

Before the Hearings Commissioners

Under the Resource Management Act 1991 (the **RMA**)

In the matter of a submission by Waka Kotahi New Zealand Transport Agency (submitter reference 82) on the Proposed Porirua District Plan – Hearing Four (Noise)

and in the matter of Proposed Porirua District Plan

**Primary statement of evidence of Catherine Lynda Heppelthwaite for
Waka Kotahi New Zealand Transport Agency regarding Proposed
Porirua District Plan – Hearing Four (Noise)**

Dated 21 January 2022

1 INTRODUCTION, QUALIFICATIONS AND EXPERIENCE

- 1.0 My full name is Catherine Lynda Heppelthwaite. I am a principal planner for Eclipse Group Limited. I am presenting this planning evidence on behalf of Waka Kotahi New Zealand Transport Agency (**Waka Kotahi**).
- 1.1 I hold a Bachelor Degree in Resource Studies obtained from Lincoln University in 1993. I am a full member of the New Zealand Planning Institute, a member of the Resource Management Law Association and the Acoustical Society of New Zealand. I have more than 25 years' experience within the planning and resource management field which has included work for local authorities, central government agencies, private companies and private individuals. Currently, I am practicing as an independent consultant planner and have done so for the past 18 years.
- 1.2 I have been engaged by Waka Kotahi to review and advise on the Proposed Porirua District Plan (**PDP**) Noise chapter.
- 1.3 I have previously been engaged by Waka Kotahi to assist with the Auckland Unitary Plan, New Plymouth District Plan and Whangarei District Plan, along with other plan change reviews. I provided similar assistance (review, preparation of submissions and planning evidence) for these planning processes. I have also recently prepared (with technical input from Dr Chiles) the section 32 analysis on noise and vibration included in my evidence as **Attachment C**.

2 CODE OF CONDUCT

- 2.0 I have read the Environment Court's Code of Conduct for Expert Witnesses (2014) and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my areas of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

3 SCOPE OF EVIDENCE

- 3.0 My evidence will address the following:
- a. The statutory and higher order planning framework; and

- b. Waka Kotahi submissions and further submissions in relation to noise and vibration.
- 3.1 In preparing my evidence, I have considered the s42A Hearings Report¹ and Council's specialist evidence provided by Mr Nigel Lloyd.²
- 3.2 Attached to my evidence are the following:
 - a. **Attachment A:** Proposed Changes Requested;
 - b. **Attachment B:** Section 32AA Assessment of changes; and
 - c. **Attachment C:** Section 32 Analysis of Waka Kotahi provisions overall.

4 THE STATUTORY AND HIGHER ORDER PLANNING FRAMEWORK

- 4.0 In preparing this evidence, I have specifically considered the following:
 - a. The purpose and principles of the RMA (sections 5-8);
 - b. Provisions of the RMA relevant to plan-making and consenting;
 - c. National Policy Statement on Urban Development 2020; and
 - d. Regional Policy Statement for the Wellington Region (2013) (**RPS**).
- 4.1 With reference to the RPS, the following sections are of relevance:
 - a. Section 2.3 Community Outcomes for the Wellington region:³

Healthy community – Our physical and mental health is protected. Living and working environments are safe, and everyone has access to health care. Every opportunity is taken to recognise and provide for good health. (Emphasis added).
 - b. Section 3.3 Energy, infrastructure and waste:⁴

[...] The efficient use and development of such infrastructure can be adversely affected by development. For example, land development can encroach on infrastructure or interfere with its efficient use. Infrastructure can also have an adverse effect on the surrounding environment. For

¹ Prepared by Mr Rory Smeaton, dated 3 December 2021.

² Statement of Evidence, Mr Nigel Lloyd, dated 1 December 2012.

³ Regional Policy Statement, page 20.

⁴ Regional Policy Statement, page 44.

example, the operation or use of infrastructure can create noise which may adversely impact surrounding communities. These effects need to be balanced to determine what is appropriate for the individual circumstances. (Emphasis added).

c. Policy 8 and its explanation:⁵

Policy 8: Protecting regionally significant infrastructure – regional and district plans. District and regional plans shall include policies and rules that protect regionally significant infrastructure from incompatible new subdivision, use and development occurring under, over, or adjacent to the infrastructure.

[Explanation]

[...] Protecting regionally significant infrastructure does not mean that all land uses or activities under, over, or adjacent are prevented. The Wellington Regional Council and city and district councils will need to ensure that activities provided for in a district or regional plan are compatible with the efficient operation, maintenance, and upgrading (where effects are the same or similar in character, intensity, and scale) of the infrastructure and any effects that may be associated with that infrastructure. Competing considerations need to be weighed on a case by case basis to determine what is appropriate in the circumstances. (Emphasis added).

- 4.2 Section 2 of Mr Smeaton's s42A Hearings Reports identifies other relevant statutory, planning and strategic document provisions with which I generally agree and will not repeat here.

5 PROVISIONS AGREED

- 5.0 There are a number Mr Smeaton's recommendations which I agree with and provide the following commentary in relation to reasons why I support his position.

Objective 2

⁵ <https://archive.gw.govt.nz/assets/Plans--Publications/Regional-Policy-Statement/RPS-Full-Documentsedited.pdf>, page 106 (pdf page number).

- 5.1 Waka Kotahi supported Objective 2 as notified.⁶ Mr Smeaton has considered submissions and proposes an alteration to Objective 2 to focus on reverse sensitivity as follows:⁷

The function and operation of existing and permitted noise generating activities are not compromised by ~~adverse effects, including~~ reverse sensitivity effects, from noise-sensitive activities.

- 5.2 This change reflects Policy 8 of the RPS and I agree with it.

Policy 1

- 5.3 Waka Kotahi supported Policy 1 as notified. Mr Smeaton proposes no change to Policy 1.

Policy 3

- 5.4 Waka Kotahi proposed to replace 'minimise' with 'mitigate' within Policy 3.⁸

~~Minimise~~ Mitigate the adverse effects of noise from construction activities on the amenity values of the surrounding area, having regard to: [...]

- 5.5 Mr Smeaton does not accept this change as it has already been rejected in 9.11 of the s42A report for *Part A Overarching Matters*⁹ and as, in his opinion, 'minimise' provides a stronger directive.¹⁰ This approach has been accepted by Waka Kotahi as part of Hearing 1.¹¹

Rule 2

- 5.6 Waka Kotahi sought to retain Rule 2 as notified as it provides for construction activities when in compliance with the relevant NZS standards for construction noise. Mr Smeaton proposes no changes to Rule 2; I consider this is appropriate as the standards referred to (NZS 6803 and DIN 4150-3) are widely adopted standards within district plans.

Rule 5.4 Infringement of S1, S2, S3 altering from discretionary to restricted discretionary.

⁶ Waka Kotahi Submission Point 82.167.

⁷ S42A Report, paragraph 57.

⁸ Waka Kotahi Submission point 82.169.

⁹ S42A Report, paragraph 126.

¹⁰ S42A Report, paragraph 127.

¹¹ Evidence of Claudia Jones for Waka Kotahi, 15 September 2021, Hearing 1, page 4.

- 5.7 As noted in paragraph 6.3 below, for noise and vibration provisions I am comfortable with non-compliances with permitted activity standards to be addressed as restricted discretionary activities; the nature of effects (and therefore matters of discretion) are well known and predictable, and it retains the option of declining unsuitable applications.

Definitions

- 5.8 Waka Kotahi submitted to include “*places of worship*” in the definition of ‘noise-sensitive activity’, and that the definition of ‘sensitive activity’ be deleted.¹²
- 5.9 Mr Smeaton has agreed with the inclusion of “*places of worship*”, but not the deletion of ‘*sensitive activity*’. On review of the PDP, I agree with Mr Smeaton that ‘*sensitive activity*’ is used elsewhere and should be retained.

6 FURTHER CHANGES REQUESTED

- 6.0 Waka Kotahi sought a replacement suite of rules and standards to manage public health effects of noise and vibration.¹³ Dr Chiles has clearly described the Waka Kotahi changes relative to the notified provisions.¹⁴
- 6.1 By way of background, Dr Chiles and I have been engaged variously to provide technical advice to Waka Kotahi and KiwiRail to develop a research based approach for the management of health effects from the transport network on a national basis. One of the outcomes of this work has been the preparation of a s32 assessment completed in October 2021 which identifies a preferred mapping and provision based approach (**Attachment C**).
- 6.2 In my experience, Waka Kotahi generally submits seeking its preferred provisions (which are similar but not the same as the s32 recommendation).¹⁵
- 6.3 In this case, recognising the PDP already contains some helpful provisions, and in consideration of the s42A Report, Dr Chiles and I have sought to work with the existing provisions.
- 6.4 As noted by Dr Chiles, we have prepared (**Attachment A**) an updated suite of provisions encompassing Policy 4, Rule 5, S1, S3, S3A (new) and S7 (new),

¹² Waka Kotahi Submission Points 82.16 and 82.17.

¹³ Waka Kotahi Submission Point 82.172 and 82.173.

¹⁴ Evidence of Dr Stephen Chiles, 21 January 2022, paragraphs 7.1 to 7.3.

¹⁵ The differences arise as the s32 report was not complete at the time of submissions on the PDP.

which endeavour to accommodate Mr Smeaton's concerns regarding the Waka Kotahi submission not 'fitting' the PDP format and in response to Mr Lloyd's technical position.

- 6.5 My commentary on the remaining further changes requested follows the order in which the items first appear in my updated provisions within **Attachment A**.
- 6.6 In **Attachment B**, I have provided a s32AA assessment for the key changes proposed (vibration and outdoor amenity protection).

Policy 4

- 6.7 As notified, Waka Kotahi supported Policy 4.¹⁶ Mr Smeaton proposes inclusion of an additional clause in Policy 4 to reference vibration effects on buildings and consideration of topography/other features.¹⁷ I support this change as there is currently no reference to vibration within the objectives or policies in the PDP. This support is on the basis that my proposed NOISE-R3A is adopted.
- 6.8 References to topography should be retained in Policy 4 if Rules 5.2 and 5.3 remain as these rely on Policy 4 as matters of control and discretion respectively. In my opinion, within the PDP, topography is a relevant matter of control/discretion for this type of application (noting it is specifically listed as a matter of discretion relative to Rule 5.4 under S1, S2 and S3).
- 6.9 I only propose one minor change to Policy 4, that is to include reference to "*health effects*" as an effect which ought to be addressed. The RPS identifies both reverse sensitivity and public health and I consider both issues should be included within Policy 4.¹⁸ Whilst the direct focus of Policy 8 is reverse sensitivity, supporting explanations and outcomes sought indicate infrastructure can have (noise) effects (which would include health effects) and that these effects need to be balanced.

50m² 'exemption' for additions (Rule 5)

- 6.10 The Waka Kotahi submission provisions apply to all building alterations, regardless of size. Council's s32 describes how the 50m² threshold was set:¹⁹

¹⁶ Waka Kotahi Submission Point 82.170.

¹⁷ S42A Report, paragraphs 67 and 73.

¹⁸ As described in my paragraph 4.1.

¹⁹ Section 32 Evaluation Report Part 2: Light and Noise Proposed Porirua District Plan August 2020, page 78.

The threshold for additions is set at 50m², as this reflects the upper threshold for 'minor residential units' under the PDP. Minor residential units are defined as being ancillary to the primary residential unit and therefore are not considered to be significant intensification of the residential activity on the site for the purposes of managing potential reverse sensitivity effects. As such, additions greater than this threshold have the potential to contain an additional primary residential unit (which is permitted on a site within residential zones), and therefore intensification of the residential activities on the site leading to reverse sensitivity effects.

- 6.11 I do not agree with this approach. Defining a minor dwelling as an 'ancillary' activity does not in any way manage potential effects on building occupants. Further, an addition of 50m² is reasonably substantial, for example: bedrooms are generally 12m² to 15m² (so perhaps three new bedrooms) and early childhood education centres require 2.5m² of indoor space per child (floor area for up to 20 children).²⁰ Both of these outcomes (in addition to a minor dwelling) would result in an increase in exposure to health risks. I have included removal of the 50m² exemption within my revised provisions.

80m to 100m Rule application (Rule 5.1)

- 6.12 Dr Chiles supports a 100m setback and a 50m setback (depending on speed limit)²¹ and Mr Lloyd agrees with this setback approach.²² I rely on the evidence of Dr Chiles in regards to the appropriate setback distance to which Rule 5 is to apply and have adopted his opinion within **Attachment A**.

Setbacks Rule 5-1.b and Rule 5.2²³

- 6.13 Mr Smeaton proposes to modify Rule 5 to enable activities between 0m and 20m to 40m of the State highway (Rule 5.1.b(i) and (ii) and S42A (new) Rule 5.2) to be assessed as a controlled activity consent (rather than restricted discretionary as notified).
- 6.14 I do not support this approach; I prefer a more simplified two tiered approach to management of noise (and vibration) effects.

²⁰ Education (Early Childhood Services) Regulations 2008, Schedule 4.

²¹ Evidence of Dr Stephen Chiles, 21 January 2022, paragraphs 7.7 to 7.10.

²² Letter dated 10 June 2020 providing advice to Porirua City Council on the management of reverse sensitivity effects on state highways and rail lines.

²³ S42A Report, paragraph 72.

- Tier 1 being a permitted activity standard requiring a design certificate at building consent stage confirming that specified noise/vibration levels will be achieved.
- Tier 2 applies where a design certificate is not provided (standards not met) and a (restricted discretionary activity) consent is then necessary.

6.15 This is partially reflected within the notified provisions and within the s42A Report, but a layer of what I consider to be 'extra' consenting is included for activities between 0m and 20m to 40m of the State highway (Rule 5.1.b(i) and (ii) and S42A (new) Rule 5.2) which requires a controlled activity consent (and the previous restricted discretionary activity status). I do not support this consent requirement and have removed it as it applies to the State highway network.

6.16 I consider that as long as suitable mitigation (compliance with standards) can be confirmed (by the design certificate) then no consent should be required. I have reflected my preferred approach within **Attachment A**.

Standard S1

6.17 In conjunction with Dr Chiles, I have proposed amendments (see **Attachment A**) to S1 which applies noise levels to specific occupancies/activities which align with the definition of *Noise Sensitive Activities* (rather than the narrower definition of *habitable room*). This includes a new **Table 1** which specifies the occupancies/activities and links design certification to building consent (rather than construction) to provide certainty. Consequential deletion of the more general habitable space provisions is proposed.

Standard S3

6.18 Dr Chiles has addressed the technical basis for the changes proposed to S3 and these have been included in **Attachment A**.²⁴ I have also updated the matters of discretion to be more specific to health and to accommodate location of outdoor living spaces (new S7).

Deletion of S4 (vibration) and consequential deletion of Rule 5-3.b and Rule 5-4²⁵

²⁴ Evidence of Dr Stephen Chiles, 21 January 2022, paragraphs 7.14 to 7.16.

²⁵ S42A Report, paragraph 72.

- 6.19 Waka Kotahi sought inclusion of different vibration standards than those notified.²⁶ Mr Smeaton had not adopted the Waka Kotahi provisions and has proposed to delete the notified S4 outright.
- 6.20 Mr Smeaton relies on the submission of Kāinga Ora (who he acknowledges has provided no specific evidence to support deletion) and the advice of Mr Lloyd to form this opinion.²⁷
- 6.21 Dr Chiles addresses the technical issues raised by Mr Lloyd and I support inclusion of vibration controls (subject to changes included in **Attachment A**).²⁸ In this regard, I have included a new S3A to reflect Dr Chiles' recommendations and my matters of discretion.

Standard S7 (new) Outdoor Living Spaces

- 6.22 Waka Kotahi sought a new provision which provides acoustic amenity for outdoor spaces. Policy 4 (as notified) recognises the importance of outdoor amenity; the PDP currently does not however, contain any methods of achieving this outcome. Introduction of S7 will achieve this (as a permitted activity with appropriate design and certification). Based on my experience of assessing applications for a wide variety of housing types and subdivisions, I agree with Dr Chiles that without a plan provision, there is no incentive to locate outdoor living areas away from State highways.²⁹ I acknowledge that there may be some circumstances where facing the outdoor living court towards a road may be a suitable outcome (eg. to manage solar orientation), but these should be assessed on a case by case basis as provided for by a restricted discretionary activity consent.

Consequential Changes

- 6.23 Within my **Attachment A**, I have included the following consequential changes:
- a. Reference to new provisions S3A and S7;
 - b. Refined the application of Rule 5.2.1.b to Rule 5.2.1.b(iii); and

²⁶ Waka Kotahi Submission Point 82.173.

²⁷ S42A Report, paragraph 71.

²⁸ Evidence of Dr Stephen Chiles, 21 January 2022, paragraphs 7.17 to 7.20.

²⁹ Evidence of Dr Stephen Chiles, 21 January 2022, paragraphs 7.11.

- c. Removed Waka Kotahi from Rule 5.2 and 5.3.

Catherine Heppelthwaite

21 January 2022

Attachment A: Proposed Changes

Base text is taken from s42A Report, Appendix A, with all changes proposed by Mr Smeaton accepted and footnotes removed.

All changes are in blue text. New text is underlined and proposed deletions in ~~strike through~~.

NOISE-P4 Reverse sensitivity from State Highways and Rail Network	
<p>Enable noise-sensitive activities and places of worship locating adjacent to existing State Highways and the Rail Network that are designed, constructed and maintained to achieve indoor design noise levels and provide for other habitable rooms when they minimise the potential for <u>health and</u> reverse sensitivity effects from noise, having regard to:</p> <ol style="list-style-type: none"> 1. The outdoor amenity for occupants of the noise-sensitive activity; 2. The location of the noise-sensitive activity in relation to the State Highway or Rail Network; 3. The ability to appropriately locate the activity within the site; 4. The ability to meet the appropriate levels of acoustic insulation through screening, alternative technologies or materials; 5. The ability to mitigate any effects on buildings from vibration generated by the State Highway or Rail Network; 6. Any topographical or other existing features on the site or surrounding area; 7. Any adverse effects on the State Highway or Rail Network; and 8. The outcome of any consultation with the Waka Kotahi New Zealand Transport Agency or KiwiRail Holdings Limited. 	
NOISE-R5	<u>Noise and Vibration Sensitive Activities adjacent to</u> State Highways and the North Island Main Trunk railway line
All zones	<p>1. Activity status: Permitted</p> <p>Where:</p> <p>a. The <u>new</u> building, <u>building addition</u> or part of the building for use by a noise sensitive activity or place of worship is within:</p> <ol style="list-style-type: none"> i. 80m<u>100m</u> of the outer painted lane marking of a State Highway with a speed limit of greater than 70km/h; ii. 50m of the outer painted lane marking of a State Highway with a speed limit of 70km/h or less; or iii. 100m of the centre of a track that is part of the North Island Main Trunk railway line; and <p>b. The building or part of the building for use by a noise sensitive activity or place of worship is not within:</p> <ol style="list-style-type: none"> i. 40m of the outer painted lane marking of a State Highway with a speed limit greater than 70km/h; ii. 20m of the outer painted lane marking of a State Highway with a speed limit of 70km/h or less; or iii. 30m of the centre of a track that is part of the North Island Main Trunk railway line; and <p>c. Compliance is achieved with:</p> <ol style="list-style-type: none"> i. NOISE-S1; ii. NOISE-S2; <u>and</u> iii. NOISE-S3; <u>iv. NOISE-S3A; and</u> <u>v. NOISE-S7</u>
Residential Zones	<p>2. Activity status: Controlled</p> <p>Where:</p> <p>a. Compliance is not achieved with NOISE-R5-1.b.<u>iii</u></p> <p>Matters of control are limited to:</p> <ol style="list-style-type: none"> 1. The matters in NOISE-P4.

	<p>Notification:</p> <ul style="list-style-type: none"> • An application under this rule is precluded from being publicly notified in accordance with section 95A of the RMA. • When deciding whether any person is affected in relation to this rule for the purpose of section 95E of the RMA, the Council will give specific consideration to any adverse effects on Waka Kotahi New Zealand Transport Agency and KiwiRail Holdings Limited.
Rural Zones Commercial and Mixed Use Zones General Industrial Zone Open Space and Recreation Zones Special Purpose Zones	<p>3. Activity status: Restricted discretionary Where: a. Compliance is not achieved with NOISE-R5-1.b.iii;</p> <p>Matters of discretion are restricted to:</p> <p>1. The matters in NOISE-P4.</p> <p>Notification:</p> <ul style="list-style-type: none"> • An application under this rule is precluded from being publicly notified in accordance with section 95A of the RMA. • When deciding whether any person is affected in relation to this rule for the purpose of section 95E of the RMA, the Council will give specific consideration to any adverse effects on Waka Kotahi New Zealand Transport Agency and KiwiRail Holdings Limited.
All zones	<p>4. Activity status: Restricted discretionary Where:</p> <p>a. Compliance is not achieved with NOISE-S1, NOISE-S2, or NOISE-S3, NOISE-S3A or NOISE-S7.</p> <p>Matters of discretion are restricted to:</p> <p>1. The matters of discretion of any infringed standard.</p> <p>Notification:</p> <ul style="list-style-type: none"> • An application under this rule is precluded from being publicly notified in accordance with section 95A of the RMA. • When deciding whether any person is affected in relation to this rule for the purpose of section 95E of the RMA, the Council will give specific consideration to any adverse effects on Waka Kotahi New Zealand Transport Agency and KiwiRail Holdings Limited.

Standards		
<p>Note: The term D2m,nT,w + Ctr is the description for noise insulation at the façade. This is the weighted level difference between the outside noise (measured at 2m) and the inside noise, normalised to a reference reverberation time and adjusted for road traffic noise characteristics.</p>		
NOISE-S1	New noise-sensitive activities and places of worship near State Highways – Indoor design noise level	
All zones	<p>1. Any: habitable room in</p> <p>a. New buildings used for a noise-sensitive activity or place of worship;</p> <p>b. Additions exceeding 50m² to existing buildings used for a noise-sensitive activity or place of worship; or</p> <p>c. An existing building where its use is changed to be for a noise-sensitive activity or place of worship;</p>	<p>Matters of discretion are restricted to:</p> <p>1. The distance of the noise-sensitive activity from the State Highway or Rail Network;</p> <p>2. The effects of any noncompliance;</p> <p>3. The ability to meet the appropriate levels of insulation</p>

	<p>Must be designed, constructed and maintained:</p> <p>a. To achieve indoor design noise levels of:</p> <ul style="list-style-type: none"> i. <u>for habitable room(s), libraries, sleeping areas, spaces for overnight medical care, wards, clinics, consulting rooms, operating theatres, nurses' stations: 40dB LAeq(24h);</u> ii. <u>for places of worship and marae: 35dB LAeq(24h);</u> iii. <u>for libraries, clinics, consulting rooms, operating theatres, nurses' stations: 45dB LAeq(24h); or</u> <p><u>For habitable room(s): 40dB LAeq(24h);</u> <u>ii. For places of worship and marae: 35dB LAeq(24h); or</u></p> <p>b. In accordance with the construction schedule set out in SCHED12 - Building Standards for Indoor Noise Reduction where the new habitable room is located in a residential unit of single storey framed construction.</p> <p>2. A design certificate from a suitably qualified and experienced professional must be provided to Council prior to <u>building consent and the construction or alteration of</u> any noise-sensitive activity or place of worship demonstrating that the standards in NOISE-S1-1 will be achieved.</p>	<p>through screening, alternative technologies or materials;</p> <p>4. Any topographical or other existing features on the site or surrounding area;</p> <p>5. The reverse sensitivity effects on the State Highway or Rail Network; and</p> <p><u>1. Location of the building and outdoor living space;</u></p> <p><u>2. The effects of the non-compliance on the health and amenity of occupants; and</u></p> <p><u>3 6. The outcome of any consultation with Waka Kotahi NZ Transport Agency (in relation to activities near a State Highway) or KiwiRail Holdings Limited (in relation to activities near the Rail Network).</u></p>
NOISE-S2 [...]	[...]	[...]
NOISE-S3	New noise-sensitive activities and places of worship near a State Highway or North Island Main Trunk railway line – Mechanical ventilation	
All zones	<p>1. Where windows of a habitable room must be closed to meet the requirements for NOISE-S1.1 or NOISE-S2.1, the building must be designed, constructed and maintained with a mechanical ventilation system that achieves the following for habitable rooms <u>other than teaching spaces:</u></p>	<p>Matters of discretion are restricted to:</p> <p>1. The <u>location of the building and outdoor living space;</u> <u>distance of the noise-sensitive activity from the State Highway or Rail Network;</u></p>

	<p>a. Provides mechanical ventilation to satisfy clause G4 of the New Zealand Building Code (Schedule 1 of the Building Regulations 1992);</p> <p>b. <u>is adjustable by the occupant to control the ventilation rate in increments up to a high air flow setting that provides at least 6 air changes per hour. Achieves a minimum of 7.5 litres per second per person</u>; and</p> <p>c. <u>provides relief for equivalent volumes of spill air</u>; and</p> <p>d. <u>provides cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C.</u></p> <p>e.-g. Does not generate more than 35 dB LAeq(30s) when measured 1m away from any grille or diffuser.</p> <p>2. A design certificate from a suitably qualified and experienced professional must be provided to Council prior to <u>building consent and the construction or alteration</u> of any noise-sensitive activity or place of worship demonstrating that the standards in NOISE-S3-1 will be achieved.</p>	<p>2. The effects of any noncompliance <u>on the health and amenity of occupants</u>;</p> <p>3. <u>The ability to meet the appropriate levels of insulation through screening, alternative technologies or materials</u>;</p> <p>4. <u>Any topographical or other existing features on the site or surrounding area</u>;</p> <p>5. <u>The reverse sensitivity effects on the State Highway or Rail Network</u>; and</p> <p>3.-6. The outcome of any consultation with Waka Kotahi NZ Transport Agency <u>(in relation to activities near a State Highway) or KiwiRail Holdings Limited (in relation to activities near the Rail Network).</u></p>
<u>NOISE-S3A</u>	<u>New noise-sensitive activities and places of worship near a State Highway – Vibration</u>	
<u>All zones</u>	<p>1. Any activity described in NOISE-S1 which is within 20m of the outer painted lane marking of a State Highway and is:</p> <p>a. A new buildings used for a <u>noise-sensitive activity or place of worship</u>; or</p> <p>b. Additions to existing buildings used for a <u>noise-sensitive activity or place of worship</u>; or</p> <p>c. An existing building where its use is changed to be for a <u>noise-sensitive activity or place of worship</u>;</p> <p><u>Must be designed constructed and maintained to achieve</u></p>	<p><u>Matters of discretion are restricted to:</u></p> <p>1. The effects of any <u>noncompliance on the health and amenity of occupants</u>;</p> <p>2. The outcome of any consultation with Waka Kotahi NZ Transport Agency <u>(in relation to activities near a State Highway)</u></p> <p>3. <u>Special topographical, building features or ground conditions which will mitigate vibration impacts.</u></p>

	<p><u>road vibration levels not exceeding 0.3mm/s $V_{w,95}$.</u></p> <p><u>2. A design certificate from a suitably qualified and experienced professional must be provided to Council prior to building consent and the construction or alteration of any noise sensitive activity or place of worship demonstrating that the standards in NOISE-S3A will be achieved.</u></p>	
NOISE-S4	[...]	[...]
NOISE-S5	[...]	[...]
NOISE-S6	[...]	[...]
<u>NOISE-S7</u>	<u>New outdoor living spaces associated with noise-sensitive activities and places of worship near a State Highway</u>	
	<p><u>1. Where:</u></p> <p><u>a. an outdoor living or outdoor activity space required by another rule in the Plan is within</u></p> <p><u>i. 100m of the outer painted lane marking of a State Highway with a speed limit of greater than 70km/h;</u></p> <p><u>ii. 50m of the outer painted lane marking of a State Highway with a speed limit of 70km/h or less</u></p> <p><u>and;</u></p> <p><u>b. the outdoor space is required for a noise sensitive activity, the required outdoor living space is to be designed and maintained to achieve 57 dB LAeq(24h) where the design road noise is based on measured or predicted external noise level plus 3 dB..</u></p> <p><u>2. A design certificate from a suitably qualified and experienced professional must be provided to Council prior to building consent and the construction or alteration of any building to which the outdoor living space relates demonstrating that the standards in NOISE-S7-1 will be achieved.</u></p>	<p><u>Matters of discretion are restricted to:</u></p> <p><u>1. Whether the location of buildings or the outdoor space minimises effects</u></p> <p><u>2. Alternative mitigation which manages the effects of the non-compliance on the health and amenity of occupants;</u></p> <p><u>3. The reverse sensitivity effects on the State Highway</u></p> <p><u>4. The outcome of any consultation with Waka Kotahi NZ Transport Agency (in relation to activities near a State Highway); and</u></p> <p><u>5. Special topographical, building features which will mitigate effects.</u></p>

Attachment B: Section 32AA Assessment

- 1 Section 32 AA sets out requirements for undertaking and publishing further evaluations where changes are proposed since the evaluation report for the proposal was completed and they key requirements are:

32AA Requirements for undertaking and publishing further evaluations (1)

[...]

*(b) must be undertaken in accordance with section 32(1) to (4); and
(c) must, despite paragraph (b) and section 32(1)(c), be undertaken at
a level of detail that corresponds to the scale and significance of the
changes; and*

(d) must-

(i) [...]

*(ii) be referred to in the decision-making record in sufficient
detail to demonstrate that the further evaluation was
undertaken in accordance with this section.*

- 2 Under section 32(1) to (4), an evaluation must:
 - a. Examine whether the proposed objectives are the most appropriate way to achieve the purpose of the RMA (s32(1)(a));
 - b. Examine whether the proposed provisions are the most appropriate way to achieve the objectives of the chapter by identifying other reasonably practicable options, assessing their efficiency and effectiveness and summarising the reasons for deciding on provisions (s32(1)(b));
 - c. Consider the extent the notified provisions are relevant to the proposed amendment and would remain if the amendment were to take effect (s32(3));
 - d. Contain a level of detail that corresponds to the scale and significance of the effects that are anticipated from implementing the proposal (s32(1)(c));
 - e. Relative to considering the efficiency and effectiveness of the provisions in achieving the objective, include an assessment of benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation and if practicable, the benefits and costs of the effects anticipated from implementing the provisions (s32(2)(a) and (b)); and
 - f. Assess the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the provisions (s32(2)(c)).
- 3 Section 32(4) is not considered relevant in this circumstance as it applies to National Environmental Standards.

- 4 The proposed changes to Policy 4 (including 'health effects' is addressed in **Attachment C** (s32 Analysis).
- 5 **Tables 1 and 2** below provide an analysis of the key proposed amendments.
- 6 The remaining changes are not considered to be so divergent from the notified provision as to require any further s32AA analysis or to be addressed by the s32 Analysis in **Attachment C**.

Table 1: Standard S3A Vibration	
a. Whether the proposed objectives are the most appropriate way to achieve the purpose of the RMA.	The State highway network is a 'physical resource', inclusion of the proposed objective will achieve the purpose of the RMA by assisting in provision of that resource (infrastructure) in an integrated manner which enables and social and economic well-being and for health and safety.
b. Achieve the objectives of the chapter by identifying other reasonably practicable options, assessing their efficiency and effectiveness and summarising the reasons for deciding on provisions.	<p>Responses to issues are identified within Section 5.3 of Council's s32 Assessment.³⁰</p> <p>I describe this approach as:</p> <p>(a) adopt new (notified) provisions; with two other alternatives for considerations being</p> <p>(b) adopt the s42 recommendation (no vibration controls); or</p> <p>(c) adopt the Proposed Changes described in my evidence.</p> <p>It is my opinion that option (c) is the most efficient and effective as it will:</p> <ul style="list-style-type: none"> • Provide for health and wellbeing under Section 5 of the RMA.
c. Extent the notified provisions are relevant to the proposed amendment and would remain if the amendment were to take effect.	The Proposed Changes will update and complement notified provisions rather than replace them. In this regard the intent of notified provisions remain relevant.
e. The efficiency and effectiveness of the provisions in achieving the objective, include an assessment of benefits and costs of the environmental, economic, social, and cultural effects that are anticipated from the implementation and if practicable, the benefits and costs of the effects anticipated from implementing the provisions.	<p>I do not consider the new provisions result in an any discernible change to costs and benefits than those already identified in Council's primary s32 Assessment.³¹</p> <p>I note in particular that the s32 Assessment³² records:</p>

³⁰ https://storage.googleapis.com/pcc-wagtail-media/documents/Section_32_Evaluation_Report_Part_2_-_Light_and_Noise.pdf page 20, Section 5.3 Summary of the Issues Analysis.

³¹ https://storage.googleapis.com/pcc-wagtail-media/documents/Section_32_Evaluation_Report_Part_2_-_Light_and_Noise.pdf page 26, Score: 3 Factor 4: Who and How Many Will be Affected/Geographical Scale of Effects.

³² https://storage.googleapis.com/pcc-wagtail-media/documents/Section_32_Evaluation_Report_Part_2_-_Light_and_Noise.pdf page 28, Section 7, line 3 in table and page 29, line 2 in table.

	<p><i>The potential loss of development opportunities arising from the proposed provisions is not significant.</i></p> <p><i>There is a likelihood that these provisions will result in an increase in build costs for residential units within certain areas in the City, but these will not be significant across the City.</i></p> <p>This is a different position to that put forward by Mr Lloyd who notes:³³</p> <p><i>...requiring compliance with the vibration standard in NOISE-S4 would effectively prevent the development of land. Developers would commence with a technical analysis of vibration only to find the solutions unpalatable.</i></p>
f. The risk of acting or not acting if there is uncertain or insufficient information.	There is considered to be sufficient information to make the Proposed Changes.

Table 2: Standard S7 Outdoor noise provision

a. Whether the proposed objectives are the most appropriate way to achieve the purpose of the RMA.	Noting the provisions are not objectives, the State highway network is a 'physical resource' and inclusion of the provisions will achieve the purpose of the RMA by assisting in provision of that resource in an integrated manner which enables social and economic well-being and for health and safety.
b. Achieve the objectives of the chapter by identifying other reasonably practicable options, assessing their efficiency and effectiveness and summarising the reasons for deciding on provisions.	<p>Reasonable alternatives are identified as:</p> <ul style="list-style-type: none"> (a) retain notified provisions ("do nothing"); or (b) adopt the Proposed Changes described in my and Dr Chiles' evidence. <p>It is my opinion that option (b) is the most efficient and effective as it will:</p> <ul style="list-style-type: none"> • Provide for residential amenity and reduce health effects of outdoor noise; and • Encourage management of site constraints by design (ie placement of outdoor living spaces) rather than reliance on other mitigation (eg noise barriers). <p>The "do nothing" option does not provide for incremental improvements in outdoor amenity and health of future residents (noting that the proposed provision applies only to residential activities).</p>
c. Extent the notified provisions are relevant to the proposed amendment and would remain if the amendment were to take effect.	The proposed changes will increase the ambit of the notified provisions but retain the structure and intent of the provision overall.

³³ Statement of Evidence, Mr Nigel Lloyd, dated 1 December 2012, paragraph 57.

e. The efficiency and effectiveness of the provisions in achieving the objective include an assessment of benefits and costs of the environmental, economic, social and cultural effects that are anticipated from the implementation and if practicable, the benefits and costs of the effects anticipated from implementing the provisions.	<p>An assessment of dwellings for compliance will be required for residential activities; I do not consider this aspect of Proposed Changes will result in an any discernible change to costs and benefits than those already identified in Councils primary s32 Assessment.</p> <p>Some additional design or consent costs will arise where compliance is not met. These will fall on applicants who seek to provide a lesser degree of amenity/public health protection than identified.</p>
f. The risk of acting or not acting if there is uncertain or insufficient information.	There is considered to be sufficient information to make the Proposed Changes.

- 7 Overall, I conclude that **Tables 1 and 2** provide an analysis of the Proposed Changes in a level of detail that corresponds to the degree of change proposed relative to the notified provisions and they remain my preferred outcome.

Attachment C: Section 32 Assessment
[separate attachment]