

Memorandum

To: Sebastian Barrett on behalf of Wellington City Council

From: Richard Turner

Date: 15 October 2020

Re: Further Information Response – 26 Donald Street and 37 Campbell Street, Karori,
Wellington

1. INTRODUCTION

The purpose of this memorandum is to provide Ryman Healthcare Limited's ("**Ryman**") response to the further information requested by Wellington City Council ("**WCC**") on 23 September 2020, pursuant to Section 92 of the Resource Management Act 1991 ("**RMA**"), and in relation to the resource consent applications for a comprehensive care retirement village ("**Proposed Village**") at 26 Donald Street and 37 Campbell Street, Karori ("**the Site**").

For completeness, each of the WCC further information requests are provided in full (in italics) below and followed by our responses, with relevant appendices noted as appropriate.

2. TRAFFIC

The further information request seeks the following with respect to traffic:

- Please provide elevations of vehicle entrances / dockways to confirm widths and clearances.*

Woods and Partners Limited ("**Woods**") have prepared elevations of vehicle entrances / dockways which are provided as **Appendix A**. As illustrated on the elevations:

- All onsite entrances / dockways are 5.8 m wide and 2.2 m high;
- The main entrance from Donald Street is 8.4 m in width; and
- The entrance to the Building B02 undercroft off Campbell Street is 5.8 m wide.

3. SERVICING AND INFRASTRUCTURE

The further information request seeks the following with respect to servicing and infrastructure:

- The information that has been used to establish the occupancy rates, water demands and sewer loads from this type of village.*

The reasons this information is requested is that numbers used are less numbers provided for in the Regional Standard for Water Services and Wellington Water requires the details to be able to assess the validity of the design figures used.

Occupancy Rates

The occupancy rates for the Proposed Village have been calculated based on the average of actual occupancy of residents within existing Ryman Villages throughout New Zealand. These rates have been calculated as being:

- 1 person per care bed;
- 1 person per assisted living suite; and
- 1.3 persons per apartment.

The above rates have been integrated into the infrastructure provisions for recently developed Ryman Villages and have been accepted by all local authorities to date, and proven to be accurate and sufficient in all cases.

Water Demand and Sewer Load

Woods have advised (in a response provided as **Appendix B**), that the water demand of 197 litres / person / day (“**L/p/d**”) has been calculated based on a Hydraulic Services Report that was undertaken by Plumbing Design and Consultancy (NZ) Limited for Ryman in 2008. The Hydraulic Service Report (provided within **Appendix B**) utilised water demand data from two existing Ryman Villages.

The sewer load / wastewater flow of 160 L/p/d has been calculated based on a Wastewater Flow Analysis (provided within **Appendix B**) that was undertaken by Woods in 2016 for the Diana Isaac Village in Christchurch. The analysis identified an average daily wastewater flow of 155 L/p/d for the Village (based on the actual contributing Village population), however the assessment acknowledges that this was less than has historically been adopted across other Ryman Villages, and as such an average flow of 160 L/p/d (80% of water usage of 200 L/p/d) has been adopted for the Proposed Village.

4. NOISE

The further information request seeks the following with respect to noise:

3. *Section 4.0 ‘Operational Noise Assessment’ (page 8) of the Marshall Day Acoustics (MDA) report provides assessment of a number of primary noise sources including service vehicles and fixed plant. The MDA assessment does not provide review of operational noise from people, recreational noise or light vehicles on site such as vehicle movements from residents or visitors. Please provide further information on how light vehicle noise, recreational noise and people noise have been accounted for in the operational noise assessment.*

The relevant noise standards of the Wellington City District Plan (“**District Plan**”) for the Residential Area consist of Standards 5.6.1.1.1 (noise emission levels from any non-residential activity occurring

in a Residential Area) and 5.6.1.2.1 (fixed plant noise emission levels from any residential or non-residential areas occurring within a Residential Area).

As detailed in Section 4.2 of the Assessment of Environmental Effects (“**AEE**”) dated 1 September 2020, the Proposed Village fits the District Plan’s definition of a residential activity as it will involve:

‘the use of premises for any domestic or related purpose by persons living in the premises alone or in family and/or non-family groups (whether any person is subject to care, supervision or not).’

As the Proposed Village is a residential activity, Standard 5.6.1.1.1 is not applicable to noise emissions generated from the Proposed Village.

Standard 5.6.1.2.1 is applicable to the Proposed Village, and the fixed plant noise emission levels have been assessed in the Operational Noise Assessment provided with the AEE.

The District Plan does not contain provisions that require an assessment of operational noise emissions from residential activities within Residential Areas, and as such an assessment of the noise associated with the residential activities of the Proposed Village has not been provided.

4. Section 4.3 ‘Fixed Plant’ (page 10) of the MDA report goes on to state it has provided its noise assessment based on previous ‘generic’ noise measurements; however no actual noise levels appear to be presented. Please provide the sound power level used in the assessment for the waste compactor and the expected noise levels produced from this noise source.

Marshall Day Acoustics (“**Marshall Day**”) have advised (in a response provided as **Appendix C**), that the calculations using ‘generic’ data were solely for the purpose of determining whether compliance with the District Plan standards can be practicably achieved.

The waste compactor data that was used in the fixed plant noise assessment was from measurements made by Marshall Day in 2009 of a waste compactor at a public recycling / dumping area, with a sound power level of L_{WA} 98 dB. Marshall Day note that this was a commercial waste compactor model that may be larger than what will be installed at the Proposed Village, however it was considered suitable for determining the practicability of achieving compliance with the District Plan noise standard.

As set out in **Appendix C** the predicted noise levels of the waste compactor are provided in Table 1 below, and demonstrate that the waste compactor can comply with the Standard 5.6.1.2.1 45 dB $L_{Aeq(15 \text{ min})}$ daytime noise limit (noting that in accordance with NZS 6802:2008 the predicted noise levels have been adjusted by +5 dB for special audible characteristics (“**SAC**”), and then adjusted by -5 dB for sounds that will have a duration of less than 30% of the prescribed frame).

Table 1: Predicted Indicative Waste Compactor Noise Levels (inclusive of +5 dB for SAC and -5 dB for duration adjustment).

Receiver Location	Predicted Noise Level dB, $L_{Aeq(15\ min)}$
25-45 Donald Street	<30
25-51 Campbell Street	<30
6-26 Scapa Terrace	<30
221A & 221B Karori Road	41 to 44

5. Section 4.3 Fixed Plant (page 10) of the MDA report states a 1 MVA transformer and a 500 kVA transformer are proposed to be operated onsite. The report goes on to state it has provided its noise assessment based on previous ‘generic’ noise measurements; however no actual noise levels appear to be presented. Please provide the sound power levels used in the assessment for the two transformers and the expected noise levels from these two noise source.

Marshall Day have advised (in the response provided as **Appendix C**) that the calculations using ‘generic’ data used a sound power of 67 dB L_{WA} for each of the proposed transformers. Marshall Day used recent measurements of a 2.5 MVA transformer, carried out in accordance with IEC 60076 – 10 “Power transformers – Part 10: Determination of sound levels”. Marshall Day note that this transformer is considerably larger than the proposed models, however these measurements were the most recent in their database for small sized transformers, and if a transformer of this size could comply with the District Plan noise limits, a smaller transformer would also comfortably comply.

Marshall Day also note that the transformers will be housed in an enclosure that may provide a barrier effect of up to 10 dB (depending on the design).

The predicted noise levels of the transformers are provided in Table 2 below, inclusive of a +5 dB adjustment for SAC in accordance with NZS 6802:2008.

Table 2: Predicted Transformer Noise Levels (inclusive of +5 dB for SAC).

Receiver Location	Predicted Noise Level dB, $L_{Aeq(15\ min)}$
25-45 Donald Street	<30 to 31
25-51 Campbell Street	<30
6-26 Scapa Terrace	<30 to 33
221A & 221B Karori Road	<30

6. *The MDA report provides assessment of individual noise sources only. Please provide further information relating to an assessment of cumulative operational noise effects.*

As noted in the response to Point 3 above, the Proposed Village is a residential activity and as such the only applicable noise standards of the District Plan relate to fixed plant noise emissions. The District Plan does not include provisions / requirements relating to the cumulative operational noise effects of residential activities.

7. *The MDA report provides assessment of LAeq noise levels but no single event levels (LAFmax). Please provide further information relating to an assessment of LAFmax noise levels and related noise effects.*

Marshall Day have advised (in the response provided as **Appendix C**) that the application of the 65 dB LAFmax noise limit (Standard 5.6.1.2.1) only applies from 10 pm to 7 am, and only applies to fixed plant noise. The fixed plant LAFmax level is typically 1 to 2 dB above the LAeq level. Therefore, the fixed plant noise levels (that are compliant with the 40 DB LAeq(15 min) night-time limit) will comply with the LAFmax limit.

8. *The MDA report does not assess construction noise. Please provide further information relating to an assessment of construction noise effects, including (but not limited to) a review of any effects related to demolition, piling or earthworks (where applicable).*

Ryman have engaged Marshall Day to prepare a Construction Noise Assessment for the Proposed Village. A response to this request is still being prepared and will be provided in a supplementary memorandum at a later date.

9. *The MDA report makes a number of assumptions and comments regarding achieving compliance with the District Plan noise limits including assumptions around 'conventional noise treatments' that may be adopted if required. Please provide further information regarding the actual proposed noise control methods which will be adopted by the Applicant in line with s.16 Best Practical Option (BPO) of the Resource Management Act.*

Marshall Day have advised (in the response provided as **Appendix C**) that as the detailed design of the Proposed Village will occur following the consenting process, assumptions have been made in the Operational Noise Assessment in order to prepare a noise compliance assessment. The purpose of the assessment was to demonstrate that the Proposed Village will be able to comply with the District Plan noise limits.

Marshall Day recommend that specific mitigation measures are considered throughout the detailed design stage, to ensure that practical mitigation measures are identified and appropriately integrated into the Proposed Village.

10. *Section 5.13.1 of the AEE (Page 77) states with regard to non-compliance of noise effects from the rubbish trucks at 29 Campbell Street noise effects 'will be negligible and have a*

less than minor adverse effect'. Please provide further information on how this assumption of noise effects has been determined.

Following further consideration of the noise standards that are applicable to the Proposed Village, the visiting of rubbish trucks are considered to be a typical occurrence in residential areas and as such the frequenting of rubbish trucks to the Site are considered to be part of the residential activity of the Proposed Village. Therefore, an associated noise assessment of effects is not required by the District Plan.

Despite this, the assessment of effect of the rubbish trucks on 29 Campbell Street that was provided in the AEE was considered to be 'negligible' on the basis that rubbish trucks will only visit the Proposed Village once or twice a week, with the noise emissions only occurring as the trucks pass the boundary shared with 29 Campbell Street on their way to the waste compactor, and then again on the return trip as they leave the Site. As the rubbish trucks will be moving along the internal road corridor that borders 29 Campbell Street, the effects will be transitory, and sensitivity to the noise effects will be lower than if the trucks were to be stationary alongside the shared boundary with the engine idling.

Additionally, it is noted that rubbish trucks will have frequented the Wellington Teachers' Training College which previously occupied the Site, and will not present as a new activity in the area.

5. HERITAGE

The further information request seeks the following with respect to heritage:

11. *Oldershaw (Octagonal Building)*

There is no indication of possible works to the Oldershaw Building. Please provide plans and elevations as existing and proposed to show any proposed changes to the building at 1:100 @ A3 or 1:50 if possible.

The section 92 response document notes that this is discussed in the Heritage Technical Report but no drawings have been provided.

Dave Pearson Architects have prepared Concept Drawings that provide further detail of the original Oldershaw Building and the proposed changes to the building (provided on page 8 of **Appendix D**), that include elevations at 1:200 @ A3. These drawings also identify elements of the existing building that have provided cues for the new design.

All drawings within the Heritage Concept Drawing package have been provided at 1:200 @ A3, as due to the detail provided in each drawing (i.e. the layout of the Site and the size of buildings) they would not fit on an A3 page at 1:100.

6. WIND EFFECTS

The further information request seeks the following with respect to wind effects:

12. *The Wind Report recommended landscaping as part of mitigation of wind effects. There do not appear to be any cross-references between the Wind Report and the landscape plan. Can you please provide additional information to confirm that the mitigation by planting recommended in the Wind Report is achievable. This information should be confirmed by WSP reviewing the landscape plan and vice versa.*
- Can you please confirm if the Wind Report has reviewed the proposed landscaping plan to ensure that the plans are consistent with the wind recommendations and vice versa.*

WSP have advised (in the response provided as **Appendix E**) that the Wind Report had been informed by an assessment of a draft Indicative Landscape Plan. WSP have since reviewed the submitted Indicative Landscape Plan and acknowledge that while slight amendments had been made to the plan, their initial assessment remains applicable and consistent with the wind recommendations.

When considering the suitability of the Indicative Landscape Plan for wind mitigation purposes, WSP conclude that:

- › The type and scale of proposed landscaping, together with the proposed fencing and buildings of the Proposed Village will provide some shelter for areas within the Site and outside the Site;
- › Wind conditions within the Site are generally expected to be about the same or better than those currently experienced around the Site, noting that some locations within the Site are expected to be windy;
- › As detailed in the Wind Report, it is considered that “there is potential for wind conditions within the Site to be further improved using additional planting (trees and shrubbery), screens and fencing”, however “it would be more appropriate to wait for pedestrian / resident use patterns to develop to assess the need for additional wind mitigation, and target this in the most appropriate locations as part of the detailed design of landscaping for the Site”;
- › The benefits of planting, in terms of providing wind shelter, are not fully realised until the plants are mature, however it is understood that, where possible, Ryman prefer to plant relatively mature plant specimens; and
- › Construction of the proposed fencing will occur prior to occupation of the Site, and will provide wind shelter.

Sullivan & Wall Landscapes have confirmed (in the response provided as **Appendix F**) that the mitigation planting recommended in the Wind Report is achievable and consistent with the Indicative Landscape Plan. When considering the suitability of the Indicative Landscape Plan for wind mitigation purposes, Sullivan & Wall Landscapes conclude that:

- › The proposed species within the Site are appropriate for the wind conditions;
- › Planting along the southern boundary (native evergreen species) is appropriate for the wind conditions, but will take some time to be effective;

- Planting along the south western and north eastern boundaries is considered to be wind hardy; and
- It is envisaged that at the detailed planting planning stage, additional planting of smaller tree species and shrubs will be integrated into the Proposed Village in areas that require additional shelter for pedestrians and seating areas. To be certain that the proposed species can withstand the wind condition, Sullivan & Wall Landscapes will also seek further opinion of the species suitability, and change the species to something more robust if required.

7. RESIDENTIAL AMENITY EFFECTS

The further information request seeks the following with respect to residential amenity effects:

- 13. Please provide at least two visual simulations or perspective drawings from the private open spaces at the rear of Nos. 16 and 24 Scapa Terrace. These locations are recommended because it would give a central and side view of buildings B02 to B06.*

3D perspective drawings of the Proposed Village viewed from 16 and 24 Scapa Terrace have been prepared by Ryman and are provided as **Appendix G** to this memorandum. The vegetation of the Proposed Village that is illustrated on the drawings is indicative of ten years growth, and the vegetation and landscape features illustrated on neighbouring properties has been modelled from images provided by WCC.



APPENDIX A

Vehicle Entrances / Dockways
Elevations – Woods



B

APPENDIX B

Water and Wastewater Demands
Response Memorandum – Woods



APPENDIX C

Noise Assessment Response
Memorandum – Marshall Day
Acoustics



APPENDIX D

Heritage Concept Drawings – Dave
Pearson Architects



APPENDIX E

Landscape and Wind Effects
Response Memorandum - WSP



APPENDIX F

Landscape and Wind Effects
Response Email – Sullivan & Wall
Landscapes



APPENDIX G

3D Perspective Drawings – Ryman