



PDP Submission 322
Further Submission 071

Richard Murcott

to

Independent Commissioners' Panel
for the Wellington City Proposed District Plan

Hearing Stream 4 – **Centres**



Hearing stream 4 chapters:

- Centres - City Centre Zone (CCZ), Neighbourhood Centre Zone (NCZ), Local Centre Zone (LCZ), Metropolitan Centre Zone (MCZ)
- Centres - Commercial Zone (CZ), Mixed Use Zone (MUZ), General Industrial Zone (GIZ)
- Waterfront Zone (WFZ)
- **Wind** (WIND)





Point 91.5

Section: High Density Residential Zone

My Principal Submission on WIND

Sub-section: HRZ High Density Residential Zone

Provision:

The High Density Residential Zone provides for a range of housing types at a greater density and scale than the Medium Density Residential Zone. It gives effect to the requirements of the RMA to allow for three residential units of up to three storeys on a site, and also by enabling multi-unit housing of up to six storeys through a resource consent process subject to standards and design guidance.

Sentiment: Oppose

Submission:

The scale of upzoning can have serious adverse impacts.

Katherine Mansfield wrote about the **wind** in Thorndon:

' SUDDENLY —dreadfully —she wakes up. What has happened? Something dreadful has happened. No — nothing has happened. It is only the wind shaking the house, rattling the windows, banging a piece of iron on the roof and making her bed tremble.'

Should wind be a qualifying matter in Thorndon's residential zones, and perhaps other parts of the city?

Currently, on the easternmost boundary of residential Thorndon, in Davis St, there are two opposing 6-storey buildings.

During windy weather these buildings create hideous wind tunnel effects at street level.

At times it has been hazardous for cyclists and scooter riders, or pushing a child's pushchair, or just handling anything that could be 'grabbed' by the wind.

Another example is No 70 Hobson St Thorndon; a planning folly from the early 1970's.

During strong southerlies the building funnels and accelerates the wind around the SW corner of the building, which at ground level creates adverse impacts on residential neighbours.

In Wellington, any developments of 6+-storey need to account for potential airflow impacts at ground level.

With climate change, wind (among other things) may need extra attention.

Add mitigation of wind implications to help advance better urban design and protect liveability.



Report for the Independent Hearings Commissioners:

[Wellington City Proposed District Plan – Wind Section 42A Report](#)

Dated 26 May 2023


EXTRACT

2. *There were nine submitters who collectively made 30 submission points on this topic.*
3. *There were three further submitters who collectively made three further submission points. Overall there were 33 total submission points on the Wind Chapter, Appendix 8 and Appendix 14.*

My principle submission was overlooked; omitted from this Appendix:

[Appendix B - WIND Chapter, Appendix 8, Appendix 14](#)

Date: 26/05/2023



***“... planning canyons of high rises
which will create wind tunnels to blow
old people and pushchairs out of the
city”***

Concerned Thorndon Resident

Davis St - the easternmost gateway into Thorndon:

- existing vertical intensification
- nasty wind effects from additions to buildings up to 6 levels





Wellington CC 1m Contours 2017

WCC WCC
Wellington City Council

Thorndon Quay - Hobson St Summary

Wellington City Council 1 metre contours

View Full Details

Download

Details

 **Dataset**
Feature Layer

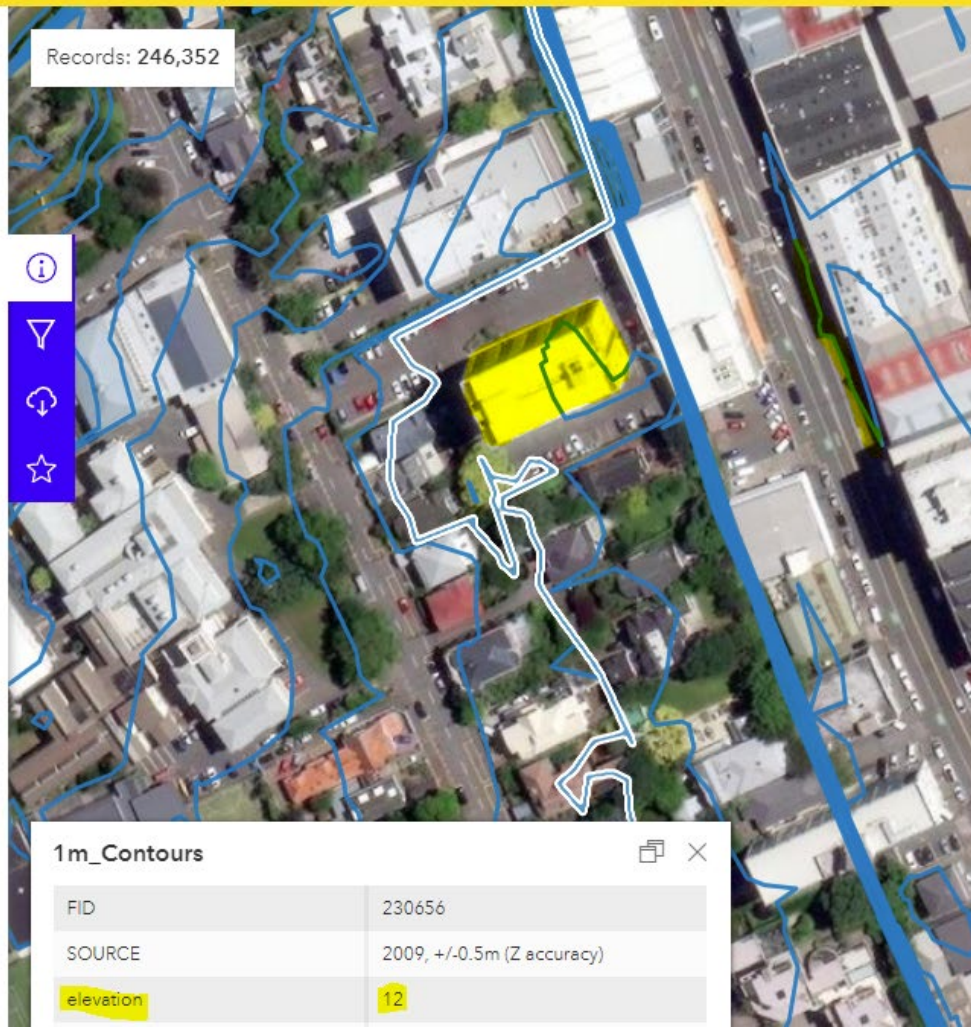
 **May 9, 2018**
Info Updated

 **May 9, 2018**
Data Updated

 **May 5, 2017**
Published Date

 **Records: 246,352**
View data table

 **Public**
Anyone can see this content



Wind patterns can be influenced by local topography and geographical features.



Daylight Weather X

02:00 PM NZST

12 6 12 6 12
AM AM PM PM AM

06/27/2023

- Sun position by date and time
- Shadows

Map scene:
<https://arcg.is/1jKrHL>



EXTRACT from [Wind Section 42A Report](#)

- “5. The following are considered to be the **key issues** in contention in the Wind chapter:
- a. The application of the provisions in the Wind Chapter to apply to the **Medium Density Residential Zone (MRZ)** and **High Density Residential Zone (HRZ);**”

Agree

More protection needed than the PDP provides.



Section 42A Wind Report 26 May 2023

110. Because of this downwash effect, buildings of even 4-6 stories, can produce dangerous wind speeds at street level. As Mr Locke's statement of evidence, paragraph 18.4-18.5, also notes as the height of buildings exposed to wind increase, the likelihood of dangerous wind speeds also increase. Over time it is possible that wind conditions can improve where a collection of larger buildings begin to provide shelter to some areas.



Wellington is the windiest capital city in the world.
Structures of 4 - 6 stories can produce dangerous wind speeds,
Out of scale structures could be proposed in existing low-rise residential areas

The relief sought near proposed **MRZ** and in **HRZ** is:

- Qualitative assessment for developments of 4-5 stories
- Quantitative assessment for developments 6 stories or higher
- Notification.
- No relaxation of annual maximum gust speed excess metrics i.e. keep gust thresholds low



Appendix A – Wind Section 42A

“The provisions within this chapter apply to public spaces in a number of zones across the City including the City Centre and different some Centres Zones and the **High Density Residential Zone**. **The provisions do not apply to private spaces such as adjacent properties or backyards.**”

Statement of evidence of Dr Michael Donn on behalf of Wellington City Council in the matter of the Effects of Buildings on Pedestrian Wind Date: 26 May 2023

“17.5 ... the concerns expressed by The Urban Activation Lab of Red Design Architects [420.5 (supported by Historic Places Wellington Inc)] about limited notification could only ever be about wind in city streets. The rules only apply to public spaces, not, as I read their concerns, to the backyards or adjacent private properties.”

Myself and the TRA remain concerned that ‘out-of-scale’ new developments being dropped into, or near, existing urban residential fabric (MRZ and HRZ), without any effective analysis of potential adverse wind affects, or controls, is problematic particularly in our windy climate.

And not just for pedestrians at street level or in public spaces, but also for backyards and adjacent private properties.

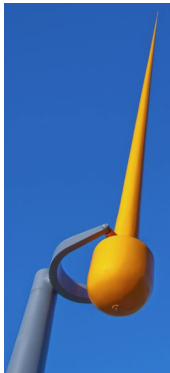


Future

Hearing Stream 4- Appendix 14 - [Wind Appendix A - Recommended Amendments to Provisions](#)

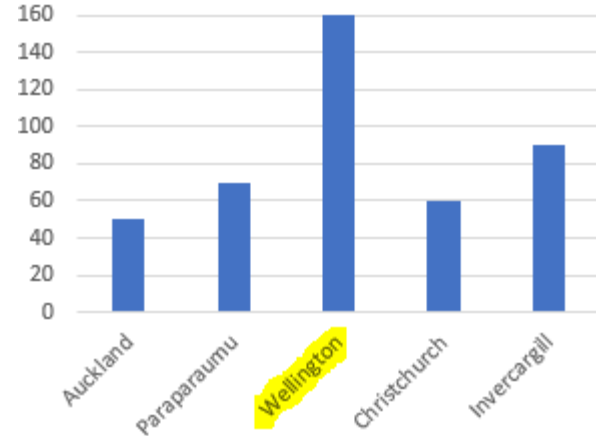
2.1 Wellington's wind climate/environment

*“Wellington is **significantly more windy** than other international cities that have similar wind rules for urban development, ...”*



Zephyrometer on Cobham Drive

Strong wind gusts over 65kph / days per year





Plan for Climate Change?

Climate change for Wellington could mean various intensified adverse wind effects, anomalies or patterns:

1. **Stronger storms** may result in higher wind speeds.
2. **Altered Wind Patterns** could result in changes to wind strengths, wind gusts and patterns.
3. **Coastal Erosion and Storm Surges** can generate strong onshore winds and cause damage to coastal infrastructure, buildings, and ecosystems.
4. **Risk of Tornadoes**: currently rare but climate change may influence the conditions that favour their formation.
5. **Seasonal Wind Systems** might change, impacted by large-scale atmospheric systems, such as El Niño and La Niña events.
6. Intensify heat-related wind events (**heat waves**); hot and dry winds can increase the risk of wildfire ignition and spread, with impacts on air quality and hazards for infrastructure.



Relief sought

1. prevent adverse wind effects that are:

- hazardous
- unpleasant

2. avoiding impacts on:

- pedestrians
- neighbouring residential properties
- micro-mobility users
- cyclists

3. **in** medium & high density **residential** areas

- provision for notification in relation to wind effects

Thank you