



**TO:** Hearing Panel - Plan Change 1 – All Other Topics

FROM: Section 42A authors

**DATE:** 26 September 2025

SUBJECT: PLAN CHANGE 1 – ALL OTHER TOPICS HEARING – REVISED RECOMMENDATIONS FOR

TA3, PHS6 AND TREEX

#### **INTRODUCTION**

1. DCC Section 42A authors provided revised recommendations to the Panel on 5 September, following the Plan Change 1 Stage 2 hearing<sup>1</sup>.

- 2. This second revised recommendations memo relates specifically to the following:
  - Revised recommendations relating to Change TA3 (Construction vibration Rule 4.5.4.1.b), following the Panel's direction for vibration experts from DCC and Health New Zealand to confer
  - Additional recommendations in relation to Change PHS6. These are primarily consequential amendments that were not included in the 5 September memo
  - A drafting change to the tree schedule to implement a recommendation made in the Section 42A report
- 3. Recommendations for drafting are provided in Appendix A (this shows a marked-up version of recommended amendments based on the notified Plan Change 1 version). This supersedes the drafting for PHS6 and Table 2.37.3 of TreeX provided in the 5 September memo.
- 4. The discussion on Change TA3 is written by John Sule, the reporting officer for this topic.

# TA3 (CONSTRUCTION VIBRATION – RULE 4.5.4.1.B)

# **Purpose of Change**

5. To correct the provisions for construction vibration (Rule 4.5.4.1.b Noise – Construction) to ensure the limits and assessment guidance are appropriate.

<sup>&</sup>lt;sup>1</sup> <u>Plan Change 1 – All other topics hearing – Revised recommendations</u> <u>PC1 All Other Topics – Appendix A Recommended Amendments</u>

# Discussion

- 6. Mr Jamie Exeter of Styles Group has considered the changes sought by submitters on Change TA3 and discussed these with Mr Brendon Shanks, acoustic expert for Health New Zealand, as directed by the Panel. Mr Exeter's further evidence is attached as Appendix B.
- 7. Mr Exeter's evidence was provided to the University of Otago and Port Otago, both of which gave evidence at the PC1 hearing on Change TA3, as requested by the Panel. In addition, a draft planning response from Mr Sule, including revised recommended drafting, was also provided to the submitters in the interests of seeing whether agreement could be reached.
- 8. The responses from the University of Otago and Port Otago are attached as Appendices C and D, respectively.
- 9. Mr Sule's comments and revised recommendations are provided below. These consider matters raised at the hearing and in the documents outlined above. Changes are shown in simple strikethrough/underline to Mr Exeter's version of the rule. Note that the numbering below has been amended to follow the 2GP style guide. Full recommended changes to the notified rule are included in Appendix A.

## Planner's response and recommended amendments

## Discussion on Rule 4.5.4.X.a

10. Rule 4.5.4.X.a as revised is similar to the proposed Rule in the Section 42A report except that it introduces an exception for short duration work in roads that cannot comply with amenity limits. This addition is supported as there may be times, where for safety reasons, work needs to be undertaken at night and there are limits on its use. A change to clause 4.5.4.X.a.i.2.3 is recommended to improve its clarity.

## Rule 4.5.4.X.a ...

- i. Except that this standard does not apply to: ...
  - 2. Vibration from construction and site investigation activity undertaken within a road where:

...

3. the works in the road are separable of can be undertaken independently from any work on private land that is part of the same project; and ...

## Discussion on Rule 4.5.4.X.b

11. Rule 4.5.4.X.b replaces the proposed table in the Section 42A that specifies the vibration limits with a new table that requires plan users to access the DIN standard to determine the relevant vibration limits for compliance. The relevant vibration limits table from the DIN standard is shown below:

# (ii) Building damage

	Short-term vibration				Long-term vibration
Type of structure	Peak particle velocity in any axis at the building foundations when measured within 500 mm of the ground			Peak particle velocity at the topmost floor, horizontal	Peak particle velocity at the topmost floor, horizontal
	1-10 Hz	10- 50 Hz	50-100 Hz	direction, all frequencies	direction, all frequencies
Buildings used for commercial purposes, industrial buildings, and buildings of similar design	20 mm/s	20-40 mm/s	40-50 mm/s	40 mm/s	10 mm/s
Residential buildings and buildings of similar design and/or occupancy	5 mm/s	5-15 mm/s	15-20 mm/s	15 mm/s	5 mm/s
Structures that are particularly sensitive to vibration and are of great intrinsic value	3 mm/s	3-8 mm/s	8-10 mm/s	8 mm/s	2.5 mm/s

- 12. Concerns about the interpretation of Column 1 of this table "type of structure" are discussed in the Section 42A and they remain unresolved in the agreed rule. To determine if a lower limit of 3mm/s applies at the 1-10 Hz frequency an assessment is required to determine if a building is particularly sensitive to vibration and of great intrinsic value. This is open to interpretation, and consequently the DIN standard is not considered to provide sufficient certainty for use as a District Plan performance standard triggering a requirement for a resource consent. This is because the uncertainty in the wording of the table may lead to interpretation disputes over application of the rule. Therefore, if the DIN table is to be used for determining the vibration limits, I recommend that the rule incorporates an additional clause (iii) that identifies that scheduled heritage buildings and structures are always considered to be particularly sensitive to vibration and of great intrinsic value to avoid disputes over whether the lowest limit applies.
- 13. The agreed rule also removes the requirement contained in the Section 42A report for heritage buildings on the same site as the construction and site investigation works to be subject to the building damage vibration limits specified in the DIN standard. The evidence of Mr Exeter on this aspect identifies that the limits in DIN standard are designed to protect buildings from cosmetic building damage and they will not be suitable if protection from structural protection is the objective.
- 14. Mr Exeter also suggests in his evidence that the level of protection afforded to heritage buildings is a District Plan policy matter. In that regard, proposed Policy 13.2.1.10 seeks to ensure adverse effects on heritage buildings from construction vibration are insignificant. It does not currently provide for a lesser standard where the heritage building is on the same

site as the construction activity, although it is acknowledged that this policy is subject to submissions seeking that the high bar of insignificant effects is relaxed. Having regard to the advice from Mr Exeter, the policy as currently written seems appropriately aligned with the limits in the DIN standard for vibration sensitive structures, which will avoid cosmetic damage to scheduled heritage buildings and structures.

15. It is acknowledged that property owners, including the Otago University, will not set out to damage their own heritage buildings. However, protection of heritage buildings is a matter of national importance under the RMA and a matter that the DCC has responsibility for in its District Plan. The submitter opposition to the Section 42A rule that includes scheduled heritage buildings on the same site is on the basis that property owners should be responsible for protection of their own scheduled heritage buildings, except for the existing 2GP rules for additions and alterations and demolition, which the submitters consider provide sufficient protection. It is not, however, entirely clear that structural damage to the buildings caused by construction vibration would fall within the existing definitions for additions and alterations and demolition. The definitions are as follows:

#### **Additions and alterations**

- ... For the purposes of rules that apply to protected parts of scheduled heritage buildings, scheduled heritage structures and character-contributing buildings, additions and alterations also include:
  - changes to the fabric, or characteristics of a building or structure, including the removal or replacement of building components that do not meet the definition of repairs and maintenance; ...

#### **Demolition**

The complete or partial destruction of a building or structure.

16. Therefore, the proposed exception could theoretically result in structural damage to heritage buildings, if they are located on the same site as a construction project, as a permitted activity. I note that based on advice I have received from Mr Exeter I understand that this would be an unlikely scenario as very high levels of vibration would be needed to cause structural damage. Nonetheless, I do not support the proposal in the agreed rule to exempt heritage buildings on the same site as the construction activity as it does not give effect to the proposed Policy 13.2.1.10. The policy as currently worded sets a high bar of insignificant adverse effects. If an exception is to be provided on the basis that it is appropriate for property owners to be made entirely responsible for protecting heritage buildings and structures from construction vibration, then I would recommend some caution in relation to potential for structural damage. I have recommended an additional clause below requiring that certification is provided in relation to the potential for structural damage, which could be provided with building consent documents at the time of building consent. I note that a prudent building owner would want to obtain such advice before proceeding with a construction and site investigation activity that was likely to generate vibration levels that could result in building damage beyond a cosmetic level.

## Rule 4.5.4.X.b

b. Construction and site investigation vibration received at any buildings in any zone must not exceed the following building damage vibration limits:

Location	Time Period	Vibration Limit (mm/s PPV)	Measurement Location
Any building	At all times	The guideline vibration velocity values (PPV) set	In accordance with the requirements of DIN 4150-
		out in the German Standard	3:2016
		DIN 4150-3:2016 Vibration	
		in buildings – Part 3: Effects	
		on Structures.	

- i. Except that this standard does not apply to vibration received at a building on the same site as the construction and site investigation activity, and the building and land on which the construction and site investigation activity is undertaken are in the same ownership, <u>provided that:</u>
  - 1. where the building or structure is a scheduled heritage building or scheduled heritage structure, a suitably qualified person certifies that the works can be undertaken without causing structural damage to the scheduled heritage building or structure.
- ii. Vibration generated by construction and site investigation must be assessed using peak particle velocity (PPV). This is consistent with the metrics used in ISO 4866:2010 Mechanical vibration and shock.
- iii. Scheduled heritage buildings and scheduled heritage structures are always considered to be 'structures that are particularly sensitive to vibration and are of great intrinsic value' in terms of assessment under DIN 4150–3:2016.

#### Discussion on Rule 4.5.4.X.c

- 17. The agreed rule seeks to change the activity status for all rule exceedances to a restricted discretionary activity status. The appropriateness of a discretionary or non-complying activity status was discussed in the Section 42A Report for both the PH6 and TA3 topics, where the reasons for seeking to retain discretionary and non-complying activity statuses were outlined.
- 18. I acknowledged in those discussions that a restricted discretionary processing status could be used for consent assessment purposes in relation to contraventions of the performance standard, as is the case in a number of other District Plans. I have proposed retaining discretionary and non-complying activity statuses as this aligns with the existing architecture of the Plan in relation to plan rules where noise limits are exceeded. The non-complying status is targeted to exceedances at night, where there are potential health effects arising from contraventions that make a non-complying status appropriate, and in relation to heritage buildings. In relation to the discretionary status, I note that this also provides for positive effects such as economic considerations to be considered in processing the consent.
- 19. If the Panel wish to amend the activity status for a breach of Rule 4.5.4.X to a restricted discretionary activity as proposed by Mr Exeter, consequential changes to the assessment rules are required as shown below. Note that these are not included in Appendix A drafting amendments, as I do not recommend this approach.

Relocate Mr Exeter's proposed Rule 4.8.2 to section Rule 4.7.2 (performance standard contraventions) and amend as shown:

4.8.2 4.7.2 Assessment of restricted discretionary activities (performance standard contraventions)

Performance standard		Matters of discretion	Guidance on assessment of resource consents	
<u>Y</u> .	Construction and site investigation	a. Effects on amenity of surrounding sites	Relevant objectives and policies	
vibration		b. Effects on health and safety	i. Objective 4.2.1	
		,	<u>ii.</u> Temporary activities (Policy 4.2.1.1)	
			Relevant guidance from other sections (priority considerations):	
			b. See Section 13.7 for guidance on the assessment of resource consents in relation to Objective 13.2.1 and effects related to significant heritage values.	
			General assessment guidance	
			<u>iii.</u> In assessing the potential for vibration	
			<u>iv.</u> The assessment will consider the proposed construction	
		c. Effects on heritage values	See Rule 13.5	

Delete D and NC assessment rules 4.9.2.X and 4.10.2.X.

Add new RD assessment rule in the heritage section - 13.5.3.X:

	13.5.3 Assessment of performance standard contraventions that affect a protected part of a scheduled heritage building, scheduled heritage structure, or scheduled heritage site				
Performance standard Matte		Matters of discretion	Guidance on the assessment of resource consents		
<u>X.</u>	Construction and site investigation vibration	a. Effects on heritage values	Relevant objectives and policies:  i. Objective 13.2.2		
			ii. Adverse effects from vibration on scheduled heritage buildings and scheduled heritage structures are insignificant (Policy 13.2.1.10).		

Delete D and NC heritage assessment rules 13.7.3.1 and 13.8.4.3.

## Policy 13.2.1.10

- 20. Port Otago Limited proposed re-drafting proposed Policy 13.2.1.10 in its supplementary evidence following the hearing.<sup>2</sup>
- 21. Port Otago considers the wording of Policy 13.2.1.10 to be too restrictive in combination with a non-complying activity status for 3mm/s PPV exceedances of the vibration limit impacting on heritage buildings. It proposes a change in wording from insignificant to minimised as far as practicable as follows:

# Policy 13.2.1.10

Only allow construction and site investigation where the adverse effects from vibration on scheduled heritage buildings and scheduled heritage structures are insignificant minimised as far as practicable.

- 22. I agree with the submitter that the policy wording must be considered in relation to the rule settings and the activity status for rule contraventions, to ensure there is a coherent relationship.
- 23. The relationship proposed in the Section 42A report is a policy direction that adverse effects are insignificant, combined with a 3mm/s PPV vibration limit rule for heritage buildings and structures that is designed to protect against cosmetic damage. This is supported by a non-complying activity status where the 3mm/s PPV limit is exceeded by 3mm/s PPV or more. It is agreed that this is a stringent framework, but it reflects the national importance of heritage in the RMA and the 2GP Objective 13.2.1 that seeks to ensure scheduled heritage buildings and structures are protected.
- 24. In relation to the changes sought by submitters, I note that changes to either the rule or the policy have the potential to result in a less coherent relationship between the policy and rules, depending on which proposed changes are accepted by the Panel.
- 25. The revised rule agreed by the experts proposes an exception for heritage buildings located on the same site as the activity and a change to a restricted discretionary status. I do not support the exception for heritage buildings on the same site as the construction and site investigation activity in the agreed rule, as outlined above, as it will not give effect to Policy 13.2.1.10 as notified. I also consider that an exception for scheduled heritage buildings within the same site may also not ensure that adverse effects are "minimised as far as practicable" (Port Otago's proposed wording), although the conflict with the policy will be reduced.
- 26. If the panel decides to make the rule less restrictive by including an exception for heritage buildings located on the same site as a construction and site investigation activity, and/or a restricted discretionary status for contraventions as proposed in the agreed rule, then I acknowledge that the change to the policy proposed by Port Otago to reduce its stringency would result in a more coherent relationship between the policy and the rules.

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<sup>&</sup>lt;sup>2</sup> Supplementary evidence of Kate Louise Pascall for Port Otago Limited, 1 Sept 2025

## PHS6 - CONSTRUCTION NOISE CONTROLS FOR LONG-TERM DURATION CONSTRUCTION

## **Purpose of Change**

27. To review Rule 4.5.4 for the control of construction noise to ensure it is not overly restricting infill development that is otherwise anticipated by the Plan, particularly in commercial and mixed use, industrial, and Port zones.

#### Discussion

28. The 5 September memo discussed recommended amendments to PHS6, which included drafted amendments to Rule 4.5.4.1. However, consequential changes to Rules 4.9.2 and 4.10.2 are also required as a result of that recommendation and are provided below. Additional minor changes to Rule 4.5.4.1 are also proposed to improve clarity and remove duplication. Amendments proposed in this Reply memo are shown in red. The overall changes from the notified version are marked up in Appendix A to this memo. These recommended provisions supersede those provided in Section 2.22 of Appendix A to the 5 September memo.

## 4.5.4.1: Construction and site investigation noise

- a. Construction and site investigation must not exceed the following relevant noise limits in Rule 4.5.4.1.a.i, Rule 4.5.4.1.a.ii and Rule 4.5.4.1.a.iii at any building that is occupied during the construction and site investigation works. Noise must be , and will be when measured and assessed in accordance with NZS6803:1999 Acoustics Construction Noise:
  - i. Construction <u>and site investigation</u> noise received <u>at any building that is occupied during the construction works in the following locations must not exceed the noise limits in the following table, except where Rule 4.5.4.1.X applies:</u>
    - 1. residential zones and;
    - 2. dwellings in rural and rural residential zones, and
    - 3. buildings housing any noise sensitive activities <u>in</u> in any other zone the Recreation Zone, centres zones, SSYP, and major facility zones other than Port Zone:

[table of noise limits – no changes proposed]

ii. Construction and site investigation noise received at any building that is occupied during the construction and site investigation works in the lindustrial, Industrial Port and Port zones and commercial and mixed use zones for all days of the year at buildings that do not house a noise sensitive activity must not exceed the noise limits in the following table, except where Rule 4.5.4.1.X applies:

[table of noise limits – no changes proposed]

- iii. Construction and site investigation noise received at any building that is occupied during the construction and site investigation works in the following locations must not exceed the noise limits in the following table, except where Rule 4.5.4.1.X applies:
  - 1. at any building within CBD, WP, PPH, HE, CEC, SDLF, and TR; and
  - 2. <u>at buildings housing a noise sensitive activity in the lindustrial, Industrial Port and Port zones:</u>

[table of noise limits – no changes proposed]

- X. Typical and long-term duration construction and site investigation within the lindustrial, Industrial Port, Port, and commercial and mixed use zones may exceed the relevant noise limits in Rule 4.5.4.1.a.i, Rule 4.5.4.1.a.ii and Rule 4.5.4.1.a.iii where all of the following criteria are met:
- i. the exceedances occur on a total of no more than three days per project;
- ii. the exceedances only occur between the hours of 7.30am and 6.00pm, Monday to Saturday;
- iii. the exceedances comply with a limit of 80 dB LAeq (15 min); and
- iv. the occupants of all buildings where exceedances are expected have been advised in writing, no less than three days before the works begin, of the location and duration of the works and a contact name and phone number for complaints.
  - b. Vibration from construction must not exceed a maximum particle velocity measured on any foundation of an adjacent building on another site, or the same site if different ownership, of 25mm/second for commercial buildings or 10mm/second for buildings housing noise sensitive activities.
  - c. Activities that contravene this performance standard by less than 5 dB LAeq (15 min) in any of either of the following ways are discretionary activities:
    - i. <u>activities that contravene Rule 4.5.4.1.a.<del>ii, Rule 4.5.4.1.a.ii or Rule 4.5.4.1.a.iii</del> by less than 5 dBA; <del>or</del></u>
    - ii. activities that contravene Rule 4.5.4.1.a.ii, Rule 4.5.4.1.a.ii or Rule 4.5.4.1.a.iii-by 5 dBA or more, in the lindustrial, Port and commercial and mixed use zones between 7.00am and 10.00pm=;
    - iii. activities that contravene Rule 4.5.4.1.X.i, iii or iv in the commercial and mixed use zones;
    - iv. <u>activities that contravene Rule 4.5.4.1.a by 5dBA or more in the Port, Industrial Port and Industrial zones; or</u>
    - v. <u>activities that contravene Rule 4.5.4.1.X in Port, Industrial Port and Industrial zones.</u>
  - d. Activities that contravene this performance standard by 5 dB LAeq (15 min) or more in either of the following ways other than provided for in 4.5.4.1.c are non-complying activities::
    - i. activities that contravene Rule 4.5.4.1.a.i, Rule 4.5.4.1.a.ii or Rule 4.5.4.1.a.iii by 5 dBA or more, except in the lindustrial, Industrial Port, Port and commercial and mixed use zones between 7.00am and 10.00pm; or
    - ii. activities that contravene Rule 4.5.4.1.X.
  - e. For the purposes of Rule 4.5.4.1 "short-term duration" means construction <u>and site investigation</u> work at any one location for up to 14 calendar days per project; "typical duration" means construction <u>and site</u> <u>investigation</u> work at any one location for more than 14 calendar days but less than 20 weeks per project; and "long-term duration" means construction <u>and site investigation</u> work at any one location with a duration exceeding 20 weeks per project.

4.9.2 Assessment of all discretionary performance standard contraventions			
Perf	ormance standard	Guidance on the assessment of resource consents	
1.	Construction and site investigation Nnoise: where the noise limit is exceeded by less than 5 dB LAcq	Relevant objectives and policies (priority considerations):	
	<del>(15 min)</del>	X. Objective 4.2.1	

- <u>activities that contravene Rule 4.5.4.1.a</u> by less than 5 dBA
- activities that contravene Rule 4.5.4.1.a by 5 dBA or more in industrial, Port, and commercial and mixed use zones between 7.00am and 10.00pm
- activities that contravene rules 4.5.4.1.X.i, iii
   or iv in the commercial and mixed use zones
- activities that contravene Rule 4.5.4.1.a by
   5dBA or more in the Port, Industrial Port and Industrial zones
- <u>activities that contravene Rule 4.5.4.1.X in</u>
   <u>Port, Industrial Port and Industrial zones.</u>

- Y. The activity is designed and operated to minimise, as far as practicable, adverse effects on:
  - i. the amenity of surrounding properties;
  - ii. people's health and safety; and
  - iii. <u>the safety and efficiency of the transport network</u> (Policy 4.2.1.1).

Relevant guidance from other sections (priority considerations):

 See Section 9.7 for guidance on the assessment of resource consents in relation to Objective 9.2.2 and effects related to public health and safety.

#### **General assessment quidance:**

Z. For exceedance of construction and site investigation noise limits, Council will consider how noise will be managed and may require a construction noise and vibration management plan to be submitted with the application (see Special Information Requirement – Rule 4.11.2).

#### **4.10.2** Assessment of non-complying performance standard contraventions

## Performance standard

- Construction and site investigation Anoise limit is exceeded by 5 dB LAeq (15 min) or more (Rule 4.5.4.1.d)
  - activities that contravene Rule 4.5.4.1.a
    by 5 dBA or more except in industrial, Port and
    commercial and mixed use zones between 7.00am
    and 10.00pm

activities that contravene Rule 4.5.4.1.X.ii

Light spill - where the limit is exceeded by greater than 25%

Guidance on the assessment of resource consents

Relevant objectives and policies (priority considerations):

#### X. Objective 4.2.1

- Y. The activity is designed and operated to minimise, as far as practicable, adverse effects on:
  - the amenity of surrounding properties;
  - ii. people's health and safety; and
  - iii. the safety and efficiency of the transport network (Policy 4.2.1.1).

Relevant guidance from other sections (priority considerations):

a. See Section 9.8 for guidance on the assessment of resource consents in relation to Objective 9.2.2 and the effects related to public health and safety.

# General assessment guidance:

Z. For exceedance of construction and site investigation noise limits, Council will consider how noise will be managed and may require a construction noise and vibration management plan (CNVMP) to be submitted with the application (see Special Information Requirements – Rule 4.11.2).

# TREEX - SUBSTANTIVE CHANGES TO SCHEDULE OF TREES

- 29. The Section 42A Report recorded the following recommendation in section 4.37.3 Submissions seeking the removal of existing trees and tree groups from the 2GP Schedule of Trees:
  - "Dunedin City Council's request to remove T096 (S197.019) was supported by Mr Roberts's assessment confirming the tree's terminal decline. As such, I agree that the 2GP should be amended as requested."
- 30. However, the amendment resulting from this change was not shown in the recommended amendments table.
- 31. For completeness and to avoid the Panel inadvertently missing this recommendation, the recommended change to the plan resulting from this recommendation is as follows:

Amend Appendix A1.3 Schedule of Trees to remove trees as shown below:

Tree Number	Tree Location	Tree Species	Tree Common Name	Tree Māori Name
<del>T096-</del> (S197.019)	<del>25 Ashton Street</del> <del>Mosgiel</del>	Nothofagus fusca	Red-beech	<del>Tawhairaunui</del>

32. This supersedes drafting provided in Table 2.37.3 of Appendix A from the 5 September memo.