PROPOSED TE PŪTAHI LADIES MILE PLAN VARIATION RESPONSE OF MICHAEL LOWE ON BEHALF OF THE QUEENSTOWN LAKES DISTRICT COUNCIL

- 1 My full name is Michael Lowe. I am an Urbanist at Studio Pacific Architecture.
- I have prepared the following documents with regards to Te Pūtahi Ladies Mile Plan Variation (**TPLM Variation**):
 - (a) Statement of evidence on behalf of Queenstown Lakes District Council (QLDC or Council) dated 29 September 2023;
 - (b) Rebuttal evidence on behalf of QLDC dated 10 November 2023;
 - (c) Written answers to questions from submitters dated 24 November 2023;
 - (d) Summary of evidence dated 4 December 2023 including Appendix A response to the Hearing Panel Minute: Pre-Hearing Questions.

Response to questions raised by the Hearing Panel during the Hearing

Proposed height levels in TPLM Zone

- At the hearing, Commissioner Makinson raised concerns around the juxtaposition of different height levels through TPLM Zone, and what provisions ensure these differencing heights will be integrated.
- I have reviewed the transition between the HDR and MDR Precincts. I acknowledge the heights will enable 6 storey apartments to be located near to 2-3 storey dwellings. I am comfortable with this built form outcome as it is a natural occurrence in medium-density environments which support a diverse range of dwelling typologies.
- In any event, my yield studies show there is likely to be few occurrences of 6 level apartments (and potentially zero 6 storey apartments)¹. And when if 6 storey apartments occur I consider this height difference is manageable through the proposed bulk and locations rules and the Restricted Discretionary assessment criteria where potential integration issues can be sufficiently resolved through the orientation of building outlooks, on-site landscaping, and visual screening devises such as pergolas. In my opinion, the Restricted Discretionary activity status assessment matters resolve visual form and appearance, and sunlight issues relating to building design within the site. Recession planes or separation by vested roading will mitigate effects between neighbouring sites.
- There are however a few areas that could be improved. These are outlined below:
 - (a) Recession plane rule where the Commercial Precinct boundary adjoins either the MDR or HDR Precinct. The Commercial Precinct should adopt the sunlight recession plane height and angles of the MDR or HDR Precinct.
 - (b) <u>Building Heights Plan</u>: Amend the Building Heights Plan to soften the transition between the HDR Precinct and LDR Precinct on the Eastern side of the Variation area as follows.

Appendix A (Response to Hearing Panel Minute: Pre-Hearing Questions) to my summary of evidence dated 4 December, paragraph 12.



Diversity of housing choice and affordability

- At the hearing, Commissioner Munro requested the Council team to consider alternative or additional methods of requiring dwelling diversity and affordability of housing choice, including the possibly of introducing a matter of discretion, rather than a standard (or information requirement).
- A key mechanism for delivering housing diversity in the TPLM Variation is through requiring minimum densities at a level which is likely to result in greater supply of one and two bedroom dwellings. This considers the fact that average dwelling size (in terms of floor area and number of bedrooms) tend to decrease as density increases due to the utilisation of smaller units being a more feasible way to counter the increased construction cost per square meter of higher-density apartments.
- I have discussed the way in which the provisions can be strengthened to provide for housing diversity with Mr Brown. I recommend the matter of discretion at Rule 49.5.16.2(b) is amended as below.
 - (b) The mix of housing typologies proposed, including the percentage of the development that will be comprised of one and two bedroom units and whether and how the mix contributes to maximising housing choice in the Zone including by the range of bedroom numbers, accessibility, and housing affordability for the owner / occupier and rental markets.
- Also relevant to diversity of housing choice, is the provision of accessible dwellings which was discussed with the Panel at the hearing.
- I note that the first of the Minister's expectations is that the TPLM Variation "contributes to providing sufficient opportunities for the development of housing and business land to ensure a well-functioning urban environment including maximising opportunities to enable housing, particularly of the typologies identified as a shortfall in Queenstown's Housing Development Capacity Assessment 2021 (housing suitable for older households, smaller households, and lower and lower-middle income households)." In my view, the underlined part of the expectation encourages consideration of accessible dwellings.

- In my view, any reduction in the minimum density requirement in the HDR Precinct would reduce the delivery of lifted apartments and as such the likelihood of accessible dwellings. In this case, I recommend including amendments to the existing assessment matters that relate to accessibility (refer Rule 49.7.1(g)) to require achieving Lifemark (or similar) design standard.
- Under a Lifemark rating, a new home design is rated against the Lifemark Standards and awarded points based on how adaptable, safe and usable the home is in terms of accessibility function. The higher the rating (3, 4 or 5 Stars), the more it will suit a family's changing needs throughout life (for example supporting aging in place). From my experience, a Lifemark 3 star rating is not an onerous requirement. Essentially it futureproofs the dwelling to be able to be retrofitted at low cost to meet accessible needs (i.e. providing circulation routes that can fit a wheelchair, and having a toilet and kitchen on the entry living level).
- 14 My recommended changes to the assessment matter at Rule 49.7.1.g(vi) is as follows:

49.7.1.g(vi)

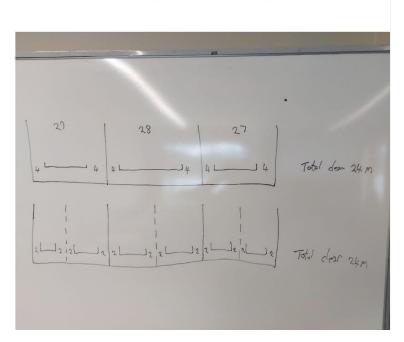
Achieves a target of 15% of the residential <u>units meeting</u> <u>dwellings across a range of</u> <u>typologies that meet</u> universal design standards as set out in NZS 4121:2001, <u>and to the</u> <u>extent the remaining dwellings incorporate design features supportive of accessibly such as lifts and level access, and can achieve certifications such as Lifemark.</u>

I understand that there may not be scope within submissions on the TPLM Variation regarding the provision of accessible dwellings, and so this change may not be within scope. However, I note this recommended change for completeness should the Panel come to a different view on scope.

Matters raised by Koko Ridge Ltd on 15 December 2023

- Following the hearing, Blair Devlin for Koko Ridge drafted up bespoke planning rules for the site that would enable LDR Precinct with pockets of Medium Density housing (i.e. on certain specified lots). He also provided further bespoke rules for the four lots overlooking Corona Trust land (i.e. specimen planting that was acknowledged by Mr Compton-Moen as potentially being appropriate).
- 17 I have reviewed Mr Devlin's proposed changes to the provisions and provide comment as follows:
 - (a) Mr Devlin is proposing a 6m deep LDR Precinct area adjoining Corona Trust's boundary. Beyond this 6m setback Mr Devlin proposes denser development of 200m² minimum (was 300m²) and semi-detached lots.
 - (b) I am concerned that Mr Devlin's rules could create a 6m deep LDR Precinct area adjoining Corona Trust's boundary that could remain undeveloped and therefore expose views through to a much denser built form outcome proposed on Koko Ridge land. This is because a 6m deep zone of LDR is too narrow to be developed on, particularly when accounting for the TPLM Variation's minimum boundary setbacks rules. I therefore see a likely outcome eventuating of significantly more zero-lot houses fronting and overlooking Corona Trust's land at a distance 6m from the boundary. The overlooking from more residents and associated yard activity overlooking the escarpment will reduce privacy in the Corona Trust's receiving environment. This outcome is a notable departure from the built form edge condition currently enabled through Koko Ridge's existing H2 subdivision consent which enables 5-6 dwellings along the boundary. For example, using more compact 10m wide x 20m deep lots (which meet the 200m² minimum lot size proposed by Koko Ridge) a scenario could

- eventuate with ~20 lots fronting Corona Trust's boundary (which is about 200m long in total). This is a 4-5-fold increase to what is enabled in the current provisions.
- (c) In opposition to my method above, Koko Ridge showed in the hearing that the existing subdivision consent lots would only be subdivided in half (as illustrated in the white board drawing below from Mr Tim Allan) and would result in an equivalent combined meterage of visual breaks in the built form along the elevation at the boundary as to what is enabled through the existing subdivision consent. While this is possible, it is not the only scenario that could occur as they have assumed that the existing subdivision boundaries are fixed and only further subdivided in half. I see no reason why Koko Ridge could not obtain a new consent to reconfigure their lot boundaries to create narrower lots.



Presented by Mr Tim Allan Koko Ridge 08 Dec 2023

- In relation to the Mr Devlin's proposed design restrictions methods to mitigate effects on Corona Trust, I comment as follows:
 - (a) I consider the recommendation in my Response to Submitters' Questions of using a 25m minimum lot width adjoining the boundary is the fairest outcome and most in keeping with the built form enabled through the existing Koko Ridge consent.² I note that in Koko Ridge's legal submission they challenge the legal jurisdiction to impose this, and I do not comment on this issue.
 - (b) However, given the Panel's questioning around the potential suitability of H2 land for more density, I am supportive of enabling denser development in H2 and fronting the Corona Trust boundary as it would enable more dwellings to benefit from the elevated views looking South, and provide great visual amenity to many residents. However, this needs to be balanced with the effects on Corona Trust land as this outcome would result in a notable change to what is enabled in the existing Koko Ridge consent, and so I consider additional controls necessary to mediate this. I propose the following:

Response to Submitter Questions dated 24 November 2023.

- (i) Increase the H2 boundary no build setback to 12m (this is similar but less than the 15m sort by Mr Giddens on behalf of Corona Trust for a 15m setback).
- (ii) The existing cadastral property boundary should be used as it is a definitive and exact reference point. It is unpractical to use the top of escarpment as the reference point for setbacks (as sought by Koko Ridge) as this is difficult to figure out and can be challenged by Corona Trust.
- (iii) The addition of MDR Precinct controls for *minimum boundary setbacks*, and *maximum buildings lengths*, to be applied to zero-lot typologies requested by Koko Ridge in (49.5.XX) for clarification of the reader 'XX' is the coding used in Mr Devlin's document).
- (iv) Include a landscape buffer and more prescriptive fence/hedging requirement to screen the increased overlooking from yards. This would include adopting the provisions sought by Mr Giddens but with a few changes marked up in red below:

Fences

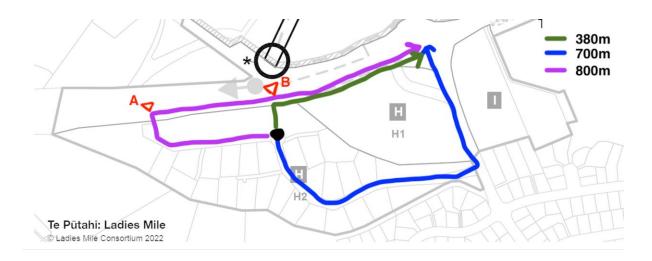
Within the no build area along the southern boundary of Sub Area H2, there shall be no solid fence or walls. Any fencing must be timber post and rail at a height of 1.2m.

Landscaping

Provide a minimum 3m deep landscape buffer within the no build area and along the southern boundary of Sub Area H2 as shown on the Structure Plan. Landscape planting within the no build area shall:

- a) Be <u>50 percent</u> established prior to making an application for building consent.
- b) Comprise of the type of species detailed in Part 3 of Appendix 1 of the Shotover Country Special Zone.
- C) When mature achieve a visual vegetative screen extending the length of the no build area and be at least 2m high.
- d) Be maintained by the site owner.
- e) No buildings shall be located in the no build area.
- In response to the subsequent effects of the proposed Koko Ridge amendments on density distribution in the Structure Plan, I comment as follows:
 - (a) Koko Ridge are essentially seeking to enabling the MDR Precinct rules to be applied within the H2 sub area with the main difference being limitations on lot sizes through a minimum lot size restriction (200m² as proposed by them) which is not present in the MDR Precinct. A consequential outcome of this change means Sub Areas 'H1' and 'l' are now of lower density to 'H2' despite being better located to the Commercial Precinct and SH6, thus, it is worth considering if the Koko Ridge provisions should apply to these areas as well to ensure equitable zoning given these sub areas are closer to the Commercial Precinct (noting my views do not consider any flow on effect on traffic effects or whether these amendments would be within the scope of submissions on the Variation generally).
 - (b) The proposed increase in yield on H2 land increases the number of residents needing walkable access to the SH6 bus stops, active travel links and the Commercial Precinct. In my view, it is important that the Structure Plan

accurately prescribes the location of H2's future walking and cycling link(s) that connect to the SH6 active travel connection. The below image highlights the difference in walking distances from access point A or point B to the Stalker Road intersection. My recommendation is for access at point B to be included in the Structure Plan as it enables the shortest route. Mr Shields agrees with this point in his reply statement.³



Comments on the AHFT revised structure plan drawings and yield table provided on 18 December 2023

Density range

- The AHFT yield table provided shows a yield range of 2267 2486 dwellings. The key differences to the TPLM Yield Scenario AA tabled in the hearing on 4 December 2023 are set out below. I also provide commentary on the appropriateness of these changes:
 - (a) AHFT's yield table does not factor in 15% loss of land for stormwater. Once factored in, their yield range is 1927 2113 dwellings. This is compared to 1764 2303 as per Scenario AA.
 - (b) AHFT has included a minimum density range of 45D/ha for Commercial Precinct. This adds 234 more dwellings compared to my Scenario AA. I note this minimum density range for the Commercial Precinct is not referred to elsewhere in the information provided by AHFT on 18 Dec, in particular Mr Murray's recommended provisions attached as Appendix B to the memorandum of Mr Winchester. On this basis, I do not consider that any weight can be placed on the 234 dwellings included in the Commercial Precinct in AHFT's yield table.
 - (c) AHFT has included medium density on the Dobbs land at 24-37 dwellings. I note, Mr Brown's view is that this should not be rezoned as residential.

Reply statement of Mr Shields, dated 25 January 2024, paragraph 37.

- (d) AHFT has includes 294 dwellings on new K2 Sub Area of the AHFT Land. I note this has been incorrectly labelled as K1 on AHFT's structure plan drawings.
- (e) AHFT's reduces the proposed MDR Precinct density down to 35D/ha (vs 40D/ha in the proposed TPLM Variation). This does not meet Mr Shields' 40D/ha density recommendation for public transport uptake.

Building Heights Plan

- The AHFT revised structure plan proposes reducing the building height in the HDR Precinct down to 17m (versus the 24.5m in the proposed TPLM Variation). This is problematic in my view for several reasons:
 - (a) The TPLM Variation seeks to enable 6 storey apartment buildings in the HDR Precinct yet the AHFT proposed 17m height only enables 4.5-5 storey apartment buildings as explained in the calculated examples below.
 - (i) <u>5 storey example:</u> By using a typical compact inter-floor dimension of 3.0m (with a less than ideal low 2.4m stud height) plus 0.5m for ground clearance, plus 1.5m for roof form and plant. = (0.5 slab) + (5x3m levels) + (1.5m roof).
 - (ii) 4.5 storey example: By using an inter-floor dimension of 3.3m (with an ideal best practice stud height of 2.7m) plus 0.5m for ground clearance, plus 1.65m for roof form and plant. = (0.5 slab) + (4.5x3.3m levels) + (1.65m roof).
 - (b) My understanding of apartment development feasibility is that delivering 5 level apartments are generally less economical than 6 level. This is due to increased complexity and associated cost with the building design that is triggered when designing apartment buildings greater than 3-4 levels. For example, requirements for more complex building code design of elements like structure, fire separation and egress, active (mechanical) fire protection, and lift access. As such, these increased costs only enable an additional 1-2 storeys when using a 4.5-5 storey enabled height limit (AHFT) versus 2-3 stores with a 6 storey enabled height limit (proposed TPLM Variation). Therefore, I question the cost benefit to developers of a 17m height limit as they only gain an extra 1-2 levels of building height but likely trigger a more costly design specification.

Response to matters by AHFT relating to Amenity Access Area

- The Council's urban design experts, including myself, proposed a further reduced cross section (18.5m building restriction, 16.5m Amenity Access Area) and provided an additional part plan and elevation to set out the spacing of proposed specimen trees. These drawings respond to questions raised by the Panel and were circulated to submitters' experts for comment on 21 December 2023. The reply statement of Mr Dun addresses these plans further.
- AHFT provided comments on the revised Amenity Access Area plans on 18 January 2024. Mr Harland and I have discussed these issues and respond to these matters as follows.
 - 1. A second cross section should be provided specifically relating to the Howards Drive and Lower Shotover / Stalker Road intersections, including the Town Centre Zone interface, noting there was agreement between experts that setbacks from SH6 / Amenity Access Area could be reduced in this area to enhance legibility and provide additional friction. The landscape treatment of this area is likely to utilise harder materiality and some allowance

needs to be made for bus stops, turning lanes and pedestrian safety areas in the median strip. Furthermore, an updated structure plan should be included to clearly indicate the location and extent applicable to each of the two cross sections, including the proposed approach to integrate the Amenity Access Strip into Spence Road and / or other proposed active travel alignments within any Western Amendment.

- As an initial comment, we note that the TPLM Variation Structure Plan has always shown a 10m Amenity Access Area (**AAA**) directly adjoining the Commercial Precinct and around the Stalker Road / SH6 intersection. This continues to be the Council's position and is shown on the Structure Plan.
- The cross section (and tree spacing plan and long elevation) circulated to submitters on 21 December 2023 only related to the mid-block sections of the AAA (which the notified Structure Plan refers to as the AAA 20m, and the Council's urban designers are now proposing to be 16.5m wide). Upon reflection, this was not made clear when the updated AAA plans and provisions were circulated.
- To avoid further confusion, we suggest that the two AAA are referred to on the Structure Plan as "Amenity Access Area wide" and "Amenity Access Area narrow", and the TPLM Variation provisions distinguish between the two different AAAs to make this clear. This has now been updated in the latest Structure Plan.
- 27 We consider that it would be impractical to draw a cross section for the narrow AAA at this stage given the uncertainties in design around the intersections. The idea of a signalisation of intersections at Stalker Road and Howards Drive has only emerged as a preferred solution since the filing of expert evidence, and joint witness statements as part of the hearing process. A schematic output from SIDRA modelling (refer Colin Shields Rebuttal Evidence, 10 November 2023) indicates that 6 lanes will be required for the intersections to work. However, no design of the signalised intersections has been undertaken and many uncertainties remain regarding final configuration including; length of taper lanes, bus stop locations, lane widths and median, additional land to be taken (and possibly roads to be closed especially Lower Shotover Road.
- Instead, we recommend adding more text to TPLM Variation provisions stating the intent and minimum requirements of the narrow AAA. We suggest that the Rule 27.7.28.3 is amended to include the minimum requirements of the narrow AAA, these being a minimum AAA of 10m that includes provision for 2.4m minimum footpath, 0.6m minimum buffer, 3m minimum two-way cycleway, and one row of trees (using the same tree species as the 'wide AAA') in the space between the road carriageway and cycleway. Note this space must be able to accommodate a bus boarding and alighting area.
- We consider that Rule 27.7.28.3 could also be amended to clarify that the crosssection and long section provided in the TPLM Variation relate to only the "wide" AAA.
- Further, to avoid any confusion, we consider that Rule 27.7.28.3 should note that there are to be no driveway crossing in the AAA because this is the primary active travel route and conflicts with vehicles should be avoided.

- 2. The width of the feature tree strip was one of the key areas of disagreement between Urban Design Experts. One part of the Council Expert's rationale for a wider strip was potential provision for Stormwater attenuation and treatment. However, the plan and cross section provided do not indicate any provisional allowance for this, such as a swale, which could help to inform the Panel of the minimum width to achieve the necessary depth and slope batters required.
- There is limited potential for the AAA to also serve a stormwater management function, and given the relatively limited space, this is most likely to be for stormwater quality and quantity in relation to the SH6 itself rather than for the wider Ladies Mile area. Given the many ways that stormwater might be accommodated in the AAA and uncertainties over soakage rates it is not possible to show a preferred solution in the cross section. Any use of the AAA for stormwater function must maintain the key amenity functions of the setback including the tree planting in the front berm adjacent to the carriageway, bus stops, and pedestrian and cycle functionality.
 - 3. It is noted that existing trees are already provided at regular spacings and carriageway offsets along the northeast and southern edge of the SH6 road corridor. It is unclear if these have been analysed and if the proposed spacings are informed by these to achieve a consistent approach between existing and new street tree plantings.
- 32 Some regard was given to the south side trees, which have irregular tree spacings but are typically circa 21m and do give a sense of continuity along the road. The Council's urban designers objective was for the new 'feature trees' area in the AAA to have a similar legible continuous pattern.
- There are very few noteworthy existing trees on the north side of SH6 within the site boundary. The majority landscape condition is hedging planting.
- We note there are a cluster of existing trees on SH6 to the east (adjacent to Threepwood land) outside of the Variation area which we interpret Mr Tim Church's comment to relate to. These are outside of the scope of the Variation and assumed will remain. Given the desire to accommodate larger trees and to retain gaps between trees to enable a good visual connection with the urban form behind, the 25m spacing is considered an appropriate distance that balances the tensions between:
 - (a) providing sufficient short-medium term tree amenity whilst future proofing the street elevation for sufficient visual breaks between trees so that buildings are visible when trees reach 20 year maturity,
 - (b) enables a practical light pole spacing i.e. 25m between light poles achieved through 50m spacings on both sides of the road (when staggered at 25m).
- However, on reflection of the above, we recommend some flexibility given to the 25m spacing of the trees given the uncertainty around the light pole requirements of the future SH6.

4. It is unclear what the following highlighted clause is trying to achieve and would likely need more clarification in addition to that provided in clause d. that follows:

4.2.2.21 Ensure that development within the Te Pūtahi Ladies Mile Zone provides for:

- an urban development with a strong community identity and sense of place by enabling community activities, including education activities, a commercial centre that meets needs of local residents, and connections to the surrounding landscape and residential communities;
- b. high and medium density residential development to enable diversity of housing choice through different typologies to contribute to increased supply of housing and affordable homes;
- c. a landscaped gateway treatment:
 - of the edge of adjoining State Highway 6 to increase provide high quality amenity for both road users and adjoining residential areas; and
 - adjoining the eastern end of the Zone north of State Highway 6 to provide a designed urban edge that promotes the containment of the urban development within the landscape.
- This text relates to the landscape amenity buffer at the Eastern end of the site that interfaces between the Medium Density Residential Precinct and the Wakatipu Basin Rural Amenity Zone. In light of Mr Church's query, we recommend Mr Brown considers revising the wording for Policy 4.2.2.21(c) as follows:
 - "adjoining the eastern end of the Zone north of State Highway 6 to provide a designed urban edge that promotes the containment of urban development within the landscape that contains urban development within the landscape by creating a clearly legible landscape buffer."
 - 5. It is assumed that provisions for the 3m Building Restriction Zone / Build To Zone indicated will effectively restrict the inclusion of vehicle access ways and car parking adjacent to the Amenity Access Area. However, it is unclear if this Zone needs to be a continuous built edge and how any separation between buildings and provision for shared pedestrian and cycle access to the Amenity Access Area could be accommodated.
- 37 Separation between buildings is controlled by the maximum building length rule for the zone.
- Linkages to the AAA are not rule based but instead covered in the policies and objectives of the plan change. I.e.:
 - "49.2.6.4 A Requiring high-quality, well connected, integrated and legible walking and cycling routes and linking to existing routes outside the Zone."
- That said, we recommend Mr Brown adds one further rule under Rule 49.7.1(b) around the design of the interface to cover Mr Church's valid concern that car parking or an on-lot slip lane/ driveway could theoretically fit in the 5 meters of space made up of the 2m 'front yard' plus 3m 'building setback' area. A new rule could be "No vehicle access or car parking can be located between the building frontage and the AAA"

- 6. It is assumed a non-statutory design guide for buildings and landscape treatments addressing the edge of the Amenity Access Area is not part of the TPLM Variation. As such, it appears from the updated provisions for the Amenity Access Area (i.e. green highlights) that no consideration has been made to ensure an active edge and CPTED outcomes are provided for along its development interface.
- Every development application has an Restricted Discretionary status and must meet the objectives and policies of the zone. Refer 49.2.7.10 a,b,c,d which we consider addresses Mr Church's concerns. We further note that assessment matter under Rule 49.7.1(e) also ensure CPTED principles are taken into account.

Michael Lowe 26 January 2024