BEFORE INDEPENDENT COMMISSIONERS

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER a submission by KiwiRail Holdings Ltd (**"KiwiRail"**) on the Intensification Planning Instrument to the Upper Hutt City District Plan ("**IPI**")

STATEMENT OF EVIDENCE OF MICHAEL BROWN
ON BEHALF OF KIWIRAIL HOLDINGS LIMITED

CORPORATE

1. INTRODUCTION

1.1 My full name of Michael James Brown and I am the Group Manager Planning and Land Use for KiwiRail Holdings Limited ("**KiwiRail**"). I have the qualifications of a BSc (Hons) and a LLB from the University of Otago.

1.2 I am a qualified lawyer and have over 20-years' experience in property, planning, environmental law and the management of large infrastructure projects.

1.3 Prior to working at KiwiRail, I was the Head of Planning at Wellington International Airport which involved advising on planning, feasibility studies, property management, development, contract management, environmental compliance and customer service.

1.4 I have also worked at the Energy Efficiency and Conservation Authority where I oversaw all procurement and property functions for the business, involving management of external advisers, providing internal legal advice and leading future focused discussions.

2. SCOPE OF EVIDENCE

2.1 I have prepared this statement for KiwiRail as the Group Manager of Planning and Land Use.

2.2 My evidence will outline:

(a) KiwiRail's infrastructure and activities within the Upper Hutt City District;

(b) the need for noise and vibration controls; and

(c) the need for a setback of 5 metres.

3. KIWIRAIL IN THE UPPER HUTT CITY DISTRICT

3.1 The Wairarapa Line is a designated rail corridor that extends through Upper Hutt City and is a key part of the KiwiRail network nationally. KiwiRail seeks to protect its ability to develop, operate, maintain and upgrade this line into the future.

3.2 Upper Hutt City is a key component of the Wellington Metro commuter rail network, with approximately 670 trains per week traversing between Upper Hutt and Wellington (via Hutt City).

3.3 A further 64 commuter trains per week travel through Upper Hutt City serving the Wairarapa contribute to making the rail network through Upper Hutt City being one of the more rail congested areas in the country.

3.4 The Wairarapa Line is also a key freight route, linking Wairarapa freight exports with Wellington via Upper Hutt City. The principal commodity along this line is log traffic and the line also carries containerised and break goods loads, all of which contributes to the removal of truck traffic.

3.5 The Wairarapa Line also operates as key resilience rail link to the Hawkes Bay, complementing the rail link from Palmerston North to Woodville via the Manawatu Gorge.

3.6 In the most recent budget, the Government allocated $349 million to replace and modernise New Zealand rail assets,[1] which has gone towards a number of major projects nationwide, including the rejuvenation of the Northland railway lines, the reopening of the Napier to Wairoa line, establishing a multi-million-dollar regional freight hub in Palmerston North, and significant upgrades to the Auckland, Wellington and Hamilton metro networks.

3.7 To assist New Zealand's move towards a low-carbon economy, and to meet the needs of New Zealand's growing population, services on the Upper Hutt City lines will grow. Recognising that rail produces at least 70 percent less carbon emissions per tonne of freight carried compared to heavy road freight, and that frequent reliable rail provides greater opportunities to avoid car journeys, plans to accommodate more rail traffic through the Upper Hutt City rail corridors are presently underway to generate additional capacity.

1 Wellbeing Budget 2022 – A Secure Future (New Zealand Government, Wellington, 2022) at page 82.

3.8 In particular, the Wellington Metro Upgrade Programme (funded through the NZUP programme) is presently underway seeking to resolve reliability issues with the line, and as a result allow more frequent services.

3.9 Within Upper Hutt City, this work has seen an extension of the double tracking from Silverstream through to the Metro terminus at Upper Hutt. Additional work is presently underway seeking to resolve inefficiencies north of the Metro terminus to facilitate greater passenger frequencies on the Wairarapa commuter network.

3.10 While actual freight volumes through Upper Hutt City have not been forecast, the expectation is that as freight customers demand lower carbon alternatives, rail freight demand will grow.

3.11 The fundamental driver of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 and the IPI is to enable intensification of housing in urban areas. KiwiRail supports urban development and recognises the benefits of co-locating housing near transport nodes. However, it is critical that the IPI provides for adequate management of the interface between urban development and lawfully established, critical infrastructure, such as the railway network. An integrated and proactive approach to planning is critical to support the overall vision of our urban environments, and to ensure that our transport network can support the increasing growth and housing intensification.

4. NOISE AND VIBRATION

4.1 Acoustic and vibration standards are important controls to ensure the ongoing health and wellbeing of people and are instrumental in ensuring that reverse sensitivity effects on rail are minimised, particularly where intensive residential development is proposed adjacent to the rail corridor.

4.2 A particular concern for KiwiRail is the potential for "reverse sensitivity" effects that new or intensified developments of sensitive land uses (eg dwellings) near the rail corridor will have on KiwiRail's activities. This well recognised resource management concept refers to the impact that locating new, sensitive activities adjacent to existing lawfully established effects-generating activities has on the ongoing operation of those existing activities. New developments, or higher density redevelopment of existing sensitive uses, can result in greater numbers of individuals subject to adverse noise and vibration effects. This can result in increased complaints and resultant operational constraints on the rail network (such as limitations on operating hours) which can constrain the ongoing operation and future development of the rail corridor.

4.3 For the reasons set out in the evidence of Dr Chiles and Ms Heppelthwaite, KiwiRail is seeking the inclusion of noise and vibration controls for activities within 60 metre of the rail corridor and an acoustic standard for all new and altered activities sensitive to noise within 100 metres of the rail

corridor. These controls are regularly sought by KiwiRail and have been included in district plans around the country (including recently in Marlborough and Whangārei). KiwiRail undertook specific noise modelling as part of the Whangārei District Plan processes in relation to that rail corridor, which confirmed that 100 metres was justified for noise controls, and was subject to a consent order agreed between the parties to resolve KiwiRail's appeal.

4.4 In terms of vibration, Dr Chiles' evidence demonstrates that there is a very real effect on neighbours (with the potential to result in reverse sensitivity effects on KiwiRail) that requires mitigation. These effects will only increase with the proposed intensification adjacent to the railway corridor.

4.5 KiwiRail is preparing two GIS spatial layers identifying the 100m area for the noise controls applying on each side of the rail corridor; and the 60m area for vibration controls. I intend to have these avaliable for the Commissioners at the hearing. I understand Waka Kotahi is preparing a similar spatial layer for the road network in relation to noise controls.

4.6 In some circumstances KiwiRail has agreed to a vibration "alert layer" (which places properties adjacent to the rail corridor on notice of the potential vibration effects) as an absolute minimum requirement. Such a layer has been included in the Whangārei District Plan and in the Precinct provisions relating to the Drury area in the Auckland Unitary Plan. KiwiRail would be open to a discussion with Council about the use of such a layer in the Upper Hutt district, but my strong preference would be for the vibration controls as recommended by Dr Chiles be included in the district plan.

5. SETBACKS

5.1 The rail corridor is an important physical resource and strategic transport infrastructure. As part of its operations and obligations to its customers, KiwiRail requires the ability to operate trains as required to meet demand. This can result in changes to the timing, frequency, or length of trains passing along the route. This can also result in upgrades to the network that can provide passing opportunities for trains, or other associated rail improvements.

5.2 As an asset of national significance, it is important the rail corridor can operate safely and efficiently without interference. Any interference with the railway corridor can be incredibly disruptive to rail services creating unnecessary delays to passengers and freight. For development on land adjoining the corridor, an efficient and effective means of ensuring that the risk of interference is mitigated is through a physical building setback from the boundary of the rail corridor.

5.3 Through its submission, KiwiRail sought the introduction of a 5-metre setback from the rail corridor. This relief was rejected by the Section 42A author on the basis that KiwiRail did not present any specific spatial mapping identifying affected properties.

5.4 These controls are regularly sought by KiwiRail and setbacks from the rail corridor have been included in district plans throughout the country.[2]

5.5 A 5-metre setback is sought by KiwiRail to ensure the provision of a safe and efficient rail network. This is particularly necessary where the IPI enables three storey buildings as of right in the applicable zones along the rail corridor. When buildings are taller, they become more difficult to maintain and require additional equipment like scaffolding or cherry picker cranes for maintenance. Due to the nature of this equipment, there is a risk that elements could inadvertently enter the rail corridor.

5.6 I have reviewed the WorkSafe Guidelines on Scaffolding in New Zealand.[3] These Guidelines include the following configurations and guidelines for scaffolding design for tower and mobile scaffolds:

(a) Over 2 metres high - the height of the top working platform is no more than three times the minimum base dimension. For a 3-storey building of around 12 metres in height this would require a minimum of 4 metres at the base of the scaffolding.

(b) No overhead power lines or other obstructions to be within 4 metres of the line of travel.

(c) If portable ladders are used to access the scaffolding then these should be pitched at an angle between 1:4 and 1:6 horizontal to vertical and should be clear of the supporting structure at the base.

5.7 I note the WorkSafe Guidelines make no recommendation for the area (setback) needed to set up and construct the scaffold, only the final scaffold dimensions.

5.8 While providing room for scaffolding is a key basis for the setbacks sought, it is not the only basis KiwiRail seeks these provisions. Other matters for which the 5-metre setback allows sufficient space without encroachment into the rail corridor include use of mechanical access equipment required for maintenance of buildings or land uses, for example:

(a) Equipment required for drainage works, such as operation of diggers (which require at least 3 - 5 metres for operation).

(b) Mobile height access equipment such as scissor lifts or cherry pickers. These include support structures which extend out from the main equipment to provide further stability in areas of unstable ground, or include moving booms which can swing out from the equipment. A small crane can be nearly 2.5 metres wide (without any outrigger

2 For example, in the Drury Centre and Waihoehoe Precincts in the Auckland Unitary Plan, Marlborough Environment Plan, Christchurch City Plan.

3 https://www.worksafe.govt.nz/topic-and-industry/working-at-height/scaffolding-in-new-zealand/#lf-doc-20051

support) and up to 18 metres in height. This is particularly important in the event of a fire where there needs to be enough room to accommodate a ladder for access.

5.9 KiwiRail has also taken into account appropriate support structures for higher scaffolding (such as outriggers) and the necessary space required around scaffolding equipment or machinery. It is not enough to just ensure the equipment itself does not encroach into the rail corridor. KiwiRail is also seeking to ensure persons operating any equipment do not encroach into the rail corridor, given the safety implications.

5.10 To assist the Panel, I have had prepared a diagram that illustrates the points outlined above (attached as **Appendix A**).

5.11 A building setback is also necessary to minimise the risks of activities that may not otherwise be seen as creating safety risks (such as water blasting and using equipment like ladders) from interfering with the rail corridor. It is particularly important to manage these activities where the rail line is electrified, as activities such as spray drift from water blasters could have significant consequences if it interferes with the electrified lines or impedes visibility for train drivers.

5.12 The rail lines are electrified through part of the Upper Hutt City District (from the southern boundary with Hutt City District to the Metro terminus at Upper Hutt Station), and without an appropriate setback this increases the risk of electrocution, should an object from a neighbouring property come into contact with the wires, like scaffolding, cherry picker cranes or building maintenance crew abseiling down the side of buildings.

6. CONCLUSION

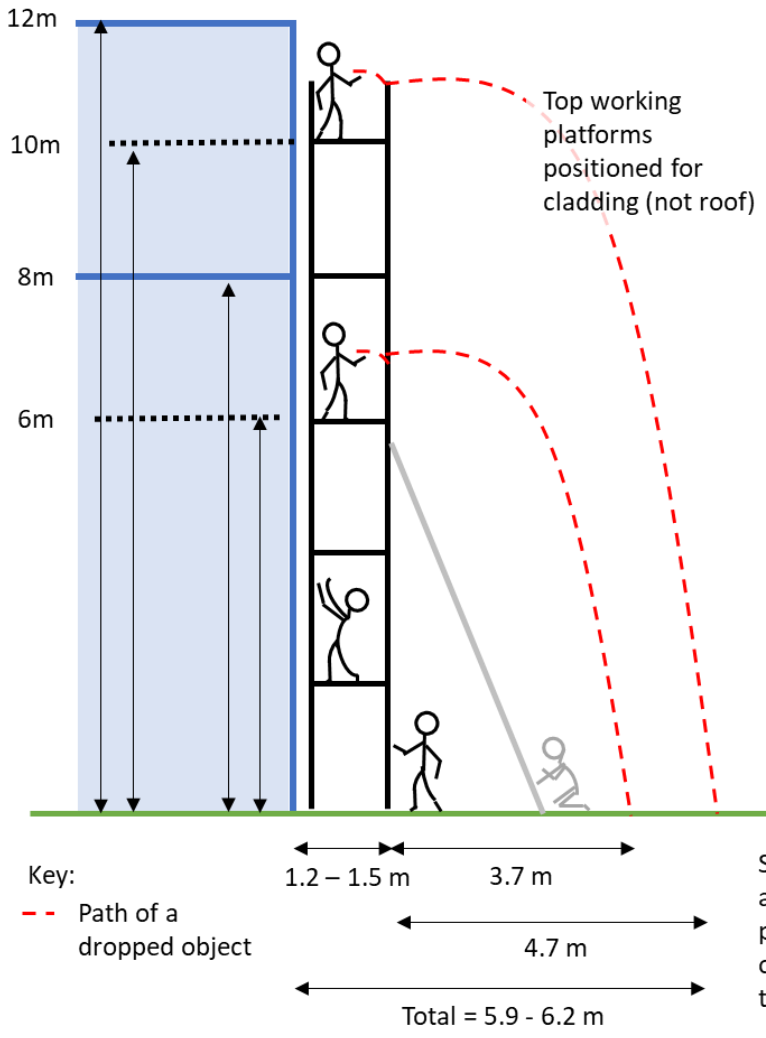
6.1 For the reasons set out in the evidence of Dr Chiles, Ms Heppelthwaite and above, the setbacks and noise and vibration controls sought by KiwiRail are appropriate and necessary for the safe and efficient operation of the rail network.

Mike Brown
19 April 2023

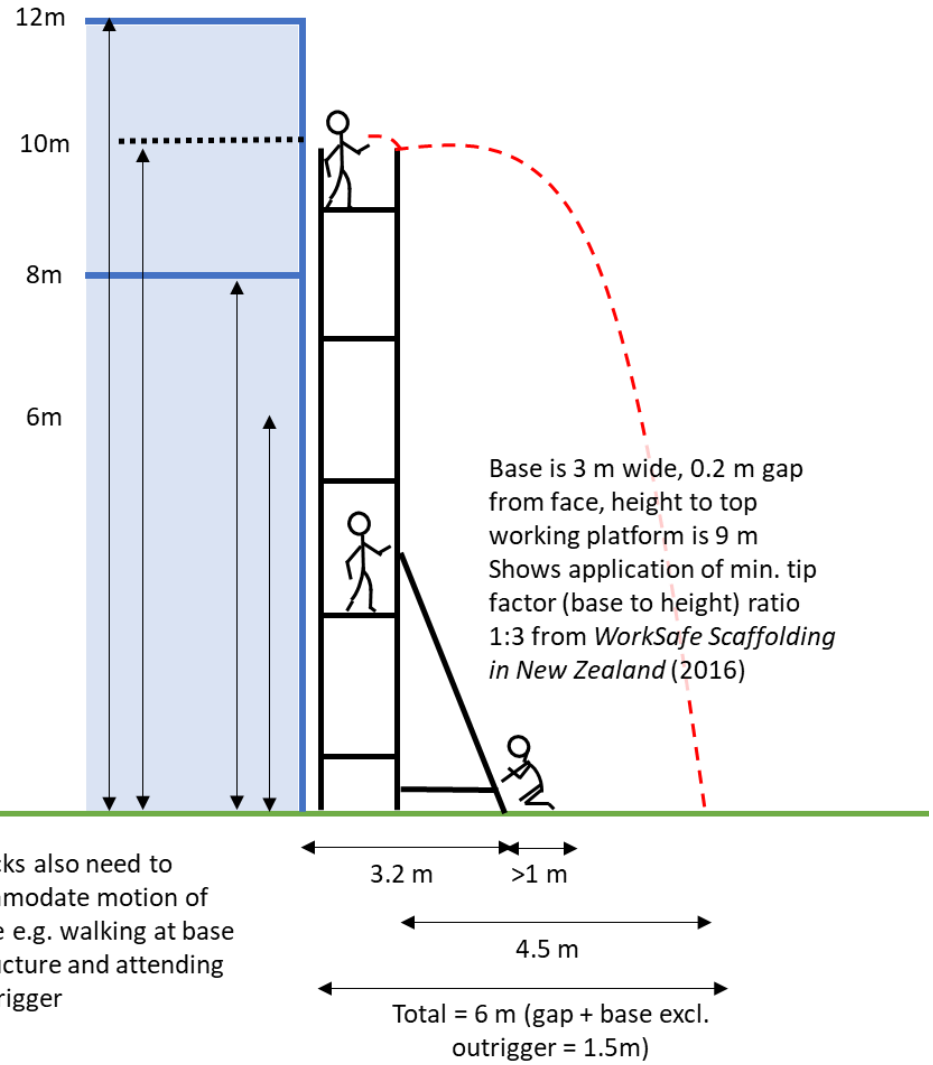
KiwiRail

APPENDIX A – DIAGRAM

Example of an Independent, Multi-Bay Scaffold



Example of a Tower Scaffold with Outrigger



Setbacks also need to accommodate motion of people e.g. walking at base of structure and attending to outrigger