

Before Queenstown Lakes District Council Independent Hearings Panel

In the Matter of the Resource Management Act 1991 (**RMA**)

And

In the Matter of an application for the Te Pūtahi Ladies Mile Variation by Queenstown Lakes District Council to amend the Proposed District Plan in accordance with section 80B and Part 5 of Schedule 1 of the Resource Management Act 1991

**Evidence of Cameron Wallace on behalf of Ladies Mile Property Syndicate
Limited Partnership**

(Primary Submission 77 and Further Submission 139)

(Urban Design / Residential Density)

Dated 20 October 2023

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Introduction

1. My full name is Cameron Wallace. I am a Partner and Urban Designer at Barker & Associates (“B&A”), an independent, specialist urban and environmental planning consultancy. I hold a Master of Urban Design (1st Class Honours) and a Bachelor of Planning (1st Class Honours) from the University of Auckland. I have been a Full Member of the New Zealand Planning Institute since 2014 and am a Member of the NZ Urban Design Forum.
2. I was instructed by the Ladies Mile Property Syndicate (“the Syndicate”) to provide high-level advice on the potential implications and requirements of the Te Pūtahi Ladies Mile Variation (“TPLMV”). I am familiar with the area to which the TPLMV relates. I have visited the site and surrounds on several occasions over the past 2-years.
3. I have 15 years’ professional experience working in urban design and urban planning, gained in both the public and private sector, in the United Kingdom and New Zealand. Since 2018, I have been employed as an urban designer at B&A. In my current role I regularly assist local authorities and government departments with policy and district plan development in relation to growth management and urban design matters. I also provide up-front urban design input into a wide range of development schemes for private clients and Auckland Council (“the Council”), including multi-unit residential buildings in both greenfield and brownfield environments as well as more traditional greenfield subdivisions across New Zealand.
4. Prior to my employment at B&A I worked for over 3 years as a City Planner, then Principal City Planner, at Transport for London where I led their input into the development of planning frameworks with the Greater London Authority to support residential and employment growth in “Opportunity Areas” across Greater London. This included a focus on ensuring future development responded to a planned extensions or upgrades of transport networks.

5. Of particular relevance to the matters that are covered by Plan Change 78, I am or have been a member of urban design and planning teams for policy planning and development projects including:
- (a) Private Plan Change 48 – Drury Central (Auckland), specifically acting as urban design lead in the proposal to rezone 91 hectares of land in South Auckland from ‘Future Urban’ to ‘Business – Metropolitan Centre’, ‘Business – Mixed Use’ and ‘Open Space – Informal Recreation’ zones;
 - (b) Plan Change 9 – Rotorua District Plan, specifically acting as lead urban designer advising Council on development of a new High Density Residential Zone, amendments to the City Centre zone to give effect to Policy 5 of the NPS-UD and the development of supporting non-statutory urban design guidelines;
 - (c) Wesley Neighbourhood (Auckland), specifically providing urban design and strategic planning advice into the development of a Spatial Development Strategy and supporting design guidelines for Wesley Neighbourhood which seeks to accommodate approximately 6,000 to 8,000 new dwellings across the consolidated landholdings of Kāinga Ora; and
 - (d) Urban Design Reviews, specifically acting as a consultant urban designer on a range of applications for both private sector developers and Auckland Council for new masterplanned developments in greenfield environments across Auckland including Milldale Town Centre, Drury Centre and Drury East. This has included regular presentations and attendance in front of the Auckland Urban Design Panel.
6. I note that I have previously provided urban design advice to Queenstown Lakes District Council (“QLDC”) as part of their Urban Intensification Variation to the Proposed District Plan (“PDP”). This included the provision of spatial analysis to inform an urban design review of existing provisions (with a focus on height and density of development) across all residential and commercial zones to align

with Policy 1 and Policy 5 of the National Policy Statement on Urban Development (“NPS-UD”). This work was limited to residential and commercial zones within the PDP and did not involve any review or detailed consideration of the TPLMV and its related provisions. I am also currently engaged by QLDC to provide urban design advice on two appeals to the Environment Court related to the General Industrial Zone on sites in Arrowtown and Wānaka as well as strategic planning advice on an update to their Spatial Plan.

7. I record that I have read and agree to abide by the Environment Court’s Code of Conduct for Expert Witnesses as specified in the Environment Court’s Practice Note 2023. This evidence is within my area of expertise, except where I state that I rely upon the evidence of other expert witness as presented to this hearing. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

Scope of Evidence

8. My evidence will address the following:
 - a. Contextualising the proposed minimum density requirements in the High-Density Residential Precinct (“HDRP”); and
 - b. Development standards and their relationship with minimum density provisions.
9. In preparing my evidence I have reviewed the following documents:
 - a. The Syndicate’s submission on the TPLMV;
 - b. Te Putahi Ladies Mile Final Draft Masterplan, Report dated June 2022;
 - c. The s42A Report for the Variation;
 - d. Urban design evidence of Mr Michael Lowe and Mr Stuart Dun and economic evidence of Ms Susan Fairgray on behalf of QLDC; and
 - e. Economic evidence of Ms Tamba Carleton and corporate evidence of Mr Hamish Anderson on behalf of the Syndicate.

Minimum Density Provisions

10. The TPLMV introduces a minimum density requirement for new development of 60-72 dwellings per hectare (“dph”) within the HDRP via Rule 49.5.16.2. Development at densities lower or higher than this range trigger a non-complying resource consent. Dph requirements are to be calculated on a “gross” basis with a number of limited exceptions for features identified within the accompanying structure plan.
11. Based on the s42A report and Council evidence, the main driver of the minimum density provisions appears to be related to the viability of public transport and mode shift (rather than any specific urban design related matters). This has been addressed in the evidence of Mr Parlane on behalf of the Syndicate.
12. To better understand the anticipated development outcomes set out within the TPLMV minimum density provisions in a real-world sense, I have undertaken an analysis of two established New Zealand examples of comprehensive development / intensification of large undeveloped parcels of land – Hobsonville and Stonefields – both in Auckland. Details of this analysis are provided in Appendix 1 of my evidence.
13. Hobsonville is a masterplanned community on 167Ha of former defence land which is intended to accommodate approximately 4,000 dwellings (24dph gross). A central portion of Hobsonville was identified for the analysis. This part of Hobsonville was one of the first areas where development commenced and features a range of residential building typologies including 6+ storey apartment buildings, 4-5 storey apartment buildings (with ground floor commercial uses), 3-storey walk-up apartments, 2 and 3-storey terraced housing, duplexes, and detached homes (including zero-lot variations). Hobsonville is generally regarded as a highly successful greenfield development project underpinned by sound urban design principles. Its peripheral location away from Auckland’s City Centre makes it, in my opinion, a particularly useful comparator to the scale and nature of development proposed for TPLM.

14. Stonefields is a masterplanned community within a former quarry site encompassing a total area of approximately 110ha that is intended to accommodate approximately 2900 dwellings (26dph gross). Development commenced in 2008, primarily with lower density housing typologies (small-lot detached and terraces). More recently, a number of apartments have been developed along with a new neighbourhood centre. The area features a range of housing typologies including 4-5 storey apartment buildings, 2 and 3-storey terraced housing, duplexes and detached homes. Like Hobsonville, the masterplan is consistent with good urban design practice and the scale of development in terms of area and dwellings is comparable to that advanced within the TPLM provisions.

15. My methodology for undertaking this analysis can be summarised as:

- a. Those parts of both development areas where development has been completed were identified. Where there are still large areas of vacant land or superlot development had occurred, these were excluded so as not to distort an understanding of both the gross and net density outcomes obtained.
- b. Commercial areas, schools, and stormwater management areas were excluded from the gross area calculations for consistency with the TPLM provisions.
- c. Where streets were located around the boundary of the area identified, road centrelines were used to determine the appropriate location of the boundary to ensure that the part of the road required to serve the development was captured in the analysis.
- d. Streets and open spaces (e.g. pocket parks) were identified. The boundaries of these areas were sourced from the Primary Parcel dataset maintained by Land Information New Zealand (LINZ). These parcels were then merged to calculate an accurate area to understand the net developable area that remained for development. For Stonefields, streets and open spaces

comprised 36% of the gross area while for Hobsonville the equivalent figure was 34%.

- e. The number of dwellings within each development area was based on the street / postal address dataset maintained by LINZ. Once this was obtained, I undertook an additional quality assurance check for apartment sites which had a unit title subdivision and cross-checked this with Auckland Council’s rating information to ensure all properties were accounted for. I also excluded addresses which were associated with commercial premises (excluding live/ work units). This reduced the number of addresses in Hobsonville by 12. Stonefields was unaffected.
- f. Gross and net density figures were calculated by dividing the total number of dwellings (based on postal addresses) by the gross area and net areas calculated for each development area.

16. High-level outcomes of this analysis in comparison to the yield studies accompanying the TPLM Masterplan¹ in the table below.

Table 1 - Density Comparisons

	Hobsonville	Stonefields	TPLM HDRP
Total Dwellings	1045	1650	419
Apartments	180 (17.2%)	304 (18.4%)	246 (58.7%)
Gross Area	29.91Ha	63.08Ha	6.97Ha
Net Area	19.66Ha	40.40Ha	4.54Ha
Gross Density	35.3dph	26.1dph	60.1dph
Net Density	53.8dph	40.8dph	92.3dph

17. This analysis indicates that the minimum density provisions proposed for the

¹ Page 104, Final Masterplan Report, dated June 2022.

HDRP are likely to be unprecedented in the New Zealand context. This indicates that development within the HDRP would need to be almost twice as dense as the central portion of Hobsonville to avoid triggering a non-complying resource consent. In my opinion, the minimum densities proposed are more comparable with the pattern and density of development near established mixed-use centres in Tier 1 authorities like Auckland and Wellington. Given the unprecedented nature of the minimum density requirements in a greenfield environment such as this and the potential issues around deliverability and feasibility raised in the evidence of Mr Anderson and Ms Carleton, I have concerns that the provisions as currently worded could undermine the development of new homes in the HDRP.

18. Both the TPLM Masterplan² and Ms Fairgray³ have provided theoretical modelling with regards to the likely split and composition required to achieve the minimum density targets. I note that there appears to be some inconsistency in the modelling results as between the TPLM Masterplan and Ms Fairgray, although this may be as a result of how Ms Fairgray characterises particular typologies within her analysis. The TPLM Masterplan density modelling indicates⁴ that around 59% of dwellings in a hypothetical area of the Masterplan Area would be in the form of apartments in order to meet the minimum density target of 60dph (of this, 25% (and 15% overall) would be via the two 6-storey apartments identified). A further 32% would be delivered via narrow terraced typologies (<5m in width). I also consider this to be consistent with the Hobsonville and Stonefields case studies which both delivered densities significantly less than the 60dph threshold with apartments forming a much lower total proportion of the overall dwelling total.
19. Ms Fairgray's analysis in Appendix B appears to differ and identifies that between 15-28% of dwellings could be delivered via vertically attached apartments, and 38-65% via "terraced/horizontally-attached walk-ups". In this

² Page 104, Final Masterplan Report, dated June 2022.

³ Appendix B, Evidence-in-Chief, dated 20 September 2023.

⁴ I note that the Masterplan modelling appears to rely on basement parking for two apartment buildings, a 14m wide local road corridor (less than the 18.6m cross-section set out in the transport report), double-fronted lots, 2/3 bedroom terraces without parking and common parking areas fronting a public road. As such, the Masterplan modelling may overestimate the density actually achievable in the example provided.

respect, I am unclear how Ms Fairgray's analysis differentiates between walk-up apartment typologies and terraces. A horizontally-attached walk-up is not a typology I have ever heard of. I have assumed this is supposed to read "vertically-attached walk-up". In my opinion, terraces and walk-up apartments are very different typologies (in terms of design, financing, and construction) and are not usefully grouped together. As such, I consider that the modelling contained within the Masterplan report as well as my own analysis provides a better understanding of the potential implications on housing variety and feasibility of the minimum density controls.

URBAN DESIGN ASSESSMENT

20. The TPLMV proposes a detailed suite of development standards around building heights, setbacks, outlook spaces, driveway placement, landscaping, private outdoor open space, communal open space and building separation. I am generally supportive of the suite of provisions proposed (or at least their intent) and consider that they are important for providing a quality-built environment. I also consider that it may be appropriate to do more with these controls in a greenfield environment where there are fewer existing constraints (e.g. land fragmentation) imposed by existing development.
21. I agree with Council's experts that density is an important factor that can support mode shift towards walking, cycling and public transport. In my opinion, it is one of a range of factors which also includes block structure, infrastructure provisions / quality (including convenience and directness of routes), public transport service frequencies and patterns, proximity to key amenities / destinations (i.e. journey times), and quality of the built environment (i.e. is it an attractive place to walk and/ or cycle).
22. In this regard, I have some concerns that the combination of high minimum density requirements within the HDRP, as well as some of the proposed development standards, and the commercial feasibility of different typologies, as raised in the evidence of Mr Anderson and Ms Carleton, could undermine the delivery of other built environment aspects required to support mode shift – in particular a fine-grained block structure and an attractive environment for

walking.

23. The current exclusions under Rule 49.5.16.2 do not include public roads identified on the Structure Plan. In my experience, roading generally takes up a not insignificant percentage of the developable area of a site ranging from 25-35% of a given site. This range is consistent with the modelling and assumptions of Ms Fairgray and the Masterplan report.
24. In my opinion, public roads will be an essential element in delivering on the vision for the area and establishing a positive sense of place for the new community. By not excluding these from the density calculations this may actually incentivise the provision of less frequent public road connections and result in a less permeable urban environment that has an over-reliance on private roads / laneways with less restrictive engineering requirements. In my opinion, this has the potential to lead to poorer urban design outcomes through reduced connectivity across the Masterplan area that could also undermine greater levels of walking required to deliver on mode shift aspirations. In addition, as public roads are not excluded, increased space allocated to public roads in any given development will force a developer to build a denser housing product to compensate for the loss of saleable/ developable land. This therefore increases the need to deliver greater quantities of apartment typologies in this location which Mr Anderson and Ms Carleton have identified as being commercially challenging to deliver in this location. This could raise the risk of development not occurring at all.
25. In addition to the above, the impact of the minimum density requirements and commercial feasibility challenges may also result in need to deliver a less diverse housing product due the need to also comply with a wide range of development standards. The development standards set out basic parameters which will impact on the density that can be delivered via various typologies. For example:
 - a. The driveway separation requirement of 8m⁵ (unless paired) establishes a minimum lot width of 7m for front loaded terraces onto public streets. A 3m front yard, 8m outlook from principal living area (assuming to the rear)

⁵ Rule 29.5.25.2

and a typical building depth of 14m establishes a 25m deep lot with an overall area of 175m² for this typology. This yields a gross density of around 34dph (short of both the HDRP and Medium Density Residential Precinct (“MDRP”) requirements).

- b. To increase yield through a terraced typology, there are two options. Firstly, you could utilise private roads to avoid the need to comply with Rule 29.5.25.2 (which could compromise connectivity) or could deliver a narrower, rear loaded typology. Typically, 4.5m is as narrow as you would want to see (although I have seen plans for terraces as narrow as 4m). When combined with a 3m front yard, 8m outlook from principal living area (assuming to the rear), a 5m deep parking space, and a shallower building depth of 10m you are left with a 26m deep lot with an overall area of 117m². When combined with a 7m wide rear lane, this yields a gross density of 47dph.
 - c. To further enhance the density attainable under this typology, it would be beneficial to combine the front yard (3m), private open space areas (minimum dimension 4m) and outlook (8m) out towards the front of the site. In other words, positioning your back garden on the street edge. This could allow you to narrow the depth of a lot to 18-20m, which when combined with a 7m wide rear lane yields a gross density of circa 56dph. This “layering” of different development standards is not an uncommon approach to infill intensification seen in Auckland and can, in my opinion, lead to poor design outcomes (e.g. outlook spaces over shared driveways, or compromised privacy of outdoor open spaces positioned to front roads).
26. Based on the above, the provisions as recommended may actually incentivise the delivery of a large number of narrow terraced typologies to minimise the need to construct a greater number of potentially unviable apartment products to meet the minimum density requirements.
27. To address the above issues, (as well as those raised by other experts) Ms Hoogveen has recommended a change to Rule 49.5.16.2, to read as follows:

*“49.5.16.2 In the High Density Residential Precinct, development shall achieve a density of 60-72 residential units per hectare across the **gross net** developable area of the site.*

*For the purpose of this rule, **gross net** developable area of a site means the land within the site shown on the Structure Plan, excluding the following:*

- a. Building Restriction areas shown on the [Structure Plan and](#) planning maps;*
- b. [Vested Roads](#);*
- c. Open Space, Amenity Access Areas and Landscape Buffer as shown on the Structure Plan;*
- d. [Stormwater management areas](#)*

But including any ~~vested or~~ private roads, reserves, accesses and walkways not shown on the Structure Plan.”

28. I am supportive of these changes and consider that they would better enable good urban design outcomes consistent with the TPLMV policy framework whilst recognising the practical and commercial realities of development. I note that the maximum density figure would also need to be increased to 90 to account for the proposed changes. This change would reduce the minimum number of dwellings expected in the HDRP to approximately 1,044⁶ based on the existing gross precinct area of 23.2Ha (excluding schools, collector roads and parks) as set out in the yield assessment contained within page 101 of the TPLM Masterplan Report. A further 25% of land has been removed from this figure to account for the likely land requirements of developing a public street system across the development. This revised figure of 1,044 is comparable to the 1,183⁷ set out in the TPLM Masterplan Report and Appendix B of Ms Fairgray’s evidence.

29. To understand the built form implications of the Syndicate’s requested changes I have undertaken 3d modelling to demonstrate an example of how the revised

⁶ The minimum number of dwellings that can be delivered in the HDRP will ultimately depend on the extent of roading, the size of the community park which has an indicative size range of 1.5-2ha within the structure plan, the size of stormwater management areas, and the land area ultimately required by MoE for the proposed schools.

⁷ The yield table on Page 101 of Final Masterplan Report, dated June 2022, identifies a minimum dwelling count of 1392 across the HDRP areas. However, the overall figure has been adjusted down 15% to account for stormwater management areas.

density minimums could be met on a theoretical site (refer to Appendix 2). This modelling meets all relevant development standards set out within the TPLMV, including car parking maximums. This example demonstrates a net density of 60 dwellings per hectare (146 dwellings on 2.44Ha of developable land) with a variety of dwelling types and sizes delivered. This includes:

- a. Four 4-bed duplexes (3% of total);
- b. 42 2-bed apartments ca. 80m² floor area (28% of total);
- c. 30 2-bed, 4.5m wide, rear-loaded terraces ca. 81m² floor area (21%);
- d. 26 3-bed, 6m wide, rear-loaded terraces ca. 120m² floor area (18%); and
- e. 44 3/4-bed, 7.5m wide, front-loaded terraces ca. 153m² floor area (30%).

Conclusion

30. Overall, I am supportive of the general intent of the TPLMV as it relates to urban design matters. I do consider that an amendment to Rule 49.5.16.2 would be beneficial, in urban design terms, in offering greater flexibility to the market to deliver an appropriate variety of housing typologies. This will better enable the market to appropriately respond to demand (in terms of type, price and size) over time whilst still delivering a quality-built environment.



Cameron Wallace

Dated: 20 October 2023

Appendix 1 – Density Analysis

Hobsonville, Auckland

Hobsonville Development Metrics	
Total Dwellings	1045
Total Apartments (%)	180 (17.2%)
Gross Area	29.91Ha
Net Area (Roads / Open Spaces)	19.66Ha (10.25Ha)
Gross Density	35.3 dph
Net Density	53.8dph

Built Form Examples



Stonefields, Auckland

Built Form Examples

Stonefield Development Metrics	
Total Dwellings	1650
Total Apartments (%)	304 (18.4%)
Gross Area	63.08Ha
Net Area (Roads / Open Spaces)	40.40Ha (22.68Ha)
Gross Density	26.1 dph
Net Density	40.8dph



Appendix 2 – Built-form Modelling associated with the recommended revised minimum density provisions

