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

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STATEMENT OF PRIMARY EVIDENCE OF JOHN SCALLAN ON BEHALF OF CHRISTCHURCH CITY COUNCIL

HOUSING CAPACITY ASSESSMENT

STRATEGIC OVERVIEW

Dated: 11 August 2023

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EXECUTIVE SUMMARY

1. My full name is **John Scallan**. I am employed as Senior Planner Urban Regeneration, Christchurch City Council.

2. I have prepared this statement of evidence on behalf of the Christchurch City Council (the **Council**) in respect of Plan Change 14 to the Christchurch District Plan (the **District Plan**; **PC14**).

3. I have completed an update of the medium density feasibility model for Christchurch to provide an up-to-date assessment of feasible capacity for medium density development typologies that consider recent changes to development conditions.

4. I have completed a spatial assessment of the potential impact of Qualifying Matters on the feasible development capacity and on plan enabled (theoretical) development.

5. The proposed PC14 provides for significant capacity for medium density development assessed either as plan enabled or feasible capacity. The potential impact of the Qualifying Matters on feasible capacity, when measured spatially, is approximately 38%, while noting that the impact at the site level of Qualifying Matters may not necessarily result in lost capacity.

INTRODUCTION

6. My full name is **John Scallan**.

7. My evidence provides an assessment of plan enabled and feasible capacity of medium density dwellings, a simple apartment typology capacity between four and six storeys from redevelopment of existing residential zoned land, and considers the impact of Qualifying Matters on development capacity.

8. In preparing this evidence I have read the Council's Section 32 report: Part 1 – Overview and High Level District Issue.

9. I was a contributing author of Part 1 Appendix 1 of the Section 32 evaluation for PC14, which is the Christchurch City Council Updated Housing Capacity Assessment February 2023 (**Capacity Assessment**). Except where I say otherwise in this report, I agree with the content and analysis set out the Capacity Assessment. I rely on, and refer back to,

relevant parts of the Capacity Assessment, but do not intend to repeat its content in order to minimise duplication. The s32 reports including their appendices can be accessed from the Council's website.

QUALIFICATIONS AND EXPERIENCE

10. I hold the qualifications of a Bachelor of Science (Geography), a Masters in Town Planning, and a PgDip in Geographical Information Systems.

11. I have 20 years' experience in Town Planning in the United Kingdom and New Zealand. I have worked in the areas of development management, policy planning and urban regeneration. I have previously been involved in assessing the dwelling capacity for Christchurch for the National Policy Statement – Urban Development Capacity and for the Greater Christchurch Spatial Plan. I worked on the previous District Plan Review, on the Council's response to the Land Use Recovery Plan and on various activities for the implementation of the Greater Christchurch Urban Development Strategy.

12. I confirm that, while I am employed by the Council, the Council has agreed to me providing this evidence in accordance with the Code of Conduct.

CODE OF CONDUCT

13. 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

14. My statement of evidence addresses the following matters:

    (a) The assessment of medium density dwelling capacity (up to three stories) from redevelopment and infill of existing residential zoned land as Plan Enabled and Feasible dwelling capacity;

    (b) The assessment of a simple apartment typology capacity between four and six storeys from redevelopment of existing residential zoned land; and

(c) Impact of Qualifying Matters on the development capacity from (a) and (b).

15. I address each of these points in my evidence below.

16. For the avoidance of doubt, my evidence does not address feasible:

(a) Greenfield housing capacity.

(b) Brownfield housing capacity.

(c) Industrial or commercial centre mixed use housing capacity.

(d) Capacity derived from apartment development above six storeys in height.

(e) Capacity in areas where no change to the zone is proposed (e.g. rural residential), except where this is a consequence of a Qualifying Matter.

(f) Feasibility of development other than commercial development (e.g. where there is a reduced or no profit motive, or where an existing home owner may add a dwelling to their site for rental purposes (minor residential dwelling or similar)).

(g) Feasible development capacity that arises from amalgamation of multiple sites into a larger development site.

ASSESSMENT OF MEDIUM DENSITY (UP TO THREE STOREY) HOUSING CAPACITY IN CHRISTCHURCH CITY

17. Part of the assessment of housing capacity for PC14 has been of the potential for new build medium density housing in the existing urban area that may come through the comprehensive redevelopment of existing housing sites (where the existing dwelling and improvements are removed), and through the creation and subsequent development of new infill housing sites (where the existing dwelling and larger improvements are retained, and new dwellings added).

18. There is a wide enablement for development of medium density housing through the Medium Density Residential Standards (**MDRS**) introduced by PC14. The MDRS enables housing typologies from single detached dwellings to low-rise apartment blocks. The town house typology of duplex, terrace and closely nested detached dwellings is readily buildable within the

built form and subdivision related standards of the MDRS. I have completed a feasible capacity assessment for the following PC14 proposed zones:

(a) High Density Residential zone.

(b) Medium Density Residential zone.

(c) Mixed Use zone (Central City).

(d) Residential Suburban zone.

(e) Residential Hills zone.

19. The areas of the Residential Hills zone and Residential Suburban zone are those that are within the extent of a proposed Qualifying Matter that seeks to retain the operative District Plan zone (specifically: Airport Noise and Low Public Transport Accessibility Qualifying Matters).

20. The feasible capacity assessment is a high-level, desktop, approach. It is a site-specific assessment in that the basic building block for assessment is the individual site and that each site has attached to it several attributes that can be used to predict potential development outcomes for a site and the potential development costs associated with that outcome, as adjusted for the site. Each individual site has not been visited nor been subject to a detailed on-site analysis.

21. Feasible apartment development capacity is reported separately and is not incorporated into the overall capacity figure. This is to reflect the fact the modelling of apartment typologies is more complex and less likely to reflect site conditions and costs. The desktop assessment indicates that some apartment development is likely to occur but with less certainty. The evidence of Ms Ruth Allen discusses the issues around apartment development in Christchurch in more detail.

22. The approach to assessing feasible development is broadly based on the Ministry for the Environment guidance on Housing and Business Development Capacity Assessments under the National Policy Statement on Urban Development. More specifically the approach has adopted the inputs and general approach recommended by the MfE Development Feasibility Tool.

23. The assessment process can be broadly summarised as the following steps:

(a) Step 1: How much can be built on a site? An assessment of ‘plan enabled’ capacity for each potential development site based on a set of built form standards applied to current rating unit site boundaries and, for infill, a set of potential new development allotments within existing sites.

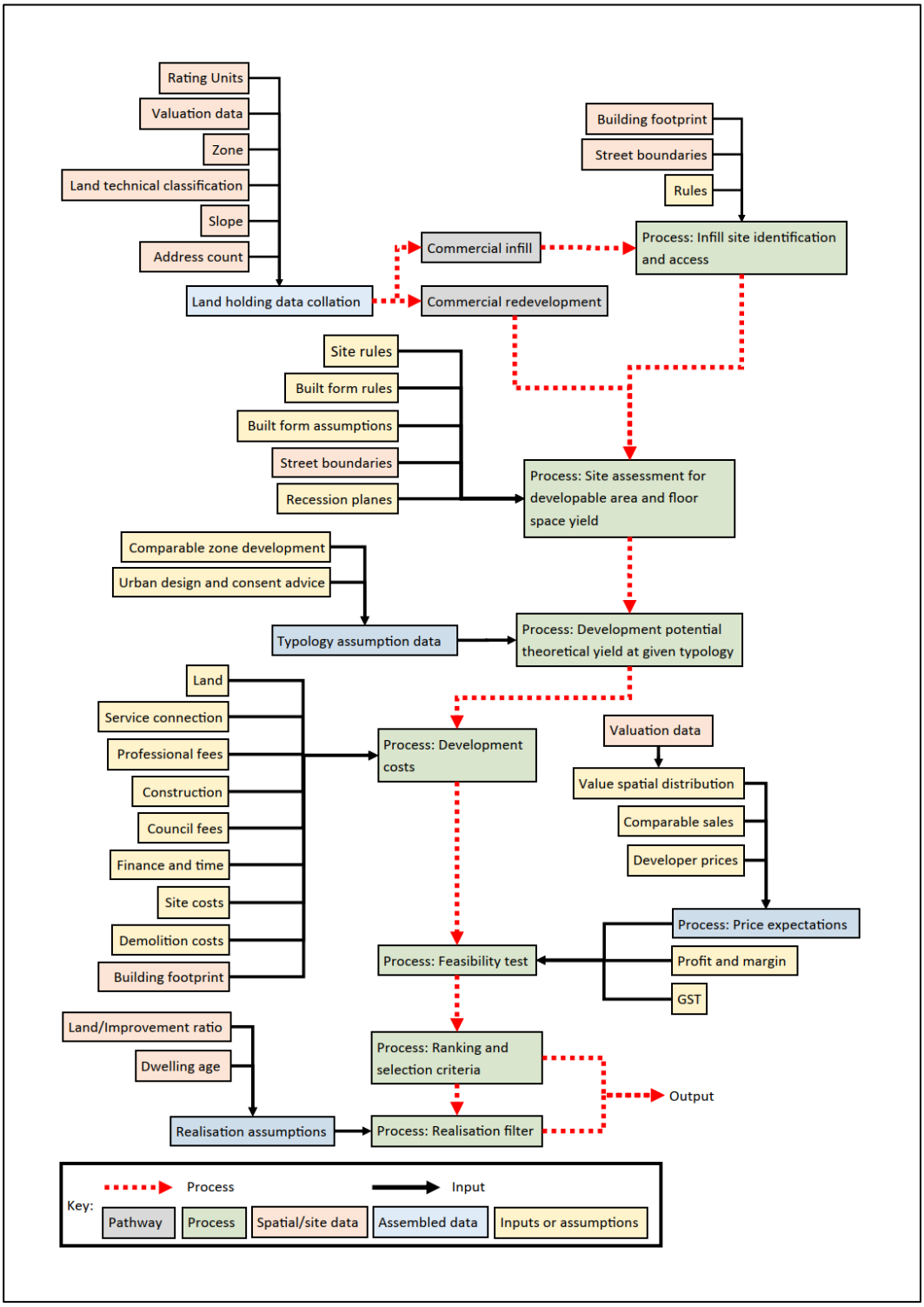
(b) Step 2: What is likely to be built? Establish a range of typical or anticipated housing typologies to test within the ‘plan enabled’ parameters for each site. These typologies are based on observations and measurement of what is currently built under a similar set of standards and/or what may be built under a new set of standards, for example: the Medium Density Residential Standards.

(c) Step 3: Is it feasible to build? An assessment of a ‘point-in-time’ commercial feasibility of the potential development outcomes for each site. This assessment includes inputs for the cost of development and the potential sales price for development, assessing feasibility from the perspective of the commercial developer. The assessment can be extended to filter for realisation potential based on, for example, existing dwelling age or the land value to improvement value ratio for a site to provide an indication of which sites are more likely to develop in the shorter term. The intent of the filtering approach is to provide a more reasonable expectation of realisation for development. Sites with high value improvements and/or newer dwellings will generally be less likely to be developed in the short term compared to sites with low value improvements and/or older dwellings.

(d) Step 4: Feasible development sites are assessed spatially against Qualifying Matters to determine the impact on the built form potential of the site.

24. The process methodology is summarised in **Figure 1** below.

Figure 1 – Process methodology



25. **Table 1** below summarises the theoretical (step 1 and 2) and feasible housing capacity (step 3).

26. An assessment of capacity was completed in mid-2022 and is reported in the Section 32 report: Part 1 – Overview and High Level District Issues, Appendix 1 – Update Christchurch Housing Capacity Assessment February 2023. I contributed to the medium density component of this assessment that

assessed capacity from existing site redevelopment and infill development. I have updated the same components of assessment for August 2023 to consider the changes to some of the inputs to the model that have occurred in the intervening 18 months, including:

(a) Construction costs have increased.

(b) Estimated house prices for tested typologies have increased in line with increasing house prices generally.

(c) Rating valuation data (at August 2022, published late 2022) shows a significant increase in values and a change to the relative pattern of value across the city.

(d) High medium density housing development activity over the last two years has reduced the number of potential development sites.

(e) Proposed changes to zone and Qualifying Matter boundaries as set out in the various section 42A reports.

(f) Updates to the source information informing the extent of the Tsunami inundation area and the Airport Noise Influence Area.

27. The outcome of the August 2023 assessment of medium density housing capacity is summarised in **Table 1**:

Table 1. City-wide Plan Enabled and Feasible Capacity at Medium Density.

Table 2.1 Qualifying Matter extent test	**Plan Enabled (mid-range estimate) (density as per Table 2) Gross totals (does not account for existing dwellings)**	**Feasible (conservative, filtered for realisation)** **Net totals (less existing dwellings)** **QM totals are based on an assessment of the combined and dissolved QM areas, not the total of each QM.**
Yield without Qualifying Matters	934,000	137,150 at medium density and below (+ undeveloped greenfield, apartment)
Outside of all Qualifying Matter extents	627,600	85,580 (+ undeveloped greenfield, apartment)
Area (plan enabled) or site (feasible) that intersects at least one Qualifying Matter extent. Multiple overlaps are not double counted.	306,400	51,570 (+ undeveloped greenfield, apartment)

Table 2. Density assumptions for Plan Enabled (theoretical) capacity.

Zone	**Density Dwellings per Ha**
Future Urban Zone	30
High density residential zone	120
High density residential zone Large Local Centre Precinct	150
High density residential zone Town Centre Precinct	150
Large lot residential zone	15
Medium density residential zone	80
Medium density residential zone Centre Precinct	100
Mixed use zone	150

Neighbourhood centre zone	80
Residential Hills	46
Residential Suburban	30
Residential Suburban Density Transition	50

Table 3. Feasible Capacity, Apartments four to six levels.

	Apartment: Feasible, conservative, and filtered for realisation. Dwellings.
Yield without Qualifying Matters	13,522
Outside of all Qualifying Matter extents	9899
Yield that intersects at least one Qualifying Matter extent	1363

28. The outcome of the apartment assessment should be read with the outcome of testing for feasible apartment development at above six storeys as set out in the evidence of Ms Ruth Allen.

29. The desktop analysis indicates that in some areas of Christchurch apartment development may be possible where the costs of developing a site can be balanced by a higher price expectation for a completed dwelling. Spatially the modelling indicates that apartment development is more likely to be feasible in the Central City and in the suburbs adjoining the Central City to the west and north-west, and less likely outside of these areas. This outcome is consistent with that set out by Ms Ruth Allen in her evidence.

30. Where development is enabled for high density there may be a high density development outcome that is feasible and more profitable than a medium density development outcome.

IMPACT OF QUALIFYING MATTERS ON MEDIUM DENSITY (UP TO THREE STOREY) HOUSING CAPACITY IN CHRISTCHURCH CITY

31. The Resource Management (Enabling Housing Supply and Other Matters) Amendment Act (the **Act**) and the NPS-UD identify a range of Qualifying Matters (**QM**) that provide scope for the Council to propose District Plan provisions that are less enabling than those otherwise required by the Act or the NPS-UD.

32. The Council has proposed Qualifying Matters as set out in the Section 32 report, Part 2. The detailed analysis of the process and capacity implications of the QMs are set out in the relevant Section 32 reports. Further detail on the methodology for assessing feasible development capacity is set-out in Section 32 report, Part 1, Appendix 1 and in Part 2 – Qualifying Matters.[1]

33. All QMs, except for Sunlight Access, have spatially defined extents. The impact of each QM has been assessed against each site where there is a spatial intersect. Where the intersect is partial, the extent of the intersect impact on the plan enabled built form capacity for the site is measured. There are multiple spatial overlaps of individual QM extents. The count of QM extent overlap with individual sites ranges from one to eight. The maps in the Section 32 report, Part 2, paragraph 2.3.32 on, illustrate the extent of this overlap count.

34. The QM impacts fall in six broad categories, defined by application and consequence:

    (a) Where the QM seeks to retain the operative residential zone, limiting medium density capacity, for example: Low Public Transport Accessibility, Airport Noise Influence Area.

    (b) Where a QM (generally) excludes development due to infrastructure constraint, limiting medium density capacity and potentially increasing costs: Vacuum Sewer Wastewater Constraint Areas.

    (c) Where the QM controls development within the spatial extent of the QM, including partial areas of a site, potentially limiting medium density capacity, and/or increasing process costs, for example: City Spine, Electricity Transmission Corridor, Waterbody setbacks, Coastal Erosion, Coastal Inundation.

    (d) Where the QM enables medium density development to a lesser extent, potentially limiting medium density capacity because of more restrictive height controls, for example: Industrial Interface, Riccarton Bush Interface.

[1] Section 32, Part 1, Appendix 1, Section 4.2, Page 13: provides more detail on the approach to assessing development outcomes for feasibility, the data and sources of information used, and the limitations of the approach.
Section 32, Part 2, Qualifying Matters, Section 2.3 on, Pages 24 to 42: provides a discussion on the impact of Qualifying Matters on development capacity, how this may be assessed and the limitations to assessment at a broad scale.

(e) Where the QM enables development with controls on design outcomes, potentially limiting medium density capacity and/or increasing process costs, for example: Residential Character Areas.

(f) Where the QM requires a resource consent to address the subject of the QM but may not necessarily have an impact on medium density capacity but may increase process costs, subject to the outcome of a site-specific assessment, for example: Sites of Cultural Significance.

35. The spatial impact of a QM extent on an individual site may not necessarily impact upon the development potential of the site. For example, a QM might have a small overlap of a non-buildable area of the site (e.g. a road setback), or a QM could have a more significant overlap but one that still allows for the maximum buildable area on a site. This impact is assessed as part of the modelling process.

36. The impacts of the QMs on capacity are updated for the August 2023 capacity assessment in **Table 4**. The Plan Enabled sub-total is also provided in **Table 4**. The impacts of the QMs are not cumulative and it is not possible to assess the full impact of QMs where a site-specific assessment would be required. For some QMs the extent of the QM does not intersect with the extent of the zones tested for capacity as part of the assessment.

Table 4. Qualifying Matter impact summary, Plan Enabled and Medium Density only, measured as dwellings.

Qualifying Matter **Also see: Section 32, Part 1, Appendix 1 for further notes on assessment of Qualifying Matters.**	**Plan enabled potential impact. Number of dwellings.**	**Feasible (conservative): Potential QM impact on either full or part of a site dwelling yield. Number of dwellings.**
Sites of Ecological Significance	520	<100
Outstanding Natural features and Landscapes	380	<100

Wahi Tapu /Wahi Taonga - existing	140	Not assessed.
Significant and other trees Heritage trees	1670	232
Heritage items and settings Existing, Removed and New	3340	503
High Flood Hazard Management Area Existing	7000	1190
Flood ponding management area - Existing	8990	744
Slope Instability High Hazard Management Areas Existing	6210	1310
Water body setback	20,160	3743
Building height for properties adjoining Riccarton Bush	970	336
Coastal Hazard Medium and High Risk Management Areas - New (includes high erosion extents)	25700	4680
Tsunami affected areas (1:500 event, >0.3m depth)	63880	9868
Residential Heritage Areas	3380	1668
Residential Heritage Interface Areas	640	<100
Lyttelton Commercial Centre Interface	Not applicable	Not applicable
New Regent Street Interface	<100	<100
Arts Centre Interface	450	<100
Cathedral Square Interface	460	<100
Lyttelton Port Influences Overlay	<100	<100
NZ Rail Network building setback	560	<100
Electricity Transmission and Distribution Corridors	3290	766

Radio Communications Pathways	170	<100
Christchurch International Airport Noise Influence, new spatial extent based on the 50dBa Ldn noise contour outer envelope.	43,600	11,879
Christchurch International Airport Noise Influence, 50dBa Ldn noise contour annual average (not included in QM total to avoid double counting)	*20,350*	*6830*
Residential Character Areas	11,130	2897
Victoria Street Height	1260	<100
Wastewater constraint(includes Prestons)	37600	2848
Sunlight (tested for proposed Medium Density Residential Zone)[2]	Approximately 5%	Approximately 5%
City Spine Transport Corridor setback	<100	<100
Designations	9700	170
Low Public Transport Accessibility Area	143,150	23,990
Industrial Interface	8870	1441
Sites of cultural significance	43,890	8620
Styx River Setback	<100	<100
Open Space and Specific Purpose (Ōtākaro Avon River Corridor) and (Cemetery) Zones	No intersect with tested zones	No intersect with tested zones
North Halswell ODP Connections	No intersect with tested zones	No intersect with tested zones
Belfast Commercial Centre and Styx River	No intersect with tested zones	No intersect with tested zones

[2] The impact of the sunlight Qualifying Matter is relatively most significant on the 3rd storey of a building. Multiple typologies are tested on each site and if there is an impact on, for example, a development of three storey townhouses on the site the next most profitable and modelled feasible development may be a two storey townhouse configuration, which when measured as net dwelling yield, can be the same outcome, albeit as smaller dwellings.

Lyttelton Building Height Section	No intersect with tested zones	No intersect with tested zones
Note: Totals are not provided here to avoid double counting the impact where there is an overlap of Qualifying Matter spatial extents. The total impact, considering these overlaps, is provided in Table 1.		

Table 5. Qualifying Matter impact summary, Apartment only, measured as dwellings.

Qualifying Matter	**Feasible, Apartment, (conservative): Potential QM impact on either full or part of a site dwelling yield. Number of dwellings.**
Sites of Ecological Significance	<100
Outstanding Natural features and Landscapes	<100
Significant and other trees Heritage trees	<100
Heritage items and settings Existing, Removed and New	<100
High Flood Hazard Management Area Existing	<100
Flood ponding management area - Existing	<100
Slope Instability High Hazard Management Areas Existing	<100
Waterbody Setbacks - Existing	218
Building height for properties adjoining Riccarton Bush	121
Coastal Hazard Medium and High Risk Management Areas - New (includes high erosion extents)	<100
Tsunami affected areas (1:500 event, >0.3m depth)	<100

Residential Heritage Areas	<100
Residential Heritage Interface Areas	<100
New Regent Street Interface	<100
Arts Centre Interface	<100
Cathedral Square Interface	<100
Lyttelton Port Influences Overlay	<100
NZ Rail Network building setback	<100
Electricity Transmission and Distribution Corridors	<100
Radio Communications Pathways	<100
Christchurch International Airport Noise Influence, new spatial extent based on the 50dBa Ldn noise contour outer envelope.	848
Christchurch International Airport Noise Influence, 50dBa Ldn noise contour annual average (not included in QM total to avoid double counting)	*<100*
Designations	<100
Industrial Interface	<100
Low Public Transport Accessibility Area	<100
Residential Character Areas	<100
Sites of cultural significance	230
Styx River Setback	<100
Victoria Street Height	<100
Wastewater constraint (includes Prestons)	<100
Water body setback	228
City Spine Transport Corridor setback	<100

Open Space and Specific Purpose (Ōtākaro Avon River Corridor) and (Cemetery) Zones	No intersect with tested zones
North Halswell ODP Connections	No intersect with tested zones
Belfast Commercial Centre and Styx River	No intersect with tested zones
Lyttelton Building Height Section	No intersect with tested zones
Sunlight	Not tested
Note: Totals are not provided here to avoid double counting the impact where there is an overlap of Qualifying Matter spatial extents. The total impact, considering these overlaps, is provided in Table 3.	

37. The impact of Qualifying Matters on feasible development capacity is a product of the Qualifying Matter extent and the location of development capacity as it has been assessed for the most recent update to the capacity assessment. Subsequent capacity assessments, under different development conditions, may yield a different spatial pattern of feasible development capacity and consequently the impact of Qualifying Matters may become more or less significant in the future.

38. Ms Oliver in her S42A report has provided a comparison between the notified assessed development capacity and the updated capacity. It can be observed that there are differences between the plan enabled capacity totals for QMs between the assessments that reflect the changes to the extents of QMs and extent of zones and precincts. However, a commensurate change to feasible capacity totals may not necessarily show the same pattern for the reasons outlined above in paragraph 36.

CONCLUSION

39. The update to the medium density component of the capacity assessment indicates that there is significant plan enabled capacity and feasible capacity for development in Christchurch. The model indicates that feasible medium density development capacity is widely dispersed across the city. The dwelling yield weighted heatmap attached as **Appendix A** illustrates the distribution of potentially feasible development capacity.

40. There is less certainty on feasible capacity though apartment development (between four and six storeys). Where feasible capacity is indicated as more likely it is confined the Central City and the inner suburbs to the west and north-west of the Central City. Modelling indicates that feasible apartment development is less likely outside these areas at this time.

41. The spatial intersect between the extent of feasible development sites and the spatial extent of the QMs indicate a potential impact on approximately 38% of the feasible medium density capacity. The Airport Noise Contours, Low Public Transport Accessibility Area and those QM associated with coastal hazards have the greatest impact. There is significant overlap of QMs and some sites are impacted by several QMs.

42. Compared to the last iteration of the capacity assessment, plan enabled capacity has increased, principally because of the expansion of the High Density Residential zone and precincts around commercial centres. Feasible development capacity for medium density residential development is lower than for the previous assessment, likely because higher construction costs and land valuations are not fully being balanced by rising price expectations. The dynamics may change for future capacity assessments and feasible capacity is expected to fluctuate between subsequent assessments.

Dated: 11 August 2023

John Scallan

APPENDIX A - A DWELLING YIELD WEIGHTED HEATMAP