

## Before the Hearings Commissioners

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

In the matter of a submission by the New Zealand Transport Agency –  
Waka Kotahi (NZTA) (submitter s356)

and in the matter of Far North Proposed District Plan (**Proposed Plan**)

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Primary statement of evidence of Bruce William Hawkins regarding Hearing 6/7  
and the Noise Chapter of the Proposed Far North District Plan.

Planning and Corporate Evidence.

Dated 7 October 2024

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## **1 INTRODUCTION, QUALIFICATIONS AND EXPERIENCE**

1.0 My full name is Bruce William Hawkins. I am a senior planner for NZTA. I am presenting this planning evidence on behalf of NZTA.

1.1 I hold a Bachelor of Arts Degree from the University of New South Wales, and a Post Graduate Diploma in Town Planning from the University of Auckland. I am a full member of the New Zealand Planning Institute. My work experience includes 35 years in planning positions in local and regional government, central government agencies and private consultancies in New Zealand and abroad.

1.2 I have extensive experience with preparing submissions and assessing district plans provisions and have worked as a senior planner in the Auckland Office of the NZ Transport Agency for the past 6 years.

## **2 CODE OF CONDUCT**

2.0 I have read the Environment Court's Code of Conduct for Expert Witnesses (2023) 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 relates to the noise chapter of the Far North Proposed District Plan (PDP) and will address the following:

- a. NZTA submissions in relation to noise in the Proposed Plan.
- b. Council's s42A recommendations; and
- c. further amendments required to the plan provisions.

3.1 In preparing my evidence, I have considered:

- a. the purpose and principles of the RMA (sections 5-8).
- b. provisions of the RMA relevant to plan-making and consenting.
- c. the Northland Regional Policy Statement (**NRPS**)

- i. Relevant provisions of the NRPS include Objectives 3.6 and 3.8 and Policies 5.1.1 and 5.1.3. e.g. Policy 5.1.3 sets a directive to “*Avoid the adverse effects including reverse sensitivity effects of new subdivision, use and development... on the operation, maintenance or upgrading of existing and planned regionally significant infrastructure.*”
  - ii. NRPS Policy 5.1.1 sets out that “*Subdivision use and development should be located, designed, and built (to) not result in incompatible land uses in close proximity and avoid the potential for reverse sensitivity.*”
- d. Section 42A Report *Noise and Lighting* prepared by Mr Kenton Baxter, including the expert advice provided to Council by Mr Peter Ibbotson from Marshall Day Acoustics
  - e. NZTA *Guide to the management of effects on noise sensitive land uses near to the state highway network -2015*<sup>1</sup>. (NZTA Noise Guide)
  - f. NZTA *Assessment of Plan Provisions to Provide for Human Health and Amenity in accordance with section 32 of the Resource Management Act dated May 2022*<sup>2</sup> (NZTA S32)
  - g. Far North PDP -Stephen Chiles – Noise Evidence for NZTA

3.2 I have read the noise evidence prepared by Dr Stephen Chiles on behalf of Waka Kotahi and support the recommendations made.

3.3 I have read the NZTA S32 and support its conclusions and rely on this to support the application of amended noise provisions and the related updates to ventilation requirements.

3.4 And support the overarching methodology outlined in the NZTA Noise Guide.

#### **4 MANAGING ROAD NOISE AND ON SENSITIVE LAND USES**

*Why does the approach to road traffic noise mitigation within the PDP Noise chapter matter to NZTA?*

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<sup>1</sup> See Attachment A

<sup>2</sup> See Attachment B

- 4.0 NZTA is a Crown entity that takes an integrated approach to transport planning, investment and delivery.
- 4.1 The functions of NZTA are set out in s95(1) of the Land Transport Management Act 2003 (LTMA) and include requirements to:
- a. Contribute to an effective, efficient, and safe land transport system in the public interest; and
  - b. Manage the state highway system, including planning, funding, design, supervision, construction, and maintenance and operations, in accordance with the LTMA and the Government Rounding Powers Act 1989.
- 4.2 Under the Government Policy Statement on Land Transport 2024/2025 – 2033/34 up to \$7billion per annum will be invested to deliver the transport outcomes set by government.
- 4.3 In addition to its mandate for the state highway network, NZTA is a co-funder of the local transport network and is therefore a significant investor in the infrastructure required to achieve the land use change and urban growth anticipated in the Northland Region.
- 4.4 The LTMA requires that in meeting its statutory objectives and undertaking its functions, Waka Kotahi “must exhibit a sense of social and environmental responsibility”. NZTA takes those social and environmental responsibilities seriously. Transport noise can cause a range of impacts on people and communities including annoyance and interference with daytime activities such as work, study and domestic living. Other effects include potential sleep disturbance and long-term health impacts such as increased stress and hypertension.

*What is the role of NZTA in managing road traffic noise?*

- 4.5 As the road controlling authority responsible for the state highway network, NZTA looks to avoid unreasonable noise effects associated with traffic using the state highway. Sections 16 and 17 of the RMA also set out a number of requirements relating to avoiding and mitigating adverse environmental effects including in relation to noise.
- 4.6 NZTA recognises that constructing, operating and maintaining state highways can impose adverse effects on communities and the environment, and takes all

practicable steps to manage noise and vibration emissions, and other adverse effects.

- 4.7 On new and altered state highways, NZTA routinely uses low-noise road surfaces; wider designations (where land use permits) and noise barriers to reduce noise levels.
- 4.8 In cases where there is unavoidable high noise exposure, Waka Kotahi acoustically treats existing individual buildings as part of new or altered state highway projects.
- 4.9 Because existing state highways, like State Highway were designed and constructed to the relevant standards at the time, there are often limited practicable opportunities to further mitigate adverse road-traffic noise and vibration effects. On these “older” style state highways, NZTA adopts good practice measures to manage road surface noise and vibration rather than undertaking substantial (capital works) noise mitigation. In some cases, resurfacing treatments will be undertaken as part of maintenance works (typically in built up urban areas only where there are more existing sensitive activities). NZTA also investigates noise and vibration complaints and addresses issues where practicable, such as following up with truck operators using noisy engine brakes.
- 4.10 For maintenance works on these state highways, NZTA adopts good practice environmental management processes. This includes using noise and vibration management plans to determine the controls necessary to minimise any adverse effects.
- 4.11 The role of councils and landowners/developers in managing the effects of road traffic noise from the state highway
- 4.12 For new and altered noise sensitive land use activities establishing near existing or planned state highways, I consider that the responsibility lies with councils to include appropriate land-use controls in district plans, and with landowners/ developers to implement them.

*Proposed approach for managing road traffic noise effects from state highways.*

- 4.13 The NZTA proposed approach to managing the effects of road traffic noise from state highways on sensitive land uses is set out in the NZTA Noise Guide . This

guide describes how NZTA, working together with local authorities and landowners/developers, manages reverse sensitivity effects from noise and vibration sensitive activities. Appropriate setback distances and criteria for acoustically treating buildings are provided, together with model district plan rules and resource consent conditions. NZTA's primary submissions are guided by this document.

- 4.14 A s32 analysis has been developed by NZTA in support of its proposed approach in relation to the management of the effects of traffic noise on sensitive activities. This NZTA s32 analysis has been developed to address plan changes and plan reviews (like the PDP) throughout New Zealand. I consider that the analysis undertaken in this document directly applies to the Far North District.
- 4.15 The s32 document demonstrates that NZTA has undertaken a process to assess all reasonable alternatives to managing the adverse effects of road traffic noise and vibration from state highways on sensitive land uses.
- 4.16 Important to this approach is the establishment of a Noise Corridor Boundary Overlay (NCBO) for each state highway within the geographical boundaries of the Proposed District Plan. Modelled to account for the topographical particularities of each highway corridor context.
- 4.17 In respect to the PDP, the changes to the rules proposed in NZTA's primary submission are in line with the rules set out in Attachment 2 of the s32 document. And a NCBO has been supplied to FNDC.
- 4.18 In summary, the proposed approach seeks to manage the adverse effects of road traffic noise and from state highways in the PDP by:
  - a. Establishing an "effects" area 100 metres from the edge of a state highway carriageway.
  - b. Establishing noise standards for noise sensitive land uses within this "effects area" which address indoor and outdoor noise.
- 4.19 The s32 document concludes that the proposed approach is the most appropriate means of addressing this resource management issue.
- 4.20 Compliance with these rules would need to be demonstrated (where relevant) by submitting an acoustic report undertaken by a suitably qualified and

experienced person to Council. Activities not meeting the permitted activity rules are then required to obtain a resource consent for a restricted discretionary activity.

- 4.21 This proposed approach will impose additional costs on applicants for resource consents. These costs have been assessed as part of the s32 analysis. Costs of mitigation have been assessed by Acoustic Engineering Services Limited as between a 0% and 2% increase in construction cost for new (or additions to) dwellings.
- 4.22 I consider it a reasonable requirement for people wishing to locate in the vicinity of a state highway to protect their health and amenity by mitigating the adverse effects of road traffic noise.

## 5 NZTA SUBMISSIONS

5.0 NZTA submitted on the PDP supporting in part new provisions to manage adverse effects caused by new and altered buildings containing sensitive activities establishing near existing state highway corridors. The purpose of these provisions is to protect the health and amenity of occupants of those buildings. NZTA submitted to amend the provisions to address shortcomings in the notified version.

5.1 NZTA sought the following relief:

### Noise

- a. Support Noise – 01 – Retain as notified.
- b. Support Noise – 02 with amendments. “New noise sensitive activities are designed and/or located to minimise conflict and ~~reverse sensitivity effects~~ protect health and wellbeing.”
- c. Support Noise - P2 with amendments “Ensure noise sensitive activities proposing to locate within the Mixed Use, Light Industrial, on land near state highways and Air Noise Boundary are located, designed, constructed and operated in a way which will minimise adverse noise on community health, safety and wellbeing by having regard to:”
- d. Support Noise -R2 with amendments “All spaces containing noise sensitive activities and habitable rooms comply with the noise insulation for noise

sensitive activities effect standards which are relevant to the underlying zone or specific area identified: Noise – S5 Noise insulation.”

e. Oppose Noise – S5 There are no State Highways in the district that exceed 15,000vpd. Delete reference to vpd and reword to apply to all areas within 100m of state highways.

f. Support Noise Standards- S5 Noise insulation standards for all noise sensitive activities parts 1-5 Amend as follows:

Part 1. Add criteria for other noise sensitive activities.

Part 2. Amend wording as follows: “Compliance with (1) above shall be achieved based on an existing noise level with a  $\pm$  3decibel addition allowing for future traffic increase uncertainty and routine changes;”

Part 3. Amend wording as follows: “Compliance with (1) above shall be achieved if, prior to the construction of any building containing a habitable room, an acoustic design certificate from a suitably qualified acoustic engineer is provided to the Council stating the design will achieve compliance with this standard. The building shall be designed, constructed, and maintained in accordance with the design certificate. ~~The design certificate shall also state the required HVAC design noise levels that are to be included in the ventilation design as well as any relevant assumptions;”~~

Part 4. Clarification is sought by Waka Kotahi as it is unclear what it sets (out) to achieve.

Part 5. Add new clause to require mechanical ventilation to be required if windows need to be closed to achieve (1)

g. Oppose in part Noise – S5 (matters of discretion) all matters b. through to h. be deleted. The 40dB standard is a bottom line for protection of health and it is not appropriate to add factors to open this up for litigation. Amend as follows: “Matters of discretion are restricted to:

a. effects in the ability of existing or permitted activities to operate or establish without undue constraint;

~~b. any legal instruments proposed;~~

~~c. mitigation of noise achieved through other means;~~

~~d. any topographical or other site constraints;~~



- ~~e. any alternative solutions proposed by a suitably qualified acoustic engineer to achieve appropriate amenity for present and future residents of the site;~~
- ~~f. any existing noise generating activities and the level of noise that will be received within any noise sensitive building;~~
- ~~g. the primary purpose and the frequency of use of the activity; and~~
- ~~h. the ability to design and construct buildings accommodating noise sensitive activities with sound insulation and/or other mitigation measures to ensure the level of noise received within the building is minimised particularly at night.”~~

## **6 COUNCIL ASSESSMENT AND RECOMMENDATIONS**

- 6.0 The Section 42A report on Noise and Light prepared by Kenton Baxter dated 23 September 2024, including acoustics advice from Peter Ibbotson, responded on the relief sought by NZTA submissions in the following terms.
- 6.1 Mr Baxter and Mr Ibbotson agree that the limitation of NOISE-S5 to roads with more than 15,000 vehicles per day in the notified PDP should be deleted, as sought in the NZTA submission.
- 6.2 Mr Baxter and Mr Ibbotson both consider the extent of application of NOISE-S5 should depend on the characteristics of each section of road, rather than using a fixed distance. Mr Ibbotson refers to the overlay used in the Whangarei District Plan following an extensive appeal/mediation process.
- 6.3 Mr Baxter and Mr Ibbotson support that an allowance of 3 dB should be required in NOISE-S5 for uncertainty and change in road-traffic noise.
- 6.4 Mr Ibbotson discusses the definition of spaces subject to NOISE-S5 but, while showing the relevant table, he does not make a recommendation on the submission point by NZTA seeking different noise limits for different types of receiving activity. Mr Baxter does not address this either but considers that no change is required.
- 6.5 Mr Ibbotson proposes an alternative ventilation specification in NOISE-S5 to that sought in the NZTA (and other) submissions.

6.6 The NZTA submission raised issues with drafting of “NOISE-S5. Noise insulation for all noise sensitive activities.” (...within 40m of a State Highway) Mr Baxter and Mr Ibbotson acknowledge these issues, and offered the following recommendations:

#### Noise S5.3

“1. Any habitable room in a new building used for a noise sensitive activity, or an alteration to an existing building that changes its use to a noise sensitive activity, must be designed, constructed, and maintained to achieve a ~~maximum~~ internal noise limit of 40dB LAeq(24h);

2. Compliance with (1) above shall be achieved based on an existing noise level with a ~~2~~ 3 decibel addition allowing for future traffic increases and design uncertainty;

3. Compliance with (1) above shall be achieved if, prior to the construction of any building containing a habitable room, an acoustic design certificate from a suitably qualified acoustic engineer is provided to the Council stating the design will achieve compliance with this standard or the certificate shows that design noise level as determined in accordance with (2) above is less than 55 dB LAeq(24h) for road...”

#### Noise S5.5

“5. Where design external noise levels in (2) above are greater than 55 dB LAeq(24 h) the habitable rooms of the noise sensitive activity must be designed, constructed and maintained with cooling and mechanical ventilation system(s) that achieves the following requirements:

i. Provides mechanical ventilation to satisfy clause G4 of the New Zealand Building Code; and

ii. provides cooling that is controllable by the occupant and can maintain the inside temperature to below 25°C”

## 7 RESPONSE TO S42A REPORTS

### Noise – NOISE-P2 and NOISE-S5

7.0 Section 4 of this evidence describes the NZTA S32 assessment developed to inform its response to best practice mitigation of state highway related road traffic noise within District Plans.

- 7.1 I have reviewed the abovementioned NZTA S32 Assessment which is included as Attachment B to my evidence. I support its conclusions and rely on this to support the application of noise provisions and the related updates to ventilation requirements.
- 7.2 The evidence of Dr Chiles in my opinion outlines the problems posed by road traffic noise and common approaches to resolving them.
- a. noise has adverse health and amenity effects on people.
  - b. that noise effects generated by the operation of a highway network cannot be entirely internalised within the road corridor.
  - c. and that appropriate land use controls must be in place to manage sensitive development near these road corridors.
  - d. That the approach promoted within the methodology used in the NZTA S32 analysis is an appropriate approach to this problem. (Founded on the use of the Noise Corridor Boundary Overlay - NCBO to establish noise effects management contours)
- 7.3 I concur that the good Land use controls that avoid or manage noise effects on new sensitive activities or alterations to such activities are critical in protecting sensitive activities from adverse health impacts.
- 7.4 And believe that the traffic-noise management approach adopted in the PDP, with the relatively minor adjustments recommended by Dr Chiles, and in keeping with the approach adopted in NZTA S32 analysis, will be fit for purpose.
- 7.5 His recommendations are mostly in support in part or in full of the Noise section of the PDP but in a few cases are still in opposition to the provisions of Noise S5. They offer no fundamental criticism of the Councils approach but rather offer improvements to facilitate the effective operation of the Noise – S5. Section. As set out below.
- 7.6 Replacement of the fixed 40 metre noise contour from the NZTA State Highway corridors with a more flexible effects contour up to 100m cap but used in combination with an NZTA supplied overlay based on a modelled noise contour (NCBO) where available, rather than a fixed distance. Allowing for a more accurate effects-based assessment of noise effects and appropriate mitigations. (not in contradiction to the S42a report that expresses a preference

for a more finely tuned highway noise assessment tool sensitive to the varied context of State Highway Corridors).

- 7.7 If the current fixed 40m noise contour is retained only the most serious of potential adverse traffic noise effects would be addressed with no mitigation provided for beyond this contour line.
- 7.8 Enhancements recommended to Noise – S5 would result in a more nuanced planning tool catering for different types of potentially affected spaces and receiving activities and for a broader set of assumptions around noise sources and ventilation requirements.
- 7.9 Deletion of the limitation of Noise – S5 to roads carrying more than 15,000 vpd is reflective of the provincial character of State Highways within the Far North District (agreed with Council).
- 7.10 Agreement with the Council S42a that an allowance of 3dB should be required in Noise-S5 for uncertainty and change in road-traffic noise.
- 7.11 Arguing for a more nuanced approach to noise receivers, seeking different noise limits for different types of receiving activity, rather than the current one size fits all broad-brush approach.
- 7.12 Arguing for the application of appropriate mechanical engineering expertise to the ventilation question, as has been applied to the NZTA-suggested ventilation standard. Thereby by avoiding the conundrum posed for the resident by inadequate ventilation. Equally unacceptable options of either mitigated noise (window closed) but inadequate ventilation. Or mitigated temperature extremes (window open) but with higher noise exposure.
- 7.13 Drafting refinements to firstly clarify in Noise S5-3 that the 55dB noise limit is an external measure and secondly in Noise S-5 to allow for the situation when not all rooms are exposed to unacceptable levels of noise exposure so that ventilation is only required if windows need to be closed to achieve internal noise limits.
- 7.14 For NZTA, there is a risk that, without adequate District Plan provisions, new sensitive activities that choose to locate near to established state highways may object to the effects of the existing land transport network (e.g. noise) Historic complaints to NZTA have requested remedial action such as low noise road

surfacing treatments, noise walls, speed restrictions and prohibitions on engine braking on existing state highways.

7.15 On this basis I consider that the rules of the Noise section of the PDP only partially address the relevant PDP noise mitigation policies and do not give effect to the Northland Regional Policy Statement (under section 75[3]) as identified in paragraph 3.1c above.

7.16 The proposed approach also provides more regional consistency in the treatment of state highway noise effect mitigation by aligning PDP approaches with those adopted by the neighbouring Whangarei District. The Whangarei District Plan has adopted an approach supported by the NZTA supplied Noise Corridor Boundary Overlay (NCBO).

## **8 CONCLUSION AND RECOMMENDATIONS**

8.0 In conclusion:

8.0 It is widely acknowledged that noise from state highways can give rise to adverse health effects on sensitive land uses located nearby.

8.1 NZTA continuously works to reduce existing sound exposure and to manage the effects of its operations on existing sensitive activities.

8.2 The development of the NZTA Noise Guide, the NZTA S 32 *report* and the supply of Noise Corridor Boundary Overlays (NCBO and related model noise provisions) to district plan reviews around the country testify to its ongoing work in this field.

8.3 However, due to the nature of its operations, NZTA (as with many large infrastructure providers) is unable to internalise all noise effects.

8.4 Therefore, controls such as those supplied within the Noise chapter of the PDP are necessary to address these adverse effects.

8.5 With relatively minor adjustment I am of the opinion that the PDP Noise provisions can address these issues satisfactorily.

8.6 NZTA submitted on the PDP for such controls in the notified version to be retained with amendments to address shortcomings. I consider the relief

sought by NZTA appropriate to address these issues and recommend the adoption of the NZTA supplied NCBO as part of this solution.

- 8.7 For the Noise chapter: For the most part I either accept or agree with Mr Baxter's recommendations for the Noise – S5 Provisions.

I recommend amendments which:

- i. Replace the fixed 40m noise contour with a more flexible Road Noise Corridor Boundary overlay within 100m of the road designation boundary effects corridor (i.e. the NCBO supplied by NZTA)
- ii. In support of Noise Standard – S5 1. Replace the present definition of “Noise Sensitive Activity” within the definitions section of the PDP with the following.

*“Noise Sensitive Activity(s): Means any residential activity including visitor, student or retirement accommodation, educational activity including in any childcare facility, healthcare activity and any congregations within places of worship/marae. Excludes those rooms used solely for the purposes of an entrance, passageway, toilet, bathroom, laundry, garage or storeroom.”*

And widen Noise Standard -S5 1. To cater for the different dynamics of receiving activities with the addition of the following table from NZTA' s standard S32 analysis.

**Table 1**

Occupancy/activity	Maximum road noise level <sup>Note 1</sup> L <sub>Aeq(24h)</sub>
<i>Building type: Residential</i>	
Sleeping spaces	40 dB
All other habitable rooms	40 dB
<i>Building type: Education</i>	
Lecture rooms/theatres, music studios, assembly halls	35 dB
Teaching areas, conference rooms, drama studios, sleeping areas	40 dB
Libraries	45 dB
<i>Building type: Health</i>	
Overnight medical care, wards	40 dB
Clinics, consulting rooms, theatres, nurses' stations	45 dB
<i>Building type: Cultural</i>	
Places of worship, marae	35 B

**Note 1:** The design road noise is to be based on measured or predicted external noise levels plus 3 dB.]

- iii. Qualify in Noise Standard -S5 3. That the design level cited is an external standard.
- iv. And replace noise Standard -S5 5 & 6 (ventilation) with the example provision from the NZTA S32 analysis

“5. Where design external noise levels in (2) above are greater than 55 dB LAeq(24 h) the habitable rooms of the noise sensitive activity must be designed, constructed and maintained with cooling and mechanical ventilation system(s) that achieves the following requirements:

- i. To achieve indoor design noise levels not exceeding the maximum values in Table 1; and
- ii. If windows must be closed to achieve the design noise levels in (a)(i), the building is designed, constructed and maintained with a mechanical ventilation system that:

- a. For habitable rooms for a residential activity, achieves the following requirements:
    - i. Provides mechanical ventilation to satisfy clause G4 of the New Zealand Building Code; and
    - ii. 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; and
    - iii. provides relief for equivalent volumes of spill air; and
    - iv. provides cooling and heating that is controllable by the occupant and can maintain the inside temperature between 18°C and 25°C; and
    - v. does not generate more than 35 dB  $L_{Aeq(30s)}$  when measured 1 metre away from any grille or diffuser.
  - b. For other spaces, is as determined by a suitably qualified and experienced person.
  - c. A report is submitted by a suitably qualified and experienced person to the Council demonstrating compliance with clauses (1)(a)(i) and (ii) above (as relevant) prior to the construction or alteration of any building containing an activity sensitive to noise.”
- iv. Oppose in part Noise – S5 (matters of discretion) all matters b. through to h. be deleted. The 40dB standard is a bottom line for protection of health and it is not appropriate to add factors to open this up for litigation. Amend as follows:

“Matters of discretion are restricted to:

- a. effects in the ability of existing or permitted activities to operate or establish without undue constraint;
- ~~b. any legal instruments proposed;~~
- ~~c. mitigation of noise achieved through other means;~~
- ~~d. any topographical or other site constraints;~~
- ~~e. any alternative solutions proposed by a suitably qualified acoustic engineer to achieve appropriate amenity for present and future residents of the site;~~
- ~~f. any existing noise generating activities and the level of noise that will be received within any noise sensitive building;~~
- ~~g. the primary purpose and the frequency of use of the activity; and~~



~~h. the ability to design and construct buildings accommodating noise sensitive activities with sound insulation and/or other mitigation measures to ensure the level of noise received within the building is minimised particularly at night."~~

7 October 2024

## **Attachments**

- a. *NZTA Guide to the management of effects on noise sensitive land uses near to the state highway network (2015).*
- b. *NZTA Section 32 Report Noise dated May 2022.*
- c. *NZTA Proposed District Plan – Submission 356 – Waka Kotahi – NZ Transport Agency.*
- d. *Far North PDP – Stephen Chiles – Noise Evidence for NZTA.*