

PROPOSED TE PŪTAHI LADIES MILE PLAN VARIATION

RESPONSE OF COLIN ROBERT SHIELDS ON BEHALF OF THE QUEENSTOWN LAKES DISTRICT COUNCIL

- 1 My full name is Colin Robert Shields. I am a Senior Principal Transport Planner at Tonkin & Taylor Limited.
- 2 I have prepared the following documents with regards to the 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 5 December 2023 including Appendix A response to the Hearing Panel Minute: Pre-Hearing Questions;
 - (e) Response to Panel Transport questions raised on 5 and 6 December - dated 7 December 2023; and
 - (f) Response to further Panel questions dated 19 December 2023.
- 3 I include the questions in italics and my response follows this. Where I have addressed a matter raised at the hearing in my earlier responses (7 December and 19 December) I have not addressed it here. Accordingly, these responses should be read alongside my earlier responses.

Response to questions raised by the Hearing Panel during Council's presentation at Hearing

Should there be any ability to relax traffic triggers for the supermarket?

- 4 I consider that at a minimum, the SH6/Howards Drive intersection is required before the supermarket is open in order to provide the necessary access for the supermarket. I consider that the other transport interventions identified for Sub Area D (Commercial Precinct) are not specifically required for a supermarket. I would therefore be comfortable for a separate rule excluding a supermarket from the other Sub Area D transport intervention triggers.

Can (and should) monitoring of achievement of mode shares be incorporated into provisions e.g. no more development if targets not met?

- 5 I addressed this question in paragraphs 21 to 23 of my response to Panel questions dated 7 December 2023.
- 6 Mr Brown and I have discussed this point further and agree that changes can be made to the TPLM provisions to ensure that monitoring of mode shares are incorporated into the resource consent stage of development. In particular, we agree changes should be made as follows:
 - (a) In relation to Rule 49.7.2 (Assessment matter in relation to preparation of a Travel Demand Management Plan for residential buildings in the High Density Residential Precinct), amendments are made to ensure all residential development over 10 units (as well as any building containing commercial, retail or educational facilities) are caught by this assessment matter.

- (b) In relation to Rule 29.9 (thresholds for High Trip Generating Activities), amendments are included for certain development in the TPLM Zone (namely, residential development over 10 units as well as any building containing commercial, retail or educational facilities) to ensure that Integrated Transport Assessments are required at the resource consenting stage for these activities.

Comments from the Panel questioning proposed maximum car parking rates for residential units

- 7 As detailed throughout my EIC, EIR and the TPLM Transport Strategy, the maximum car park rates are considered an important part of the Transport Demand Management measures to encourage mode change at TPLM. As detailed in my evidence, there is not one measure that will achieve the required mode change, with the maximum car park rates forming one part of the overall solution. In response to comments made by Mr Parlane, I also identify, in paragraphs 38 to 40 below, research and policy guidance relating to maximum car park rates and their relationship to mode shift. I maintain my support for the maximum carparking rates for residential units.

Should a housing cap be included in the provisions and / or the density maximum limits for the MDR and HDR Precincts be retained particularly if there is no certainty about schools establishing in TPLM?

- 8 These issues are addressed in paragraphs 27 and 28 of my response to Panel questions dated 7 December 2023. I respond further as follows.
- 9 On the basis of the economic evidence presented at the hearing, I understand that it is very unlikely that 2,400 residential units at TPLM will be exceeded, and therefore the need for a housing cap or the density maximum limits largely falls away. On that basis, I am largely comfortable if there is no housing cap or density maximum limit.
- 10 To address any uncertainty about the schools establishing in TPLM, I have discussed this matter with Mr Brown, and we agree a further matter can be included in Rule 49.7.2 (Assessment matter in relation to preparation of a Travel Demand Management Plan) to ensure that transport to and from existing (and planned) schools are considered. We agree that Rule 49.7.2(a)(i) can include the requirement for a Travel Demand Management Plan to include an assessment of active travel and public transport to educational activities.

Response to matters raised by Mr Smith for NZTA Waka Kotahi

Mr Smith's summary identified a number of matters that he considers still need to be addressed

- 11 I have addressed these matters within paragraph 64 of my EIC, paragraphs 8 to 40 of my EIR and paragraphs 21, 22 and 33 of my response to the Panel's questions dated 7 December.
- 12 In addition, given the agreement that SH6/Stalker Road intersection should be signalised (and this is included in the transport related provisions), I recommend amendments to the TPLM Structure Plan to ensure that Local Road Type E is amended to a Collector Road Type A.

Mr Smith's amendments to transport infrastructure staging rules

- 13 I have reviewed Table 2 included in Mr Smith's summary, where he provides an amended list of infrastructure upgrades that must be delivered prior to the development of the different Sub-Areas within the TPLM Variation. There are certain

additions recommended by Mr Smith that I agree with, and some that I do not support.

- 14 In Table 1 below, I have used the TPLM Provisions (as at 27 November 2023) as the base, and show Mr Smith's additions in green shading. Where I agree with Mr Smith's additions these are shown in bold and underlined. Where I disagree with Mr Smith, these are shown in red strikethrough.
- 15 Since the hearing I have further reflected on the transport infrastructure requirements and I consider further amendments should be made to the transport infrastructure requirements for certain Sub-Areas. These are shown in red bold and underlined (and in some instances in red strikethrough (where not included in green shaded box).

Table 1 - Transport Infrastructure Staging Rules

PROVISION	49.5.10			49.5.33				49.5.50		49.5.56
PRECINCT	LDR			MDR and HDR				GP	Com	Open
STRUCTURE PLAN SUB-AREA	H1	H2	I	A	B	C/E	F/G	B	D	J
Dedicated westbound bus lane on SH6 (<u>Howards Drive to Shotover Bridge (part of NZUP package)</u>)		<u>Y*</u>		<u>Y</u>	Y	Y	✘	Y	Y	<u>Y</u>
<i>Western PACKAGE 1:</i>										
Upgrade to <u>existing signalise</u> SH6/Stalker Road intersection				Y	Y	✘	✘	<u>Y</u>	✘	✘
Intersection on Lower Shotover Road at Spence Road				Y	✘	✘	✘	✘	✘	✘
Bus stops on SH6, west of Stalker Road intersection (one on each side of SH6)		<u>Y*</u>		Y	Y	✘	✘	Y	✘	✘
Safe pedestrian/ cycle crossing of SH6 west of Stalker Road intersection				Y	Y	✘	✘	Y	✘	✘
<i>Central PACKAGE 2:</i>										
Upgrade to <u>existing signalise</u> SH6/Howards Drive intersection						Y	✘		<u>Y</u>	<u>Y</u>
Bus stops on SH6, west of Howards Drive intersection (one on each side of SH6)						Y	✘		Y	Y
Safe pedestrian/ cycle crossing of SH6 east of Howards Drive intersection <u>at location shown on the Structure Plan as Key Crossing (+/- 40m)</u>						Y	✘		Y	Y
<i>Eastern PACKAGE 3</i>										
Eastern roundabout on SH6							Y			
<u>Dedicated westbound bus lane on SH6 (Howards Drive to</u>							<u>Y</u>			

Eastern roundabout (not included in NZUP package)										
Bus stops on SH6, west of the Eastern roundabout (one on each side of SH6)							Y			
Safe pedestrian cycle crossing of SH6, west of the Eastern roundabout							Y			
Active Travel Link to SH6 Bus Stops	Y	Y								
Stalker Road bus priority		Y*		<u>Y</u>	<u>Y</u>	<u>Y</u>	Y	<u>Y</u>	<u>Y</u>	<u>Y</u>
NZUP package west of Shotover Bridge		Y*		<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>	<u>Y</u>

* If the total number of units at H2 is increased from 108 to 140 (as sought by Koko Ridge Limited in response dated 15 December 2023).

16 I summarise below the key changes to the table presented by Mr Smith and my rationale for these changes:

Westbound bus lane

17 I have differentiated between the section of SH6 westbound bus lane between Howards Drive and Shotover Bridge (delivered as part of NZUP) and the section between the new eastern roundabout and Howards Drive (which will need to be completed before development of sub areas F or G). The NZUP section of SH6 westbound bus lane is required for sub areas A, B, C, D, E and J since their access is from either the SH6/Stalker Road or SH6/Howards Drive intersections and this bus lane will provide improved bus journey times and reliability for these sub areas. The section of SH6 westbound bus lane east of Howards Drive is required for sub areas F and G since their access is from the Eastern roundabout and this bus lane will provide improved bus journey times and reliability for these sub areas.

18 I do not agree with Mr Smith that sub areas F and G cannot be developed until the westbound bus lane between Howards Drive and Shotover Bridge is complete (and in fact Mr Smith has assumed that F and G are reliant on all of the TPLM infrastructure to be complete before any development at F and G can take place). I consider that this would make development of F and G unviable. Furthermore, F and G are required to implement the bus lane between the eastern roundabout and SH6/Howards Drive, the bus stops at the eastern roundabout and the active travel links to these bus stops. As such, transport choice for the residents and visitors to sub areas F and G will be in place and hence there is not a need for these areas to be reliant on completion of the westbound bus lane between Howards Drive and Shotover Bridge.

'Western Package 1'

19 In light of the agreement with NZTA (and also with all of the transport experts) I have slightly reworded the description of the SH6/Stalker Road intersection upgrade provision to include signalisation. I have also amended slightly the wording of the pedestrian/cycle crossing to reflect the proposed signalisation of the intersection.

20 I do not agree with Mr Smith that sub areas C, D, E, F, G and J cannot be developed until the SH6/Stalkers Road intersection signalisation is complete, since for these sub areas to be developed the TPLM provisions require the improvements to

SH6/Howards Drive intersection, the bus lane between Howards Drive and Shotover Bridge, bus stops and active travel links to these and the eastern roundabout and bus lane to Howards Drive to have been completed. As such, the 'bottleneck' for people using the bus will be reduced thus improving transport choice for residents and visitors to sub areas C, D, E, F, G and J. Therefore, there is not a need for these sub areas to be reliant on completion of the SH6/Stalker Road signalisation and this will also assist in promoting modal shift for these sub areas by not removing the 'bottleneck' for private vehicle travel.

- 21 I do not agree with Mr Smith that sub areas B, C, D, E, F, G and J cannot be developed until the Lower Shotover Road/Spence Road intersection is complete since only development of sub area A is actually reliant on this provision, especially in light of my recommendation to amend Local Road Type to a Collector Road Type A in the TPLM Structure Plan (see paragraph 10 above).
- 22 I do not agree with Mr Smith that sub areas C, D, E, F, G and J cannot be developed until the bus stops west of SH6/Stalker Road intersection are complete, since these sub areas are more than a 400m walk distance from these bus stops and for these sub areas to be developed the TPLM Variation provisions require bus stops to be provided either at the SH6/Howards Drive intersection or the eastern roundabout.
- 23 I do not agree with Mr Smith that sub areas C, D, E, F, G and J cannot be developed until the safe pedestrian/cycle crossing at SH6/Stalker Road intersection are complete, since these crossings are intended for residents to access the bus stops and, as outlined above, these sub areas will have provided active travel improvements to bus stops at SH6/Howards Drive or the eastern roundabout.

'Central Package 2'

- 24 In light of the agreement with NZTA (and with all of the transport experts) I have slightly reworded the description of the SH6/Howards Drive intersection upgrade provision to include signalisation. I have also amended slightly the wording of the pedestrian/cycle crossing to reflect the proposed signalisation of the intersection and removed reference to the '*key crossing*' given removal of the underpass as agreed with NZTA and all the transport experts.
- 25 I do not agree with Mr Smith that sub areas F and G cannot be developed until all three of these provisions are complete for the reasons as set out in paragraph 19 above.

Stalker Road bus priority

- 26 I do not agree with Mr Smith that sub areas F and G cannot be developed until all three of these provisions are complete for the reasons as set out in paragraph 19 above.

Sub-Area H2

- 27 If the total number of units at H2 is increased from 108 to 140 (as sought by Koko Ridge Limited in response dated 15 December 2023) bringing this sub area more in line with medium density housing, then I consider that the following provisions to provide mode choice are required to be complete before development at H2 (which would be in line with the infrastructure upgrades required for MDR Precinct to the north side of SH6):
- (a) NZUP westbound bus lane Howards Drive to Shotover Bridge.
 - (b) Bus stops at SH6/Stalker Road.

- (c) Stalker Road bus priority (see paragraph 31 below).
- (d) NZUP package west of Shotover bridge.

Response to new matters raised by David Finlin at the Hearing

- 28 At the hearing Mr Finlin queried the timing and provision of the transport infrastructure tied to the development to Sub-Areas F and G (i.e. Eastern Roundabout package) and requested that the Eastern Roundabout package is tied with provision of westbound bus lane, and other works required for Sub-Areas A, B, C, E, F and G.
- 29 I do not consider any changes need to be made to the transport infrastructure trigger provisions. I remain of the view that the Eastern Roundabout works are required only for sub areas F and G since this forms the main access into F and G rather than to the other sub areas. I remain of the view that the westbound bus lane between the eastern roundabout and Howards Drive is required only for sub areas F and G since this will provide the necessary improved bus journey time and reliability for these two sub areas on the approach to the SH6/Howards Drive intersection. The Sidra assessments provided in my EIR indicated there would still be residual queues and delays on SH6 and therefore a westbound bus lane would encourage mode shift by offering improved bus journey times compared to using a private vehicle.

Response to matters raised by Anna Hutchison Family Trust following the Hearing

- 30 I have reviewed the response submitted by AHFT dated 18 December 2023. My overall position is unchanged. However, should the Panel be minded to include the AHFT land within the TPLM Variation, I remain of the view that access to this land can be provided without any change required to the TPLM Variation Structure Plan (as shown in Concept 1 of Mr Harland’s Response to Panel questions dated 24 November 2023).

Transport infrastructure required for AHFT land

- 31 In the information dated 18 December 2023, AHFT have noted the following transport infrastructure should be required (under amendments to rules 49.5.10 and 49.5.33):
- (a) For Sub-Area K generally (i.e. K1 and K2):
 - (i) Bus stops on State Highway 6, west of the Stalker Road intersection.
 - (ii) Safe pedestrian cycle crossing of State Highway 6 west of Stalker Road intersection.
 - (iii) Upgrades to the existing SH6 / Stalker Road intersection.
 - (iv) Appropriately upgraded Intersection on Lower Shotover Road at Spence Road.
 - (v) Dedicated westbound bus lane on State Highway 6.
 - (b) For Sub-Area K1 specifically (LDR Precinct):
 - (i) Active travel link to State Highway 6 Bus Stops.
 - (ii) Access intersection from either Lower Shotover Road or Spence Road.
 - (c) For Sub-Area K2 specifically (MDR Precinct):
 - (i) Active travel link between; Lower Shotover Road, the Bus Stops on State Highway 6, Sub-areas K1 & K2 and the Old Shotover Bridge.

- (ii) Access intersections from both Lower Shotover Road and Spence Road, these access intersections are to be linked through Sub-area K2 to enable a loop road.
- 32 Should the Panel be minded to include the AHFT land within the TPLM Variation, then in addition to the infrastructure put forward by AHFT (as outlined in paragraph 29 above) I recommend the addition of the following provisions:
- (a) Stalker Road bus priority – this will be required to provide improved journey times and reliability for buses serving the proposed bus stops on SH6.
 - (b) NZUP package west of Shotover Bridge – as agreed with NZTA this provision is required to provide improved journey times and reliability for eastbound buses serving the proposed bus stops on SH6.

Response to matters raised by Koko Ridge Ltd following the Hearing.

Changes proposed to TPLM provisions as set out in Mr Devlin’s response dated 15 December 2023

- 33 I understand that this will increase the total number of units at H2 from 108 to 140. I have assessed the impact of these additional units at H2 within the Sidra model for the SH6/Stalker Road traffic signal option. This indicates an increase in queue lengths on Stalker Road in the AM Peak. On this basis, and in light of the proposed changes to the TPLM Variation provisions, I would recommend that H2 cannot be developed until the Stalker Road northbound bus lane is implemented to provide improved journey times and reliability for buses.
- 34 As stated at paragraph 28, as the increased density brings this sub area more in line with medium density housing to the north of SH6, then I consider that the following provisions providing mode choice are required to be complete before development at H2:
- (a) NZUP westbound bus lane Howards Drive to Shotover Bridge.
 - (b) Bus stops at SH6/Stalker Road.
 - (c) Stalker Road bus priority (see paragraph 32 above).
 - (d) NZUP package west of Shotover bridge.
- 35 I also agree with Mr Lowe’s suggested changes to the active travel links indicated in his written reply, to better link H2 to the SH6 bus stops.

Response to Ladies Mile Property Syndicate:

Although not contained in Mr Parlane’s written summary or his evidence, following Panel questioning, Mr Parlane commented that there is no evidential basis or academic research that restrictions on parking (including for residential units) correlates to a mode shift.

- 36 There is a wide body of NZ and international research and policy evidence that I used to inform the TPLM Variation Transport Strategy and provisions regarding use of maximum car parking rates for residential and commercial uses to promote mode choice. Below are some examples:
- a) UK research ([Reducing car use through parking policies: an evidence review \(climatexchange.org.uk\)](https://climatexchange.org.uk)) concluded that restrictive low car and car free housing can “reduce car modal split by 25-50% compared to a baseline where there is ample free parking; and the probability of owning a car also reduced by a similar order of magnitude for residents of car-reduced developments, or for those whose car parking space is on-street or 50m or more from their home, compared

to those who have a car parking space directly at home”. This included research where residential developments provided 0.5, 1 and 1.5 parking spaces per residential unit (i.e. compatible with that proposed in the TPLM Variation).

- b) NZTA Keep Cities Moving ([Keeping cities moving: Increasing the wellbeing of New Zealand's cities by growing \(nzta.govt.nz\)](#)) where the key lessons from the research carried out within this document on mode shift indicated “*that political and public support for challenging changes, such as removing parking, reallocating road space or restricting traffic is vital. These changes are as important as delivering new infrastructure or services*”. It also found that “*programmes that focus on reducing car dependency are having tangible safety benefits*”.
- c) NZTA Parking management ([Chapter Title \(nzta.govt.nz\)](#) “*By using planning criteria that set out a maximum parking standard or maximum number of spaces for a particular facility, alternative modes of transport become more desirable and the land otherwise used for parking can be used for other purposes.*”
- d) Australian research and strategy ([Committee-for-Sydney-Better-Parking-for-Better-Places-August-2022.pdf](#)) identifies the need to provide maximum parking rates to encourage the use of active and public transport modes. It concludes that “*around the world, cities are shifting from minimum to maximum parking requirements. In the same way that building more roads leads to higher traffic volumes, it is now recognised that building more parking leads to higher rates of car ownership. New parking supply does not ease the pressure of parking demand, it creates more demand*”.
- e) Australian research ([banfield1997carparking.pdf \(uts.edu.au\)](#)) concluded “*that restriction of parking, in concert with promotion of other modes, will sway a potential motorist away from using the car in favour of alternatives. This is particularly appropriate in higher density areas well served by public transport where impacts of car use are high and alternatives to the car are available.*”
- f) Australian research ([Car parking is choking our cities, and we're paying for the privilege \(foreground.com.au\)](#)) found that “*access to private household parking facilities triples the likelihood of car ownership, whereas increasing the distance between parking and destinations reduces car mode share*”.
- g) Norwegian research ([main.pdf \(sciencedirectassets.com\)](#)) concluded that “*maximum norms can reduce car ownership and thereby reduce congestion and emissions*”.
- h) USA research, ([Study: The Strongest Evidence Yet That Abudant Parking Causes More Driving - Bloomberg](#)) indicates that “*parking provision in cities is a likely cause of increased driving among residents and employees in those places*”. Authorities should “*consider policies designed to limit parking to its strictest natural demand. These include the elimination of minimum parking requirements, the use of maximum parking requirements in some places, and the implementation of market-based pricing*”. Engineering NZ Transportation group [Microsoft Word - Genter, Schmitt, Don Parking IPENZ.doc \(transportationgroup.nz\)](#) - covered the current best practice principles and strategies of the new parking management paradigm.

37 The above research and NZTA transport policy evidence clearly shows a link between restrictive car park rate maximums (in both residential and commercial areas) and a reduction in the car mode share. Furthermore, NZTA policy clearly supports restrictive car parking standards including use of car park maximum rates.

38 Based on the above evidence and NZTA policy guidance, I remain of the view that carpark maximum rates for the residential uses are required to achieve mode change at TPLM Variation.

Response to Doolytle and Son Limited:

39 I understand that Mr Brown has considered recommending that the submitters' land on Howards Drive is rezoned to High Density Residential Zone (as per the PDP).

40 From a traffic perspective, I can support this zoning of the submitters' site if residential development is contingent on the provision of the following:

- (a) QLDC engineering design standard compliant site access from Howards Drive.
- (b) Provision of sealed footpath on Howards Drive between the site access and SH6 to provide a safe walking route to the proposed bus stops on SH6.
- (c) Provision of sealed footpath on Howards Drive between the site access and the Jones Avenue intersection to provide a safe walking route to the existing bus stops on Jones Avenue and to the Kawarau Park Centre.

41 I consider that this is a suitable site as PDP High Density Residential Zone given the close proximity (circa 300m) to existing bus stops on Jones Avenue and the proposed bus stops on SH6 west of Howards Drive. The site is also in close proximity (circa 250m) from existing local facilities at the Kawarau Park Centre, is adjacent to the proposed TPLM sports hub and is in close proximity (400m) of the proposed TPLM Commercial Precinct and anticipated school.

42 I do not consider the size of the site large enough to result in a scale of high density residential units that would require the transport interventions included in the TPLM planning provisions. However, given the existing lack of a sealed footpath on Howards Drive, then active mode improvements on Howards Drive will be required before these residential units are complete, along with a suitable and safe site access from Howards Drive.

Colin Robert Shields

25 January 2024