

BEFORE THE HEARING PANEL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Proposed Plan Change 5 to the Operative Hamilton
City District Plan

**REBUTTAL STATEMENT OF EVIDENCE OF ALASTAIR JAMES BLACK
(TRANSPORT)**

Dated 22 September 2022

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INTRODUCTION

1. My full name is Alastair James Black.
2. My experience and qualifications are set out at paragraphs 1 to 3 of my statement of evidence dated 2 September 2022 (**primary evidence**).
3. I repeat the confirmation given in my primary evidence that I have read, and agree to comply with the Code of Conduct for Expert Witnesses in the Environment Court, Practice Note 2014.
4. In this rebuttal evidence, which I provide on behalf of Hamilton City Council (**HCC**) as the proponent of Plan Change 5 (**PC5**), I respond to the evidence of:
 - a) Mr Tony Penny.
 - b) Mr Andrew Carnell and Ms Hannah Craven.
 - c) Mr Don McKenzie (as it relates to the submission of Woolworths New Zealand Limited (**Woolworths**)).
 - d) Mr Wayne Bredemeijer.
5. I have read the statements of evidence provided by:
 - a) Mr Tony Penny for the Adare Company Limited.
 - b) Mr Wayne Bredemeijer for the Adare Company Limited.
 - c) Mr Andrew Carnell for Waikato Regional Council.
 - d) Ms Hannah Craven for Waikato Regional Council.
 - e) Mr Don McKenzie on behalf of Woolworths.

- f) Mr Don McKenzie on behalf of submitters Peacocke South Limited, Northview Capital Limited and Jones Lands Limited.
- g) Ms Renee Fraser-Smith on behalf of submitters Peacocke South Limited, Northview Capital Limited and Jones Lands Limited.
- h) Rachel Dimery on behalf of submitters Cordyline Holdings Limited.
- i) Sara Brown on behalf of submitters WEL Networks Limited.

CORRECTIONS

- 6. I would like to make the following correction to my primary evidence:
 - a) Appendix 1, Section 4.6: The first sentence of the second paragraph should read “A blanket approval of transport corridors with 5.6m wide carriageways is not appropriate.” Mr Penny¹ refers to this statement in his evidence.
- 7. Throughout his evidence Mr Penny has identified some errors in the S42A report version of Table 15-6b that are inconsistent with the recommendations of my primary evidence (Appendix 1 of my Review of Transport Submissions). I support the corrections to the version of Table 15-6b provided in the S42A report identified by Mr Penny as follows:
 - a) The berm width for Minor Arterials should be 11.1m².
 - b) The berm width for Collectors with PT should be 8.9m³.

¹ Evidence of Mr Penny, paragraph 25.

² Evidence of Mr Penny, paragraph 16.

³ Evidence of Mr Penny, paragraph 20.

- c) The Open Space Edge corridors should have a total width of 11.4m including a 5.6m carriageway and berms of 3.3m and 2.5m⁴.
 - d) Delete the ownership qualifier for private ways⁵.
8. I have adopted the corrections to the numbering and spelling of the footnotes to Table 15-6b identified by Mr Penny. The footnotes currently shown on page 15-56 relate to Table 15-6a and I recommend that they should be relocated to directly follow Table 15-6a along with the introduction of the text "*Footnotes to Table 15-6a*" to improve the clarity of the District Plan.

EVIDENCE OF MR TONY PENNY

Collector Transport Corridors

9. I do not support the narrower carriageway widths for collector transport corridors sought by Mr Penny. I disagree with Mr Penny⁶ that the Auckland design standard requires wider lanes due to vehicle size. The design code refers to FTN (**Frequent Transit Network**) or heavy freight route. In my opinion, this indicates that frequency of movements by bus or heavy vehicles is the relevant factor to consider not whether "*very large buses*" will use the corridor.
10. I agree with Mr Penny⁷ that the clarity of Table 15-6b would be improved by reflecting the legal road width and berm widths for both cycle options (i.e. bi-directional cycleway and cycle lanes).

⁴ Evidence of Mr Penny, paragraph 33.

⁵ Evidence of Mr Penny, paragraph 56.

⁶ Evidence of Mr Penny, paragraph 19.

⁷ Evidence of Mr Penny, paragraph 21.

Local Transport Corridors

11. I do not support the narrower carriageway width for local transport corridors sought by Mr Penny. As described in my primary evidence (Appendix 1, Section 4.6) there is clear guidance that 3m lane widths are appropriate in urban environments.
12. I disagree with Mr Penny's⁸ approach to including the width of recessed parking within the carriageway width. Note 3 to Table 15-6b states that the carriageway width is to exclude recessed parking.

Neighbourhood Streets

13. I do not support the changes sought by Mr Penny for neighbourhood streets as his proposed threshold with local transport corridors is unclear and the cross-section is inconsistent with best practice as described in the Waka Kotahi Aotearoa Urban Street Planning and Design Guide.
14. I do not support Mr Penny's proposed amendments to Table 15-6b as they do not clearly describe a threshold to differentiate local roads from neighbourhood streets. The need for a threshold was agreed in the Planning and Transport (2) Joint Witness Statement dated 23 August 2022 (JWS)⁹. Through the addition of footnotes 10, 13 and 14 Mr Penny appears to be attempting to introduce a threshold. In my view, it is unclear how footnotes 13 and 14 are to be interpreted and a how decision is to be made on whether the transport corridor should be two or three cars wide.
15. At his proposed footnote 10 Mr Penny seeks that the neighbourhood street guidance be applied to *"...a cul-de-sac up to 150m in length or a road with dual connectivity up to 250m in length provided that there is little or no*

⁸ Evidence of Mr Penny, paragraph 28.

⁹ JWS Planning and Transport (2), 23 August 2022, section 3.3.

through traffic". This is inconsistent with his evidence¹⁰ that "... *two car widths applies to shorter Neighbourhood Streets (say up to 75m for a cul-de-sac and 125m for a dual access road)*". I do not support this new footnote. As discussed in my primary evidence (Appendix 1, Section 4.7), I prefer a precautionary approach to the use of neighbourhood streets, and I consider my proposed threshold of 20 dwellings or up to 100m appropriate.

16. I do not consider it necessary to provide design guidance for culs-de-sac because SUB-PREC1-PSP P10(6) seeks to "*Minimise the use of culs-de-sac to where there are no alternatives due to clearly demonstrable topographical constraints*". I consider that site-specific design will achieve the best outcome in these constrained situations.
17. I consider that Mr Penny's proposed cross-sections with carriageways of 7.9-8.5m will result in higher vehicle speeds. A research project¹¹ in Auckland found that narrower roads (defined as having carriageway $\leq 6\text{m}$) were generally operating within the desirable 30km/h design speed, in contrast to 40-50km/h for conventional roads with carriageway widths of 7.4-11.1m. In my opinion it is difficult to see how his desired design speed environment of 20km/h will be achieved for carriageways 7.9-8.5m wide.
18. In my view Mr Penny¹² understates the influence that other transport corridor design elements can have on vehicles speeds. Austroads¹³ identifies the following factors influence vehicle speed: gradients, sight lines, location and spacing of traffic management devices, pedestrian and cycle treatments, signs and line marking, and landscaping.
19. I consider that Mr Penny's proposed cross-sections for Neighbourhood Streets are inconsistent with the Waka Kotahi Aotearoa Urban Street

¹⁰ Evidence of Mr Penny, paragraph 44.

¹¹ Narrow Road: Implications for Auckland Transport, Vaisht, P & Prasad M. IPENZ Transportation Group Conference 2018.

¹² Evidence of Mr Penny, paragraph 46.

¹³ Austroads, Guide to Traffic Management Part 8: Local Street Management, Section 9.

Planning and Design Guide (**the Guide**) for 'local street – suburban residential street' as he seeks:

- a) 12.2m wide corridors, lower than the 14m-20m range in the Guide.
 - b) Design speed of 20km/h, lower than the recommended 30km/h. The Waka Kotahi Speed Management Guide: Road to Zero Edition (July 2022)¹⁴ identifies the Safe and Appropriate Speed for local streets as 30km/h.
 - c) A footpath on one side. The Guide clearly states that footpaths should be provided on both sides of the street. I consider that only providing one footpath does not support the mode shift related objectives and policies of PC5.
 - d) Seeks that no recessed parking be provided. The Guide illustrates recessed parking on at least one side of the road.
20. In my opinion the typology that Mr Penny is seeking (i.e. narrow carriageway, very slow speed, parking shared in the movement space and up to 250m in length) is already provided for through the rear lane category. I consider that rear lanes provide advantages over his proposed Neighbourhood Street as:
- a) They have a design speed environment of 10km/h.
 - b) They will be designed as a shared space improving safety for all road users.
 - c) SUB-PREC1-PSP:R22 requires dwellings with access to a rear lane to have a separate pedestrian access. This reduces the likelihood of pedestrian-vehicle interaction that could arise from only providing a footpath on one side of the road.

¹⁴ <https://www.nzta.govt.nz/resources/speed-management-guide-road-to-zero-edition/>, Table 2

21. As discussed in my primary evidence¹⁵, I consider that Neighbourhood Streets with 5.6m wide carriageways should be considered on a site-by-site basis that allows the specific place and movement context to be considered.

Rear Lanes

22. Mr Penny¹⁶ considers that the berm requirements for rear lanes should be 'One side' rather than 'N/A'. In my experience rear lanes do not have a dedicated berm as the lane is formed as a shared space with the service corridor provided within the shared space. In my opinion there is no need to provide any comment on the location or size of the berm for rear lanes and consider that the proposed description of N/A is appropriate.

EVIDENCE OF MR ANDREW CARNELL AND MS HANNAH CRAVEN

23. The s42A report has adopted my earlier initial responses to the WRC Submission 36.75 which were superseded by primary evidence (Appendix 1). I confirm my responses to SUB 36.75 as follows:
- a) Item (1) – stops not within major arterial design. Potential catchment/ridership limited by land uses including retirement village, open space and water treatment plant. Bus stop would likely require underpass for pedestrian access.
 - b) Item (2) – amend structure plan map to reflect current design for Peacockes Road.
 - c) Item (3) – map shows the bus stops included on the construction/tender drawings.

¹⁵ Evidence of Mr Black, paragraphs 54-57 and Appendix 1, Review of Transport Submissions, Section 4.7

¹⁶ Evidence of Mr Penny, paragraphs 52 and 53.

24. For the reasons set out in my primary evidence¹⁷, I disagree with Mr Carnell¹⁸ and Ms Craven¹⁹ on whether a bus stop should be shown where Weston Lea Drive is severed.
25. Approximately half of the area shown by Mr Carnell as 'poor access to public transport' is consented as a retirement village. The extent of the retirement village site is shown in my primary evidence²⁰ and I have shown it on Mr Carnell's figure using light green shading and added the access points as yellow stars. In my assessment two of the three retirement village accesses are with a 600m walk to bus stops. The third access is a secondary access to the dementia and hospital unit.

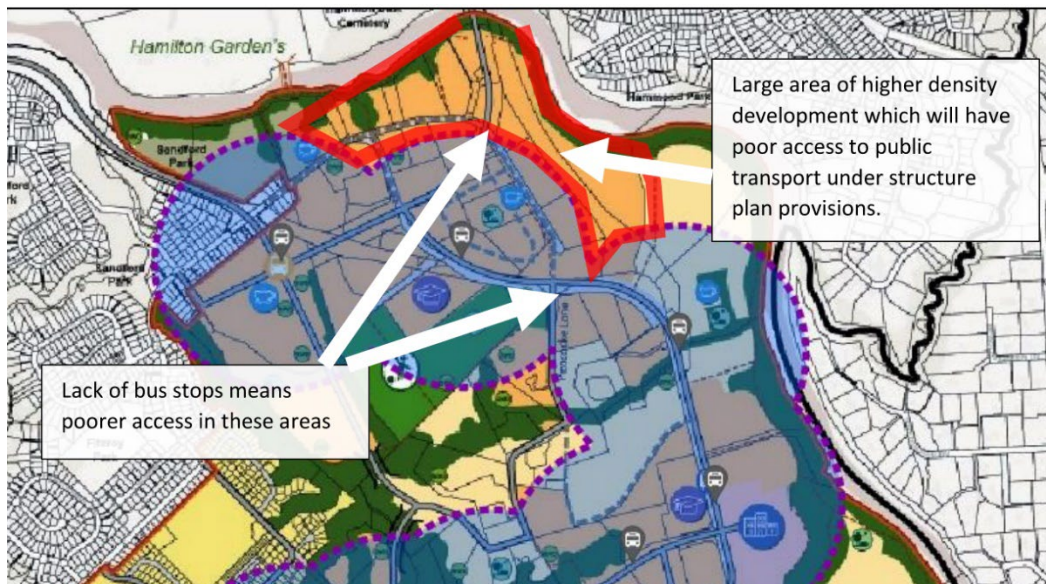


Figure 1: Peacocke Public Transport Access map (source: evidence of Mr Carnell)

26. I do not support including a bus stop on the major arterial because:
- a) Much of the potential catchment east of the major arterial has been consented as a retirement village (including a dementia and hospital unit).

¹⁷ Evidence of Mr Black, Appendix 1, Review of Transport Submissions, Section 6.2.2.

¹⁸ Evidence of Mr Carnell, paragraph 33.

¹⁹ Evidence of Hannah Craven, paragraph 61.

²⁰ Evidence of Mr Black, Appendix 1, Review of Transport Submissions, Figure 11.

- b) The retirement village has two accesses within a 600m walk of a bus stop.
 - c) The catchment west of the minor arterial is limited in size and the land uses include proposed natural open space and the HCC water treatment plant.
 - d) This section of the major arterial is under construction and safe pedestrian access to/from the stop would likely require an underpass to be constructed. I am not aware of any proposals to provide an underpass in this location, meaning that retrofitting at significant cost would be required.
 - e) The other bus stops shown have a higher degree of certainty compared to Mr Carnell's proposed bus stop. For example the stops on the minor arterial are included in the construction drawings for Peacockes Road and Whatukooruru Drive.
27. Mr Carnell²¹ and Ms Craven²² seek an additional bus stop on the minor arterial near the intersection with Peacocke Lane. Figure 2-2 identifies Peacocke Lane as a 'Proposed Public Transport Route'. I expect that bus stops will be provided on Peacocke Lane to serve the area south-west of the minor arterial that Mr Carnell has identified as having 'poorer access'. I consider that this will achieve the outcome sought in the P13 of the Regional Passenger Transport Plan. I do not support the introduction of a additional bus stop at this location.
28. I agree with Mr Carnell²³ that where possible the indicative cycleway/walkway routes should be relocated to provide more direct connections to the relocated bus stops on the east-west minor arterial. I note that the

²¹ Evidence of Mr Carnell, paragraph 34

²² Evidence of Ms Craven, paragraph 61

²³ Evidence of Mr Carnell, paragraphs 37-38

intersection arrangements on part of the east-west minor arterial are subject to on-going discussions between Cordyline and HCC. This may result in changes to the location of walking and cycling connection from those currently shown on Figure 2-2. On the western side of the east-west arterial, the proposed walking and cycling connection aligns with the Hall Road road reserve. There may be opportunities to relocate this connection at the time the adjacent land is subdivided.

EVIDENCE OF MR WAYNE BREDEMIJER FOR THE ADARE COMPANY

29. I understand that Woolworths are seeking that the Local Centre Zone be expanded to include their property in the southwest corner of the Whatukooruru Drive/Peacockes Road intersection.
30. Mr Bredemeijer's²⁴ comments on the status of the Peacockes Road construction works. I can confirm that the construction tender for these works has been awarded with construction expected to commence on 1 October 2022 and is expected to take 2 to 3 years.
31. The planned works include:
 - a) A raised signalised intersection at the Whatukooruru Drive/Peacockes Road intersection which includes protected facilities for pedestrians and cyclists.
 - b) A raised zebra crossing of Peacockes Road at the public transport facility.
 - c) A raised signalised intersection north of the local centre facilitating access to the adjacent residential area.

²⁴ Evidence of Mr Bredemeijer, paragraph 33(c).

- d) A posted speed limit of 40km/h on Peacockes Road (north) except in the vicinity of schools where the speed limit will be 30km/h. This means that the speed limit at the Whatukooruru Drive/Peacockes Road intersection will be 30km/h.
 - e) A posted speed limit of 50km/h on Whatukooruru Drive.
32. Based on discussions with HCC staff directly involved in the project I understand that the Whatukooruru Drive/Peacockes Road intersection was designed to facilitate safe pedestrian and cycle movements based on land uses including a Local Centre on the eastern side of Peacockes Road and a school and high density residential on the western side. They understood there was the potential for the residential activity to be replaced by a supermarket.
33. In my opinion the planned works will provide a slow speed environment that provides multiple opportunities for pedestrians and cyclists to safely cross Peacockes Road.
34. Design for Peacockes Road south of the Whatukooruru Drive intersection has not been developed. This section of Peacockes Road is expected to be progressively upgraded as the adjacent land is developed. This provides an opportunity for the transport corridor design to respond to the actual land use and site layout. For example, this may include signalling the Peacockes Road/Bridge Street intersection which would provide an opportunity for this short section of Peacockes Road (approx 170m) to be designed to support a 30km/h speed limit adjacent to the Local Centre.



Figure 2: Peacocke Local Centre Concept – Option 1: One large supermarket south²⁵

35. I have reviewed the three Peacocke Local Centre Concept plans attached to Mr Bredemeijer’s evidence²⁶. I have identified transport concerns which I discuss later in this statement. In my opinion providing direct access for a supermarket from either Peacockes Road or Whatukooruru Drive will be challenging unless robust projection for the walking and cycling facilities is provided.
36. In my opinion, it is unlikely that a change from residential to town centre land use would lead to significant changes in the form of the intersection.

²⁵ Evidence of Mr Bredemeijer, Appendix G Conceptual design options for the Peacocke Local Centre.

²⁶ Evidence of Mr Bredemeijer, Appendix G Conceptual design options for the Peacocke Local Centre.

EVIDENCE OF MR DON MCKENZIE ON BEHALF OF WOOLWORTHS NEW ZEALAND LIMITED

37. Mr McKenzie²⁷ supports the relief sought by Woolworths from a transportation point of view for three reasons:
- a) Activity connections and pedestrian safety through the intersection;
 - b) Potential reduction of traffic movements through the intersection and along the Local Centre "Main Street"; and
 - c) Potential for enhanced connectivity to the local road network.
38. As described by Mr McKenzie²⁸, I understand that the Whatukooruru Drive/Peacockes Road intersection will include a raised intersection with signalised pedestrian crossing phases and separated cycle facilities. I consider that this design is consistent with the Safe System approach for the design of signalised intersections. In my view there is no reason to expect adverse safety effects for pedestrians or cyclists crossing at the intersection who may be accessing the bus stop on the western side of Peacockes Road or a potential supermarket. This aligns with Mr McKenzie's opinion²⁹.
39. Mr McKenzie's³⁰ view is that the relief sought by Woolworths will reduce the number of heavy vehicle trips at the Whatukooruru Drive/Peacockes Road intersection and along the "Main Street". He has not quantified the number of heavy vehicle trips or the potential benefits.
40. I agree that the relief sought would avoid the need for supermarket related trips by heavy vehicles to use the "Main Street". However, the number of heavy vehicle trips generated by the supermarket is likely to be low

²⁷ Evidence of Mr McKenzie, paragraph 2.13.

²⁸ Evidence of Mr McKenzie, paragraph 5.3.

²⁹ Evidence of Mr McKenzie, paragraph 6.2.

³⁰ Evidence of Mr McKenzie, paragraphs 4.3-4.6.

compared to trip generation of the Local Centre and I consider that the benefits for the “Main Street” are more related to pedestrian amenity than safety or efficiency.

41. Similarly, I consider that the relief sought may have a small reduction in heavy traffic at the Whatukooruru Drive/Peacockes Road intersection, and therefore any transport benefits, are likely to be small.
42. I have reviewed the Urbanismplus diagram titled "Peacocke Local Centre Concept - August 2022" (**Concept Plan**) attached to the Planning, Retail Economics and Urban Design (Local Centre) Joint Witness Statement (dated 25 August 2022). This provides an indicative design for the transportation elements of the transport network and the layout and positioning of the supermarket fronting Peacockes Road.
43. I am concerned that a supermarket on the western side of Peacocke Road may reduce the ability for people to visit multiple activities with a single vehicle trip. For example, based on the Concept Plan layout someone making a single vehicle trip to the local centre could visit multiple activities within the centre.
44. In my experience, supermarkets often limit parking within their site to their customers. For example, the Countdown located on Peachgrove Road in Hamilton includes signs stating, *“Customer Parking Only 120 minutes. Vehicles exceeding this limit will be towed away at the owners expense.”* If the supermarket were located on the western side of Peacockes Road, it is possible that visitors would be required to make another vehicle trip to visit activities on the eastern side of Peacockes Road to avoid enforcement action by the supermarket.

45. I share Mr McKenzie's³¹ transport concerns with the Concept Plan. These concerns also apply to the updated concepts attached to Mr Bredemeijer's evidence³². My transport concerns are that:
- a) The loading dock will require extended reverse manoeuvring of heavy vehicles to access the loading dock.
 - b) There is no obvious space for other service vehicles to wait/queue if there is already a vehicle at the loading dock.
 - c) The entry driveway is close to the signalised intersection which leads to the potential for adverse safety effects arising from slow moving and manoeuvring vehicles. However, I consider that this is partially addressed through design of the Whatukooruru Drive/Peacockes Road intersection which includes a raised intersection that will manage vehicle speeds reducing the likelihood and severity of any crash that may occur.
 - d) Service vehicles will be required to cross the separated cycle lane and footpath to access the supermarket site and protection for the walking and cycling facilities will be required. My preference is for all service vehicle movements to take place from a local/side road, not Peacockes Road.
 - e) The loading dock exit is parallel to and located close to Peacockes Road. Based on my experience in reviewing other consent applications, the tracking for a semi-trailer vehicle exiting the loading dock and heading north from the site looks challenging. There does not appear to be sufficient space for a semi-trailer vehicle to align themselves perpendicular to Peacockes Road. This is required to ensure that the driver has a clear visibility in both directions.

³¹ Evidence of Mr McKenzie, paragraph 5.7.

³² Evidence of Mr Bredemeijer, Appendix G Conceptual design options for the Peacocke Local Centre.

- f) All three concepts attached to Mr Bredemeijer's evidence³³ include an exit from the service lane which is not shown on the Concept Plan attached to the Planning, Retail Economics and Urban Design (Local Centre) Joint Witness Statement. In my opinion introducing another access point is undesirable as it increases the potential for conflict with pedestrians and cyclists. The layout appears to restrict exit movements to left-out meaning any vehicles wanting to head north would need to circulate around a block.
- g) I am concerned that Mr Bredemeijer's options for a second supermarket appear to require service vehicles to reverse across footpaths in the Local Centre or within the carpark which increases the risk of conflict with pedestrians.
46. In summary, I consider the transport benefits described by Mr McKenzie on the Whatukooruru Drive/Peacockes Road intersection and along the "Main Street" from granting the relief sought by Woolworths are likely to be small.
47. I agree with Mr McKenzie that there is no reason to expect adverse safety effects for pedestrians or cyclists crossing at the signalised intersection
48. I agree with Mr McKenzie that there are transport concerns with the proposed layout shown on the Concept Plans prepared by Mr Bredemeijer. My preference is for all service vehicle movements to take place from a local/side road, not Peacockes Road.

³³ Evidence of Mr Bredemeijer, Appendix G Conceptual design options for the Peacocke Local Centre.

CONCLUSION

49. I do not support the narrower carriageway and cross-section widths sought by Mr Penny for collector and local transport corridors.
50. I do not support Mr Penny's proposed changes for Neighbourhood Streets as the proposed threshold with local transport corridors is unclear and the proposed cross-section is inconsistent with best practice as described in the Waka Kotahi Aotearoa Urban Street Planning and Design Guide.
51. I support the corrections identified by Mr Penny to the s42A Report version of Table 15-6b.
52. I agree with Mr Penny that the clarity of Table 15-6b would be improved by reflecting the legal road width and berm widths for both cycle options (i.e. bi-directional cycleway and cycle lanes).
53. For the reasons set out at paragraphs 26 and 27 above, I do not support the introduction of additional bus stops on the arterial network sought by Mr Carnell.
54. I do agree with Mr Carnell that where possible the indicative cycleway/walkway routes should be relocated to provide more direct connections to the relocated bus stops on the east-west minor arterial. However, I note that the location of these indicative connections may change as the adjacent land is subdivided.
55. In my opinion the design of Peacockes Road provides a slow speed environment that provides multiple opportunities for pedestrians and cyclists to safely cross Peacockes Road.
56. I consider the transport benefits of the relief sought by Woolworths on the Whatukooruru Drive/Peacockes Road intersection and along the "Main Street" are likely to be relatively small.

57. Overall, I confirm the conclusion of my primary evidence that the proposed framework of PC5 is flexible enough to allow the transport network to be constructed to meet best practice principles related to safety, coherence, directness, attractiveness and amenity which will assist in encouraging mode shift.

Alastair Black

22 September 2022