

**Before the Hearing Panel appointed by the
Christchurch City Council**

In the Matter of

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

And

In the Matter of

Proposed Plan Change to the
Christchurch City Council: Marshs
Road Industrial

**Statement of Evidence of
Gary Walton (Acoustics) for
Calder Stewart Development Limited**

Dated: 2 October 2026

Lane Neave
Level 5, 141 Cambridge Terrace
Christchurch
Solicitor Acting: Joshua Leckie and Charlotte
Coyle
Email: joshua.leckie@laneneave.co.nz,
charlotte.coyle@laneneave.co.nz
Phone: 03 372 6307, 04 903 5481

lane neave.

Table of Contents

INTRODUCTION	2
Qualifications and Experience	2
Code of Conduct	3
SCOPE OF EVIDENCE.....	3
EXECUTIVE SUMMARY	3
BACKGROUND AND ROLE	5
EXISTING NOISE ENVIRONMENT	5
EXISTING NOISE STANDARDS	6
NOISE STANDARDS FOR FRONTAGE PROPERTIES	7
INDUSTRIAL NOISE MANAGEMENT.....	8
OVERALL NOISE EFFECTS	10
Frontage Property Zoning	10
Road Traffic Noise	10
RESPONSE TO SELWYN DISTRICT COUNCIL SUBMISSION	11
RESPONSE TO OTHER SUBMISSIONS	13
RESPONSE TO SECTION 42A REPORT	14
CONCLUSION	14

INTRODUCTION

Qualifications and Experience

1. My name is Gary Mark Walton. I am a senior consultant in the international acoustics firm, Marshall Day Acoustics (**MDA**).
2. I hold a Bachelor of Science with Honours in Audio and Music Technology from the University of the West of England in the United Kingdom. I am a member of the Acoustical Society of New Zealand and the Institute of Acoustics (United Kingdom), for which requirements of membership are that I am active in the field of professional acoustics and satisfy the requirements regarding suitable qualifications and experience.
3. I have worked for MDA in Christchurch since 2014. In this time, I have worked on a diverse range of environmental noise projects across New Zealand. My experience includes:
 - (a) industrial facilities, including warehousing and distribution centres;
 - (b) ports and airports;
 - (c) dairy factories;
 - (d) roading and infrastructure projects;
 - (e) commercial and retail developments; and
 - (f) construction and demolition activities.
4. I have previously provided evidence for similar industrial/commercial related policy matters, including for the Christchurch, Selwyn and Timaru District Plans.
5. I have been engaged by Calder Stewart Development Limited (**Calder Stewart**) to give expert acoustic evidence in respect of Private Plan Change 19: Marshs Road Industrial (**PC19**), being a private plan change application to rezone approximately 20 hectares of land zoned Rural Urban Fringe Zone (**RuUF**) to Industrial Heavy Zone (**IHZ**) and Industrial General Zone (**IGZ**) (**Site**).
6. I am familiar with the Site. I have previously undertaken a number of noise assessments for other projects in the surrounding area. I undertook a specific visit to the Site on 16 September 2026.

Code of Conduct

7. While this is not an Environment Court hearing, I have read and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2023. This evidence is within my area of expertise, except where I state that I am relying on material produced by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

SCOPE OF EVIDENCE

8. My evidence will deal with the following:
- (a) executive summary;
 - (b) background and role;
 - (c) assessment of noise effects;
 - (d) response to submissions;
 - (e) response to s42A Report; and
 - (f) conclusions.

EXECUTIVE SUMMARY

9. Calder Stewart engaged MDA in August 2026 to address noise-related submissions on PC19. My evidence focuses on the closest noise-sensitive activities to the Site. These are the existing dwellings on Main South Road and Marshs Road that adjoin the Site, and the dwellings on the opposite side of Marshs Road in the Selwyn District.
10. Road traffic, mainly on State Highway 1 (**SH1**), governs the existing noise environment in the area. The measured background noise levels are typical of a suburban environment. They broadly align with the RuUF notional boundary noise standards of 50 dB L_{Aeq} during the day and 40 dB L_{Aeq} at night.¹
11. In my opinion, the current amenity expectations of residents need to be maintained while the land remains in residential use. Retaining the existing RuUF zoning of the dwellings achieves this, as the existing noise standards will continue to apply. I agree with the recommendations of the s42A report that this is an appropriate way

¹ Christchurch District Plan, Rule 6.1.5.2.1 (Table 1).

to maintain amenity, and that an IGZ area will act as a buffer between the residential activity and heavy industry activities.

12. The IGZ and IHZ internal noise standards (70 and 75 dB L_{Aeq} respectively) are well above the RuUF standards, so future industrial activities near the Frontage Properties may need noise mitigation. Modelling shows that even an activity generating the permitted 70 dB L_{Aeq} could meet the RuUF limits with careful site design and activity management. In practice, many existing Hornby Quadrant activities generate considerably less noise than this, which would reduce the mitigation needed.
13. Future activities designed and operated to comply with the noise limits that currently apply will result in minimal change to the existing noise environment and acoustic amenity at the adjoining dwellings.
14. I agree with Selwyn District Council (**SDC**) and Mr Lightbody that noise effects on dwellings in the Selwyn District need to be considered. While it is a matter for legal submission, from a technical perspective I do not consider it correct to apply the Christchurch District Plan (**CDP**) noise standards to receivers outside the Christchurch District. Instead, I recommend an additional matter of discretion requiring consideration of noise effects on these receivers, having regard to the Selwyn District Plan noise provisions. The 10-20 metre setbacks in the Outline Development Plan (**ODP**) provide space for mitigation, such as bunds or fences, if required.
15. Traffic noise from the new road access is likely to be in keeping with existing traffic noise levels near SH1. At the nearest dwellings, operational vibration from typical industrial activity is expected to be orders of magnitude below levels associated with cosmetic building damage, and generally below common thresholds of human perception.
16. I consider that the noise effects of PC19 can be managed to an acceptable level, subject to the measures I have described in my evidence.

BACKGROUND AND ROLE

17. I was not involved in the original Plan Change request process but have reviewed the application and supporting information.² Calder Stewart engaged MDA in August 2026, after receiving submissions relating to noise.
18. The notified IHZ area includes existing dwellings on Main South Road and Marshs Road that are in the RuUF Zone, which I have referred to as the **Frontage Properties**, for consistency with the s42A report.³ Further dwellings are located on the opposite side of Marshs Road, within the Selwyn District. I have focussed primarily on noise effects in these two areas, as they contain the closest noise-sensitive activities to the Site.
19. My colleagues at MDA have monitored noise in the area and modelled the potential future noise environment to establish the effects of the proposal. I describe this work below.
20. I have worked with Calder Stewart to refine the noise-related aspects of the proposal, so that it includes appropriate noise mitigation and management measures and addresses relevant submissions. This work, together with matters arising from the s42A report, has resulted in some changes to the noise provisions in the original plan change application.
21. The primary change is to retain the existing zoning of the Frontage Properties as RuUF, effectively removing them from the Plan Change request. The changes are detailed more fully in the evidence of Mr Kim McCracken, and I address them below.

EXISTING NOISE ENVIRONMENT

22. My colleagues surveyed existing noise in the area, as detailed in **Annexure A**. Noise sources included road traffic, mainly on SH1, industrial activities, construction and earthmoving, aircraft and natural sounds such as birds and insects.
23. The results vary slightly with measurement location, but generally show existing noise levels in the area are in the range of:
 - (a) daytime – 53-56 dB LAeq and 47-51 dB LA90; and
 - (b) night-time (excluding early morning⁴) – 48-53 dB LAeq and 40-42 dB LA90.

² *Request and Section 32 Evaluation*, updated September 2025 and available from the Christchurch City Council website for PC19.

³ Planning Officer's Report of Kirk Joseph Lightbody (s42A), dated 25 September 2026.

⁴ The District Plan night-time period is defined as 22:00 to 07:00. However, my experience is that traffic noise in the early morning period, for example between 06:00 and 07:00 near SH1, will 'pull up'

24. Although the survey was relatively short, the results are consistent with what I would expect for this area. Road traffic strongly influences the 'average' (L_{Aeq}) noise levels, and the elevated night-time levels reflect the 24/7 nature of traffic on the highway network. The 'background' (L_{A90}) levels represent the underlying noise level – for example, during lulls in traffic – and are typical of a suburban environment.
25. Noise levels on dwelling elevations facing SH1 are likely to be much higher than on those facing the Site. For my assessment, I have taken the worst case in terms of noise sensitivity, and assumed that the most noise-sensitive spaces in each dwelling face the Site. The ambient noise levels above reflect this environment, rather than conditions closer to SH1.

EXISTING NOISE STANDARDS

26. The CDP noise standards apply based on the zoning of the receiving site. For this reason, the zoning of the noise-generating site has no bearing on the noise standards that apply in a given situation (in most cases).
27. The applicable noise standards for the existing dwellings in the RuUF Zone are:
- (a) When assessed at the site boundary:
 - (i) 55 dB L_{Aeq} (daytime); and
 - (ii) 45 dB L_{Aeq} and 70 dB L_{AFmax} (night-time).
 - (b) When assessed at the notional boundary:⁵
 - (i) 50 dB L_{Aeq} (daytime); and
 - (ii) 40 dB L_{Aeq} and 65 dB L_{AFmax} (night-time).
28. In this case, the more restrictive notional boundary limits effectively govern at the Frontage Properties, as the dwellings are set back no more than about 20 metres from the eastern site boundary. For many dwellings, the notional boundary is therefore at or close to the site boundary. For simplicity, I refer only to the notional boundary standards for the Frontage Properties.
29. Noise standards also apply to the open space and commercial areas bounding the Site to the north and south, along Main South Road. I have not focussed on these

the average night-time level so that it does not characterise the quietest periods of the night as well. I have therefore excluded the early morning period from the levels at (b).

⁵ The notional boundary is defined in the CDP as 'a line 20 metres from any wall of a residential unit or a building occupied by a sensitive activity, or the site boundary where this is closer to the residential unit or sensitive activity'.

areas, but note for completeness that the applicable site boundary standards are the same as those at paragraph 27(a) above.

NOISE STANDARDS FOR FRONTAGE PROPERTIES

30. In my opinion, the current amenity expectations of residents in and around the Site need to be maintained until such a time that the land is no longer in residential use.
31. The RuUF notional boundary noise standards are consistent with the amenity anticipated in a suburban residential area, and effectively represent the highest level of protection afforded to any zone in the CDP. They also broadly align with the background noise environment described at paragraph 23.
32. Maintaining the existing level of protection will therefore provide an outcome that is consistent with the existing environment and offers a relatively high level of residential amenity (setting aside the potential effects of other noise sources in the environment).
33. In terms of noise limits, this will be achieved by removing the Frontage Properties from the Plan Change request and retaining the existing RuUF zoning over those properties (i.e. they will remain outside the plan change area).
34. I agree with Mr Lightbody that retaining the existing zoning is an appropriate way to maintain amenity.⁶ I also agree with Mr Lightbody that an IGZ area will act as a buffer between the Frontage Properties and heavy industry.⁷
35. However, although the range of activities permitted or anticipated differs somewhat between the IHZ and IGZ, their internal zone noise standards differ by only 5 dB (75 dB L_{Aeq} in the IHZ and 70 dB L_{Aeq} in the IGZ). Both are well above the RuUF daytime and night-time standards of 50 and 40 dB L_{Aeq} .
36. Some noise management may therefore be needed where future industrial activities could affect existing residential land. This is consistent with the existing CDP rule framework, under which industrial activities at several industrial/residential interfaces already have to manage their noise emissions.⁸
37. In my experience with projects at or near such zone interfaces, activities can mostly be engineered to comply, or otherwise to mitigate effects to an acceptable level.

⁶ Paragraph 7.4.7, s42A report.

⁷ Paragraph 7.3.7, s42A report.

⁸ Similar examples with a direct boundary interface (no intervening road corridor) include: (a) Halswell Junction Road/Denise Crescent, Hornby; (b) Boston Avenue/Branston Street, Hornby; (c) The Runway/Hayton Road, Wigram; (d) Paragon Place/Buchanans Road, Sockburn; (e) Roydvale Avenue/Highwood Lane, Burnside; (f) Tyrone Street, Belfast; (g) Cuthberts Road, Bexley; and (h) Curries Road, Hillsborough.

The mitigation needed can be significant (and costly) in some cases, so it needs careful consideration at the design and consenting stage of future projects. However, it is generally still feasible from an engineering perspective.

38. PC19 also has the potential to conflict with noise-sensitive land use in the Selwyn District, which I address below in response to the submission of SDC.

INDUSTRIAL NOISE MANAGEMENT

39. Under the proposed rule framework, any new industrial activity in the area would need to comply with the existing RuUF noise limits at the Frontage Properties.
40. This would generally be addressed at the resource consent stage. Activities may need to incorporate noise mitigation into their design (e.g. physical design of buildings and equipment) and/or operations (e.g. avoiding high noise-generating activities outside at night).
41. Where resource consent is not otherwise required, operators would remain responsible for identifying the applicable residential noise limits through their own due diligence and designing their activities accordingly to comply with these limits, as for any permitted activity.
42. I have considered the types of activity that could establish at the Site if it were rezoned for industrial use, and the level of mitigation that might be needed to achieve the RuUF noise limits.
43. **Figure 1** shows predicted noise levels from a hypothetical high-noise industrial activity. The noise sources are based on measurements of comparable activities elsewhere, and include heavy vehicles, outdoor plant and equipment, mobile machinery, and noise breakout from a lightweight building. In combination, these sources generate noise up to the permitted 70 dB L_{Aeq} at the boundary of the example site, which is the IGZ limit between industrial sites.
44. The example includes noise mitigation in the form of surrounding industrial buildings, boundary fences, and a 3 metre high earth bund along the sensitive boundaries. With this mitigation, noise levels at the Frontage Properties are below the 50 dB L_{Aeq} daytime limit. To meet the 40 dB L_{Aeq} night-time limit, this example activity would need additional management, such as not using some of the outdoor machinery at night. This demonstrates that careful site and activity design can achieve the RuUF noise limits, even for a high-noise activity.

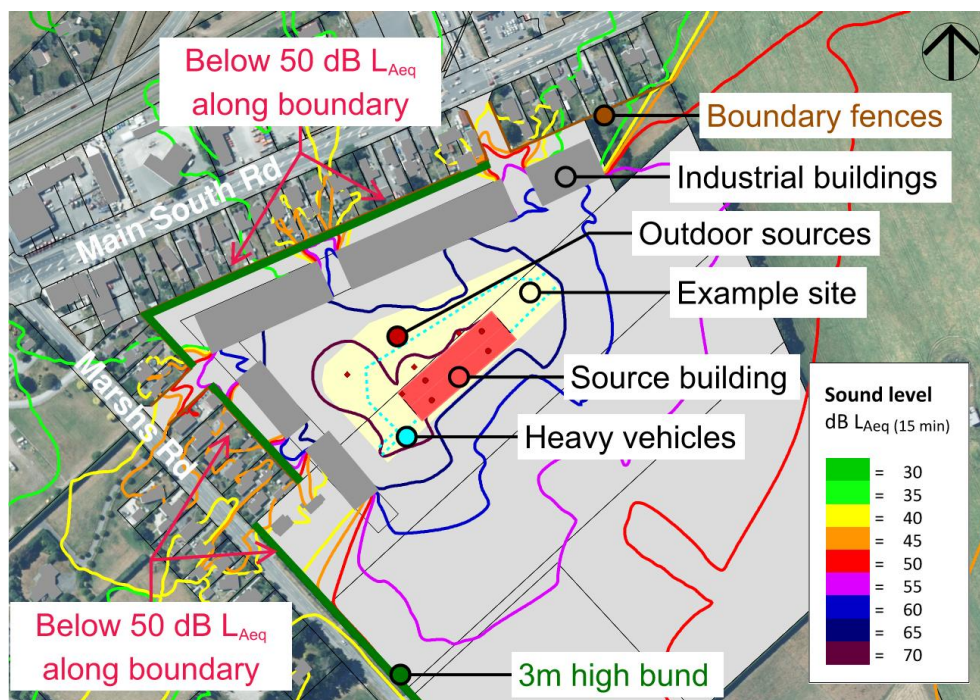


Figure 1: Example noise emissions from a high-noise industrial site

45. Although it is only illustrative, I consider this example to represent a realistic worst case that demonstrates relevant noise standards will be able to be met. While the noise sources are realistic, it is unlikely that a single activity would combine all of them and operate continuously up to the IGZ limit. In practice, I do not expect all future industrial activities to generate noise right up to the permitted intra-zone standards, as 70–75 dB L_{Aeq} is a high level of environmental noise.
46. For example, the existing Stages 1-4 of the Hornby Quadrant development (the South West Hornby industrial area) include warehouses, distribution centres, packaging facilities, showrooms and offices, among others. Not all of these generate continuous high levels of 'heavy industrial' noise, and, in terms of noise emissions, I characterise many of them as 'lighter' rather than 'heavier' industrial uses.
47. At two freight distribution warehouses in the Hornby Quadrant, my colleagues measured activity noise levels of 55 to 62 dB L_{Aeq} at distances of 30 to 50 metres. Levels only increased to 70 dB L_{Aeq} , measured from the opposite side of the road, when a heavy vehicle exited the site.
48. This contrasts with the IHZ (and even IGZ) permitted noise standards, which would typically enable significant noise generators such as heavy manufacturing, processing plants and rail yards.
49. If future activities are more aligned with the existing nature of Hornby Quadrant activities, the level of noise mitigation needed (and the risk of not meeting the residential noise limits) will reduce accordingly.

OVERALL NOISE EFFECTS

Frontage Property Zoning

50. For the Frontage Properties, future industrial activities designed and operated to comply with the noise limits that currently apply will result in minimal change to the existing noise environment and acoustic amenity.
51. While some new types of noise source will be audible at times, industrial activities are not out of keeping with the range of noise sources that currently occur. Local road traffic will continue to govern the ambient noise environment.
52. Compliance at the Frontage Properties will also effectively ensure that noise at other receivers in the Christchurch District is below the permitted standards.

Road Traffic Noise

53. The proposed ODP shows a new Collector road connecting to SH1 opposite the current Pound Road intersection. Traffic associated with the industrial area would therefore pass close to dwellings, the closest being 687 and 693 Main South Road on either side of the access.
54. The potential adverse effects of traffic noise have not been specifically raised by any submitters or in the s42A report. The normal CDP noise standards also do not apply to road traffic noise within a Transport Zone.⁹
55. A new road may require a noise assessment under the relevant road traffic noise standard, NZS 6806:2010, but only where it is forecast to carry more than 2,000 vehicles per day (AADT). The Standard is therefore unlikely to apply in this instance.¹⁰
56. Where the Standard is used, it generally enables higher noise levels than the usual permitted activity standards. The lowest assessment criterion is 57 dB L_{Aeq} (24 hr) at a dwelling. Levels above this essentially trigger a more detailed assessment of effects and mitigation.
57. As an indication of scale, accounting for the reduction from a solid, 1.8 metre high boundary fence, I calculate a noise level of 55 dB L_{Aeq} (24 hr) for a receiver 10 metres from the new road.¹¹

⁹ CDP Rule 6.1.4.2.a.i.

¹⁰ Stantec's Integrated Transport Assessment and the statement of evidence of Mr Andrew Leckie dated 2 October 2026 describe traffic generation of 200vph for the whole development, which will be spread over multiple access points.

¹¹ Using the Waka Kotahi NZTA Road traffic noise calculator, assuming 2,000 vpd with a nominal 50% heavy vehicles on an SMA10 surface.

58. The traffic noise level at the dwellings is unlikely to exceed 57 dB L_{Aeq} (24 hr), which is similar to or below existing traffic noise levels around the new access. This area is closer to SH1, and therefore subject to higher noise levels than those captured in the survey data described above.
59. Irrespective of the Plan Change, it is also reasonable to expect that there will be long-term growth in road traffic on SH1, which would also increase the ambient noise levels and diminish any additional effects of traffic associated with the industrial area.¹²
60. I therefore expect noise effects from additional road traffic to be in keeping with the existing scale of effects in this area. Given the proximity to SH1, some dwellings may already have been designed to a minimum sound insulation standard for road noise, as Rule 6.1.7.2.1.a requires this for new or altered dwellings within 100 metres of a State Highway. While I expect many of the dwellings on the Frontage Properties pre-date this rule, it would have applied to any more recent alterations.

RESPONSE TO SELWYN DISTRICT COUNCIL SUBMISSION

61. SDC considers that the IHZ noise standards are not appropriate for noise received in a rural zone, and that the receiving environment around 22-42 Marshs Road in particular is more sensitive than the Plan Change request accounts for.
62. I understand the submission to mean that, in Ms Carruthers' opinion, the CDP rural zone noise rules – Rule 6.1.5.2.1 Table 1, rows (b) and (h) – should apply to sites within the Selwyn District. Mr Lightbody shares this opinion at paragraph 7.6.4 of the s42A report.
63. While I agree with the stated problem from an effects perspective, my understanding is that this application of the rules is not correct. Although this is a matter for legal submission, my understanding is that Christchurch City Council has no authority over noise received within the Selwyn District, so the CDP rules do not apply there. Nonetheless, I agree it is important to consider noise effects at receivers within the Selwyn District.
64. I consider this distinction of relevant because it creates a potential assessment gap:
- (a) Permitted activities (those that do not need resource consent for any matters) could establish and generate high noise levels at receivers within the Selwyn District.

¹² As an example, the reverse sensitivity requirements for sensitive activities near roads stipulate the addition of 3 dB for future road noise in 20 years' time (Rule 6.1.7.2.1.d.ii.i).

- (b) Even activities that require consent may not have regard to cross-boundary effects unless specifically required to do so.
65. MDA has previously assessed this issue for a site at 85 Marshs Road. In that case, the Commissioner confirmed that, while each council is precluded from regulating beyond its own territorial boundary, this does not prevent Christchurch City Council from considering effects beyond it from activities within its district.¹³ With no applicable District Plan standard, the Selwyn District Plan rural noise provisions were used as a guide to anticipated noise effects, and noise-related consent conditions were imposed. However, that outcome depended on consent being required; no equivalent mechanism would exist for permitted activities.
66. The dwellings at 6-42 Marshs Road are within the General Rural Zone (**GRUZ**) of the Partially Operative Selwyn District Plan (**POSDP**). Under the POSDP, noise from an activity in an industrial zone received in the GRUZ would be subject to limits of 55 dB L_{Aeq} (15 min) during the day and, at night, 45 dB L_{Aeq} (15 min) and 70 dB L_{AFmax}.¹⁴ These L_{Aeq} limits are 5 dB higher (less restrictive) than the equivalent CDP rules.
67. Ideally, the cross-boundary matter would be addressed at the consent stage. However, as noted above, it is harder to close the gap for activities that do not otherwise require consent. From a practical perspective, new activities that are close to the RuUF dwellings on Marshs Road will be controlled by the need to meet the noise standards at these boundaries, which are closer than the dwellings in the Selwyn District. However, there are still some parts of the Site along the Marshs Road frontage (south-east of 27 Marshs Road – generally the proposed IHZ sites) that are directly opposite the GRUZ properties.
68. The proposed ODP already provides for 10-20 metre setbacks from Marshs Road, which may provide sufficient room for noise mitigation if required. Provided new activities are directed to assess noise effects on Selwyn receivers, this gives assurance that there is space to incorporate additional noise mitigation as necessary.
69. I understand this matter will be addressed further in legal submissions on behalf of Calder Stewart Development Limited.

¹³ Commissioner's decision on notification, RMA/2019/308, 1 July 2019.

¹⁴ POSDP NOISE-REQ1 and NOISE-TABLE5.

RESPONSE TO OTHER SUBMISSIONS

70. My evidence has addressed general concerns about potential noise effects. I respond to specific submission points below.
71. Many submitters expressed concerns about the implications of the industrial zone noise rules, for example submissions of M & A Bateria,¹⁵ S & T Paulsen¹⁶ and Niven.¹⁷ Retaining the RuUF zone responds to these concerns directly. Similarly, submissions of Newell¹⁸ and Crockett-Hunt¹⁹ specifically identify night-time noise as a concern. This is also addressed by the application of the existing RuUF limits, which apply lower limits at night to reflect this period of increased sensitivity to noise.
72. The submissions of Eager²⁰ and Niven (and the SDC submission) express a preference for bunds to control noise. I agree that bunds would likely be useful in some cases. In general, the efficacy of a bund depends on its position relative to the noise source(s) and receiver. A bund within the landscaping setback will generally provide meaningful noise attenuation, except where other large structures on the site (for example warehouse buildings) already block noise from a given source. The specific set of mitigation required for any given activity will be assessed at the time of the activity developing, to ensure compliance with the RuUF noise standards.
73. Four submitters (Akulov,²¹ Tofanchuk,²² S & T Paulsen) list vibration among the potential effects of industrial activities. In my experience, operational vibration from typical general industrial activity, such as forklifts, loading and fixed plant on engineered foundations, is minimal beyond the site. At the minimum separation of 40 metres²³ between the rezoning area and the nearest dwellings, I expect such vibration to be orders of magnitude below the levels typically associated with cosmetic building damage, and generally below common thresholds of human perception.
74. Construction vibration from future development will be temporary and addressed through the normal provisions for managing construction noise and vibration.

¹⁵ Submissions 8 and 14.

¹⁶ Submissions 17 and 18.

¹⁷ Submission 23.

¹⁸ Submission 7.

¹⁹ Submission 22.

²⁰ Submissions 9 and 10 on behalf of the Templeton Residents' Association.

²¹ Submission 15.

²² Submission 16.

²³ Accounting for the 20 metre building buffer and the observation that dwellings are typically set back about 20 metres from the boundary.

RESPONSE TO SECTION 42A REPORT

75. I have addressed the key noise-related matters above. For completeness, I summarise my position as follows:
- (a) I agree with the recommendation to retain the existing zoning. While an alternative rule arrangement could be developed to provide equivalent protection, I consider it simplest to retain the *status quo*.
 - (b) I agree with the recommendation to rezone the land IGZ rather than IHZ. Although Calder Stewart proposes IGZ for only about half of the Site, this will help manage the interface between the industrial and residential areas.
 - (c) I do not agree that it is technically correct to apply the CDP noise standards to receivers in the Selwyn District. For this reason, I consider SDC's submission point 5.3 has merit and should not be rejected. However, I agree that noise effects on these receivers need to be considered and managed accordingly.

CONCLUSION

76. PC19 has the potential to affect the acoustic amenity of the Frontage Properties and of dwellings in the Selwyn District. In my opinion, these effects can be appropriately managed.
77. The Frontage Properties will remain in the RuUF and therefore subject to the existing noise standards. Future industrial activities designed to comply with these standards would result in minimal change to the existing noise environment.
78. Achieving compliance is feasible from an engineering perspective, even for activities generating noise at the permitted IGZ level. The specific mitigation required for each activity will vary depending on the layout and noise sources, and will therefore be appropriately addressed at the time any new activity establishes.
79. For receivers in the Selwyn District, the proposed matter of discretion and the ODP setbacks together provide a mechanism for future activities to assess and mitigate cross-boundary noise effects.

80. Subject to these measures, I consider that the noise effects of PC19 can be managed to an acceptable level.



Gary Mark Walton

2 October 2026

ANNEXURE A

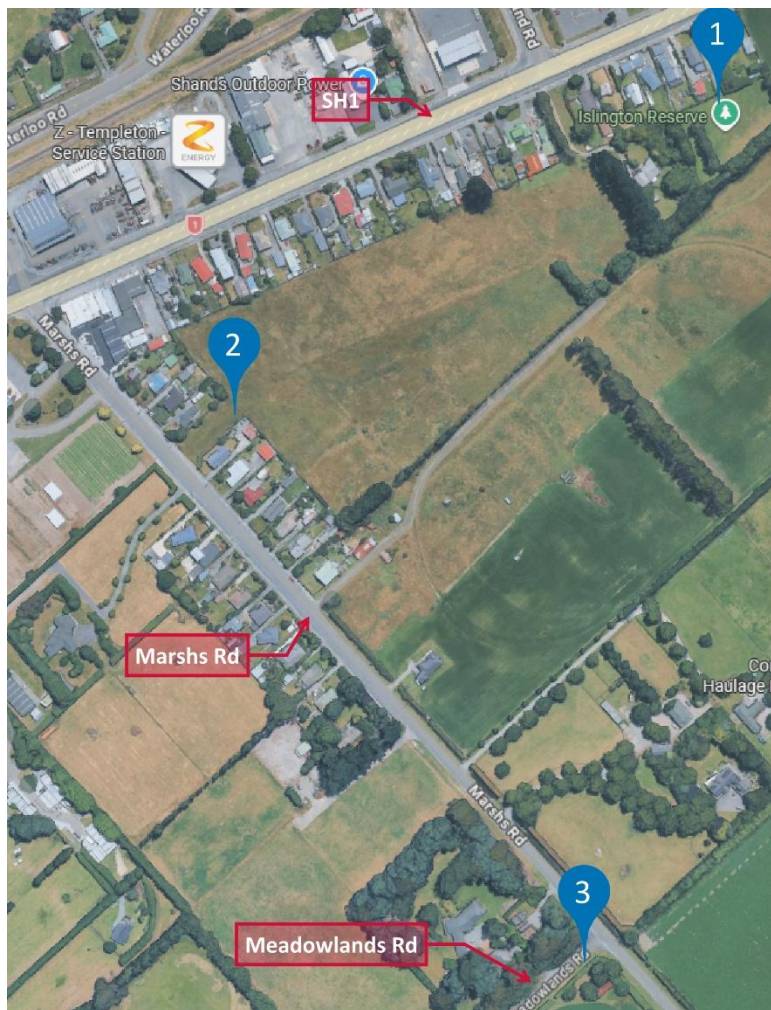
Noise Survey Details

MDA undertook ambient noise monitoring at the positions shown below in Figure A1.

An unattended noise monitor recorded continuously at Location 2 between Tuesday 11 and Friday 14 August 2026. Attended measurements and observations using a handheld sound level meter were obtained at all three positions, with an initial daytime survey on Friday 7 August 2026 and a night-time/early morning survey on 11 August 2026.

The survey results are provided in Tables A1 and A2 overleaf for the attended survey results, while the unattended monitor data is shown in Figure A2.

Figure A1: Noise monitoring locations



The key details of the noise survey are as follows:

Personnel: Ayla Wesley, Marshall Day Acoustics
Weather: 7 August 2026 – Temperature 8 °C, partial cloud, 0-2 m/s ENE wind
11 August 2026 – Temperature 3 °C, cloud clearing, nil wind
Instrumentation: NTi XL3 analyser, s/n A3A-02228-F0, calibration due 08/01/2028
Brüel & Kjær Type 4231 calibrator, s/n 2574264, calibration due 23/09/2026
01dB CUBE Noise Monitor, s/n 11191, calibration due 19/06/2027
Calibration: Field calibration of the equipment was carried out before measurements, and the calibration checked after measurements

Table A1: Daytime attended survey results, 7 August 2026

Loc.	Start Time	Measured Noise Level, dB			Comments and Noise Sources
		L _{Aeq}	L _{A90}	L _{AFmax}	
1	15:09	56	52	67	SH1, industrial area excavator, reversing squawker
1	15:26	56	49	79	SH traffic slowing, birds, excavator
1	15:42	56	52	63	Birds, slow SH1 traffic, excavator, trucks braking
2	12:44	56	50	76	Traffic: SH1 & Marshs, construction, sirens, aircraft
2	14:32	56	50	80	SH1 traffic, Marshs Rd traffic
2	14:47	53	50	66	SH1 traffic, less Marshs Rd traffic, metal hammering
3	13:22	56	46	70	Marshs Rd traffic, SH1 traffic, tree in wind, aircraft
3	13:37	57	47	74	Aircraft, Marshs Rd traffic, SH1 traffic, birds
3	13:49	55	47	70	Marshs Rd Traffic, aircraft

Table A2: Night-time/morning attended survey results, 11 August 2026

Loc.	Start Time	Measured Noise Level, dB			Comments and Noise Sources
		L _{Aeq}	L _{A90}	L _{AFmax}	
1	04:57	48	42	58	Birds, SH1 traffic
1	05:58	51	47	60	Powerlines, SH1 traffic, birds
1	07:15	55	52	67	SH1 traffic, birds, chickens
3	04:18	52	37	76	Powerlines, Marshs Rd traffic
3	05:19	54	40	78	Increased bird activity, traffic on SH1& Marshs Rd
3	05:43	53	45	68	Marshs Rd traffic, birds, SH76 traffic, SH1 traffic
3	07:35	59	50	76	Birds, Marshs Rd traffic, Plane Pass
3	07:55	59	52	73	Birds, Marshs Rd traffic

Figure A2: Daily variation in noise level at the unattended noise monitor

