

BEFORE THE INDEPENDENT COMMISSIONERS

IN THE MATTER of the Resource Management Act
1991 ("**RMA**")

AND

IN THE MATTER a submission by KiwiRail Holdings
Limited (submitter 30 and FS 71) on
Plan Change 92 ("**PC92**") to the
Operative Western Bay of Plenty
District Plan ("**District Plan**")

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

CORPORATE

1. INTRODUCTION

- 1.1 My full name is Michael James Brown and I am the Group Manager of 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 of 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 This statement has been prepared on behalf of KiwiRail and relates to the matters contained in PC92, which KiwiRail submitted on.

2.2 My evidence will outline:

- (a) KiwiRail's infrastructure and activities within the Western Bay of Plenty District;
- (b) the identification of rail corridor as a qualifying matter;
- (c) the need for a safety setback from the railway corridor; and
- (d) the need for noise controls and a vibration alert layer.

3. KIWIRAIL IN THE WESTERN BAY OF PLENTY DISTRICT

3.1 KiwiRail is a State-Owned Enterprise responsible for the management and operation of the national railway network. The rail network is an asset of national and regional importance. Rail is fundamental to the safe and efficient movement of people and goods throughout New Zealand. Recognising the importance of the rail network, the Government has invested and continues to invest in the maintenance and expansion of the rail network to meet future growth demands and improve transport network efficiency.

3.2 In the most recent budget, the Government allocated \$569.2 million to replace and modernise New Zealand rail assets,¹ which, alongside a further \$8 billion in previous years funding announcements, 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.

3.3 To assist with New Zealand's move towards a low-carbon economy and to meet the needs of New Zealand's growing population, rail services will grow. Recognising that rail produces at least 70 percent less carbon emissions per tonne of freight carried compared with heavy road freight, plans to accommodate more freight on rail are underway, with the new (delivery from 2025) Cook Strait ferries able to accommodate 4 times the present rail freight

¹ Wellbeing Budget 2023 – Support for Today. Building for Tomorrow (New Zealand Government, Wellington, 2023).

capacity of the route. This investment in growth is also being supported by the Central North Island Freight Hub at Bunnythorpe.²

- 3.4 The designated corridor of the East Coast Main Trunk railway line ("**ECMT**") passes through the Western Bay of Plenty District (including both the Ōmokoroa and Te Puke urban areas) and is a key part of the KiwiRail network nationally. The ECMT line is considered a very busy freight line, with approximately 188 train movements per week west of Tauranga. There are also 90 train movements per week west of Mount Maunganui through to Kawerau and Murupara. KiwiRail seeks to protect its ability to operate, maintain and upgrade this line into the future.
- 3.5 PC92 enables intensification of housing in the Ōmokoroa and Te Puke urban areas. KiwiRail supports urban development, including around transport nodes, and recognises the benefits of co-locating housing near transport corridors. However, it is critical that PC92 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. RAIL AS A QUALIFYING MATTER

- 4.1 The Reporting Planner agrees that "land within 10m of a railway corridor or designation for railway purposes (for sites created by way of an application for subdivision consent approved after 1 January 2010)" should be identified in the District Plan as a qualifying matter.³ KiwiRail strongly supports the identification of the rail corridor as a qualifying matter (and the related setback provisions) as a matter required for the purpose of ensuring the safe or efficient operation of nationally significant infrastructure.⁴
- 4.2 However, recognition of the rail setback as a qualifying matter should apply regardless of the date of creation of a site for the reasons set out in Ms Heppelthwaite's evidence.⁵ KiwiRail seeks that the words within the brackets in the rail-related qualifying matter be deleted.

² The Bunnythorpe Freight Hub (the Hub) is a proposed 176-hectare freight facility designed to support the transit of rail freight through the lower North Island, in particular to and from the Cook Strait Ferries.

³ Section 42 Report – Section 14A – Omokoroa and Te Puke Part 2 (Definitions, Activity Lists, and Standards), Topic 2 – Definitions – Qualifying Matters, pp 5 - 6.

⁴ Resource Management Act 1991, s77I(e) and s77O(e).

⁵ Statement of Evidence of Catherine Heppelthwaite dated 25 August 2023 at [7.2].

5. SAFETY 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. It 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 that 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 and cascading 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 The District Plan currently includes a 10 metre setback from the rail corridor across a range of urban, rural and commercial zones. The 10 metre setback has been included in the PC92 provisions.⁶ KiwiRail strongly supports these provisions which show the clear intent of the Council to enable the residents of its district to be able to use and maintain buildings on their properties safely, while also protecting rail operations from interference.
- 5.4 The Reporting Planner supports retaining the 10 metre setback as it ensures that buildings and structures are able to be used and maintained without needing access on or over the rail corridor, but notes KiwiRail has not provided evidence that a 10 metre setback is needed.⁷

Need for safety setbacks

- 5.5 A safety setback is important to provide enough space within a site adjoining the rail corridor for the home owner or occupant of that building to maintain and access their own house or building safely – without accessing the rail corridor to do so, or getting too close to trains. Buildings constructed close to the rail corridor do not leave enough space on site for essential maintenance activities. The lack of space means that it is highly likely that these activities can only happen by accessing the rail corridor.

⁶ Rule 14A.4.1(d)(ii)(b).

⁷ Section 42 Report – Section 14A – Omokoroa and Te Puke Part 2 (Definitions, Activity Lists, and Standards) – Topic 12 – Density Standards – Setbacks, p 34.

- 5.6 The rail corridor is not a public domain and it has a very different and high consequence risk profile compared to entering other sites. It is a hazardous environment and entering the rail corridor can result in a material safety issue to both the person accessing the corridor, and to the rail operations being undertaken within the rail corridor. To this end, it is very similar to, albeit less secure than, an airports operational 'airside' area.
- 5.7 Buildings right up on the boundary (or subject to a minimal setback from the boundary) also significantly increase the risk of inadvertent incursion into the rail corridor from objects falling from open windows or being dropped from scaffolding / platforms that are used for maintenance.
- 5.8 Any object within the rail corridor becomes a safety issue for rail employees who need to remove the obstruction, not to mention train drivers and passengers on trains if the obstruction is not removed in time. It also becomes a safety issue for residents who seek to retrieve items from the track, due to danger from trains.
- 5.9 It is frequently suggested that adjoining landowners can simply ask KiwiRail for permission to access the rail corridor to undertake maintenance and other activities. With respect, this is not the answer. This would be disruptive to the network and onerous for landowners / occupiers to have to use each time they wish to undertake maintenance. Enabling third parties (like neighbours) to access the rail corridor can require on-site safety personnel, or the temporary closure of a block of the track. Closing – even temporarily – track requires around six months to plan, as freight and passenger demands are required to be factored in and alternatives found.
- 5.10 In my opinion, it would be a poor planning outcome if the options for landowners who need to access their buildings for maintenance are either: (a) the landowner needs to seek permission of KiwiRail to encroach onto the rail corridor (resulting in delay, cost and safety issues); or (b) they do not obtain permission and trespass on the rail corridor. The better planning outcome is to provide an adequate safety setback within a landowner's own property for that landowner to access their own building safely.
- 5.11 A physical setback manages adverse effects on the safety of adjacent occupiers and the operation of the railway corridor, while also providing a level of amenity in terms of safe enjoyment of land use activities adjacent to the corridor.

Matter of discretion

- 5.12 The setback provisions sought by KiwiRail do not prevent all development in the setback area. Resource consent can be sought where the setback is not complied with, which allows the Council and KiwiRail to assess whether or not safety concerns can be adequately managed. To assist Council officers, KiwiRail's submission sought the inclusion of a matter of discretion relating to setbacks, however, this has been rejected by the Reporting Planner.⁸
- 5.13 It is important that the plan provisions include matters of discretion relating to impacts on the safe and efficient operation of the rail network to direct the Council as to the relevant effects. I support the amendments to Rule 14A.7.4 proposed by Ms Heppelthwaite.⁹

Setback distance

- 5.14 KiwiRail endorses the Council's approach to include a setback from the rail corridor in PC92. 10 metres is provided for in the District Plan and is proposed in the PC92 provisions. This is a generous distance and ensures that Council is meeting its obligations under Part 2 to enable people and communities to provide for their health and safety.
- 5.15 KiwiRail generally seeks a 5 metre safety setback from the boundary of the rail corridor as being sufficient to enable landowners to use and maintain buildings safely while ensuring the provision of a safe and efficient rail network. While KiwiRail would support the retention of the 10 metre setback, KiwiRail would also agree to 5 metres being adopted, consistent with KiwiRail's submissions in other districts.
- 5.16 A robust setback is particularly necessary under the Medium Density Residential Standards where three storey buildings are enabled as of right in 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.

⁸ Section 42 Report – Section 14A – Omokoroa and Te Puke Part 3 (Matters of Discretion) – Topic 5 – Rule 14A.7.A – Non-Compliance with Setbacks, pp 26-27.

⁹ Statement of Evidence of Catherine Heppelthwaite dated 25 August 2023 at [10.22].

5.17 I have reviewed the WorkSafe Guidelines on Scaffolding in New Zealand.¹⁰ These Guidelines include the following configurations and guidelines for scaffolding design for tower and mobile scaffolds:¹¹

- (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.

5.18 While providing room for scaffolding is a key basis for the setbacks sought, it is not the only basis on which KiwiRail seeks these provisions. Other matters for which a 5 metre setback allows sufficient space include the use of mechanical access equipment required for the maintenance of buildings or land uses, for example:

- (a) Equipment required for drainage works, such as the operation of diggers (which require at least 3 to 5 metres for operation).
- (a) 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 moving booms which can swing out from the equipment. A small crane can be nearly 2.5 metres wide (without any outrigger support) and up to 18 metres in height.

5.19 The setback distance also takes 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 that persons operating any equipment do not encroach into the rail corridor, given the safety implications.

¹⁰ <https://www.worksafe.govt.nz/topic-and-industry/working-at-height/scaffolding-in-new-zealand/#f-doc-20051>.

¹¹ The WorkSafe Guidelines make no recommendation for the area (setback) needed to set up and construct the scaffold, only the final scaffold dimensions.

5.20 To assist the Panel, I have had prepared a diagram that illustrates the effects that KiwiRail is concerned about (attached as **Appendix A**).

6. NOISE AND VIBRATION

6.1 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.

6.2 KiwiRail is supportive of urban development. KiwiRail is a responsible infrastructure operator and has an ongoing programme of upgrade and maintenance work to improve track conditions over time which helps to minimise potential noise and vibration. However, as outlined in Dr Chiles' evidence, residual noise and vibration effects cannot be entirely internalised within the rail corridor and have the potential to cause ongoing disturbance and adverse health effects to communities surrounding the rail corridor.¹²

6.3 Planning instruments are an appropriate tool to manage adverse effects of rail activities on adjacent land users. It is critical that PC92 appropriately addresses these issues so that the health and wellbeing impacts on neighbouring communities are minimised and the ongoing operation and efficiency of the rail network can be maintained.

6.4 A particular concern for KiwiRail is the potential for reverse sensitivity effects to arise from new or intensified sensitive activities (eg dwellings) developing near the rail corridor. Reverse sensitivity is a well-recognised resource management concept which 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 being 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.

¹² Statement of Evidence of Stephen Chiles dated 25 August 2023 at [5.1].

- 6.5 In its submission, KiwiRail sought:¹³
- (a) the inclusion of an acoustic standard requiring acoustic insulation to be installed in new or altered noise sensitive activities within 100 metres of the railway corridor;
 - (b) the inclusion of vibration controls to apply to noise sensitive activities within 60 metres of the railway corridor; and
 - (c) a new definition for "noise sensitive activity".

Response to the Reporting Planner

- 6.6 The Reporting Planner recognised it is appropriate to afford a level of protection to the rail corridor within the District Plan, but goes on to say that these new rules are not required because Rule 4C.1.3.2(c) is already in place to protect noise sensitive activities in all zones.¹⁴ Dr Chiles' and Ms Heppelthwaite's evidence explains the reasons why Rule 4C.1.3.2(c) does not address KiwiRail's concerns.¹⁵
- 6.7 The Reporting Planner queried the 100m and 60m distances sought by KiwiRail.¹⁶ Dr Chiles' evidence provides the technical basis for these distances.¹⁷ These controls are regularly sought by KiwiRail and have been included in district plans throughout the country (including through recent Environment Court processes in Marlborough and Whangārei). KiwiRail undertook specific noise modelling as part of the Whangārei District Plan process in relation to that rail corridor, which confirmed that 100 metres was justified for noise controls and was subject to a consent order confirmed by the Court to resolve KiwiRail's appeal.
- 6.8 The Reporting Planner states that KiwiRail's submission did not include any specific site analysis of the rail corridor through Ōmokoroa and Te Puke, nor provide details of the number of properties potentially affected by these new rules.¹⁸ Ms Heppelthwaite's evidence addresses these matters.¹⁹ It is also important to underline, as set out in Dr Chiles' evidence, that the noise rule

¹³ Submission on Plan Change 92 to the Western Bay of Plenty District Plan at [16].

¹⁴ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 7.

¹⁵ Statement of Evidence of Catherine Heppelthwaite dated 25 August 2023 at [10.10] and Dr Stephen Chiles at [6.2] – [6.5].

¹⁶ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 6.

¹⁷ Statement of Evidence of Dr Stephen Chiles dated 25 August 2023 at [7.6] and [7.10].

¹⁸ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 6.

¹⁹ Statement of Evidence of Catherine Heppelthwaite dated 25 August 2023 at [10.2] – [10.3].

proposed by KiwiRail has been intentionally drafted to allow for site specific variation.²⁰

- 6.9 The Reporting Planner also appears to consider that the existing 10 metre setback addresses KiwiRail's concerns around noise and vibration.²¹ As set out above, the primary intent of the setback is to address **safety issues** arising from buildings being too close to the rail corridor. As described by Dr Chiles, noise and vibration effects extend well beyond 10 metres from the rail corridor and the 10 metre setback is not sufficient manage noise and vibration effects.²²
- 6.10 Ms Heppelthwaite's evidence responds to the Reporting Planner's comment that KiwiRail has given written approval to landowners to establish dwellings within 10 metres despite concerns about reverse sensitivity.²³ Again I wish to clarify that the primary intent of the setback is to manage safety concerns. KiwiRail assesses each request to infringe the setback provision on a case by case basis to ensure it is comfortable that those concerns have been addressed. KiwiRail's approval to establish dwellings within 10 metres of the railway corridor does not undermine the setback provisions, but rather shows that they are working as intended.
- 6.11 Finally, the Reporting Planner notes that KiwiRail has not provided details of the nature of noise or vibration complaints (if any) that KiwiRail has received.²⁴ KiwiRail tries to be a good neighbour but there are inevitable complaints about its activities. These complaints are received nationwide and can result in KiwiRail needing to make changes and / or constrain its operations. However, a focus on complaints is missing the point.
- 6.12 The bottom line is that a complaint being made means that person is likely to be suffering adverse health and amenity effects. Dr Chiles' evidence clearly sets out the technical basis for these effects and how we can mitigate them. In my view, it is not good planning to wait for the effect to have happened that results in the complaint before we do anything. Good planning puts in place acoustic measures so that effects on health and amenity of residents are mitigated.
- 6.13 KiwiRail continues to consider the controls sought are appropriate to ensure that new development is undertaken in a way that achieves a healthy living

²⁰ Statement of Evidence of Dr Stephen Chiles dated 25 August 2023 at [8.3].

²¹ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 6.

²² Statement of Evidence of Dr Stephen Chiles dated 25 August 2023 at [8.2].

²³ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 6.

²⁴ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 6.

environment for people locating in proximity to the rail corridor, having regard to the evidence of Dr Chiles and Ms Heppelthwaite.

Vibration

- 6.14 The Reporting Planner considers that new vibration controls would add further cost to building, including the need for specific foundation design, noise barriers and vibration certification.²⁵
- 6.15 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.²⁶ These effects will only increase with the proposed intensification adjacent to the railway corridor. Ms Heppelthwaite supports vibration controls.
- 6.16 KiwiRail continues to consider that vibration controls are appropriate having regard to Ms Heppelthwaite and Dr Chiles' evidence. However, if the Panel is not minded to accept these vibration controls, KiwiRail would accept a vibration "alert layer" as an absolute minimum requirement.
- 6.17 A vibration "alert layer" places properties adjacent to the rail corridor on notice of the potential vibration effects. Such a layer has recently been included in the Whangārei District Plan and in the Precinct provisions relating to the Drury area in the Auckland Unitary Plan.

7. CONCLUSION

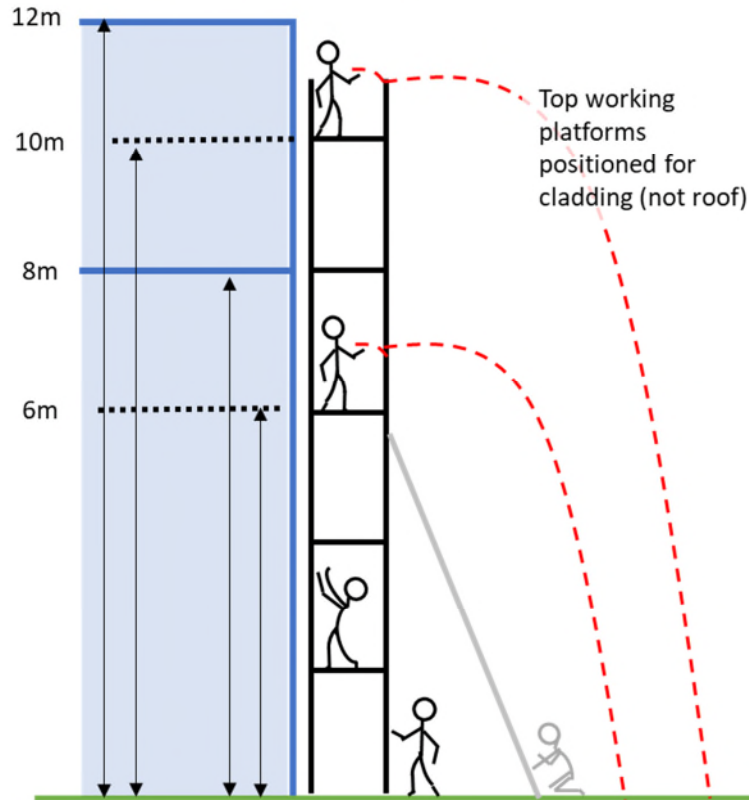
- 7.1 For the reasons set out in the evidence of Dr Chiles, Ms Heppelthwaite and above, the setbacks and noise and vibration controls sought by KiwiRail are appropriate and necessary for the safe and efficient operation of the rail network in the Western Bay of Plenty District.

Mike Brown
25 August 2023

²⁵ Section 42A Report – Section 4C – Amenity – Topic 2 – Indoor Railway Noise and Vibration, p 7.
²⁶ Statement of Evidence of Stephen Chiles dated 25 August 2023 at [4.5].

APPENDIX A – DIAGRAM

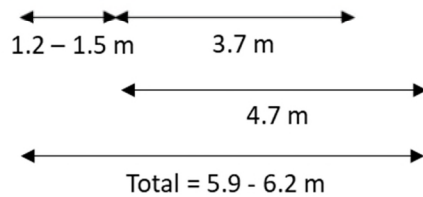
Example of an Independent, Multi-Bay Scaffold



Top working platforms positioned for cladding (not roof)

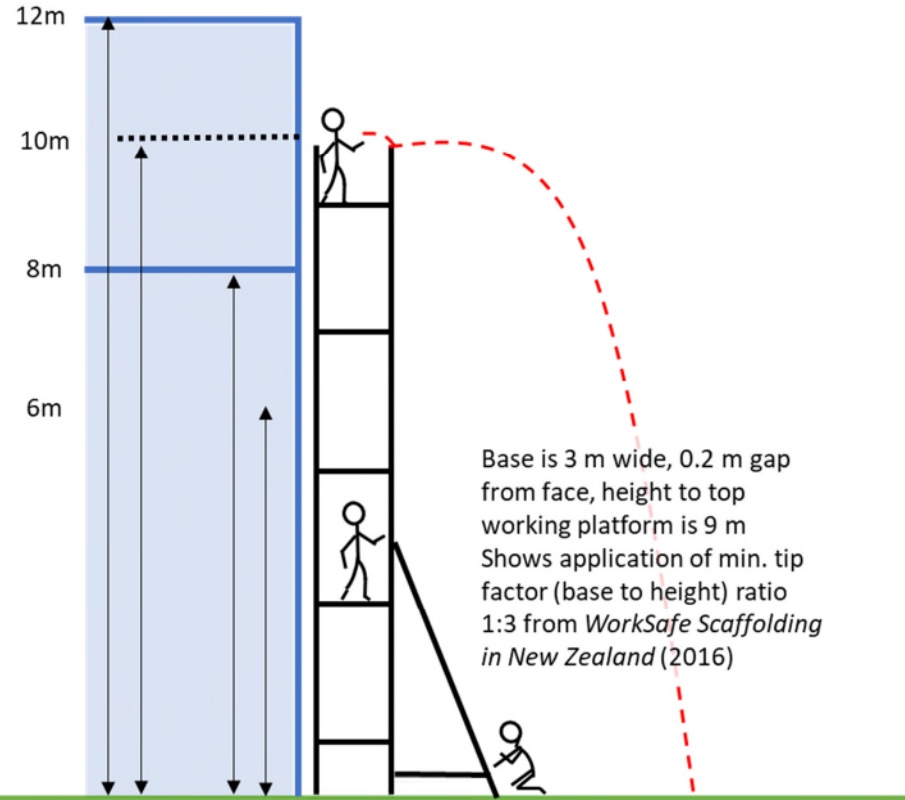
Key:

- - - Path of a dropped object



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

Example of a Tower Scaffold with Outrigger



Base is 3 m wide, 0.2 m gap from face, height to top working platform is 9 m Shows application of min. tip factor (base to height) ratio 1:3 from *WorkSafe Scaffolding in New Zealand (2016)*

