

3.0 ACOUSTICS

General Comment

The control of noise emissions from activities comes under the jurisdiction of the Council by way of provisions contained in the Resource Management Act.

Examination of relevant noise issues has been undertaken by Hegley Acoustic Consultants (HAC) and the results of that study are contained in the HAC report No. 8150 v5 dated December 2008. The recommendations of that report have been given effect to through Plan Change 24 as outlined below. The achievement of the standards in PC 24, and summarised below will ensure that internal noise levels in dwellings will not exceed generally accepted standards, indoor residential activity will not be adversely affected and appropriate protection against sleep disturbance provided.

- Rule 27A.5.5 – Yards (Residential 2 Zone). The separation distance for State Highway 1 is 20 metres and NIMT is 10 metres.
- Rule 27A.6.1 – Noise (Residential 2 Zone) specifies noise limits of 55 /45 dBA L_{eq} (day/night) for sites in the ‘high background noise area’ (refer Maps 107A and B), and 50/40 dBA L_{eq} for all other sites. The rule requires that buildings used for residential activity in ‘Background’ and ‘High Background Areas’ are required to be designed and constructed so that noise from traffic does not exceed internal noise criteria as set out in Rule 27A.6.1.2. The ‘High Background Areas’ are areas where the existing background noise is already high because of the State Highway.
- Rule 29.5.13 (Business Zone) requires attenuation of noise in residential and mixed use buildings.

Rules 29.6.1 (Business zone) and 29B.5.1 (Industrial Zone) establish noise limits for the boundaries adjoining zones used for residential purposes and for business zones where a higher level of acoustic amenity is sought.

3.1 Vehicle Noise

Submission 4.4 (McRae and Wells Family Trusts) expresses concern about increased traffic noise from the road layout. The relief sought is that the 3 roads surrounding the property are not formed or Council purchases the property.

Submission 4.4 is opposed in part by:

- Helenslee Investments Limited (FS05),
- Hynds Pipe Systems Limited (FS06),
- Dines Infrastructure and Development Limited (FS07),

And opposed by:

- Village Lifestyle Limited (FS08); and
- Stuart PC Limited (FS09).

Assessment

As a result of future development of Pokeno (as anticipated by PC 24) there will be an increase in traffic on roads in the vicinity of the submitters’ property, and therefore, some increase in traffic noise, as is typical for urban areas. However this property falls mostly within the High Background Noise Area which requires a higher than usual level of acoustic insulation to reflect the higher ambient noise levels. Any residential use on the site is required to comply with Rule 27A.6.1.2 requiring attenuation so that inside any bedroom the NOISE level resulting from traffic shall not exceed 35dBA L_{eq} (1 hour) from 10.00pm to 7.00am.

With regard to the potential forming of the three roads surrounding the property, these roads are already existing as unformed paper roads and could be formed at any time. PC24 does not propose any new roads that are not already existing within the town centre. However, Council is intending to undertake an assessment of which roads are appropriate to be formed and those more appropriate for stopping. The issue of paper roads will be considered in more detail at that time.

Recommendation 3.1

Vehicle Noise

That the Council:

Reject submission

4.4 McRae and Wells Family Trusts

Accept further submission

FS05 Helenslee Investments Limited
FS06 Hynds Pipe Systems Limited
FS07 Dines Infrastructure and Development Ltd
FS08 Village Lifestyle Limited
FS09 Stuart PC Limited

Required Amendments to Provisions of the Plan Change:

None

Other Actions Required:

None

Reasons for Recommendation:

PC24 acknowledges the higher background noise level on the submitter's property and requires an internal noise level of 35dBA L_{eq} (1 hour) to be achieved during the night, with maximum 45dBA L_{eq} (1 hour) during the day. PC24 does not propose any new roads that are not already existing within the town centre, although the issue of rationalisation of the paper roads may be looked at through another process subsequent to the Plan Change.

3.2 Acoustic and Noise Standards

Submission 36.1 (Village Lifestyles Limited) seeks amendments to Rule 27A.6.1 to ensure that appropriate acoustic standards are provided where buildings within the Residential 2 Zone are constructed prior to potentially noisy activities being established in surrounding areas. The relief sought is to insert new Rules 27A.6.1.3 and 27A.6.1.4 as detailed below, and subsequently renumber existing Rules 27A.6.1.3 – 27A.6.1.5.

3. Acoustic design in relation to Rule 27A.6.1.2 shall be based on the traffic flows predicted for the road a minimum of 10 years after the construction of the building.
4. Compliance with Rule 27A.6.1.2 shall be demonstrated by the provision of an acoustic design report from a suitably qualified and experienced acoustic engineer confirming that the building to be constructed is designed to achieve the above noise levels.

Submission 36.1 is supported in part by:

- Helenslee Investments Limited (FS05)
- Hynds Pipe Systems Limited (FS06)
- Dines Infrastructure and Development Limited (FS07)
- Stuart PC Limited (FS09)

And opposed by:

- GSRI Investments Ltd and GSRD Developments Ltd (FS13)

Submission 60.10 (Franklin District Council) seeks the addition of a clause to Rule 27A.6.1 to require evidence (i.e. acoustic report) of adherence to the acoustic standards of Rule 27A.6.1.

Submission 60.10 is supported by:

- Winstone Aggregates (FS04)

And supported in part by:

- Helenslee Investments Limited (FS05)
- Hynds Pipe Systems Limited (FS06)
- Dines Infrastructure and Development Limited (FS07)
- Village Lifestyles Limited (FS08)

- Stuart PC Limited (FS09)

Submission 60.37 (Franklin District Council) seeks amendment to Rule 27A.6.1.2(c)

27A.6.1.2(c): If the internal NOISE levels can not be attained with windows open, then mechanical ventilation is required in accordance with the Building Code. The internal NOISE levels shall be achieved with ventilation windows open and with any mechanical ventilation required to ventilate the rooms in accordance with the Building Code, switched on.

Submission 60.37 is supported in part by:

- Helenslee Investments Limited (FS05)
- Hynds Pipe Systems Limited (FS06)
- Dines Infrastructure and Development Limited (FS07)
- Village Lifestyle Limited (FS08)
- Stuart PC Limited (FS09)

Submission 61.1 (Winstone Aggregates) requests that Business Zoned lots in the vicinity of the proposed eastern rail crossing from the Industrial 2 Zone require an acoustic design standard for the interior of any room used for sensitive activities such as education, community, and health facilities. These activities should be protected from adverse effects of traffic noise. Alternatively, such protection of sensitive activities should apply throughout the Business Zone. The relief sought is to add a new Rule 29.5.18 as follows

On Section 1 Survey Office Plan 69131, Lots 1 and 3 DP 174370 (and any subsequent subdivision of these lots) on Map 107B (as shown amended on Attachment A to the submission), the following standards shall apply:

1. Within the above lots, buildings shall be designed and constructed such that:
 - a. Inside any room, the level resulting from future generation of traffic shall not exceed 45dBA Leq (1hour) from 0700 to 2200 and 35dBA Leq (1 hour) between 2200 and 0700.
 - c. The internal noise levels shall be achieved with ventilation windows open and with any mechanical ventilation required to ventilate the rooms in accordance with the Building Code, switched on.
 - d. The design shall be based on the Annual Average Traffic Flows predicted for the road on completion of development of the Pokeno Structure Plan Area.
2. The noise standards do not apply to the construction or maintenance of buildings or the development of land.
3. The noise levels shall be measured and assessed in accordance with the requirements of NZS 6801: 2008 Measurement of Environmental Sound and NZS 6802: 2008 Environmental Noise respectively, or any standards that supersede these standards.
4. The noise shall be measured by a sound level meter complying with the International Standard IEC 651 (1979): Sound Level Meters, Type 1 or any standard that supersedes that standard.
5. Compliance with Rule 29.5.18 shall be demonstrated by the provision of of an acoustic design report from a suitable qualified and experienced acoustic engineer confirming that the building to be constructed is designed to achieve the above noise levels

Alternatively, apply the standards sought above to the entire Business Zone for rooms for community, education and health facilities intended for human occupation e.g. wards, classrooms etc.

Submission 61.1 is supported in part by:

- Helenslee Investments Limited (FS05),
- Hynds Pipe Systems Limited (FS06),
- Dines Infrastructure and Development Limited (FS07),
- Village Lifestyle Limited (FS08);
- Stuart PC Limited (FS09); and
- HW Richardson Group Limited (FS15)

And opposed by:

- GSRI Investments Ltd and GSRD Developments Ltd (FS13).

Submission 61.3 (Winstone Aggregates) seeks amendment to Rule 27A.6.1.2 Noise, to include a provision that the acoustic design standards for the 'High Background Noise Area' and the 'Background Noise Area' should be based on the "annual average daily traffic flows predicted for the road on the completion of the development of the Pokeno Structure Plan area". Further amendment of Rule 27A.6.1(2) is sought requiring compliance with Rule 27A.6.1(2) to be certified by an acoustic engineer.

d) The design shall be based on the Annual Average Traffic Flows predicted for the road on completion of development of the Pokeno Structure Plan Area.

Submission 61.3 is supported in part by:

- Helenslee Investments Limited (FS05),
- Hynds Pipe Systems Limited (FS06),
- Dines Infrastructure and Development Limited (FS07),
- Village Lifestyle Limited (FS08);
- Stuart PC Limited (FS09); and
- HW Richardson Group Limited (FS15)

And opposed by:

- GSRI Investments Ltd and GSRD Developments Ltd (FS13).

Assessment Submission 36.1

Submission 36.1 notes that, as notified, the plan change does not ensure that appropriate acoustic standards will be adhered to within the Residential 2 Zone where a building (e.g. dwelling) is constructed prior to a potentially noisy activity (e.g. road) being constructed. The submission also notes that (as notified) compliance with the acoustic standards of Rule 27A.6.1 is not explicitly required to be demonstrated (i.e. compliance demonstrated by the provision of an acoustic design report).

The intent of the submission is supported to ensure that development within the Residential 2 zone has an appropriate level of internal noise. Submission 36.1 also seeks to add a clause to Rule 27A.6.1.2 to require an acoustic report (prepared by a suitably qualified acoustic engineer) to demonstrate compliance with the acoustic standards of Rule 27A.6.1.2. It is noted that, as notified, this requirement is inferred rather than required.

It is considered that the relief sought through Submission 36.1 will ensure appropriate acoustic amenity is provided and subsequently that part of the submission is supported.

Assessment 60.10

Rule 27A.6.1 provides acoustic standards for all activities within the Residential 2 Zone, including Permitted Activities. If there is an infringement of Rule 27A.6.1 then the application will be assessed as a Restricted Discretionary Activity and will require assessment against Rule 27A.8.

The issue raised through Submission 60.10 is how can adherence to Rule 27A.6.1 be confirmed if there is no requirement for an acoustic report at the stage of either Resource Consent (where consent is required) or Building Consent (where resource consent is not required).

Where an activity is Permitted by PC24, any potential infringements (which would affect Permitted Activity status) will be identified at the time of application for Building Consent. Where an activity is required to seek resource consent within the Residential 2 Zone, as per Rule 27A.8(b) and Rule 27A.9(a) Council have discretion to ensure that sufficient information is submitted with an application to ensure full evaluation of a proposal. This includes the discretion to require an acoustic report.

Rule 27A.6.1 provides acoustic standards for all activities within the Residential 2 Zone, including the High Background Noise Area, as identified on Planning Maps 107. As notified, Rule 27A.6.1 does not expressly require an acoustic report to demonstrate compliance with Rule 26A.6.1, however as per Planning Map 107, development within the High Background Noise Area is required to demonstrate compliance with Rule 26.4A.2.K. It is noted that the reference to 26.4A.2.k is incorrect, as 26.4A.2.k refers to "Retention of

appropriate vegetation". To rectify this incorrect reference in a manner consistent with Clause 16(2) of the RMA, it is recommended that the following amendment be made to Planning Map 107:

High Background Noise Area Rules 26.4A.2.KL and 27A.6.1.2 apply.

Assessment Submission 60.37

There is a commonly-used method for expressing this matter in a much more straight forward way, avoiding the possibility of dispute over what constitutes the meaning of " ventilating windows", whilst at the same time making mechanical ventilation required where necessary.

Assessment Submission 61.1

It is considered that, in principle, the amendment sought has some merit, in that not only residential activities are noise-sensitive. However, the proposal that the limits should apply to any room, whether or not such room is used for a noise-sensitive activity, and that the noise source considered be confined to road traffic noise only, and that the 35 dBA L_{eq} night-time limit applies to rooms which are unlikely to be used at night, are considered inappropriate.

Notwithstanding the identified issues in the mechanisms proposed by the submitter, noise-sensitive activities, in addition to residential in the Business Zone can be protected against intrusive noise by amendment to Rule 29.5.13 by extending its application to relevant noise-sensitive activities, such as those referred to by the submitter and additionally to accommodation facilities.

Assessment Submission 61.3

It is considered that the two proposed amendments sought by the submitter have merit but need refining in order to address both rail and traffic noise. The certification sought is appropriate but should apply only to subsection 2 of Rule 27A 6.1 which refers to habitable rooms in dwellings and residential buildings.

Recommendation 3.2	
Acoustic and Noise Standards	
That the Council:	
Accept in part submissions	36.1 Village Lifestyles Limited
Accept in part further submissions	<i>FS05 Helenslee Investments Limited</i>
	<i>FS06 Hynds Pipe Systems Limited</i>
	<i>FS07 Dines Infrastructure and Development Ltd</i>
	<i>FS08 Village Lifestyle Limited</i>
	<i>FS09 Stuart PC Limited</i>
Reject further submission	<i>FS13 GSRD Developments Ltd and GSRI Investments Ltd</i>
Reject submission	60.10 Franklin District Council
Reject further submission	<i>FS04 Winstone Aggregates</i>
	<i>FS05 Helenslee Investments Limited</i>
	<i>FS06 Hynds Pipe Systems Limited</i>
	<i>FS07 Dines Infrastructure and Development Ltd</i>
	<i>FS08 Village Lifestyle Limited</i>
	<i>FS09 Stuart PC Limited</i>
Accept in part submission	60.37 Franklin District Council
Accept further submissions	<i>FS05 Helenslee Investments Limited</i>
	<i>FS06 Hynds Pipe Systems Limited</i>
	<i>FS07 Dines Infrastructure and Development Ltd</i>
	<i>FS08 Village Lifestyle Limited</i>
	<i>FS09 Stuart PC Limited</i>

<p>Accept in part submissions Accept further submissions</p>	<p>61.1, 61.3 Winstone Aggregates <i>FS05 Helenslee Investments Limited</i> <i>FS06 Hynds Pipe Systems Limited</i> <i>FS07 Dines Infrastructure and Development Ltd</i> <i>FS08 Village Lifestyle Limited</i> <i>FS09 Stuart PC Limited</i> <i>FS15 HW Richardson Group Limited</i></p>
<p>Reject further submission</p>	<p><i>FS13 GSRD Developments Ltd and GSRI Investments Ltd</i></p>
<p>Required Amendments to Provisions Of The Plan Change:</p>	
<p>Amend 27A.6.1 Noise as follows</p>	
<p>Replace 27A6.1 - 2(c) in the manner as set out below:</p>	
<p>27A6.1 Noise c) The internal NOISE levels criteria shall be achieved with ventilation windows open and with any mechanical ventilation required to ventilate the rooms in accordance with the Building Code, switched on whilst at the same time complying with the ventilation requirements of section G4 of the New Zealand Building Code.</p>	
<p>Amend 29.5.13 in the manner as set out below:</p>	
<p>29.5.13 Standards For Residential Buildings / <u>DWELLING HOUSE</u> and Noise Sensitive Activities</p>	
<p>1. Every residential development shall comply with the relevant minimum standards of the <i>Residential Zone</i> of this Plan <u>(except as modified below)</u> and every specified noise sensitive activity⁽¹⁾ shall comply with clause 2 a), b) and c).</p>	
<p><i>Explanation: A minimum level of amenity should be achieved for any residential building and noise-sensitive activity located in the Business Zone of the District.</i></p>	
<p>2. <u>RESIDENTIAL BUILDINGS, DWELLING HOUSE, and mixed-use BUILDINGS and Noise Sensitive Activities</u></p>	
<p>a) <u>Any RESIDENTIAL BUILDING, DWELLING HOUSE or mixed-use BUILDING shall be designed in such a manner as to comply with the following internal NOISE limits:</u></p>	
<p><u>i) 35dBA L_{eq} in bedrooms</u> <u>ii) 45dBA L_{eq} in all other HABITABLE ROOMS</u> <u>iii) rooms used for noise-sensitive activities⁽¹⁾</u></p>	
<p>b) <u>The internal NOISE levels shall be achieved with ventilating windows open and with any mechanical ventilation required to ventilate the rooms in accordance with the Building Code switched on operating.</u></p>	
<p>c) <u>Compliance with Rule 27A.6.1.2 shall be demonstrated by the provision of an acoustic design report from a suitably qualified and experienced acoustic engineer confirming that the building to be constructed is designed to achieve the above noise levels.</u></p>	
<p>⁽¹⁾ <u>Noise sensitive activities are: TRAVELLERS' ACCOMMODATION, SPECIAL HOUSING DEVELOPMENT, SCHOOLS, CHILD CARE AND LEARNING CENTRES, spaces within BUILDINGS used for overnight HOSPITAL care.</u></p>	
<p><i>Explanation:</i> <u>A mixture of activities is likely to be established within the Business zone and DWELLING HOUSE(S) residential and other noise sensitive activities require an appropriate level of acoustic privacy protection. The control seeks to ensure acoustic privacy protection for DWELLING HOUSE(S) and other noise sensitive activities by requiring an appropriate standard of acoustic insulation.</u></p>	

Amend in the manner set out below:

Additional amendments are recommended for Rule 27A.6.1 to improve wording in sub-section 2 c) and the deletion of sub-section 5 as this is redundant, this issue being covered by the reference in subsection 4 to NZS 6801:2008 "Acoustics – Measurement of environmental sound".

27A.6.1 Noise

1. The NOISE level measured within the boundary of a SITE zoned Residential 2 shall not exceed:

Except that the NOISE ~~levels~~ limits do not apply to construction noise, and may be exceeded by intermittent NOISE associated with normal HOUSEHOLD activity e.g. lawn mowing undertaken at reasonable times during the day.

2. HABITABLE ROOMS in a DWELLING HOUSE or RESIDENTIAL BUILDING that is within the area shown on Planning Maps 107 as "Background Noise Area" and "High Background Noise Area" shall be designed and constructed such that:

a) Inside any bedroom the NOISE level resulting from traffic shall not exceed 35dBA L_{eq} (1 hour) from 10.00pm to 7.00am.

b) The NOISE level inside any HABITABLE ROOM, other than a bedroom, resulting from traffic on the defined corridors, shall not exceed 45dBA L_{eq} (1 hour).

c) The internal NOISE levels shall be achieved with ventilation windows open and with any mechanical ventilation required to ventilate the rooms in accordance with the Building Code, ~~switched on~~ operating.

d) The design shall be based on :

- the Annual Average Daily Traffic flow for roads in the vicinity for the year ten years from the time of commencement of construction of the building; and,

- the predicted noise level from the North Island Main Trunk railway for the year ten years from the time of commencement of construction of the building

3. The NOISE standards do not apply to the construction or maintenance of BUILDINGS or the DEVELOPMENT of land.

4. The NOISE levels shall be measured and assessed in accordance with the requirements of NZS 6801: 2008 Measurement of Environmental Sound and NZS 6802: 2008 Environmental Noise respectively. ~~or any standards that supersede these standards.~~

5. ~~The NOISE shall be measured by a sound level meter complying with the International Standard IEC 651 (1979): Sound Level Meters, Type 1 or any standard that supersedes that standard.~~

Explanation

To ensure a good acoustic environment and to support residential amenity and wellbeing, maximum allowable levels of NOISE are applied to the zone.

Some residential areas are adjacent to State Highway 1, other roads and the NIMT rail corridor, which are expected to be sources of elevated ~~background~~ ambient noise. In order to ensure that residents do not suffer adverse effects in relation to their health, safety and amenity from exposure to unacceptable noise levels and to ensure efficient operation of the networks, the rules require acoustic treatment of DWELLING HOUSES or RESIDENTIAL BUILDINGS (in addition to other methods) in these locations (Refer Planning Maps 107).

Amend in the manner set out below:

Planning Map 107: High Background Noise Area Rules 26.4A.2. ~~KL~~ and 27A.6.1.2 apply.

Other Actions Required:

None

Reasons for Recommendation:

Submission 36.1 - The part of the submission which requires compliance with Rule 27A.6.1.2 to be demonstrated by an acoustic report prepared by an appropriately qualified and experienced acoustic engineer is supported in full. Subsequently it is recommended that that part of Submission 36.1 be accepted.

The part of the submission, which seeks assessment against predicted traffic flows a minimum of 10 years after construction is however supported in part - see above for proposed textual amendments.

Submission 60.10 – Compliance with the internal noise requirements is required to be demonstrated at the time of Building Consent in order to be a Permitted activity. To rectify this incorrect reference in a manner consistent with Clause 16(2) of the RMA, it is recommended Planning Map 107 be amended as detailed above to rectify a referencing error.

Submission 60.37 – The recommended amendments express this matter in a much more straight forward way, avoiding the possibility of dispute over what constitutes the meaning of "ventilating windows", whilst at the same time making mechanical ventilation required where necessary.

Submission 61.1 - The limits should apply to any room, whether or not such room is used for a noise-sensitive activity, and that the noise source considered be confined to road traffic noise only, and that the 35 dBA L_{eq} night-time limit applies to rooms which are unlikely to be used at night, are considered inappropriate.

Submission 61.3 - It is considered that PC24 adequately recognises the increased ambient noise levels produced by the State Highway and introduces provisions to mitigate against potential reverse sensitivity effects. Additional amendments are recommended for this Rule to improve wording in sub-section 2 c) and the deletion of sub-section 5 as this is redundant, this issue being covered by the reference in subsection 4 to NZS 6801:2008 "Acoustics – Measurement of environmental sound".

3.3 Lot 2 DP 174370 in Background Noise Area

Submission 61.2 (Winstone Aggregates) seeks the inclusion of Lot 2 DP 174370 (Residential) in the 'Background Noise Area', to provide protection against future traffic noise.

Submission 61.2 is supported in part by:

- Helenslee Investments Limited (FS05),
- Hynds Pipe Systems Limited (FS06),
- Dines Infrastructure and Development Limited (FS07),
- Village Lifestyle Limited (FS08);
- Stuart PC Limited (FS09); and
- HW Richardson Group Limited (FS15)

And opposed by:

- GSRI Investments Ltd and GSRD Developments Ltd (FS13).

Assessment

The Lot referred to by the submitter is on Hitchen Road, approximately mid-way between the NIMT and Great South Road with its nearest boundary about 50 metres distant from NIMT, and 200 metres from State Highway 1. It is considered that these distances are sufficient to provide adequate noise attenuation from road and rail noise without the need for the additional protection afforded by being within the 'Background Noise Area'.

Recommendation 3.3

Lot 2 DP 174370 in Background Noise Area

That the Council:

Reject submission

61.2 Winstone Aggregates

Reject in part further submissions

FS05 Helenslee Investments Limited
FS06 Hynds Pipe Systems Limited
FS07 Dines Infrastructure and Development Ltd
FS08 Village Lifestyle Limited
FS09 Stuart PC Limited

Accept further submission

FS13 GSRI Investments Ltd and GSRD Developments Ltd

Required Amendments to Provisions of the Plan Change:

None

Other Actions Required:

None

Reasons for Recommendation:

The Lot referred to by the submitter is on Hitchen Road, approximately mid-way between the NIMT and Great South Road and, its nearest boundary about 50 metres distant from NIMT, and 200 metres from State Highway 1. It is considered that these distances are sufficient to provide adequate noise attenuation from road and rail noise without the need for the additional protection afforded by being within the 'Background Noise Area'.

3.4 Noise and Yard Provisions in Proximity to the State Highway

Submissions 71.2, 71.3 and 71.4 (NZ Transport Agency) request changes to Rule 27A.6.1 to acknowledge noise generated by the operation and maintenance of the State Highway.

Submission 72.2 supports the proposed High Background Noise Area rules as they apply to the proposed Residential 2 Zone.

Submission 72.3 supports the provision of a State Highway yard setback as it applies to the Residential 2 Zone.

Submission 72.4 supports the requirement for minimum internal noise level standards within dwellings and medium density housing.

Submissions 71.2, 71.3, 71.4, 72.2, 72.3 and 72.4 are supported in part by:

- Helenslee Investments Limited (FS05),
- Hynds Pipe Systems Limited (FS06),
- Dines Infrastructure and Development Limited (FS07),
- Village Lifestyle Limited (FS08);
- Stuart PC Limited (FS09); and

And opposed by:

- GSRI Investments Ltd and GSRD Developments Ltd (FS13).

Assessment of Submissions 71.2, 71.3 and 71.4

The noise limits of Rule 27A.6.1. are not intended or practicable for application to construction noise or to traffic noise on any road, or any other transportation-generated noise in public places such as trains or aircraft. Rule 27A.6.1 (4) contains a requirement for noise to be assessed in terms of New Zealand Standard NZS 6802:2008 "*Acoustics – Environmental Noise*". This Standard in clause 1.2.1 states:

"This Standard does not apply to the assessment of sound where the source is within the scope of, and subject to, the application of other New Zealand Acoustical Standards, except as provided for in 1.2.3 and 1.2.4. In particular, assessment of specific sources of sound including road or rail transport, flight operations of fixed or rotary winged aircraft associated with airport or helicopter landing areas, construction, port noise, wind turbine generators, and impulsive sound (such as gunfire and blasting), requires special techniques which generally are outside the scope of this Standard....."

It is considered therefore, that the amendments sought by the submitter are satisfactorily addressed by the Rule as currently proposed and no further amendment is required.

It is recommended that Submission 71.2, 71.3 and 71.4 be rejected on the basis that the issues raised are adequately covered by the proposed rule.

Assessment Submission 72.2

It is considered that PC24 adequately recognises the increased ambient noise levels produced by the State Highway and introduces provisions to mitigate against potential reverse sensitivity effects. It is recommended that Submission 72.2 be accepted and the proposed High Background Noise Area rules as they apply to the proposed Residential 2 Zone be retained.

Assessment Submission 72.3

The potential for reverse sensitivity effects from the State highway have been recognised by PC24, with the inclusion of Objectives and Policies 19.3.8.2. The 20m setback of dwellings from the State highway is intended to minimise any potential effects from the State highway in terms of acoustic and amenity. It is recommended Submission 72.3 is accepted and the proposed State Highway Yard is retained.

Assessment Submission 72.4

The increased ambient noise from the State highway is recognised by PC24 through the introduction of a High Background Noise Area and lower internal noise requirements as set out in Rule27.A.6.1.2. The internal acoustic requirements are intended to mitigate any potential effects from the State highway in terms of acoustic and amenity. It is recommended Submission 72.4 is accepted and the proposed Rule regarding internal noise standards is retained.

Recommendation 3.4

Noise and Yard Provisions in Proximity to the State Highway

That the Council:

Reject submissions	71.2, 71.3 and 71.4 NZ Transport Agency
Reject further submissions	<i>FS05 Helenslee Investments Limited FS06 Hynds Pipe Systems Limited FS07 Dines Infrastructure and Development Ltd FS08 Village Lifestyle Limited FS09 Stuart PC Limited</i>
Accept further submission	<i>FS13 GSRI Investments Ltd and GSRD Developments Ltd</i>
Accept submissions	72.2, 72.3, 72.4 NZ Transport Agency
Accept further submissions	<i>FS05 Helenslee Investments Limited FS06 Hynds Pipe Systems Limited FS07 Dines Infrastructure and Development Ltd FS08 Village Lifestyle Limited FS09 Stuart PC Limited</i>
Reject further submission	<i>FS13 GSRI Investments Ltd and GSRD Developments Ltd</i>

Required Amendments to Provisions Of The Plan Change:

None

Other Actions Required:

None

Reasons For Recommendation:

Submissions 71.2, 71.3 and 71.4 - the amendments sought by the submitter are satisfactorily addressed by the Rule as currently proposed and no further amendment is required.

Submission 72.2 - the proposed High Background Noise Area rules as they apply to the proposed Residential 2 Zone are retained.

Submission 72.3 - The 20m setback of dwellings from the State highway is intended to minimise any potential effects from the State highway in terms of acoustic and amenity and the proposed State Highway Yard is retained.

Submission 72.4 - The increased ambient noise from the State highway is recognised by PC24 through the introduction of a High Background Noise Area and lower internal noise requirements as set out in Rule27.A.6.1.2. The internal acoustic requirements are intended to mitigate any potential effects from the State highway in terms of acoustic and amenity