BEFORE INDEPENDENT HEARING COMMISSIONERS IN CHRISTCHURCH

TE MAHERE Ā-ROHE I TŪTOHUA MŌ TE TĀONE O ŌTAUTAHI

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of the hearing of submissions on Plan Change 14 (Housing

and Business Choice) to the Christchurch District Plan

STATEMENT OF PRIMARY EVIDENCE OF ALISTAIR RAY ON BEHALF OF CHRISTCHURCH CITY COUNCIL

CITY CENTRE ZONE (DEVELOPMENT CAPACITY, BUILDING HEIGHTS, DESIGN)

Dated: 11 August 2023

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EXECUTIVE SUMMARY

- My full name is Alistair Ray. I am employed as a Principal and Senior Urban Designer at Jasmax.
- I have prepared this statement of evidence on behalf of the Christchurch
 City Council (the Council) in respect of urban design matters arising from
 the submissions and further submissions on Plan Change 14 to the
 Christchurch District Plan (the District Plan; PC14).
- 3. My evidence is focused on urban design in the City Centre Zone (CCZ) only, with particular focus on building heights and the control of taller building elements, including the qualifying matters (QMs) applying to building heights in Victoria Street and identified heritage areas (The Arts Centre, New Regent Street and Cathedral Square).
- 4. My evidence specifically addresses the following two key issues:
 - (a) Whether or not increased building heights is an appropriate response in a Ōtautahi Christchurch context from an urban design perspective; and
 - (b) Whether the proposed planning provisions within PC14 are appropriate to ensure high quality urban design outcomes in the CCZ.
- 5. I recognise the mandate laid out by the National Policy Statement Urban Development (NPS-UD) for Tier 1 regional and territorial councils to enable increased development capacity in commercial zones which has led to Christchurch City Council's response via PC14. For the CCZ, the response of PC14 has largely been to increase building heights.
- 6. In my opinion increased heights are not an appropriate response in a Ōtautahi Christchurch context, in the absence of appropriate plan provisions for ensuring high quality urban design outcomes for taller buildings within the CCZ.
- 7. I consider that the provisions within PC14 are in the main appropriate for ensuring high quality urban design outcomes with respect to controlling / guiding taller building within the CCZ, although I do recommend some alterations to further improve the effectiveness of the provisions.

INTRODUCTION

- 8. My full name is **Alistair Ray**. I am a Principal and Senior Urban Designer for Jasmax.
- I have been engaged to provide expert evidence on the subject matter of urban design in the CCZ, with particular focus on building heights and the control of taller building elements.
- 10. In preparing this evidence I have reviewed the following documents and evidence:
 - (a) The proposed provisions in sub-chapter of PC14 concerning the CCZ¹
 - (b) The Council's draft Central City non-height related matters Section42A report prepared by Holly Gardiner; and
 - (c) The Councils draft CCZ building heights (including QMs), Section42A report prepared by Andrew Willis in
 - (d) The draft statement of evidence from Tim Heath;
 - (e) The draft statement of evidence from Ruth Allen; and
 - (f) The section 32 reports for PC14 in-so-far as they relate to my evidence.
- 11. I am authorised to provide this evidence on behalf of the Council.

QUALIFICATIONS AND EXPERIENCE

- 12. I hold a BA(Hons) in Town Planning, a Postgraduate Diploma in Town Planning and a Masters Degree (Hons) in Urban Design.
- 13. I have 30 years' experience working in urban planning and urban design, gained in both the public and private sector, in both the UK and in New Zealand. Since 2008 I have been employed as Principal and Head of the Urban Design team at Jasmax in its Auckland office, although my role includes work across New Zealand. Jasmax is one of New Zealand's largest and well-respected design firms, which includes architects, landscape architects, interior designers, brand designers and urban designers. Jasmax has one of the largest teams of dedicated urban

¹¹Proposed Housing and Business Choice Plan Change (Plan Change 14) <u>Plan-Change-14-HBC-NOTIFICATION-Chapter-15-Commercial2.pdf (ccc.govt.nz)</u>

- designers in New Zealand. Prior to my role at Jasmax, I worked in the City Planning department of Auckland City Council.
- 14. From 2018 to 2022 I was the Chair of the national committee of the Urban Design Forum (UDF), the only body representing the interests of the urban design profession nationally. I continue to be a member of the UDF. I am currently a Chair of the Auckland Urban Design Panel and a Chair of the Hobsonville Point Design Review Panel, organiser of the Urbanism NZ 2018 and 2023 national conferences and was part of the small expert group of attendees invited to two Parliamentary workshops discussing the value of urban design (April / May 2019).
- 15. I have been an advisor to the Council's planning and urban design teams on various matters since 2009 including advising on the post-earthquake Christchurch Central Recovery Plan in 2011.

CODE OF CONDUCT

While this is a Council hearing, I have read the Code of Conduct for Expert Witnesses (contained in the 2023 Practice Note) and agree to comply with it. Except where I state I rely on the evidence of another person, I confirm that the issues addressed in this statement of evidence are within my area of expertise, and I have not omitted to consider material facts known to me that might alter or detract from my expressed opinions.

SCOPE OF EVIDENCE

- 17. My statement of evidence addresses the following matters:
 - (a) Whether or not increasing building heights is an appropriate response in a Ōtautahi Christchurch context from an urban design perspective;
 - (b) Whether the proposed planning provisions within PC14 are appropriate to ensure high quality urban design outcomes in the CCZ;
 - (c) The appropriateness of the QMs; and
 - (d) Response to submissions and further submissions in respect of urban design matters related to the CCZ.
- 18. I address each of these points in my evidence below.

SECTION 1 – APPROPRIATENESS OF INCREASED BUILDING HEIGHTS IN THE ŌTAUTAHI CHRISTCHURCH CONTEXT FROM AN URBAN DESIGN PERSPECTIVE

Setting the scene

- 19. The NPS-UD requires that Tier 1 regional and territorial councils enable increased development capacity in commercial zones. As a Tier 1 council, the Council is required to make changes to the District Plan to enable increased development capacity, and this is the basis of PC14.
- 20. Policy 3 of the NPS-UD requires that in relation to tier 1 urban environments, regional policy statements and district plans enable:
 - a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification;
- 21. The Council's response under the proposed provisions in PC14 is to increase building heights, with some caveats. In certain locations building heights have been increased to 90m. In other sensitive locations within the CCZ building heights are restricted to 45m. A range of additional provisions / assessment criteria have also been included to ensure high quality outcomes from these taller elements. These will be discussed in greater detail in Section 2 of my evidence.

Well-functioning Environments

- 22. While policy 3 of the NPS-UD requires district plans to enable, in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification, objective 1 and policy 1 also seek the delivery of well-functioning urban environments.
- 23. Policy 1 of the NPS-UD describes a well-functioning environment as a planned environment that as a minimum have, or enable a variety of homes that serve the following functions:
 - (a) meet the needs, in terms of type, price, and location, of different households.
 - (b) enable Māori to express their cultural traditions and norms.

- (c) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size.
- (d) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport.
- (e) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and support reductions in greenhouse gas emissions.
- (f) are resilient to the likely current and future effects of climate change.
- 24. Accompanying guidance produced by the Ministry for the Environment² states that this list is not an exhaustive list of factors that contribute to well-functioning urban environments. There are other factors that contribute to the outcomes that councils and other decision-makers may wish to consider alongside those of the NPS-UD, such as principles of urban design.
- 25. Additional guidance by the Ministry for the Environment states that:

None of the intensification requirements are intended to override or undermine good quality urban design or quality urban environments.

- 26. In my opinion, observing the principles of good urban design plays a significant role in the creation of well-functioning built urban environments. Building form and building design directly impact the quality, vitality and enjoyment of the built environment for people occupying and using the city. These effects can range from positive to adverse, depending on the design and spatial arrangement of buildings. People experience the city from close up, from afar, from street level or from height, and all of these contribute to the experience of the city. In addition to height, aspects such as the volume / mass and bulk of buildings, the sense of enclosure, the degree of building continuity, the architectural quality and craftsmanship and the quality and richness of materials all play a significant role in shaping the quality of the built environment and the degree at which it can be described as a well-functioning environment³.
- 27. Urban design principles also go beyond the aesthetic concern of building masses and the spaces between buildings, expanding the focus to include

² Well-functioning-urban-environments.pdf

³ By design: urban design in the planning system: towards better practice (designcouncil.org.uk), pp15-16

the enjoyment and the use of urban areas by people. Carmona, Heath, Oc, & Tiesdell, (2003) ⁴stated that 'good design meets both the people's physical and sociocultural needs.' In effect, good urban design is both a product and a process, reflecting both the function and form of developments. It also captures who influences the design and how they are engaged in the process.

- 28. In other words, how an urban place performs goes beyond just physical or quantitative elements (form) but is determined by people's behaviour and needs within a particular place.
- 29. Universally termed 'placemaking', the approach recognises that homogenised blueprints designed by specialists external to the context cannot be transferred between urban settings. Instead, placemaking should build on local knowledge, culture, and preference to create a bespoke inclusive vision for useable spaces (Dayaratne, 2016⁵; Markusen and Gadwa, 2010).⁶
- 30. It is with this knowledge in mind, that requires a contextual approach as to what constitutes a well-functioning urban environment specific to the Ōtautahi Christchurch context.
- 31. As promoted by Jacobs (1961)⁷ and Gehl (2013)⁸, for the built environment to successfully reflect the community's needs and desires, the community must be fully engaged and have ownership of the design. Placemaking, which builds a design led vision for an area, requires the broad engagement of communities, businesses, and agents of social change to reflect on current use, meaning and sense of place and expand this to enhance future development (Dayaratne, 2016; Markusen and Gadwa, 2010; Marques, Grabasch, & McIntosh⁹, 2018). Notably, placemaking informs the physical space and incorporates social relations and subjective human experiences in the design itself (Schofield & Szymanski, 2011¹⁰). In summary, the

⁴ Carmona, R., Heath, T. Oc, T. and Tiesdell, S. (2003). Public places, urban spaces: the dimensions of urban design. New York: Architectural Press.

⁵ Dayaratne, R. (2016). Creating places through participatory design: psychological techniques to understand people's conception. Journal of Housing and the Built Environment, 31, 719-741.

⁶ Markusen, A., and Gadwa, A. (2010). Creative placemaking. Markusen Economic Research Services and Metris Arts Consulting, pp.1-60.

⁷ Jacobs, J. (1961). The death and life of great American cities. New York: Random House.

⁸ Gehl, J., and Svarre, B. (2013). How to study public life. Washington, Covelo, London: Island Press.

⁹ Marques, B., Grabasch, G., and McIntosh, J. (2018). Fostering Landscape Identity through participatory design with indigenous cultures of Australia and Aotearoa/New Zealand. *Space and Culture*, 00, 1-16.

¹⁰ Schofield, J., and Szymanski, R. (2011). Local heritage, global context: cultural perspectives on sense of place. Farnham, England: Ashgate.

process by which a 'well-functioning urban environment' is conceived is as important as the measurable outcomes.

A well-functioning environment in the Ōtautahi Christchurch context

- 32. Christchurch was devastated by the earthquakes in 2011, but in the aftermath of this tragedy, one of the elements of the re-building programme was an engagement process that stepped above and beyond that typically found across Aotearoa. The "Share an Idea" process was widely accepted as being one of the bright spots of the Christchurch earthquakes as thousands of people were able to engage with the process and voice their opinions, views and concerns on how the city was to rebuild.
- 33. A significant element of this response was to inform the Christchurch Central Recovery Plan (CCRP) with a consolidated central city core, with lower rise buildings, improved connections and more greenspace. This reflected the fact that many in the community had become afraid of taller buildings and the safety risk that they could pose.
- 34. Whilst that safety risk is probably a perceived rather than actual risk, it nevertheless reflected a community aspiration from submissions received on PC14 appears to still be relevant today.
- 35. Based on submissions therefore, in my view the vision and aspiration for a mid-rise city is still relevant today.
- 36. Reflecting the position described above, that it is important for the built environment to successfully reflect the community's needs and desires, and increasing the allowable heights of buildings within the CCZ to the standards proposed in PC14 would not be consistent with reflecting those needs and desires.
- 37. This view is supported by the numerous submissions opposed to the increase in height of buildings within the CCZ, with very few in support, thus reinforcing the view that the community supports a vision for a mid-rise city centre.
- 38. Whilst there is public consultation and submission process on PC14, plan changes are hard for the public to understand, and I do not consider this to be as accessible and engaging as the "Share an Idea" process postearthquake which successfully reached a wide cross-section of the local community.

- 39. From an urban design perspective, the CCZ has been developing into one of New Zealand's best well-functioning urban environments. A human-scaled city with buildings and streets and spaces in excellent proportions; buildings that define space and create clearly articulated public streets and spaces; well-designed streets that promote active transport modes; a network of high-quality attractive public open spaces and routes; a high-degree of mixed use and diversity; highly activated buildings especially at ground level; excellent design quality throughout buildings and the public realm. Indeed, there are all the essential ingredients defined by Jacobs and Appleyard (1987)¹¹ in their seminal paper Toward an Urban Design Manifesto as being critical in creating successful urban environments.
- 40. I consider that the approach since the 2011 earthquakes of pursuing a lower rise city is instrumental in this success. Partly because of the community buy-in to this vision (as described in the section above), but also because taller buildings could upset the balance that is currently being achieved between buildings and spaces which is so important in defining the character of the city.
- 41. Whilst other cities such as Wellington and Auckland have a city centre clearly characterised by tall buildings, Christchurch does not, partly due to the earthquakes. Even prior to the earthquakes, the CCZ's character was determined principally by its low to mid-rise building form. The taller buildings within the CCZ were sporadic and were generally considered not to be the City's most redeeming features with some poor architectural examples of tall buildings from the late twentieth century.
- 42. The earthquake saw the demolition of many of these tall buildings, and although a few tall buildings remain their contribution to the character of the city is even smaller.
- 43. The character of the central city has therefore emerged even stronger as a low to mid-rise city and the community has embraced and supported this vision.

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¹¹ Jacobs, A & Appleyard, D. (1987). Toward an Urban Design Manifesto

The challenges of successfully integrating taller buildings

- 44. Tall buildings are often seen as the aspirational building form a city form to aspire to. Whilst tall buildings can provide impressive skylines and help to display a sense of importance in the landscape, by their very nature they stand out, and so they also bring challenges in integrating them successfully within the built environment:
 - (a) Taller buildings are more prominent, and unless they are of much higher architectural design quality, including the use of high-quality materials, they can easily be considered eyesores within the environment.
 - (b) Taller buildings can result in streets and public spaces that feel overcrowded and dominated by buildings, particularly if there are many tall buildings along a street that can result in a canyon type effect.
 - (c) Taller buildings create more micro-climate issues on the surrounding public realm both in terms of wind impact and shading.
 - (d) Taller buildings can result in less engagement with the street and public realm, as occupants of buildings are too high to be able to meaningfully engage with users of the streets below.
 - (e) Taller buildings can result in more challenges under emergency situations, such as during earthquakes. They can take longer to evacuate and would have larger zones of impacts in the event of building collapse.
- 45. In the late Twentieth and early Twenty-First Century, the implementation of tall buildings often fell far short of desired outcomes. Projects often lacked adequate urban design principles and to a lesser extent, architectural guidelines to control outcomes, and consequently created undesirable urban environments for which dissatisfaction of the public with high-rise is widespread. "There have been too many examples of tall buildings that have been unsuitably sited, poorly designed, wrongly detailed and badly built" English Heritage & CABE (2007)¹².
- 46. Because of these challenges, a central city with tall buildings should not always be considered the aspirational cityscape. A low to mid-rise urban environment can often provide a far more attractive, comfortable and well-

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¹² English Heritage and CABE, Guidance on Tall Buildings, July 2007.

- functioning urban environment, as evidenced by the success of many European cities that exist without significant numbers of tall buildings.
- 47. Indeed, often tall buildings emerge as a result of a shortage of development capacity in areas of high demand, as opposed to the other way around.
- 48. My point is that tall buildings should not just be chased simply because they are tall. Given the challenges of integrating tall buildings, a well-functioning environment is probably easier to achieve without tall buildings. If taller buildings are to be allowed, given the potential impact upon the built environment and the need to achieve a well-functioning urban environment, it becomes important to ensure the planning provisions are crafted to ensure high quality outcomes.

Alternative methods to enable more development capacity

- 49. There are potentially other methods of enabling more development capacity in any given urban environment or rather there may be planning controls or standards in place that restrict development that could be removed.
- 50. Site coverage some urban zones have restrictions in place that control the amount of the site that can be covered by buildings. This effectively restricts the amount of development that can take place on any particular site. However, a site coverage control is not in place in the CCZ as this was removed in the CCRP, with the District Plan maintaining this approach of allowing 100% site coverage. Removing any site coverage control to enable further development capacity is therefore not an option.
- 51. Floor Area Ratio (FAR) similarly some urban zones have a restriction in place that limits the amount of gross floor area in relation to the size of the site. This has typically been used to control both the amount of development and the form of the buildings on the site. For example, developers could choose to build a larger footprint but low-rise building, or a small footprint but taller building. However, FAR controls are not in place in the CCZ and so this is also not an option to enable further development capacity.
- 52. Parking minimums for many years parking minimums were in place to ensure that development providing sufficient parking to serve the proposed uses on the site. Although not a control on the amount of floor area itself, this effectively provided a restriction on the amount of development as part of the site or building would be required to provide parking, thus effectively

limiting the amount of development could be achieved (assuming there are corresponding limits to building height or FAR controls). Again, parking minimums do not apply in the CCZ, and therefore this is not currently a restriction on development capacity.

53. These are the three most typical restrictions on development capacity. The fact that these are not in place in the CCZ points to the fact that increasing building heights is potentially the only realistic planning method to enable further development capacity.

Section 1 - Conclusions

- 54. Section 1 of my evidence has looked at the appropriateness of increasing building heights in the Ōtautahi Christchurch context from an urban design perspective.
- 55. I conclude that from an urban design perspective, raising building heights in the CCZ is not an appropriate response in the Christchurch context in the absence of appropriate plan provisions for ensuring high quality urban design outcomes for taller buildings within the CCZ.
- 56. Increasing building heights raises a number of significant urban design challenges that need careful consideration and Section 2 of my evidence addresses these issues.

SECTION 2 – APPROPRIATENESS OF PROPOSED PLANNING PROVISIONS WITHIN PC14 TO ENSURE HIGH QUALITY URBAN DESIGN OUTCOMES IN THE CITY CENTRE ZONE

- 57. The most significant element of PC14 in the CCZ is the enabling of taller buildings.
- 58. This section of evidence turns to assessing the appropriateness and effectiveness of the proposed planning provisions, with particular focus on the provisions included to control / guide the urban design outcomes of taller buildings within the CCZ.
- 59. The most significant change is to introduce a revised 90m building height limit (45m in sensitive locations) and the requirement to set the tower away from boundaries by 10% of the total building height once above 28m. This will effectively result in a "building base and tower" approach.

- 60. The proposed significant changes within the CCZ in PC14 are as set out below:
 - (a) Increase the total building height to 90m across the CCZ, except this is limited to 45m adjacent to Cathedral Square and Victoria St.
 - (b) Introduce a "building base and tower" approach, by retaining the existing road-wall height of 21m and building base of 28m.
 - (c) Allow a 50% increase in the road-wall height for corner sites.
 - (d) Introduce a maximum tower dimension (diagonal) of 40m and a maximum tower site coverage.
 - (e) Introduce a tower separation standard.
 - (f) Introduce an upper floor setback for taller elements (10% of the total building height).
 - (g) Additional assessment matters regarding building design and wind effects.
- 61. Many of these elements are inter-related and it is the combination of the collective provisions that shape the design outcomes of taller building elements. Whilst I will address each proposed change, the first point to address is the overall approach to managing building height.

History of building heights in Ōtautahi Christchurch

- 62. The city of Christchurch was formally founded in 1850 and the central city area became characterised with buildings from the Victorian and Edwardian period, with many in the Gothic Revival style. Until the earthquakes of 2010/2011, large parts of the central city remained characterised by buildings from this period, typically up to four storeys.
- 63. The first "tall" building in Christchurch was "Manchester Courts", built in 1906 and 39.6m tall. It was demolished post-earthquakes.
- 64. The next tall building was not until 1963 Tower Insurance, 69 Cathedral Square at 40.8m tall. It too was demolished post-earthquakes.
- 65. There have been 52 buildings in Christchurch central city area (not just the CCZ) over 35m in height since 1906. Only 17 have been taller than 46m, with 35 buildings between 35m and 45.2m. Of the 17 taller than 46m, only

- seven remain. Of these 17 taller buildings, all were built since 1967, with the most recent being the Waipapa Acute services building at the hospital in 2018.
- 66. Mr Willis provides a detailed explanation of how the building heights in the CCZ have changed over the last 25 years, from the 1995 District Plan through the CCRP, the operative District Plan (**ODP**) and now proposed PC14.
- 67. The CCRP and the subsequent ODP placed a height limit in the CCZ of 28m (although buildings above 28m were still possible as discussed later). This was the result of extensive consultation with the community and stakeholders. It also included studies looking at development feasibility and construction issues, with 28m being a sweet-spot for returns versus buildability, construction, structural and seismic requirements. This has resulted in most new buildings since the earthquakes being up to 28m.
- 68. Since the earthquakes, 36 buildings have been demolished in the wider central city area that were over 35m in height.
- 69. Looking at the CCZ now, these two factors mean that there are relatively few buildings that are over 28m (as shown in **Figure 2** below).



Figure 2. Illustration showing buildings in the CCZ greater than 28m.

Dark red = greater than 60m (2 x buildings)

Bright red = between 45m and 60m (3 x buildings)

Light red = between 28m and 45m (9 x buildings)

- 70. As discussed in depth in the first part of my evidence, I consider that Christchurch central area has been developing into one of New Zealand's highest quality urban environments, and I consider this due in part to the careful curation of the city through the CCRP and the community buy in to the mid-rise vision for the city.
- 71. It is important to understand this history and how it has shaped the character of the central city. Unlike Wellington and Auckland, Christchurch has maintained a relatively low-rise character to its central city, with relatively few remaining exceptions.

Recommended approach to building heights

- 72. Given my conclusions in Section 1 of this evidence, combined with a strong character of lower rise buildings, I would suggest that if tall buildings are to be allowed in the CCZ, then there needs to be a more subtle and contextual method that helps to best deliver a well-functioning environment in the Christchurch context.
- 73. I consider that this is through the use of a series of urban design assessment criteria that apply at different height thresholds, where the quality of design and the configuration of the building becomes an increasingly important factor the taller the building proposal. This is a direct correlation with the fact that the taller a building is within a city, the more prominent it potentially becomes and the more important it is to ensure good design outcomes.
- 74. As stated earlier, the NPS-UD is not advocating that additional development capacity should be at the expense of well-functioning urban environments. Rather it is a delicate balancing act of enabling more development capacity whilst ensuring that the quality of the environment is not compromised.
- 75. The ODP appears to have a maximum building height of 28m. But this is technically not an absolute maximum. Developers can submit applications for buildings above 28m, but they require a consent that is considered under full discretionary activity status. In my experience this is not a particularly attractive route to developers as the outcome is less certain than other activity statuses, as it is not clear what criteria the building will be assessed against. So, this process effectively does create a ceiling at 28m,

although some developers are choosing to pursue this path, as evidenced by recent consents for buildings greater than 28m (see **Figure 3** below).



Figure 3: Building (45m in height) granted a recent Resource Consent on the corner of Cashel St and Manchester St.

- 76. To satisfy the thrust of the NPS-UD, it is therefore recommended that an approach is taken that sends a signal to the market that more capacity has been enabled than that allowed under the ODP, but also maintaining a degree of design quality for Council to protect the quality of the urban environment (both current and future) and reassure the community who have bought into the current vision that quality can be maintained.
- 77. With respect to building heights, I therefore recommend the following tiered approach.

Buildings up to 28m

- 78. For buildings up to 28m in height, the process remains the same as per the ODP. Consents are still required, but buildings can be considered under Controlled Activity status if urban design certification is obtained, or otherwise as Restricted Discretionary Activity (RDA) status with matters of discretion around general matters of urban design.
- 79. This would allow commercial buildings of approximately seven storeys and residential buildings of approximately nine storeys.

Buildings above 28m, up to 90m

- 80. The thrust of the NPS-UD is to enable more development capacity. If taller buildings above 28m are to be allowed within the CCZ, then I consider that additional assessment criteria should be applied to ensure the best possible urban design outcomes.
- 81. I also recognise that in the right strategic location and with a distinctive form and exceptional architectural and public realm quality, a tall building could enhance the identity of the CCZ.
- 82. I agree with the approach taken in PC14 that applications for buildings above 28m can face an easier process than the ODP, and this can be communicated to the property industry.
- 83. Above 28m, it is recommended that an RDA consent will be required (which compares to the current Discretionary status under the ODP). This is considered a significant change to enable capacity.
- 84. The figure of 28m for the introduction of these additional matters of discretion relates to the fact that the CCRP and the ODP both had a height "limit" of 28m and this has been embraced by the community and development industry. But it also feels a logical transition point given the fact that there is currently a natural threshold at 28m, with the majority of buildings sitting below this threshold, as discussed in the previous section.
- 85. Given this current threshold, any buildings protruding above the 28m will inevitably be significantly more visible than buildings up to or below the 28m. As buildings become more visible, it becomes more important to control the design quality to avoid the risk of large, poor quality buildings having a dominant and detrimental impact on the city environment.
- 86. So above 28m, an RDA consent will be required and additional matters of discretion are recommended that deal with design quality, which are discussed in more detail in the following section of this evidence. These matters are restricted to design quality they are not around the development economics of the project.

- 87. Also, a building should not be refused solely because of its height, if the overall design quality is otherwise considered acceptable. The height of a building is an intrinsic and integral part of the design, and the overall form and massing will be assessed, and it may be that height could be a contributing factor to a poor design. But if the design is otherwise acceptable it should not be refused simply on building height.
- 88. Other elements have also been introduced to control the appearance of buildings as they poke above the 28m threshold. One method is to encourage more elegant, slender tower buildings as opposed to bulky, slabtype buildings that are generally regarded as being more detriment to the urban environment by blocking views, causing more over-shadowing and having a greater visual impact. In this regard, a base (podium) and tower approach is being recommended, which I will discuss in more detail in the following sections.
- 89. It is recommended that this RDA approach with rigorous design quality assessment criteria, together with the slender tower approach, is applied to building proposals above 28m and up to 90m.

Buildings above 90m

90. Above 90m it is recommended that buildings are then subject to a Discretionary Activity resource consent. This is not stating that they are definitely not acceptable (or non-compliant), but above this height full discretion will be applied, which as stated earlier is a signal to the market that 90m is effectively an upper limit, even if not absolute. The height of 90m has been selected for this transition to Discretionary status for a number of reasons. The tallest building in Christchurch currently is 86.5m – Pacific Tower (including masts / antennae). With the next tallest being the Crowne Plaza hotel at 71m. These are currently the only two buildings in the CCZ above 60m.





Pacific Tower (left) (86.5m including antennae) and the Crowne Plaza hotel (right) (71m)

91. In my analysis of existing building heights as discussed earlier, there is a natural threshold of buildings at 28m or below, partly due to the ODP. There is then another threshold at 45m, with a small number of buildings between 28m and 45m, but very few above 45m – just five in the CCZ above 45m. The long elevation of the CCZ below shows these thresholds a as set out in **Figure 4**.

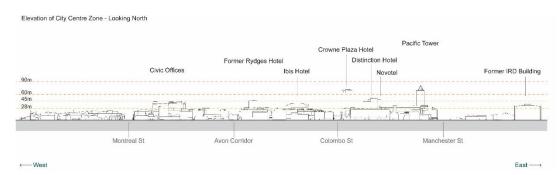


Figure 4: Long elevation of the CCZ (west to east) demonstrating how most buildings sit beneath 28m in height, there are several buildings between 28m and 45m, but only 2 buildings greater than 60m in height.





The Christchurch Civic Offices building on Hereford Street (left) 45m.

The former IRD building on Cashel / Manchester Street (right) 37m.

- 92. So not only would a building at 90m represent the tallest building in the city, it would also be twice the height of the 45m threshold and three times the height of the 28m building height where most buildings sit below. For this reason, 90m is considered an appropriate point to provide the next level of assessment, and with this being full discretion it is effectively sending a signal to the market. Perhaps as the city grows over the next decades, this limit may need to change. But considering all the factors discussed earlier, it feels appropriate to impose this limit at this point in time.
- 93. I consider that this tiered approach will reinforce the vision of the CCZ as one consisting predominantly of mid-rise buildings, but that taller buildings will be allowed under certain circumstances and if they demonstrate exemplary design quality. I consider this represents a good balance, sitting between the current visions for the city, whilst responding to the NPS-UD.
- 94. In my opinion, this is the best method of achieving a well-functioning environment in an Ōtautahi Christchurch context.

Road-wall height

- 95. PC14 maintains the control over the height of the building in relation to the street the "road-wall" as 21m (with the exception at corners of urban blocks which is dealt with in the next section). Any part of the building above this height needs to be setback from the street edge.
- 96. People's perception of building form is often formed by the height of buildings along the street edge otherwise known as the "road-wall".
- 97. Christchurch is a city that has historically been characterised by lower to mid-rise buildings. Whilst there is some variability in the road-wall height, it is generally consistent between three and seven storeys, and this results in streets and public spaces that do not feel overpowered by adjacent taller buildings.
- 98. The latitude of Christchurch also means that the angle of the sun is lower. With cooler winter temperatures, but high annual sunshine hours, access to sunlight brings benefits for a large proportion of the year. This places more importance on allowing sunlight to penetrate the streets. Previous work, both for the CCRP and in preparing PC14, has modelled building heights,

road widths and sun angles for Christchurch streets and this has led to the current approach of limiting the road-wall to 21m. This allows sunlight to fall on the far side of typical Christchurch streets during the equinox¹³.

- 99. With many of Christchurch's streets at approximately 20m in width, this 21m road-wall height also results in building height to street width ratios of close to 1:1, which is generally considered as comfortable for street users.
- 100. In my opinion this has been working successfully and I see no reason to change this approach.
- 101. As an additional standard to control the building form facing the street, PC14 proposes the use of a 45-degree recession plane measured from the maximum road-wall height and angling into the site. This is a continuation of the standard in the CCRP and ODP.
- 102. This means that an additional storey of 3m in height would need to be setback from the road-wall by 3m. But another 3m storey in height would have to be a further 3m setback. Theoretically this rule could result in a "wedding cake" outcome, as floors are progressively set back from each other, which can look rather awkward in the built form. However, this recession plane rule only applies up to a maximum height of 28m and so it effectively only applies to the storeys between 21m and 28m normally just two storeys.
- 103. If maximum permitted building heights are increased as part of PC14 and taller buildings become more common, then a "wedding cake" effect for additional storeys above 28m would be an even worse built outcome in my opinion. But given this rule only applies to the storeys between 21m and 28m and there are additional rules to control how far set back the building must be from the street for parts of the building above 28m (see following sections), then I consider this rule to be an appropriate response to reinforce the importance of the road-wall and control the form of the building between 21m and 28m.
- 104. However, I would recommend adding one additional criterion to its use, and that would be to state that this recession place rule only applies until the upper floors are set back at least 6m. A setback of 6m from the road-wall is an easy to understand and appropriate control to retain primacy of the road-

¹³ Technical Report – Urban Design – Commercial Zones (Aug 2022), pp35-36.

- wall part of the building and also relates to a common structural grid to allow for easier construction.
- 105. This also sits comfortably with rules relating to the distance the tower element (above 28m) must be set back from the road-wall (dealt with below). I recommend that tower elements should be set back by at least 6m on boundaries along streets or public spaces, to avoid creating canyon effects on the street. If the parts of the building between 21m and 28m are set back further than this, it will create either a very odd building form, or a confusing / contradictory set of rules. This approach is summarised in the diagram in **Figure 5**.

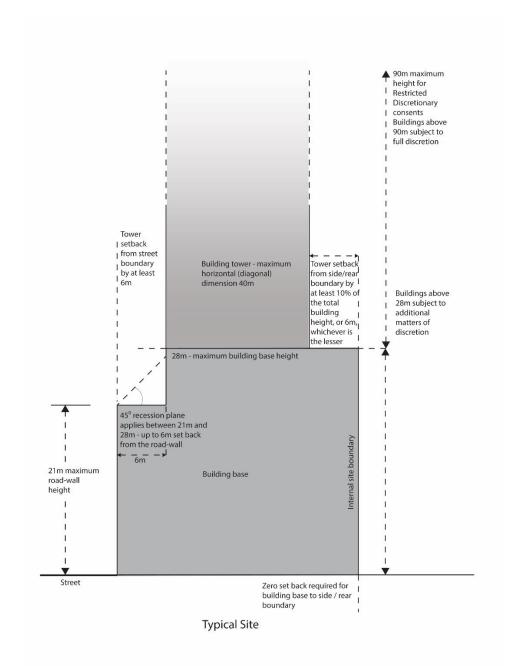


Figure 5: Diagram summarising proposed building standards / controls.

- 106. PC14 includes a change to the road-wall height controls at corners of urban blocks, by increasing the height of the road-wall to 32m for a maximum distance of 20m from the street corner.
- 107. The purpose of this approach is to enable more development capacity on corner sites which often play a more important role in the cityscape due to their additional prominence. This is a feature of urban environments around the world, with civic or institutional buildings (quite commonly banks) often occupying corners and creating interesting buildings often larger than their

- neighbouring buildings. This aids legibility and wayfinding as corners become distinctive and recognisable.
- 108. Also, potential adverse effects are generally reduced at corner sites as there is more space for sunlight due to the presence of multiple streets or spaces. This additional space allows for taller buildings to be integrated and absorbed more easily into the cityscape.
- 109. However, I consider the rule proposed to be complicated and difficult to understand when combined with the recession plane rule discussed previously and the "building base and tower" approach described in the next section. If a building proposed is only up to 28m in height, then additional height at the corner could be appropriate. But under a building base (podium) / tower approach, additional height on the corner conflicts with the form of the tower arising out of the podium and looks clumsy.
- 110. I would therefore recommend that the approach to additional height on corners is simplified and be covered under rule 15.11.2.3 that covers the 45-degree recession plane as discussed in the previous section.

For sites located on a street intersection, this rule shall not apply within 30m of the street corner.

Building base and tower approach – including maximum tower diagonal dimensions, tower setback requirements, and tower separation distances

- 111. As stated earlier in my evidence, building form and building design is a major urban design principle and key contributor to a well-functioning environment. One method of ensuring that tall buildings do not have an overly dominant impact on the environment is to control the size and placement of any taller elements in relation to the street and public realm.
- 112. PC14 introduces a "base and tower" approach, with the base of the building considered to be up to 28m as per the ODP, whilst any parts of the building above 28m are considered to be part of a tower.
- 113. This reinforces the approach of the CCRP and subsequent District Plan maintaining the vision of the CCZ as a generally mid-rise urban form but accepting an increase in building heights to enable further development capacity. However, any buildings over the previous height limit of 28m should be relatively slender and not be larger footprint buildings that could have a dominating impact on the skyline.

- 114. I support this approach as it recognises the sensitivity of building height on the city, as discussed at length in both the first section of my evidence and the section around recommended building heights.
- 115. PC14 recommends that the tower component of a building (that part above 28m) is controlled by several standards.

Maximum tower dimension

- 116. PC14 recommends the use of a maximum tower dimension of 40m. This is the maximum plan dimension measured horizontally between the exterior faces of the two most separate parts of the building. Typically, this would be the diagonal on a rectangular or square floorplate.
- 117. This is the primary control to ensure that buildings are not overly bulky in appearance and to manage significant visual dominance effects both from within surrounding streets but also longer distance views of the city.
- More slender towers, where the height of the building is greater than its width, tend to look more elegant in a city skyline and although shadows might be longer, they tend to move more quickly across surrounding streets and buildings. Blockier or slab-like buildings can be much more visually dominant in the cityscape as well as casting bigger, longer-lasting shadows.
- 119. Auckland has successfully used this maximum tower dimension to control its taller buildings. Auckland uses a maximum dimension of 55m, but this reflects a number of key differences between Auckland and Ōtautahi Christchurch. Auckland has a much greater history and greater number of tall buildings such that they are an intrinsic part of the city fabric. This includes many existing commercial buildings that have much larger footplates (over 1,000m2) and therefore require larger tower dimensions. The Auckland climate with much warmer winters means that sunlight access to streets is less important than in the South Island.
- 120. In Ōtautahi Christchurch, with its different climate conditions and much less of a history of tall buildings, it is considered the right approach to restrict towers to a more slender approach, in scale with the rest of the city. This dimension also is likely to restrict taller elements to being residential or visitor accommodation towers, as commercial offices will generally expect larger floorplates that the tower dimension will allow. This is considered to be an appropriate control in this respect because of the risk that one large commercial tower could use up Christchurch's commercial demand in one

- building for a considerable time. As opposed to spreading the commercial floorspace around a number of sites in the CCZ. This approach was a factor in the formation of the CCRP.
- 121. Given my point of view on the ideal built form for the CCZ outlined earlier in this evidence, I consider a control on the maximum tower dimension to be critical and that the 40m tower dimension to be appropriate in this location, noting that resource consent could still be obtained for a larger tower dimension where justified against the matters of discretion. Many of Auckland's taller residential towers are below the 40m tower dimension, thus proving that this dimension is adequate to accommodate taller residential buildings.
- 122. There is an argument that even a 40m diagonal is too large in this context. The illustration below shows a 60m tall building complying with the planning provisions proposed in PC14, with a tower diagonal of 40m which results in a building 35m long by 20m wide. This appears bulky when compared to the other taller buildings in Ōtautahi Christchurch. The two existing tallest buildings both have maximum tower dimensions of approximately 33m, and they can be seen in the background of the image.
- 123. However, given the need to enable further development capacity, I consider that anything less than 40m will be overly restrictive in terms of enabling suitable residential towers. From my experience, a typical residential floorplate for a tower will need to be at least 600m² plus balconies, which a 40m diagonal will allow. Also, with the presence of criteria to assess the form, appearance and overall design of the tower, together with height being a key assessment criterion above 45m, I consider there are sufficient safeguards to ensure high quality design outcomes. **Figure 6** below provides an illustration of a new residential building complying with the proposed planning provisions.



Figure 6: Illustration showing a new residential building (beige coloured building) - 60m total building height - in the CCZ complying with the proposed planning provisions, with a maximum tower dimension of 40m (diagonal)

Tower setback and tower separation

- 124. PC14 requires that all parts of the building tower (above 28m) are set back from any boundary by a distance equal to 10% of the total height of the building. For example, a 40m tall building will be required to setback by at least 4m from all boundaries whilst a 70m building will be required to setback 7m.
- 125. There is also a requirement for a 12m separation between towers on the same site.
- 126. Both of these standards will help to further ensure that there are gaps between tower buildings, allowing for views between buildings of the sky and allowing sunlight to penetrate through to the streets below. Gaps between buildings are also essential in dissipating the wind (rather than concentrating it on the street).
- 127. PC14 applies the setback requirement to all boundaries, including the street boundary. I consider that the relationship of taller building elements to the street boundary is the most important in terms of its effect on the overall cityscape. This avoids any tower elements rising up in a direct line, straight up from the street, which can easily produce a "canyon" type effect which can be quite overpowering to users of the street, see examples below in

Figures 7 - 8, taken from the Technical Report – Urban Design – Commercial Zones¹⁴.



Figure 7: Charlotte Street, Brisbane, Australia. Street wall created by requiring a 3-storey podium with setbacks beyond this (source: Google Streetview).

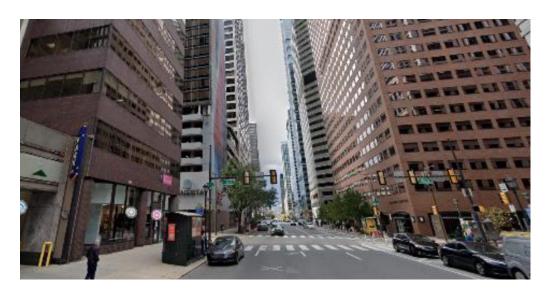


Figure 8: Market Street, Philadelphia, USA. Canyon effect created by high-rise buildings ascending directly from the street (source: Google Streetview).

128. This "base and tower" approach was introduced by cities to avoid this canyon effect and has been used successfully in a number of comparable cities in Australia, USA and Canada.

¹⁴ Technical Report – Urban Design – Commercial Zones (Aug 2022), p16.

- 129. In the section relating to road-wall height, I discussed the proposed 45-degree recession plane that is used to control the part of the building between the maximum road-wall height and 28m. I concluded that this is an appropriate control with an addition to state that this applies up to a 6m setback. I.e., parts of the building between 21m and 28m need only be set back by at least 6m.
- 130. A setback of 6m from the road-wall is an easy to understand and appropriate control to retain primacy of the road-wall part of the building and also relates to a common structural grid to allow for easier construction.
- 131. I consider the 6m setback from the road-wall should apply to all parts of the building including any tower component and this will be sufficient to reinforce the "base and tower" approach, even for much taller building elements.
- 132. The requirement for tower elements to be setback from all boundaries, including side / rear boundaries is also an attempt to avoid overly highly visual blank facades. When buildings are located immediately adjacent to side and rear boundaries, they are likely to be blank to partly avoid borrowing outlook over a neighbour's site but more importantly they will need to be constructed as firewalls and are therefore inevitably solid blank walls. At lower building heights this is acceptable within a city as such walls are either not particularly visible or even if they are, they are likely to be built against at some point in the future. However, at high levels, they are likely to be much more prominent and less likely to disappear in the future as other taller buildings are less frequent.
- 133. If the building is setback from the boundary by the distances required in PC14, then windows can be installed in walls facing side and rear boundaries as they will not be required to be fire-rated and the setbacks will ensure this outlook will not be built out in the future.
- 134. The use of a 10% setback has been introduced to provide greater flexibility in the position of the tower. In Auckland for example, taller building elements are required to be setback by at least 6m, regardless of the height. Given that there may be more demand for building in the range of 28m to 45m, then a setback of at least 6m is seen as too onerous. The 10% standard means that a building of only 35m needs to be setback 3.5m, which is considered more appropriate. Admittedly a taller building of 75m in height for example would need to be setback at least 7.5m.

- 135. I consider this to be not quite necessary. I consider that a 6m setback to be reasonable, even for buildings taller than 60m, when considering the other controls such as the maximum tower dimension and also relates to the proposed consistent 6m setback from the road-wall.
- 136. I would suggest the standard is amended slightly to read as:

All parts of the building tower (above 28m) are setback at least 6m from the street boundary, and from side / rear boundaries by at least the distance equal to 10% of the total height of the building, or at least 6m, whichever is the lesser.

- 137. The tower separation standard only applies to towers on the same site.

 Given the typical size of Christchurch sites it means this standard is not likely to be used frequently. Nevertheless, if multiple towers are proposed on one site, then it is important that each tower has adequate outlook and access to sunlight. If towers are built too close this could be compromised.
- 138. Again, I consider these are important and vital in manging the design outcomes of taller building elements. As stated earlier, the taller a building the more prominent in the cityscape and the more important that design control becomes to ensure good outcomes.

Matters of discretion

- 139. So far, I have focused on the rules and standards proposed as part of PC14. However, rules and standards controlling height, bulk and location, setbacks etc. can only go so far in ensuring high quality design outcomes as not all good design fits neatly into a series of quantitative controls. There are often reasons to depart from the standards, particularly as standards are written for typical sites, and not all sites are typical.
- 140. When considering applications for RDA for elements that do not meet the standards, the Council's power to decline consent, or to grant a consent and impose conditions, is restricted to a series of assessment matters defined in the corresponding rule. This allows Council to exercise some discretion over matters that are otherwise difficult to define in rules and standards, such as qualitative issues around building form, design and appearance and other areas of urban design that are critical to successfully integrating buildings into the urban environment.

- 141. Assessment matters provide the opportunity for greater recognition of the context and nuance that might be applied to individual developments. Further they provide the ability to add more specific design intention that can further mitigate building bulk or address specific design issues.
- 142. As discussed earlier in my evidence, the taller a building proposal, the greater potential visual impact it has on the urban environment, and it becomes increasingly important that the building demonstrates high quality design outcomes.
- 143. Tall buildings affect a wide area and need to be carefully located and integrated, allowing their scale, form and silhouette to have a positive relationship with the buildings nearby. When designing tall buildings, it is crucial to consider the height of the building in relation to nearby buildings a tall building should never look as if it has been "dropped" in place without regard for the context, but rather it should be carefully integrated as a coherent element of the wider urban visual narrative.
- 144. It is important that tall building developments fit well into the urban landscape, patterns, morphology, scale, streetscape, urban character and city skyline. Tall buildings will be successful if they relate well to the unique urban grain, visual axes, general context and topography. For example, the spatial arrangement of tall buildings should be in due proportion to immediate streets, open spaces and low-rise buildings and should prevent creating an extensive so-called canyon effect on public streets. The massing of a proposed tall building needs to integrate into surrounding development and create an elegant rather than bulky form and to make a positive contribution to the city's public realm and skyline.
- 145. In PC14, buildings over 28m would require an RDA consent, but would only be subject to the CCZ urban design matters of discretion 15.14.2.6.
- 146. These include some very basic urban design matters of discretion which whilst being suitable to assess lower rise buildings, in my opinion do not include sufficient matters to provide adequate assessment for buildings that could potentially have a significant impact on the CCZ urban environment given their potential prominence if they protrude above 28m. For example, the design of the top of tall buildings become critical as they get taller and more prominent, as they have a significant effect on the skyline, and as notified, 15.14.2.6 does not include such matters of discretion.

- 147. PC14 included some matters of discretion appropriate for assessing taller buildings, but these only became applicable if a building standard was breached. As notified, PC14 included a maximum permitted building height of 90m and so only buildings greater than 90m would be subject to these more detailed matters of discretion.
- 148. As discussed earlier in this section, a tiered approach to building heights is proposed which includes buildings over 28m in height requiring an RDA consent, and I consider that additional matters of discretion should be introduced to allow a more detailed design assessment for buildings over 28m, regardless of whether they breach one of the building form standards.
- 149. I would recommend the following matters of discretion are added to 15.14.2.6. For buildings over 28m in height, the proposal will need to demonstrate (in addition to the matters already present in 15.14.2.6):
 - (a) A clear design approach to the proposed building form, including a coherent relationship between the building base and tower elements, to ensure graceful design solutions and avoiding overly bulky and dominant building forms. The proposed building shall demonstrate how the height and massing is visually mitigated through the overall design of the building. Massing is the combined effect of the height, bulk and silhouette of a building. In general, bulky, dominant massing of new tall buildings should be avoided. The building form/massing should be influenced by the site's location, the use of the building and its status, and its contribution within the wider urban context, for example as a landmark focus or as a response to other established taller buildings.
 - (b) An elegant design approach for the top of the building including the accommodation of rooftop plant and service apparatus and telecommunication masts that contributes positively to the enhancement of the city skyline, particularly from strategic viewpoints and areas where there are high levels of pedestrian activity.
 - (c) Excellent architectural quality through the composition of design elements, articulation and modulation of the building facades, colours & materials, glazing and other architectural detailing. Note that large blank walls / facades should be avoided in the tower element of the building. External materials will need to be durable, require low

maintenance and perform well from an environmental sustainability perspective.

- (d) An integrated and coherent design approach for the building's signage, lighting and night-time appearance, noting that lighting is a key design consideration and can greatly impact on the building's appearance on long and near views. Also note that large scale advertisements at high levels are not supported.
- (e) How the building mitigates the individual or cumulative effects of shading, visual bulk and dominance, glare and reflections and reflected heat from glass on sites in adjoining residential zones or on the character, quality and use of public open space and in particular the Ōtākaro Avon River corridor, Earthquake Memorial, Victoria Square, Latimer Square and Cathedral Square.
- 150. An additional matter of discretion around wind is also proposed as discussed in the following section.
- 151. The matters of discretion relating to design quality in 15.14.3.1, which would have applied if a building standard is breached, are now not required, as these matters are covered for all buildings over 28m. If the 90m height is exceeded, then a full discretionary consent is required.
- 152. I do not consider that this is an onerous and excessive step that places further barriers on enabling development. Rather, I consider it an essential step to safeguarding the future of the city, as buildings are typically in existence for half a century or more. Also, applicants with good design intent are likely to be able to satisfy such requests, whilst poor design proposals will find the process hard and this is how it should be.
- 153. This approach is consistent with many other major cities around the world, many of which also provide detailed supplementary design guidance to help applicants understand the expectations around tall buildings both in terms of strategic location and design quality. Examples include Toronto¹⁵, Hamilton¹⁶, Edmonton¹⁷, Ottowa¹⁸ (all Canada), Newcastle upon Tyne (UK)¹⁹ to name but a few.

¹⁵ Tall Buildings Guidelines (toronto.ca)

¹⁶ pedpolicies-tall-buildings-guidelines.pdf (hamilton.ca)

¹⁷ Tall Building Guidelines (edmonton.ca)

¹⁸ Urban Design Guidelines for High-rise Buildings (ottawa.ca)

¹⁹ Microsoft Word - final text version tall buildings spd dec06.doc (newcastle.gov.uk)

154. I would recommend that Design Guidelines for Tall Buildings are also produced for the CCZ in Christchurch to provide guidance to applicant as well as assist in the assessment of consents. Such guidance can provide illustrations and examples of good precedents to inform developers of the Council's expectations with regard to taller buildings.

Wind

- 155. In Ōtautahi Christchurch there is a background wind speed of 4m/s that blows for nearly half the time²⁰. At speeds higher than this, streets can become uncomfortable places, particularly for sitting or waiting. Buildings can have both positive and negative impacts on ground level wind conditions, but tall buildings in particular often bring more negative consequences.
- 156. Taller buildings can both channel wind and divert higher speed, higher altitude winds to ground level. This can create uncomfortable spaces for people, and there is also a risk of occasional dangerous wind conditions. These effects can be mitigated by building design. As discussed in the evidence of Mr David Hattam, modelling of Christchurch conditions by Meteorological Solutions shows that there is a risk of a deterioration in ground level conditions from high-rise buildings of around 30m high; and a high risk of unsafe conditions from 90m high buildings, through the generation of dangerous wind gusts.
- 157. PC14 proposes to introduce a development standard 15.11.2.17 where proposals must meet certain standards with respect to wind.
- 158. Whilst I am not an expert in wind matters, I recognise the importance of this topic and the need to be able to understand the impact of new buildings with respect to wind, and to be able to determine if any mitigation or alteration to the building design is required. However, I consider the exactness of the quantitative standard to be very specific and potentially onerous. I would consider that it would be more appropriate if this topic is a matter of discretion as opposed to a standard, but one that applies to all buildings over 28m along with the other matters of discretion with respect to design quality as discussed in the previous section.
- 159. Such a matter of discretion could read as follows:

²⁰ Technical Advice for Wind Assessments for Christchurch City. Meteorological Solutions, 2022

The extent to which the building or use:

- For buildings or parts of buildings over 28m in height, considers the adverse impacts of wind caused by tall buildings on the safety and comfort of people, whether stationary or moving, at street level and in public spaces including Cathedral Square, Victoria Square, the Otākaro Avon River Corridor, the Margaret Mahy Family Playground, any public open space zoned Open Space Community Park Zone, Central City Heritage Triangles and other parks, and any mitigation measures proposed, demonstrated through the use of wind modelling and analysis.

Advice Note:

- For the purpose of this assessment, safety and comfort will be demonstrated where the building does not result in wind conditions that exceed the following cumulative wind condition standards (Gust Equivalent Mean) more than 5% annually at ground level, within 100m of the site based on modelling:
 - 4 m/s at the boundary of the site street frontage for the width of the footpath;
 - ii. 6 m/s within any carriageway adjacent to the site;
 - iii. 4 m/s at the following listed public open spaces:
 - A. The Avon River Precinct Zone:
 - B. Cathedral Square;
 - C. Victoria Square;
 - D. Any public open space zoned Open Space Community Park Zone:
 - E. The Margaret Mahy Family Playground.
- New buildings, structures or additions greater than 30 metres in height shall not result in wind speeds exceeding 15m/s more than 0.3% annually at ground level.

Qualifying matters – height limited to 45m adjacent to Cathedral Square and Victoria St

160. PC14 proposes QMs with respect to building heights in locations within the CCZ that are considered to be more sensitive with respect to building height. These are around Cathedral Square (max 45m), in the vicinity of Victoria Street (max 45m) and the Arts Centre / Central City Heritage

- Precinct (28m). The existing height control in the ODP for building along New Regent Street is proposed to be maintained (8m).
- 161. The purpose of this approach is to protect the sensitive character of these areas, both with respect to visual impact of taller buildings and the shade that they could cause in particular to Cathedral Square.
- 162. Given the recommended approach to building heights as described earlier in my evidence – buildings up to 90m in the CCZ can be considered with RDA consents – I consider these QM to be still required and important in protecting sensitive parts of the CCZ.
- 163. The Arts Centre te Matatiki Toi Ora is housed in the Gothic Revival buildings of the University of Canterbury's former town site. The centre is a national landmark and includes New Zealand's largest collection of category one heritage buildings with 21 of the 23 buildings covered by Heritage New Zealand listings. Most of these buildings are two stories in height.
- 164. Introducing tall buildings into this environment could be damaging to the character of this extremely important heritage precinct and so imposing a height limit of 28m (which is still up to 7/8 stories) in the immediate vicinity of this precinct is an obvious urban design move to provide protection.
- 165. New Regent Street also has a very important character and role within the CCZ. Due to its coherent architectural character, the buildings in the streets are listed as Category I heritage items by Heritage New Zealand, and in addition, the entire street has a historic area listing. PC14 proposes to maintain the 8m height limit along this street, which given its character is also an obvious and appropriate design move.
- Victoria Street, although technically part of the CCZ, is a narrow strip of zoning effectively just one land parcel deep stretching along the length of Victoria Street. It is surrounded by the High-Density Residential zone which has a proposed height limit of 32m. Given the narrowness of this strip and the height limit of the adjacent zone, it would create a visually incoherent transition between the two zones if buildings up to 90m in height were allowed along this section of the CCZ along Victoria Street. Hence PC14 proposes a 45m height limit as a way of transitioning between the two zones which I consider appropriate. The Technical Report Urban

- Design²¹ and supporting analysis²² provides details of studies carried out to help arrive at this proposed height.
- 167. Cathedral Square with Christchurch Cathedral plays a significant role in defining the character of Christchurch at the heart of the city and is the city's principal civic open space.
- 168. A maximum height limit of 45m is also proposed for sites around the edge of Cathedral Square, mainly on the northern side. Shading analysis has been undertaken as part of the PC14 process and again is summarised in The Technical Report – Urban Design²³ and supporting analysis²⁴. It demonstrates there would be significant shading over the majority of the square if buildings approaching 90m were built around its edges, whilst shading effects would be substantially reduced with a 45m height limit.
- 169. Given the sensitivity of Cathedral Square, I consider this is an appropriate design move to protect the amenity of the square, both in terms of shading and visual impact.
- 170. The additional matters of discretion proposed for all buildings over 28m in height also make reference to these sensitive environments, requiring proposals to demonstrate how the cumulative effects of shading, visual bulk and dominance, glare and reflections and reflected heat from glass on adjoining residential zones or the sensitive areas has been mitigated.

RESPONSE TO SUBMISSIONS

I have read the Council's summary of submissions and many of the specific 171. submissions received that relate directly to urban design issues in the CCZ. I will address the submissions that relate specifically to building form issues in the CCZ.

Flexibility in building design for future uses (ground floor - floor to ceiling height)

172. The New Zealand Institute of Architects [762.35] seeks to increase the minimum height of the ground floor from 3.5m to a minimum between 4.2 & 4.5m. Reason: Propose that this measurement is increased from 3.5m to a minimum between 4.2 & 4.5m to enable a wider range of future functions to

²¹ Technical Report – Urban Design – Commercial Zones (Aug 2022), pp1641-44.
²² Lower Height Limits: Victoria Street and Cathedral Square Qualifying Matters

²³ Technical Report – Urban Design – Commercial Zones (Aug 2022), pp1641-44.

²⁴ Lower Height Limits: Victoria Street and Cathedral Square Qualifying Matters

occur within the ground floor space the 3.5 minimum is restrictive on future programme.

Response

173. This rule continues from the ODP and is not proposed for change. It is considered that 3.5m is the minimum required for a range of ground floor uses that could include active uses such as commercial, retail and hospitality, as the height is measured between the surface of the ground floor and the underside of the first-floor slab. In other words, this is floor to ceiling and not a floor-to-floor height. Applying a minimum of 4.2m for this distance is considered too onerous.

Maximum road-wall height

- 174. Oyster Management Limited [872.17] oppose and seek to delete Standard 15.11.2.12. Oyster opposes the Maximum Road wall height standard. Reason: Limiting height of the road wall is an additional and unnecessary restriction on building height.
- 175. Kāinga Ora [834.297] opposes and seeks to delete all these provisions. Reason: These provisions, both individually and collectively act as proxies to restrict height and associated development capacity in the CCZ. The retention (and addition) of height rules in the CCZ simply does not give effect to the NPS-UD Policy 3 direction to "enable in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification."
- 176. Carter Group Limited [814.206] opposes Rule 15.11.2.12. and seek that this be deleted. Reason: Retaining a maximum road wall height rule is at odds with the NPS-UD and the purpose of PC14 and accordingly this rule should be deleted. Road wall heights should be unconstrained and provided for as a permitted activity noting the control/discretion of building design that is otherwise afforded by the urban design rule (C1 and RD1).

Response

177. The importance of a maximum road-wall height is explained earlier in my evidence. I consider that it is important to protect daylight and sunlight to the street as well as reinforce the particular character of Ōtautahi Christchurch for the reasons explained through the early part of my evidence. Also noting that the NPS-UD recognises that enabling further

development capacity should not be at all costs, and certainly not at the expense of a well-functioning environment.

Maximum building base height; Building tower dimension; Building tower coverage; Tower setbacks; Minimum building tower separation

- 178. Christchurch City Council [751.8, 751.9, 751.10] seeks clarity on the definition of the building base on the basis that as it is proposed it is confusing. This submitter seeks to clarify that the building base is the part of the building below the base height (either 17m or 28m) and that the tower would be the part above it. Reason: At present, the tower is defined as the part of the building above the permitted height (32m or 90m).
- 179. Oyster Management Ltd seek to retain Standard 15.11.2.11(a)(i)(A) and delete (a)(i)(B) regarding the maximum height for building base. Reason: Oyster supports the Building Height standard to the extent that the maximum building height is 90m. Oyster seeks that the maximum height of 28m for the building base is removed. The height limit on a building base is an additional and unnecessary restriction on building height.
- 180. Kāinga Ora [834.296] seek to amend the definition of Building Base. Reason: There is an inconsistency between the definition of Building Base and the rule. The definition of Building Base is sought to be deleted, as it is internally inconsistent with provisions in the Plan and is uncertain in purpose. Building Base is defined as: 'In respect to the City Centre and Central City Mixed Use Zones, means any part of any building that is below the maximum permitted height for that type of building in the zone'.
- 181. Kāinga Ora [834.322] oppose and seek to delete 13.2.11 tower coverage. Reason: Considered unnecessary and would reduce development capacity for no sound resource management purpose.
- 182. Ceres New Zealand, LCC [150.3, 150.4, 150.5] oppose to delete Standard 15.11.2.15. Reason: When these standards are applied to 25 Peterborough Street and 87-93 Victoria Street, in conjunction with the height standards and overlays, any redevelopment of these properties and buildings therein will be restricted and impeded in both its height and density options.
- 183. Carter Group Limited [814.207, 814.208] oppose Rule 15.11.2.15. and seek that this be deleted. Reason: Imposing new, additional rules regulating the design of buildings in a manner that may not be functional, efficient,

economically viable and which may constrain the realisation of central city intensification is at odds with the NPS-UD and the purpose of PC14 and accordingly this rule should be deleted.

Response

- 184. The reason for the "base and tower" approach and the corresponding rules that supplement this approach has been explained in detail earlier in my evidence. This approach would result in the majority of the building form of the CCZ to be 28m or less, consistent with the existing built form that gives Ōtautahi Christchurch its distinctive and unique character compared to other New Zealand cities. Any building form above the 28m building base maximum height would then be part of a slender tower, helping to preserve views of the sky from within the street and views through the buildings, to the Port Hills for example.
- 185. Without this base and tower approach and the requirement for the upper parts of buildings appearing "tower-like" in form, taller buildings could be quite bulky which would be to the detriment of the quality of the environment that is emerging in the CCZ. The maximum tower dimension has been carefully considered and tested to ensure that residential / hotel buildings in particular could reasonable be built complying with these rules. Office buildings require much bigger floorplates to be commercially viable, and if such large floorplates are built as tall buildings it would result in bulky buildings that are not in keeping with the vision and direction that Christchurch has been successfully pursuing, in line with community support since the earthquakes. Noting that the NPS-UD recognises that enabling further development capacity should not be at all costs, and certainly not at the expense of a well-functioning environment.
- 186. It should also be noted that breach of any of these standards would not result in a "prohibited activity status". Any proposals not meeting all the rules and standards would result in an RDA consent and if a case can be made to justify the proposal, then the application may be successful.
- 187. To clarify the definition of the building base:
 - (a) Building base: For the City Centre Zone, means any part of any building that is 28m or less in height. The building tower is the part of the building above this height see the building tower definition.

(b) Building Tower: For the City Centre Zone, means any part of any building that is more than 28m in height. A tower comprises the upper levels of a tall building that are set back from the property boundaries.

Wind & pedestrian focus

- 188. Carter Group Limited [814.210] opposes 15.11.2.17. and seeks that this be deleted. Reason: Imposing new, additional rules regulating the design of buildings in a manner that may not be functional, efficient, economically viable and which may constrain the realisation of central city intensification is at odds with the NPS-UD and the purpose of PC14 and accordingly this rule should be deleted. As set out in other submission points, controls on wind generation are opposed due to the difficulties of evaluating such effects with certainty and the practical limitations on obtaining such assessments. Moreover, changes to wind generation and the pedestrian environment are a necessary trade-off contemplated by the NPS-UD, insofar as it directs maximum intensification of central city environments.
- 189. The Catholic Diocese of Christchurch [823.156] oppose and seek to delete the addition that has been made to policy 15.2.6.5 with respect to "wind generation". Reason: As set out in other submission points, controls on wind generation are opposed due to the difficulties of evaluating such effects with certainty and the practical limitations on obtaining such assessments.

Response

- 190. As with a number of other responses to submissions, it must be noted that the NPS-UD recognises that enabling further development capacity should not be at all costs, and certainly not at the expense of a well-functioning environment. In this regard, I do not consider it unreasonable to impose standards where their express purpose is to protect the environment for the benefit of those who use it.
- 191. Having said that, as per my earlier discussion on the proposed development standard on wind, I find the expectations to be very specific and potentially onerous. I am not an expert on wind so cannot make an expert judgement on how practical it is to achieve these figures. I would consider that it may be best if this topic is a matter of discretion as opposed to a standard, but one that applies to all buildings over 28m as proposed in the earlier section addressing "wind".

Building height - seek reduction in height

- 192. A number of submitters are opposed to the proposed increase in permitted building heights in the CCZ from the current 28m to the 90m.
- 193. Sonia Bell [431.1] states that many commercial properties around Christchurch remain unleased, keep inner city commercial area as is.
- 194. John Bennett [367.2] seeks amendment to lower height limit in the Central City to be 26m (10 stories). Reason: The 90m height limit for Central city buildings ignores the Cities Blueprint which was prepared with considerable consultation and by very experienced professionals.
- 195. Paul McNoe [171.4] seeks to reduce permitted building heights and that the permitted height limits within the existing District Plan (prior to PC14) are retained to the maximum extent possible. Reason: to ensure existing buildings designed and constructed within the current District Plan requirements are not shaded or otherwise lose their existing amenity. The proposed building heights undermine the CCRP, reducing the central city's design coherence and creating a less attractive City.
- 196. Mary-Louise Hoskins [670.1] seeks to reduce the 92m height limit for the central city (or ensure done with great architectural merit). Reason: There is an abundance of vacant land in and around the city. Just one building of this height (92m) will not only look peculiarly out of place, but it will also soak up the tenants and businesses for years to come creating near ghost towns around them. If there are to be such significant high rise, then ensure that these are done with great architectural merit to build on the fine bones Christchurch now has.
- 197. Peter Troon [422.4, 422.5] seeks to reduce the height and density of innercity dwellings. Reason: the proposal for high density dwellings of the height and density proposed is a retrograde move all to the detriment of Christchurch. These developments will alter the character of the city and potentially become the ghettos of the future.
- 198. James Carr [519.8] seeks to amend the height limits in the CCZs to allow exemptions for spires, domes, sculptural cap-houses or other architectural features [etc.] that add visual interest to the skyline without adding bulk or significant shading. Reason: In the CCZ the height limits appear to be hard numbers. This does not allow for architectural features that add visual interest to the skyline without adding bulk or significant shading. If these are

- not allowed for, then they must come out of the total height of the building, and this of course will actively discourage such things.
- 199. Dr Sandy Bond [317.1] seeks that the height limit is reduced and that buildings are limited to 5-6 storey buildings as the maximum height. Reason: believe the height limits within the city centre of 90metres are too high and contradict the feedback received post-earthquakes.
- 200. Malaghans Investment Ltd [818.3] seek that the permitted building height for the properties bound by Gloucester, Manchester, Oxford and Columbo streets [within the Central City Heritage Interface Overlay] be a maximum of no more than three stories in height above ground. Reason: Access to sunlight is critical to the success of businesses that rely on outdoor dining areas.
- 201. Paul Wing [70.17] seeks to amend Rule 15.11.2.11 Building height such that the height of all buildings in the central city should be limited to no more than five storeys. Reason: That the height of all buildings in the central city should be limited to no more than five storeys.
- 202. Victoria Neighbourhood Association [61.10] seeks to amend Rule 15.11.2.11 to reduce height limits in the Central City Zone from 90m to 45m. Reason: would like to see the overall heights in the CCZ reduced from 90m to 45m. This in turn will better fit with heights in the areas designated as The Frame (21m) and Centre City Mixed Used Zones (32m) and High Density Residential Zone (14m) at a height which would still achieve the tiered city design sought by the Council.
- 203. Marjorie Manthei [237.3] seeks to decrease maximum height in the City Centre from 90m to 60m as far north as Kilmore Street and reduce the proposed maximum heights on Victoria Street (from Salisbury Street to Bealey Avenue) to 20m Reason: Christchurch already has adequate capacity and density. The reasons covered in the CCRP for a low-rise redeveloped central city also are still valid. Low-rise would also give Christchurch a unique identity (Summary from Background to Central City Height, Appendix 1, s32, Part 7).
- 204. Rosemary Fraser [26.7] opposes change to height limits and having buildings 90m tall. Make sure that wind and winter conditions are taken into consideration when considering building height controls. Reason: Wind tunnels occur between taller buildings as happens on Colombo Street

between the library and TePai. As Christchurch experiences strong winds and is flat, it could create dangerous situations if there are tall buildings on both sides of street. Oppose having buildings 90 m tall. Even with appropriate foundations they would still sway terrifying people on the higher floors. Also, the taller the building the more difficult it would be to escape if there was a fire. Also, with increased shading, there is likely to be for ice on paths for longer in winter.

- 205. Susanne and Janice Antill [893.9] and Susanne Antill [870.8] oppose increased height limits of buildings. Reason: Christchurch is on an aquifer flood plain and subject to earthquakes.
- 206. Robert J Manthei [200.11] seeks to reduce height limits. Reason: Although the CCRP has been revoked, "PC14 must still have regard to the directions of the CCRP under s74(2)(b)(i) of the RMA" Those directions include statements like the following: 2.1.39 Under the CCRP, the aim was "the overall design concept for development of a greener, more accessible city with a compact core, more greenspace and a stronger built density".
- 207. Marina Steinke [378.2] seeks to retain the existing height limits for the central city. Reason: Oppose the increased height limit to 90m. The existing seven storeys height limit in central city set government after the earthquakes should remain. The type of shaking expected when Alpine fault or Hikurangi Fault ruptures will be most damaging to high rise buildings.
- 208. Steve Burns [276.27] seeks a maximum height of 5 stories in Christchurch. Reason: Sun/shading, wind, and firefighting ability. If all the square mile in the centre of town was five stories there would be little need for other development for years.
- 209. Pamela-Jayne Cooper [625.7] seeks amendment to a maximum height of 60m (with consent). Reason: request a max consented height of 60m (with consent) in the City Centre cascading as proposed. Greater consideration for the prevention of 'ugly' and inferior builds, which maximize profit, before city and citizens' wellbeing and movement.
- 210. Anna Melling [337.20] seeks that maximum heights will be lowered to account for lower sun height further south. Reason: current plan will cause efforts at greening the city through gardens and solar panels to be

- wasted. Three storeys is too high, here in the South Island where the sun is so much lower in winter.
- 211. Atlas Quarter Residents Group [224.17] seeks that the permitted height limits within the existing District Plan (prior to PC14) are retained to the maximum extent possible. Reason: The greatly increased height limits proposed by PC14 are unnecessary and inappropriate for Christchurch. Support the inclusion of QMs to enhance design quality and urban amenity across the city. Following the Christchurch earthquakes, a comprehensive design process was undertaken for the city, particularly for the central city. Deliberate and well-informed decisions were made create a liveable city, with intensified development in the central city and around suburban centres, but with lower central city height limits than previously existed.
- 212. Jack van Beynen [309.1] seeks to retain existing height limits in the CCZ. Reason: Would like Council to remove the height limit change to the CCZ. The idea of a low-rise city, with no new buildings over 28 metres, is a really good one and should not be abandoned. It has the potential to be a real selling point for the city a city with sun and without wind tunnels. We already have so much bare land in the CBD. This change also seems, to me, to punish those developers who have contributed to the rebuild and got on with building on their land, while rewarding those who have held back the city's progress.

Response

- 213. It is noted that there are twenty-one submissions opposing the increase in heights in the CCZ. My evidence has covered the issue of height above and I do not feel the need to repeat it in full here.
- 214. I recognise the thrust of the NPS-UD to enable as much development capacity as possible, and so if heights limits are to be increased, I propose a method to enable this whilst being able to maintain sufficient design quality control through additional matters of discretion and the "building base and tower" approach with its accompanying tower dimension and setback controls.

Building height - support additional height

215. Logan Brunner [191.9], Regulus Property Investments Limited [810.13], James Barbour [812.9], David Lough [223.2], Joshua Wight [199.7] support and seek to retain provisions that enable 20-30 levels in the central city.

- Reason: This will result in more homes, more economic activity, more vibrant communities, and more economical public transport and other infrastructure upgrades.
- 216. Bob Hou [150.1] seeks to increase maximum building height in the central city. Reason: 90m is way too low for a city of nearly half a million, at the moment even Hamilton can build taller than Christchurch.
- 217. The Catholic Diocese of Christchurch [823.171] and Carter Group Ltd [814.205] seek to delete rule 15.11.2.11 in its entirety. Reason: The height limits in this rule are opposed in their entirety by the submitter. Among other reasons: The rules are fundamentally inconsistent with the requirements in policy 3 of the NPS-UD to 'enable... building heights and density of built form to realise as much development capacity as possible, to maximise benefits of intensification'.
- 218. Luke Baker-Garters [344.13] seeks the removal of all central city maximum building height overlays. Reason: These should be replaced with a single overlay that does not restrict building height. Housing should be concentrated in the central city and property owners should be free to decide the height of whatever they want to build in the CBD.

Response

- 219. It is noted that there are eight submissions supporting the additional height proposed in PC14 (or even advocating for additional height). However, there are almost three times as many (21) submissions by those who oppose the increased height limits in the CCZ. Although I also recognise this is fairly typical of a submission process that tends to encourage those who oppose things to write in more than those who support something.
- 220. My evidence has covered the issue of height and again I do not feel the need to repeat it in full here. But I feel it appropriate to repeat my conclusions in response to these submissions.
- 221. I recognise the thrust of the NPS-UD to enable as much development capacity as possible, and so if heights limits are to be increased, I propose a method to enable this whilst being able to maintain sufficient design quality control. Building proposals above 28m will need to demonstrate a clear design strategy and response and the taller the building, the stronger this response will need to be.

Sunlight and outlook for the street

222. Kāinga Ora [834.295] oppose and seek to delete the rule. Reason: Acts as a proxy to limit development capacity in the Central City in a manner that is not founded in the NPS-UD Policy 3.

Response

223. The reason for the outlook and sunlight rule (45-degree recession plane) is described in detail earlier in my evidence and sits alongside the need for a maximum road-wall height. I consider that it is important to protect daylight and sunlight to the street as well as reinforce the particular character of Ōtautahi Christchurch for the reasons explained through the early part of my evidence. Also noting that the NPS-UD recognises that enabling further development capacity should not be at all costs, and certainly not at the expense of a well-functioning environment.

Removal of Qualifying Matters

224. James Barbour [812.18], Regulus Property Investments [810.20] seeks to remove any QMs and provisions that do not support the intensification of urban form to provide for additional development capacity.

Response

225. The reason for QM's is described in detail earlier in my evidence. I consider that it is important to protect the most important and sensitive parts of the CCZ, noting that the NPS-UD recognises that enabling further development capacity should not be at the expense of a well-functioning environment.

Minimum number of floors

226. The New Zealand Institute of Architects [762.33] seeks to add a minimum height restriction to aid in producing larger scale buildings within the city centre zone and restrict the development of unfittingly small-scale developments. Reason: To add a minimum height restriction to aid in producing larger scale buildings within the city centre zone and restrict the development of unfittingly small-scale developments which will take up room without realising the necessary development to contribute to the primacy and vitality of the central city.

Response

227. Rule 15.11.2.4 sets the minimum number of floors above ground floor for any building within the city core to be two storeys. Whilst it could be argued that two storeys is quite low in the central part of a city, there are numerous examples of two storey buildings, both new and old, both pre- and post-earthquake that contribute to the character of the city and its increasing reputation as a well-functioning environment. Given the character of the CCZ as a relatively low-rise city (compared to Wellington or Auckland for example), two storey buildings have a role to play. Most important is the design and functionality of any buildings, including lower rise two storey buildings, in terms of how they present to the street and levels of activation. This is controlled by other rules and assessment criteria.

Extent of additional building height

- 228. The New Zealand Institute of Architects [762.40] seeks to reconsider height limits and controls. Reason: The extent to which the 90m overlay applies, is reduced to a hand-full of sporadic sites when overlayed with recent developments, council owned facilities, open space, and historic buildings. This limitation of foreseeable development will potentially result in an undesirable and inconsistent skyline. How is this being controlled and addressed in the planning to ensure a desirable outcome, and how does this relate to the objectives of the post EQ city Blueprint that was prepared after the quake through considerable consultation and experienced professionals?
- 229. The New Zealand Institute of Architects [762.47] seeks that an additional height limit area is placed around the Te Papa Ōtākaro (Avon River precinct) within the CBD. Reason: to limit the development and impact of solar access to this culturally significant corridor and public amenity route throughout the city.
- 230. Mary-Louise Hoskins [670.2] seeks to contain the super high-rise buildings to the central area, restrain its area and review the city centre zone every 5 years. Reason: The extent of that Central City high density zone is too great and unnecessary.

Response

231. It is accepted that given the various controls for tall buildings including maximum tower dimension and tower setbacks, there are unlikely to be

many sites that are capable of accommodating a very tall building of 90m for example. But given the amount of vacant land in the CCZ and the issues described in depth around what is considered a well-functioning urban environment in the Ōtautahi Christchurch context, I do not consider this to be a major issue. By changing the activity status for buildings above 28m up to 90m, more development capacity will be enabled and added to an already high capacity. If any tall buildings emerge, they should be of the highest quality such that if only one or two taller building proposals come forward, this could enhance the city skyline.

- 232. With respect to Te Papa Ōtākaro, although a QM has not been proposed for this area, it is mentioned specifically in the proposed additional matters of discretion for buildings above 28m. Proposals will be required to demonstrate how the building has addressed and mitigated effects on sensitive areas including Te Papa Ōtākaro.
- 233. Regarding the extent of the zone, it is deliberately constrained to the CCZ and even then, has further qualifications with respect to the QM zones around Victoria Street and Cathedral Square. As a result, I consider the size of the area within which taller buildings may be considered to be appropriate as this correlates with the heart of the city.

Design Panel

234. John Bennett [367.15] seeks to require all developments to be assessed by a professionally qualified urban design panel. Reason: The approach taken by Government and the Council is a 'sledgehammer' approach and there are little in the way of design controls to help ensure a well-designed City for the present and future residents of Christchurch is achieved.

Response

235. Christchurch already has an urban design panel²⁵ which reviews major projects. There are a number of triggers which determine whether a proposal is reviewed by the Panel but I understand that most, if not all major building proposals in the CCZ are likely to be reviewed by the Panel. Although the Panel has a non-statutory function, recommendations can help to shape and support the consenting process. I also recommend design guidance is produced specifically for tall buildings in order to provide clarity on what is considered good practice, to assist applicants in putting

²⁵ Christchurch Urban Design Panel: Christchurch City Council (ccc.govt.nz)

their proposals together as well as providing assistance to Council to assess proposals.

CONCLUSION

- 236. I conclude that from an urban design perspective, raising building heights in the CCZ is not an appropriate response in the Christchurch context in the absence of appropriate plan provisions for ensuring high quality urban design outcomes for taller buildings within the CCZ.
- 237. Tall buildings can be appropriate from an urban design perspective if carefully controlled to certain locations and certain heights, depending on sensitivity of location.
- 238. However, in order to provide the necessary design control, I recommend a change to the planning provisions as notified in PC14, by stating that buildings above 28m in height will be subject to additional building standards and require an RDA consent subject to additional matters of discretion relating to design quality. This will enable greater control over the building form and building design recognising that the taller the building, the more potential impact it has on the built environment.
- 239. I support the "base and tower" approach which allows buildings up to 28m in height (with a small setback on the street edge) to effectively fill the site. Parts of the building above 28m are to be considered a "tower" and would be subject to a number of controls to ensure taller, slender towers which have less impact on the urban environment in terms of bulkiness, visual permeability and shading.
- 240. I recommend the building height be limited to 90m and that buildings above 90m will be required a full Discretionary consent.
- 241. I recommend maintaining the road-wall maximum height, the 45-degree recession plane control for parts of the building between 21m and 28m, and the various tower controls including maximum tower dimension, tower separation distance and tower setback controls (with a minor alteration to the distance).
- 242. I consider that these recommended changes to PC14 would enable more development capacity than the ODP in line with the direction of the NPS-UD without radically departing from the current vision for the city that has such

strong community support and maintains good levels of design control over taller elements.

Date: 11 August 2023

Alistair Ray