

**BEFORE INDEPENDENT HEARING COMMISSIONERS
AT CHRISTCHURCH**

**I MUA NGĀ KAIKŌMIHANA WHAKAWĀ MOTUHAKE
KI ŌTAUTAHI**

**IN THE MATTER
AND**

IN THE MATTER

of the Resource Management Act 1991

**of the hearing of submissions and further
submissions on Plan Change 14 to the
Operative Christchurch District Plan**

**STATEMENT OF EVIDENCE OF MATTHEW ARMIN LINDENBERG ON
BEHALF OF KĀINGA ORA – HOMES AND COMMUNITIES**

PLANNING (AIRPORT NOISE)

20 SEPTEMBER 2023

Instructing solicitor:
C E Kirman
Special Counsel
Kāinga Ora - Homes and Communities
PO Box 14594
Central Auckland 1051
E: claire.kirman@kaingaora.govt.nz

Counsel instructed:
N M H Whittington
Hawkestone Chambers
32 Hawkestone Street
Wellington 6012
E: nick.whittington@hawkestone.co.nz

1. EXECUTIVE SUMMARY

1.1. My name is Matthew Armin Lindenberg, and I hold the position of Principal Planner at Beca Ltd. I have been engaged by Kāinga Ora-Homes and Communities (**Kāinga Ora**) to provide evidence in support of its primary submission (submitter #834) and further submissions (further submitter #2050) on Plan Change 14 (**PC14**) to the Operative Christchurch District Plan (**ODP**). PC14 incorporates the Intensification Planning Instrument (**IPI**) as required by the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (**Amendment Act**), which amends the Resource Management Act 1991 (**RMA**) and provides for implementation of the National Policy Statement on Urban Development 2020 (**NPS-UD**).

1.2. The key points addressed in my evidence are:

- (a) The overarching policy context for land use management in proximity to Christchurch International Airport (“the Airport”), as set out in the Operative Canterbury Regional Policy Statement (July 2021 update);
 - (i) In particular, my view that the approach proposed through PC14 is contrary to Policy 6.3.5(4) of the Canterbury Regional Policy Statement;
- (b) The framework set out within the New Zealand Standard for Airport Noise Management and Land Use Planning (NZS6805:1992) and its applicability to the approach set out in the Council’s evidence / s42A report with regard to land use management in proximity to the Airport;
- (c) The Council’s proposed approach through PC14 in relation to the management of sensitive activities in proximity to the Airport, and how this differs from:
 - (i) the approach set out within the Operative Canterbury Regional Policy Statement, which continues to be recommended by Environment Canterbury to be the

most appropriate approach for land use planning purposes;

- (ii) the approach adopted in relation to New Zealand's other major urban airports, specifically the land use management approach applied to both Auckland and Wellington International Airports; and
 - (iii) that I do not consider there are reasons specific to Christchurch International Airport that justify taking a wholly different land use management approach to that undertaken in Auckland and Wellington.
- (d) My recommended approach for a framework within the District Plan to manage sensitive activities in proximity to the airport, which I consider appropriately balances the need to provide for the ongoing operation and growth of the Airport, whilst also enabling change and growth over time to Christchurch's urban environment, being:
- (i) Continuing to restrict development within the 65dBA noise contour (as generally provided for through the operative District Plan framework);
 - (ii) Applying specific permitted standards to the development of noise sensitive activities within the 55dBA noise contour relating to acoustic insulation (as per the general approach set out in the operative District Plan, through Standard 6.1.7.2.2 'Activities near Christchurch Airport'), plus the addition of ventilation requirements (as recommended through the evidence of Mr Selkirk on behalf of Kāinga Ora) within such a permitted standard. There would be no specific restrictions relating to residential density within the 55dBA contour. Any non-compliance with the noted permitted standards would be assessed as a Restricted Discretionary Activity; and

- (iii) Not applying density restrictions / specific permitted standards applying to noise sensitive activities / residential units within residential zones located within the existing 50dBA noise contour identified in 'Map A' as currently set out in the operative CRPS.

- 1.3. A copy of my proposed amendments and changes sought to the provisions under consideration in PC14 is included in **Attachment B** of this statement of evidence. I confirm that the version of relief in my evidence represents the full "updated" set of relief requested by Kāinga Ora in relation to this topic.
- 1.4. In my opinion, the changes sought in the Kāinga Ora submission and the proposed amendments to provisions discussed within my evidence, will provide greater alignment between the ODP and the Canterbury Regional Policy Statement (**CRPS**), as well as better achieve the NPS-UD and the purpose, principles and provisions of the RMA as amended by the Amendment Act.

2. INTRODUCTION

- 2.1. My full name is Matthew Armin Lindenberg and I hold the position of Principal Planner at Beca Ltd. I have the qualifications and experience set out in my 'Statement of Experience', included as **Attachment A** to this statement.
- 2.2. I am familiar with the national, regional and district planning documents relevant to PC14.
- 2.3. I am providing evidence on behalf of Kāinga Ora in respect of submissions made on PC14, specifically in relation to the provisions within the plan change and ODP which relate to land use management of sensitive activities in proximity to Christchurch International Airport. I was not involved with the preparation of the primary and further submissions made by Kāinga Ora.

- 2.4. In preparing this evidence I have read the Section 32 and Section 42A¹ reports together with the associated appendices prepared by Council staff and the evidence prepared by:
- (a) Mr. Chris Morahan (Transport Planning); and
 - (b) Mr. Jeremy William Trevathan (Acoustic).
- 2.5. I have also read and considered the evidence prepared on behalf of Kāinga Ora by:
- (a) Mr. Jon Styles (Acoustic);
 - (b) Mr. Jonathan Selkirk (Ventilation); and
 - (c) Mr. Tim Joll (addressing other noise-related matters).

Code of Conduct

- 2.6. Although this is a Council hearing, I confirm that I have read the Expert Witness Code of Conduct set out in the Environment Court's Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and agree to comply with it while giving evidence.
- 2.7. Except where I state that I am relying on the evidence of another person, this written evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed in this evidence.

Scope of evidence

- 2.8. My evidence covers submissions and further submissions on PC14 to the ODP. Specifically, my evidence will address the noise provisions contained within Chapter 6 General Rules and Procedures / Section 6.1 Noise of the ODP.
- 2.9. To the extent that the Section 42A report recommends amendments to the proposed changes to the ODP, I generally support those amendments. However, I consider further amendments are required to

¹ Planning Officer's Report of Sarah-Jane Oliver Under Section 42A of the Resource Management Act 1991. Dated 11 August 2023.

better align the ODP with the NPS-UD and the purpose, principles and provisions of the RMA, as amended by the Housing Supply Act.

- 2.10. My evidence will address the following matters:
- (a) The overarching policy context for land use management in proximity to Christchurch International Airport (“the Airport”), as set out in the Operative Canterbury Regional Policy Statement (July 2021 update);
 - (b) The framework set out within the New Zealand Standard for Airport Noise Management and Land Use Planning (NZS6805:1992) and its applicability to the approach set out in the Council’s evidence / s42a report with regard to land use management in proximity to the Airport;
 - (c) The Council’s proposed approach through PC14 in relation to the management of sensitive activities in proximity to the Airport, and how this differs from:
 - (i) the approach set out within the Operative Canterbury Regional Policy Statement;
 - (ii) the approach adopted in relation to New Zealand’s other major urban airports, specifically the land use management approach applied to both Auckland and Wellington International Airports; and
 - (d) My recommended approach for a framework within the District Plan to manage sensitive activities in proximity to the airport, which I consider appropriately balances the need to provide for the ongoing operation and growth of the Airport, whilst also enabling change and growth overtime throughout Christchurch’s urban environment.
- 2.11. Where appropriate and relevant, my evidence will reference and rely on the evidence of those whose opinions I agree with.
- 2.12. The evidence has also been prepared to give consideration to, and provide assessment where relevant of, the Section 32AA requirements

as set out in the RMA. I provide commentary later in this evidence as to why I consider that the relief sought throughout this statement:

- (a) is efficient, effective and the most appropriate means to achieve the objectives that the ODP – as amended by PC14 – is seeking to achieve, as well as the overarching objectives and strategic direction set out in higher-order documents such as the NPS-UD and the Canterbury Regional Policy Statement (CRPS); and
- (b) that the benefits of relief sought will outweigh the costs, in relation to the potential environmental, economic, social and cultural effects which could be anticipated from the implementation of the relief sought.

3. THE KĀINGA ORA SUBMISSION AND FURTHER SUBMISSION

3.1. For context, I first summarise the key matters / issues addressed in the Kāinga Ora submission points relating to the Noise Chapter as amended by PC14.

3.2. In summary, the Kāinga Ora submission² sought:

- (a) the removal of the Airport Noise Influence Area; and
- (b) the amendment of the Noise chapter provisions to clarify the focus / nature of adverse effects to be addressed by the Noise chapter provisions, as well as how the framework of rules relating to noise sensitive activities strikes an appropriate balance between the enablement of growth over time, whilst ensuring the management of any relevant adverse effects relating to amenity and health outcomes as well as the potential creation of land use incompatibilities.

² Sub No. 834 and 2050

4. RELEVANT POLICY CONTEXT FROM THE OPERATIVE CANTERBURY REGIONAL POLICY STATEMENT (2021)

- 4.1. Chapters 5 and 6 of the Canterbury Regional Policy Statement set out the relevant policy framework in relation to infrastructure and land use management and growth.
- 4.2. Objective 5.2.1 of the CRPS seeks that development is located and designed so that it functions in a way that (amongst other matters):
- (a) Enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety (5.2.1.2);
 - (b) Provides sufficient housing choice to meet the region's housing needs (5.2.1.2(b));
 - (c) Is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure (5.2.1.2(f));
 - (d) Avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, **and where avoidance is impracticable, remedies or mitigates those effects** on those resources and infrastructure; and
 - (e) Avoids conflicts between incompatible activities.
- 4.3. Policy 5.3.2 of the CRPS seeks to enable development, including regionally significant infrastructure which:
- (a) Ensures that adverse effects are avoided, **remedied or mitigated**, including where these would compromise or foreclose (amongst other matters);
 - (i) Existing or consented regionally significant infrastructure (5.3.2.1(a));
 - (ii) Options for accommodating the consolidated growth and development of existing urban areas (5.3.2.1(b));

- (iii) ***Avoid or mitigate*** reverse sensitivity effects and conflicts between incompatible activities (5.3.2.2(b)).

4.4. Chapter 6 of the CRPS sets out the policy framework relating to the recovery and rebuilding of Greater Christchurch. Objective 6.2.1 of the CRPS seeks to enable the recovery, rebuilding and development of Greater Christchurch through a land use and infrastructure framework that (amongst other matters):

- (a) Integrates strategic and other infrastructure and services with land use development (6.2.1.9);
- (b) Achieves development that does not adversely effect the efficient operation, use, development, appropriate upgrade, and future planning of strategic infrastructure and freight hubs (6.2.1.10); and
- (c) Optimises the use of existing infrastructure (6.2.1.11).

4.5. Policy 6.3.5 of the CRPS relates specifically to land use and infrastructure integration and seeks that the recovery of Greater Christchurch is assisted by the integration of land use development with infrastructure by (amongst other matters):

- (a) Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by avoiding noise sensitive activities within the 50dBA Ldn airport noise contour for Christchurch International Airport, unless the activity is within an existing residentially zoned urban area, residential greenfield area identified for Kaiapoi, or residential greenfield priority area identified in Map A (page 6-28 of the CRPS) (6.3.5(4)); and
- (b) Managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective provision, operation, maintenance or upgrade of strategic infrastructure and freight hubs.

- (c) The identified 'methods', relevant to territorial authorities, which flow from the above direction set out in Policy 6.3.5 of the CRPS, specifically states that objectives, policies and rules will be included in District Plans to **manage** (but not specifically to "avoid") reverse sensitivity effects between strategic infrastructure and subdivision, use and development, including for residential and rural-residential activities.

4.6. In light of the above direction set out in the CRPS, I consider that the key policy framework for preparing and shaping any response through the City Plan in relation to the management of sensitive activities in proximity to the Airport can be summarised as follows:

- (a) Development is provided for:
 - (i) which enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety – including the provision of sufficient housing choice to meet the Region's housing needs;
 - (ii) which avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, **and where avoidance is impracticable, remedies or mitigates those effects** on those resources and infrastructure;
 - (iii) which **avoids or mitigates** reverse sensitivity effects and conflicts between incompatible activities;
- (b) Specifically in relation to the Airport, and the use of airport noise contours as a method to manage land use and development:
 - (i) Only providing for new development that does not affect the efficient operation, use, development, appropriate upgrading and safety of existing strategic infrastructure, including by avoiding noise sensitive activities within the 50dBA Ldn airport noise contour

for Christchurch International Airport, **unless the activity is within an existing residentially zoned urban area**, residential greenfield area identified for Kaiapoi, or residential greenfield priority area **identified in Map A** (page 92 of the CRPS).

5. APPROACH SET OUT IN NZS6805

- 5.1. The s42A report prepared by Ms Oliver on behalf of the Council provides an overview (page 90, paras 12.36-12.37) of the New Zealand Standard for Airport Noise Management and Land Use Planning (NZS6805:1992) and its applicability to the approach proposed by the Council through PC14, in particular the use of the 50dBA noise contour.
- 5.2. NZS6805:1992 (**the Standard**) establishes a concept of the 'Airnoise Boundary' as an appropriate mechanism within District Plans to establish compatible land use planning and to set limits for the management of aircraft noise at airports to protect community health and amenity values.
- 5.3. The Standard provides a maximum level of aircraft noise exposure (identified as the 'Inner Air Noise Overlay' in the proposed Noise Chapter provisions of the PDP), as well as an outer control boundary. Table 1 in clause 1.8.2 of the Standard sets out recommendations for land use planning within the Airnoise Boundary, and Table 2 for the land within the noise contours of 55dB L_{dn} and 65dB L_{dn} .
- 5.4. The Standard provides recommendations for local authorities to consider whether the 'Airnoise Boundary' contours provide a reasonable basis for land use planning. In addition, the Standard also acknowledges that whether or not these contours provide a reasonable basis for future land use planning around airports requires taking into account (amongst other matters listed in clause 1.4.3.7 of the Standard) the extent of non-compliance of existing land uses; the impacts (such as economic, social and health considerations); the effect of the contours on the flexibility for aircraft operators to meet the community's demand for services; as well as the costs and benefits of land use controls (based on the 'Airnoise Boundary'), when compared against other options which

would achieve the same objective of managing the adverse effects of airport noise.

- 5.5. In my opinion, the Standard provides appropriate scope to acknowledge that in some cases both existing development and other resource demands may mean the “ideal” extent of physical separation of, or restrictions placed upon, noise sensitive activities in proximity to the airport may not always be either possible nor practicable. I consider this is particularly the case in the context of the requirements of both the NPS-UD and the Amendment Act, noting that PC14 must give effect to the NPS-UD.

6. PROPOSED PC14 APPROACH IN THE CONTEXT OF THE CRPS

- 6.1. The approach to land use management in proximity to the airport proposed through PC14 is summarised at Section 12.6 (page 79) of the s42A report prepared by Ms Oliver on behalf of the Council. In summary, the Council proposes:
- (a) Inclusion of an ‘Airport Noise Influence Area’ as a qualifying matter. PC14 proposes the retention of the existing Operative District Plan residential zoning framework in locations where the spatial extent of the ‘Airport Noise Influence Area’ has been identified;
 - (b) The ‘Airport Noise Influence Area’ proposed through PC14 was based upon the 2021 Annual Average Aircraft 50dBA Noise Contour.
- 6.2. I note that this contour proposed by the Council through PC14 would be inconsistent with the 50dBA Noise Contour which is currently included within the CRPS and the aforementioned CRPS ‘Map A’ (page 92 of the CRPS).
- 6.3. Environment Canterbury has been initiating a process to undertake a review of the noise contours as they relate to Christchurch Airport, as part of the wider review of the CRPS. Environment Canterbury recently concluded the process of seeking an independent peer review of updated noise contour modelling information which has been prepared

and provided by Christchurch International Airport (as a means to inform the upcoming review of the CRPS).

- 6.4. The outcomes of the independent peer review process have been made available on Environment Canterbury's website³. Of most relevance to the PC14 process – and the Council's proposed approach of utilising the PC14 process to update the noise contours through the District Plan (in advance of such contours being updated, considered and incorporated through the upcoming CRPS review) – the Environment Canterbury website specifically states:

"We had the airport's modelling reviewed by an international panel of experts who worked with airport staff to finalise the noise contours.

At this stage, the new contours are considered to be technical information only. The noise contour considered to be appropriate for land use planning purposes will continue to be that in Map A of the operative Canterbury Regional Policy Statement."

- 6.5. Environment Canterbury's currently identified timeline for their CRPS review indicates that public consultation will begin during 2023 on the Greater Christchurch spatial plan, and it will be this process which is the first opportunity for the public to consider the updated noise contours. The reviewed RPS is then expected to be publicly notified for submission in December 2024.
- 6.6. In light of the above, I am of the opinion that it would be both inappropriate, as well as contrary to the operative CRPS, to seek to incorporate any updated noise contours for Christchurch Airport through the PC14 process. Instead, I consider that any such updated contours would first need to be considered, assessed and confirmed through the currently scheduled review of the CRPS. Once this process has been completed, with any updated noise contours incorporated through the review of the CRPS, I then consider it would be appropriate to seek to incorporate any updated noise contours into the District Plan – via a future, separate, plan change process.

³ <https://www.ecan.govt.nz/get-involved/news-and-events/2021/council-reviews-airport-noise-contours/>

7. PROPOSED PC14 APPROACH RELATIVE TO OTHER COMPARABLE APPROACHES AROUND NEW ZEALAND

- 7.1. As noted by Ms Oliver in the Council's s42A report (para 12.37, page 90), Christchurch is the only major airport in the country which seeks to limit or restrict development within the 50dBA noise contour. The other major airports (e.g. Auckland and Wellington) only apply restrictions to residential development within respective 55dBA and 65dBA Ldn noise contours.
- 7.2. Wellington City Council has recently held a hearing (beginning week of 1st August 2023) in relation to the Noise Chapter provisions of the proposed Wellington City District Plan. With regard to airport noise contours, the approach recommended by Wellington City Council expert through evidence at the hearing can be summarised as follows:
- (a) Within the 'Inner Air Noise Overlay' (which identifies the 65dBA noise contour):
 - (i) One residential unit is a Permitted Activity (subject to compliance with acoustic insulation and ventilation requirements);
 - (ii) Two units is a Restricted Discretionary Activity;
 - (iii) Three+ units / development not complying with permitted standards is a Discretionary Activity;
 - (b) Within the 'Outer Air Noise Overlay' (the area applying to those properties located between the 65dBA and 60dBA noise contour):
 - (i) Up to 3 residential units is a Permitted Activity (subject to compliance with acoustic insulation and ventilation requirements);
 - (ii) Four+ residential units is a Restricted Discretionary Activity;

- (iii) Development not complying with rules / permitted standards is a Discretionary Activity.

- 7.3. Also of direct relevance to the Christchurch City Council proposed approach, Waimakariri District Council (**WDC**) has also recently held its hearing (week of 21st August 2023) in relation to Noise Chapter provisions as part of 'Hearing Stream 5' for the Proposed Waimakariri District Plan. As with CCC, WDC also needs to give effect to the CRPS – including the aforementioned Policy 6.3.5(4) of the CRPS in relation to the 50dBA noise contour as it relates to Christchurch International Airport.
- 7.4. With regard to airport noise contours, the approach recommended by WDC experts (in relation to the Christchurch Airport noise contours) through evidence at the hearing can be summarised as follows:
- (a) For any development within the 55dBA noise contour for Christchurch International Airport (proposed 'Rule NOISE-R14') there are no restrictions on numbers of dwellings / residential density, but compliance is required to be achieved with a permitted activity standard relating to acoustic insulation and ventilation requirements; and
 - (b) For any development within the 50dBA noise contour for Christchurch International Airport (proposed 'Rule NOISE-R17') there are no restrictions / permitted standards applying to any activity located within a Residential Zone (i.e. residential development is Permitted, with no controls / standards applying in relation to the 50dBA contour).
- 7.5. Of specific note here is the difference in the approach proposed by CCC as opposed to that proposed by WDC – with both approaches applying to the exact same airport / same noise contours / same RPS policy direction, in the context of a national policy direction which requires district plans to substantially enable residential development and which only permits modifications to the MDRS to the limited extent necessary to accommodate a qualifying matter.

- 7.6. I specifically note the approach proposed by WDC in relation to the 50dBA noise contour – where WDC propose no specific controls / restrictions applying to the residential zones within the Waimakariri District. I do not consider that the approach arrived at by the WDC experts was an ‘error’ or a position which failed to address matters of specific technical detail relating to airport noise contours and related adverse effects – rather it is my opinion that the approach proposed by WDC through the recent hearing process for the Proposed Waimakariri District Plan specifically, and accurately seeks to apply the direction set out in Policy 6.3.5(4) of the CRPS (being that noise sensitive activities within the 50dBA L_{dn} airport noise contour for Christchurch International Airport should generally be avoided, ***unless the activity is within an existing residentially zoned urban area***).
- 7.7. In the Auckland context, Proposed Plan Change 78 (notified 18 August 2022) seeks to retain the general approach contained in the operative Auckland Unitary Plan (AUP) with regards to the ‘Aircraft Noise Overlay’ provisions. By way of summary, the general approach to the management of sensitive activities within proximity to Auckland International Airport can be summarised as follows:
- 7.7.1. Within the ‘High Aircraft Noise Area’ (HANA) – being the area generally located within the 65dB L_{dn} future noise contour – the establishment of new sensitive activities (with the exception of tertiary education facilities) is a Prohibited Activity;
- 7.7.2. Within the ‘Moderate Aircraft Noise Area’ (MANA) – being the area generally located between the 60dB L_{dn} and 65dB L_{dn} future noise contour – and/or within the identified 57dB L_{dn} ‘noise boundary’:
- 7.7.2.1. New dwellings in a residential zone where the average density does not exceed one dwelling per 400m² is a Permitted Activity; and
- 7.7.2.2. New dwellings in a residential zone where the average density exceeds one dwelling per 400m² is a Restricted Discretionary Activity; and

7.7.3. Outside of the HANA and MANA (i.e. beyond the 55dB L_{dn} noise contour), there are no restrictions which apply to any sensitive activities relating to the management of aircraft noise.

8. MY RECOMMENDED APPROACH FOR MANAGING SENSITIVE ACTIVITIES IN PRXOMITY TO THE AIRPORT

8.1. In light of the above, and with a particular mind towards seeking to create a consistent framework within the Canterbury Region for addressing the management of sensitive activities in proximity to Christchurch International Airport, I recommend a rule framework specific to the Christchurch District Plan as follows:

- (c) Restricting development within the 65dBA noise contour (as generally provided for through the operative District Plan framework);
- (d) Applying specific permitted standards to the development of noise sensitive activities within the 55dBA noise contour relating to acoustic insulation (as per the general approach set out in the operative District Plan, through Standard 6.1.7.2.2 'Activities near Christchurch Airport'), plus the addition of ventilation requirements (as recommended through the evidence of Mr Selkirk on behalf of Kāinga Ora) within such a permitted standard. There would be no specific restrictions relating to residential density within the 55dBA contour. Any non-compliance with the noted permitted standards would be assessed as a Restricted Discretionary Activity.
- (e) No density restrictions / specific permitted standards applying to noise sensitive activities / residential units within residential zones located within the existing 50dBA noise contour identified in 'Map A' as currently set out in the operative CRPS.

8.2. I consider that such a recommended approach set out above would assist to:

- (a) Better balance the various policy directions / considerations within the Operative CRPS and Operative Christchurch District

Plan with the intensification policies of the NPS-UD and the associated provisions and tenor or the MDRS requirements as required by the Amendment Act;

- (b) Better align the Christchurch City Council approach with the other approaches proposed by territorial authorities (in particular the very recently proposed approaches by Wellington City Council and Waimakariri District Council) in relation to Wellington and Christchurch International Airports – noting airport noise effects on noise sensitive receivers are consistent across New Zealand major airports, and benefits are created for all Plan users when resource management frameworks for similar issues are standardised / more consistent – which helps to deliver upon the overall intent of the National Planning Standards and wider resource management reform programme which seek to streamline and simplify the planning frameworks and planning practice across the country. I am aware of no reason specific to Christchurch International Airport that justifies taking a wholly different approach to that undertaken in Auckland and Wellington;
- (c) Create a more consistent management framework within the Canterbury Region itself, better aligning the Christchurch City approach with the approach recently proposed by Waimakariri District Council – which in my opinion would most accurately and appropriately reflect the current direction set of in Policy 6.3.5(4) of the Operative CRPS.

8.3. In addition, I am also of the opinion that the appropriate version of the 50dBA noise contour for Christchurch International Airport should continue to be the existing contour identified on 'Map A' within the Operative CRPS. I do not consider that any updated contours should be included at the District Plan level, in advance of the existing airport contour identified within the CRPS being appropriately considered for review through the upcoming review of the CRPS.

9. SECTION 32A / 32AA CONSIDERATIONS

9.1. In respect of a Section 32A / 32AA evaluation of the issues raised above, along with the proposed amendments to provisions which I (and Mr Selkirk on behalf of Kāinga Ora) have recommended (as set out in **Attachment B**), I provide the following assessment and commentary:

- (a) I consider that the amendments I have recommended are the most appropriate means to achieve:
 - (i) the creation of effective and efficient, well-functioning urban environments, which will provide for ongoing development and change over time;
 - (ii) the provision of sufficient development capacity to meet the needs of people and communities, as well as future generations;
 - (iii) active enablement of development of noise sensitive activities in appropriate locations, where it can be demonstrated that adequate acoustic / ventilation standards can be met. I consider my recommended amendments to provisions strike an appropriate balance to build in to the District Plan a framework of provisions which balances the need to enable and provide for future urban growth opportunities, whilst also ensuring that potential adverse effects (relating to amenity, health, well-being as well as issues of land use compatibility) can be appropriately identified and assessed;
- (b) I consider that the potential benefits associated with my recommended approach / amendments include the creation of a package of District Plan provisions which enable and provide for future development opportunities to accommodate noise sensitive activities, whilst also enabling existing noise generating activities and regionally significant infrastructure to provide for the needs of the region without their operations being unduly constrained or compromised.

10. CONCLUSION

- 10.1. A summary of the changes that are sought through my evidence (as well as the evidence of Mr Selkirk on behalf of Kāinga Ora) are included at **Attachment B**. The changes are shown in green as a markup.
- 10.2. It is my opinion that the underlying principles that have informed the proposed changes sought by Kāinga Ora will better align the ODP with the NPS-UD and the purpose, principles and provisions of the RMA, as amended by the Housing Supply Act.

Dated 20 September 2023



Matthew Armin Lindenberg

**ATTACHMENT A:
STATEMENT OF EXPERIENCE – MATHEW LINDENBERG**

Matthew Lindenberg:

I am a Planner and hold the position of Principal/Technical Director Planner at Beca Ltd. I hold a Master of Science in Geography (Second Class Honours) and a Bachelor of Science, both from the University of Auckland. I am an Associate member of the New Zealand Planning Institute.

I have over 16 years' planning and resource management experience, providing technical direction on a number of key projects, particularly focussing on strategic and policy planning. I have been involved in a number of plan review and plan change processes, including the recent Independent Hearings Panel ("IHP") hearings on the proposed Auckland Unitary Plan (PAUP). In particular, I have been a member of planning teams for policy planning projects including:

- (a) The Whangarei District Plan Urban and Services Plan Changes submission, hearing and appeal processes;
- (b) The Waikato District Council Stage One District Plan Review submission, hearing and appeal processes;
- (c) Submission and hearings processes in relation to numerous plan changes to the Auckland Unitary Plan (including PC3, PC4, PCs 14-17, PC23, PC26 and PC34);
- (d) The submission, hearing and appeals process in relation to Tauranga City Council's Plan Change 27 (Flooding from intense rainfall);
- (e) The Kaipara District Plan review and development of objectives and policies (for the 'Land Use and Development Strategy' and 'Residential' chapters) for the notification of that Plan;
- (f) The Plan Variation for the site known as 'The Landing' at Hobsonville Point (undertaken through the Housing Accords and Special Housing Areas legislative process) on behalf of Hobsonville Land Company;

- (g) The Kerikeri-Waipapa Structure Plan (2007) on behalf of the Far North District Council; and
- (h) The preparation of the Local Development Framework and Core Strategy (the 'Spatial Plan') during my time working at the London Borough of Bexley in the United Kingdom, including leading the 'Affordable Housing' and 'Sustainability /Climate Change' workstreams as part of the plan development process.

I have also prepared and presented evidence on numerous PAUP hearing topics on behalf of Kāinga Ora in front of the IHP. I subsequently prepared and presented evidence in the Environment Court on behalf of Kāinga Ora in relation to appeals on the PAUP related to the carparking and transport provisions as well as the Residential zone provisions.

**ATTACHMENT B:
RELIEF SOUGHT**

DISTRICT PLAN TEXT AMENDMENTS

Key:

For the purposes of this plan change, any unchanged text is shown as normal text or in bold, any text proposed to be added by the plan change is shown as **bold underlined** and text to be deleted as ~~**bold strikethrough**~~.

Text in green font identifies existing terms in Chapter 2 – Definitions. Where the proposed change contains a term defined in Chapter 2 – Definitions, the term is shown as **bold underlined text in green** and that to be deleted as ~~**bold strikethrough in green**~~. New definition in a proposed rule is **bold green text underlined in black**.

Text in purple is a plan change proposal subject to Council Decision.

Text in **purple shaded in grey** is a Plan Change Council Decision.

Text in **black/green shaded in grey** is a Council Decision subject to appeal.

Text in blue font indicates links to other provisions in the district Plan and/or external documents. These will have pop-ups and links, respectively, in the on-line Christchurch District Plan.

Text in **red underline / strikethrough** identifies the relief sought sought by Kainga Ora (through the expert evidence of Mr Lindenberg and Mr Selkirk).

Chapter 6 General Rules and Procedures

6.1 Noise

6.1.1 Introduction

- a. This introduction is to assist the lay reader to understand how this sub-chapter works and what it applies to. It is not an aid to interpretation in a legal sense.
- b. Sub-chapter 6.1 Noise relates to the management of adverse noise effects, recognising the impact such effects can have on the **amenity values** and health of people and communities. Noise-creating activities are managed by setting limits on the sound levels they generate, their location and their duration, so that the noise generated is consistent with the anticipated outcomes for the receiving environment. In addition, this sub-chapter sets out where sound insulation is required for **sensitive activities**, or alternatively, by limiting the location of **sensitive activities** relative to activities which have elevated noise levels.
- c. The provisions in this sub-chapter give effect to the **Chapter 3 Strategic Directions Objectives**.

6.1.2 Objective and Policies

6.1.2.1 Objective - Adverse noise effects

- a. Adverse noise effects on the **amenity values** and health of people and communities are managed to levels consistent with the anticipated outcomes for the receiving environment.

6.1.2.1.1 Policy - Managing noise effects

- a. Manage adverse noise effects by:
 - i. limitations on the sound level, location and duration of noisy activities;
 - ii. requiring sound insulation for **sensitive activities** or limiting their location relative to activities with elevated noise levels.

6.1.2.1.2 Policy - Noise during night hours

- a. Achieve lower noise levels during night hours to protect sleep, and the **amenity values** of residential and other sensitive environments, so far as is practicable.

6.1.2.1.3 Policy - Entertainment and hospitality activities in precinct areas and key locations in the Central City

- a. Enable entertainment and hospitality activities, and temporary events including those at identified facilities (refer to [Rule 6.1.6.2.3 Temporary activities](#)), that contribute to Christchurch's economic, social and cultural well-being to occur in the Central City Entertainment and Hospitality Precincts while ensuring the adverse noise effects of activities on the surrounding community and environment are managed to levels consistent with the anticipated outcomes for the receiving environment.

6.1.2.1.4 Policy - Activities in key locations outside the Central City

- a. Enable land use activities at identified facilities (refer to [Rule 6.1.6.2.3 Temporary activities](#)) outside the **Central City** that contribute to Christchurch's economic, social, and cultural wellbeing while ensuring the adverse noise effects of activities on the surrounding community and environment are managed to levels consistent with the anticipated outcomes for the receiving environment.

6.1.2.1.5 Policy - Airport noise

- a. Require the management of **aircraft operations** and **engine testing** at Christchurch International Airport, so that:
 - i. noise generated is limited to levels that minimise sleep disturbance and adverse effects on the **amenity values** of residential and other sensitive environments, so far as is practicable;
 - ii. where practicable, adverse noise effects are reduced over time.
- b. Mitigate adverse noise effects from the operations of the Christchurch International Airport on **sensitive activities**, by:
 - i. prohibiting new **sensitive activities** within the **Air Noise Boundary** and within the 65 dB L_{dn} engine testing contour; and
 - ii. requiring noise mitigation for new **sensitive activities** within the 55 dB L_{dn} air noise contour and within the 55 dB L_{dn} engine testing contour; and

- iii. requiring Christchurch International Airport Limited (CIAL) to offer appropriate acoustic treatment in respect of residential units existing as at 6 March 2017 within the 65 dB L_{dn} Annual Airport Noise Contour, and within the 60 dB L_{dn} engine testing contour.

Advice note:

1. [Policy 17.2.2.10](#) also mitigates noise effects from the operations of Christchurch International Airport on rural land.

6.1.3 How to interpret and apply the rules

- a. The rules that apply to activities generating, or affected by, noise in all zones are contained in:
 - i. The general noise rules in [Rule 6.1.4](#);
 - ii. The activity status tables (including activity specific standards) in [Rules 6.1.5.1](#), [6.1.6.1](#) and [6.1.7.1](#);
 - iii. The Noise Standards in [Rule 6.1.5.2](#);
 - iv. The Activity Standards in [Rules 6.1.6.2](#) and [6.1.7.2](#); and
 - v. The matters of discretion in [Rule 6.1.8](#).
- b. Activities generating, or affected by, noise are also subject to the rules in the relevant zone chapters.
- c. The activity status tables, rules and standards in the following chapters also apply to activities generating, or affected by, noise (where relevant):
 - 4 [Hazardous Substances and Contaminated Land](#);
 - 5 [Natural Hazards](#);
 - 6 [The other sub-chapters of General Rules and Procedures](#);
 - 7 [Transport](#);
 - 8 [Subdivision, Development and Earthworks](#);
 - 9 [Natural and Cultural Heritage](#); and
 - 11 [Utilities and Energy](#).
- d. Additional noise standards applying to specific activities are contained in some zone chapters and some of the chapters listed in c. above.
- e. In order to understand which rules apply to your activity, there are two aspects you need to consider in relation to Sub-chapter 6.1 Noise - whether you:
 - i. are generating noise; or
 - ii. may be affected by noise (a receiver of noise).
- f. If you are generating noise, the following steps may assist:

- i. Determine whether the activity is exempt from the noise rules, as listed in [Rule 6.1.4.2](#) or subject to [Rule 6.1.4.3](#) (a) in the [Central City](#).
 - ii. Check whether the activity has specific noise standards for that activity in [Rule 6.1.6.2](#). If so, only the standards in [Rule 6.1.6.2](#) apply (unless specified otherwise in [Rule 6.1.6.2](#)).
 - iii. Outside the [Central City](#), if not an activity covered in (f) ii. above, establish the zoning for all [sites](#) which will receive noise from the activity. This will include all [adjoining sites](#), but may also include other [sites](#) in the vicinity, particularly those that have more stringent noise rules than the [adjoining sites](#). Determine whether the noise generated by the activity will meet the Noise Standards specified in [Rule 6.1.5.2.1](#) for all noise receiving [sites](#).
 - iv. In the [Central City](#), if not an activity covered in (f) ii. above, establish the precinct (as shown on the Central City Entertainment and Hospitality Precinct Overlay Planning Map) for the [sites](#) which will receive noise from the activity. Determine whether the noise generated by the activity will meet the Noise Standards specified in [Rule 6.1.5.2.2](#) for that precinct, at any [site](#) receiving noise from the activity.
 - v. Check your activity is not specified as a discretionary activity, non-complying activity or prohibited activity.
- g. If you may be affected by noise (a receiver of noise), the following steps may assist:
- i. Check whether the activity is near infrastructure specified in [Rule 6.1.7.2.1](#), or [Rule 6.1.7.2.2](#), and is an activity specified in those rules.
 - ii. Check the activity status in [Rule 6.1.7.1](#) and whether the activity meets the Activity Standards in [Rule 6.1.7.2](#).

6.1.4 General Noise Rules

6.1.4.1 Measurement and assessment of noise

- a. Unless otherwise specified elsewhere in this [District Plan](#), noise shall be measured in accordance with [NZS6801:2008 "Acoustics – Measurement of environmental sound"](#), and assessed in accordance with [NZS 6802:2008 "Acoustics-Environmental noise"](#), except that provisions in NZS 6802 referring to Special Audible Characteristics shall not be applied.
- b. The noise standards shall apply at any point within a [site](#) receiving noise from an activity, except where:
 - i. the [site boundary](#) is a [boundary](#) with a [site](#) in the Transport Zone outside the [Central City](#), in which case noise standards shall apply at or beyond the far boundary of the Transport Zone; or
 - ii. the [site boundary](#) is a [boundary](#) with a [site](#) in the Transport Zone, an open space zone or any combination of these zones in the [Central City](#), in which case noise standards shall apply at or beyond the far boundary of the Transport or open space zone; or
 - iii. the standards specify otherwise.

- c. Where a **site** is divided by a zone boundary, then each part of the **site** divided by the zone boundary shall be treated as a separate **site** for the purpose of these rules.

6.1.4.2 Exempt activities

- a. The provisions in [Rule 6.1.5](#) and [Rule 6.1.6](#) do not apply to the following noise sources:
 - i. traffic noise generated within a [Transport Zone](#);
 - ii. trains and crossing bells within a [Transport Zone](#), within the area of the Scheduled Activity (Ferrymead Heritage Park), and including railway yards, [rail sidings](#) (excludes new sidings on private land) or stations, tramways, trams and tram crossing bells;
 - iii. sirens used during an [emergency](#);
 - iv. helicopters used for an [emergency](#) and as an air ambulance;
 - v. outside the [Central City](#), boating activities permitted under [Rule 18.8.1.1 P3](#);
 - vi. outside the [Central City](#), normal [farming](#) practices undertaken for a limited duration, and using equipment which is mobile during its normal use. This includes activities such as harvesting, but does not include the use of helicopters, bird-scaring devices, frost control fans or irrigation pumps (for these activities refer to [Rule 6.1.6.2.4](#)). Motorbikes and chainsaws are only exempt when being used as part of normal [farming](#) activity;
 - vii. spontaneous social activities and children's play (but not including [preschools](#));
 - viii. the use of generators and mobile equipment (including vehicles) for [emergency](#) purposes, including testing and maintenance not exceeding 48 hours in duration, where they are operated by emergency services or lifeline [utilities](#); and
 - ix. the use of mobile generators by lifeline [utilities](#) for planned electricity supply interruption not exceeding 48 hours in duration; and
 - x. activities at [emergency service facilities](#) associated with [emergency](#) response and [emergency](#) response training.
- b. Any noise received in the [Open Space Natural Zone](#) from activities in the [adjoining](#) Specific Purpose (Burwood Landfill and Resource Recovery Park) is not subject to noise limits for the open space zone under [Rule 6.1.5.1](#). All other provisions apply to activities within the zone.

Advice note:

1. Although these noise sources are exempted from meeting the rules, any potential and actual adverse effects shall be considered for any discretionary or non-complying activity.
2. While not exempt from the noise provisions, broadband reversing alarms are encouraged in preference to tonal models.

6.1.4.3 Duration of resource consents for activities operating after 23:00 hours in Category 3 Precincts in ~~Commercial~~ Central City Mixed Use Zones

- a. In the ~~Commercial~~ Central City Mixed Use Zone and ~~Commercial~~ Central City Mixed Use Zone (South Frame)-~~Zone~~, any resource consent granted under [Rule 6.1.5](#) for activities operating after 23:00 hours in Category 3 Precincts shall be limited in duration to 7 years. For the avoidance of doubt, further resource consent/s for an additional 7 year term, or shorter duration, can be sought.

6.1.5 Zone Specific Noise Rules

- a. Rule 6.1.5 does not apply to activities for which activity specific rules are specified in [Rule 6.1.6](#) (unless otherwise specified in [Rule 6.1.6](#)).

6.1.5.1 Activity status tables

6.1.5.1.1 Permitted activities

- a. The activities listed below are permitted activities if they meet the activity specific standards set out in the following table.
- b. Activities may also be controlled, restricted discretionary, discretionary, non-complying or prohibited as specified in [Rules 6.1.5.1.2](#), [6.1.5.1.3](#), [6.1.5.1.4](#), [6.1.5.1.5](#) and [6.1.5.1.6](#).

	Activity	Activity specific standards
P1	Outside the Central City , any activity that generates noise and which is not exempt by Rule 6.1.4.2 or specified in Rule 6.1.5.1.1 P2 below.	a. Any activity that generates noise shall meet the Zone noise limits outside the Central City in Rule 6.1.5.2.1 .
P2	Outside the Central City , people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol, in all commercial zones <u>commercial zones</u> .	<ul style="list-style-type: none"> a. No noise standard applies. b. The activity shall only occur between 07:00 hours and 22:00 hours. c. The maximum size of the outdoor area shall be 50m². d. The outdoor area shall be setback at least 10 metres from the boundary of any site in a residential zone.
P3	In the Central City , any activity that generates noise and which is not exempt by Rule 6.1.4.2 .	a. Any activity that generates noise shall meet the Noise limits in the Central City in Rule 6.1.5.2.2 .

6.1.5.1.2 Controlled activities

There are no controlled activities.

6.1.5.1.3 Restricted discretionary activities

- a. The activities listed below are restricted discretionary activities.
- b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in [Rule 6.1.8](#), as set out in the following table.

Activity		The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 6.1.5.1.1 P1 or P3 that exceeds the noise limits in the activity specific standards by 10 dB or less.	a. Matters of discretion - Rule 6.1.8

6.1.5.1.4 Discretionary activities

- a. The activities listed below are discretionary activities.

Activity	
D1	Any activity listed in Rule 6.1.5.1.1 P2 that does not meet one or more of the activity specific standards.
D2	Any activity not provided for as a permitted, restricted discretionary or non-complying activity.

6.1.5.1.5 Non-complying activities

- a. The activities listed below are non-complying activities.

Activity	
NC1	Any activity listed in Rule 6.1.5.1.1 P1 or P3 that exceeds the noise limits in the activity specific standards by more than 10 dB.

6.1.5.1.6 Prohibited activities

There are no prohibited activities.

6.1.5.2 Noise Standards

6.1.5.2.1 Zone noise limits outside the Central City

- a. Outside the **Central City**, any activity that generates noise shall meet the Zone noise limits in Table 1 below at any **site** receiving noise from that activity, as relevant to the zone of the **site** receiving the noise.

Table 1: Zone noise limits outside the Central City

Zone of site receiving noise from the activity	Time (hrs)	Noise Limit (dB)	
		L_AEq	L_Amax
a. All residential zones (other than in the Accommodation and Community Facilities Overlay)	07:00-22:00	50	n/a
	22:00-07:00	40	65
b. All rural zones, except Rural Quarry Zone, assessed at any point within a notional boundary			
c. Specific Purpose (Flat Land Recovery) and Specific Purpose (Ōtākaro Avon River Corridor) Zones			
d. Papakāinga/Kāinga Nohoanga Zone			
e. All commercial zones commercial zones	07:00-22:00	55	n/a
	22:00-07:00	45	70
f. All open space zones			
g. All rural zones, except Rural Quarry Zone, assessed at the site boundary			
h. Accommodation and Community Facilities Overlay			
i. All industrial park zones (excluding Awatea and Memorial Avenue)			
j. Industrial Office Zone			
k. Specific Purpose (Cemetery, Schools, Tertiary Education, Golf Resort, Defence Wigram and Hospital) Zones			
l. Industrial General Zone	07:00-22:00	70	n/a
	22:00-07:00	70	n/a
Except that noise levels shall not exceed 50 dB L_AEq /75dB L_Amax at any residential unit lawfully established prior to 6 March 2017 during the hours of 22:00 to 07:00			
m. Industrial Park Zones – (Awatea and Memorial Avenue)	07:00-22:00	60	n/a
	22:00-07:00	60	n/a
Except that noise levels shall not exceed 50 dB			

Zone of site receiving noise from the activity	Time (hrs)	Noise Limit (dB)	
		L _{AEq}	L _{Amax}
L _{AEq} /75dB L _{Amax} at any residential unit lawfully established prior to 6 March 2017 during the hours of 22:00 to 07:00			
n. Industrial Heavy Zone Except that noise levels shall not exceed 50 dB L _{AEq} /75dB L _{Amax} at any residential unit lawfully established prior to 6 March 2017 during the hours of 22:00 to 07:00.	07:00-22:00	75	n/a
	22:00-07:00	75	n/a
o. Rural Quarry Zone p. Specific Purpose (Styx Mill Road Transfer Station) q. Specific Purpose (Burwood Landfill and Resource Recovery Park) Zone Except that noise levels shall not exceed 50 dB L _{AEq} /75dB L _{Amax} at any residential unit lawfully established prior to 6 March 2017 during the hours of 22:00 to 07:00.	07:00-22:00	65	n/a
	22:00-07:00	65	n/a

6.1.5.2.2 Noise limits in the Central City

- a. In the Central City, any activity that generates noise shall meet the Noise standards in Table 2 below at any site receiving noise from that activity, as relevant to the Category of Precinct in which the site receiving the noise is located (as shown on the Central City Entertainment and Hospitality Precinct Overlay Planning Map).

Table 2: Noise standards for each Category

Category of Precinct in which the site receiving noise is located	Applicable to:	Time (hrs)	Noise Limit		Exemptions
			L _{AEq}	L _{Amax}	
a. Category 1 - Higher noise level entertainment and hospitality precincts.	Activities other than discrete outdoor entertainment events	07:00-03:00	60	85	This shall not include noise from people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol that meet the specified outdoor area setback required by Rule 6.1.6.2.10 .
		03:00-07:00	60	75	
	Discrete outdoor entertainment events	07:00-22:00	65	85	
		22:00-07:00	65	85	

Category of Precinct in which the site receiving noise is located			Applicable to:	Time (hrs)	Noise Limit		Exemptions
					L _{AEq}	L _{Amax}	
b.	Category 2 - Lower noise level entertainment and hospitality precincts.	All except Victoria Street area	All activities	07:00-01:00	60	85	This shall not include noise from people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol that meet the specified outdoor area setback required by Rule 6.1.6.2.10 , between 07:00 hours and 23:00 hours for the Victoria Street area and between 07:00 hours and 01:00 hours for the remainder of Category 2.
				01:00-07:00	50	75	
		Victoria Street area	All activities	07:00-23:00	55	85	
				23:00-07:00	50	75	
c.	Category 3 - All Central City areas other than Category 1 and 2 entertainment and hospitality precincts.	All activities	07:00-23:00	55	85	This shall not include noise from people in outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol up to a maximum size of 50m ² , in all Category 3 Zones except High Density Residential Central City Zone , between 07:00 hours and 23:00 hours.	
			23:00-07:00	45	75		

Advice notes:

1. The map of the three categories is shown in the Central City Entertainment and Hospitality Precinct Overlay Planning Map.
2. Compliance with the noise limits in Table 2 relating to entertainment and hospitality activities may require assessment of the ability of individual **site** design and **building** construction to attenuate noise to the required level, e.g. noise lobbies, "sound ceilings" or other means, or certification by an experienced acoustic consultant.

6.1.6 Activity Specific Noise Rules

6.1.6.1 Activity status tables

6.1.6.1.1 Permitted activities

- a. The activities listed below are permitted activities if they meet the activity specific standards set out in the following table.
- b. Activities may also be controlled, restricted discretionary, discretionary, non-complying or prohibited as specified in [Rules 6.1.6.1.2](#), [6.1.6.1.3](#), [6.1.6.1.4](#), [6.1.6.1.5](#) and [6.1.6.1.6](#).

	Activity	Activity specific standards
P1	<p>Any activity listed in:</p> <ol style="list-style-type: none"> a. Rule 6.1.6.2.1 (Generators for emergency purposes); b. Rule 6.1.6.2.2 (Temporary military training activities or emergency management activities); c. Rule 6.1.6.2.3 (Temporary activities); d. Rule 6.1.6.2.4 (Rural activities); e. Rule 6.1.6.2.5 (Aircraft operations at Christchurch International Airport); f. Rule 6.1.6.2.6 (On-aircraft engine testing at Christchurch International Airport); g. Rule 6.1.6.2.8 (Helicopter movements); h. Rule 6.1.6.2.9 (Sensitive activities in the Central City), other than as provided for in Rule 6.1.6.1.4 D3; i. Rule 6.1.6.2.10 (Licensed premises outdoor areas in the Central City); or j. Rule 6.1.6.2.11 (Shooting ranges within 1 km of Peacock Springs). 	<ol style="list-style-type: none"> a. The activities shall meet the activity standards in the following rules: <ol style="list-style-type: none"> i. Rule 6.1.6.2.1 (Generators for emergency purposes); ii. Rule 6.1.6.2.2 (Temporary military training activities or emergency management activities); iii. Rule 6.1.6.2.3 (Temporary activities); iv. Rule 6.1.6.2.4 (Rural activities); v. Rule 6.1.6.2.5 (Aircraft operations at Christchurch International Airport), including the following additional activity standards: <ol style="list-style-type: none"> A. Rule 6.1.6.2.7.1 (Airport Noise Management Plan); B. Rule 6.1.6.2.7.2 (Acoustic treatment and advice); C. Rule 6.1.6.2.7.3 (Airport Noise Liaison Committee); vi. Rule 6.1.6.2.6 (On-aircraft engine testing at Christchurch International Airport), including the following additional activity standards: <ol style="list-style-type: none"> A. Rule 6.1.6.2.7.1 (Airport Noise Management Plan); B. Rule 6.1.6.2.7.2 (Acoustic treatment and advice);

	Activity	Activity specific standards
		<p>C. Rule 6.1.6.2.7.3 (Airport Noise Liaison Committee);</p> <p>vii. Rule 6.1.6.2.8 (Helicopter movements);</p> <p>viii. Rule 6.1.6.2.9 (Sensitive activities in the Central City);</p> <p>ix. Rule 6.1.6.2.10 (Licensed premises outdoor areas in the Central City); or</p> <p>x. Rule 6.1.6.2.11 (Shooting ranges within 1 km of Peacock Springs).</p> <p>b. In the Central City, all activities shall also comply with Rule 6.1.5.</p>
P2	Construction activities	a. Construction activities shall meet relevant noise limits in Tables 2 and 3 of NZS 6803:1999 Acoustics - Construction Noise , when measured and assessed in accordance with that standard.

6.1.6.1.2 Controlled activities

There are no controlled activities.

6.1.6.1.3 Restricted discretionary activities

- a. The activities listed below are restricted discretionary activities.
- b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in [Rule 6.1.8](#), as set out in the following table.

Activity	The Council's discretion shall be limited to the following matters:
<p>RD1 Any activity listed in:</p> <ol style="list-style-type: none"> a. Rule 6.1.6.2.1 (Generators for emergency purposes); b. Rule 6.1.6.2.2 (Temporary military training activities or emergency management activities); c. Rule 6.1.6.2.3 (Temporary activities); d. Rule 6.1.6.2.4 (Rural activities); e. Rule 6.1.6.2.9 (Sensitive activities in the Central City), other than as provided for in Rule 6.1.6.1.3 D3; f. Rule 6.1.6.2.10 (Licensed premises outdoor areas in the Central City); or 	<p>a. Matters of discretion – Rule 6.1.8</p>

Activity		The Council's discretion shall be limited to the following matters:
	<p>g. Rule 6.1.6.2.11 (Shooting ranges within 1 km of Peacock Springs), that:</p> <ul style="list-style-type: none"> i. exceeds any noise limits in the activity standards for that activity by 10 dB or less, or ii. does not meet one or more of the other activity standards for that activity. <p>Any application arising from Rule 6.1.6.1.3 RD1 g. (Shooting ranges within 1 km of Peacock Springs) shall not be publicly notified and shall be limited notified only to the trustees of The Isaac Conservation and Wildlife Trust or its successors (absent their written approval).</p> <p>Advice note:</p> <ol style="list-style-type: none"> 1. This rule does not apply to the Specific Purpose (Ruapuna Motorsport) Zone or the Christchurch Kart Club raceway at Carrs Road. 	
RD2	Construction activities listed in Rule 6.1.6.1.1 P2 that do not meet the activity specific standard.	

6.1.6.1.4 Discretionary activities

a. The activities listed below are discretionary activities.

Activity	
D1	<p>Any activity listed in:</p> <ul style="list-style-type: none"> a. Rule 6.1.6.2.5 (Aircraft operations at Christchurch International Airport); or b. Rule 6.1.6.2.6 (On-aircraft engine testing at Christchurch International Airport); <p>that does not meet one or more of the activity standards for that activity, including one or more of the relevant additional activity standards for these activities in Rules 6.1.6.2.7.1, 6.1.6.2.7.2 and 6.1.6.2.7.3.</p>
D2	<p>Helicopter movements listed in Rule 6.1.6.2.8 (Helicopter movements) that do not meet one or more of the activity standards for that activity, other than for air ambulance or emergencies.</p>
D3	<p>In the Central City, any residential activity or guest visitor accommodation located within a Category 1 Precinct as shown on the Central City Entertainment and Hospitality Precinct Overlay planning map.</p>

Activity	
	(Plan Change 4 Council Decision subject to appeal)

6.1.6.1.5 Non-complying activities

a. The activities listed below are non-complying activities.

Activity	
NC1	Any activity not provided for as a permitted, restricted discretionary or discretionary activity.
NC2	Any activity listed in: <ul style="list-style-type: none"> a. Rule 6.1.6.2.1 (Generators for emergency purposes); b. Rule 6.1.6.2.2 (Temporary military training activities or emergency management activities); c. Rule 6.1.6.2.3 (Temporary activities); d. Rule 6.1.6.2.4 (Rural activities); e. Rule 6.1.6.2.9 (Sensitive activities in the Central City), other than as provided for in Rule 6.1.6.1.4 D3; f. Rule 6.1.6.2.10 (Licensed premises outdoor areas in the Central City); or g. Rule 6.1.6.2.11 (Shooting ranges within 1 km of Peacock Springs); that exceeds any noise limits in the activity standards for that activity by more than 10 dB.

6.1.6.1.6 Prohibited activities

There are no prohibited activities.

6.1.6.2 Activity standards

6.1.6.2.1 Generators for emergency purposes

- a. Except as provided for in [Rule 6.1.4.2](#), the use of generators, for **emergency** purposes only, including during planned electricity supply interruption exceeding 48 hours in duration, shall meet the following activity standards:
 - i. The activity shall, at any time, meet the Zone noise limits specified for between 07:00 hours and 22:00 hours in Table 1 of [Rule 6.1.5.2.1](#) at any **site** receiving noise from the activity, as relevant to the zone of the **site** receiving the noise.
 - ii. Routine testing shall occur only on weekdays between the hours of 09:00 and 17:00, and shall meet the Zone noise limits in Table 1 of [Rule 6.1.5.2.1](#) at any **site** receiving noise from the activity, as relevant to the zone of the **site** receiving the noise.
- b. For avoidance of doubt, use of generators not for **emergency** purposes, including peak-logging, shall comply with [Rule 6.1.5](#).

6.1.6.2.2 Temporary military training activities or emergency management training activities

- a. Temporary military training activities or emergency management training activities shall meet the following activity standards:
 - i. The activities shall meet the noise standards in Table 3 below.
 - ii. Activity 1 in Table 3 shall meet either the minimum separation distance; or, if within the minimum separation distance, the maximum noise limit, as specified in Table 3. At least 10 days prior to the activity occurring, the Council and the occupier of the land and adjoining properties shall be informed of the activity and whether Standard a 1 a. or 1 b. will be used.
 - iii. The decibel noise standards specified in Table 3 for Activity 1. and 3. shall apply at any point within the notional boundary of any sensitive activity.
 - iv. The minimum separation distances specified in Table 3 shall be measured between the boundary of the temporary military training activity or emergency management training activity and the notional boundary of any sensitive activity.
 - v. The duration of the temporary military training activity or emergency management training activity shall be limited to a period not exceeding 31 days, excluding set-up and pack-down activities.

Table 3: Temporary military training activity or emergency management training activity noise standards

	Activity	Time (hrs)	Noise Standard
1.	Firing of weapons and single or multiple explosive events.	07:00 – 19:00	a. The activity shall either: <ol style="list-style-type: none"> i. meet a minimum separation distance of 1,500 metres; or ii. if within 1,500 metres, not exceed the noise level of 65 dB L_{Amax}. b. The activity shall meet the decibel noise limits of Table 1 or 2 of Rule 6.1.5.2, except that on up to 10 days per year on any site, activities may exceed the decibel noise limits in Table 1 or 2 of Rule 6.1.5.2 by 10 dB or less.
		19:00 – 07:00	a. The activity shall either: <ol style="list-style-type: none"> i. meet a minimum separation distance of 4,500 metres; or ii. if within 4,500 metres, not

	Activity	Time (hrs)	Noise Standard
			<p>exceed the noise level of 50 dB L_{Amax}.</p> <p>b. The activity shall meet the decibel noise limits of Table 1 or 2 of Rule 6.1.5.2, except that on up to 10 days per year on any site, activities may exceed the decibel noise limits in Table 1 or 2 of Rule 6.1.5.2 by 10 dB or less.</p>
2.	Helicopter movements	All times	NZS6807:1994 'Noise Management and Land Use Planning for Helicopter Landing Areas'
3.	Any other noise-generating activities (including mobile and fixed sources).		<p>a. The activity shall meet the decibel noise limits of Table 1 or 2 of Rule 6.1.5.2, except that:</p> <p>i. on up to 10 days per year on any site, activities may exceed the decibel noise limits in Table 1 or 2 of Rule 6.1.5.2 by 10 dB or less, and</p> <p>ii. the noise limit in Table 1 g. of Rule 6.1.5.2 at a rural site boundary shall not apply.</p>

6.1.6.2.3 Temporary activities

- a. Temporary activities and buildings specified in Rule 6.2, other than temporary military training activities or emergency management activities which are subject to the activity standards in Rule 6.1.6.2.2, shall meet the following activity standards:
- i. Temporary activities and buildings specified in Rule 6.2, and located at a location listed in Table 4 below, shall meet the noise standards set out in Table 4.
 - ii. Any temporary activity and building specified in Rule 6.2, and located at a location not listed in Table 4, shall:
 - A. be located no closer than 30 metres from any residential unit;
 - B. undertake sound amplified activities for a total duration not exceeding 4 hours per day on any site, including all sound checks; and
 - C. occur only between 09:00 hours and 22:00 hours;

and for sound amplified activities, either:

 - D. have a total amplified power not exceeding 500 Watts RMS; or
 - E. result in a sound level not exceeding 65 dB L_{Aeq} at any residential unit, to be evidenced by a report from a suitably qualified acoustic consultant.

Table 4: Location-specific noise standards

	Location	Maximum No. of Days	Time limit (hrs)	Noise limit (dB)		Qualifications
				L _{AEq}	L _{AFmax}	
a.	Lancaster Park	3 days per year	09:00–22:30	65	85	a. Assessed at the boundary with any site in a residential zone.
b.	Queen Elizabeth II Park					
c.	Specific Purpose (Defence Wigram) Zone	Refer to Rule 13.1.4.1.1 P2	Refer to Rule 13.1.4.1.1 P2	65 (15 min)	85	a. Applies only to temporary recreation activities or exhibitions provided for by Rule 13.1.4.1.1 P2 .
d.	Temporary Christchurch Stadium	Refer to the provisions for Temporary Christchurch Stadium, including noise, of Chapter 18 Rule 18.5.4 .				
e.	Christchurch Kart Club Raceway at Carrs Road	120 days per year, excluding Christmas Day and Boxing Day	09:00-17:00	65	85	a. These noise limits shall apply between 09:00 hrs and 18:00 hrs for official kart racing events that comply as a KartSport NZ race meeting with a status of Group A to Group G event, and are fixed in the published annual calendar of the Christchurch Kart Club.
		1 day between Monday and Friday each week, excluding public holidays, that is fixed in the published annual calendar of Christchurch Kart Club	13:00-17:00	65	85	
f.	Ruapuna Motorsport Park – Specific Purpose (Ruapuna Motorsport) Zone	Refer to the noise provisions of the Specific Purpose (Ruapuna Motorsport) Zone in Chapter 13.10				
g.	Hagley Park	Any	09:00-22:00	50	85	

	Location	Maximum No. of Days	Time limit (hrs)	Noise limit (dB)		Qualifications
				L _{AEq}	L _{AFmax}	
		30 days per year	09:00-22:30	70	85	<p>a. Assessed at any property in a <u>Residential Central City-High Density Residential Zone</u>.</p> <p>b. Fireworks are exempt from the L_{Amax} limits.</p>
		5 of the above 30 days per year	09:00-23:30	75	85	
		New Years Eve/Day	09:00-00:30 (12:30am New Years Day)	75	85	
h.	Cathedral Square	120 days per year	09:00-22:30	70	85	
i.	Victoria Square	20 days per year	09:00-22:30	70	85	
j.	Specific Purpose (Ōtākaro Avon River Corridor) Zone	30 days per year	09:00-22:30	70	85	<p>a. Assessed at the boundary of any site:</p> <ul style="list-style-type: none"> i. In a residential zone adjoining the Specific Purpose (Ōtākaro Avon River Corridor) Zone; or ii. Identified in Appendix 13.14.6.2 that is in private ownership; or iii. Located within an Edge Housing Area Overlay or Trial Housing Area Overlay as shown in the Development Plan in Appendix 13.14.6.1

Advice note:

1. Refer to [Appendix 6.11.3](#) for maps of the locations specified in this table.

6.1.6.2.4 Rural activities

- a. Bird-scaring devices shall meet the following activity standards:
 - i. Any bird-scaring devices shall:
 - A. not operate between sunset and sunrise;
 - B. not be used within 200 metres of a **notional boundary** of a **residential unit**;
 - ii. Noise from such devices, including clusters of up to three shots from gas operated devices, or three multiple shots from a firearm in rapid succession, shall not exceed 65 dB L_{AE} when assessed at any point within the **notional boundary** of any **residential unit** on any other **site**.
- b. Frost control fans shall meet the following activity standards:
 - i. Any noise generated by a frost control fan shall not exceed 55 dB L_{Aeq} when assessed at the **notional boundary** of any **residential unit** on a separate **site** under different ownership.
 - ii. This noise limit in [Rule 6.1.6.2.4 b.i.](#) applies to the total noise from all frost control fans in the vicinity operating simultaneously.
 - iii. The noise limit in [Rule 6.1.6.2.4 b.i.](#) includes a correction for the special audible characteristics of frost control fans and no further penalty shall be applied to measured or calculated noise levels.
- c. Any other rural activity shall comply with [Rule 6.1.5](#).

6.1.6.2.5 Aircraft operations at Christchurch International Airport

- a. **Aircraft operations** at Christchurch International Airport shall meet the following activity standards:
 - i. Noise from **aircraft operations** shall not exceed 65 dB L_{dn} outside the 65 dB L_{dn} Air Noise Compliance Contour shown in Figure 1, other than as provided for in [Rule 6.1.6.2.5 a.ii.](#)
 - ii. Noise from **aircraft operations** may exceed the aircraft noise limit in [Rule 6.1.6.2.5 a.i.](#) by not more than 2 dB, provided that such exceedance is due to atypical weather, national flight disruption, natural disaster or other unplanned circumstance.
 - iii. Monitoring and determining compliance with activity standards i. and ii. above shall be as follows:
 - A. Noise monitoring of **aircraft operations** shall be based on calculations from an operational aircraft noise model, and records of actual **aircraft operations** at Christchurch International Airport over the previous year's **aircraft operations**.
 - B. Noise from **aircraft operations** shall be calculated as the Annual Aircraft Noise Contour (**AANC**), over the busiest three month period of the previous year.
 - C. The calculations shall be performed by a person with appropriate qualifications and experience in airport noise modelling and acoustics assessments.

- D. The calculated results shall be verified by noise measurements carried out in accordance with the Airport Noise Management Plan required under [Rule 6.1.6.2.7.1](#).
 - E. The measurement of aircraft sound exposure levels and the derivation of the 65 dB L_{dn} contour shall be in accordance with [NZS 6805:1992](#).
- iv. An Aircraft Operations Noise Monitoring Report shall be provided annually by the [airport operator](#) to the [Council](#), with the first required by the 6 March 2018. The report shall include:
- A. the calculated [AANC](#);
 - B. the results of the verification measurements;
 - C. analysis of compliance with reference to [Rule 6.1.6.2.5](#) a.i. and ii. (including the number of exceedances and the reasons for them); and
 - D. a summary of complaints received over the previous year in relation to noise from [aircraft operations](#), and any actions taken in response.
- v. The additional activity standards in [Rule 6.1.6.2.7](#) for [aircraft operations](#) at Christchurch International Airport shall be met.

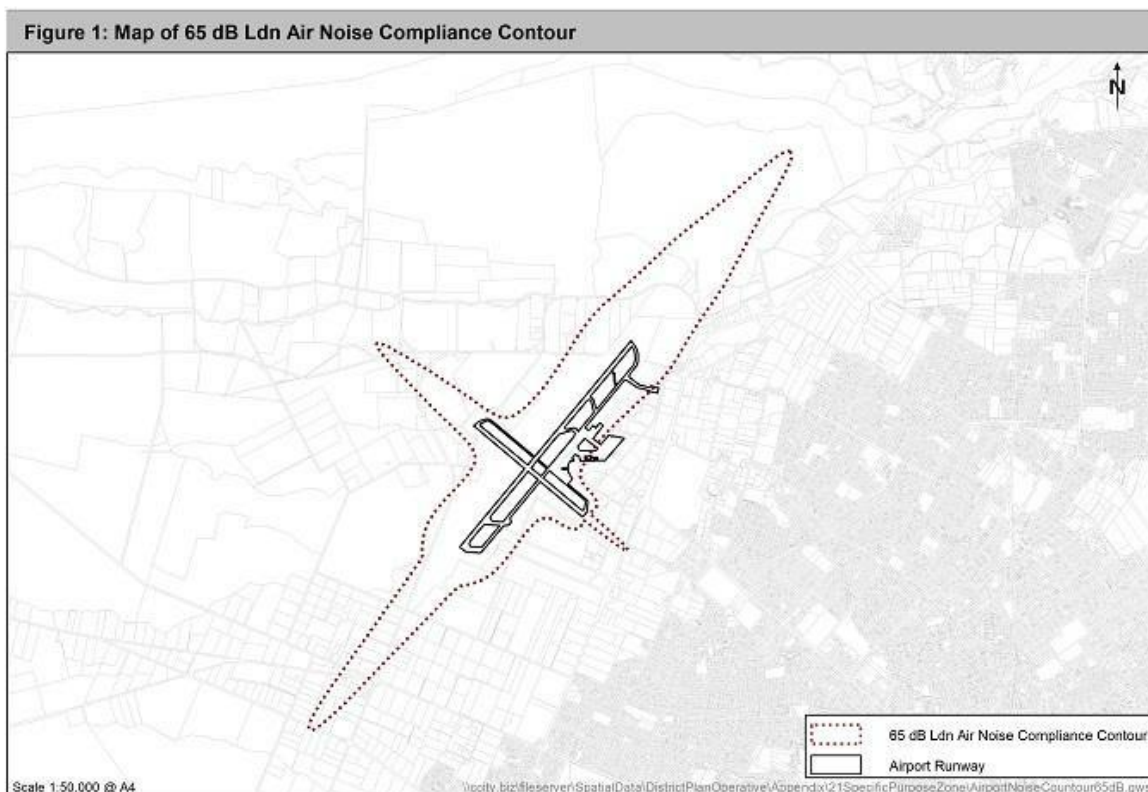


Figure 1: 65 dB Ldn Air Noise Compliance Contour

6.1.6.2.6 On-aircraft engine testing at Christchurch International Airport

- a. The testing of engines on aircraft at Christchurch International Airport shall meet the following activity standards:
 - i. Noise from the testing of engines on aircraft shall not exceed the noise limits shown in Table 5 below at the engine testing compliance monitoring positions (ETCMPs) shown in Figure 2.

Table 5: On-aircraft engine testing noise limits

Noise Limit	Engine testing compliance monitoring positions (ETCMP) - refer Figure 2
65 dB L_{dn} , 7 day	8 points
55 dB L_{dn} , 7 day	8 points
75 dB L_{Amax} 22:00 to 07:00 only	Edge of residential zone – 3 points

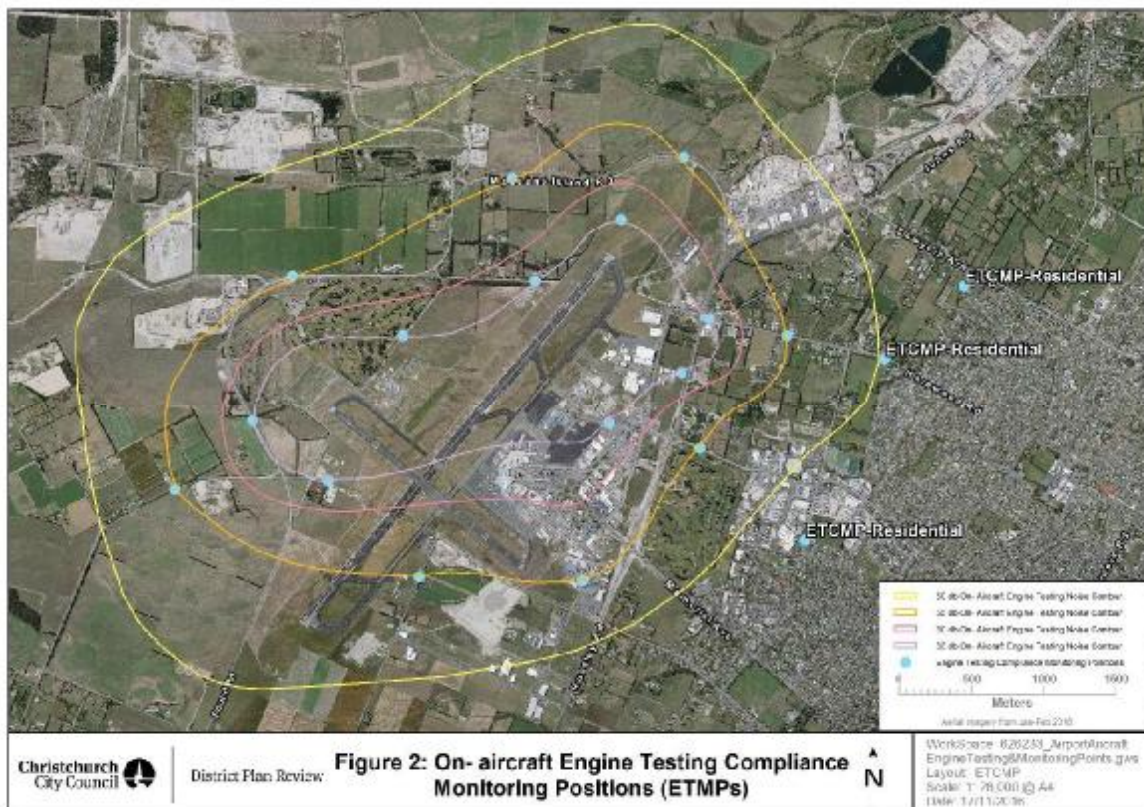


Figure 2: On-aircraft engine testing compliance monitoring positions (ETCMPs)

- ii. All high power testing of jet engines on an aircraft shall occur between the hours of 07:00h and 22:00h, except that a maximum of 5 unplanned engine testing events within any three

month period, up to a maximum of 12 unplanned **engine testing** events per annum, may occur between the hours of 22:00h and 07:00h.

- iii. Testing of turbo prop engines on an aircraft between the hours of 22:00h and 07:00h, when the total duration of testing at high power is five minutes or more per aircraft, shall be conducted in the vicinity of the threshold of Runway 11 (ie. the north-western end of the cross-runway).
- iv. The following exclusions apply:
 - A. The testing of engines on an aircraft used for Antarctic operations, is excluded from activity standards i.-iii..
 - B. The testing of engines on any aircraft is excluded from activity standards i.–iii., where such work is necessary to satisfy an airworthiness directive or other like safety requirement issued by the Minister of Transport, the Director of Civil Aviation or the Civil Aviation Authority, as is any other unplanned **engine testing** arising from an aircraft operator’s identification of a safety issue relating to an aircraft fleet, or required as a result of a natural disaster including volcanic eruption.
 - C. The testing of turbo prop engines on an aircraft is exempted from activity standard iii. when Runway 11/29 is in use.
- v. Monitoring and determining compliance with activity standard a.i. above shall be as follows:
 - A. Compliance or otherwise with activity standard a.i. shall be demonstrated by calculations of on-aircraft **engine testing** noise emissions based on the actual on-aircraft **engine testing** events and calculations of noise emissions for the **engine testing** events and configurations in question. The noise level ($L_{dn, 7day}$) shall be calculated as a 7 day rolling average.
 - B. The calculations in activity standard a.v.A. shall be verified by measurements undertaken with reference to at least four ETCMPs for a sample of at least two different on-aircraft engine test configurations. Verification measurements shall be carried out for an initial period of 6 months from 6 March 2017 and subsequently be undertaken at least once every two years.
- vi. An On-aircraft Engine Testing Report shall be provided quarterly by the **airport operator** to the **Council**, with the first covering the period ending the 30 June 2017 and provided to the Council by the 15 July 2017. The report shall include:
 - A. a summary of all on-aircraft **engine testing** activities undertaken in the quarter; and
 - B. identification of all tests undertaken both in accordance with activity standard a.i. and those excluded by activity standard a.iv., including reasons for the tests excluded and any measures taken to manage noise effects during those excluded tests.
- vii. An On-aircraft Engine Testing Noise Monitoring Report shall be provided annually by the **airport operator** to the **Council** by 6 March 2018, and annually thereafter. The report shall include:
 - A. the results of verification measurements in accordance with activity standard v.B.; and

- B. analysis of compliance with reference to [Rule 6.1.6.2.6 a.i.](#); and
 - C. a summary of complaints received over the previous year in relation to noise from on-aircraft [engine testing](#), and any actions taken in response.
- viii. The additional activity standards in [Rule 6.1.6.2.7](#) for on-aircraft [engine testing](#) at Christchurch International Airport shall be met.

6.1.6.2.7 Additional activity standards for aircraft operations and on-aircraft engine testing at Christchurch International Airport

- a. The following additional activity standards apply to [aircraft operations](#) and to the testing of engines on aircraft at Christchurch International Airport.

6.1.6.2.7.1 Airport Noise Management Plan

- a. Within 12 months of 6 March 2017, noise from [aircraft operations](#) and on-aircraft [engine testing](#) at Christchurch International Airport shall be managed in accordance with an Airport Noise Management Plan prepared by a suitably qualified and experienced person on behalf of the [airport operator](#) and in consultation with the Airport Noise Liaison Committee, in accordance with the requirements set out in [Appendix 6.11.14](#). The Airport Noise Management Plan shall be reviewed, and updated if required, at least once every two years.
- b. The Airport Noise Management Plan shall:
 - i. demonstrate how compliance with the following noise limits will be achieved:
 - A. for [aircraft operations](#) - [Rule 6.1.6.2.5](#); and
 - B. for on-aircraft [engine testing](#) - [Rule 6.1.6.2.6](#).
 - ii. provide the details of the noise monitoring programme;
 - iii. incorporate a procedure for transparently and expediently responding to any complaints received in relation to noise from [aircraft operations](#) and on-aircraft [engine testing](#); and
 - iv. incorporate a procedure for transparently and expediently presenting, in a publicly accessible forum, the following:
 - A. the Aircraft Operations Noise Monitoring Report, On-aircraft Engine Testing Report, and On-aircraft Engine Testing Noise Monitoring Report required by [Rules 6.1.6.2.5](#) and [6.1.6.2.6](#);
 - B. a 7-day rolling report of noise from on-aircraft [engine testing](#) against the requirements of [Rule 6.1.6.2.6 a.](#); and
 - C. a daily L_{Amax} report of noise from on-aircraft [engine testing](#) against the requirements of [Rule 6.1.6.2.6 a.](#) at the edge of the residential zone.

6.1.6.2.7.2 Acoustic treatment and advice

- a. Within 12 months of 6 March 2017, an Acoustic Treatment Programme shall be prepared by the [airport operator](#), in consultation with the Airport Noise Liaison Committee, in accordance with

the requirements of [Appendix 6.11.15](#), for any [residential unit](#) existing as at 6 March 2017 and located within the Rural Urban Fringe and Rural Waimakariri Zones, that is partly or wholly located within either:

- i. the 65 dB L_{dn} Annual Aircraft Noise Contour as shown in the Aircraft Operations Noise Monitoring Report provided annually to the [Council](#) in accordance with [Rule 6.1.6.2.5 a.iv.](#); or
- ii. the 65 dB and 60 dB L_{dn} Engine Testing Contours shown on the Planning Maps.

The Acoustic Treatment Programme shall be reviewed, and updated if required, at least once every two years.

- b. Within the following timeframes, acoustic treatment shall be formally offered by the [airport operator](#) to the owners of any [residential unit](#) that meets the requirements of [Rule 6.1.6.2.7.2 a.](#), in accordance with the Acoustic Treatment Programme and the requirements of c. or d. below:

- i. within 24 months of 6 March 2017 for all [residential units](#) that meet the requirements at that time; and
- ii. each year after that date, within 12 months from the date of the provision to the [Council](#) of the Aircraft Operations Noise Monitoring Report in accordance with [Rule 6.1.6.2.5 a. iv.](#), for any additional [residential units](#) that meet the requirements at that time.

- c. Where a [residential unit](#) is partly or wholly contained within either:

- i. the 65 dB L_{dn} Annual Aircraft Noise Contour as shown in the Aircraft Operations Noise Monitoring Report provided annually to the [Council](#) in accordance with [Rule 6.1.6.2.5 a.iv.](#); or
- ii. the 65 dB L_{dn} Engine Testing Contour shown on the planning maps,

the formal offer from the [airport operator](#) to the owner of that [residential unit](#) shall be for 100% funding for retrofitting acoustic treatment, to achieve the internal design sound level of 40 dB L_{dn} in ~~habitable rooms~~ [habitable rooms](#). If [windows](#) and doors are required to be closed to achieve the internal design sound level, the acoustic treatment shall include [mechanical heating, cooling and ventilation](#) meeting the requirements of [Rule 6.1.7.2.1 a.viii](#) for sound generation and airflow rate.

- d. Where a [residential unit](#) is partly or wholly located between the 60 dB L_{dn} and the 65 dB L_{dn} Engine Testing Contours shown on the Planning Maps (but not within the 65 dB L_{dn} Annual Aircraft Noise Contour), the formal offer from the [airport operator](#) to the owner of that [residential unit](#) shall be for 75% funding for retrofitting [mechanical ventilation](#), to allow [windows](#) to be closed if necessary to achieve an internal design sound level of 40 dB L_{dn} for ~~habitable rooms~~ [habitable rooms](#). [Mechanical ventilation](#) shall meet the requirements of [Rule 6.1.7.2.1 a.viii](#) for sound generation and airflow rate.

- e. Where the offers under b. - d. above are accepted by the owners, the acoustic treatment shall be provided by the [airport operator](#) according to the Acoustic Treatment Programme prepared under a. above, but not exceeding a cost of \$30,000 (under c.) or \$22,500 (under d.) per [residential unit](#) (inclusive of GST and inflation adjusted from 2016 to the Consumer Price Index).

- f. An internal design sound level of 40 dB L_{dn} for ~~habitable rooms~~ habitable rooms is not required to be achieved if:
 - i. the property owner accepts a form or level of acoustic treatment that results in a different internal design sound level; or
 - ii. it is impracticable to achieve the specified internal design sound level due to the desirability of maintaining the heritage fabric of a building. Instead, the internal design sound level of the habitable spaces will be reduced as far as practicable.
- g. Within 24 months of 6 March 2017, the airport operator shall provide technical advice on acoustic treatment to all residential units existing as at 6 March 2017 within the Rural Urban Fringe, Rural Waimakairiri or Rural Quarry Zones, which are located partly or wholly located between the 55 dB L_{dn} and the 60 dB L_{dn} Engine Testing Contours shown on the Planning Maps.

6.1.6.2.7.3 Airport Noise Liaison Committee

- a. Within 6 months of 6 March 2017, an Airport Noise Liaison Committee (the Committee) shall be established and operated by the airport operator.
- b. The airport operator shall:
 - i. invite the following parties to appoint members of the Committee:
 - A. two representatives appointed by the airport operator;
 - B. at least two members of Christchurch City Community Boards (as representatives of the community) appointed by the Council;
 - C. one Environmental Health Officer appointed by the Council (non-voting);
 - D. two representatives appointed by the Board of Airline Representatives of New Zealand; and
 - E. one representative appointed by the Isaac Conservation and Wildlife Trust.
 - ii. provide facilities and administrative support for the Committee in order that it can meet not less than twice annually.
- c. The Committee may consider and make recommendations to the airport operator on:
 - i. Any community concerns regarding noise from aircraft operations and engine testing;
 - ii. Liaison with, and provision of relevant information to the community;
 - iii. the preparation, review and updating if required of the Airport Noise Management Plan as required by Rule 6.1.6.2.7.1;
 - iv. the preparation, review and updating if required of the Acoustic Treatment Programme and its implementation as required by Rule 6.1.6.2.7.2;
 - v. complaints received over the previous year in respect of noise from aircraft operations and on-aircraft engine testing, and any actions taken in response to those complaints; and
 - vi. Reviewing, and updating if required, the procedures associated with noise complaints received over the previous year.

- d. The **airport operator** shall provide by 6 March 2018, and annually thereafter, a report to the **Council** regarding the following:
 - i. the composition of the Committee; and
 - ii. summaries of the Committee's consideration of the matters specified in [Rule 6.1.6.2.7.3 c.](#)

6.1.6.2.8 Helicopter movements

- a. Outside the Specific Purpose (Airport) Zone, **helicopter movements** shall meet the following activity standards:
 - i. **Helicopter movements** shall only occur between 08:00 hours and 18:00 hours. These hours of operation shall not apply to **helicopter movements** which take place further than 450 metres from a **residential unit**.
 - ii. Within 25 metres of any **residential unit**, no **helicopter movement** shall take place, unless that **residential unit** is on the **site** on which the landing or take-off occurs.
 - iii. Between 25 metres and 450 metres from a **residential unit**, the number of **helicopter movements** on a **site** shall not exceed 24 in any calendar year, or 10 in any month, or six in any week, unless that **residential unit** is on the **site** on which the landing or take-off occurs.
- b. Within the Specific Purpose (Airport) Zone, noise created by **helicopter movements**, or hovering above points within the zone, shall not exceed 50 dB L_{dn} at any point within the **notional boundary** of a **residential unit** or a **building** occupied by a **sensitive activity** on any rurally zoned **site** or within the **boundary** of any residentially zoned **site**.

6.1.6.2.9 Sensitive activities in the Central City

- a. **Sensitive activities** in the **Central City** shall meet the following activity standards:
 - i. Any **sensitive activity** shall achieve a minimum external to internal noise reduction of:
 - A. Category 2 Precincts:
 - I. 35 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms;
 - II. 30 dB $D_{tr, 2m, nT, w} + C_{tr}$ for other **habitable spaces**.
 - B. Category 3 Precincts **adjoining** the Category 1 Precinct:
 - I. 35 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms;
 - II. 30 dB $D_{tr, 2m, nT, w} + C_{tr}$ for other **habitable spaces**.
 - C. Category 3 Precincts zoned residential, if within 75 metres of a Category 1 or 2 Precinct shown on the [Central City Noise Environments Planning Map](#), and not already covered by B. above:
 - I. 30 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms.
 - D. Category 3 Precincts zoned **City Centre**, ~~Commercial Central City Business~~, ~~Commercial Central City Mixed Use~~, ~~Commercial Central City Mixed Use (South~~

Frame) and ~~Commercial Local Neighbourhood Centre~~ and not already covered by B. above:

- I. 30 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms.
- E. CMUA Outer Noise Insulation Area as shown on the Central City Noise Environments Planning Map:
 - I. 35 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms
 - II. 30 dB $D_{tr, 2m, nT, w} + C_{tr}$ for other **habitable spaces**.
- F. CMUA Inner Noise Insulation Area as shown on the Central City Noise Environments Planning Map:
 - I. 35 dB $D_{tr, 2m, nT, w} + C_{tr}$ for bedrooms
 - II. 35 dB $D_{tr, 2m, nT, w} + C_{tr}$ for other **habitable spaces**.

Advice note:

- 1. Meeting this activity standard can be achieved by either:
 - a. Conforming with the schedule of typical building constructions set out in [Appendix 6.11.4](#);
or
 - b. Providing an acoustic design certificate signed by a suitably qualified acoustic engineer stating the design proposed is capable of meeting the above standards.

6.1.6.2.10 Licensed premises outdoor areas in the Central City

- a. Outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol in the **Central City** shall meet the following activity standards:
 - i. Outdoor areas of premises licensed for the sale, supply and/or consumption of alcohol located within Category 1 or 2 Precincts shall be setback by at least 25 metres from the boundary of any premise, or **boundary** of any **site**, that is a Category 3 Precinct zoned **High Density Residential Central City, Commercial Central City Mixed Use or Commercial Central City Mixed Use (South Frame)**.
 - ii. Activity standard i. shall not apply to **sites** that adjoin areas designated as H4 Stadium (Incorporating Spectator Events Facility) shown in [Planning Maps 32 and 39](#).
 - iii. For the avoidance of doubt, the 25 metre setback can include any Transport Zone or open space zone, or any combination of these.

6.1.6.2.11 Shooting ranges within 1 km of Peacock Springs

- a. Any shooting ranges located within 1 km of the Peacock Springs Conservation Area, as shown in Chapter 17 [Appendix 17.12.1](#), shall not generate noise levels exceeding 60 dB L_{Amax} at any time when received at any point within the Peacock Springs Conservation Area, except that, for the

purpose of determining compliance with this rule within Lot 1 DP 38246, noise measurements shall be taken from points within the base of the former quarry.

- b. Notwithstanding [Rule 6.1.3](#) f.ii., the Zone Specific Noise Rules in [Rule 6.1.5](#) shall also apply.

6.1.7 Rules - Activities near infrastructure

6.1.7.1 Activity status tables

6.1.7.1.1 Permitted activities

- a. The activities listed below are permitted activities, if they meet the activity specific standards set out in the following table.
- b. Activities may also be controlled, restricted discretionary, discretionary, non-complying or prohibited as specified in [Rules 6.1.7.1.2](#), [6.1.7.1.3](#), [6.1.7.1.4](#), [6.1.7.1.5](#) and [6.1.7.1.6](#).

Activity	Activity specific standards
<p>P1 Any activity listed in:</p> <p>a. Rule 6.1.7.2.1 (Sensitive activities near roads and railways); or</p> <p>b. Rule 6.1.7.2.2 (Activities near Christchurch Airport)</p>	<p>a. The activities shall meet the activity standards in the following rules:</p> <p>i. Rule 6.1.7.2.1 (Sensitive activities near roads and railways); or</p> <p>ii. Rule 6.1.7.2.2 (Activities near Christchurch Airport)</p>
<p>P2 In any rural zone other than the Rural Quarry Zone, any new noise sensitive activity and any addition to an existing noise addition of a whole room to an existing building or any part of a new building where these are intended for a sensitive activity proposed between the Ruapuna Inner and Outer Noise Boundary relating to Ruapuna Motorsport Park as shown on the relevant Planning Maps.</p> <p>(Plan Change 4 Council Decision subject to appeal)</p>	<p>a. The activities shall be designed and constructed to ensure compliance with the indoor design sound levels in Rule 6.1.7.2.1.</p> <p>Advice note:</p> <p>1. These rules are intended to mitigate the effects of motorsport noise within internal building spaces only. Noise from motor sport activities will also be audible outside of buildings to a varying degree. When constructing new dwellings, residents are encouraged to consider orientating outdoor living spaces away from the Motorsport Park. Where this is not practical, the use of solid continuous walls or fencing encircling the outdoor space, can be used to help mitigate noise.</p>

6.1.7.1.2 Controlled activities

There are no controlled activities.

6.1.7.1.3 Restricted discretionary activities

- a. The activities listed below are restricted discretionary activities.
- b. Discretion to grant or decline consent and impose conditions is restricted to the matters of discretion set out in [Rule 6.1.8](#), as set out in the following table.

Activity		The Council's discretion shall be limited to the following matters:
RD1	Any activity listed in Rule 6.1.7.2.1 (Sensitive activities near roads and railways) that exceeds any noise limits in the activity standards for that activity by 10 dB or less.	a. Matters of discretion – Rule 6.1.8
RD2	Any new buildings and/or additions to existing buildings located within the 55dB L_{dn} air noise contour shown on the Planning Maps that do not meet one or more of the activity standards	a. Matters of discretion – Rule 6.1.8
RD3	Any new buildings and/or additions to existing buildings located within the 55 dB L_{dn} engine testing contour shown on the Planning Maps that do not meet the L_{dn} standards in the	a. Matters of discretion – Rule 6.1.8

6.1.7.1.4 Discretionary activities

There are no discretionary activities.

6.1.7.1.5 Non-complying activities

- a. The activities listed below are non-complying activities.

Activity	
NC1	Any new buildings and/or additions to existing buildings located within the 55dB L_{dn} air noise contour shown on the Planning Maps that do not meet one or more of the activity standards in Rule 6.1.7.2.2.
NC2	Any new buildings and/or additions to existing buildings located within the 55 dB L_{dn} engine testing contour shown on the Planning Maps that do not meet the L_{dn} standards in the activity standards in Rule 6.1.7.2.2.
NC3	Any activity not provided for as a permitted, restricted discretionary or prohibited activity.
NC4	Any activity listed in Rule 6.1.7.2.1 (Sensitive activities near roads and railways) that exceeds any noise limits in the activity standards for that activity by more than 10 dB.

NC5	<p>In any rural zone, any addition of a whole room to an existing building or any part of a new building where these are intended for a new noise sensitive activity located within the Ruapuna Inner Noise Boundary surrounding Ruapuna Motorsport Park as shown on the relevant Planning Maps.</p> <p>(Plan Change 4 Council Decision subject to appeal)</p>
NC6	<p>In any rural zone, other than the Rural Quarry Zone, any addition of a whole room to an existing building or any part of a new building where these are intended for a new noise sensitive activity or any addition to an existing noise sensitive activity proposed between the Ruapuna Inner and Outer Noise Boundary relating to Ruapuna Motorsport Park, as</p>

Activity	shown on the relevant Planning Maps, that does not comply with the activity specific standard of Rule 6.1.7.1.1 P2. (Plan Change 4 Council Decision subject to appeal)
----------	---

6.1.7.1.6 Prohibited activities

a. The activities listed below are prohibited activities.

Activity	
PR1	Any new sensitive activity within the Air Noise Boundary shown on the Planning Maps.
PR2	Any new sensitive activity within the 65 dB L _{dn} engine testing contour shown on the Planning Maps.

6.1.7.2 Activity standards

6.1.7.2.1 Sensitive activities near roads and railways

a. ~~The following activity standards apply to new buildings, or alterations or additions to existing buildings, intended for a sensitive activity:~~

i. ~~External sound insulation—Any new building intended for a sensitive activity, and any alteration or addition to an existing building intended for a sensitive activity, located within 80 metres of the boundary of any state highway or railway designation, or within 20 metres of the edge of the nearest marked traffic lane of a collector road, or within 40 metres of the edge of the nearest marked traffic lane of a Main Distributor, Local Distributor or arterial road, shall either:~~

A. ~~be designed and constructed to achieve a minimum external to internal noise reduction of 30 dB $D_{tr,2m,nT,w} + C_{tr}$ to any habitable space; or~~

B. ~~be designed and constructed to meet with the following indoor design sound levels:~~

I. ~~Rail noise inside bedrooms between 22:00 hours and 07:00 hours — 35 dB $L_{Aeq}(1h)$;~~

II. ~~Rail noise inside habitable spaces excluding bedrooms — 40 dB $L_{Aeq}(1h)$;~~

III. ~~Road traffic noise inside all habitable spaces — 40 dB $L_{Aeq}(24hr)$; and~~

IV. ~~Rail and road traffic noise within any other building intended for a sensitive activity — maximum value recommended in AS/NZS2107:2000.~~

~~except where either:~~

- V. ~~the sound incident on the most exposed part of the outside of the building is less than 55 dB $L_{Aeq}(1h)$ for rail noise or 57 dB $L_{Aeq}(24h)$ for road traffic noise; or~~
 - VI. ~~the nearest façade of the building is at least 50 metres from all state highway and railway designations and there is a solid building, fence, wall or landform that blocks the line of sight from all parts of all windows and doors to all parts of any state highway road surface or all points 3.8 metres above railway tracks.~~
- ii. Compliance with [Rule 6.1.7.2.1](#) can be achieved by either:
- A. ~~providing the Council with a design report (prior to construction) and a design certificate (prior to occupation) prepared by a suitably qualified acoustics specialist stating the design proposed is capable of meeting activity standard a.i.; and/or~~
 - B. ~~conforming to the acceptable solutions listed in [Appendix 6.11.4 Noise Attenuation Construction Requirements](#).~~
- iii. ~~For the purposes of ventilation systems, compliance with [Rule 6.1.7.2.1](#) shall be confirmed by providing the product specifications; or a design certificate (prior to occupation) prepared by a suitably qualified acoustics specialist, stating the design proposed is capable of meeting the activity standards.~~
- iv. ~~Rail noise shall be deemed to be 70 $L_{Aeq}(1h)$ at a distance of 12 metres from the edge of the track, and shall be deemed to reduce at a rate of 3 dB per doubling of distance up to 40 metres and 6 dB per doubling of distance beyond 40 metres;~~
- v. ~~Compliance with [Rule 6.1.7.2.1](#) a.i.B. shall be confirmed by providing the Council with a design report prepared by a qualified acoustic engineer demonstrating compliance, prior to any sensitive activity or alteration occurring. The design shall take into account future permitted use of the collector roads and arterial roads, and railway and state highway designations outside the Central City, either by the addition of 2 dB to predicted sound levels or based on forecast traffic in 20 years' time.~~
- vi. ~~The indoor design sound levels in [Rule 6.1.7.2.1](#) a.i.B shall be achieved at the same time as the ventilation requirements of the [New Zealand Building Code](#). If windows are required to be closed to achieve the indoor design sound levels then an alternative means of ventilation shall be required within bedrooms.~~
- vii. ~~Where no traffic lane is marked, the distances stated shall be measured from 2 metres on the roadward side of the formed kerb. The classification of roads is shown in [Appendix 7.5.12 Road Classification System](#).~~
- viii. Ventilation systems where installed shall:
- A. generate sound levels not exceeding
 - I. 35 dB $L_{Aeq}(30s)$ at night time in bedrooms; and
 - II. 40 dB $L_{Aeq}(30s)$ in any other habitable space (excluding bedrooms) when measured 1 metre away from any grille or diffuser; and
 - B. provide an adjustable airflow rate of up to at least 6 air changes per hour.

- a. Any addition of a whole room to an existing building or any part of a new building, intended for a Sensitive Activity, within the distances specified from a road or a railway network shall be designed and constructed so that noise from road or railway sources will not exceed internal sound design levels specified in the table below:

Internal sound design levels near roads and railways

<u>Measurement point for road or railway</u>	<u>Distance (metres)</u>	<u>Internal design sound levels (i)</u>	
		<u>Bedrooms</u>	<u>Other habitable spaces and spaces used for other Sensitive activities:</u>
<u>Centre of the railway track including railway sidings on private property</u>	<u>100</u>	<u>35dB $L_{Aeq}(1h)$</u>	<u>40dB $L_{Aeq}(1h)$</u>
<u>Boundary of any State Highway</u>	<u>100</u>	<u>40dB $L_{Aeq}(24h)$</u>	
<u>Marked traffic lane of any Major or Minor Arterial</u>	<u>40</u>		
<u>Marked traffic lane of any Main Distributor or Local Distributor Road</u>			
<u>Marked traffic lane of any Collector Road</u>	<u>20</u>		

Except where:

- i. the space is one of the following - storage spaces, stairwells, bathrooms, laundry rooms, toilets, pantries, walk-in wardrobes, corridors, clothes drying rooms, or entrance areas; or
- ii. the sound incident on the most exposed part of the proposed façade of the affected space is less than 55 dB $L_{Aeq}(1h)$ for rail noise or 57 dB $L_{Aeq}(24h)$ for road traffic noise.
- iii. the nearest façade of the building is at least 50 metres from all state highways, railways, and rail sidings, and there is a solid building, fence, wall or landform that blocks the line-of-sight from all parts of all windows and doors to all parts of any state highway road surface or all points 3.8 metres above railway tracks

- b. Compliance with this rule shall be demonstrated by providing the Council with a design report before construction, which is prepared by a suitably qualified acoustics specialist, stating that the design proposed is capable of meeting the required internal noise levels.
- c. Determination of the internal design sound levels, including any calculations, shall be based on the following considerations:
- i. Railway noise shall be deemed:
 - A. to be 70 L_{Aeq} (1h) at a distance of 12 metres from the edge of the track or centre of the track where it is a rail siding; and
 - B. to reduce at a rate of 3 dB per doubling of distance up to 40 metres and 6 dB per doubling of distance beyond 40 metres;
 - ii. Road noise is to be based on measured or predicted noise levels plus 3 dB added to predicted sound levels or based on forecast traffic in 20 years' time.
 - iii. Where no traffic lane is marked, the distances shall be measured from 2 metres on the road-ward side of the formed kerb. The classification of roads is shown in Appendix 7.5.12 Road Classification System.
 - iv. Any external noise levels shall be assessed at the location of the most exposed part of the proposed façade of the affected space(s).
 - v. Any calculations of noise for the purpose of determining internal noise levels shall take into account all of the relevant external elements of a habitable space at the same time, including roof areas and walls.
 - vi. Internal design sound levels shall be achieved in conjunction with the ventilation requirements of the New Zealand Building Code. If windows are required to be closed to achieve the internal design sound levels, then a ventilation system is required.
- d. Heating, Cooling and Ventilation systems shall meet the following specifications:
- i. ~~i.~~ The room is provided with mechanical ventilation which must satisfy clause G4 of the New Zealand Building Code; and
 - ii. ~~ii.~~ Where noise sensitive internal spaces are not provided opening window area to comply with natural ventilation requirements of clause G4 of the New Zealand Building Code; mechanical ventilation shall be adjustable between the minimum ventilation rate specified in i above, and up to 1 air change per hour; and
 - iii. ~~iii.~~ The room is provided with heating and cooling that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C when assessed using a 2.5% design weather condition for the applicable location. An acceptable design weather set is 24 hour NIWA 2.5% published weather data for the applicable region; and
 - ii. ~~ii.~~ Achieve a minimum of 7.5 litres of air per second per person; and
 - iii. ~~iii.~~ 35 dB L_{Aeq} (30s) at night time in bedrooms when measured 1 metre away from any grille or diffuser outlet/inlet when operating at the maximum required duty. This does not apply to initial start-up; and
 - iv. ~~iv.~~ 40 dB L_{Aeq} (30s) in any other space when measured 1 metre away from any grille or diffuser outlet/inlet when operating at the maximum required duty. This does not apply to initial start-up.

~~iii.v.~~ Alternatively, in lieu of sections i to iii above, a design verified by a suitably qualified and experienced HVAC expert stating the HVAC system design proposed will provide ventilation and internal space temperature controlled to meet or exceed the outcomes described in parts i to iii.

(Proposed Plan Change 5E)

6.1.7.2.2 Activities near Christchurch Airport

- a. The following activity standards apply to new **buildings** and additions to existing **buildings** located within the 55 dB L_{dn} air noise contour or the 55 dB L_{dn} engine testing contour shown on the Planning Maps:
 - i. Any new **buildings** and/or additions to existing **buildings** shall be insulated from aircraft noise and designed to comply with the following indoor design sound levels:

- A. Residential units, hosted visitor accommodation and unhosted visitor accommodation:
 - I. Sleeping areas – 65 dB L_{AE} /40 dB L_{dn}
 - II. Other habitable areas – 75 dB L_{AE} /50 dB L_{dn}
 - B. Guest Visitor accommodation (other than hosted visitor accommodation and unhosted visitor accommodation), resort hotels, hospitals and health care facilities:
 - I. Relaxing or sleeping - 65 dB L_{AE} /40 dB L_{dn}
 - II. Conference meeting rooms - 65 dB L_{AE} / 40 dB L_{dn}
 - III. Service activities – 75 dB L_{AE} /60 dB L_{dn}
 - C. Education activities:
 - I. Libraries, study areas – 65 dB L_{AE} /40 dB L_{dn}
 - II. Teaching areas, assembly areas – 65 dB L_{AE} /40 dB L_{dn}
 - III. Workshops, gymnasiums – 85 dB L_{AE} /60 dB L_{dn}
 - D. Retail activities, commercial services and offices:
 - I. Conference rooms – 65 dB L_{AE} /40 dB L_{dn}
 - II. Private offices – 70 dB L_{AE} /45 dB L_{dn}
 - III. Drafting, open offices, exhibition spaces - 75 dB L_{AE} /50 dB L_{dn}
 - IV. Typing, data processing – 80 dB L_{AE} /55 dB L_{dn}
 - V. Shops, supermarkets, showrooms - 85 dB L_{AE} /60 dB L_{dn}
 - E. Sound stages, studios for filming and/or sound production for Commercial film or video production activities - 47 dB L_{AE}
- ii. Noise insulation calculations and verification shall be as follows:
- A. Building consent applications shall be accompanied with a report detailing the calculations showing how the required sound insulation and construction methods have been determined.
 - B. For the purpose of sound insulation calculations, the external noise levels for a site shall be determined by application of the air noise contours L_{dn} and L_{AE} . Where a site falls within the contours, the calculations shall be determined by linear interpolation between the contours.
 - C. If required by the Council, in conjunction with the final building inspection the sound transmission of the façade shall be tested in accordance with ISO 16283-3:2016 to demonstrate that the required façade sound insulation performance has been achieved, and a test report is to be submitted to the Council's Head of Building Consenting (or any subsequent equivalent position). Should the façade fail to achieve

the required standard then it shall be improved to the required standard and re-tested prior to occupation.

- iii. Where acoustic insulation measures require windows to be closed in residential dwellings, the follow rules shall apply:
 - A. Mechanical ventilation shall be provided and must satisfy clause G4 of the New Zealand Building Code; and
 - B. Where noise sensitive internal spaces are not provided opening window area to comply with natural ventilation requirements of clause G4 of the New Zealand Building Code; mechanical ventilation shall be adjustable between the minimum ventilation rate specified in i above, and up to 1 air change per hour; and
 - C. The room is provided with heating and cooling that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C when assessed using a 2.5% design weather condition for the applicable location. An acceptable design weather set is 24-hour NIWA 2.5% published weather data for the applicable region; and
 - iii. 35 dB LAeq (30s) at night-time in bedrooms when measured 1 metre away from any heating, cooling or ventilation outlet/inlet when operating at the maximum duty required. This does not apply to initial start-up; and
 - iv. 40 dB LAeq (30s) in any other space when measured 1 metre away from any heating, cooling or ventilation outlet/inlet when operating at the maximum duty required. This does not apply to initial start-up.
 - v. Alternatively, in lieu of sections i to iii above, a design verified by a suitably qualified and experienced HVAC expert stating the HVAC system design proposed will provide ventilation and internal space temperature controlled to meet or exceed the outcomes described in parts i to iii.

(Plan Change 4 Council Decision subject to appeal)

6.1.8 Rules - Matters of discretion

- a. When considering applications for restricted discretionary activities, the Council's discretion to grant or decline consent, or impose conditions, is restricted to the matters over which discretion is restricted in the tables in Rules 6.1.5.1.3, 6.1.6.1.3 and 6.1.7.1.3, and as set out for that matter below.
 - i. The level, duration and character of the noise, and proximity and nature of nearby activities, and the adverse effects that may arise from these factors on activities anticipated in the receiving environment and associated amenity.
 - ii. Whether the noise generated would be of such a level as to create a threat to the health or well-being of persons living or working in the vicinity.

- iii. The proposals made by the applicant to reduce noise generation, including:
 - A. reduction of noise at source;
 - B. alternative techniques or machinery which may be available;
 - C. insulation or enclosure of machinery;
 - D. mounding or screen fencing/walls;
 - E. hours of operation;
 - F. in the **Central City**, the management of outdoor areas, including by closing outdoor serving areas, turning off outdoor heaters, turning off outdoor speakers, and minimising the size of outdoor areas;
 - G. in the **Central City**, the management of external doors and **windows** and other avenues for noise to emanate from within a **building**; and
 - H. in the **Central City**, any other management required to address issues such as rubbish and recycling disposal.
- iv. Outside the **Central City**, the adequacy of measures to address the adverse effects of noise on the natural character of the coastal environment.
- v. The value and nature of entertainment activities and their benefit to the wider community, having regard to the frequency of noise intrusion and the practicality of mitigating noise, or utilising alternative **sites**.
- vi. The extent to which achieving the standard is appropriate where the existing noise environment is subject to significant noise intrusion from **road** traffic, or Transport Zone activities in the **Central City**.

- vii. Any relevant standards, codes of practice or assessment methods based on sound acoustic principles, including those which address the reasonableness of the noise in terms of community health and amenity and/or sleep protection.
- viii. In the **Central City**, the level of noise from the activity in relation to ambient noise in its vicinity.
- ix. In the **Central City**, the reasonableness of the noise in terms of recommendations and guidelines for community health and amenity and sleep protection, including guidance given by the World Health Organisation.
- x. Additional criteria where sound insulation is required by the rules:
 - A. The extent to which a reduced level of acoustic insulation may be acceptable due to mitigation of adverse noise impacts through other means, e.g. screening by other structures, or distance from noise sources.
 - B. The ability to meet the appropriate levels of acoustic insulation through alternative technologies or materials.
 - C. The provision of a report from an acoustic specialist which provides evidence that the level of acoustic insulation is appropriate to ensure the amenity of present and future residents of the **site**.
 - D. In the **Central City**, the impact of any residential accommodation or **education activity** that does not provide the required noise insulation on the ability of existing or future permitted business activities to operate or establish without undue constraint.
 - E. In the **Central City**, the location of any nearby business activities and the degree to which the amenities of the **sensitive activities** may be adversely affected.
 - F. Outside the **Central City**, the appropriateness of a legal instrument to be registered against the title that is binding on the owner and the owner's successors in title, containing a 'no complaint' clause relating to the noise of aircraft using Christchurch International Airport.
- xi. In the case of shooting ranges, whether the shooting range and associated activities will adversely affect the captive bird breeding programme within the Peacock Springs Conservation Area (identified in Chapter 17 [Appendix 17.12.1](#)) in terms of noise disturbance.
- xii. The extent to which achieving the standard may give rise to adverse effects on the heritage values associated with a building listed in [Appendix 9.3.7.2](#) (Schedule of Significant Historic Heritage) that outweigh the benefits of noise insulation.

Advice note: Specialist heritage advice may help determine the appropriateness of any building solutions to manage the adverse effects of noise from roads and railways.

(Proposed Plan Change 5E)