often used to describe noise effects.



AES have confirmed that the noise effects specific to Receiver A have been described as minimal due to finding that the noise level external to the building at Receiver A is expected to comply with the District Plan noise limit. So it is our understanding that the term "minimal" means compliance with the DP noise limits.

AES have not taken any background noise readings of the existing environment, which means the assessment of effects is only focused on whether or not the noise complies with the DP noise limit. In this case the predicted noise rating level from functions at Receiver A is 40 dB  $L_{Aeq}$  which is right on compliance with ODP noise limit of 40 dB  $L_{Aeq}$ . In fact, the predicted noise level at Receiver A from traffic after the functions have finished (between midnight - 1am) is 54 dB  $L_{Aeq}$ , which is a 14 dB exceedance of the ODP limit. This is why we asked for the rating levels in question 1.

We need to understand if this activity, and the character of the noise it generates, could reasonably be expected within the Resort Zone - Jacks Point Zone. Can the Applicant please provide further commentary on this matter.

## Q.8 (Q.30 of the RFI)

The question has not been answered. AES state that:

"When considering the noise effects from traffic, we note that assessing noise levels at the property boundary, as required by the District Plan, does not give a reasonable indication of the noise effects which will be experienced at and in the areas immediately around the receiver dwelling. The noise level at the notional boundary of Receiver A (at 20 m from the dwelling) is expected to be less than 40 dB LAeq(15 min) during peak traffic flow conditions and well below the daytime and night-time noise limits during the events. These noise levels received at the dwelling notional boundary are consistent with the protection of sleep, the relevant effect during the night-time (including between midnight and 1:00 am), and will be acceptable during all periods and flow conditions. We therefore expect the associated noise effects from vehicles approaching and departing the site will be minimal".

The ODP requires that the assessment is made at the site boundary, not the notional boundary. The predicted noise level from traffic leaving a function late at night is 54 dB L<sub>Aeq</sub>, which is a 14 dB exceedance, so we need some comments from the applicant as to what this means. I fully agree with AES that the notional boundary is a better way to assess sleep disturbance and that may well be end of the discussion, but we have not got to that point yet. The first step in the assessment is to assess against what is required by the ODP. A 14 dB exceedance across private land may arise in reverse sensitivity issues. For example, what will happen if the owners of the site at Receiver A want to develop their property? What is the effect of using this land as a 14 dB noise buffer?

Can the Applicant please provide a response to this as these matters have not been adequately addressed.

Q.9 (Q.31 of the RFI)

The question has not been answered. We asked for comments AES refer us back to the text below Table 3.4, but this does not address the issues. In particular that the



vehicle noise assessment at Receiver A shows that the predicted noise levels are 54 dB L<sub>Aeq</sub>, which is a 14 dB exceedance and no assessment of effects has been provided.

The vehicle noise assessment at Receiver A shows that the noise at the notional boundary is less than  $40dB L_{Aeq}$ . The distance from the road to the notional boundary is approximately 30m. If the vehicle noise from a line source is 54 dB  $L_{Aeq}$  at the boundary then the noise at 30m will be more than 40 dB  $L_{Aeq}$ .

The vehicle noise assessment at Receiver B shows that the predicted noise levels are 41 dB  $L_{Aeq}$  at the façade of the dwelling and that the effects will be minor. The ODP requires that the assessment must be made at the site boundary but no predicted noise levels have been provided.

Can the Applicant please provide further commentary on this noting that a request has been made to publicly notify the application.

Q.11 (Q.33 of the RFI)

We asked if AES had any additional draft conditions than the two already put forward. They responded that all the assessment information is in the original report and refer us back to draft conditions (15) and (16) as set out below:

Noise Mitigation

- **15.** The collection of waste from the site must only occur between the hours of 8.00am and 8.00pm.
- 16. When amplified music or speech is associated with events being held at the Woolshed and / or the lecture theatre, all windows and doors are to be kept closed on all facades of the buildings except the windows and doors that face south towards the lake.

These conditions are not comprehensive enough to manage all of the noise effects that this application seeks to authorise. We will consider if any of the following should also be controlled through conditions:

- Noise limits
- The number of permitted events per year
- The number of permitted events in a 7 days period
- The permitted times of events
- Controls for amplified music (no speakers outside)
- Conditions to authorise the noise exceedance for vehicle noise
- Review condition
- Operational noise management plan

Can the applicant please confirm if any additional conditions are considered necessary/volunteered to manage effects from noise associated with the activity.

A response to these questions is provided in AES's letter attached to this document as Attachment 3D.

In addition to the above technical questions, Styles Group also asked whether the University would be willing to accept additional consent conditions as means of managing or mitigating



potential adverse noise effects (refer to Q.4, Q.6 and Q.11 above). AES, in **Attachment 3D**, has addressed the reasons that specific noise limits, off-site vehicle movement and noise management plan consent conditions are not needed. In relation to the remaining potential consent conditions noted by Styles Group, the University response is as follows:

- Event restrictions. The application, and subsequent RFI responses, state that Hākitekura will generally be used for private events and weddings around 20 times a year and that the University will hold around 11 large events at the site each year. AES, in Part 1 of the RFI Response (Attachment 1D), identifies that a total of 31 large functions could occur at the site each year, and this equates to between two to three events per month and up to 1 per week. Although this restriction forms part of the application (and thus any general condition that specifies that the activity must be carried out in accordance with the application documentation), the University is willing to accept a specific condition that contains a restriction of the number of private events, weddings and large University events that can occur annually at the site. Condition 20 (Attachment 3E) specifies that no more than 31 events per year and one event per week can take place at the site.
- **Outdoor speakers**. Similar to the above discussion, the application (i.e., **Attachment 1D** of **Part 1 of the RFI Response**) does state that the University will not install any outdoor speakers within the site. Therefore, although this restriction also forms part of the application, the University is also willing to accept a specific condition that specifies this restriction (refer to Condition 22 in **Attachment 3E**).
- **Review condition**. It is anticipated that a review condition, in accordance with section 128 of the RMA, will be attached to the land use consent being sought by the University. This condition will relate to 'any adverse effects' arising from the activity as a whole, which will include potential noise effects.

## **5** Planning (Additional Questions)

QLDC, in an email dated 22 June 2021, sought clarification in relation to minor points associated with one of the cladding 'materials and the proposed 'solar panels'.

Planz provided a response to these two questions in an email dated 23 June 2021. For completeness, the response provided is repeated below:

• Materials.

Yes, the 'charred vertical shiplap cladding' referred to on the elevation drawings, is the 'charred Abodo weatherboards – Thermally treated pine' shown on the Materials drawing contained in Appendix 2 of the application.

As stated in the Q.38 s92 RFI Response (dated 17 December 2020), there are four claddings to be used on the new buildings. These claddings are: Central Otago stone cladding; Charred Abodo weatherboards, thermally treated pine; Sioux Adodo weatherboards, thermally treated pine; and, corrugated true oak coloursteel in colour flaxpod G10. All four of these claddings are shown under the heading 'buildings' of the Materials drawing contained in the application.

• Solar Panels.

As you have mentioned, detailed design of the solar panels and/or solar farm, has not yet been carried out. However, as assessed in the application (Table 2 – Assessment of PDP Rule Applicability – refer to pp. 46 and 47), the proposed solar



panels and farm will be designed to ensure compliance with Standard 30.4.2.1, and therefore the solar panels/farm are a permitted activity in accordance with Rule 30.4.1.1. As stated in the assessment against Standard 30.4.2.1 of the PDP: the panels will be black with any frames, mounting or fixing hardware being finished in recessive colours consistent with the colours of the site's buildings and/or panels; and, within the solar farms, the maximum height of the panels will not exceed 2m above ground level.

In addition, in relation to glare / reflectivity, the application (Tables 1 and 2) identifies that structures and buildings, which will include the solar panels, will comply with ODP Standard 12.2.5.2(iv)(b) and PDP Standard 41.5.5.5.

## 6 Conclusion

This document provides a response to all the remaining RFI questions, including additional questions received from QLDC in June 2021. In addition, updated consent conditions, that accommodate modifications to the proposal and additional controls discussed within the RFI responses are provided in **Attachment 3E** of this document.

In addition, as outlined in **Section 2.3** above, if 'Option 2 – Independent Servicing' (i.e., on-site water supply provision) is implemented, then the following additional consent trigger also applies to the application:

Non-complying activity, as Standard 41.5.5.10 of the PDP which requires all dwellings to connect to reticulated infrastructure including provision of water supply, is not complied with if an on-site water supply is provided for the Hākitekura redevelopment.

As assessed in **Section 2.3** of this document, if an on-site water supply option is pursued, the effects of this specific activity will be less than minor. In addition, it is considered that this rule did not anticipate an application such as this one at this location. This water supply option is also consistent with the relevant policy framework of the PDP and ODP, and also higher order planning documents, and passes both gateway tests of section 104D of the RMA. This additional consent trigger does not affect the section 104D assessment for the proposal as a whole and is also considered to fall within the scope of the application.



# **ATTACHMENT 3A:**

# Hadley Consultants Limited – Further Response

Technical Memorandum dated 30 September 2021



## **TECHNICAL MEMORANDUM**

то:	University of Otago
FROM:	Nigel Lloyd, Senior Civil Engineer, Hadley Consultants Ltd
DATE:	30 September 2021
SUBJECT:	Hākitekura – QLDC Request For Further Information RM200570 - Further Response
LOCATION:	86 Kingston-Garston Highway, Kingston
PROJECT:	193330 Woolshed Bay

## <u>Background</u>

Hadley Consultants Limited (HCL) have been engaged by the University of Otago (UoO) to investigate and assess various infrastructure servicing options for the proposed Hākitekura redevelopment. This was originally detailed in the Feasibility of Utility Services & Infrastructure Report dated 13 May 2020 (HCL Feasibility Report) that was included as Appendix 3 in the resource consent application for this project that was prepared by others.

Subsequent to the submission of the resource consent application a Request for Further Information (RFI) was received from Queenstown Lakes District Council dated 5 October 2020 in regards a variety of matters relating to the application and proposed redevelopment. Responses have previously been provided to the engineering related queries 6, 7, 8, 9, 11 and 16 that relate to earthworks, potable water supply, fire fighting, stormwater disposal and vehicle manoeuvring respectively, and these are detailed in the HCL RFI Response Memorandum dated 10 February 2021 as attached to the Part 2 RFI Response dated 12 February 2021.

Subsequent to the initial RFI Response additional investigations and assessment has been undertaken on a range of matters including Effluent Disposal (Q.10 of the S92 RFI), Liquefaction Hazard (Q.13 of the S92 RFI) and further queries have also been received from QLDC in regard to the water supply and fire fighting water supply. Responses to these items are detailed in the following sections of this memorandum.

#### Water Supply

Southdrill Limited was engaged by the UoO in order to assess the capacity and quality of the existing water supply bore that is located on the site. This existing bore currently services the two dwellings located on the Hākitekura site and several other nearby dwellings.

Southdrill inspected the existing bore on 10 August 2021, undertook flowrate testing and obtained water quality samples for laboratory analysis. A three-stage step drawdown test and recovery over a period of 4 hours was undertaken by Southdrill in order to assess the bore capacity. Flowrates of 1L/s, 2 L/s and 3L/s were used for steps of 1 hour each and the drawdown was periodically measured over the course of this flow testing and subsequent recovery phase. A copy of the Southdrill Step Test Results is included with this memorandum as Attachment A.

Based on our review of the drawdown test results the sustainable yield from the bore is at least 1 litre per second which equates to approximately 72m<sup>3</sup>/day based on 20-hour pumping. However, we note that based in the higher flow tests and given the close proximity of the bore to Lake Whakatipu (Whakatipu Waimāori) the sustainable yield from the existing bore is likely to be significantly higher than this. However, this was not able to be confirmed based on the testing undertaken as steady state was not reached due to the limited duration of the flow steps. This is supported by the data indicating that the drawdown was slowing and was trending towards stabilising in the higher rate flow tests.

By observation, even conservatively considering a sustainable yield of 1 litre/second from the existing bore, it can be seen that this is significantly in excess of the water demand from the proposed ultimate development that was previously assessed as 14,600 litres per day as detailed in Section 8.2 of the HCL Feasibility Report. By inspection the existing bore has sufficient capacity even when the adjacent dwellings that are currently serviced by this bore are allowed for.

Water samples from the existing bore were also collected by Southdrill for laboratory analysis to assess the raw water quality of the bore water. These samples were sent to Hill Laboratories for water quality analysis. A copy of the Hill Laboratories Water Quality Certificate of Analysis is included with this memorandum as Attachment B.

We have reviewed the water quality results and concur with the assessment made by Hill Laboratories that the water meets the requirements of the Drinking Water Standards New Zealand 2005 for the elements tested with the exception of pH which at 6.9 is marginally below the lower guideline value of 7.0 indicating that the water may be slightly corrosive. This is not unusual in the Whakatipu region and not expected to cause any issues with the existing or proposed water supply.



#### Firefighting Water Supply

As previously advised fire protection for the proposed development will be provided through a combination of sprinklers within the majority of the buildings, particularly those that are publicly accessible, and fire service connection points provided elsewhere to provide residual coverage to the remainder of the development, particularly elements that are not sprinklered.

The fire fighting water supply will be provided for as per the potable water supply by way of either:

- 1. Connection to area wide Council reticulation, or;
- 2. An independent on-site supply to be constructed as a part of the development that will include an on-site bore (existing or replacement), buffer storage tanks, treatment, booster pumping and internal reticulation.

The sprinkler water demand has been conservatively assessed as 700 litres/minute or 12.5 litres/second at a pressure of 450kPa. This flowrate is required to be provided for a 60 minute duration which results in a required storage volume of  $45m^3$  for the sprinkler water supply. The final sprinkler pressure and flowrate requirements for the various elements of the development will be calculated and confirmed at the time of detailed design in accordance with NZS4541:2020. If the option of an independent on-site water supply is utilised then a suitably sized proprietary fire water pump will also be provided as a part of the development in accordance with the relevant NZ standards in order to provide the necessary pressure and flow to the sprinkler system.

The residual fire water demand to cover the unsprinklered elements of the proposed development has been reassessed through this process. We can confirm that based on conservatively assuming that the independent on-site water supply option will be utilised to service the proposed development sprinklers will be provided to all elements of the development that would otherwise have a fire water classification greater than FW2 if unsprinklered. This will be done to ensure that the residual fire water classification for the proposed development will be FW2 in order to limit the volume of static water storage required to be maintained on site. On this basis the staff dwelling and garage are anticipated to remain unsprinklered and we confirm that these meet the FW2 fire water classification in accordance with SNZ PAS 4509:2008. The static storage requirements for residual FW2 fire water supply is also 45m<sup>3</sup>.

Based on the majority of the buildings being protected from fire by sprinklers and any unsprinklered and residual elements meeting the requirements for FW2 fire water then a total minimum static water storage volume of 90m<sup>3</sup> will be required for fire fighting (sprinklers and fire appliance connection combined). This can be readily provided for by a series of 4 buried 22.5kL water storage tanks as indicated on the HCL Site Services Concept Plan – Independent Servicing 193330-007-C that was previously provided, a copy of which is included as Attachment C.

Fire service connection points will be provided in key communal locations throughout the development in order to provide coverage via fire appliance for the unsprinklered elements of the dwelling. These will be provided in accordance with SNZ PAS 4509:2008 and a concept of how this might be achieved is indicated in the HCL Site Services Concept Plan – Independent Servicing.



We confirm as outlined above that it is entirely feasible to design, construct and implement a fire fighting water supply and fire protection system to service the proposed dwelling in accordance with the relevant New Zealand standards including SNZ PAS 4509:2008 and NZS4541:2020. We recommend that a suitably worded condition of consent, as proposed by Condition 12 in Attachment 3E of Planz' overarching s92 Response, be included requiring that fire fighting provisions in accordance with the relevant standards are provided following detailed design at the time of engineering acceptance and/or building consent.

## Effluent Disposal

RFI item 10 in regard to liquefaction hazard is as follows:

Provision for a wastewater disposal is reliant upon a connection into future Council wastewater infrastructure which is to be installed to service the neighbouring Homestead Bay development site however it is noted this infrastructure does not yet exist and it is not currently within the Council long term plan (LTP). Please provide a feasible option for providing provision for wastewater disposal to the development.

We note that infrastructure for the Southern Corridor is now included in the QLDC 10 Year Plan the timing may not align with the project. As such a number of alternative wastewater servicing and effluent disposal options have been considered including the following:

- 1. Connection to future Homestead Bay / Southern Corridor wastewater network.
- 2. On-site wastewater treatment and disposal within the Hākitekura site.
- 3. On-site wastewater treatment with off-site disposal to land on the Jardine's Deer Paddock site adjacent to Woolshed Road entrance.
- 4. Connection to existing QLDC wastewater network at Jacks Point Village.
- 5. On-site collection and disposal off-site via effluent tanker.
- 6. Staging of the proposed development in order to enable a combination of wastewater servicing options to be utilised.

Connection to the QLDC wastewater network as per either option 1 or 4 above remains the preferred ultimate servicing solution for the Hākitekura development. However, Option 1 is not yet available and the timeframe for this could be towards the end of 2031 (given the funding provided in the 10 Year Plan). Option 4, while technically feasible at the current time requires the approval of Jacks Point for the construction of a wastewater pressure main within the private Jacks Point roads in order to connect the Hākitekura site to the existing QLDC wastewater network.

Detailed subsurface site investigations were undertaken across the Hākitekura site in December 2020 in order to assess the feasibility of Option 2 above, being on-site wastewater treatment and disposal. Based on these site investigations and the subsequent assessment of ground conditions and land application options it has been determined that the site is in general poorly suited to land disposal of treated effluent at a scale necessary to service the proposed development. This is primarily due to the combination of the soils that are present, proximity to the lake and presence of shallow rock in many



areas of the site. It is however noted that some areas of the site would be suitable for land disposal of limited volumes of treated effluent.

Option 3 as outlined above involved the assessment of the northern portion of the deer paddock located on the Jardine's property to the south of the entrance to Woolshed Road which was offered as a potential land disposal site. Detailed subsurface investigations were undertaken on this site in May 2021. These investigations indicated that there is likely to be a hydraulic linkage between relatively shallow groundwater that is present below some areas of this site and the surface water drainage feature / wetland area that is located to the south of this site. Due to the potential adverse environmental impacts, and consenting and approval risks associated with disposal of treated effluent to land on the deer paddock site, it has been determined that this site is not suitable for disposal of treated effluent to land.

The possibility of collecting and buffering wastewater flows prior to carting from the site for disposal at an existing wastewater treatment site as outlined under Option 5 has been considered at several stages through the course of this project. By inspection, it is apparent that the likely wastewater generation volumes associated with the ultimate development would mean that this is not a sustainable long-term or ultimate servicing solution. However, conversely it could represent a pragmatic and feasible interim servicing solution for a smaller initial stage development, depending on the size and likely occupancy or usage associated with the initial stage development.

Further staging of the proposed Hākitekura development has recently been considered by the UoO and the project team in order to allow the site to be at least partially utilised ahead of a permanent, long-term wastewater servicing solution for the ultimate development becoming available. An initial stage development proposal and a wastewater servicing concept is discussed in more detail in the following section.

## Initial Stage Development – Wastewater Servicing Concept

Initial, interim staging of the development has recently been considered in order to allow the site to be used periodically for small to medium sized functions ahead of the implementation of a long-term wastewater servicing solution to service the ultimate development. This initial stage has considered the Woolshed and the 3 bedroom manager's/staff dwelling and the removal of the existing Shearers Quarters dwelling. The only on-site accommodation would be the manager's dwelling and it is anticipated that events would be a mix of day and part day events with no more than 60 people in attendance.

Ahead of area wide wastewater infrastructure being available, this initial stage of development would be serviced by on-site reticulation to an underground storage/holding tank for temporary buffering prior to removal off-site for disposal at an approved treatment facility by effluent tanker/sucker truck. It is anticipated that the wastewater holding tank would have a capacity in the order of 20m<sup>3</sup>. It is anticipated that the holding tank would ultimately be able to be converted to serve as a wastewater pump station for the site once wastewater infrastructure is available in this area.



We have undertaken an assessment of the likely wastewater generation and subsequent truck movements that would be associated with this. This assessment has adopted event types and usage figures that have been prepared by the UoO for the preparation of a business case for the initial stage development. A copy of the initial stage wastewater generation estimate is included as Attachment D.

Based on this assessment and use of 10,000 litre capacity effluent tanker to remove wastewater from site a total of 27 truck movements annually would be expected to service the staff dwelling and 15 truck movements would be required annually as a result of the anticipated events. In total this equates to less than one truck movement per week.

Based on the above assessment we consider it feasible to provide wastewater servicing for an initial stage development through the provision of on-site holding tank and off-site disposal by an effluent cartage contractor.

#### Liquefaction Hazard

RFI item 13 in regard to liquefaction hazard is as follows:

13. The QLDC Hazard mapping database identifies that Lot 3 DP 452315 is located within a LIC 2 (P) risk to Liquefaction zone. Deep geotechnical investigations and reporting in accordance with NZ 3604 and DBH guidelines is required for this Liquefaction Zone. The Hadley Consultants Infrastructure report establishes a very low to negligible risk of liquefaction based on investigations and conclusions from an RDAgritech liquefaction assessment for the neighbouring Homestead Bay development site. Please provide a copy of the RDAgritech liquefaction assessment referred to in the Hadleys Consultants Infrastructure report along with a supporting comment from RDAgritech confirming the conclusions of their assessment applies to the subject site (Lot 1 DP 452315 & Lot 3 DP 452315.

The RDAgritech liquefaction assessment included the subject site but was not included in the original HCL Infrastructure Feasibility report for commercial reasons as it was prepared for a separate client and development proposal. Following receipt of the RFI HCL have liaised with RDAgritech regarding updating of the previous assessment for the University of Otago to cover the currently proposed development. However, through the course of this liaison it was noted that the level of detail in the original RDAgritech report does not meet Council's current investigation standards.

Subsequent to the initial RFI request and initial discussions with RDAgritech HCL undertook more detailed shallow subsurface investigations in some areas of the site primarily to assess potential on-site disposal of treated effluent. These investigations encountered fine grained lake sediments at relatively shallow depth in some test pits in several areas of the site which may have liquefaction potential. As such it was agreed that a more detailed, deep geotechnical investigation was in fact warranted and would be undertaken.

ENGEO Limited were engaged by the UoO to undertake a geohazard assessment of the site including the monitoring of deep geotechnical investigations in key areas of the site. These investigations and



assessment are detailed in the ENGEO Hākitekura Retreat Geohazard Assessment Report, a copy of which is included with this memorandum as Attachment E. This information is intended to replace and supersede previous reporting on this matter.

The ENGEO geohazard assessment found that based on the initial CPT and dynamic cone testing in two locations on the site that negligible liquefaction and/or lateral spreading is anticipated under Service Limit State (SLS) seismic design conditions, although some liquefaction could occur under Ultimate Limit State (ULS) seismic conditions.

Given the variable ground conditions across the site, in particular the variable bedrock profile and depth and nature of the overlying soils, this will need to be considered and assessed in further detail. This further assessment should be undertaken at the time of detailed design in order to fully quantify the potential liquefaction risk and mitigation measured to be incorporated into the design of various elements of the development. It is anticipated that the foundations of at least some buildings including the lecture theatre will require specific engineering design in order to ensure that they adequately mitigate the potential liquefaction risk.

As noted in the ENGEO report we also confirm that it is feasible and appropriate to further assess potential liquefaction hazard and undertake specific engineering design of mitigation measures as necessary as a part of detailed design process. We recommend that the following condition of consent as proposed in Condition 9 of Attachment 3E of Planz' overarching s92 Response be included:

"The Consent Holder must submit to QLDC, prior to construction commencing at the site, documentation confirming that a site-specific detailed geotechnical investigation and assessment has been undertaken to confirm the soil conditions, rock profile and liquefaction/lateral spread potential beneath the specific structural elements of the proposed development. If liquefaction/lateral spread hazard is confirmed for any elements of the proposed development as result of the investigation and assessment carried out, then the documentation submitted to QLDC must also identify the mitigation measures that are to be implemented, as part of the proposed development, to ensure that these risks are adequately mitigated.

(Advice Note: As any proposed mitigation measures, such as ground improvement and/or specific engineering design of foundations and/or structures, if required, will be subject to review as part of the building consent process required for the proposed development, this condition is not part of the QLDC Engineering Acceptance of this land use consent)."

Attachment A: Southdrill Step Test Results
Attachment B: Hill Laboratories Water Quality Certificate of Analysis
Attachment C: HCL drawings 193330-007-Rev C
Attachment D: HCL Initial Stage Wastewater Generation Estimate
Attachment E: ENGEO Hākitekura Retreat Geohazard Assessment Revision 1 Report



## Attachment A



#### STEP TEST X 4

			<u>012</u>
SWL 2.250m		1LPS	
TIME STARTE	D FLOW: 9.10a	m	Flow
30	2.650		lps
1m	2.590		
2m	2.610		
3m	2.600		
4m	2.600		
5m	2.600		0.997
10m	2.600		1.005
15m	2.600		1.002
20m	2.600		1.008
30	2.600		0.998
45	2.600		1.006
1 hour	2.605		1.005

<u> </u>				
			2LPS	
NEXT	STEP	FLOW: 10.10a	n	Flow
30	)	3.200		lps
1n	n	3.250		
2n	n	3.290		
3n	n	3.300		
4n	n	3.300		
5n	n	3.310		1.997
10	m	3.330		2.006
15	m	3.340		2.001
20	m	3.350		2.02
30	)	3.360		2.004
45	5	3.370		1.999
1 hc	bur	3.380		2.016

3 LPS
-------

515				
NEXT STEP FI	LOW 11.10am	Flow		
30	4.250	lps		
1m	1.300			
2m	4.400			
3m	4.370	3.004		
4m	4.370	2.993		
5m	4.370	3.005		
10m	4.380	2.997		
15m	4.400	2.993		
20m	4.410	2.99		
30	4.440	2.997		
45	4.440	3.006		
1 hour	4.470	3.001		

	Notes	
SWL	2.250	
Rainfall	Nil	
GPS Discharge		
Bore ID		

	Recovery		
NEXT STEP	FLOW	12.10am	
30	2.600		
1m	2.440		
2m	2.430		
3m	2.420		
4m	2.420		
5m	2.410		
10m	2.400		
15m	2.390		
20m	2.390		
30	2.380		
45	2.360		
1 hour	2.340		

All measurements taken from top of concrete pit. 0.620 from top of pit to bore. Top of concrete pit is ground level Attachment B



**Hill Laboratories** TRIED, TESTED **AND TRUSTED** R J Hill Laboratories Limited 28 Duke Street Frankton 3204 Private Bag 3205 Hamilton 3240 New Zealand

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Page 1 of 4

# **Certificate of Analysis**

Client:	SouthDrill Limited	Lab No:	2675046	DWAPv1
Contact:	SouthDrill Limited	Date Received:	11-Aug-2021	
	C/- SouthRoads Limited	Date Reported:	17-Aug-2021	
	PO Box 968	Quote No:	102422	
	Invercargill 9840	Order No:	2186.015	
		Client Reference:	Bore water	
		Submitted By:	SouthDrill Limited	

#### Sample Type: Aqueous

Sample Type: Aqueous				Massimo
	Sample Name:	Otago University 10-Aug-2021 11:15 am	Guideline	Maximum Acceptable
	Lab Number:	2675046.1	Value	Values (MAV)
Individual Tests				
Total Cadmium	g/m³	0.00039	-	0.004
Total Chromium	g/m³	< 0.00053	-	0.05
Fluoride	g/m³	< 0.05	-	1.5
Routine Water + E.coli profile	Kit			
Escherichia coli	MPN / 100mL	<1	-	< 1
Routine Water Profile	i			
Turbidity	NTU	0.68	< 2.5	-
рН	pH Units	6.9	7.0 - 8.5	-
Total Alkalinity	g/m³ as CaCO <sub>3</sub>	24	-	-
Free Carbon Dioxide	g/m <sup>3</sup> at 25°C	6.5	-	-
Total Hardness	g/m <sup>3</sup> as CaCO <sub>3</sub>	34	< 200	-
Electrical Conductivity (EC)	mS/m	9.5	-	-
Electrical Conductivity (EC)	µS/cm	95	-	-
Approx Total Dissolved Salts	g/m³	64	< 1000	-
Total Arsenic	g/m <sup>3</sup>	0.0054	-	0.01
Total Boron	g/m³	0.0097	-	1.4
Total Calcium	g/m³	10.2	-	-
Total Copper	g/m³	0.0050	< 1	2
Total Iron	g/m³	0.051	< 0.2	-
Total Lead	g/m <sup>3</sup>	0.00027	-	0.01
Total Magnesium	g/m <sup>3</sup>	2.2	-	-
Total Manganese	g/m³	0.0022	< 0.04 (Staining) < 0.10 (Taste)	0.4
Total Potassium	g/m³	2.0	-	-
Total Sodium	g/m³	4.2	< 200	-
Total Zinc	g/m³	0.057	< 1.5	-
Chloride	g/m <sup>3</sup>	6.2	< 250	-
Nitrate-N	g/m³	0.81	-	11.3
Sulphate	g/m <sup>3</sup>	6.3	< 250	-

Note: The Guideline Values and Maximum Acceptable Values (MAV) are taken from the publication 'Drinking-water Standards for New Zealand 2005 (Revised 2018)', Ministry of Health. Copies of this publication are available from https://www.health.govt.nz/publication/drinking-water-standards-new-zealand-2005-revised-2018

The Maximum Acceptable Values (MAVs) have been defined by the Ministry of Health for parameters of health significance and should not be exceeded. The Guideline Values are the limits for aesthetic determinands that, if exceeded, may render the water unattractive to consumers.

Note that the units g/m<sup>3</sup> are the same as mg/L and ppm.



This Laboratory is accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised. The tests reported herein have been performed in accordance with the terms of accreditation, with the exception of tests marked \* or any comments and interpretations, which are not accredited.

#### pH/Alkalinity and Corrosiveness Assessment

The pH of a water sample is a measure of its acidity or basicity. Waters with a low pH can be corrosive and those with a high pH can promote scale formation in pipes and hot water cylinders.

The guideline level for pH in drinking water is 7.0-8.5. Below this range the water will be corrosive and may cause problems with disinfection if such treatment is used.

The alkalinity of a water is a measure of its acid neutralising capacity and is usually related to the concentration of carbonate, bicarbonate and hydroxide. Low alkalinities (25 g/m<sup>3</sup>) promote corrosion and high alkalinities can cause problems with scale formation in metal pipes and tanks.

With the pH and alkalinity levels found, this water could be corrosive towards metal piping and fixtures.

#### Hardness/Total Dissolved Salts Assessment

The water contains a very low amount of dissolved solids and would be regarded as being soft.

#### Nitrate Assessment

Nitrate-nitrogen at elevated levels is considered undesirable in natural waters as this element can cause a health disorder called methaemaglobinaemia. Very young infants (less than six months old) are especially vulnerable. The Drinking-water Standards for New Zealand 2005 (Revised 2018) suggests a maximum permissible level of 11.3 g/m<sup>3</sup> as Nitrate-nitrogen (50 g/m<sup>3</sup> as Nitrate).

Nitrate-nitrogen was detected in this water but at such a low level to not be of concern.

#### **Boron Assessment**

Boron may be present in natural waters and if present at high concentrations can be toxic to plants. Boron was found at a low level in this water but would not give any cause for concern.

#### **Metals Assessment**

Iron and manganese are two problem elements that commonly occur in natural waters. These elements may cause unsightly stains and produce a brown/black precipitate. Iron is not toxic but manganese, at concentrations above 0.5 g/m<sup>3</sup>, may adversely affect health. At concentrations below this it may cause stains on clothing and sanitary ware.

Iron was found in this water at a low level.

Manganese was found in this water at a low level. Treatment to remove iron and/or manganese should not be necessary.

#### **Bacteriological Tests**

The NZ Drinking Water Standards state that there should be no Escherichia coli (E coli) in water used for human consumption. The presence of these organisms would indicate that other pathogens of faecal origin may be present. Results obtained for Total Coliforms are only significant if the sample has not also been tested for E coli.

Escherichia coli was not detected in this sample.

#### Final Assessment

The parameter pH did NOT meet the guidelines laid down in the publication 'Drinking-water Standards for New Zealand 2005 (Revised 2018)' published by the Ministry of Health for water which is suitable for drinking purposes.

## **Summary of Methods**

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request. Unless otherwise indicated, analyses were performed at Hill Laboratories, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Aqueous			
Test	Method Description	Default Detection Limit	Sample No
Routine Water Profile		-	1
Filtration, Unpreserved	Sample filtration through 0.45µm membrane filter. Performed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch.	-	1
Total Digestion	Nitric acid digestion. APHA 3030 E (modified) 23rd ed. 2017.	-	1
Turbidity	Analysis using a Hach 2100 Turbidity meter. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 2130 B 23 <sup>rd</sup> ed. 2017 (modified).	0.05 NTU	1
рН	pH meter. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 4500-H <sup>+</sup> B 23 <sup>rd</sup> ed. 2017. Note: It is not possible to achieve the APHA Maximum Storage Recommendation for this test (15 min) when samples are analysed upon receipt at the laboratory, and not in the field. Samples and Standards are analysed at an equivalent laboratory temperature (typically 18 to 22 °C). Temperature compensation is used.	0.1 pH Units	1
Total Alkalinity	Titration to pH 4.5 (M-alkalinity), autotitrator. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 2320 B (modified for Alkalinity <20) 23 <sup>rd</sup> ed. 2017.	1.0 g/m <sup>3</sup> as CaCO <sub>3</sub>	1
Free Carbon Dioxide	Calculation: from alkalinity and pH, valid where TDS is not >500 mg/L and alkalinity is almost entirely due to hydroxides, carbonates or bicarbonates. APHA 4500-CO <sub>2</sub> D 23 <sup>rd</sup> ed. 2017.	1.0 g/m³ at 25°C	1
Total Hardness	Calculation from Calcium and Magnesium. APHA 2340 B 23 <sup>rd</sup> ed. 2017.	1.0 g/m <sup>3</sup> as CaCO <sub>3</sub>	1
Electrical Conductivity (EC)	Conductivity meter, 25°C. Analysed at Hill Laboratories - Chemistry; 101c Waterloo Road, Christchurch. APHA 2510 B 23 <sup>rd</sup> ed. 2017.	0.1 mS/m	1
Electrical Conductivity (EC)	Conductivity meter, 25°C. APHA 2510 B 23 <sup>rd</sup> ed. 2017.	1 µS/cm	1
Approx Total Dissolved Salts	Calculation: from Electrical Conductivity.	2 g/m <sup>3</sup>	1
Total Arsenic	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.0011 g/m <sup>3</sup>	1
Total Boron	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.0053 g/m <sup>3</sup>	1
Total Cadmium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.000053 g/m <sup>3</sup>	1
Total Calcium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.053 g/m <sup>3</sup>	1
Total Chromium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1
Total Copper	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1
Total Iron	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.021 g/m <sup>3</sup>	1
Total Lead	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.00011 g/m <sup>3</sup>	1
Total Magnesium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.021 g/m <sup>3</sup>	1
Total Manganese	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.00053 g/m <sup>3</sup>	1
Total Potassium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.053 g/m <sup>3</sup>	1
Total Sodium	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017.	0.021 g/m <sup>3</sup>	1
Total Zinc	Nitric acid digestion, ICP-MS, trace level. APHA 3125 B 23 <sup>rd</sup> ed. 2017 / US EPA 200.8.	0.0011 g/m <sup>3</sup>	1
Chloride	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 <sup>rd</sup> ed. 2017.	0.5 g/m <sup>3</sup>	1
Fluoride	Direct measurement, ion selective electrode. APHA 4500-F <sup>-</sup> C 23 <sup>rd</sup> ed. 2017.	0.05 g/m <sup>3</sup>	1
Nitrate-N	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 <sup>rd</sup> ed. 2017.	0.05 g/m <sup>3</sup>	1
Sulphate	Filtered sample from Christchurch. Ion Chromatography. APHA 4110 B (modified) 23 <sup>rd</sup> ed. 2017.	0.5 g/m <sup>3</sup>	1

Sample Type: Aqueous					
Test	Method Description	Default Detection Limit	Sample No		
Escherichia coli	MPN count using Colilert (Incubated at 35°C for 24 hours) and 97 wells. Analysed at Hill Laboratories - Microbiology; 101c Waterloo Road, Hornby, Christchurch. APHA 9223 B 23 <sup>rd</sup> ed. 2017.	1 MPN / 100mL	1		

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 11-Aug-2021 and 17-Aug-2021. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

This certificate of analysis must not be reproduced, except in full, without the written consent of the signatory.

Martin Cowell - BSc Client Services Manager - Environmental



## Attachment D

#### Hakitekura Wastewater Generation Estimate - Initial Development

10-Sep-21



Event Guest WW Generation50 L/person/dayAccommodation Guest Capacity0 peopleEffluent Truck Capacity10000 L

Event/Activity	People	Number/Year	Per Person WW Generation	Event WW Volume	Trucks per event	Annual WW Volume	Trucks per year
	#		L/person/day	L	#	L	#
Manager's Dwelling	3	365	250	750	0.08	273,750	27
National Think Tanks	60	6	50	3000	0.3	18,000	1.8
International Think Tanks	60	6	50	3000	0.3	18,000	1.8
Staff leadership retreats	15	24	50	750	0.08	18,000	1.8
Student leadership retreats	20	20	50	1000	0.1	20,000	2.0
Public service events	60	6	50	3000	0.3	18,000	1.8
Internal candidates	5	6	50	250	0.03	1,500	0.2
Open lectures and public seminars	60	12	50	3000	0.3	36,000	3.6
Internal candidates	5	12	50	250	0.03	3,000	0.3
Adult/community education courses	30	6	50	1500	0.15	9,000	0.9
Internal Candidates	5	12	50	250	0.03	3,000	0.3
Totals						418250	42

Notes:

Figures based on UoO Business Case informations

Wastewater generation figures generally as per QLDC Code of Practice & NZS1547:2012.

Figures presented are preliminary estimate only, to be confirmed at time of detailed design.

## Attachment E

# **ENGEO** Hākitekura Retreat - Geohazard Assessment\_Revision 1

Woolshed Bay Queenstown

> Submitted to: University of Otago

C/o Rubix Level 2 50 Stanley Street Queenstown 9300



02.06.2021 18684.000.001\_02

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## Contents

1	Introduction				
2	Site Description and Proposed Development5				
3	Desktop Assessment				
	3.1	Publi	shed Geology	6	
	3.2	Seisr	nicity	7	
	3.3	Haza	rd Databases and Reports	7	
	3.4	Third	-party Information	9	
4	Sit	te Inves	tigation	9	
	4.1	Site V	Valkover	10	
5	En	igineerii	ng Geological Model	11	
	5.1	Subs	urface Geology	11	
	5.2	Grou	ndwater	12	
6	Ge	eohazar	d Assessment	13	
	6.1	Seisr	nic Hazards	13	
		6.1.1	Lake Seiches	13	
		6.1.2	Ground Rupture	13	
		6.1.3	Soil Classification	13	
		6.1.4	Ground Shaking	13	
		6.1.5	Liquefaction	14	
		6.1.6	Lateral Spreading and Stretching	15	
	6.2	Rock	fall	16	
	6.3	Flood	ling	16	
7	Limitations18				
8	References19				



## **Tables**

Table 1:	Summary Investigation Information
Table 2:	Typical subsurface geology for topographic lows within the bedrock.
Table 3:	Summary of liquefaction analysis
Table 4:	Summary of Lateral Spread Analysis

## **Figures**

Figure 1:	3D visualisation of the proposed development (Source: UoO RFP dated 18 February 2020)
Figure 2:	Published geological map of the area (Turnbull, 2000)
Figure 3:	Liquefaction susceptibility map by T+T, 2013. Source: QLDC webmaps. Note red line is the approximate site boundary.
Figure 4:	Liquefaction susceptibility map by Barrel, 2019. Source: QLDC webmaps. Note red line is the approximate site boundary.

## Appendices

Appendix 1:	Figures
Appendix 2:	Third-party data

- Appendix 3: Investigation results
- Appendix 4: Liquefaction analysis



Report Title	Hākitekura Retreat - Geohazard Assessment_Revision 1 - Woolshed Bay, Queenstown				
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#### **ENGEO Document Control:**



## **Executive Summary**

ENGEO was requested by University of Otago (UoO) to undertake a geohazard assessment for the proposed UoO Hākitekura Retreat at Woolshed Bay, Queenstown. ENGEO attended site during May 2021 and monitored geotechnical site investigations comprising one Cone Penetration Test (CPT), one Dynamic Probe Super Heavy (DPSH) test and a site walkover.

Geotechnical investigation data suggests the site is underlain by an undulating bedrock profile. Surficial bedrock was observed in two locations within the site and soil profiles greater than 10 m depth were encountered in in others. The bedrock profile is anticipated to be similar in nature to the Jacks Point ridges located to the northwest of the site with topographic ridges and hollows trending in northwest-southeast direction. Liquefaction and lateral spreading were identified as the dominant natural hazards of the site.

ENGEO completed a liquefaction and lateral spread analysis using commercially available software CLiq (GeoLogismiki, 2018). CPT data from a zone of relatively deep (greater than 10 m) soil estimates settlement and lateral spreading under ULS conditions of approximately 130 mm and 170 cm, respectively, is possible. Despite the 3 m thick crust of non-liquefiable soil encountered that would typically mitigate the surface effects of differential settlement, the undulating bedrock profile means the settlement on rock will be near zero, amplifying differential settlements across building footprints. Whilst our analysis estimates up to 170 cm of lateral displacement, the lack of geomorphic evidence and potential for lateral confinement from subsurface bedrock ridges supports conservatism in our analysis. Notwithstanding this, the effects of lateral displacement on the proposed buildings may be more significant if they are constructed across regions of variable surficial soil thickness as there is anticipated to be a sharp transition with the potential for significant displacement across a small distance.

If shallow foundation solutions are progressed to detailed design, they will need to be designed to withstand a differential settlement equal to the total settlement predicted. To mitigate the risk of lateral spreading ENGEO recommend a sliding layer, such as a two-layer damp-proof membrane, beneath foundations in order to reduce frictional forces acting in the slab. Alternatively, appropriately designed piled foundations or a combination of piled and shallow foundations where all elements bear on bedrock would effectively manage the risk of both differential settlement and lateral spreading.

Given the information available and conservative liquefaction and lateral spreading analysis performed to date, ENGEO consider that the proposed development is feasible from a geotechnical perspective provided the recommendations in this report are accounted for during detailed design.

To refine the liquefaction and lateral spread analysis and to support detailed design, ENGEO recommend additional site investigations are completed to support detailed design. The focus of these investigations is to refine the sites engineering geology model. Specifically, future site investigation should reduce uncertainty associated with the bedrock profile, thickness and composition of potentially liquefiable soils and inform the most efficient building locations and foundation solution(s). Investigations may include one or a combination of surface geophysics, machine boreholes and laboratory testing.

ENGEO can work with the wider design team to develop the most effective investigation plan to inform detailed design.



## 1 Introduction

ENGEO Ltd was requested by University of Otago to undertake a geohazard assessment for the proposed University of Otago (UoO) Hākitekura Retreat at Woolshed Bay, Queenstown (herein referred to as 'the site') as outlined in your Request for Proposal (RFP) dated 18 February 2021. This work has been carried out in accordance with our signed agreement dated 25 February 2021. The purpose of the assessment was to address the Request for Information (RFI) issued by the Queenstown Lakes District Council (QLDC) in response to your Resource Consent application (RM200570). Specifically, QLDC have requested a site-specific geotechnical investigation to address the level of liquefaction hazard on the site.

This work has been carried out in accordance with our signed agreement (ENGEO, 2020).

## 2 Site Description and Proposed Development

The site is located in Woolshed Bay, Queenstown, on the shore of Lake Wakatipu just south of the Jacks Point landform (Appendix 1, Figure 1). The site is legally described as Lot 1 and 3 DP 452315 and is approximately 4 hectares.

The site is typically generally gently sloping south towards Lake Wakatipu with some steeper slopes and rock bluffs towards the north and northwest, outside of the proposed development area. The area of the site proposed for development sits between approximately 312 and 325 m RL.

There is currently a redeveloped woolshed, shearer's quarters and several small auxiliary buildings located on the site.

Based on your RFP dated 18 February 2021, we understand it is proposed to develop the site into an academic retreat for the UoO (Figure 1). The development is planned to comprise a refurbishment of the current woolshed building, demolition of the shearers quarters, and construction of a new lecture theatre building and an accommodation block.





#### Figure 1: 3D visualisation of the proposed development (Source: UoO RFP dated 18 February 2020)

## 3 Desktop Assessment

## 3.1 Published Geology

The site is located in the Wakatipu Basin, a feature formed predominantly by glacial advances with the last event being approximately 10,000 - 20,000 years ago. Glaciations have left till, outwash and lake sediments over ice-scoured bedrock. The post-glacial period has been dominated by erosion of schist bedrock and glacial sediments, with deposition of alluvial gravels by local watercourses and by deposition of lacustrine sediments.

Published geological maps by Turnbull (2000) indicate the site is predominantly underlain by angular bouldery till with some schist bedrock present in the northwest corner. Due to the proximity to Lake Wakatipu, it is likely sands and gravels from old beach ridges and lacustrine deposits are also present near the surface.





Figure 2: Published geological map of the area (Turnbull, 2000)

## 3.2 Seismicity

No active fault traces were observed in the field nor have been reported in this vicinity. However, the Alpine Fault is located approximately 90 km northwest of the site and is the primary seismic hazard to the Queenstown Basin. A magnitude (Mw) 8.1 Alpine Fault earthquake could result in shaking for one to two minutes in the Queenstown area with a shaking intensity of MMVII (Modified Mercalli scale, Mackey, 2015).

Located 16 km east of the site is the Nevis-Cardrona fault system. Estimated to have a return period of 5,000-10,000 years for an Mw 7.1 event, it is the closest significant active fault system to the Queenstown community.

## 3.3 Hazard Databases and Reports

ENGEO have reviewed the geohazards that are catalogued and / or mapped in both the QLDC and Otago Regional Council (ORC) hazard databases / online reports. We have summarised the relevant information below:

The site is mapped within an area categorized as 'LIC 2 (P) – Possibly Moderate Risk' according to a 2012 Tonkin & Taylor report (T&T, 2013) (Figure 3). A subsequent report by Barrell (2019) categorises the site as 'Domain B' with a liquefaction potential of low to moderate due to being underlain by predominantly poorly consolidated lake, beach or stream sediments (Figure 4).







Figure 4: Liquefaction susceptibility map by Barrel, 2019. Source: QLDC webmaps. Note red line is the approximate site boundary.





02.06.2021 18684.000.001\_02 • There are historical records of seismically induced landslide seiches, causing waves up to 3.7 m high (Opus, 2004)<sup>1</sup>. Given the seismic hazard for the area, ORC have suggested that a significant seiche risk may exist. However, this risk has not been quantified to date and remains uncertain.

## 3.4 Third-party Information

A review of documents provided with the RFP and a search of the New Zealand Geotechnical Database (NZGD) has been undertaken to identify and relevant information in the vicinity of the site. We have summarised the key findings below and included the documents in Appendix 2.

- Hadley Consultants Ltd (Hadley) completed 8 Test Pit (TP) investigations across the site in 2020. TPs reached depths of between 1.1 to 2.4 m depth.
  - The typical geology encountered in TPs was a thin layer of topsoil overlying sandy gravels to approximately 2.2 m in which TPs were terminated. Two TPs encountered silt at approximately 2.2 – 2.4 m depth before terminating. One TP met shallow refusal on bedrock.
- Two boreholes were drilled by Southdrill Water Exploration (Southdrill) approximately 450 m southeast of the site in July 2017 to 36 m depth<sup>2</sup>.
  - The basic geological descriptions noted on the drill logs is: a surficial layer of loose coarse gravels to approximately 0.8 m, underlain by silts to 3.5 m, underlain by gravels and sands to 36 m.

## 4 Site Investigation

ENGEO visited the site on 16 April 2021 to observe / complete the following site investigations:

- A site walkover to identify potential geohazards.
- Supervision of one Cone Penetration Tests (CPT) and one Dynamic Probe Super Heavy (DPSH) test to depths of 11 and 5 m respectively<sup>3</sup>.

The CPT and DPSH were completed by Ground Investigations Ltd. and supervised by ENGEO.

CPT/DPSH locations were guided by the presence of underground services and access. Investigation locations are shown in Appendix 1. CPT and DPSH logs are attached in Appendix 3.

Summary investigation data is included in Table 1 below.

<sup>&</sup>lt;sup>3</sup> Note that only one of the two planned CPTs could be completed as the CPT rig could not get anchorage at one of the planned locations. A DPSH was instead completed at this location.



<sup>&</sup>lt;sup>1</sup> A Seiche is a landslide generated wave, generally within an enclosed waterbody such as a lake.

<sup>&</sup>lt;sup>2</sup> The addresses on the logs do not match the coordinates listed showing the location as Homestead Bay. The Boreholes were observed in field by ENGEO, so we consider that the site addresses listed on the logs is incorrect.

Investigation ID	Easting (NZTM) <sup>1</sup>	Northing (NZTM) <sup>1</sup>	Elevation (m RL) <sup>2</sup>	Depth (m bgl)	Reason for Refusal
HKR-ENG21- CPT01	1263894.84	4998357.83	313	11.06	Limit of reaction force
HKR-ENG21- DPSH01	1264048.45	4998377.98	313	5.0	High blow count

#### Table 1: Summary Investigation Information

<sup>1</sup>Coordinates were measured by handheld GPS by Ground Investigations.

<sup>2</sup>Elevations are estimated using QLDC webmaps contour data with an accuracy of +/- 1 m.

## 4.1 Site Walkover

ENGEO completed a site walkover on 16 April 2021, below is a summary of the key features observed:

- Drift wood ridge deposits were observed as storm-deposited ridges along the southern boundary of the property at an elevation of approximately 312 m RL (Photo 1).
- Rocky bluffs are located on the west and northwest boundaries of the site. Bluffs are typically moderately sloping and well vegetated. Minor signs of past rockfall was observed at the very toe of some bluffs (Photo 2).
- Two rock outcrops (RO01 and RO02) were observed within the planned development area of the site as shown in Appendix 1, Figure 2 (Photo 3 & 4). The schist's foliation at these outcrops had a dip / dip direction of approximately 20-30° / 110° East. This is consistent with outcrops that form the rock bluffs of Jacks Point mapped to the northwest of the site (RO03 & RO04, Appendix 1, Figure 2). This suggests that the rock outcrops observed within the planned development area are *in situ* and areas of shallow bedrock likely extend from these locations.







Photo 1: View looking west along the southern boundary of the site.



Photo 2: View looking northwest towards rocky bluffs.



Photo 3: RO02 adjacent to the woolshed. View looking Photo 4: RO01, view looking south.

## 5 Engineering Geological Model

We have developed a basic engineering geological model for the proposed development area of site utilising the data obtained from our site investigations (Section 4) and available third-party data (Section 3.4).

## 5.1 Subsurface Geology

The information available suggests the site is underlain by an undulating bedrock profile. Schist bedrock was exposed at the surface in two locations within the site and soil profiles greater than 10 m thick were encountered in some investigations. The bedrock profile likely follows the topography of the Jacks Point ridges located to the northwest of the site, typically trending in northwest-southeast direction. Topographic lows within the bedrock profile are infilled with sequence of lacustrine, beach and possibly till deposits at depth. The subsurface geology profile discussed below is considered to be characteristic of topographic lows within the bedrock, and of the ground conditions encountered below the proposed lecture theatre building.

A thin layer of topsoil blankets the majority of the site, typically 200 mm thick. Underlying the topsoil are loose sandy gravels interpreted to be old beach ridges to depths of 6 m below ground level (bgl). Within this unit is a  $\sim$ 0.5 m thick layer of fine-grained silt found at depths between 2 – 4 m bgl.



From approximately 6 to 11 m bgl is an interbedded sequence of silts, sands, clays and gravels interpreted to be a series of lacustrine and beach deposits. Beds typically range from 0.1 to 1 m thick.

While not encountered during site-specific investigations, it is anticipated that sands and gravels of glacio-fluvial origin underlies the interbedded sequence detailed above. Glacial till may also underlie the glacio-fluvial sediments at unknown depths before bedrock is encountered.

A summary of interpreted subsurface conditions is presented in Table 2 below.

Material Layer	Geological Unit	Typical Depth <sup>1</sup> (m bgl)	Typical Material Description	Density / Consistency
1	Topsoil	0.0 - 0.2	Organic SILT.	Firm
2	Beach gravels	0.2 - 6.0	Sandy GRAVEL (minor layer/s of silt)	Loose to medium dense
3	Interbedded lacustrine and beach deposits	6.0 – 11.0	Interbedded SILT, SAND, CLAY, GRAVEL	Soft to firm / loose to medium dense
4	Glacio-fluvial deposits <sup>2</sup>	11 +	Sandy GRAVEL / Gravelly SAND	Dense to very dense

 Table 2:
 Typical subsurface geology for topographic lows within the bedrock.

<sup>1</sup> The typically depth profile is based on the CPT undertaken below the proposed lecture theatre building and is considered to be characteristic of topographic lows within the bedrock.

<sup>2</sup> No site-specific information is available for these units as they were not encountered during our investigations. Their likely presence is based on the results of our desktop review (Section 3).

<sup>3</sup> Schist bedrock was found at the surface in some locations, and at depths greater than 10 m bgl in other locations. The bedrock profile is expected to be undulating.

The location of the planned accommodation block is expected to have a highly variable depth to bedrock. A Hadley TP met shallow refusal (at 1.1 m bgl) on bedrock at the western extent of the planned building (Section 3.4), while DPSH01 encountered a soil profile at least 5 m thick towards the east.

## 5.2 Groundwater

The groundwater level was estimated at 3 m bgl during CPT investigations.

Lake level monitoring data available at orc.govt.nz indicates lake levels fluctuate between approximately 309.5 and 310.5 m RL. As area of the site planned for development is at approximately 313 m RL, we have utilised a groundwater depth of 2.5 m in our liquefaction and lateral spreading analysis (Section 6.1)



## 6 Geohazard Assessment

## 6.1 Seismic Hazards

Seismic hazards resulting from nearby moderate to major earthquakes can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking, regional subsidence or uplift, soil liquefaction, lateral spreading, landslides, tsunamis, flooding, or seiches. The following sections present a discussion of seismic hazards as they apply to the site.

## 6.1.1 Lake Seiches

As discussed in Section 3.3, there are historical records of seismic seiches comprising up to 3.7 m high waves in lakes caused by Modified Mercalli VI intensities of seismic shaking and increasing wave heights with greater intensity. Given that the site is elevated approximately 3 m above the average lake level, inundation from lake seiches may be possible during static and seismic events. The residual risk to the site depends on the bathymetry of Lake Wakatipu and nature / scale of the landslide, in addition to seismic shaking. This has not been specifically assessed and is outside of the scope of this study

#### 6.1.2 Ground Rupture

There are no known active faults located within the site. Based on our site walkover and review of relevant publications (Section 3.2) it is our opinion that fault-related ground rupture is unlikely at the subject property.

#### 6.1.3 Soil Classification

Based on the site investigation information and available third party data, we consider the soil classification in accordance with NZS 1170.5:2004 to be 'Class C – Shallow Soil' for the purpose of seismic design.

## 6.1.4 Ground Shaking

Based on discussions with Hadley and the information provided to us as part of the RFP, we understand the development may include both Importance Level 2 and 3 (IL2 & IL3) buildings.

The design peak ground accelerations (PGA) for the site under both ultimate limit state (ULS) and serviceability limit state (SLS) design load cases have been calculated from NZS 1170.5:2004 using the recommendations of the New Zealand Geotechnical Society as follows:

Peak horizontal ground accelerations  $(a_{max})$  have been calculated in accordance with MBIE / NZGS Module 1 (2016) using the following formula:

 $PGA = C_{0,1000} (Ru/1.3) x f x g$ 

 $C_{0,1000} = 0.4$  for Queenstown (Commentary to the NZTA Bridge Manual (2018) Table C6.1)

R = 0.25 for a 25 year return period event (NZS1170.5) (SLS)

= 1 for a 500 year return period event (NZS1170.5) (ULS) (IL2 Building)

= 1.3 for a 1000 year return period event (NZS1170.5) (ULS) (IL3 Building)


f = 1.33 for Class CThus  $a_{max} = 0.4 \times (0.25 / 1.3) \times 1.33 = 0.1 \text{ g (SLS)}$  $= 0.4 \times (1.0 / 1.3) \times 1.33 = 0.41 \text{ g (ULS) (IL2)}$  $= 0.4 \times (1.3 / 1.3) \times 1.33 = 0.53 \text{ g (ULS) (IL3)}$ 

The effective earthquake magnitude for the Queenstown area has been assumed to be 6.5.

### 6.1.5 Liquefaction

The QLDC hazard webmaps indicates the site is possibly at-risk of liquefaction based on reports by T+T (2013) and Barrel (2019) (Section 3.3). This classification is based on the absence of detailed site investigation data within the area and possible presence of unconsolidated sediments beneath the site.

Additionally, site investigation results (Section 4) and third-party information (Section 3.4) indicates the presence of loose and / or fine-grained sediments beneath the site that may be susceptible to liquefaction when saturated.

A detailed liquefaction analysis was undertaken using the results of CPT completed at the proposed lecture theatre location, utilising the method recommended by Boulanger and Idriss (2014) to determine the susceptibility of the subsoils to liquefaction. The assessment was completed using the commercially available software CLiq (GeoLogismiki, 2018).

A groundwater level of 2.5 m bgl was utilised for the liquefaction assessment (Section 5.2).

The results of the liquefaction assessment indicate the following:

- Negligible liquefaction is predicted under SLS conditions.
- Liquefaction is likely to occur in the interbedded lacustrine and beach deposits between approximately 4.5 and 11 m bgl under ULS seismic loading, if saturated.

Vertical settlement is predicted to be approximately 13 cm under ULS seismic loading.

The analysis considers volumetric strain and does not account for ground loss due to ejecta. Owing to the depth of the liquefiable layers (> 3 m) and subsequent thickness of the non-liquefiable crust, sand boil formation and ejecta are unlikely to occur at the site under both SLS and ULS shaking.

In terms of the NZGS / Ministry of Business Innovation and Employment (MBIE) guidelines (NZGS / MBIE, 2016), it is expected that the expected level of liquefaction to occur corresponds to a Performance Level 'L0 - Insignificant' under SLS loading and 'L3 – High' under ULS loading.

A summary of our analysis results are presented in Table 3, with full results presented in Appendix 4.



#### Table 3: Summary of liquefaction analysis

Investigation Identifier	Calculated Vertical Settlement (cm)		
	ULS (IL3) M6.5, 0.53 g	ULS (IL2) M6.5, 0.41 g	SLS M6.5, 0.10 g
HKT-ENG21- CPT01	13	12.5	Negligible

The settlement values calculated here are based on the soil profile encountered below the proposed lecture theatre building. Despite the 3 m thick crust that would usually mitigate the effects of differential settlement, the settlement on rock will be essentially zero so differential settlements across the building footprints will be amplified in this case. We recommend designing foundations to withstand a differential settlement equal to the total settlement predicted. This is a relatively onerous load case.

A piled foundation solution, or combination of shallow and piled foundations where all elements bear on bedrock would effectively manage the risk of differential settlement.

### 6.1.6 Lateral Spreading and Stretching

ENGEO have also assessed the potential of lateral spreading occurring at the site using the triggering method outlined by National Centre for Earthquake Engineering (NCEER) and the deformation estimate by Zhang (2004). An approximately level site with a 2 m high free face has been used for the analysis, representing the approximately flat lying development portion of the site and increased grade of the beach front.

A summary of our analysis results are presented in Table 4, with full results provided within Appendix 4. The analysis indicates up to 170 cm of global lateral movement is possible under ULS conditions based on the CPT undertaken at the proposed lecture theatre building, with no movement predicted under SLS conditions.

Investigation Identifier	Calculated Lateral Displacement (cm)		
	ULS (IL3) M6.5, 0.53 g	ULS (IL2) M6.5, 0.41 g	SLS M6.5, 0.10 g
HKT-ENG21- CPT01	170	165	Negligible

#### Table 4: Summary of Lateral Spread Analysis



While the analysis suggests up to 170 cm of lateral displacement is possible, no geomorphic evidence of pre-historic lateral displacement was observed on the site. Were this a true reflection of the amount of lateral spread, we would expect to see evidence of around 30-40 m of lateral spread in the 10,000 year post-glacial timeframe with large earthquakes occurring every 300-500 years and generating 1.5-2 m of lateral spread each time. Based on the lack of geomorphic evidence, we consider the possible amount of lateral spreading experienced under ULS conditions to be much lower than 170 cm. This appears to be a reasonable conclusion as the same rock outcrops and ridges that amplify the effects of differential settlement will serve as a buffer to prevent large lateral movement of the soil. This is not accounted for in the simplified lateral analysis which simply extends the ground conditions at the CPT location across the whole site – i.e. it does not account for the presence of the rock outcrops.

Notwithstanding our assessment that the lateral spread will be substantially less than predicted, the effects of lateral movement on the proposed buildings may be more significant if they are constructed across the soil-rock interface as this will be a sharp transition with the potential for significant displacement across a small distance. We recommend that consideration is given to incorporating a sliding layer beneath foundations (for instance, a two layer damp-proof membrane) in order to reduce frictional forces acting in the slab. Slabs should be designed to resist a frictional force acting on half of the slab area in tension. This will likely result in foundations have additional reinforcing steel in the direction perpendicular to the lake. Alternatively, a piled foundation solution or combination of shallow and piled foundations where all elements bear on bedrock would effectively manage the risk of lateral spreading, provided the foundations are designed to resist lateral loads from the soil moving past.

### 6.2 Rockfall

ENGEO completed a site walkover as part of our site investigations. Rock bluffs were observed in the northwest corner of the site (Section 4.1). The rock bluffs were typically well vegetated with very rare rockfall observed at the immediate toe area of some bluffs.

Based on the drawings provided to ENGEO as part of the RFP, proposed building locations are all greater than 20 m from the base of any bluffs. As such, in the currently proposed site layout, we consider the risk to rockfall is low.

### 6.3 Flooding

A detailed flooding assessment is outside the scope of this report. However, drift wood ridges that were likely deposited during storm events were found on the southern boundary of the site at an elevation of approximately 311 - 312 m RL. Additionally, historic floods during 2010 and 1999 resulted in recorded lake levels of 311.48 and 312.8 m RL respectively (ORC, 2021). This information suggests that, depending on final design locations and levels, some parts of the site may be at-risk of flooding during storm events and / or high Lake Levels within the design life of buildings.

### 7 Recommendations for Detailed Design

Given the information available and conservative liquefaction and lateral spreading analysis performed to date, ENGEO consider that the proposed development is feasible from a geotechnical perspective provided the results summarised in Section 6 are accounted for in development design.



To refine the liquefaction and lateral spread analysis and to support detailed design, ENGEO recommend additional site investigations are completed to support detailed design. The focus of these investigations is to refine the sites engineering geology model. Specifically, future site investigation should reduce uncertainty associated with the bedrock profile, thickness and composition of potentially liquefiable soils and inform the most efficient building locations and foundation solution(s).

Investigations may include one or a combination of the following methodologies: surface geophysics (likely to be seismic refraction and / or multi-channel analysis of surface waves), machine boreholes (cored or percussion) and laboratory testing.

ENGEO can work with the wider design team to develop the most effective investigation plan to inform detailed design.



### 8 Limitations

- We have prepared this report in accordance with the brief as provided. This report has been
  prepared for the use of our client, University of Otago, their professional advisers and the
  relevant Territorial Authorities in relation to the specified project brief described in this report.
  No liability is accepted for the use of any part of the report for any other purpose or by any other
  person or entity.
- ii. The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model.
- iii. Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.
- iv. This Limitation should be read in conjunction with the Engineering NZ/ACENZ Standard Terms of Engagement.
- v. This report is not to be reproduced either wholly or in part without our prior written permission.

We trust that this information meets your current requirements. Please do not hesitate to contact the undersigned on (03) 328 9012 if you require any further information.

Report prepared by

Report reviewed by

Bradley Cosgrove Engineering Geologist

al anters

Neil Charters, CMEngNZ (CPEng) Principal Geotechnical Engineer



### 9 References

ENGEO (2021). Hākitekura Retreat Geohazard Assessment Proposal – 831 Woolshed Road, Jacks Point, Queenstown.

Turnbull, I. M. (2000). Geology of the Wakatipu Area. Scale 1:250 000. Institute of Geological & Nuclear Sciences geological map 18. Institute of Geological & Nuclear Sciences Limited, Lower Hutt, New Zealand.

Mackey B. 2015. Seismic hazard in the Queenstown Lakes district. Dunedin (NZ): Otago Regional Council. 88 p. GNS Science (2009). Otago Alluvial Fans Project: Supplementary maps and information on fans in selected areas of Otago.

Tonkin & Taylor Ltd. (2013). Queenstown Lakes District 2012 Liquefaction Hazard Assessment: Report prepared for QLDC. T&T Ref: 880360.00/LR001.

Barrell, D. J. (2019). Assessment of liquefaction hazards in the Queenstown Lakes, Central Otago, Clutha and Waitaki districts of the Otago Region. Lower Hutt (NZ): GNS Science. 99 p. Consultancy Report 2018/67.

ORC (2021) Otago Regional Council: Lake Wakatipu at Willow Place. Retrieved April 28, 2021 from: https://www.orc.govt.nz/managing-our-environment/water/water-monitoring-and-alerts/kawarau/lakewakatipu-at-willow-place

Boulanger, R.W., Idriss, I.M. (2014). CPT and SPT based liquefaction triggering procedures. Center for Geotechnical Modelling. Report No. UCD/CGM-14/01.

Geologismiki (2018). Cliq v.3.0 [Computer Software].









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Figure No:

2

Size: A4

Version:

draft

Drawn:

Checked:

BC

NC Scale:

1:2074







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		Site: Hakitekura Test Pit Logs	Test Pit: 01
nadle		ISUITANTS LTD	Sheet 1 of 8
Date: Excavator: Dther:	02/12/2020 4T	Weather Conditions: Dry Location: Northeast of site Ground Elevation (m):	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty TOPSOIL	
		Brown GRAVEL in a silty and sandy matrix, well-graded, small to large, rounded, sub horizontally bedded, dry, moderately compact.	Category 2
		@ 0.6m tends light greyish brown, some layers slightly more silt/sand, layers typically 200mm - 400mm	
		@ 1.6m tends light grey	
2.0			
		End of pit - no water or seepage	
3.0			
H.0			
5.0			

		Site: Hakitekura Test	Test Pit: 02
hadle	ey co		Sheet 2 of 8
Date: Excavator: Other:	02/12/2020 4T	Weather Conditions:     Dry       Location:     Southeast of site       Ground Elevation (m):	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty TOPSOIL	
		Brown GRAVEL in a silty and sandy matrix, well-graded, small to large, rounded, sub horizontally bedded, dry, moderately compact.	Category 2
1.0			
		Light grey gravelly SAND, well-graded up to med gravel, sub horizontally bedded, dry, moderately compact	Category 2
2.0  		End of pit - no water or seepage	
3.0			
4.0			
5.0 5.0 200	000155		

hadle		Site: Hakitekura Test Pit Logs	Test Pit: 03 Sheet 3 of 8
Date: 0 Excavator: 4 Other:	02/12/2020 IT	Weather Conditions: Dry Location: Southeast of site Ground Elevation (m):	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
1.0		Dark brown silty TOPSOIL Grey GRAVEL, clean, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
		Light brownish grey gravelly SAND/sandy GRAVEL, well-graded fine sand to med gravel, damp, moderately compact End of pit - no water or seepage	Category 2
2.0			
3.0			
4.0			
5.0 t Set ID: 709			

		Site: Hakitekura Test	Test Pit: 04
nadle	y cor	Pit Logs	Sheet 4 of 8
vate: 02 xcavator: 4 <sup>-</sup>	2/12/2020	Weather Conditions: Dry Location: Central	Project No: 193330 Logged: NL
)ther:		Ground Elevation (m):	Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty and sandy TOPSOIL with some small gravels	
.0		Dark brown GRAVEL, clean, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
		Light brown tending light grey gravelly SAND/sandy GRAVEL, well- graded fine sand to med gravel, damp, moderately compact	Category 2
		Dark brown GRAVEL, clean, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
		Light brownish grey gravelly SAND/sandy GRAVEL, well-graded fine sand to med gravel, damp, moderately compact @ 1.8m tends finer with some silt	Category 2-3
.0		@ 2.1m tends orangish brown and gravelly, moist Light blueish grey SILT with some sand, damp, moderately compact	Category 2 Category 4
		End of pit	
.0			
.0			
5.0 Set ID: 709	0455		

hadl	ey co	Site: Hakitekura Test Pit Logs	Test Pit: 05 Sheet 5 of 8
Date: Excavator: Other:	02/12/2020 4T	Weather Conditions: Dry Location: Central Ground Elevation (m):	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty TOPSOIL	
1.0		Grey GRAVEL, with minor sand & silt, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
	-	End of pit - rock, unable to excavate, no water or seepage	
2.0			
3.0	-		
	-		
	-		
4.0	-		
	-		
	-		
5.0			

hadle		Site: Hakitekura Test Pit Logs	Test Pit: 06
		ISULTANTS LTD	Sheet 6 of 8
Date: Excavator: Other:	02/12/2020 4T	Weather Conditions:     Dry       Location:     Southwest of site       Ground Elevation (m):     Dry	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty TOPSOIL	
		Grey GRAVEL, clean, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
1.0			
		Light brownish grey gravelly SAND/sandy GRAVEL, well-graded fine sand to med gravel, damp, moderately compact	Category 2
2.0			
3.0  			
4.0			
5.0			

hadle	ev con	Site: Hakitekura Test Pit Logs	Test Pit: 07 Sheet 7 of 8
	02/12/2020	Weather Conditions:     Dry       Location:     North of site       Ground Elevation (m):     Dry	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark blackish brown GRAVEL in a silty organic matrix, rounded, well- graded, fine to medium, moderately loose, dry. Fill	
		Dark brown GRAVEL in silt matrix, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel/Fill	Category 1
		Light brownish grey gravelly SAND/sandy GRAVEL, well-graded fine sand to med gravel, damp, moderately compact	Category 2
		tends pea gravel in silty and sandy matrix in some layers	
2.0			
		Light grey with some orange mottles SILT with some sand, damp, moderately compact	Category 4
		End of pit - no water or seepage	
3.0 			
4.0			

hadl	hadley consultants LTD CONSULTING CIVIL & STRUCTURAL ENGINEERS		
Date: Excavator: Other:	02/12/2020 4T	Weather Conditions:     Dry       Location:     North of site       Ground Elevation (m):	Project No: 193330 Logged: NL Checked:
Depth B.G.L. (m)	Soil Symbol	Soil Description: Colour, structure, subordinate, main / minor components.	Other: SPT / Scala / notes
		Dark brown silty TOPSOIL	
		Grey GRAVEL, generally clean but with minor sand and silt, well-graded, small-medium, rounded, dry, moderately loose. Beach Gravel	Category 1
1.0 		Light brownish grey gravelly SAND/sandy GRAVEL, well-graded fine sand to med gravel, damp, moderately compact	Category 2
2.0	-	End of pit - no water or seepage	
3.0			
4.0			
5.0	-		



### BORE LOG DATA SHEET

CLIENTS NAMES:	
FULL ADDRESS:	309 LOWER SHOTOVER R.D RD1 QUEENTOWN 9371
RESOURCE CONSENT NO:	RM17.173
BORE SIZE:	12'''
START DATE:	6 July 2017
FINISH DATE:	8 July 2017
MACHINE:	DR24
RAPID NO:	
GRID REFERENCE:	N4998187 E1264612
DRILLER:	R HARREX
MEASURED FROM:	CASEING .26CM
300mm UPSTAND:	
TOTAL DEPTH BORE:	35.76M
TOP LEADER:	28.77M
STATIC WATER LEVEL:	.89CM
SCREEN - SLOT:	.250MM
SCREEN:	6M BY 10"
LEADER:	1M BY 10"
SUMP:	
TOTAL CASING USED:	29.65M
AT TIME OF PUMPING-BORE DID:	34.1 LTS PER SCD
TEST PUMP PERIOD:	72hr pump test
AIR/PUMP INTAKE:	26.5
BACTERIAL WATER TEST:	
CHEMICAL WATER TEST:	
IMPERVIOUS SEAL AT GROUND	
LEVEL AROUND CASING	
CASING TOP SEALED TO	Yes
PREVENT CONTAMINATION	
COMMENTS:	

BORE LOG:	
0.080cm	Loose course gravels
0.80cm - 3.2m	Blue Silts
3.2 - 5.1m	Silty small gravels
5.1 - 31.4m	Sandy small gravels
31.4 - 36m	Coarse silty gravels



#### BORE LOG DATA SHEET MURPHYS DEVELOPMENTS LTD C/O CRIS HANSEN CLIENTS NAMES: 309 LOWER SHOTOVER R.D RD1 QUEENTOWN 9371 FULL ADDRESS: RM17.173 **RESOURCE CONSENT NO:** 50MM BORE SIZE: 16 July 2017 START DATE: 17 July 2017 FINISH DATE: DR24 MACHINE: RAPID NO: N4998193 E1264607 GRID REFERENCE: DRILLER: R HARREX 6" STEEL COLLER MEASURED FROM: 300mm UPSTAND: .31CM 35.67M TOTAL DEPTH BORE: TOP LEADER: .74CM STATIC WATER LEVEL: 6M 50MM PVC PLUS 2 50MM CAPS 6M FILTER CLOTH SCREEN - SLOT: SCREEN: LEADER: SUMP: TOTAL CASING USED: AT TIME OF PUMPING-BORE DID: TEST PUMP PERIOD: AIR/PUMP INTAKE: BACTERIAL WATER TEST: CHEMICAL WATER TEST: IMPERVIOUS SEAL AT GROUND 1BAG BENTINTE AROUND 6" STEEL 2M LONG LEVEL AROUND CASING CASING TOP SEALED TO WELDED STEEL SECEARITY CAP PREVENT CONTAMINATION COMMENTS:

PESSO 15M AWAY FORM PUMP BORE

BORE LOG:	
0.0 - 0.60cm	Loose coarse gravels
0.60cm - 3.60m	Blue silts
3.60 - 5.1m	Silty small gravels
5.1 - 31.70m	Sandy small gravels
31.70 - 36.20m	Silty coarser gravels
51.70 - 30.2011	



### **APPENDIX 3:** Investigation results



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## **CONE PENETRATION TEST (CPT) LOG**





# **CONE PENETRATION TEST (CPT) LOG**

GROUND

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## **CPT PARAMETER LOG**





Document Set ID: 7090155 Version: 1, Version Date: 07/12/2021



## **CPT PARAMETER LOG**



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# DYNAMIC PROBE SUPER HEAVY (DPSH) LOG

GRO

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## **CPT ZEROS AND DRIFT**



G.I. Job Ref: 210231

		Push		Tip Resistance			Local Friction			Pore Pressure	
Cone Reference	CPT Name	Number	Initial (MPa)	Final (MPa)	Difference (kPa)	Initial (MPa)	Final (MPa)	Difference (kPa)	Initial (MPa)	Final (MPa)	Difference (kPa)
MKJ333	CPT-01	1	9.790	9.728	-62.5	0.1150	0.1141	-0.9	0.9467	0.9482	1.5

Project: Jacks Point       Engineer: Bradley Cosgrove       22476-1:2012. Blue indicates Class 1, green Class 2, orange Class 3 and red Class 4.         Grey represents if a test is below Class 4.       Grey represents if a test is below Class 4.	Client: Engeo Project: Jacks Point	Location: Maori Jack Road, Jacks Point, Queenstown Engineer: Bradley Cosgrove	
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### **APPENDIX 4:** Liquefaction analysis



02.06.2021 18684.000.001\_02



CLiq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 29/04/2021, 2:22:25 pm



CLiq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 29/04/2021, 2:22:25 pm





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CLiq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 29/04/2021, 2:22:23 pm



CLiq v.2.3.1.15 - CPT Liquefaction Assessment Software - Report created on: 29/04/2021, 2:22:26 pm

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Version: 1, Version Date: 07/12/2021



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Version: 1, Version Date: 07/12/2021



### **ATTACHMENT 3B:**

## Lane Neave – Covenant Condition and Wastewater Provision Memo

Memo dated 30 September 2021
### Memo

To:	Christian German	Cc:	Carmen Taylor
From:	Lane Neave	Date:	30 September 2021
Client:	University of Otago	Matter Number:	UNI10013

## Subject: RM200570 – Hākitekura Redevelopment – Covenant Condition and Wastewater Provision

### Introduction

- 1. This memorandum is in relation to the University of Otago's (**University**) application for resource consent (RM200570) for the proposed Hākitekura Redevelopment (**Proposal**).
- 2. The Hākitekura Redevelopment involves the establishment of an academic retreat and conference facility at Woolshed Bay. The land for the facility, Lots 1 and 3 DP 452315 (Site), was gifted to the University by Dickson and Jillian Jardine in 2016.
- 3. Queenstown Lakes District Council (**Council**) issued a Request for Further Information (**RFI**) in relation to the University's application on 5 October 2020. The University provided responses to the RFI on 17 December 2020 (Part 1) and 12 February 2021 (Part 2) and will soon be providing Part 3 of the response.
- 4. In response to the information received to date, the Council has asked additional questions by email. This includes a question in an email on 3 June 2021 in relation to the access into the facility between Māori Jack Road and the back lot of the development. This memorandum provides a legal response to the question and a suggested condition of consent to address the matter.
- 5. A question was also raised by the Council in the RFI as to the feasibility of the provision of wastewater servicing for the Proposal given that Council services are not yet in place. The University will respond to this question in Part 3 of the RFI response. In short, it has been identified that an onsite wastewater solution will not be desirable. The University continues to seek to connect to a Council reticulated wastewater system and to rely on a condition precedent to provide certainty that this will take place.
- 6. This memorandum sets out the detail of the proposed condition precedent and provides an explanation for why the condition is sufficiently certain and lawful. We also summarise the alternative staging approach now being proposed by the University to provide Council with further comfort around the ability for the consent to be implemented and the vision of Hākitekura to be enabled.

### Legal Response in terms of access to the back of the facility

- 7. As outlined in the Planz Consultants' overall Part 3 RFI response, the Council's access question appears to query the nature of the proposed access into the "back lot" of the University's overall site. The "back lot" of the development is Lot 1 DP 452315. The two lots are shown outlined in red in **Figure 1** below. The yellow outline shows the general development area.
- 8. In response to the Council's question, it is confirmed that access into the facility will be via the "front lot" (Lot 3 DP 452315) using the access which already exists into this lot. The location of the access is shown in **Figure 2** below. There will be no access for the facility via the "back lot" (Lot 1 DP 452315), as demonstrated by **Figure 2**.

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- 9. The above arrangements will be secured by way of the requirement for the University to implement its resource consent (if granted) in accordance with the approved plans .
- 10. However, should the Council have remaining concerns, a further condition of consent could be imposed that requires the registration of a covenant which provides that the consent holder must operate Lots 1 and 3 DP 452315 as one land parcel for the purposes of access, with access being via Lot 3 DP 452315. The suggested condition would read:
  - X. Prior to the facility becoming operational, the consent holder shall enter into and have registered on the property titles a Covenant in Gross in favour of QLDC pursuant to sections 116(a) and (b) of the Land Transfer Act 2017. The covenant shall provide for the following matters:
    - (a) The consent holder shall operate the property titles (Lots 1 and 3 DP 452315) together for the purposes of access into the facility; and
    - (b) Access into the facility shall be via Lot 3 DP 452315.
- 11. We note this is a similar approach to that taken under sections 75-78 of the Building Act 2004 where a building is constructed across two or more allotments.

### Figures



Figure 1: Clark Fortune McDonald & Associates Site Plan (submitted with application)



Figure 2: Kerr Ritchie Site Plan (submitted with RFI Response Part 2)

### Wastewater provision

- 12. The Site is not yet serviced by Council wastewater services. However, options exist for a connection to be provided to the Site. For the reasons set out in Part 3 of the University's section 92 response, it is the University's intention that the Proposal would connect into Council reticulated services rather than to develop an onsite wastewater system.
- 13. Two options exist for the provision of Council reticulated wastewater services to the Site:
  - (a) connection to confirmed future Council infrastructure that will be developed to service development in the Te Tapuae/Southern Corridor; and
  - (b) connection to existing Council wastewater infrastructure through the Jacks Point Village.

#### Connection to future Te Tapuae/Southern Corridor Council infrastructure

- 14. Connection to the future Council infrastructure along the Te Tapuae/Southern Corridor is the University's preferred option for the provision of wastewater services to Hākitekura. The development of such infrastructure has been confirmed in the Council's Long-Term Plan. In terms of the progress of this Council infrastructure:
  - (a) Preliminary scoping work has been carried out demonstrating that the infrastructure is feasible. Based on this preliminary scoping work, a Memorandum of Understanding was entered into by the Council on 8 May 2020 setting out the Council's intention to deliver the wastewater services through the Long-Term Plan.
  - (b) Following the signing of the Memorandum of Understanding, the Council included the wastewater provision in the Long-Term Plan with the investment for the scoping works to be released in 2021 and the funding for construction to be released over 2028-2031. It was the original intention to include the provision of the investment for the

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construction of the wastewater services at an earlier time in the Long-Term Plan. However, Covid-19 related fiscal restraints resulted in the funding being pushed out.

(c) There is strong demand for wastewater provision in the Te Tapuae/Southern Corridor and alternative funding mechanisms are being explored by the Council outside of the Long-Term Plan to provide the infrastructure earlier than 2028-2031. The Council's Property and Infrastructure Team has now made an application to the Infrastructure Acceleration Fund to fund the first stage of a programme designed to accelerate the provision of the relevant infrastructure. A funding application for the full investment programme is expected to be submitted by Council with Kāinga Ora within 12- 18 months in order to provide for the delivery of the infrastructure.

#### Council wastewater infrastructure within the Jacks Point Village

- 15. A servicing solution that involves connection to Council wastewater infrastructure through the Jacks Point Village area is also currently under consideration given the potential delays in the wider Te Tapuae/Southern Corridor solution discussed at paragraph 14 above.
- 16. The University has received an engineering report from Hadley Consultants that concludes "we consider the wastewater volumes that are required to be discharged from the proposed Hākitekura development to be very minor and that these should be able to be accommodated in the existing Council wastewater network in the vicinity of the Jacks Point Village."<sup>1</sup> The required connection would require approval from the Jack's Point entities for the necessary reticulation to be installed within the existing Council wastewater reticulation network. Such a solution is currently being investigated with these parties.

#### Condition precedent

- 17. The University wishes to have the resource consent for the Proposal granted now despite the provision of inevitable reticulated wastewater services potentially being somewhat delayed. Granting the consent now will allow the University to undertake detailed design, obtain building consents and carry out construction in the interim period before the wastewater provision is available.
- 18. In order to provide certainty that the Proposal will have adequate wastewater provision prior to its operation, the University now proposes an updated staged condition precedent as follows:<sup>2</sup>
  - (a) Initial stage- the development of the Woolshed and the Managers House shall be able to be constructed and occupied from the date of consent, utilising a storage and trucking wastewater system to manage the wastewater before connection to the reticulated system is achieved if needed. In addition, during this initial stage, the University may also develop ancillary structures at the site that do not need to be connected to wastewater services (e.g., the garage etc);
  - (b) Subsequent staging the remining components of the development (i.e. the lecture theatre, visitor accommodation units and various ancillary structures) to be able to be constructed from the date of consent but shall not be occupied until the Site is connected to a reticulated wastewater system.
- 19. We consider that the proposed condition precedent is legally valid and appropriate. The addition of the further staging gives Council absolute assurance that the resource consent can

<sup>&</sup>lt;sup>1</sup> Hadley Consultants Limited – Hākitekura Wastewater Connection to Council Reticulation 20 June 2021.

<sup>&</sup>lt;sup>2</sup> Hākitekura Redevelopment – Academic Retreat and Conference Facility Assessment of Environmental Effects, prepared by PLANZ dated July 2020 at Part 10.

be implemented on the grant of the resource consent in a way that is entirely within the control of the University – this will unlock the Hākitekura vision.

- 20. In relation to the subsequent staging, it is well established in case law that a condition that defers the opportunity for the applicant to embark upon the consented activity until a third party carries out some independent activity is valid.
  - (a) The High Court in Director-General of Conservation v Marlborough District Council held that a condition of consent that had two possible outcomes, one of which would enable the activities authorised by the consent to proceed, and one which would not, was valid and would not frustrate the relevant consent.<sup>3</sup> The High Court held that such conditions is permissible if it is worded in a way so that what is deferred is the ability of the applicant to carry out the activities permitted by the consent and not the existence of the consent itself.<sup>4</sup>
  - (b) The High Court in *Westfield (NZ) Limited v Hamilton City Council* made a similar finding, holding that a condition precedent which defers the opportunity for the applicant to embark upon the activity until a third party carries out some independent activity off site is lawful and valid.<sup>5</sup>
- 21. The effect of the proposed condition is that the ability of the University to occupy part of Hākitekura is to be deferred until the Site is connected to reticulated wastewater. However, the consent itself (and the initial activities) will take effect from its date of issue. Further, while the condition requires a third party (the Council or another party) to carry out an independent action (the provisions of the wastewater infrastructure) before part of Hākitekura can be occupied, the High Court has confirmed that there is nothing objectionable about a consent condition resulting in such an outcome. Accordingly, the proposed consent condition is in accordance with the High Court authority noted above and is legally valid.
- 22. In addition to the condition being lawful, the provision of certainty is key when considering whether a condition precedent is acceptable from a planning perspective. In our view, the proposed condition of consent provides sufficient certainty for the following reasons:
  - (a) The condition will allow part of the development to be occupied as soon as possible despite the potential delays in the provision of reticulated service in a manner that is entirely within the control of the University;
  - (b) For the remainder of the development, the condition is sufficiently certain because:
    - (i) Initial scoping work has been carried out demonstrating that the provision of reticulated wastewater services to the Site is practical and can be achieved.
    - (ii) Funding for the Council wastewater services along the Te Tapuae/Southern Corridor are included in the Council's Long-Term Plan. The date for the provision of the services is indicated as 2029-2031. However, there is demand for the services prior to this time. Accordingly, the Council is actively seeking alternative funding means to deliver the infrastructure as soon as possible.
    - (iii) Further, the Te Tapuae/Southern Corridor is included in the Queenstown Lakes District Council's Spatial Plan as a key urban area. This provides

4 At [17].

<sup>&</sup>lt;sup>3</sup> [2004] 3 NZLR 127 at [23].

<sup>&</sup>lt;sup>5</sup> (2004) 10 ELRNZ 271 at [56].

certainty that the Council will prioritise the provision of the services as soon as possible.

- (iv) There are other viable options for the provision of wastewater services to the Site if the University considers that the delay in the Council wastewater services along the Te Tapuae/Southern Corridor is too long.
- 23. For all of the above reasons, we consider that it is sufficiently certain that the required wastewater services will be provided, at least within the timeframe provided in the Long-Term Plan, if not earlier. It is acknowledged that there is a risk that construction activities may take place in separate stages or some of the proposed buildings will be constructed and then sit completed on Site but not be able to be occupied for a period of time, but this risk sits with the University and not with the Council. To the contrary, if the Council declines to grant the consent until the wastewater services are in place, there will be a significant delay between the wastewater provision being available and the Proposal being operational on account of the time that the land use consent, building consent and construction work will take. This would be an undesirable outcome for both the Council and the University.
- 24. For all of the above reasons, we consider that there is no legal or planning related barrier to the Council granting the consent for the Proposal based on the proposed condition precedent. We consider that the most efficient and desirable outcome for all parties is for the Council to grant the consent now in order to allow the University to undertake detailed design, obtain building consents and commence construction of the Proposal and to allow the commencement of the initial stage of Hākitekura as soon as possible.

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# **ATTACHMENT 3C:**

# Tim Kelly Transportation Planning Limited – Response to Additional Questions

Letter dated 26 July 2021

26 July 2021

Campus Development Division – Operations Group University of Otago PO Box 56 DUNEDIN 9054

For the attention of: Christian German

[via email: Christian.german@otago.ac.nz]



Christian

# Proposed Hākitekura, Woolshed Bay, Queenstown (Ref = RM 200570) Response to Queenstown Lakes District Council Request for Further Information

# Background

An application has been lodged with the Queenstown Lakes District Council (**QLDC**) for an academic retreat and conference facility, Hākitekura at Woolshed Bay. The application material included an Integrated Transportation Assessment (**ITA**) dated May 2020.

QLDC responded with a request for further information dated 5 October 2020. This includes a number of items relating to transportation matters. A response to these issues was supplied in a letter dated 17 December 2020.

Following a further review of the material supplied (including additional information provided in the overarching response document prepared by Planz Consultant Ltd), QLDC identified three residual transportation-related issues.<sup>1</sup> These issues were clarified with QLDC in a phone conversation on 9 July 2021.<sup>2</sup> The purpose of this letter is to provide a response to these issues.

# Issue 1

<u>Request</u>: Parking Shortfall – The proposed layout has 22 formed spaces and 6 in a grass overflow area. The sensitivity testing (which is considered very conservative) shows that 34 spaces are needed for Third Party Events, and this number is more in line with the DP Rules and industry data. Therefore we are recommending a minimum of 30 formed spaces and 4 overflow spaces be provided.

As described in the 17 December 2020 response, the district plan (operative and proposed) rules and industry data are based upon empirical information which does not reflect the specific demands likely to be associated with the proposed facility. It is for this reason that a 'first principles' approach was adopted, which concluded that the provision of 22 formed spaces and a further 6 overflow spaces would meet the demands generated by this specific

<sup>&</sup>lt;sup>1</sup> Email from Niamh Sheehy QLDC to Carmen Taylor, 3 June 2021

<sup>&</sup>lt;sup>2</sup> Phone conversation Tim Kelly / Mike Pridham QLDC, 9 July 2021.

activity at this particular location. The provision of parking consistent with the highest level of demand identified from the sensitivity testing would be likely to result in areas of unused parking and would also signal a greater level of car-dependency.

It is the intention of the University to reduce car dependency and encourage public/group transport to and from the site, both from an environmental perspective and to limit general traffic activity. This is aligned with the QLDC's strategic vision for a public transport route along the Southern Corridor in the longer-term. Furthermore, the number and location of parking spaces also reflects the landscape values and the unique location of this site.

Although it is not considered that the provision of 34 spaces is necessary, **Figure 1** identifies where an additional 12 spaces could be located (bringing the total to 34 spaces), should monitoring identify that these are required. To clarify, the University proposes to only provide 22 formed parks, plus an area providing for six overflow parks. However, **Figure 1** shows that sufficient room is available within the site, if required, to provide a total of 34 spaces (22 formed plus 12 overflow spaces.

A parking monitoring condition is a pragmatic response to the parking issue. It is understood that, based on this recommendation, an appropriate condition will be provided by Planz, which when the set of proposed conditions is updated.

It is reiterated that the minimum parking requirements of QLDC's district plan(s) are to be removed no later than 20 February 2022, in accordance with the requirements of the National Policy Statement for Urban Development 2020.



Figure 1 Proposed Additional Parking Area

# Issue 2

# <u>Request</u>: Tour Coaches – a restriction of tour coaches is proposed to be part of a TMP however it would sense to make this a consent condition instead so that it is monitorable/enforceable

This is already addressed by a proposed condition of consent (refer Section 10 of the consent application):

'3. No full sized coaches are to be used to drop-off and pick-up visitors to the facility.'

(An associated Advice Note defines a full sized coach as one having a seating capacity in excess of 20 people excluding the driver.)<sup>3</sup>

# Issue 3

<u>Request</u>: Access – Lack of measurable assessment of the "access" [which is considered to be the roading and aisle network between Māori Jack Road and the back Lot of the development] (comments 03, 07, 11). I did a site visit and saw that there are a handful of spots along Woolshed Road where the sight distance is questionable due to horizontal curves and vegetation. The applicant merely states that the intersection is adequate and sight distance is fine but has not provided any measurable data nor compared it to the ODP/PDP Rules, which would be expected of any Integrated Transport Assessment.

Additionally it is still considered that it would be appropriate from a safety and link/place context to upgrade Woolshed Road to a two-lane road (5.5m unsealed is fine) per comment 12. The applicant has proposed to retain the single lane and install passing bays 250m apart with the final design being subject to QLDC review and approval. If Council accepts this then Council should use the guidance from the Code of Practice that "passing bays are required every 100m IF visibility is available from bay to bay. If visibility is not available, passing bays every 50m" (CoP 3.3.16) – see email below from Council's Development Engineer advising that Council are satisfied that a single lane carriageway is sufficient, however requires further assessment of the location and feasibility of the passing bays.

Issues relating to both the intersection and Woolshed Road standard should be considered in the context of the very low volumes expected to use Woolshed Road and its low speed environment – the ITA identified at most 50 arriving vehicles per day with the same number of departures. Even allowing for some additional movements associated with the Jardines' property, the total number of daily movements will rarely exceed 100.

The ITA (Section 3.3) proposed a widening of the first 10m of Woolshed Road to 5.5m to facilitate two-way vehicle movement in the vicinity of the intersection. This will require removal or widening of an existing cattle-stop and trimming / removal of vegetation on the south side of the Woolshed Road approach. It is not intended to remove a large gum tree on the northern side of the intersection as approaching drivers on Woolshed Road are able to view approaching vehicles from the north to either side of this.

The available sight distances for vehicles exiting Woolshed Road are 50-55m to the left (north) and 45-50m to the right (south). The applicable speed limit on Maori Jack Road is 40 km/hr. Standard 29.5.18 of the Proposed District Plan (which can now be considered to be operative)

<sup>&</sup>lt;sup>3</sup> As identified in Section 4.3 of the 'Section 92 Response – Part 1' provided to QLDC on 17 December 2020.

identifies minimum sight distances for posted speed limit areas – but the lowest speed limit category is 50km/hr. The Guidelines for Visibility at Driveways<sup>4</sup> document recommends a minimum sight distance of 40m for a low volume (less than 200 vehicle movements/day) access onto a 'local' road having an operating speed of 50km/hr. These values are exceeded at the intersection. Furthermore, the primary movements at the intersection will be the left-turn exit and right-turn entry movements. A vehicle leaving Woolshed Road and turning left will have moved away from a potential collision point before an approaching northbound vehicle arrives at this point. For these reasons, it is considered that the intersection will operate safely. **Photos 1 – 3** shows the sightlines available to an exiting vehicle driver at this location.

This analysis was discussed with QLDC (Mike Pridham) on 9 July 2021 with an acknowledgement that this satisfactorily addresses issues relating to the safe and efficient operation of the access intersection.



Photo 1: Sightline to Left (behind tree, north)

Photo 2: Sightline to Left (beyond tree, north) Photo 3: Sightline to Right (south)

Similarly, there is agreement with QLDC that there is no necessity to upgrade of Woolshed Road to a two lane standard. The link/place context is a reference to the guidance of NZS4404:2010 – but the two-lane standards in this document are in anticipation of traffic volumes considerably higher than those likely to be experienced on this part of Woolshed Road.

It is also agreed that the frequency and location of passing bays should ensure the safe and efficient use of Woolshed Road by all vehicle movements.

While numerous locations are available at which passing bays could be located, a rigid adherence to the Code of Practice requirements for 100m intervals is not necessary to achieve this objective. Aside from the sharp bend 230m from the intersection (where a passing bay would be located), sightlines along Woolshed Road are good (as shown by **Photos 4 – 7**) and the provision of passing bays at intervals greater than 100m would not be detrimental to the safe and efficient operation of the road, noting also that the road edges allow plenty of room for vehicles to easily pull to one side if required.

The construction of passing bays would meet the geometric requirements specified by the

<sup>&</sup>lt;sup>4</sup> Road and Traffic Guidelines, RTS 6: Guidelines for Visibility at Driveways. Land Transport Safety Authority, June 1998.

Code of Practice i.e., a minimum of 2.1m wide, 6m long and with appropriate tapers at each end.





Photo 4

Photo 5



Photo 6

Photo 7

As previously stated, matters relating to the location, spacing and design of the passing bays should be the subject of detailed design, as provided for by the proposed Condition 5 contained in Section 10 of the resource consent application. This proposed condition provides for QLDC approval of the proposed upgrade works to Woolshed Road. Planz will supply an updated and internally reviewed set of conditions to reflect the specific passing bay issues described above.

Yours sincerely,

T.m. Kelly

**Tim Kelly** Tim Kelly Transportation Planning Limited (*Phone: 027-284-0332, E-mail: tim@tktpl.co.nz*)



# **ATTACHMENT 3D:**

# Acoustic Engineering Services – Response to Additional Questions

Letter dated 25 August 2021



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**Dear Christian** 

#### Re: RM200570 - S92 Further information request

We have reviewed the additional comments from Styles Group in relation to our original responses to the S92 request for further information. The following outlines our response to the additional comments. We note that Daniel Winter from Styles Group, who made the additional comments, has since left that company and we have therefore been recently discussing the outstanding comments and our responses with Jamie Exeter.

**Q1 (S92 Point 23 and 30)** AES have confirmed their "expected levels" are the Rating Levels. This was an important point to clarify because rating levels are the levels that are compared to the noise limits after all the adjustments have been made. We do not normally use the term "expected levels" when undertaking assessments under NZS6802:2008.

AES predict that the rating level for noise from events at Receiver A is 40 dB  $L_{Aeq}$ . The ODP noise limit is 40 dB  $L_{Aeq}$ , so this is right on compliance. However, the expected level for traffic noise is 54 dB  $L_{Aeq}$ . Normally rating levels are presented as the predicted noise levels after all the adjustments have been made. So the overall rating level for Receiver A is 54 dB  $L_{Aeq}$ , which is a 14 dB exceedance.

This is contradictory to the s92 response. Can the applicant please confirm the predicted noise rating level from traffic noise.

We are not aware of any contradiction here. The rating noise level for traffic was provided, and we noted that there were no duration or special audible characteristic adjustments applied.

Further, the report assessed the level of traffic noise in accordance with the District Plan noise limits. In this case, the District Plan noise limits apply at the receiver property boundary, which is not close to any actual dwelling, which is common in rural settings. We therefore also presented the traffic noise levels back at the actual receiver location notional boundary (more common approach) and at the facade of the actual receiver dwelling, in order to better describe the expected effects from traffic noise. That assessment concluded that the noise effects from vehicles approaching and leaving the site, at Receiver B which is the dwelling closest to the road, will be minimal.

It is also important to acknowledge that one of the consent triggers included in the land use consent application related to the potential for traffic movements to cause occasional non-compliance with the District Plan noise limits. All other noise from the proposed development is expected to comply with the District Plan noise limits.

Acoustic Engineering Services Limited Specialists in Building, Environmental and Industrial Acoustics **Q4 (S92 Point 26)** AES state that a total of 31 large functions per year (2-3 per month, up to 1 per week) that could have amplified music played inside the buildings. There is no discussion about the level of noise effect on receiver A with regard to the number of events.

We can draft a recommended condition to limit the number of functions with amplified music. For example, conditions could look like this:

- A maximum of one function or event shall be held within any seven-day period
- The function centre will not hold more than XX functions with amplified music per calendar year.

Conditioning the number of functions or events is fairly standard for consents of this nature.

AES advise that the predicted noise from functions and events at Receiver A is 40 dB L<sub>Aeq</sub> which is right on compliance with ODP noise limit of 40 dB L<sub>Aeq</sub>.

Due to the tight predicted margin of compliance, we can also discuss the option of a review condition to check the noise levels during the first big event that has amplified music. Can the applicant please confirm their position on this and if such a condition is likely to be acceptable.

The application, including within the s92 Responses, clearly states that there will be no more than 31 large functions with amplified music per year (up to 1 per week), and that there will be no outdoor speakers installed. Planz, in the overarching response document, discuss this request further.

**Q6 (S92 Point 28)** AES confirm that there will not be outdoor speakers installed in any of the outdoor areas. We recommend that this forms a condition of consent. Can the applicant please confirm if they agree to the inclusion of a condition to this effect.

The application confirms that there will be no outdoor speakers installed. Planz, in the overarching response document, discuss this request further.

**Q7** (S92 Point 29) The term "minimal" has been used in the AES report multiple times to describe the effects of the noise. Minimal is not a term that is often used to describe noise effects. AES have confirmed that the noise effects specific to Receiver A have been described as minimal due to finding that the noise level external to the building at Receiver A is expected to comply with the District Plan noise limit. So it is our understanding that the term "minimal" means compliance with the DP noise limits.

AES have not taken any background noise readings of the existing environment, which means the assessment of effects is only focused on whether or not the noise complies with the DP noise limit. In this case the predicted noise rating level from functions at Receiver A is 40 dB  $L_{Aeq}$  which is right on compliance with ODP noise limit of 40 dB  $L_{Aeq}$ . In fact, the predicted noise level at Receiver A from traffic after the functions have finished (between midnight - 1am) is 54 dB  $L_{Aeq}$ , which is a 14 dB exceedance of the ODP limit. This is why we asked for the rating levels in question 1.

We need to understand if this activity, and the character of the noise it generates, could reasonably be expected within the Resort Zone - Jacks Point Zone. Can the Applicant please provide further commentary on this matter.

For the purpose of the assessment, the determined noise levels at the receivers were intentionally "worstcase" and the actual noise levels will likely be lower and not right on compliance. The types of noise from the activity (such as people, traffic and music noise) are typical of what could be expected within the zone. The background noise level is likely to be reasonably low in the area surrounding the site, although the background noise levels will fluctuate depending on the weather conditions and the background noise level at any one receiver location will fluctuate depending on the presence or absence of typical ambient noise from birds, traffic, people or other residential activity. The nature of the proposed activity will mean that noise from the activity will be somewhat intermittent (not all day every day) and there will be long respite periods. Given the potential for a wide range of possible combinations of background noise vs activity noise at any given time at any receiver location, the District Plan noise limits have therefore been used as a guide to gauge the relevance and scale of effects from the proposed activity, which we consider will be minimal.

### Q8 (S92 Point 30) The question has not been answered. AES state that:

"When considering the noise effects from traffic, we note that assessing noise levels at the property boundary, as required by the District Plan, does not give a reasonable indication of the noise effects which will be experienced at and in the areas immediately around the receiver dwelling. The noise level at the notional boundary of Receiver A (at 20 m from the dwelling) is expected to be less than 40 dB  $L_{Aeq(15)}$ min) during peak traffic flow conditions and well below the daytime and night-time noise limits during the events. These noise levels received at the dwelling notional boundary are consistent with the protection of sleep, the relevant effect during the night-time (including between midnight and 1:00 am), and will be acceptable during all periods and flow conditions. We therefore expect the associated noise effects from vehicles approaching and departing the site will be minimal".

The ODP requires that the assessment is made at the **site boundary**, not the notional boundary. The predicted noise level from traffic leaving a function late at night is 54 dB L<sub>Aeq</sub>, which is a 14 dB exceedance, so we need some comments from the applicant as to what this means. I fully agree with AES that the notional boundary is a better way to assess sleep disturbance and that may well be end of the discussion, but we have not got to that point yet. The first step in the assessment is to assess against what is required by the ODP. A 14 dB exceedance across private land may arise in reverse sensitivity issues. For example, what will happen if the owners of the site at Receiver A want to develop their property? What is the effect of using this land as a 14 dB noise buffer?

Can the Applicant please provide a response to this as these matters have not been adequately addressed

The report did present the noise levels according to the ODP assessment point, at the site boundary in this case. There are currently no receivers at the adjacent site boundaries, and there will therefore be no noise effects.

Regarding the question of reverse sensitivity, Jamie Exeter from Styles Group has requested that we undertake additional noise modelling to determine the expected levels of noise at the vacant land on the east side of the entrance road, which is zoned Open Space Residential according to the PDP. The area of interest is shown in figure 1.



Figure 1 – Potential large lot future residential area

We understand there could be up to twelve future residential lots on the marked area, based on an assumption that there would be a restriction for minimum lot sizes and a cap on the number of lots.

Based on a reasonable assumption that any future dwellings would be set back at least a similar distance from the road as the existing dwelling (Receiver B) on the west side of the road, we expect the noise levels received at the future dwellings during the times before and after events would be similar (less than 45 dB L<sub>Aeq</sub> outside the building facade) and the effects would also be minimal for any future receivers.

**Q9 (S92 Point 31)** The question has not been answered. We asked for comments AES refer us back to the text below Table 3.4, but this does not address the issues. In particular that the vehicle noise assessment at Receiver A shows that the predicted noise levels are 54 dB  $L_{Aeq}$ , which is a 14 dB exceedance and no assessment of effects has been provided.

The vehicle noise assessment at Receiver A shows that the noise at the notional boundary is less than 40 dB  $L_{Aeq}$ . The distance from the road to the notional boundary is approximately 30m. If the vehicle noise from a line source is 54 dB  $L_{Aeq}$  at the boundary then the noise at 30m will be more than 40 dB  $L_{Aeq}$ .

The vehicle noise assessment at Receiver B shows that the predicted noise levels are 41 dB  $L_{Aeq}$  at the façade of the dwelling and that the effects will be minor. The ODP requires that the assessment must be made at the site boundary but no predicted noise levels have been provided.

Can the Applicant please provide further commentary on this noting that a request has been made to publically notify the application.

Noise limits for low density residential and rural type settings are often applied at receiver dwellings or notional boundaries, being 20 m from dwellings. In this District Plan zone however, the limits apply at the property boundary. We provided the determined noise levels at the nearest property boundaries (and the application sought consent for this technical non-compliance) and then went on to discuss the actual effects at the dwelling, because there are no receivers on the property boundaries and there will therefore be no effects at those locations.

**Q11 (S92 Point 33)** We asked if AES had any additional draft conditions than the two already put forward. They responded that all the assessment information is in the original report and refer us back to draft conditions (15) and (16) as set out below:

### **Noise Mitigation**

- The collection of waste from the site must only occur between the hours of 8.00am and 8.00pm.
- 16. When amplified music or speech is associated with events being held at the Woolshed and / or the lecture theatre, all windows and doors are to be kept closed on all facades of the buildings except the windows and doors that face south towards the lake.

These conditions are not comprehensive enough to manage all of the noise effects that this application seeks to authorise. We will consider if any of the following should also be controlled through conditions:

- Noise limits
- The number of permitted events per year
- The number of permitted events in a 7 days period
- The permitted times of events
- Controls for amplified music (no speakers outside)

- Conditions to authorise the noise exceedance for vehicle noise
- Review condition
- Operational noise management plan

Can the applicant please confirm if any additional conditions are considered necessary/volunteered to manage effects from noise associated with the activity.

The assessment has shown the activity can comply with the noise limits except for the period of traffic movements after an event that finishes at night. The noise effects from traffic movements on Woolshed Road is expected to be minimal, when considered at the receiver dwellings and not the property boundary right beside the road. As such, the noise related mitigation measures that were recommended will be sufficient and no further control over noise is warranted. However, as addressed in the Planz overarching response document, additional consent conditions are proposed that accommodate the restrictions previously offered by the applicant in relation to the number of events and not installing outdoor speakers.

Please do not hesitate to contact me if you have any queries or comments.

Kind Regards,

James Boland Senior Acoustic Engineer Acoustic Engineering Services Ltd



# **ATTACHMENT 3E:**

Proposed Land Use Consent Conditions (as at 30 September 2021)

# University of Otago Hākitekura Redevelopment – Academic Retreat and Conference Facility

# Proposed Land Use Consent Conditions (as at 30 September 2021)

The proposed land use conditions are the same as those that were provided in Section 10 of the University of Otago's land use consent application dated July 2019, with amendments to the conditions proposed since the lodgement of the application identified in tracked changes mode (deletions are shown in strikethrough text and additions in <u>underlined</u> text) and grey shading.

### General

- 1. <u>The occupation of the academic retreat and conference facility shall occur as follows:</u>
  - (a) Initial stage. The Woolshed, the three-bedroom residential unit for staff accommodation and any ancillary structures that do not require wastewater servicing, may be constructed and occupied from the date of consent provided Condition 13 is complied with.
  - (b) Subsequent staging. The remaining components of the development, consisting of the Hākitekura lecture theatre, visitor accommodation units and various other ancillary structures, shall not be occupied until the site is connected to a reticulated wastewater system.

The academic retreat and conference facility shall not commence operation until it is connected to a reticulated water supply and wastewater system.

- 2. This consent shall lapse ten years after the commencement date, unless the consent is given effect to before that lapsing date, under section 125 of the RMA.
- 3. There shall be no more than 125 people, including staff, present on the site at any time.
- 4. No full-sized coaches are to be used to drop-off and pick-up visitors to the facility.

(Advice Note: For the purpose of this consent, a full-sized coach is a coach that has a seating capacity in excess of 20 people, excluding the driver).

- 5. Except for the use of the visitor accommodation units, the facility must only operate be open to visitors / guests between 8.00am to 12.00am (midnight) Monday to Sunday inclusive.
- 6. Prior to the facility becoming operational, the Consent Holder shall enter into and have registered on the property titles a Covenant in Gross in favour of QLDC pursuant to sections 116(a) and (b) of the Land Transfer Act 2017. The covenant shall provide for the following matters:
  - (a) The Consent Holder shall operate the property titles (Lots 1 and 3 DP 452315) together for the purposes of access into the facility; and
  - (b) Access into the facility shall be via Lot 3 DP 452315.

### Engineering

- 7. Prior to construction activities commencing within the site, the upgrade of Woolshed Road is to be completed. Prior to commencing the proposed upgrade works, the Consent Holder shall submit the upgrade design, and associated engineering documentation, to QLDC for Engineering Acceptance. The minimum upgrade standard for Woolshed Road is:
  - (a) a 5.5m width for the first 10m from its intersection with Māori Jack Road;
  - (b) at least five passing bays, with a <u>minimum passing bay</u> width of 5.56<u>m</u> and length of 6m with appropriate tapers at each end, at key locations namely on bends and areas with decreased forward visibility so as to provide for the safe and efficient operation of the Woolshed Road;

- (c) a uniform 3.5 m width along the remainder of the road; and
- (d) sealed using a two-coat seal.
- 8. The Consent Holder is to provide:
  - (a) <u>aAt least 22 formed parking spaces for cars within the site, with three of the parking spaces marked for accessible use. The dimensions and gradients of all parking spaces are to comply with AS/NZS 2890.1:2004 "Parking facilities Off-street car parking"–; and</u>
  - (b) An overflow parking area that can accommodate at least 6 additional cars within the site, and no more than 12 additional cars. Within six months of the fully developed facility commencing operation, parking monitoring is to be carried out in accordance with the Transportation Management Plan requirements of Condition 27 of this consent. If parking monitoring identifies that the full 12 additional parking spaces for cars are required, the Consent Holder must ensure that the overflow parking area can accommodate up to 12 cars in total.

(Advice Note: The overflow parking provided for by Conditions 8(b) and 8(b) must comply with the dimensions and gradients requirements of AS/NZS 2890.1:2004 "Parking facilities – Off-street car parking" but does not need to consistent of impermeable materials and does not need to be delineated.)

9. The Consent Holder must submit to QLDC, prior to construction commencing at the site, documentation confirming that a site-specific detailed geotechnical investigation and assessment has been undertaken to confirm the soil conditions, rock profile and liquefaction/lateral spread potential beneath the specific structural elements of the proposed development. If liquefaction/lateral spread hazard is confirmed for any elements of the proposed development as result of the investigation and assessment carried out, then the documentation submitted to QLDC must also identify the mitigation measures that are to be implemented, as part of the proposed development, to ensure that these risks are adequately mitigated.

(Advice Note: As any proposed mitigation measures, such as ground improvement and/or specific engineering design of foundations and/or structures, if required, will be subject to review as part of the building consent process required for the proposed development, this condition is not part of the QLDC Engineering Acceptance of this land use consent).

- 10. The Consent Holder must submit the stormwater infrastructure design, and associated engineering documentation, to QLDC for Engineering Acceptance prior to installation of the site stormwater infrastructure.
- 11. The Consent Holder must submit the following water supply documentation to QLDC, for Engineering Acceptance, prior to commencing construction within the site:
  - (a) If the water supply is to be provided though connection to a reticulated water supply system, the water supply connection and reticulation design, and associated engineering documentation; or, to QLDC for Engineering Acceptance prior to connection to the reticulated water supply system.
  - (b) If an on-site water supply is to be provided, the location of the bore/s, the on-site reticulation and water treatment system design and associated engineering documentation.
- 12. <u>The Consent Holder must ensure that the water supply engineering documentation submitted</u> to QLDC for Engineering Acceptance in accordance with Condition 11:
  - (a) Complies with the relevant firefighting water supply standards; or

- (b) Alternatively, that approval in writing from Fire Emergency New Zealand confirming that the design is acceptable to Fire Emergency New Zealand is contained in the documentation.
- 13. If connection to a reticulated wastewater system is not available at the time that the Initial Stage of the development is being developed, as provided for by Condition 1(a), then the Consent Holder must provide an interim wastewater treatment and disposal system for the Woolshed and three-bedroom residential unit which consists of a storage tank/s and trucking of wastewater off-site. Once it is feasible for the site to connect to a reticulated wastewater system, the Consent Holder must do so, and once the connection is established the use of the interim wastewater treatment and disposal system must cease.
- 14. <u>Prior to connecting to any reticulated wastewater system, Fthe Consent Holder must submit</u> the wastewater connection and reticulation design, and associated engineering documentation, to QLDC for Engineering Acceptance prior to connection to the reticulated wastewater system.

### Construction

- 15. All construction activities at the site are to be carried out in accordance with an approved Construction Environment Management Plan (CEMP).
- 16. At least one month prior to construction commencing on site, the Consent Holder must submit a copy of the site's CEMP to QLDC for approval. The CEMP must include procedures that mitigate potential adverse construction effects by ensuring that:
  - (c) erosion and sediment control measures are in place;
  - (d) there is no release of contaminants to the environment;
  - (e) no significant dust emissions occur;
  - (f) archaeological values, if discovered, are managed in accordance with an Accidental Discovery Protocol and the archaeological authority held for the site;
  - (g) construction noise and vibration complies with relevant standards and/or is managed to ensure potential effects are minimised;
  - (h) any contaminated soils that may be present on site are appropriately managed;
  - (i) chemicals and fuels used on site are stored and used responsibly;
  - (j) waste is appropriately managed and disposed of; and
  - (k) emergency response and complaints procedures are in place.

Any review of, or amendments to, the CEMP are to be submitted to QLDC for approval before being implemented on site.

- 17. All site earthworks are to be designed, and subsequently monitored, by a suitably experienced Chartered Professional Engineer.
- 18. All fill placed beneath new buildings established on the site are to be certified, in accordance with NZS4432, by a suitably experienced Chartered Professional Engineer.
- 19. All site earthworks are to be undertaken in accordance with the QLDC's Accidental Discovery Protocol.

(<u>Advice Note</u>: An archaeological authority, in accordance with the Heritage New Zealand Pouhere Taonga Act 2014, is required prior to the commencement of all site disturbance activities. Therefore, site disturbance activities must also comply with the conditions of the archaeological authority. This includes, but is not limited to:

- monitoring of excavation works in the vicinity of the Woolshed and the Shearers' Quarters; and,
- briefing the Contractor/s on identification of archaeological and pre-European (Māori) materials and the procedures to be followed if discovered.)

### **Noise Mitigation**

- 20. <u>The number of private events, including weddings, and large events run by the University with</u> more than 100 people in attendance, cannot exceed more than:
  - (a) <u>31 private or large events in any calendar year; and</u>
  - (b) <u>One private or large event in any week, with the week starting on a Saturday and finishing</u> on a Friday.
- 21. The collection of waste from the site must only occur between the hours of 8.00am and 8.00pm. (Advice Note: The restrictions on the collection of waste provided by this condition also applies to the collection of wastewater, within tankers, provided for under Condition 13 of this consent)
- 22. The Consent Holder must not install any outdoor speakers in any of the site's outdoor areas.
- 23. When amplified music or speech is associated with events being held at the Woolshed and / or the lecture theatre, all windows and doors are to be kept closed on all facades of the buildings except the windows and doors that face south towards the lake.

### Lighting

24. The Consent Holder is to ensure that all external site lighting is designed and installed in a manner that complies with "Southern Light - A Lighting Strategy for Queenstown Lakes District" dated March 2017.

### Landscaping

- 25. (a) Within the first planting season after construction has been completed, the Consent Holder must plant the site in general accordance with the Landscape Plan (Ref. 1603-01 dated 26 November 2020) and Plant Schedule (Ref. 1603-02 dated 26 November 2020).
  - (b) <u>The Consent Holder must ensure that any pest grazing of new plants is reasonably</u> managed.
  - (c) The Consent Holder must ensure that the landscaping is maintained in general accordance with the Landscape Plan (Ref. 1603-01 dated 26 November 2020) and Plant Schedule (Ref. 1603-02 dated 26 November 2020). This includes replacing, within the next planting season, any plant that dies or becomes diseased.

(Advice note: Pest management may include the installation of plant sheath protectors around individual plants and/or fencing.)

26. In the event that the existing vegetation on the LINZ land, that is shown in red on the approved Landscape Plan (Ref. 1603-01 dated 26 November 2020), is entirely or substantially removed, the Consent Holder must submit a planting plan to the QLDC for approval showing a revegetative regime within the site that will achieve appropriate mitigation of visual effects of the proposed activities when viewed from the lake and foreshore.

(Advice note: Should the re-vegetation pursuant to this condition be required, it is important to recognise that full visual screening is not the outcome being sought as the buildings on the site which existed prior to this consent being granted, as well as all development provided for within the Jacks Point Zone, form part of the receiving environment.)

### **Transportation Management Plan**

27. At least 15 working days prior to the opening of the academic retreat and conference facilities to visitors / guests, the Consent Holder shall submit a Transportation Management Plan (TMP) to the QLDC's Monitoring and Enforcement Team for review and certification that the TMP achieves the objectives set out in this condition. The objectives of the TMP are to manage travel to and from the site for various users / transport modes and to manage the parking demands generated by the activities undertaken and events held at the facility.

The matters that the TMP shall address include, but are not limited to:

- (a) The management of vehicles, including staff vehicles, entering and exiting the site for Consent Holder activities and events;
- (b) The management of vehicles, including staff vehicles, entering and exiting the site for private accommodation stays and events, including through the Consent Holder's booking system;
- (c) The management of the use of Woolshed Road, including the passing bays, including appropriate signage indicating the low-speed environment and the availability of the passing bays at certain distances;
- (d) The use of the permanent and overspill parking areas by visitors / guests and staff, including appropriate signage of the overspill parking area when it is required to be used;
- (e) The restriction on full-size coaches accessing the site, including through the Consent Holder's booking system and through signage located at the intersection between Maori Jack Road and Woolshed Road;
- (f) The safety of cyclists accessing the site, including through the installation of warning signage at either end of Woolshed Road to warn motorists of the potential presence of cyclists; and
- (g) On-site parking monitoring, including criteria, which is to be undertaken within 6 months of the facility commencing operation, to determine whether any need exists for additional overflow parking spaces in the overflow parking area.

The operation of the facility shall be undertaken in accordance with the most current version of the TMP as accepted as suitable by the QLDC.

(Advice Note: For the purpose of this consent, a full-sized coach is a coach that has a seating capacity in excess of 20 people, excluding the driver).