

**BEFORE THE HEARING PANEL APPOINTED BY THE QUEENSTOWN LAKES
DISTRICT COUNCIL**

Under of the Resource Management Act
1991

In the Matter of a request under clause 21 of the
First Schedule to the Act for a
Change to the Queenstown Lakes
Proposed District Plan (Private Plan
Change 1)

By **THE HILLS RESORT LIMITED**

**Evidence of Christopher William Day
for The Hills Resort Limited**

Dated: 13 March 2026

INTRODUCTION

1. My full name is Christopher William Day.
2. I have worked in the field of acoustics, noise measurement and control for the past 50 years in England, Australia and New Zealand, specialising in transportation noise and acoustics for the performing arts. My firm is one of the largest acoustic engineering consultancies worldwide, working on major projects in over 15 countries. We employ approximately 100 professional staff throughout New Zealand, Australia, Hong Kong and France.
3. I have the qualification of Bachelor of Engineering (Mechanical) from Monash University in Melbourne, Australia. My work over the last 45 years has included noise control engineering and town planning work for various major corporations and city councils within New Zealand, and I have been engaged on numerous occasions as an expert witness before the Environment Court.
4. I have had significant involvement in matters relating to noise in the Queenstown area. I have been involved with many projects where entertainment noise has been an issue and others involving noise from tennis and pickleball.

CODE OF CONDUCT

5. I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

SCOPE OF EVIDENCE

6. The Hills Resort Limited (**THRL**) requests to change parts of the Hills Resort Zone (**HRZ**) and the HRZ Structure Plan, and to make consequential changes to other provisions of the Queenstown Lakes Proposed District Plan (**PDP**) to facilitate the rerouting of the existing 18-hole golf course to optimise the golfing experience and ranking of the course and improve the overall resort offering (**Plan Change Request or Request**).

7. The particular changes requested are to amend the location and extent of existing Activity Areas, establish eleven additional homesites in the south of the HRZ, and provide for three new Activity Area associated with the Resort, including a Sports Garden Activity Area (**SG Activity Area**).
8. My evidence addresses expected noise levels and appropriate noise controls for the proposed SG Activity Area, responding to the specific submissions of Todd (#2) and Brown (#4) only.

DOCUMENTS REVIEWED

9. In preparing this evidence I have reviewed the following documents:
 - The notified HRZ Structure Plan as it relates to the SG Activity Area.
 - The revised HRZ provisions, as they relate to the SG Activity Area.
 - The Hills Resort Zone Masterplanning Design Statement, May 2025, section 5 and Appendices 5 and 6 in particular.
 - The submissions by:
 - (i) Jane Ellen Todd and Trustees of the Graeme Todd Family Trust (**Todd**, Submission #2)
 - (ii) Derek and Anna Brown (**Brown**, Submission #4)
 - The evidence of Brett Thomson and Emma Hill, in draft.

EVIDENCE

10. The proposed HRZ provisions describe the new SG Activity Area as follows:

*“**Sports Courts and Gardens (SG)** – to provide for recreation activities for use by visitors and residents, including playing surfaces and courts, communal outdoor living and open spaces, and related activities (0.6ha)”;*
11. The Masterplanning Design Statement elaborates:

“This is a new Activity Area, and part of the comprehensive resort offering. It is intended to be a recreational and social facility, an informal area away from ‘golf’ where visitors and residents can socialise, host or participate in casual events. A similar facility is in place at Tara Iti, where it is an important addition to the resort

and a casual space for members and visitors to relax. The proposed new Activity Area is set in a landscaped framework of a working garden to cater for the resort's kitchen, as well as an amenity garden that will enclose and shelter the area through a combination of hedging plants and trees. A glasshouse, small tennis pavilion and refreshments area are some of the anticipated built forms. More substantial buildings are not proposed or anticipated within this Activity Area."

12. Appendix 5 of the Masterplanning Design Statement contains a concept plan, and Appendix 6, an artist's impression, of the anticipated activity mix and development outcomes within the SG Activity Area, illustrating a recreation facility, with tennis, pickleball and a half basketball court embedded in a garden environment.
13. The SG Activity Area is located in the eastern part of the HRZ, immediately south of the main entry and immediately west of McDonnell Road.
14. The Todds reside at 10 Advance Terrace (Submitter #2) and the Browns at 18 Advance Terrace (Submitter #4) (together, the **Submitters**). The Submitters' properties are located on an elevated terrace some 400 metres and 375 metres respectively from the SG Activity Area, within the Suburban Residential Zone. My analysis indicates that 18 Advance Terrace is effectively the closest existing residential property to the SG Activity Area (375m).
15. The Todds and Browns have made a submission on the Plan Change Request raising concerns with the SG Activity Area, including a concern that there is a disconnect between the description of the SG Activity Area contained in the Masterplanning Design Statement and the notified provisions for the SG Activity Area, and it "would allow for "...licensed premises¹ with no control on hours of operation or noise controls".
16. Contrary to this assertion, there are noise controls in the District Plan that would apply to activities within the SG Activity Area and I will discuss these later in my evidence. I also understand that in response to other concerns raised by the Submitters, THRL proposes amendments to the rules that limit the number of buildings in the Activity Area to three (pergola, toilet facilities and a greenhouse) each no greater than 60m² in size, and limit retail sales (i.e., the sales of food and beverage) to sales from one non-permanent food truck to better align the intended

¹ Licenced premises are defined in the PDP as follows:

"Licensed Premises: Means any premises or part of any premises, in which liquor may be sold pursuant to a licence, and includes any conveyance, or part of any conveyance on which liquor may be sold pursuant to the licence"

use of the Activity Area with the proposed rules for the Area, and limit the hours of “retails sales”, which includes any licenced premises, to the hours of 0800 to 2000 (i.e 8Am to 8pm). I understand that these changes are to ensure that the Activity Area is a small-scale area for recreating members and their guests that is ancillary to the main resort offering. This certainly aligns with my personal experience of Tara Iti and Te Arai Links, which both have similar sports court areas.

17. With regards to the Submitters’ concerns about licenced premises, while no permanent bar, restaurant or similar premises is anticipated or provided for by the SG Activity Area rules (as usually associated with the phrase ‘licenced premise’), I understand that food and beverage, including alcohol, may from time to time be available to members and their guests from the temporary food truck, which would be considered a ‘licensed premises’ as defined in the PDP. I understand that this use may include background music for ambience from a small Bluetooth loudspeaker or similar.

DISTRICT PLAN NOISE LIMITS

18. The District Plan noise limits will apply to noise from all activities within the SG Activity Area, including noise from any ‘licenced premises’. The District Plan noise limits are set out in Chapter 36 of the Proposed District Plan but in summary the SG Activities would have to comply with the following noise limits at the residential interface;
- 50 dB LAeq between 8am and 8pm and
 - 40 dB LAeq between 8pm and 8am
19. The 50/40 dB day/night limits that apply are typical of more stringent District Plan limits, whereas many other district plans set 55/45 dB daytime/nighttime limits (i.e 5dB higher than this District Plan). The 8pm onset for the night-time noise limit is the most stringent I have come across – normal practice is 10pm to 7am for night noise, which aligns with when many people sleep. The QLDC District Plan noise limits provide therefore for a high level of residential noise amenity.

PREDICTED NOISE LEVELS

Existing Noise Environment

20. The Todd and Brown residences on Advance Terrace, sit on an elevated escarpment looking west over the Wakatipu Basin with a direct line of sight to McDonnell Road. My colleague has obtained the annual traffic flow data for McDonnell Road and found that with the annual average daily flow (AADT) of 1700 vpd the predicted noise level (24 hr LAeq) is 50 dB at the Brown's residence. There may also be noise from Centennial Avenue which is closer but has more screening due to other houses.
21. My colleague Rob Hay, carried out a short noise survey at the western boundary of 10 Advance Terrace at 6:30pm on the 12 March 2026 as shown in the photograph below.



22. The measured noise level was 47 dB LAeq with the predominant source being cars on McDonnell Road as anticipated. This value aligns well with the 24 hour average predicted value of 50 dB LAeq discussed above.
23. The measured background noise level of 39 dB LA90 shows the noise environment is typical of a rural/residential area close to moderate to low flow rural roads.

Music Noise

24. I understand that music noise from the SG Activity Area can be a concern arising from licenced premises. As mentioned above, the activities within the SG Activity Area may include background music for ambience from a small Bluetooth loudspeaker or similar. A sound level of 75 dBA at 1m is sometimes used as a reference level for small speakers providing background entertainment. In my opinion, this is a conservatively high level (i.e. loud) and my experience of the music played from the food and coffee truck at Te Arai Links is noticeably lower than this.
25. However, using the 75 dBA at 1m as a source level, the predicted level received at the Brown's residence (375m distant) is 31 dBA. This level includes a +5 dB correction for the 'Special Audible Character' (SAC) of music noise (NZS6802 clause 6.3²) and does not include any negative adjustment for duration even though the music is unlikely to operate all day from 8am to 8pm. If the music played for only 4 hours there would be a -5dB adjustment for duration resulting in a predicted Noise Rating Level of 26 dB at 375m.
26. The music level of 31 dB that my predictions indicate would be received at the Brown property is approximately 20 dB below the daytime noise limit and 10 dB below the night limit.
27. While music played in the SG Activity Area might be just audible at the Brown property during very low traffic flow, it is unlikely to be audible when there are cars visible on McDonnell Road. It is important to note that 'audibility' has never been accepted as a basis for noise assessment under the New Zealand planning regime. Chapter 36 of the District Plan tell us that in this district, the District Plan noise limits can be used as a guide for 'reasonable' noise. As I have stated already, predicted noise from music in the SG Activity Area is likely to be (at least) 20 dB lower than these noise limits during daytime.

² The District Plan directs noise measurements to be made in accordance with NZS6802:2008 Acoustics – Environmental Noise. Clause 6.3 of this standard defines a +5 dB adjustment to be added to the measured LAeq level for a sound that contains 'Special Audible Characteristics (SAC)' such as tonality and impulsiveness.

Tennis and Pickleball Noise

28. From my firm's measurements/experience of Pickleball and Tennis, we have found that Pickleball is approximately 10 dB noisier than Tennis. Using the measured data for pickleball, the predicted level at the Brown's residence (375m) is 35 dBA LAeq. This level includes a +5 dB correction for the 'Special Audible Character' under NZS6802 clause 6.3 and does not include any adjustment for duration even though pickleball is very unlikely to operate all day from 8am to 8pm. My personal experience at Te Arai is that in reality, the courts are used infrequently and for limited duration.
29. This predicted pickleball level is approximately 15 dB below the daytime noise limit of 50dB LAeq and 5 dB below the night limit 40dB LAeq . While this might be just audible during very low traffic flow, it is unlikely to be audible when cars are on McDonnell Road.
30. The tennis court projects I have worked on previously, have involved tennis courts operating satisfactorily with an immediately adjoining residential boundary (approximately 10m away from the noise source). The proposed SG Activity Area is very different, with the residential interface 375m away.
31. I am satisfied that the pickleball noise (35 dB LAeq adjusted), and tennis noise (approximately 30 dB LAeq adjusted), received at the closest residential interface, are reasonable for a residential environment during daytime.

People Noise

32. I understand that the SG Activity Area will be used intermittently by small groups of club members. I have used our significant experience of café, restaurant and bar noise from outdoor areas to calculate the noise level from 50 people at this location, although I understand that groups using the SG Area will likely be much smaller than this, which is consistent with my experience with the comparable facilities at Tara Iti and Te Arai. The predicted level at the Brown's residence (375m) is 30 dBA LAeq (no SAC). It is widely accepted that SAC is not applied to people noise.
33. Again, this predicted level is 20 dB below the daytime limit and 10 dB below the night noise limit.

SUMMARY

34. I have been asked to review the submissions of Todd and Brown regarding their concerns about - “no noise controls” for the proposed SG Activity Area.
35. The District Plan does provide noise limits that the SG activities would have to comply with. These noise limits are more conservative than most district plan noise limits.
36. Traffic noise measurements and calculations confirm that the District Plan noise limits are reasonable for this location.
37. I have calculated the level of noise at the Brown’s residence (closest residential property) from the three main sources of noise in the SG Activity Area – music noise, court noise and people noise.
38. The predicted noise level from all three activities complies with the District Plan noise limits by a considerable margin of 5 to 20 dB.
39. My experience of residential tennis clubs and the SG type activity areas at Tara Iti and Te Arai Links suggest that the level of usage at The Hills SG Activity Area is likely to be significantly less than that used in the noise calculations above.
40. In my opinion the noise level from the SG Activity Area received at the residential interface would be reasonable.

Christopher Day

13 March 2026