

BEFORE AN INDEPENDENT HEARINGS PANEL

UNDER the Resource Management Act 1991

IN THE MATTER of proposed Plan Change 14: Housing and Business
Choice to the Christchurch District Plan

EVIDENCE OF FIONA SMALL ON BEHALF OF:

THE MINISTRY OF JUSTICE (Submitter 910)

FIRE AND EMERGENCY NZ (Submitter 842.1-10 only)

NZ POLICE (Submitter 2005)

HATO HONE ST JOHN (Submitter 909)

CANTERBURY CIVIL DEFENCE AND EMERGENCY MANAGEMENT

GROUP (Submitter 912)

19 September 2023

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Executive Summary

- 1 I have been asked by the agencies set out above to prepare this planning evidence in support of their submissions to Plan Change 14 and, in particular, in relation to sub-chapter 6.12 Radiocommunications Pathway Protection Corridors, the definition of height and Planning Map 39.
- 2 My evidence describes the provisions of the sub-chapter and sets out the reasons for my support for the provisions, particularly the non-complying activity status for buildings, structures or utilities that exceed the maximum height limits for the radiocommunication pathways.
- 3 I have identified a misinterpretation of the calculation of the height of the pathways in the s42A report and suggested minor additions to provide greater clarification for plan users.
- 4 Having regard to the s42A report and the lack of any submissions in opposition to provisions relating to radiocommunication pathways, I support that the sub-chapter be retained as notified, except for the deletion of the references to Appendices 6.12.17.1 – 6.12.17.3 (as these Appendices were not included in the notified provisions) and minor additions to clarify the calculation of the height of the pathways.

Introduction

- 5 My full name is Fiona Jo-anne Maree Small.
- 6 I am an Associate – Resource Management Consultant employed by Incite (ChCh) Limited, a role I have held for 22 years.
- 7 I hold a Bachelor of Arts degree and a Masters in Regional and Resource Planning from University of Otago.
- 8 My relevant experience includes working as a planning consultant, predominantly in the preparation and processing of resource consent applications and notices of requirement, for District Councils and private clients based in the South Island. In terms of radiocommunications, I have been providing planning support to the New Zealand Police for radiocommunication upgrades and new facilities throughout the South Island since at least 2009 and this year I

have been providing consenting services to the Kordia Tait Joint Venture Public Safety Network upgrade.

- 9 I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023. I have complied with the Code of Conduct in preparing this evidence and I agree to comply with it while giving any oral evidence during this hearing. Except where I state that I am relying on the evidence of another person, my evidence is within my area of expertise. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope of Evidence

- 10 I have prepared this evidence on behalf of the following parties:
- (a) Ministry of Justice, Te Tāhū o te Ture (Submitter 910) (**Ministry**);
 - (b) Fire and Emergency New Zealand (Submitter 842, in respect of Submission points 842.1-10 only) (**FENZ**);
 - (c) New Zealand Police (Submitter 2005) (**Police**);
 - (d) Hato Hone St John (Submitter 909) (**St John**); and
 - (e) Canterbury Civil Defence and Emergency Management Group (Submitter 912) (**CCDEM**).
- 11 Information on each of these submitters (hereafter referred to as the **Agencies**) and their roles and functions, as well as the specific reasons for their interest in the protection of the radiocommunication pathways is included in their original submissions.
- 12 I have been asked by the Agencies to prepare this planning evidence in support of their submissions to Plan Change 14 (**PC14**) and in particular, in relation to sub-chapter 6.12 Radiocommunication Pathway Protection Corridors, the definition of height and Planning Map 39.
- 13 My evidence addresses the following:

- (a) Describing the provisions in sub-chapter 6.12 Radiocommunication Pathway Protection Corridors and my general support for the provisions;
 - (b) Section 42A Report of Andrew Willis; and
 - (c) My overall conclusion.
- 14 In preparing my evidence, I have reviewed the following documents:
- (a) The following reports prepared between November 2020 and December 2021 to support an earlier draft plan change to protect radiocommunication pathways from the Christchurch Justice and Emergency Services Precinct (it was originally proposed to be a separate plan change before it was included with PC14):
 - (i) Radiocommunications Pathways – Issue Paper;
 - (ii) Radiocommunications Pathways – Issues Table;
 - (iii) Radiocommunications Pathways – Options Assessment;
 - (iv) Radiocommunications Pathways – Issues Table;
 - (v) Radio Engineering Requirements for CJESP Radio Corridors;
 - (vi) Radio Link Mitigation Options Report;
 - (vii) CJESP Radio Corridor Project Structural Report;
 - (b) Section 32 Reports, Part 2 – Qualifying Matters (District Plan Chapters 6, 8, 9, 13, 14, 18 – Parts 1 and 2);
 - (c) Section 32 Reports, Appendix 20 - CJESP Radio Communication – Cost Benefit Analysis – Formative Limited;
 - (d) The Council’s section 42A report prepared by Andrew Willis, 2. - Central City, Density and Building Heights, Commercial Distribution Requirements, Qualifying Matters: Victoria Street and Cathedral Square Building Heights, Radio Communications Building Heights;
 - (e) The Council’s section 42A report prepared by Nicola Williams, 58. Urban design (commercial zones in and around centres); and

- (f) The expert evidence prepared by Richard Gary Smart, on behalf of the Agencies.

Sub-chapter Chapter 6.12 Radiocommunications Pathways

- 15 The provisions of sub-chapter 6.12 seek to protect radiocommunications pathways from the Christchurch Justice and Emergency Services Precinct (**CJESP**) to three key radiocommunication sites (Cashmere/Victoria Park, Sugarloaf and Mt Pleasant) in Christchurch. The Introduction (Section 6.12.1) describes how radiocommunications operate, provides some background information on the CJESP and the pathways to the three key sites. It recognises radiocommunications and their associated pathways as strategic infrastructure and notes that the provisions in this sub-chapter give effect to the Chapter 3 Strategic Directions Objectives.
- 16 The sub-chapter contains a key objective and policy which recognise the importance of protecting the radiocommunication pathway corridors and seek to avoid physical obstructions within the protection corridors to maintain radiocommunication for emergency and day-to-day operations of emergency services.
- 17 I support the submissions of the Agencies that seek that the objective and policy be retained.
- 18 Telecommunication facilities (including radiocommunication facilities) fall under the definition of “strategic infrastructure” under the Canterbury Regional Policy Statement (**CRPS**) which is necessary infrastructure facilities, services and installations which are of greater than local importance. Objective 6.2.1 of the CRPS directs that development is enabled through a framework where it does not adversely affect the efficient operation, use, development, appropriate upgrade and future planning of strategic infrastructure and optimised use of existing infrastructure. Policy 6.3.5 of the CRPS directs that land use development and infrastructure is integrated by managing the effects of land use activities on infrastructure, including avoiding activities that have the potential to limit the efficient and effective provision, operation, maintenance or upgrade of strategic infrastructure.

- 19 I consider the objective and policy give effect to Objective 6.2.1 and Policy 6.3.5 of the CRPS as there are currently no provisions in the District Plan to protect airspace to ensure that radiocommunication pathways are maintained.
- 20 CJESP (being an emergency co-ordination facility) and telecommunications installations and networks are also “critical infrastructure” under the CRPS. This means infrastructure necessary to provide services which, if interrupted, would have a serious effect on the communities within the Region (including Christchurch District) and would require immediate reinstatement. The CRPS includes an objective (11.2.1) and policy (11.3.4) requiring new critical infrastructure to be located outside high hazard areas unless there is no reasonable alternative so as to maintain its integrity and function during natural hazard events. The objective and policy in sub-chapter 6.12 recognise the importance of the pathways from the CJESP to the key hill sites and the need to maintain radiocommunications for emergency (including during natural hazard events) and day-to-day operations of emergency services.
- 21 The objective and policy are supported by two rules. Rule 6.12.4.1.1 P1 permits any building, structure (including a crane) or utility that are lower than the maximum height limits specified in the tables in Rule 6.12.4.2. Rule 6.12.4.1.5 NC1 provides for any building, structure or utility that does not comply with Rule 6.12.4.1.1 P1 as a non-complying activity. As explained in the evidence of Mr Richard Smart on behalf of the Agencies, the radiocommunication pathway protection corridors are narrow and any intrusion is likely to completely block the pathways and severely disrupt communications.² I consider that the non-complying activity status is consistent with Policy 6.12.2.1.1 which seeks to avoid any physical obstructions of the corridors to ensure that communications for emergency and day-to-day operations are maintained. This activity status signals to plan users that any intrusion into the pathway is unlikely to be acceptable, but enables an assessment through the resource consent process for any physical

² Evidence of Richard Smart dated 19 September 2023, at [13].

obstructions of the corridors in the event there is something about the design or materials used that means communications for emergency and day-to-day operations can still be maintained.

- 22 The radiocommunication pathway protection corridors are identified in section 6.12.4.2. Tables 1-3 are supported as they clearly define the radiocommunication pathways to be protected. The pathways are shown on the interactive planning maps and Planning Map 39 and the tables can be used to determine the height of the pathway above mean sea level for a particular site.
- 23 There are a number of references throughout sub-chapter 6.12 that reference the radiocommunication pathways being illustrated in Appendices 6.12.17.1 – 6.12.17.3. These include:
- (a) Section 6.12.1 Introduction, clause f;
 - (b) Section 6.12.2 Objective and policies, advice note;
 - (c) Rule 6.12.4.1.1 Permitted Activity;
 - (d) Rule 6.12.4.1.5 Non-complying Activity; and
 - (e) Section 6.12.4.2 Radiocommunication pathway protection corridors.
- 24 These appendices were not included in the notified provisions and I consider that reference to them should be deleted. The radiocommunication pathways are shown on Planning Map 39 and they are also visible on interactive planning maps.
- 25 I attach to this evidence **Annexure 1** which sets out the amendments that I support to the notified provisions, namely deletion of the references to Appendices 6.12.17.1 – 6.12.17.3.
- 26 I consider these amendments can be made pursuant to section 16 of Schedule 1 of the Resource Management Act 1991 (**RMA**) as they are required to correct a minor error. On this basis, I have not included an assessment pursuant to section 32AA of the RMA for these amendments.
- 27 Overall, I support the provisions of sub-chapter 6.12 as it provides for the protection of radiocommunication pathways which are vital for

providing emergency and day-to-day coverage for Police, FENZ and St John operational vehicles, communications and civil defence services. If these pathways were to become blocked or disrupted, this could have serious implications for life, property and the environment.

- 28 I also support the proposed amendment to the definition of height made by Plan Change 14, which provides for a number of exceptions for the purposes of calculating height. These exceptions include radio and television aerials, finials, lift shafts, plant rooms, water tanks, air conditioning units, ventilation ducts, chimneys, antennas and similar architectural features on buildings, and the spires or towers of spiritual activities. These activities have the potential to disrupt or block a radiocommunications pathway, so it is important that the exceptions for these do not apply when assessing the height of buildings against the height limits set out in the tables of section 6.12.4.2.

Section 42A Report – Evidence of Andrew Willis

- 29 I have reviewed the s42A report prepared by Mr Andrew Willis. In respect of the radiocommunication pathways, Mr Willis supports the “*40m radiocommunications qualifying matter to protect this important infrastructure*”. There is no mention in the s42A report of the provisions of sub-chapter 6.12, other than support for the non-complying activity status where heights are exceeded. The report also does not address the amendments sought to the definition of height. As set out above, I support the provisions of the sub-chapter and the amendment to the definition of height, and I note that there were no submissions in opposition to any of these provisions.
- 30 In terms of the reference to the “*40m radiocommunications qualifying matter*”, there appears to be some confusion as to the application of the maximum height limits specified in the tables set out in section 6.12.4.2. The maximum height limits specified are referenced to A.M.S.L (above mean sea level) not existing ground level. An explanation of this is included in section 6.12.3(e) How to interpret and apply the rules, as follows:

e. Tables 6.12.4.2.1 – 6.12.4.2.3 set out the absolute maximum height in metres of any obstruction referenced to “A.M.S.L”. This

refers to metres above mean sea level (A.M.S.L) at the Lyttelton Datum. A correction will need to be made to calculate the available height above existing ground level at each site.

- 31 I note that Chapter 2 – Abbreviations and Definitions also includes the abbreviation “AMSL” and explanation for this abbreviation.
- 32 In paragraph 132 of his evidence, Mr Willis discusses the recommended heights limits that are proposed for the mixed use zones in Ms Williams’ evidence³. Mr Willis notes that the recommended height limits for the areas under the radiocommunication pathways are below 40m, which aligns with the radiocommunications qualifying matter. The maximum building height recommended by Ms Williams for the Central City Mixed Use Zone (South City area) is 32m and for the Central City Mixed Use Zone (South Frame) is 21m.
- 33 While the tables in section 6.12.4.2 specify a maximum height limit beginning at between 40.4m – 40.8m and steadily climbing from this starting point, this is referenced from AMSL not existing ground level. During the development of the provisions for this sub-chapter, I am aware that Council GIS staff modelled the proposed pathways based on information held on existing ground levels. Figure 1 below demonstrates the approximate height above existing ground levels for the three radiocommunication pathways.

³ 58. Nicola Williams – Statement of Evidence - Urban design (commercial zones in and around centres).

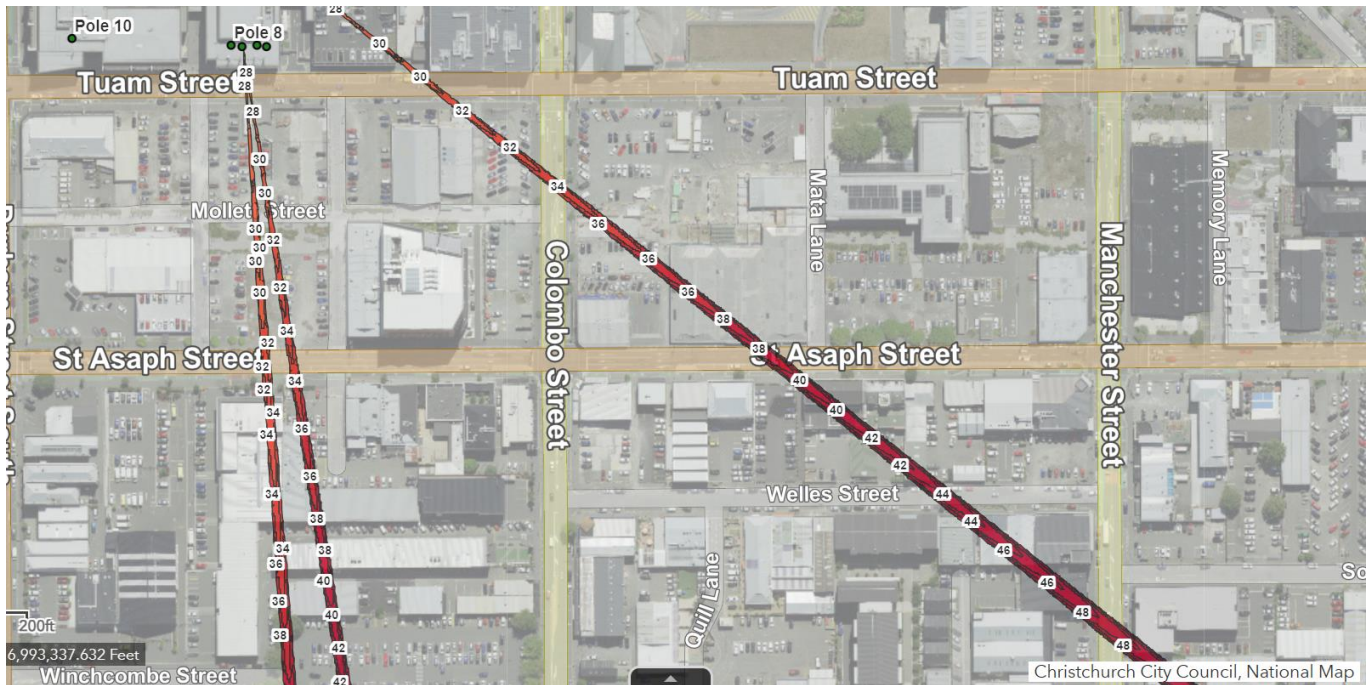


Figure 1: CCC GIS Map of Proposed Pathways showing height above existing ground level

34 While this map is not as accurate as calculating the height above mean sea level based on the Lyttelton Datum, it demonstrates that the radiocommunication pathways are either at or above the height limits proposed for the mixed use zones. For example:

- (a) In the area between Tuam Street and St Asaph Street, the maximum height limit for the radiocommunication pathways is 28m or higher (maximum building height of 21m is proposed by PC14 and Ms Williams).
- (b) In the area south of St Asaph Street, the maximum height limit for the radiocommunication pathways is 32m or higher (maximum building height of 21m is proposed by PC14 and 32m is proposed by Ms Williams).

35 Figure 2 below is the map that is included in the evidence of Ms Williams showing the height limits proposed for the central city zones:

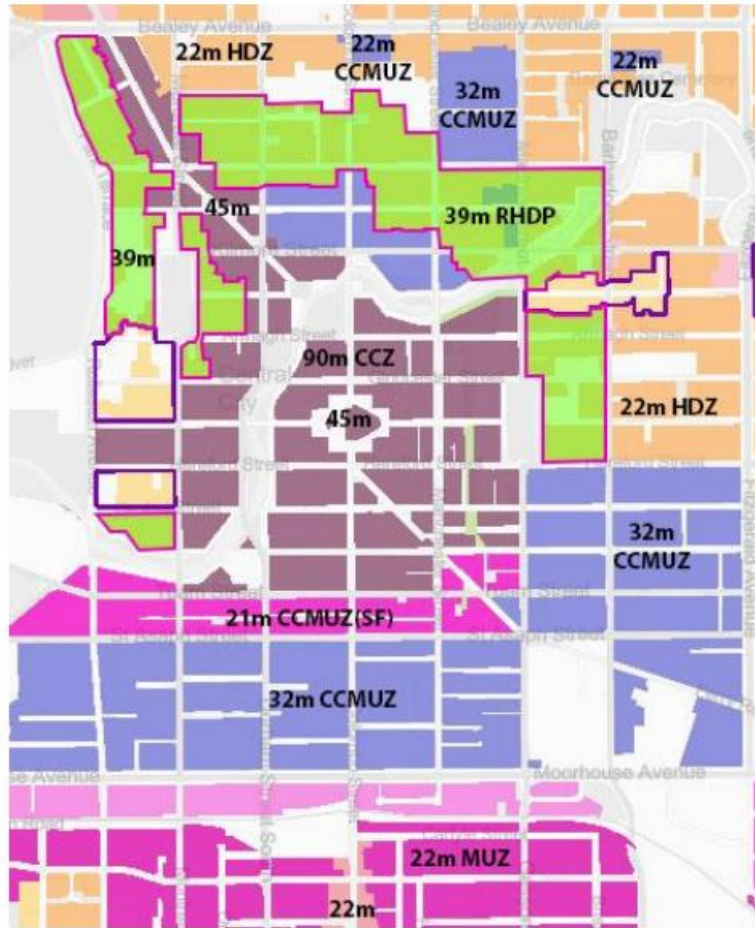


Figure 2: Updated Central City map illustrating the recommended uplift in height in the CCMUZ areas to 32m (purple shade) ... as well as the recommended retention of 21m height limit in the CCMUZ(SF)

- 36 While Mr Willis has incorrectly referred to the radiocommunication pathway qualifying matter having a height of 40m, I agree with his conclusion that the recommended height limits in Ms Williams' evidence align with the radiocommunications qualifying matter. In other words, the maximum height limits for the radiocommunication pathways are either at or above the height limits proposed by Ms Williams so they will not impede these recommended limits.

Amendments to further clarify reference point

- 37 As noted above, the abbreviation AMSL is explained in Chapter 2 – Abbreviations and Definitions and further explained in Section 6.12.3(e) - How to interpret and apply the rules. However, to further clarify for plan users that the maximum height limit is metres above sea level, I

suggest that a footnote reference is be added to column heading for maximum height limit in each of the tables.

- 38 I also consider that it would be useful for the Council to include the heights above existing ground level on the interactive maps in the District Plan Property Search function. While this could not be relied upon, it would quickly indicate to developers whether the proposed building is well under the maximum height limit or whether further investigation is required. An example of the amendment to the tables is included in red in Figure 3 below:

Table 1

<u>Radio Path</u>	<u>CJESP - Cashmere/Victoria Park</u>	
<u>Path Length (km)</u>	<u>5.5</u>	
<u>Azimuth from CJESP (deg TN)¹</u>	<u>176</u>	
<u>Distance from CJESP (km)</u>	<u>Horizontal width of Clearance Zone centred on Radio Link axis (m)</u>	<u>Maximum Height Limit (m A.M.S.L)²</u>
<u>0</u>	<u>0.0</u>	<u>40.5</u>
<u>0.02</u>	<u>0.7</u>	<u>40.5</u>
<u>0.04</u>	<u>1.0</u>	<u>41.1</u>
<u>0.06</u>	<u>1.3</u>	<u>41.7</u>
<u>0.08</u>	<u>1.5</u>	<u>42.3</u>

¹ Degrees True North

² m AMSL means metres above mean sea level. Approximate heights above existing ground level are indicated through the property search function of the District Plan.

Figure 3: Excerpt from Table 1 of Section 6.12.4.2 showing proposed changes in red

- 39 These amendments are also included in **Annexure 1** to my evidence. As with the amendments to delete references to Appendices 6.12.17.1 – 6.12.17.3 noted above, I consider these changes can be made pursuant to section 16 of Schedule 1 of the RMA as they are alterations of minor effect for clarification purposes. On this basis, I

have not included an assessment pursuant to section 32AA of the RMA for these amendments.

Conclusion

- 40 I support sub-chapter 6.12 of PC14 as notified with the exception of the minor amendments noted below. I consider the objective, policy and rule framework to be appropriate to protect emergency service radiocommunication pathways from being disrupted or blocked. The tables set out in section 6.12.4.2 clearly define the pathways and they are further illustrated on interactive planning maps.
- 41 I support the deletion of the references to Appendices 6.12.17.1 – 6.12.17.3 and minor amendments for clarification purposes to the tables in section 6.12.4.2 to ensure plan users are aware the maximum height limits are calculated from AMSL, not existing ground level. I also suggest that the approximate heights above existing ground level are included on the interactive maps in the Property Search function of the District Plan.
- 42 I attach to this evidence **Annexure 1** which sets out the amendments to the notified provisions that I support.

Fiona Small

19 September 2023