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

---

STATEMENT OF EVIDENCE OF ALASTAIR JAMES BLACK (TRANSPORT)

Dated 2 September 2022

LACHLAN MULDOWNEY
BARRISTER

P +64 7 834 4336 **M** +64 21 471 490
Office Panama Square, 14 Garden Place, Hamilton
Postal PO Box 9169, Waikato Mail Centre, Hamilton 3240
www.lachlanmuldowney.co.nz

INTRODUCTION

1. My full name is Alastair James Black. I hold a Bachelor of Engineering degree (Civil, 2002) from the University of Canterbury. I am a Chartered Member of Engineering New Zealand (CMEngNZ) and a Chartered Professional Engineer (CPEng). I have worked in the transportation field for 20 years.

2. I am based in Hamilton and have worked for Gray Matter Ltd as a transportation engineer since March 2009. For two years prior to that I was a Project Engineer for the London Borough of Hammersmith and Fulham. For the previous six years I was a civil/transportation engineer with Opus International Consultants Ltd in Hamilton.

3. I am familiar with the transport issues arising in and around Hamilton, having provided advice to Hamilton City Council (**HCC**), Waipa District Council, Matamata Piako District Council, Waikato District Council, and other local authorities. I have also provided advice to Waka Kotahi and developers on a range of transport related projects in the area.

4. I have provided two reports assessing transportation matters arising under the proposed Plan Change 5 to the Operative Hamilton District Plan (**PC5**):

    a) Plan Change 5 Peacocke Integrated Transport Assessment, Issue 1, dated 3 August 2021 (**ITA**) which is Appendix P to the PC5 Assessment of Environmental Effects (**AEE**); and

    b) Plan Change 5 Peacocke Review of Transport Submissions, Issue 1, dated 31 August 2021 which is **Attachment 1** to my evidence (**Review of Transport Submissions**).

5. I participated in Expert Witness Caucusing for Planning and Transport as documented in the Joint Witness Statements (**JWS**) dated 19 August 2022 and 23 August 2022.

CODE OF CONDUCT

6. I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2014 and agree to comply with it. I confirm that the opinions expressed in this statement are within my area of expertise except where I state that I have relied on the evidence of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

SCOPE OF EVIDENCE

7. The purpose of this statement of evidence, presented on behalf of HCC as PC5 proponent, is to summarise my ITA, respond to matters raised in submissions and comment on the updated PC5 provisions.

8. This evidence focuses on the following transport topics:

   a) Plan change effectiveness;

   b) Design criteria;

   c) Criteria for new types of transport corridor;

   d) Rear lanes;

   e) Location of indicative transport corridors, including the Ohaupo Road/ Hall Road intersection;

   f) Public transport.

9. A detailed response to each transport related submission point is provided at Appendix 2 to my Review of Transport Submissions.

EXECUTIVE SUMMARY

10. The ITA highlights that the success of Hamilton's transport system relies on creating a new approach for multi-modal (different types of transport) movement. The Peacocke area will be developed in line with Hamilton's vision for accessibility set out in Access Hamilton and is consistent with Vision Zero for road safety.

11. In a transport sense this means providing a multi-modal transport network within Peacocke that provides access to frequent public transport on key routes, and a direct and accessible walking and cycling network that is safe and enjoyable to use.

12. Key transport features that distinguish Peacocke from the Operative District Plan provisions are:

    a) Designing the transport system to prioritise safety and prioritise pedestrians and cyclists over vehicles.

    b) Wider footpaths on local corridors.

    c) Separated cycle lanes on collector and minor arterial corridors.

    d) Identification of public transport routes so that infrastructure can be provided at the time of subdivision.

    e) Bus stops are to be provided in-lane to minimise delays to the public transport services.

13. The RMA (Enabling Housing Supply and Other Matters) Amendment Act 2021 results in changes that may impact on the safety and attractiveness

of pedestrian and cycle facilities. I recommend that new assessment criteria be introduced to manage the:

a) Potential effects arising from closely spaced vehicle crossings.

b) Risk of parked vehicles blocking the footpath due to in appropriate design of on-site parking.

c) Potential for rubbish, food-scraps, and recycling bins to block footpaths or cycleways adversely impacting on the attractiveness and safety of these facilities.

14. In response to submissions, I recommend that new transport corridors be included for Open Space Edge and Minor Arterial Transport Corridors.

15. I do not consider a blanket approval of transport corridors with 5.6m wide carriageways appropriate. These widths lead to an increased risk of adverse operational effects. In my opinion, the use of these narrow carriageways should be considered on a site-by-site basis that allows for the specific place and movement context to be considered. Subject to including appropriate minimum standards and assessment criteria, I support the inclusion of Neighbourhood Streets.

16. From a transport perspective I largely support the changes sought to the indicative local transport corridors. However, there may be topographical or ecological constraints that make this unacceptable. I support the proposed changes to Figure 2-1 and Figure 2-2 to improve the clarity of the indicative nature of the local and collector transport corridors shown on these figures.

17. I consider closure of the Ohaupo Road/Hall Road intersection to be necessary due to safety concerns. I recommend that the relocated intersection be retained as shown on Figure 2-2 with changes to the

supporting Transport Network text (Chapter 3A, page 19) and Infrastructure and Staging Table (Chapter 3A, page 30).

18. In summary, the transport provisions of the Peacocke Plan Change support the strategic transport framework. The proposed framework 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.

TECHNICAL REPORTS

Plan Change Effectiveness

19. The Waka Kotahi submission comments on the lack of traffic modelling and evidence that the structure plan will be effective in delivering mode shift.

20. Prior to PC5, Peacocke was expected to accommodate around 8,100 dwellings. PC5 has reduced the developable area by increasing significant natural areas (**SNAs**) and setbacks, and increased development density. HCC expect the combination of these to result in a similar number of dwellings, subject to market response and demand for higher density living. In addition, the transport objectives for Peacocke are to reduce single occupant vehicle use, prioritising walking, cycling and public transport.

21. HCC has reviewed Access Hamilton and is working with Future Proof on the Metro Spatial Plan (**MSP**) transport programme business case. Those processes are more appropriate places for traffic modelling that is influenced by external connections and wider HCC, regional and national policy changes.

22. PC5 manages the internal trip generation and connectivity. The structure plan facilitates and favours active modes. In my view, their adoption by the community is not a structure plan matter, rather a matter better suited to

the other levers that HCC, Waka Kotahi and Waikato Regional Council (**WRC**) can use such as transport pricing, parking policy, financial assistance priorities and education. I consider that the effectiveness of the structure plan in delivering mode shift will be very sensitive to WRC's decisions on timing and levels of service for passenger transport, and on take up for active modes.

23. Strategic transport connections rely on the corridors designated for the Hamilton Southern Links network. HCC is currently delivering much of the minor arterial network and the major arterial connection to Wairere Drive and Cobham Drive.

24. External cycle connectivity was considered in HCC's Biking and Micromobility Programme Single Stage Business Case. HCC is investing in an early strategic walking and cycling connection leveraging construction of strategic wastewater connections along the designated north-south arterial corridor. Through PC5 a network of separated cycle facilities will be provided on the collector and arterial networks providing strategic connections both within Peacocke and to the existing network. I consider that the proposed infrastructure standards are sufficient to accommodate additional users at a level of service designed to make active modes and passenger transport attractive. The funding of activities identified in HCC's Biking and Micromobility Programme Single Stage Business Case will be considered and prioritised through future HCC Long Term Plan (**LTP**) and Annual Plan processes.

25. In my view, there is no clear benefit for assessing the PC5 effects and opportunities through additional traffic modelling. Options outside the RMA process would be more effective.

Design Criteria

26. In my view the proposed framework within the District Plan (Restricted Discretionary activity status and assessment criteria) is flexible enough to allow a range of transport corridors to be developed at the time of subdivision in response to topography, land use, urban design, safety and amenity.

27. All new transport corridors are Restricted Discretionary activities, and the assessment criteria provide flexibility in the design of transport corridors. The introductory text to Appendix 15-6 states: "For designations**, new transport corridors, private ways** and internal vehicles access **the design elements in this table will be used as guidance**" (emphasis added). At Section 4.6 of my Review of Submissions, I provide examples of how this flexibility is allowing a range of transport corridors to be developed on a site-by-site basis in response to the specific development proposals.

28. Waka Kotahi's Aotearoa Urban Street Planning and Design Guide[1] refers to the National Association of City Transportation Officials (**NACTO**) Global Street Design Guide[2] for matters including design of pedestrian priority and roadway narrowing.

29. I consider that the level of design detail sought by Waka Kotahi is better suited to guidelines provided through a design guide, not through District Plan rules. HCC does not have a design guide for transport corridors and the Waikato Regional Infrastructure Technical Specifications (RITS) has not been updated to reflect best practice outlined in Waka Kotahi's Aotearoa Urban Street Planning and Design Guide.

30. As discussed in my Review of Transport Submissions (Section 2.4.2), I recommend that reference to Waka Kotahi's Aotearoa Urban Street

[1] https://www.nzta.govt.nz/about-us/about-waka-kotahi-nz-transport-agency/environmental-and-social-responsibility/urban-street-guide/
[2] https://globaldesigningcities.org/publication/global-street-design-guide/

Planning and Design Guide and the NACTO Global Street Design Guide is included through an updated note in the Assessment Criteria.

Medium Density Residential Standards.

31. The RMA (Enabling Housing Supply and Other Matters) Amendment Act 2021 requires changes to some provisions.

32. In my view, the potential for higher density living potentially results in more vehicle crossings or more vehicle movements at vehicle crossings. These changes impact on the safety and attractiveness of pedestrian and cycle facilities. In my view these impacts are partially addressed through the existing assessment criteria at G Transportation, and P3h), P4b), P5g), P5l), P5m). However, I recommend that additional assessment criteria are introduced to better consider the impact of frequent and closely spaced vehicle crossings.

33. I understand that the setbacks standards notified as MRZ-PREC1-PSP: R38 will be removed. I am concerned about the potential for parked vehicles to block the footpath where there is less than 5m between the boundary and the garage door / dwelling/ building. I recommend that the provisions are amended to require that carparks are set back either 1.5m, or more than 5m from the transport corridor boundary.

34. In my view, increases in development density can result in rubbish, food-scraps, and recycling bins blocking the footpath or cycleways impacting on the attractiveness and safety of these modes. I recommend that new assessment criteria are added so that these potential effects are considered as part of the transport corridor design.

RESPONSE TO SUBMISSION TOPICS

35. My detailed response to each transport related submission point is provided at Appendix 2 to my Review of Transport Submissions. I discuss the key transport topics below.

New Types of Transport Corridor

36. The criteria for transport corridors are discussed in detail at Section 4 of my Review of Transport Submissions. My proposed changes to Table 15-6b (Appendix 15) are included as Appendix 1 to that review.

37. I support the Adare Company submissions (53.21 and 56.98(5)) seeking that a Peacocke specific minor arterial corridor be included as much of the minor arterial network is currently being designed and constructed by HCC. I recommend that Table 15-5b is amended to include a 32.2m cross-section for minor arterials in Peacocke. The Minor Arterial Transport Corridor criteria were agreed at caucusing[3].

38. For the reasons set out at Section 4.8 of my Review of Transport Submissions, I support the Adare Company submissions (53.21 and 56.98(5)) seeking that an Open Space Edge transport corridor be introduced. I recommend that Table 15-5b is amended to include an 11.4m cross-section for Open Space Edge Transport Corridors in Peacocke and that new assessment criteria be included so that the level of walking, cycling and on-street parking infrastructure is integrated with the adjacent land use. The Open Space Edge Transport Corridor criteria were agreed at caucusing[4].

[3] Planning & Transport (2) Caucusing JWS, 23 August 2022, Section 3.1
[4] Planning & Transport (2) Caucusing JWS, 23 August 2022, Section 3.2

Rear Lanes

39. In my view, it is necessary to include minimum standards for rear lanes to ensure that the lane is accessible to a wide range of users and to minimise the risk of adverse safety outcomes arising from interactions of users, including walking cycling, micro-mobility devices, cars and trucks such as fire engines, refuse and recycling trucks and furniture removals.

40. In response to the Adare submission (53.98(2)), I have recommended changes so that private ways and rear lanes are now more clearly defined and identified separately in the relevant provisions. The standards for private ways are closely aligned with the Operative District Plan and a new category for rear lanes has been established along with additional assessment criteria.

41. In response to the Fire and Emergency NZ (**FENZ**) submission, I recommend changes be made to SUB-PREC1-PSP:R21 so that the width of rear lanes and private way are consistent with New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008 and the 'Emergency Vehicle Access Guideline' (May 2015).

42. My proposed changes to Table 15-6b (Appendix 15) are included as Appendix 1 to my Review of Transport Submissions. In Section 3.2, Section 4.9 and Section 4.10 of my Review I recommend changes to SUB-PREC1-PSP:R20, SUB-PREC1-PSP:R21, and Rule 25.14.4.1h)vii).

Collector Transport Corridors

43. The Adare Company (53.21 and 53.98) and Waka Kotahi (10.32) submitted seeking changes to the collector transport corridors.

44. Waka Kotahi's Public Transport Design Guidance[5] states the width of a standard bus is 2.85m including mirrors. Collectors will have a high proportion of buses and service vehicles (delivery, refuse and recycling etc.) compared to local roads. Allowing for two buses to pass each other with 0.3m clearance to the kerbs and 0.5m between the buses requires a 6.8m wide carriageway.

45. The proposed lane widths for collector corridors with public transport are 0.2m wider that provided in the Auckland Transport Engineering Design Code (Table 6). That design code prefers 3.2m lanes on collector corridors except on a FTN bus route where it is to be increased to 3.5m.

46. I consider that the proposed legal width for collectors of 24.2m and 24.6m is broadly consistent with Waka Kotahi's Aotearoa Urban Street Planning and Design Guide which indicates 15-20m for Urban Connector – Narrower (18-20m). The additional width required in Peacocke specifically allows for the provision of on-street parking, landscaping and stormwater management. In addition it is based on providing separated cycle lanes (each 2m wide + 0.8m buffer), which is wider than the 3.5m required for a bi-directional cycleway.

47. Waka Kotahi's submission queried how residents will interact and cross collector corridors. Waka Kotahi's Aotearoa Urban Street Planning and Design Guide refers to the NACTO Global Street Design Guide for matters including design of pedestrian priority and roadway narrowing. Specific guidance for the design of pedestrian facilities including crossings is provided in Waka Kotahi's Pedestrian Network Guidance[6]. In response to this submission, I recommend an additional assessment criterion is introduced to consider the frequency and location of crossing facilities.

---

[5] https://www.nzta.govt.nz/walking-cycling-and-public-transport/public-transport/public-transport-design-guidance/bus-dimensions-for-design/

[6] https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/design/

48. In summary, I consider that the proposed legal road widths of 24.2m and 24.6m are appropriate for the function of these collector corridors. I do not recommend changes to the collector transport corridor criteria at Table 15-6b.

Local Transport Corridors

49. The Adare Company (53.21 and 53.98) submitted seeking changes to the criteria for local transport corridors. The submitter seeks that the carriageway be reduced from 6m to 5.6m. I discuss this in detail at Section 4.6 of my Review of Transport Submissions.

50. I do not consider that a blanket approval of transport corridors with 5.6m wide carriageways is appropriate. In my opinion, the evaluation of carriageways less than 6m wide should be reviewed on a site-by-site based that considers the following factors:

    a) Subdivision layout and likelihood of through movement on each road.

    b) Proposed land use, e.g. building typology, access to open space.

    c) The on and off-road walking and cycling networks.

    d) Provision of public transport.

    e) Provision of on-street parking and vehicle crossings relative to the proposed building typology.

    f) Ability for residents to place refuse, recycling and food-scraps bins within the transport corridor for collection.

    g) Ability for the refuse, recycling and food-scraps collection vehicles to access the bins.

h) Provision of non-transport infrastructure like stormwater and services.

i) Ability to provide landscaping and amenity.

51. In my view, the proposed legal road width of 16.8m is broadly consistent with Waka Kotahi's Aotearoa Urban Street Planning and Design Guide which indicates 14-20m for Local Streets - Suburban Residential Streets. I consider that the One Network Framework description of Local Streets[7] anticipate a range of outcomes and diverse forms for this category of road.

52. Based on my experience in assisting HCC process consents for the Te Awa Lakes and Greenhill Area K and L developments, HCC has demonstrated a flexible approach to the development of site-specific cross-sections. I note that both developments are currently under construction and the actual effects arising from the narrower cross-sections have not yet been realised.

53. In summary, I do not consider that a blanket approval of transport corridors with 5.6m wide carriageways is appropriate. New transport corridors are a Restricted Discretionary activity and the transport criteria at Table 15-6b and assessment criteria provide guidance that allows a range of cross-sections to be developed. In my opinion the use of 5.6m wide carriageways should be considered on a site-by-site basis that allows the specific place and movement context to be considered.

Neighbourhood Streets (Minor Local)

54. At the Planning and Transport Caucusing[8], it was agreed that a "minor local transport corridor" category to be included within Table 15-6b provided that suitable metric(s) can be provided to classify it. In my opinion it is difficult to set a single transport metric to define the use of minor local

[7] https://www.nzta.govt.nz/planning-and-investment/planning/one-network-framework/movement-and-place-classification/street-categories/
[8] Planning & Transport (2) Caucusing, 23 August 2022, Section 3.3

transport corridors/ neighbourhood streets. I prefer the term Neighbourhood Street to clearly differentiate them from local transport corridors.

55. I recommend that a precautionary approach is taken to the use of a neighbourhood street cross-section as the narrower widths lead to an increased risk of adverse operational effects for vehicle movement, parking and access for refuse, recycling and food-scraps collection vehicles. In my view the use of neighbourhood streets should be:

    a) On a site-by-site basis where there is certainty of the subdivision layout and connectivity with the wider transport network.

    b) Limited to very short streets with no (or very little) through movement function.

    c) Slow speed environments that support walking and cycling.

56. My assessment of this cross-section has focussed on addressing the potential transport effects and there is a risk that this Neighbourhood Street cross-section will not adequately provide for non-transport related functions including stormwater management, landscaping, climate change and amenity.

57. Subject to including appropriate minimum standards and assessment criteria that adequately recognise the site-specific context, I support the inclusion of Neighbourhood Streets.

Location of Indicative Local and Collector Corridors

58. From a transport perspective I broadly support the requested changes in location to the indicative local and collector transport corridors shown on Figure 2-2 Transport Network. I note that there may be topographical or

ecological constraints that make some of the proposed changes unacceptable. My view on these submissions is discussed Section 5 of my Review of Transport Submissions.

59. The indicative nature of the alignments is described in the structure plan at Chapter 3A, Development Area 1: Peacocke Structure Plan, Peacocke Transportation network (page 18-19). I support the proposed changes to that text as well as Figure 2-1 Land Use and Figure 2-2 Transport Network to more clearly state that the local and collector corridors shown on the maps are indicative.

Ohaupo Road/ Hall Road Intersection

60. Three submitters (Waka Kotahi, Ohaupo Land LP and Golden Valley Farms) sought changes to the indicative collector road intersection with Ohaupo Road due to closing the current Hall Road intersection. I discuss these submissions in Section 5.8 of my Review of Transport Submissions.

61. The Notified Structure Plan seeks that the existing Ohaupo Road/ Hall Road intersection be closed due to existing safety concerns and this connection be relocated to a more suitable location south of the existing intersection and indicated as a collector. At caucusing[9], the Transport Experts agreed that Hall Road should be closed for traffic reasons.

62. In my view the location shown on Figure 2-2 Transport Network maximises the sight distance and the intersection will be located approximately midway between the Whatukooruru Drive and Raynes Road intersections with SH3.

63. In the long term, state highway status is expected to be revoked from Ohaupo Road and it will revert to local road. In my opinion, it may not be

[9] Planning & Transport (1) Caucusing, 19 August 2022, Section 3.1

desirable to create a new intersection while Ohaupo Rad remains a state highway. This will depend on the level and nature of traffic using Ohaupo Road. I note that all new transport corridors are Restricted Discretionary activities and the existing Assessment Criteria G3d) states: "Issues and outcomes arising from consultation with the relevant road controlling authorities and/or Kiwirail."

64. In response to the Waka Kotahi submission (10.15) I have recommended changes to the Peacocke Infrastructure and Staging Table (Chapter 3A) and the Transport Network text (Chapter 3A, page 19) to reflect that new or altered intersections on the state highway network require the approval of Waka Kotahi.

Public Transport

65. My review of submissions related to public transport is discussed at Section 6 of my Review of Transport Submissions with discussion on the Mass Transit Stop at Section 2.5.3.

66. In response to submissions by Jones Lands Limited (13.17), Northview Capital Limited (14.16) and Adare Company (53.81), I recommend that the requirement for consultation in Rule SUB-PREC1-PSP:R25 with WRC is deleted and incorporated in new assessment criteria.

67. I recommend that the definitions for 'Public Transport Station' and 'Public Transport Station Catchment' are deleted as they are not relied upon elsewhere in PC5.

68. I recommend the following replacement definitions be incorporated for consistency with the Draft Regional Public Transport Plan 2022-2032 (**draft RPTP**):

> ***Primary Bus Interchange:*** Locations where one or more frequent lines intersect with an existing or future rapid line. Primary interchanges will

> be busy with high volumes of people and bus movements and be surrounded by moderate to high land use densities and/or major activity centres.
>
> **Key Public Transport Interchange:** Locations where two or more frequent lines intersect. The locations will be moderate passenger volumes and be surrounded by at least moderate land use densities.

69. Following discussions with submitters and internally with HCC, I have recommended changes to Figure 2-2 Transport Network so that:

    a) The location of bus stops aligns with the current detailed design for Peacockes Road and Whatukooruru Drive.

    b) The entire length of Peacockes Road is identified as a 'Proposed Public Transport Route' to align with the draft RPTP.

    c) The legend is changed to clearly identify which features are indicative and that the names of the bus interchanges align with the draft RPTP.

UPDATED PC5 PROVISIONS

70. In response to submissions, I have recommended changes to the notified plan change provisions including:

    a) Minor amendments to the objectives and policies.

    b) New assessment criteria in response to the Medium Density Residential Standards.

    c) More detailed rules and assessment criteria supporting the use of rear lanes and clarifying the difference to private ways.

    d) Amendments to provisions relating to vehicle crossing spacing and separated cycleways.

    e) Introduction of an Open Space Edge Transport Corridor for the Peacocke Structure Plan area.

f) Introduction of a Minor Arterial Transport Corridor for the Peacocke Structure Plan area.

g) Changes to the locations of bus stops on Figure 2-2 Transport Network to reflect detailed design of the minor arterial corridors.

h) Changes to the indicative local and collector transport corridors shown on Figure 2-2 Transport Network.

i) Changes to the definitions of public transport interchanges

j) Expanding the extent of 'Proposed Public Transport Route' shown on Figure 2-2 Transport Network.

CONCLUSION

71. In summary, the Peacocke Plan Change seeks to go further than the Operative District Plan through the objectives and policies seeking integration of land use and transport supporting mode shift. The proposed framework 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 James Black

2 September 2022

ATTACHMENT 1

Plan Change 5 Peacocke
Review of Transport Submissions

Hamilton City Council

ISSUE 1, 31 AUGUST 2022

gray matter

Plan Change 5 Peacocke
Review of Transport Submissions

Hamilton City Council

Prepared by: 

Alastair Black

Approved by: 

Alasdair Gray

ISSUE 1, 31 AUGUST 2022

2 Alfred Street
PO Box 14178
Hamilton, 3214
Tel: 07 853 8997

TABLE OF CONTENTS

P:\1_Projects\14_HCC\14_449_Peacocke_PC5_Hearing\F_Hearing\0_Evidence\2022-08-31-PC5-Transport-Submissions-Report-ISSUE1.Docx

1. PURPOSE

1.1. Purpose

Hamilton City Council (HCC) engaged Gray Matter to assess the transport impacts of the Plan Change 5 (PC5) for the Peacocke Structure Plan area and to provide technical advice on transport-related issues and provisions. PC5 comprises a review of the current structure plan and the indicative transport network, increase in development density, a greater focus on mode shift to non-vehicular modes of transport and public transport, and greater recognition of ecological and significant natural areas (SNAs).

We prepared the Integrated Transport Assessment (ITA)[1] to support PC5.

The purpose of this report is to respond to transport-related submissions on PC5.

1.2. Integrated Transport Assessment

The ITA that supports PC5 highlighted that the success of Hamilton's transport system relies on creating a new approach for multi-modal (different types of transport) movement. The Peacocke area will be developed in line with Hamilton's vision for accessibility set out in Access Hamilton and is consistent with Vision Zero. In a transport sense this means providing a multi-modal transport network that provides access to frequent public transport on key routes, and a direct and accessible walking and cycling network that is safe and enjoyable to use. The network will be constructed to meet best practice principles related to safety, coherence, directness, attractiveness and amenity to encourage mode shift, in particular for shorter trips of less than 2km.

2. INTRODUCTION

2.1. Transport within PC5

The hierarchy and layout of the transport features of the proposed structure plan are well aligned with the current structure plan. Changes are proposed to the cross-section standards to better support a multi-modal network that prioritises active modes and is safe and enjoyable to use.

It is worth noting that HCC is investing in lead strategic infrastructure including major and minor arterial transport corridor connections ahead of, or coordinated with subdivision. These are within the Hamilton Southern Links designation and will allow for development connections in the north by mid-late 2023 and in the centre of the Peacocke Structure Plan area by late 2025. These set some cross sections, design philosophies for walking, cycling and public transport, and some intersection arrangements and locations.

Key transport features that distinguish Peacocke from the Operative District Plan provisions are:

- Designing the transport system to prioritise safety, and prioritise pedestrians and cyclists over vehicles;
- Wider footpaths on local corridors;
- Separated cycle lanes on the collector and minor arterial corridors;
- Identification of public transport routes so that infrastructure can be provided at the time of subdivision; and
- Bus stops are to be provided in-lane to minimise delays to the public transport services.

[1] Plan Change 5 Peacocke, Integrated Transport Assessment, Issue 1, 3 August 2021 (Gray Matter Ltd)

The Peacocke Plan Change seeks to go further than the Operative District Plan through the objectives and policies seeking integration of land use and transport with a focus on higher density development near key transport corridors and activities nodes along with prioritising pedestrians and cyclists over vehicles. The proposed policy framework provides supporting detail including requirements for the transport network to provide for public transport services and infrastructure, separation of cyclists from vehicles on the collector network and providing a continuous and safe walking and cycling network.

The ITA did not include transport modelling of the transport network. A lack of updated modelling was raised as a concern in the Waka Kotahi submission. This report considers and responds to that submission.

The ITA and structure plan map show the closure of the existing Ohaupo Road/ Hall Road intersection and potential relocation further south which was subject to several submissions. This report considers and responds to those submissions.

2.2. Access Hamilton

The updated Access Hamilton Strategy was presented to HCC's Infrastructure Operations Committee on 9 August 2022. The strategy sets out what's important to Hamilton City and guides investment decisions made in the Long-Term and Annual Plans. Its vision is *"Our transport network enables everyone to connect to people and places in safe, accessible and smart ways."*

A key role of Access Hamilton is to "join the dots" and deliver directly to Council's purpose of improving the wellbeing of Hamiltonians. The alignment of Access Hamilton with Council's wider strategies, policies and plans is illustrated below. This highlights that within Council's transport system there are a wide range of influences and tools to achieve the desired outcomes, and the District Plan is one of these tools.

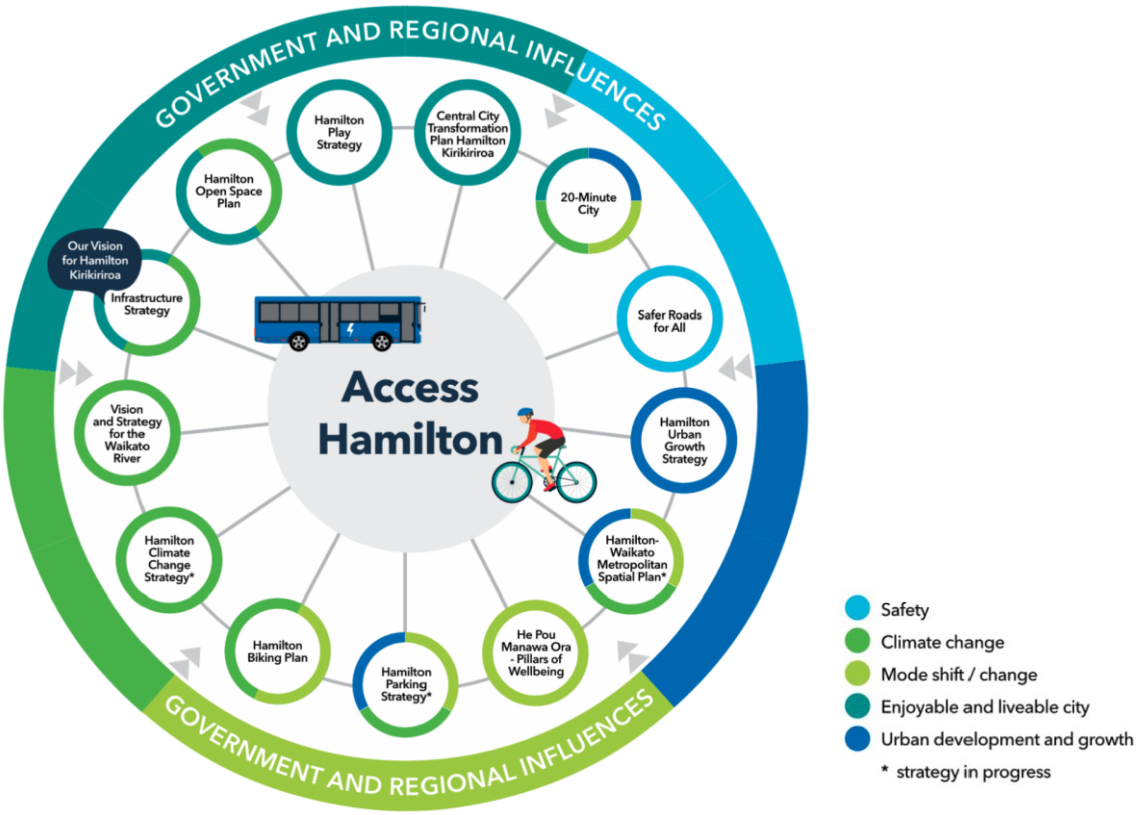


Figure 1: Access Hamilton Joining the Dots

2.3. Medium Density Residential Standards (MDRS)

The RMA (Enabling Housing Supply and Other Matters) Amendment Act 2021 has required changes to some provisions.

The potential for higher density living potentially results in more vehicle crossings or more vehicle movements at vehicle crossings. These changes impact on the safety and attractiveness of pedestrian and cycle facilities.

This is partially addressed through the recommended changes to the rear lane provisions. While these rear lane vehicle crossings could have relatively higher vehicle movements, providing fewer crossings allow them to be designed to a higher standard that places emphasis on safety and priority for pedestrians and cyclists. Clearer standards are introduced to provide rear access to properties meaning there are fewer vehicle crossings to the transport corridor.

The number of vehicle crossings is influenced by the lot size and width. The Operative District Plan specifies the minimum separation of vehicle crossings at Rule 25.14.4.1a). PC5 includes policies to minimise vehicle access and vehicle crossings at SUB-PREC1-PSP: P11 and P13 and refers to the Chapter 25.14 at SUB-PREC1-PSP:R20. In addition to the assessment criteria at G Transportation, the following assessment criteria are relevant in assessing effects of vehicle crossings on pedestrians and cyclists; P3h), P4b), P5g), P5l), P5m). I recommend that additional assessment criteria are introduced to consider the impact of closely spaced vehicle crossings. This new assessment criteria partially addresses concerns about the ability for pedestrians to cross the transport corridor which was raised by Waka Kotahi.

P5	Subdivision in the Peacocke Structure Plan
New	The extent to which the proposal: 1. minimises the number of vehicles access points to transport corridors 2. considers the ability of pedestrians, cyclists, and micro-mobility and public transport users to access the site from the opposite side of the carriageway with minimal detour and safely and provision for safe access across and through an intersection in the vicinity of the development.

I understand that the setbacks notified as MRZ-PREC1-PSP: R38 will be removed. I am concerned about the potential for parked vehicles to block the footpath where there is less than 5m between the boundary and the garage door/ dwelling/ building. I recommend that the provisions are amended to require that carparks are located 1.5m or more than 5m from the transport corridor boundary.

The transport corridor criteria (Appendix 15, Table 15-6b) provide options for bi-directional and one-way cycle ways so that the design can respond to the land use. For example, where there are transport corridors with fewer vehicle crossings on one side of the corridor a bi-directional facility may be preferred.

Increases in development density can result in rubbish, food-scraps, and recycling bins blocking the footpath or cycleways impacting on the attractiveness and safety of these modes. I recommend that the following assessment criteria are added so that these effects are considered as part of the transport corridor design.

P5	Subdivision in the Peacocke Structure Plan
New	Whether rubbish, food-scraps, and recycling collection points within the transport corridor are adequate for the scale of the development.

New	The extent to which the transport corridor design addresses the safety effects or nuisance to pedestrians, cyclists, micro-mobility users and traffic resulting from the placement of rubbish, food-scraps, and recycling bins within the transport corridor.

2.4. Draft 2022-2032 Regional Public Transport Plan

Waikato Regional Council has recently consulted on the Draft 2022-2032 Regional Public Transport Plan[2] (RPTP). Hearings are scheduled for August with the plan to be adopted on 22 September 2022.

Where appropriate the responses to submissions have relied on the draft RPTP for guidance on public transport matters.

2.5. Waka Kotahi Submission

Waka Kotahi submitted on a range of transport matters. This section responds to the general matters discussed within the submission. Detailed discussion of each submission point is included at Appendix 2.

2.5.1. Effectiveness

The Waka Kotahi submission comments on the lack of traffic modelling and evidence that the structure plan will be effective in delivering mode shift.

Prior to PC5, Peacocke was expected to accommodate around 8,100 dwellings. PC5 has reduced the developable area by increasing significant natural areas (SNAs) and setbacks, and increased development density. HCC expect the combination of these to result in a similar number of dwellings, subject to market response and demand for higher density living. In addition, the transport objectives for Peacocke are to reduce single occupant vehicle use, prioritising walking, cycling and public transport.

PC5 manages the internal trip generation and connectivity. Strategic connections rely on the corridors designated for the Hamilton Southern Links network. HCC is currently delivering much of the minor arterial network and the major arterial connection to Wairere Drive and Cobham Drive. The minor arterial network provides roundabouts at the Ohaupo Road/ Whatukooruru Drive and Wairere Drive (extension)/ Peacocke Road intersections (with grade-separated walking and cycling). There is a grade-separated interchange at Cobham Drive/ Wairere Drive.

The main benefit from traffic modelling will be in understanding timing for additional investments, which is a Local Government Act (LGA) matter. Much of the arterial network is designed and/or under construction using the designation for the Hamilton Southern Links network. External major arterial connections to the north and south are more than 10 years away, even for design. There is significant scope for more certainty to inform modelling and assessments to be determined through other processes.

HCC is working with FutureProof on the Metro Spatial Plan (MSP) transport programme business case, and Access Hamilton. Those are more appropriate places for traffic modelling that is influenced by external connections and wider HCC, regional and national policy changes. Waka Kotahi are completing a form and function review of Hamilton Southern Links state highway connections, which we understand may not include modelling. Significant changes in form and

[2] https://www.waikatoregion.govt.nz/services/publications/rptp-2022-2032/

function of the wider Southern Links network would have a more significant impact the Peacocke transport patterns than a change in trip rates from a known layout.

The structure plan facilitates and favours active modes. Their adoption by the community is not a structure plan matter, rather a matter better suited to the other levers that HCC, Waka Kotahi and WRC can use such as transport pricing, parking policy, financial assistance priorities and education as illustrated in Access Hamilton. Plan Change 12[3] includes provisions specifying when travel plans are required. Travel Plans are long-term management strategies for integrating proposals for active travel and public transport travel into the planning process. Development of travel plans aim to ensure that destination is attractive and has appropriate facilities to support mode shift. PC12 will introduce the requirements for a wide range of activities (e.g. offices, retail activities, schools, etc.) to develop and implement travel plans. The effectiveness of the structure plan in delivering mode shift will be very sensitive to WRC's decisions on timing and levels of service for passenger transport, and on take up for active modes.

External cycling connectivity was considered in HCC's Biking and Micro-mobility Programme Single Stage Business Case. HCC is investing in an early strategic walking and cycling connection leveraging construction of strategic wastewater connections along the north-south arterial corridor. Through PC5 a network of separated cycle facilities will be provided on the collector and arterial networks providing strategic connections both within Peacocke and to the existing network. The infrastructure standards proposed are sufficient to accommodate additional users at a level of service designed to make active modes and passenger transport attractive.

The Biking and Micro-mobility Programme Single Stage Business Case presents the coordinated 30-year programme of infrastructure and non-infrastructure activities. The business case acknowledges that there are gaps in the existing cycle network and has prioritised projects for Decade 1 2021-2031. The Biking and Micromobility Business Case (Figure 23) indicates $4.8M for design and construction of the Bader Gully Connection in 2025/26 – 2027/28 and provides a separate line item for 'Projects within growth areas'. The funding of these activities will be considered and prioritised through the Council Long Term Plan (LTP) and the Annual Plan processes.

There is no clear benefit for assessing the PC5 effects and opportunities from additional traffic modelling. Options outside the RMA process would be more effective.

2.5.2. Transport Corridor Design

In my view the proposed framework within the District Plan (RD activity status and assessment criteria) is flexible enough to allow a range of transport corridors to be developed at the time of subdivision in response to topography, land use, urban design, safety and amenity.

All new transport corridors are Restricted Discretionary activities and the assessment criteria provide flexibility in the design of transport corridors. The introductory text to Appendix 15-6 states: *"For designations, **new transport corridors, private ways** and internal vehicles access the design elements in this table will be **used as guidance***" (emphasis added).

With regard to cycling infrastructure, the transport corridor criteria at Table 15-6b are aligned with the route typologies described in the Biking and Micro-mobility Programme Single Stage Business Case (Figures 11 to 13). Table 15-6b provides flexibility in the design of collector transport corridors by providing for both one-way and bi-directional cycle facilities and does not specify where within the cross-section they are to be provided relative to the footpath and parking. This allows design of the

[3] https://hamilton.govt.nz/property-rates-and-building/district-plan/plan-changes/plan-change-12/

transport corridor to respond to the land use subdivision. For example, different design responses will be needed based on dwelling typology (i.e. apartments vs terrace units vs stand-alone dwellings) and the level of parking provided both on-street and off-street.

Much of the collector network will provide for public transport and the rules (SUB-PREC1-PSP: R25) require the provision of safe and step free access between stops. The design for Peacocke Road provides this through raised platforms and kerb build-outs and a similar level of facility is anticipated for the collector roads. With bus stops likely to be provided every 400-600m and maximum block lengths of 250m (SUB-PREC1-PSP: R18)1)) dedicated crossing facilities are anticipated are frequent intervals.

The level of detail sought by Waka Kotahi is better suited to guidelines provided through a design guide, not through District Plan rules. HCC does not have a design guide for transport corridors and the Waikato Regional Infrastructure Technical Specifications (RITS) has not been updated to reflect best practice outlined in Waka Kotahi's Aotearoa Urban Street Planning and Design Guide[4]. To better align with that guide, I recommend that the note to the Assessment Criteria for New Transport Corridor Design be amended as follows (the Note below follows G18).

	Note In considering the above matters Council may have regard to relevant parts of Austroads Design Guides and NZS 4404:2010 Land Development and Subdivision Infrastructure, and the ~~Hamilton City~~ Waikato Regional Infrastructure Technical Specifications, Waka Kotahi's Aotearoa Urban Street Planning and Design Guide (Final Draft, September 2021) and National Association of City Transportation Officials (NACTO) Global Street Design Guide (2017) and Urban Bikeway Design Guide (2014).

A detailed discussion of the transport corridor cross-sections and response to specific submission points is provided in Section 4.

2.5.3. Mass Transit Stop

The location of the future mass transit stop shown on the notified version of the structure plan was based on discussions with WRC that took place in 2021. Since PC5 was notified there has been significant work to consider the future of mass transit through development of the Hamilton-Waikato Metro Spatial Plan (MSP) and the draft Regional Public Transport Plan (RPTP).

Development of the MSP Transport Programme Business Case is on-going. Future mass transit planning and business cases will determine the proposed routes and stops for mass transit.

I recognise that the central transit stop located at the intersection of the major and minor arterial has a limited catchment for future ridership due to the open space and gully networks. However, I consider it important that the structure plan recognise that future mass transit could be provided along the arterial network.

I recommend that locations shown on Figure 2-2 Peacocke Structure Plan – Transport Network be retained and the legend for the Future Mass Transit Stop be amended to:

"Indicative Future Mass Transit Stop. Location to be determined by mass transit planning."

[4] https://www.nzta.govt.nz/about-us/about-waka-kotahi-nz-transport-agency/environmental-and-social-responsibility/urban-street-guide/

2.6. Bike Waikato Submission

Bike Waikato submitted on several cycling related matters. Detailed discussion of each submission point is included at Appendix 3.

The submission (54.15) highlights the lack of detail for connectivity beyond the structure plan area. HCC's Biking and Micromobility Business Case presented the coordinated 30-year programme of infrastructure and non-infrastructure activities. The network improvements and activities identified in this Business Case will be considered and prioritised through the LTP and the Annual Plan processes. I note that the Biking and Micromobility Business Case (Figure 23) indicates $4.8M for design and construction of the Bader Gully Connection in 2025/26 – 2027/28 and provides a separate line item for 'Projects within growth areas'.

In principle, I support the submission points on matters like end-of-journey facilities (i.e. 54.16, 54.23). However, these matters are being progressed through Plan Change 12 which takes a more comprehensive and city-wide approach to mode shift. I prefer to rely on the PC12 process to ensure that cycle parking standards are consistent across the city rather than developing provisions specific to individual structure plans.

Other matters (i.e. submissions 54.17, 54.18) relate to detailed design are best managed at the time of subdivision to allow development of a walking and cycling that responds to the planned land use and subdivision layout.

3. TRANSPORT OBJECTIVES, POLICY AND RULES

3.1. Objectives and Policies

In general, I support most of the submissions on the Objectives and Policies as they provide additional clarity and enhance the plan change.

My detailed recommendations on the transport-related Objectives and Policies are provided at Appendix 3. In some situations, I support the submission from a transport perspective but highlight that there may be other land use or ecological considerations that inform the final response to that submission (e.g. SUB 10.22, 36.34).

3.2. Rule 25.14.4.1a)v) - Vehicle Crossing Spacing and Separated Cycleways

Submissions by Adare (53.76) and Waka Kotahi (10.32) seek amendments to Rule 25.14.4.1a)v) to better balance infrastructure design and property access/ urban development. I support the intent of these submissions and recommend that the rules are modified so that they only apply to shared paths and separated cycle facilities on minor arterials, with the spacing on Collector Transport Corridors managed through assessment criteria P5 l). I recommend that SUB-PREC1-PSP:R20 be amended to include shared paths so that it is consistent with Rule 25.14.4.1a)v).

I recommend the following amendments in blue text:

Rule 25.14.4.1a)v)	In the Peacocke Structure Plan area, on ~~collector roads~~ minor arterial transport corridors where a shared path or separated cycleway are provided, there shall be a minimum distance of 50m between vehicle crossings.
SUB-PREC1-PSP: R20 Clause 2)	Vehicle crossings located over a shared path or separated cycle lane on minor arterial transport corridors shall be separated by a minimum of 50m.
Assessment criteria P5 l)	Where vehicle crossings are proposed across separated cycleways and shared paths, the extent to which the number of vehicle crossings ~~these~~ are minimised, and the transport corridor is designed having regard to ~~maximise~~ the safety of pedestrians and cyclists.

3.3. SUB-PREC1-PSP: R23 Access or Private Way Widths

The Adare Company (53.79) submitted seeking narrower widths for access and private ways for subdivision in the local and neighbourhood centres.

I understand that these are based on current subdivision standards for business and industrial zones (Rule 23.7.6). I am not aware of these current standards being applied to recent subdivisions in the business zones, and only very infrequently within the industrial zone. They do not appear relevant for subdivision of the local centre or neighbourhood centres in Peacocke.

I recommend that clauses ((5), (6), (7) and (8)) of SUB-PREC1-PSP: R23 are deleted.

Jones Lands Limited (13.15) and Northview Capital (14.14) sought deletion of rules at SUB-PREC1-PSP: R23 (11) and (12) relating to pedestrian accessways. In my view, minimum standards are necessary to ensure that where accessways are provided through blocks they are safe for use by the public. The proposed standards at SUB-PREC1-PSP: R23 (11) and (12) replicate the citywide standards at Rule 23.7.3. I recommend that the standards be retained.

SUB-PREC1-PSP: R23 Local Centre: Peacocke Precinct and Neighbourhood Centre Zones: Peacocke Precinct		
1.	Minimum net site area	1,000m^2
2.	Minimum shape factor	20m diameter circle
3.	Minimum transport corridor boundary length	8m
4.	Minimum transport corridor boundary length adjoining a major arterial transport corridor	20m
~~5.~~	~~Minimum access or private way width serving an allotment with a net site area of less than 2000m2~~	~~8m~~
~~6.~~	~~Minimum access or private way width serving an allotment with a net site area of 2000m2–5000m2~~	~~10m~~
~~7.~~	~~Minimum access or private way width serving an allotment with direct access to a major arterial transport corridor~~	~~10~~
~~8.~~	~~Minimum private way width serving 1-5 allotments~~	~~10m~~
9.	Maximum private way gradient	1:8
10.	Maximum private way length	100m
11.	Maximum pedestrian accessway length	80m
12.	Minimum pedestrian accessway width	40m or less in length: 6m wide 41m – 60m in length: 9m wide 61m – 80m in length: 12m wide
13.	The ability for any proposed lot in a subdivision to comply with the vehicle crossing separation distance requirements in Rule 25.14.4.1a) and 25.14.4.1c) shall be demonstrated	-

4. TRANSPORT CORRIDOR CRITERIA

4.1. Introduction

The following sections provide detailed discussion of submissions related to SUB-PREC1-PSP: R20 and SUB-PREC1-PSP: R21 Roading and Access and the transport corridor criteria at Volume 2, Appendix 15, Table 15-6b. These transport corridor criteria only apply within the Peacocke Structure Plan. My recommended amends to the transport corridor criteria are discussed below, with tracked changes to Table 15-6b at Appendix 1. This includes incorporating the relevant footnotes from Table 15-6a that are included in the heading of Table 15-6b.

4.2. Design Standards

Transport corridors provide space for pedestrians, cyclists, micro-mobility users and vehicular traffic including buses, trucks and private vehicles to move, as well as providing a place function and space for stormwater, parking, landscaping/planting, amenity and services. These place and movement functions are explained in Waka Kotahi's One Network Framework (ONF)[5].

Waka Kotahi's Aotearoa Urban Street Planning and Design Guide sets out the policy criteria and criteria for the planning and design, and evaluation of streets. It is supported by Waka Kotahi's suite of guidance including the Pedestrian Network Guidance[6], Cycling Network Guidance[7] and Public Transport Design Guidance[8]. The Aotearoa Urban Street Planning and Design Guide does not provide specific detail instead relying on visual representation of urban streets to convey the desired elements and outcomes.

The District Plan seeks to go further and provide guidance on the specific elements while providing a degree of flexibility where appropriate. As noted earlier, the introductory text to Appendix 15-6 states: *"For designations, **new transport corridors, private ways** and internal vehicles access the design elements in this table will be **used as guidance***" (emphasis added).

The District Plan Assessment Criteria for New Transport Corridor Design G11 states: *"The extent to which transport corridor design provides design elements identified in or otherwise contrary to any criteria contained in Table 15-6a of Appendix 15."* There is clear direction that the primary reference document for assessment of transport corridor cross-sections is the District Plan.

The notes to these assessment criteria state *"In considering the above matters Council **may** have regard to relevant parts of Austroads Design Guides and NZS 4404:2010 Land Development and Subdivision Infrastructure, and the Hamilton City Infrastructure Technical Specifications[9]."* (emphasis added). However, Section 3.3.1 of the Regional Infrastructure Technical Specification (RITS) states: *"Roads shall be designed with reference to the transportation functional classification table contained in the relevant District Plan and NZS 4404 Section 3.3. However all references within Section 3.3 (NZS 4404) to Table 3.2 (NZS 4404), shall be taken instead to refer to the table in the relevant district plan."* As discussed in Section 2.5.2, I recommend that the note to the Assessment Criteria for New

[5] https://www.nzta.govt.nz/planning-and-investment/planning/one-network-framework/
[6] https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/design/
[7] https://www.nzta.govt.nz/walking-cycling-and-public-transport/cycling/cycling-standards-and-guidance/cycling-network-guidance/
[8] https://www.nzta.govt.nz/walking-cycling-and-public-transport/public-transport/public-transport-design-guidance/bus-dimensions-for-design/
[9] I note that the Hamilton City Infrastructure Technical Specifications have been superseded by the Regional Infrastructure Technical Specification (RITS)

Transport Corridor Design be amended to include Waka Kotahi's Aotearoa Urban Street Planning and Design Guide which better describes urban streets within the ONF.

In summary, there is clear direction in both the District Plan and the RITS that the appropriate method of achieving the city's transportation objectives and policies is the guidance and criteria set out in the District Plan, not Table 3.2 of NZS 4404. The Restricted Discretionary activity status for new transport corridors[10] combined with the assessment criteria provides guidance on the matters to be considered. The Aotearoa Urban Street Planning and Design Guide and supporting technical guidance provide best practice on how to achieve the desired transport outcomes for each type of transport corridor.

4.3. Design Speeds

WRC (36.78) seeks additional guidance be included within the District Plan on how 30km/h design speeds will be achieved. Waka Kotahi raised concerns about whether the transport corridor criteria would achieve the outcome sought in the objectives and policies.

All new transport corridors are RD activities and design criteria are provided in Table 15-6b and the relevant assessment criteria such as G11-G18 and P3-P5. Table 15-6b clearly identifies the design speed environment for each type of transport corridor. Design guidance for matters like speed management, street design and cycleway design continue to evolve, and my preference is to retain flexibility through the reliance on best practice guidelines that remain outside the District Plan.

4.4. Minor Arterial Transport Corridor

The Adare Company (53.21 and 56.98(5)) submitted seeking that transport corridor criteria for a Peacocke specific residential minor arterial be included.

As illustrated in the figure below, much of the minor arterial network is currently being designed and constructed by HCC. The only section not being actively considered by HCC is the minor arterial south of the Local Centre. Specific design of matters like stormwater and topographical constraints will inform detailed design of the corridor at the time of subdivision.

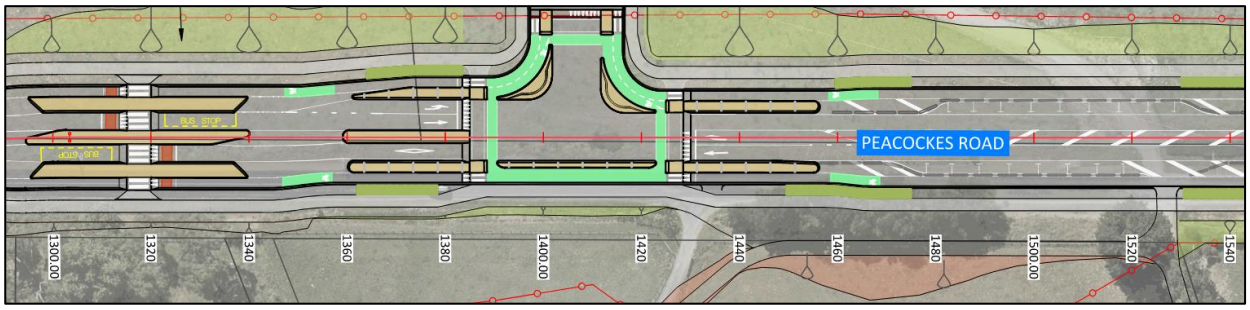


Figure 2: Extract from Minor Arterial Design for Peacocke Road

I support the submissions seeking that a Peacocke specific minor arterial corridor is included as there is sufficient design information to specify the preferred cross-section for the remaining length of minor arterial.

I recommend that Table 15-5b is amended to reflect the current design cross-section of Peacocke Road. Refer to Appendix 1 for the detail of this cross-section.

[10] Rule 25.14.3(b)

4.5. Collector Transport Corridors

The Adare Company (53.21 and 53.98) and Waka Kotahi (10.32) submitted seeking changes to the collector transport corridors.

Waka Kotahi's Public Transport Design Guidance[12] states the width of a standard bus is 2.85m including mirrors. Collectors will have a high proportion of buses and service vehicles (delivery, refuse and recycling etc.) compared to local roads. Allowing for two buses to pass each other with 0.3m clearance to the kerbs and 0.5m between the buses requires a 6.8m wide carriageway.

Providing a reduced carriageway width of 6.4m on non-PT routes recognises that there will be fewer larger vehicles and requiring slowing of these larger vehicles to pass carefully is acceptable.

The proposed lane widths for collector corridors with public transport are 0.2m wider than provided in Auckland Transport Engineering Design Code[13] (Table 6). That design code prefers 3.2m lanes on collector corridors except on a FTN bus route where it is to be increased to 3.5m.

The proposed legal road width of 24.2m and 24.6m are broadly consistent with Waka Kotahi's Aotearoa Urban Street Planning and Design Guide which indicates 15-20m for Urban Connector – Narrower (18-20m), the additional width specifically allows for the provision of on-street parking and landscaping/ stormwater management within Peacocke. As noted earlier, the Aotearoa Urban Street Planning and Design Guide only provides guidance on the desired outcomes and does not specify criteria for the individual elements within the transport corridor.

The ONF describes Urban Connectors as:

> *"Urban connectors provide safe, reliable and efficient movement of people and goods between regions and strategic centres and mitigate the impact on adjacent communities.*
>
> *The purpose of urban connectors is to provide for efficient movement of people and goods from A to B. There are low levels of interaction between the adjacent land use and the street. Servicing adjacent land has a lower priority, as the key role of these streets is to move along them rather than accessing adjacent properties."*

Waka Kotahi's submission queried how residents will interact and cross collector corridors. From the ONF description above it is clear that the movement function dominates these corridors. Waka Kotahi's Aotearoa Urban Street Planning and Design Guide refers to the National Association of City Transportation Officials (NACTO) Global Street Design Guide (2017) for matters including design of pedestrian priority and roadway narrowing. Specific guidance on the design of pedestrian facilities including crossings is provided in Waka Kotahi's Pedestrian Network Guidance[14]. As discussed in Section 2.5.2, I recommend that reference to Waka Kotahi's Aotearoa Urban Street Planning and Design Guide (Final Draft, September 2021) and the National Association of City Transportation Officials (NACTO) Global Street Design Guide (2017) is included through a note in the Assessment Criteria.

In response to the Waka Kotahi submission, I recommend an additional criterion is introduced to consider the frequency and location of crossing facilities. PC12 proposes further changes to the

[12] https://www.nzta.govt.nz/walking-cycling-and-public-transport/public-transport/public-transport-design-guidance/bus-dimensions-for-design/
[13] https://at.govt.nz/about-us/manuals-guidelines/transport-design-manual/
[14] https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/design/

assessment criteria for new transport corridors that will apply city-wide and provide further emphasis safety and prioritising walking, cycling and micro-mobility.

P5	Subdivision in the Peacocke Structure Plan
m)	Whether the transport corridor has been designed to provide a high amenity environment that provides for public transport, a high quality, safe walking and cycling network that maximises accessibility for people of all ages and abilities.
New	Whether the transport corridor has been designed to provide safe, frequent and formal crossing facilities for pedestrians, cyclists and micro-mobility users that minimise detour and delay for those users.

The proposed legal road widths of 24.2m and 24.6m are considered appropriate for the function of these corridors. No changes are recommended to the collector transport corridor criteria at Table 15-6b.

4.6. Local Transport Corridors

The Adare Company (53.21 and 53.98) submitted seeking changes to the local transport corridors. The submitter seeks that the carriageway be reduced from 6m to 5.6m.

A blanket approval of transport corridors with 5.6m wide carriageways is appropriate. The use of these narrow carriageways should be considered on a site-by-site basis that allows that the specific place and movement context to be considered. The transport criteria at Appendix 15-6 are used as guidance and the consenting process allows design flexibility without the provision of additional information.

The minimum width for an opposing 90-percentile car[15] and service vehicle to pass is 5.35m allowing 300mm clearance to kerbs and each other (i.e. 3 x 0.3m clearances plus 1.9m car plus 2.55m service vehicle[16] = 5.35m excluding mirrors). The Land Transport Rule: Vehicle Dimensions and Mass 2016[17] specifies the maximum width of a vehicle as 2.55m plus collapsible mirrors.

A parked car and two cars passing takes up 6.6m (3 x 1.9m cars + 0.9m clearances). This means that where recessed parking is not provided there is the potential for sections of “single lane” flow.

The proposed legal road width of 16.8m is broadly consistent with Waka Kotahi’s Aotearoa Urban Street Planning and Design Guide which indicates 14-20m for Local Streets - Suburban Residential Streets. However, it only provides high-level and broad guidance on the desired outcomes and does not specify criteria for the individual elements within the transport corridor. The ONF describes Local Streets as:

> *“Local streets provide quiet and safe residential access for all ages and abilities and foster community spirit and local pride. They are part of the fabric of our neighbourhoods, where we live our lives and they facilitate local community access.*

[15] HCC District Plan, Appendix 15, Figure 15-1j, 90%ile car is 1.88m plus mirrors
[16] Vehicle Dimensions and Mass Rule 2016, Schedule 2 states the maximum width of a vehicle as 2.55m excluding mirrors. Section 3.4 states that collapsible mirrors extending not more than 240mm beyond the vehicle body are allowed.
[17] https://www.nzta.govt.nz/resources/rules/land-transport-rule-vehicle-dimensions-and-mass-2016-index/, Section 3.4 and Schedule 2

Local streets are the most common and most diverse streets in urban areas. They are generally important components of walking and cycling networks and should support these transport choices for local trips."

It is clear that the ONF expects a wide range of outcomes and diverse forms within the local street category. This is reflected in the District Plan with new transport corridors being Restricted Discretionary activities subject to assessment criteria and guidance at Appendix 15-6.

The Aotearoa Urban Street Planning and Design Guide refers to the NACTO[18] Global Street Design Guide[19] which states that *"Lane widths of 3m are appropriate in urban areas and have a positive impact on street safety without impacting traffic operations".* Similarly, the NACTO Urban Street Design Guide[20] states *"Lane width should be considered within the overall assemblage of the street. Travel lane widths of 10 feet[21] generally provide adequate safety in urban settings while discouraging speeding".*

A research project[22] in Auckland found that narrower roads (defined as ≤6m) 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.

Through the Restricted Discretionary activity status for new transport corridors and assessment criteria G11-G18 and P3-P5 there is flexibility to allow the local networks to be designed to support low traffic neighbourhoods (e.g. criteria P5m). Features to discourage through traffic include kerb build-outs, pinch points, restrictions on access and modal filters. SUB-REC1-PSP:R18 limits block lengths to 250m and midblock treatments could provide these features every 80-100m. Waka Kotahi provides guidance on speed management, pedestrian and cycle facilities that can be incorporated in the design as appropriate to the movement and place function of that corridor while achieving safe speeds and prioritising walking and cycling.

As part of the consent process, HCC takes a flexible approach to the development of specific cross-sections. For an example, the Te Awa Lakes Land Development Consent provides for 11 different types of local street plus privately owned rear lanes. The local streets have a variety of cross-sections ranging from 8.8m wide park edge lanes (with no on-street parking) to 23.5m wide mixed use streets.

[18] National Association of City Transportation Officials, https://nacto.org/
[19] https://globaldesigningcities.org/publication/global-street-design-guide/designing-streets-people/designing-for-motorists/travel-lanes/
[20] https://nacto.org/publication/urban-street-design-guide/street-design-elements/lane-width/
[21] 9.1 feet = 2.8m, 10 feet = 3.05m and 11 feet = 3.35m
[22] Narrow Road: Implications for Auckland Transport, Vaisht, P & Prasad M. IPENZ Transportation Group Conference 2018

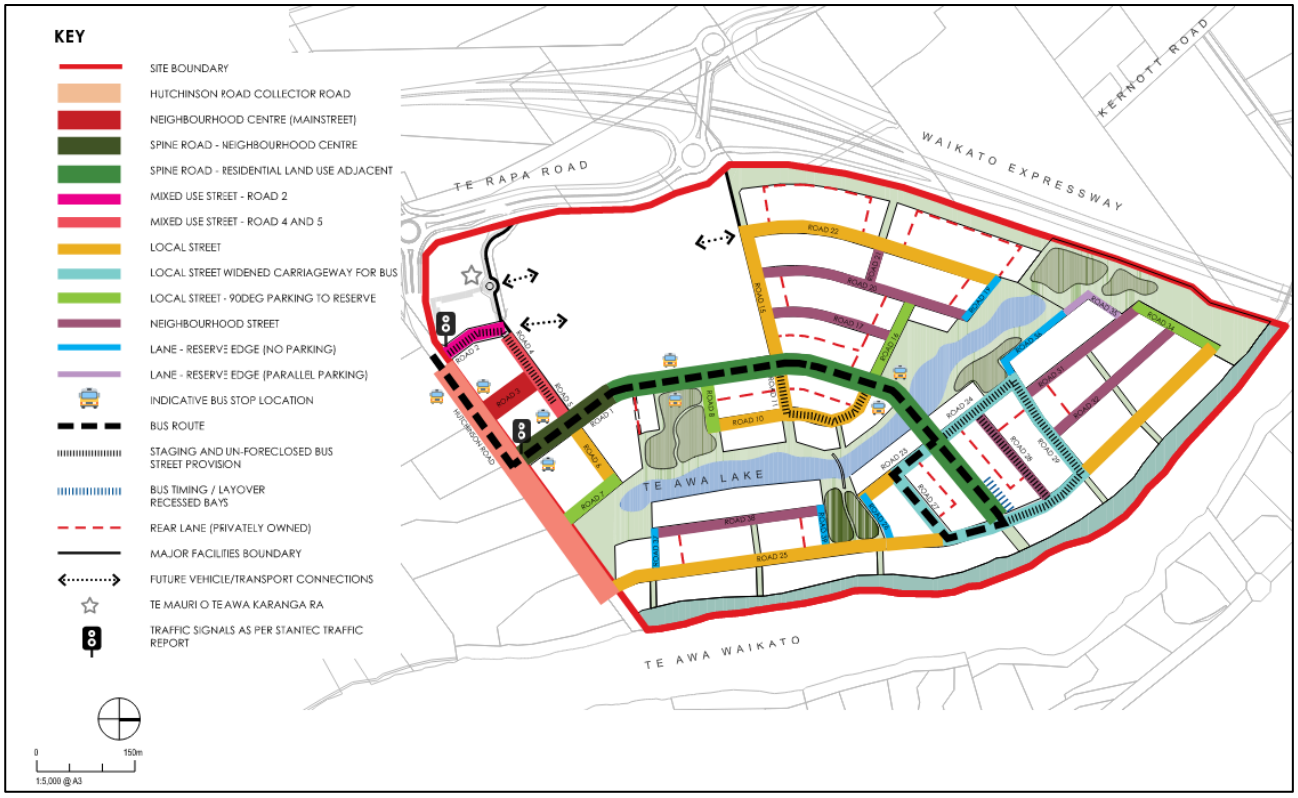


Figure 3: Te Awa Lakes – Road Typologies

At Te Awa Lakes there is no through movement beyond the development area meaning that the transport functions are limited to internal movement and property access. Through movement within the site is provided for along the spine road which provides separated cycle facilities and lane widths suitable for public transport. The proposed layout and use of rear lanes allowed a comprehensive understanding of each proposed local road to be developed by the Applicant and presented to Council for consideration.

Similarly, the development of Greenhill Areas K and L uses local (15.1m wide) and neighbourhood (13.3m wide) streets. The use of neighbourhood streets is limited to six streets with 6-23 dwellings, lengths of 58-350m and due to the subdivision layout those corridors have a very low through movement function.

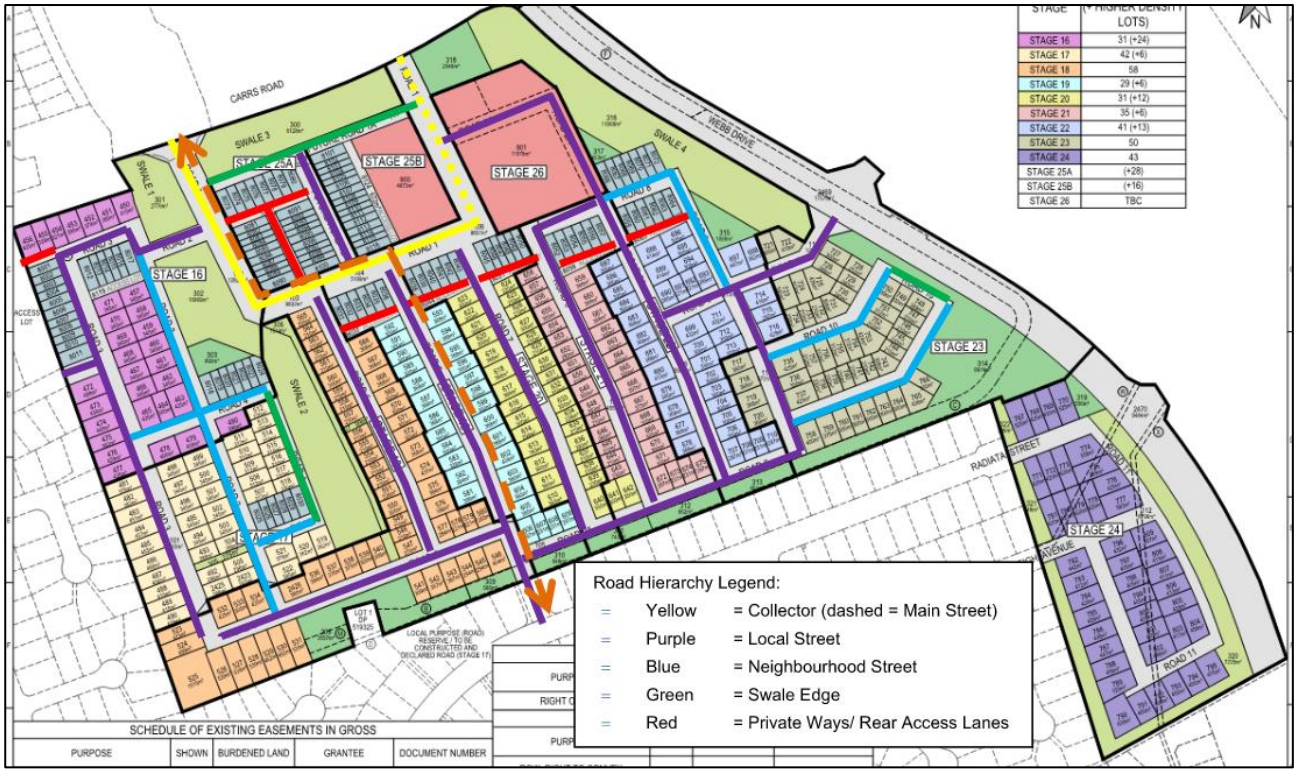


Figure 4: Greenhill Area K and L – Road Hierarchy

Evaluation of these neighbourhood street cross-sections considered the following factors:

- Subdivision layout and likelihood of through movement on each corridor;
- Proposed land use, e.g. building typology, access to open space;
- The on and off-road walking and cycling networks;
- Provision of public transport;
- Provision of on-street parking and vehicle crossings relative to the proposed building typology;
- Ability for residents to place refuse, recycling and food-scraps bins within the transport corridor for collection;
- Access for the refuse, recycling and food-scraps collection vehicles;
- Non-transport infrastructure like stormwater and services; and
- Ability to provide landscaping and amenity.

Ultimately, HCC were satisfied that the proposed subdivision layout and cross-sections were consistent with the relevant transport objective and policies. However, both developments are currently under construction and the actual effects arising from the narrower cross-sections have not yet been realised.

I do not recommend any changes to the local transport corridor criteria at Table 15-6b. I recommend that following new assessment criteria is introduced to reflect the place and movement functions described in the ONF:

P5	Subdivision in the Peacocke Structure Plan
New	The extent to which the transport corridor design aligns with the movement and place function by:

	- Reflecting the intended land use - Responding to the level of on-street activity generated by the adjacent land use - Recognising the contribution to movement for all modes of transport

In summary, I do not consider that a blanket approval of transport corridors with 5.6m wide carriageways is appropriate. New transport corridors are a Restricted Discretionary activity and the transport criteria at Appendix 15-6 provide guidance that allows flexible designs to be developed. The use of these narrow carriageways should be considered on a site-by-site basis that allows the specific place and movement context to be considered.

4.7. Neighbourhood Street

As agreed at the Transport Caucusing[23], it may be appropriate for a "minor local transport corridor" category to be included within Table 15-6b provided that suitable metric(s) can be provided to classify it.

In my opinion it is difficult to set a single transport metric to define the use of minor local transport corridors/ neighbourhood streets. With increasing development densities, setting a limit of the number of lots/ dwellings could result in very short street and poor subdivision layout. A limit on length could result in a large number of lots/dwellings with relatively high travel demand and potentially resulting in poor connectivity for walking and cycling, both of which are inconsistent with the objectives and policies of the Peacocke Structure Plan (DEV01-PSP: O18, O19, P39, P41, P44, P45, P48, P50).

Table 15-6a)ii) of the ODP provides a 16m road reserve for low volume local roads serving 10 to 20 residential units, but does not apply within the Peacocke Structure Plan area. This includes a 6m carriageway but allows narrower berms. As discussed above, in some recent developments (e.g. Te Awa Lanes and Greenhill) the carriageway has been reduced from 6m to 5.5-5.7m taking into account the lower number of dwellings and reduced through movement function that these neighbourhood streets have.

I understand that the 20 dwelling unit limit in the ODP was based on the change in hierarchy/ classification from lane to local road described at Table 3.2 of NZS4404. However, changes in housing typology and increasing development density (i.e. reduced lot sizes) that have occurred since the NZS4404 was published in 2010 potentially requiring very short streets to meet this criteria and there are few other transport metrics by which to define a lower classification of local road. To simplify the District Plan, this low volume local road category was not included in the notified version of the Peacocke Structure Plan, instead relying on the Restricted Discretionary activity status and assessment criteria to determine when a reduction in carriageway width may be appropriate.

I do not consider a blanket approval of neighbourhood streets with 5.6m wide carriageways appropriate. These widths lead to an increased risk of adverse operational effects for vehicle movement, parking and access for refuse, recycling and food-scraps collection vehicles. In my experience, a lack of, or poorly defined on-street parking can lead to:

- Vehicles parked on both sides of the street limiting traffic movements to one-way. This can have potentially serious consequences for access by emergency vehicles or lead to non-collection of refuse and recycling.

[23] Planning & Transport (2) Caucusing, 23 August 2022, Section 3.3

- = Vehicles parking on the berm resulting in damage to the kerb which requires more frequent replacement/ and damage to berm/ grass/ planning reducing the amenity value of these areas, and
- = Requests to Council for parking enforcement and education.

I recommend that a precautionary approach is taken to the use of a neighbourhood street cross-section. In my view the use of neighbourhood streets should:

- = Be on a site-by-site basis where there is certainty of the subdivision layout and connectivity with the wider transport network;
- = Be very short streets with no (or very little) through movement function; and
- = Be slow speed environments that support walking and cycling.

This review has focussed on addressing the potential transport effects and there is a risk that this neighbourhood street cross-section will not adequately provide for non-transport related functions including stormwater management, landscaping, climate change and amenity.

If a neighbourhood street is to be included in Table 15-6b I recommend the following criteria be used along with a specific assessment criteria. There is some overlap between the assessment criteria recommended below and those recommended in response to the MDRS provisions.

Table 15-6b) Transport Corridor Criteria:

=	Transport Corridor Type	Neighbourhood Street
=	Land Use Environment	Residential (up to 20 dwellings or 100m)
=	Design Speed	30km/h
=	Legal Road Width	14.3m
=	Carriageway Width	5.6m
=	Recessed parking, stormwater management and landscaping	2.1m on one side
=	Footpath	1.8m wide on both sides
=	Cycling	Shared in movement lane
=	Service corridor	1.5m both sides

P5	Subdivision in the Peacocke Structure Plan
New	The extent to which the design of neighbourhood streets considers: - Subdivision layout and potential for through movement. - The adjacent land use. - The on and off-road walking and cycling networks. - Provision of on-street parking and vehicle crossings relative to the proposed building typology. - Access for the refuse, recycling and food-scraps collection vehicles. - The provision of non-transport functions like stormwater management, landscaping, amenity and services. - Safety in Design as it relates to the maintenance of

In summary, I do not consider a blanket approval of neighbourhood streets with 5.6m wide carriageways appropriate. These widths lead to an increased risk of adverse operational effects. The

use of these narrow carriageways should be considered on a site-by-site basis that allows the specific place and movement context to be considered. This requires additional assessment criteria specific to this type of cross-section.

4.8. Open Space Edge Transport Corridor

The Adare Company (53.21 and 56.98(5)) submitted seeking that an Open Space Edge transport corridor be introduced. Open Space/ Park Edge transport corridors have been consented elsewhere within HCC with a variety of cross-sections and approaches to providing on-street parking (e.g. parallel vs angle parking). Due to the scale of open space anticipated within Peacocke there are advantages in providing a cross-section specific to Peacocke.

The minimum width for an opposing 90-percentile car[24] and service vehicle to pass is 5.65m allowing 300mm clearance to kerbs and each other (i.e. 3 x 0.3m clearances plus 1.9m car plus 2.85m service vehicle = 5.65m). A parked car and two cars passing takes up 6.6m (3 x 1.9m cars + 0.9m clearances).

These corridors will only have development on one side of the road resulting in low traffic volumes and reduced potential for conflict between opposing and manoeuvering vehicles. Similarly, there will be fewer large servicing vehicles because development occurs on one side only. These corridors are unlikely to be very long lengths as development economics will favour development on both sides of the corridor.

There will be lower parking demand from residential activities and recessed parking on one side is consider appropriate. Depending on the nature of the open space there may be parking demand from visitors to the space. This increases the potential for inappropriate berm and footpath parking, or there will be sections of "single lane" flow.

I recommend that Table 15-5b is amended to include an 11.8m cross-section for Open Space Edge Transport Corridors, refer to Appendix 1 for the detail of this cross-section. A new assessment criteria is required to ensure that design of Open Space Edge corridors integrates with the adjacent open space.

P5	Subdivision in the Peacocke Structure Plan
New	The extent to which the design of any Open Space Edge Transport Corridor: - Considers the level of walking and cycling infrastructure provided within the adjacent open space - Provides on-street parking for users of the adjacent open space

This also requires additional text to be included in Chapter 3A, under the heading "Peacocke Transportation Network":

> ba) **Open Space Edge Corridors**: Open Space Edge Corridors have low traffic volumes, as well as travel speed of 10 to 30 km/h. They are streets with residential development on one side and Open Space on the other. These streets should have friction (trees, green infrastructure, parking, etc.) on either side of the street to slow speeds and allow for mix of traffic and cycling. Local streets are some of the most important street types, as this is where people live and play. Walking and cycling should be prioritised as the fundamental units of movement within the local road network by designing low traffic streets. The needs of a wide variety of people throughout their lifetime should be considered during the design

[24] HCC District Plan, Appendix 15, Figure 15-1j, 90%ile car is 1.88m plus mirrors

of these street (Universal Access provisions). Local street should be multi-purpose streets that are a community asset. They are spaces used for gathering, play, and support the built form through the provision of amenity (street trees).

Key Design Principles

- Design speed of 30km/h
- Residential development limited to one side with open space on the other side
- Short blocks

4.9. Private Ways and Rear Lanes

Waka Kotahi (10.29), Jones Lands Limited (13.14), Northview Capital Limited (14.13) and The Adare Company (53.98(2)) submitted seeking amendments to the provisions related to rear lanes. These submissions are summarised as:

= Waka Kotahi seeks a rule limiting the length of rear lanes;

= Jones Lands and Northview Capital considers that the provisions limiting the length, number of units, ownership model or any reference that they should provide for planting, walking and cycling or trip reduction, and/or large trucks and their manoeuvring are inappropriate; and

= Adare seeking clarity between the standards applying to rear lanes and private ways.

In my view minimum standards are necessary to ensure that rear lanes are safe and appropriate for use by a wide range of users, including walking cycling, micro-mobility devices, cars and trucks such as fire engine, refuse and recycling trucks and furniture removals. Council's preference is for rubbish and recycling to be collected by Council contractors (not private collection) and in some circumstances it may be necessary for collection to occur from the rear lane which requires access by a large rigid truck. In my view, it is necessary to include minimum standards for rear lane to ensure that the lane is accessible to a wide range of users and minimise the risk of adverse safety outcomes arising from interactions of these users.

In response to the Adare submission, private ways and rear lanes are now more clearly defined and identified separately in the relevant provisions. The standards for private ways are closely aligned with the Operative District Plan and a new category for rear lanes has been established.

The proposed changes allow ownership of rear lanes through an "appropriate legal mechanism" that provides for ownership, and ongoing management and maintenance. It does not have to be a Unit Title arrangement.

The Fire and Emergency NZ (FENZ) submission submitted that the New Zealand Fire Service Firefighting Water Supplies Code of Practice SNZ PAS 4509:2008 ('Code of Practice') and the 'Emergency Vehicle Access Guideline' (May 2015) are mandatory through inclusion in the RITS. I support that position and recommend amendments to the width of private ways (refer to Table 15-6b) and inclusion of height and width standards for rear lanes within SUB-PREC1-PSP: R20 (3) so that the relevant parts of the Code of Practice and guideline are considered at the time of subdivision.

I recommend the following changes (blue text) to Rule SUB-PREC1-PSP: R20 and changes to Table 15-6b (refer to Appendix 1). Changes to Rule 25.14.4.1h) are discussed separately in the following section.

SUB-PREC1-PSP: R20 Provision of parking and access.

Where on-site parking and/or access is provided:			
1)	Parking, access and manoeuvering areas shall meet the requirement of Chapter 25.14 Transportation		
2)	Vehicle crossings located over a shared path or separated cycle lane on minor arterial transport corridors shall be separated by a minimum of 50m.		
3)	All rear lanes shall meet the following standards:		
	A.	i) Minimum legal width	7m
		ii) Maximum length ~~number of residential units served~~	~~20~~ 250m
		iii) Minimum unobstructed width at vehicle entrances and between buildings or structures	3.5m
		iv) Minimum height clear of buildings and other obstructions	4.0m
	B.	Each rear lane shall be:	
		i) Designed to provide access and egress for large rigid tricks such as fire, furniture removal, refuse and recycling-collection trucks	
		ii) Connected by unrestricted access to a transport corridor in at least two locations ~~at each end~~	
		iii) Privately-owned and its owners shall be responsible for its operation and maintenance.	
		~~iv) Common property under the Unit Titles Act when it serves more than 9 residential units.~~	
		iv) Kept clear of carparking or storage of materials, landscaping, fencing or other obstructions that would restrict access by emergency vehicles.	
	C.	Shall have a maximum gradient of 1:5	
4.		Where vehicle access is provided by a rear lane, each dwelling shall have a separate pedestrian access from the primary transport corridor boundary or a reserve where pedestrian access is provided.	
5.		The ability for any proposed lot in a subdivision to comply with the vehicle crossing separation distance requirements in Rule 25.14.4.1a) and 25.14.4.1c) shall be demonstrated.	

I recommend the following changes to the assessment criteria:

P5	Subdivision in the Peacocke Structure Plan
g)	~~Where narrow dwelling units are proposed and rear lanes are required for vehicle access,~~ For rear lanes, the extent to which: 1. The lane provides safe access to adjoining dwellings; 2. The lane incorporates planting/landscaping to provide on-site amenity; 3. It is designed to ensure it provides rear access only and any adjoining dwellings front a public road or a reserve where pedestrian access is provided. 4. The design allows for ease of access to the transport corridor for management of rubbish and servicing. 5. The lane is designed to include traffic calming measures to promote slow vehicle speeds and provide a safe shared space. 6. An appropriate legal mechanism will be established for ownership and ongoing management and maintenance of the lane and providing indemnity for collection of rubbish and recycling (where the collection vehicles are proposed to enter the rear lane)

4.10. Consistency with Rule 25.14.4.1 h)

The Adare Company (53.21, 53.83, 53.98) made several submissions relating to the lack of consistency between Rule 25.14.4.1 h), Table 15-6b and SUB-PREC1-PSP:R21. I agree that these parts of the District Plan should be consistent.

I recommend that the internal access widths for residential units described at Rule 25.14.4.1 h) are relocated to SUB-PREC1-PSP:R21. This means that all road and internal access widths relevant to Peacocke are described in the same rule.

If legal widths are retained within SUB-PREC1-PSP: R21, my recommended amendments to Rule 25.14.4.1 h) vii) are provided below in blue text:

vii) The internal vehicle access requirements for residential units at ~~of~~ i., iv and v do not apply ~~to rear lanes~~ in the Peacocke Structure Plan. Instead SUB-PREC1-PSP: R21 Roading and Access ~~the following~~ shall apply.~~:~~

~~i. Minimum legal width of a rear lane~~	~~7m~~

Alternatively, a separate table of the internal access width requirements for the Peacocke Structure Plan could be provided in a modified Rule 25.14.4.1 h) vii).

Rule 25.14.4.1 h) vii).
The internal vehicle access requirements of i. for residential units, and the requirements of iv and v do not apply to rear lanes in Peacocke Structure Plan. Instead the following shall apply:

~~i. Minimum legal width of a rear lane~~	~~7m~~

Internal vehicle access	Use of access	Minimum formation width (m)	Minimum legal width (m)
Residential units	1-6 units	3.5	4.0
	7-20 units (Private Way)	5.5	6.0
	7-20 units (Neighbourhood Street)	5.6	14.3
	More than 20 units (Local Road)	6.0	16.8
	More than 20 units (Open Space Edge Road)	5.6	11.4
	More than 20 units (Collector Road – PT Route)	6.4	24.6
	More than 20 units (Collector Road – Non-PT Route)	6.0	24.2
Residential units (rear lanes)	Rear lane	5.5	7.0

My recommended amendments to SUB-PREC1-PSP: R21 are provided below in blue text:

SUB-PREC1-PSP: R21 Roading and Access		
1)	Minimum ~~road~~ width of vehicle access to be formed and vested as public road: a) Local ~~Road~~ Transport Corridor b) Collector ~~Road~~ Transport Corridor - no Public transport c) Collector ~~Road~~ Transport Corridor – Public transport Route d) Neighbourhood Street d) Open Space Edge Transport Corridor e) Minor Arterial Transport Corridor	 16.8m (See note 1) 24.2m (See note 1) 24.6m (See note 1) 14.3m (See note 1) 11.8m (See note 1) 32.2m (See note 1)
	Note 1: This width does not provide for swales or stormwater management. Additional width may be required for these features, if present, and may be required to accommodate any other features or activities.	
1a)	Minimum width of a private way or rear lane: a) Rear lane b) Private way (serving 1-6 units) c) Private way (serving 7-20 units	 7m 4m 6m
2)	Maximum pedestrian/cyclist access way length through a block	80m
3)	Minimum width for pedestrian/cyclist through a block: a) 40m or less in length. b) 41m – 60m in length. c) 61m – 80m in length:	 6m wide 9m wide 12m wide
4)	Minimum paved width for shared pedestrian/cyclist path through a block.	3m
5)	Internal vehicle accesses and public roads shall meet the relevant requirements of Table 15-6b in Appendix 15.	

Regardless of whether SUB-PREC1-PSP:R21(1) is retained or deleted, I support introducing the following new assessment criteria:

P5	Subdivision in the Peacocke Structure Plan
New	The extent to which transport corridor design provides design elements identified in or otherwise contrary to any criteria contained in Table 15-6b of Appendix 15.

5. INDICATIVE LOCAL TRANSPORT CORRIDORS

5.1. Introduction

Submitters have sought changes to the location of indicative local transport corridors shown on Appendix 2 Figure 2-2: Peacocke Structure Plan – Transport Network. I have considered each change in the following sections.

5.2. Submission 13.5 (Jones Lands Limited)

Submission 13.5 (Jones Lands Limited) seeks a number of changes to the indicative collector and local network on their property.

Submission Point	Response
1. Extend the collector road proposed over the adjoining Aurora development south east toward Southern Links north-south Arterial to achieve better connectively and support the identified neighbourhood centre.	From a transportation perspective, submission points (1) and (2) are unlikely to result in adverse impacts on the transport network and hierarchy. However, there may be topographical or ecological constraints that make this unacceptable.
2. In conjunction with the above, reduce classification of road marked X above to a local road to afford a better urban design and ecological outcome.	
3. Remove overbridge proposed along Peacocke Road crossing Southern Links and consider partial closure of Peacocke Road, re-routing of roads and better integration with adjoining growth cell.	I recommend rejecting the submission seeking partial closure of Peacocke Rd. This corridor is identified as minor arterial, and the overbridge is required to maintain continuity of the arterial transport network. HCC is typically responsible for funding and constructing the minor arterial network.
4. Provide for any changes as a result of the above, including the possible relocation of neighbourhood centre in locality.	Relocation of neighbourhood centre outside my area of expertise

Table 1: Discussion of Submission 13.5

Figure 5: Amendments Sought through Submission 13.5

5.3. Submissions 12.2 and 50.29 – Local Road to Ohaupo Road

Submission 12.2 (Hodgson Trustee Management Co. Limited) and Submission 50.29 (Stuart and Maylene Ross) both sought changes to the location of the indicative local road connecting to Ohaupo Road. The alternative location shown below (extract from Submission 50.29) is supported because:

- The revised location maximises sight distance in both directions from the proposed local road; and
- The revised location aligns with a previous subdivision (HCC Ref: 11.2014.5972) that provided an "access at least 20m wide for future roading if needed".

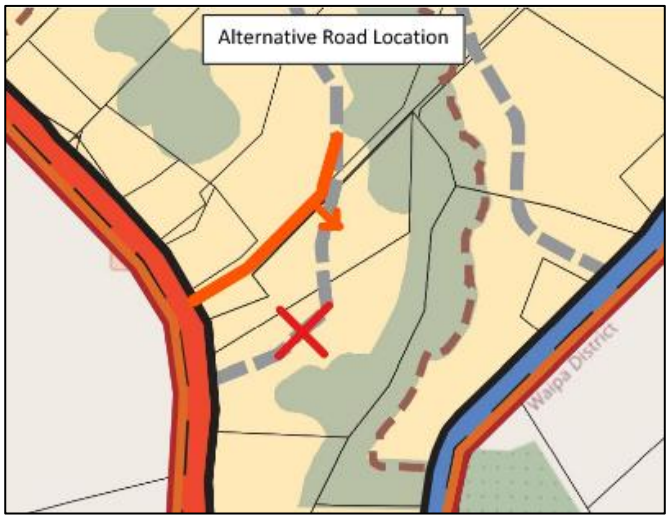


Figure 6: Revised Indicative Local Road to Ohaupo Road

5.4. Submission 19.2 (Nathan Cox)

From a transportation perspective, the submission point is broadly acceptable and is unlikely to adversely impact on the hierarchy. As indicated in red below, some changes to the alignment are possible, but the corridor will not be able to follow the boundary along the full length as the geometric alignment will not meet the required design standards.

The indicative nature of the alignments is already described in the structure plan at Chapter 3A, Development Area 1: Peacocke Structure Plan, Peacocke Transportation network (page 18-19).

There may be topographical or ecological constraints that make this proposed change unacceptable.

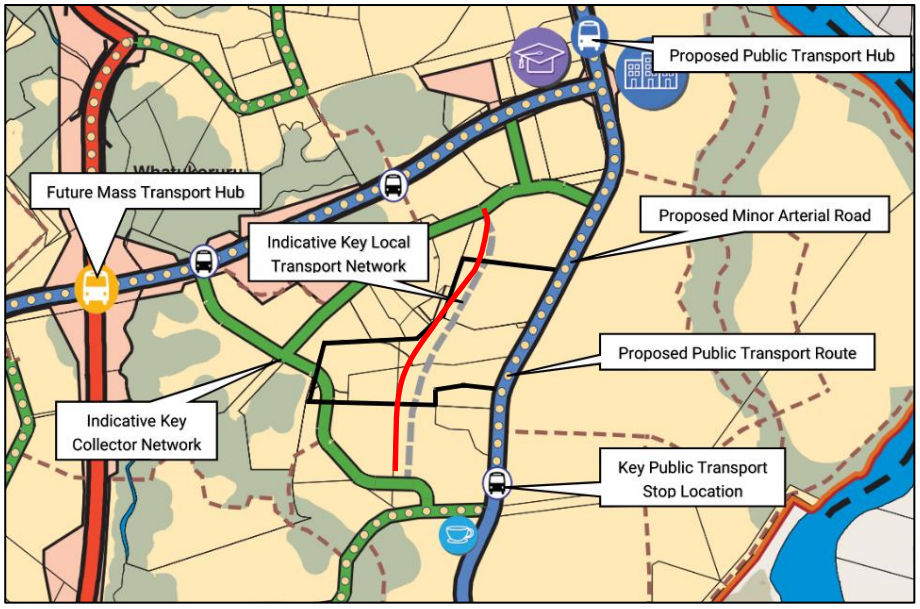


Figure 7: Relocation of Indicative Local Road

5.5. Submission 44.3 (Cordyline)

The submission seeks removal of the proposed collector road from their property or amendments to clarify that the transport network is indicative only and is not intended to show exact alignments. I understand that this submission relates to the properties shaded red in the figure below.

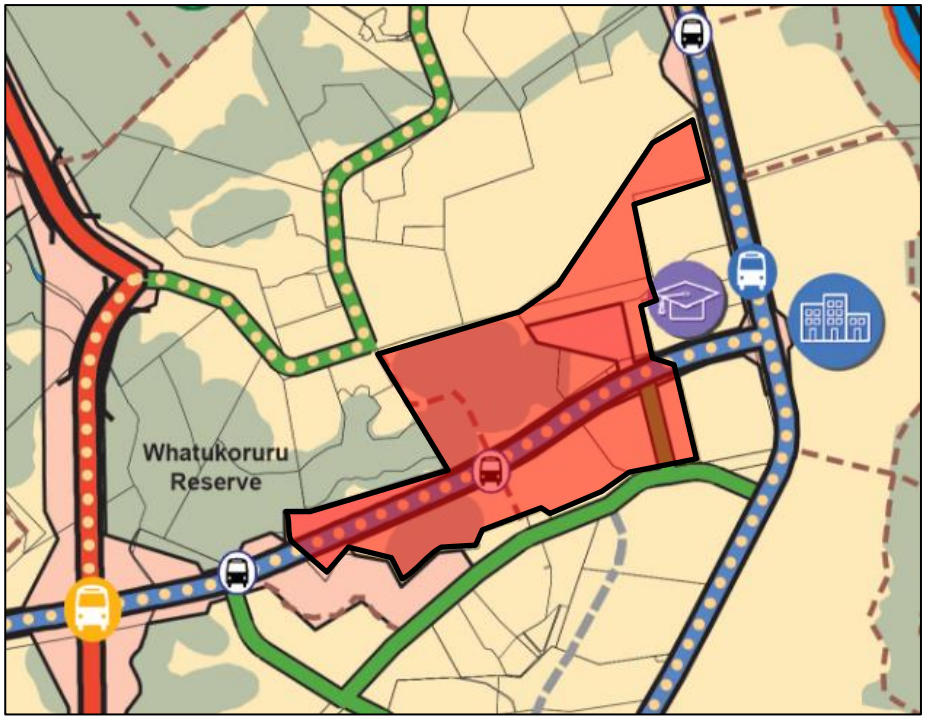


Figure 8: Submission 44.3, Approximate Extent of Subject Property

In my view it is important that the Structure Plan clearly identifies connected and integrated collector network, including a connection to the minor arterial. I do not support complete removal of the collector road.

The indicative nature of the alignments is already described in the structure plan at Chapter 3A, Development Area 1: Peacocke Structure Plan, Peacocke Transportation network (page 18-19).

Change to this text, Figure 2-1 Land Use and Figure 2-2 Transport Network were discussed during the transport caucusing.

I understand that there are on-going discussions between the submitter and HCC team delivering the minor arterial about the potential relocation of the intersection to the west (and remaining within the submitters property). The location of the collector may change as a result of those discussions.

5.6. Submission 53.93 (Adare)

I recommend that the Adare submission seeking a new indicative local road be included on the structure plan map is accepted. The proposed local road will connect to Peacocke Road midway between two signalised intersections and gives certainty that access between the affected land and Peacocke Road (a minor arterial) is anticipated.

Figure 9: New Indicative Local Road to Peacocke Road

5.7. Submission 57.3 (Victoria Collins & Troy Radovancich)

I recommend that the submission seeking an indicative local road connecting from their property to the east-west minor arterial (Whatukooruru Drive) be rejected. The subject property already has frontage to a paper road which provides certainty that access can be provided to Whatukooruru Drive along that corridor.

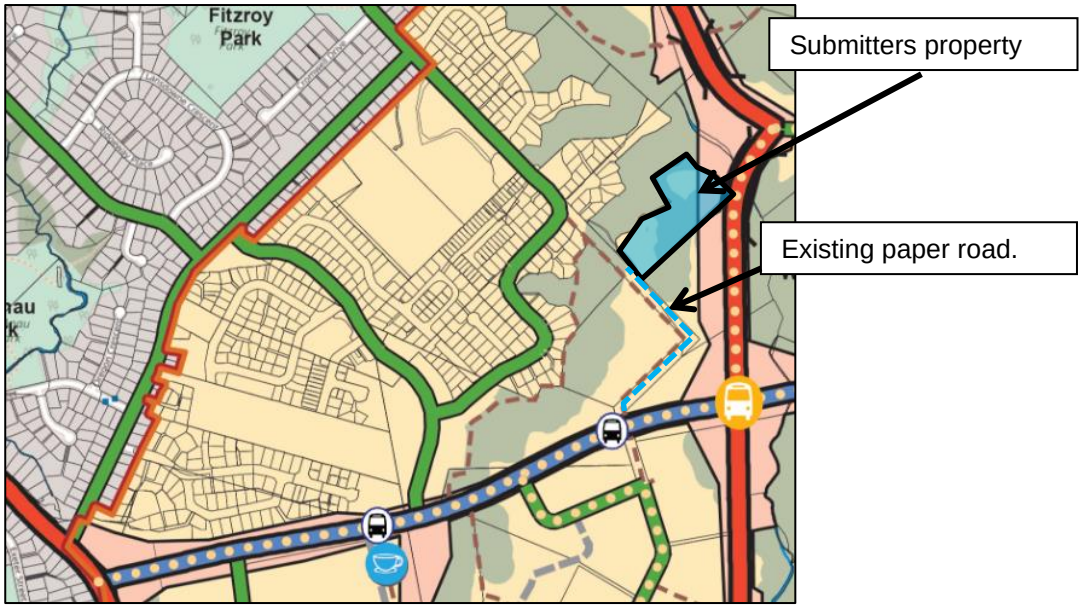


Figure 10: Existing Paper Road to Whatukooruru Drive

5.8. Ohaupo Road/ Hall Road Intersection

5.8.1. Submissions

The following submitters seek changes to the indicative local road intersection with Ohaupo Road as a result of closing the current Hall Road intersection:

- Submission 10.15 Waka Kotahi seek that reference to upgrade the Hall Road/ SH3 intersection is removed from the Stage D and E within the tables titled 'Strategic Infrastructure Required'
- Submission 10.37 Waka Kotahi seek that connection showing the relocated Hall Road intersecting with Ohaupo Road is removed from the Transport Network Plan
- Submission 42.5 Ohaupo Land LP – support closure of the current Hall Road intersection, but seek the new intersection to be located south of the reservoir
- Submission 43.5 Golden Valley Farms – support closure of the current Hall Road intersection, but seek the new intersection to be located south of the reservoir

5.8.2. Discussion

The Structure Plan seeks that the existing Hall Road/ SH3 intersection be closed due to existing safety concerns and this connection be relocated to a more suitable location south of the existing intersection and confirmed as a collector. As shown the connection maximises the sight distance from the new location approximately midway between the Whatukooruru Drive and Raynes Road intersections with SH3.

In the long term, state highway status is expected to be revoked from Ohaupo Road and it will revert to local road. Depending on the level and nature of traffic on Ohaupo Road, it may not be desirable to create a new intersection while it remains a state highway.

I note that all new transport corridors are RD activities and the existing Assessment Criteria G3d) states: *"Issues and outcomes arising from consultation with the relevant road controlling authorities and/or Kiwirail."* While the structure plan includes commentary on the indicative nature of the alignments shown on the structure plan, I recommend that this discussion be expanded and include reference to consultation with Waka Kotahi where there is new intersection with the state highway.

5.8.3. Recommendations

In response to Waka Kotahi (10.15), I recommend that the Peacocke Infrastructure and Staging Table (Chapter 3A) be amended as follows:

Stage	Strategic Infrastructure Required
B	- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout
D	- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout - New collector road (if connecting to Hall Road then Hall Road urban upgrade to collector standard and ~~upgrades to~~ closure of the existing Hall Road/ SH3 intersection will also be required)
E	- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout - Peacocke Road urban upgrade to minor arterial standard (from Stage F) - Hall Road urban upgrade to collector standard and connection to east-west minor arterial, and ~~upgrades to~~ closure of the existing Hall Road/ SH3 intersection - Peacocke Lane urban upgrade to collector standard - New collector road linkages in the south-eastern catchment

In response to Waka Kotahi (10.15), I recommend adding an additional footnote to the Peacocke Infrastructure and Staging Table (Chapter 3A, page 30):

> ***** The transport network shown on the Structure Plan is indicative and not intended to show exact alignments. The final alignment will be largely determined as individual subdivisions are progressed. New or altered intersections on the state highway network require the approval of Waka Kotahi.

In response to Waka Kotahi (10.15), I recommend amending the Transport Network text (Chapter 3A, page 19) as follows:

> The transport network (refer to Figure 3.4.4a and Volume 2, Appendix 2, Figure 2-2 Peacocke Structure Plan Transport Network) shown on the Structure Plan is indicative and not intended to show exact alignments. It is important that the Arterial and Collector networks are established in general accordance with the structure plan in order to deliver a well-connected network that provides a high level of service for public transport and walking and cycling. Collector and key local networks are shown conceptually to provide key linkages and ensure integration between land parcels and different residential developments. The final alignment will be largely determined as individual subdivisions are progressed. New or altered intersections on the state highway network require the approval of Waka Kotahi.
>
> ~~All transport networks shown on the Structure Plan are considered to be key linkages and future developments must show how these connections are to be provided and how future integration is to be ensured with surrounding land parcels to ensure that integrated and permeable development that avoids the used of Culs-de-sac. Collector roads and key Local Roads in particular are shown conceptually to provide key linkages and ensure integration between land parcels within and between different residential developments.~~

I recommend that:

- = Submission 10.37 be rejected because the proposed relocation of the existing intersection is considered necessary. The District Plan and structure plan provide flexibility so that the intersection form and transport corridor alignment can be considered at the time of subdivision.

= Submission 42.5 and 43.5 be rejected because relocating the relocated Hall Road intersection further south does not allow for integration of Houchens Structure Plan and results in poor sight distance for the Peacocke connection.

6. PUBLIC TRANSPORT

6.1. PT Routes and Consultation with WRC

Jones Lands Limited (Submission 13.17), Northview Capital Limited (14.16) and Adare Company (Submission 53.81) seek that the requirement for consultation in Rule SUB-PREC1-PSP:R25 with WRC is deleted. This is supported in part. I recommend that the requirement for consultation with WRC is deleted from the rules and incorporated as new assessment criteria. The existing assessment criteria relating to public transport in Peacocke and the new criteria are provided below.

Assessment criteria P4 b)	The extent to which the streetscape and road corridors have been designed to: i. Establish a slow speed environment that priorities the safe movements of pedestrians and cyclists. ii. Enable use of the footpath for outdoor dining. iii. Integrate with Public Transport. iv. Be accessible and useable by people of all ages and abilities. v. Provide a high amenity environment with lighting, seating and planting. vi. For the main street, provide sufficient space to enable onstreet dining and seating.
Assessment criteria P5 m)	Whether the transport corridor has been designed to provide a high amenity environment that provides for public transport, a high-quality, safe walking and cycling network that maximises accessibility for people of all ages and abilities.
New assessment criteria	The outcome of consultation with the Waikato Regional Council regarding public transport.
New assessment criteria	The extent to which the transport corridor design provides public transport infrastructure including accessible bus stops, bus stop shelters, bus priority measures on key corridors or at key intersections, bus turning facilities, including interim facilities responding to staged development, and facilities for pedestrians to cross transport corridors to access public transport stops.

6.2. PT Infrastructure

6.2.1. Definitions

New or modified definitions for PT infrastructure are sought by Waka Kotahi (10.34 and 10.35) and WRC (36.62 and 36.63). WRC are currently consulting on the draft RPTP 2022-2032 which includes a new hierarchy for bus stops and public transport infrastructure.

I recommend deleting definitions for 'Public Transport Station' and 'Public Transport Station Catchment' as they are not relied upon elsewhere in PC5.

I propose the following definitions as replacement definitions be used in relation to Appendix 2, Figure 2-2 Transport Network for consistency with the draft RPTP 2022-2032

Primary Bus Interchange

Locations where one or more frequent lines intersect with an existing or future rapid line. Primary interchanges will be busy with high volumes of people and bus movements and be surrounded by moderate to high land use densities and/or major activity centres.

Key Public Transport Interchange: Locations where two or more frequent lines intersect. The locations will be moderate passenger volumes and be surrounded by at least moderate land use densities.

6.2.2. Bus Stop Locations

WRC (36.75) seeks that additional bus stops are shown on Figure 2-2 Peacocke Structure Plan – Transport Network.

WRC seek an additional bus stop be included on the major arterial leading to the new Waikato River Bridge (indicated by the black cloud on the figure below). Much of the potential catchment east of the major arterial has been consented as a retirement village (including a dementia and hospital unit) or has access to the stop on Peacocke Road. The catchment west of the minor arterial is limited with land uses including open space and the HCC water treatment plant. 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 do not support including a bus stop in this location.

The bus stops shown on Figure 2-2 Peacocke Structure Plan – Transport Network do not accurately reflect the locations determined through detailed design of Peacocke Road and the changes to the figure are necessary. The proposed bus stop locations should be as indicated below.

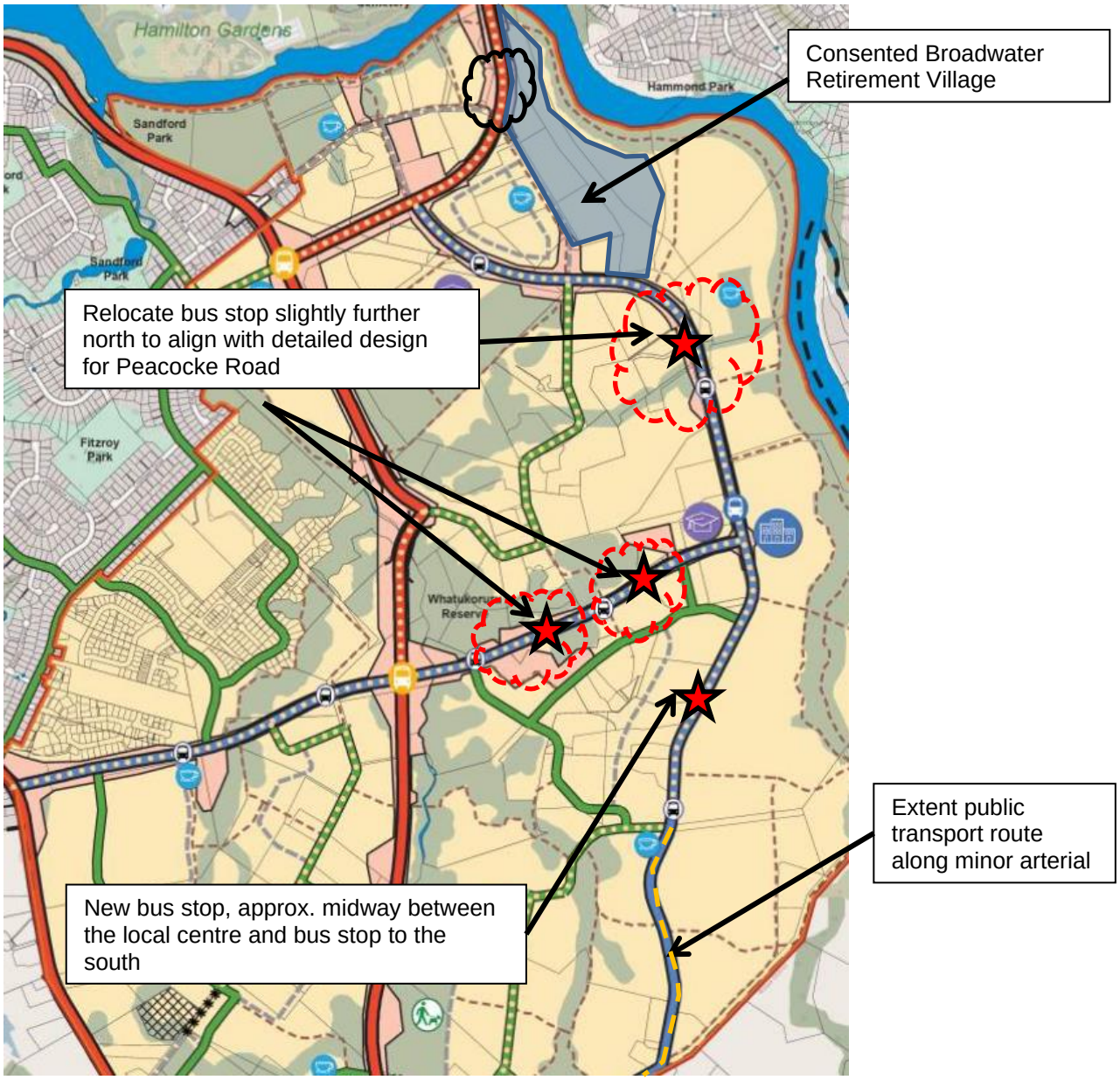


Figure 11: Revised Bus Stop Locations

6.2.3. Recessed Bus Stops

Mithrandir Enterprises Ltd (Submission 8.2) sought that recessed bus stops be provided, rather than in-lanes stops (as described in Table 15-6b).

The plan change seeks to prioritise walking, cycling and public transport in line with Waka Kotahi's Keeping Cities Moving and the Hamilton-Waikato Metro Spatial Plan. An important aspect is to prioritise public transport movements with kerbside bus stops preferred.

The public transport routes in Peacocke are expected to operate at 15min or 30min frequency so the frequency of buses impacting on following vehicles is low, and the number of vehicles affected will also be low. Reducing delays to bus passengers makes bus use more attractive and encourages mode shift.

I recommend that this submission be rejected as recessed bus bays have the following disadvantages[25]:

- = Difficult merging. Bus drivers find it difficult to merge into the mainstream of traffic increasing journey times.
- = Wasted space. Indented bus stops require a significant distance to ensure that buses can pull in 'flush' with the kerb. This means that there is less area available for wider footpaths, streetscape, berms, landscaping, or on-street parking.
- = Poor accessibility. Can result in difficulty for boarding where the bus is not parallel with the kerb due to poor geometry.
- = Illegal parking. Bus bays are prone to attract inconsiderate parking or loading especially in high-activity areas.

[25] Auckland Transport Public Transport – Bus Infrastructure Guide, Section 5.1

7. CONCLUSION

The success of Hamilton's transport system relies on creating a new approach for multi-modal (different types of transport) movement. The Peacocke area will be developed in line with Hamilton's vision for accessibility set out in Access Hamilton and is consistent with Vision Zero. In a transport sense this means providing a multi-modal transport network that provides access to frequent public transport on key routes and a direct and accessible walking and cycling network, that is safe and enjoyable to use.

Key transport features that distinguish Peacocke from the Operative District Plan provisions are:

- Designing the transport system to prioritise safety, and prioritise pedestrians and cyclists over vehicles;
- Wider footpaths on local corridors;
- Separated cycle lanes on the collector network;
- Increased density around key transport routes and activity centres;
- Identification of public transport routes so that infrastructure can be provided at the time of subdivision; and
- Bus stops are to be provided in-lane to minimise delays to the public transport services;

Some of the key changes proposed in response to submissions include:

- Introducing criteria for Open Space Edge and Minor Arterial Transport Corridors specific to Peacocke.
- Introducing additional assessment criteria to support development of local transport corridors.
- Clarifying the difference between rear lanes and private ways.
- Introducing additional standards and assessment criteria to support the development of rear lanes.
- Reviewing the public transport corridors and bus stops shown on the Transport Network map.
- Changing the location of some indicative local transport corridors.

In summary, the current transport provisions of the District Plan support the strategic transport framework, but the Peacocke Plan Change seeks to go further through the objectives and policy seeking integration of land use. The proposed framework 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, in particular for shorter trips of less than 2km.

APPENDIX 1: TABLE 15-6B: CRITERIA FOR THE FORM OF TRANSPORT CORRIDORS IN THE PEACOCKE STRUCTURE PLAN

Transport corridor type[1]	Land use environment [2]	Design speed environment (max desirable)	Legal road width (min desirable)[4, 5, 14]	Carriageway width[3]	Movement lane width[15]	Berm requirements[5]	Berm requirements[5]					
							On street parking and landscaping/ stormwater management		~~Passenger~~ Public transport requirements (min desirable)[11]	Footpath requirements (min desirable)[12]	Cycle~~path~~ requirements (~~min desirable~~ absolute minimum)	Service corridor (min desirable)[6]
							On street parking requirements (min desirable)	Stormwater Management and landscaping				
Peacocke Residential Land Use Environment												
~~Private Way~~ Rear Lane	Residential ~~Rear lane access (two-way)~~	10~~-20km~~/h	7m	5.5m	~~1 or~~ 2 way flow, not marked	~~One side~~ N/A	None	None	None	Shared Zone	Shared zone – no dedicated facility	One side
Private Way	Residential (serving 1-6 units)	10km/h	4m	3.5m	2 way flow, not marked	One side	None	None	None	Shared Zone	Shared zone – no dedicated facility	One side
Private Way	Residential ~~(serving 7-20 units (– via common property under uUnit Titles Act) or, 7-9 units (where access is part of a fee simple subdivision)~~	10 ~~to 20~~km/h	~~69~~m	5.5m	2 way flow, not marked	~~1.5m both sides~~ One side	None	None	None	Shared Zone	Shared zone – no dedicated facility	~~1.5m both sides~~ One side
Park Edge	Residential	30km/h	11.4m	5.6m	2 way flow, not marked	3.3m and 2.5m berms	Recessed parallel parking bays (2.1 m) on one side	Specific Design	None	1.8m wide footpath, one side	Cycling on road shared in movement lane	1.5m one side

Transport corridor type[1]	Land use environment [2]	Design speed environment (max desirable)	Legal road width (min desirable)[4, 5, 14]	Carriageway width[3]	Movement lane width[15]	Berm requirements[5]	Berm requirements[5]				
							On street parking and landscaping/ stormwater management		~~Passenger~~ Public transport requirements (min desirable)[11]	Footpath requirements (min desirable)[12]	Service corridor (min desirable)[6]
							On street parking requirements (min desirable)	Stormwater Management and landscaping			Cycle~~path~~ requirements (~~min desirable~~ absolute minimum)
Neighbourhood Street	Residential (serving up to 20 units or up to 100m long)	30km/h	14.3m	5.6m	2 way flow, not marked		Recessed parallel parking bays (2.1 m) on one side	Where parking is not provided - Specific Design (2.1m wide) on one side[8]	None	1.8m wide footpath, both sides	Cycling on road shared in movement lane	1.5m both sides
Local	Residential	30km/h	16.8m[1]	6m	2 way flow, not marked	5.4m both sides	Recessed parallel parking bays (2.1 m) on both sides	Where parking is not provided - Specific Design (2.1m wide) on both sides[8]	None	1.8m wide footpath, both sides	Cycling on road shared in movement lane	1.5m both sides
Collector – PT Route	~~1.~~ Residential	40km/h	24.6m[1]	6.8m	2 @ 3.4m, marked	8.8m both sides	Recessed parallel parking bays (2.1 m) on both sides	Alternating where parking is not provided - Specific Design (2.1m wide) on both sides	All bus stops to be in lane. ~~2.8m~~ 2.9m berm with bus shelter	2m wide footpath, both sides	2m off road, separated from carriageway, both sides. With 0.8m separator from parking. Or 3.5m bi-directional off-road separated from carriageway on one side[2].	2m both sides

Transport corridor type[1]	Land use environment [2]	Design speed environment (max desirable)	Legal road width (min desirable)[4, 5, 14]	Carriageway width[3]	Movement lane width[15]	Berm requirements[5]	Berm requirements[5]				
							On street parking and landscaping/ stormwater management		~~Passenger~~ Public transport requirements (min desirable)[11]	Footpath requirements (min desirable)[12]	Cycle~~path~~ requirements (~~min desirable~~ absolute minimum)	Service corridor (min desirable)[6]
							On street parking requirements (min desirable)	Stormwater Management and landscaping				
Collector – Non-PT Route	Residential	40km/h	24.2m[1]	6.4m	2 @ 3.2m, marked	8.9m both sides	Recessed parallel parking bays (2.1 m) on both sides	Alternating where parking is not provided - Specific Design (2.1m) on both sides[8]	N/A	2m wide footpath, both sides	2m off road, separated from carriageway, both sides. With 0.8m separator from parking Or 3.5m bi-directional off-road separated from carriageway on one side[2].	2m both sides
Minor Arterial	Residential (Managed or limited direct access)[10]	50-60km/h	32.2m. Subject to Specific Design[8]	10.0m	2 @ 3.5m, marked, plus 3m flush median	11.1m. Subject to Specific Design[8]	Recessed parallel parking bays (2.3m) on both sides	Specific Design (2m wide) on both sides[8]	All bus stops to be kerbside. Potential for bus priority at intersections	2.0m footpath on both sides	2.3m off road, separated from carriageway, both sides. With 1.0m separator from parking	1.5m both sides

Note 1: This width does not provide for swales or stormwater management. Additional width may be required for these features, if present.

Note 2: Use of a bi-directional cycleways shall include an assessment that shows the design minimises and manages the risks associated with two-way movement, otherwise single-direction cycleways on each side of the road shall be required.

(Additional footnotes to be included from Table 15-6a, numbering of the footnotes will need to be updated and consistent throughout Table 15-6b))

[1] New Minor Arterial transport corridors are likely to be designated with the final design undertaken on a case by case basis. For work involving significant changes to existing transport corridors, local constraints, land use environment and network function requirements may require design compromises whereby the minimum desirable design criteria may not be able to be met.

[2] Refer to Table 15-4a for which zones form land use environments.

[3] Measured from the face of the kerb to the face of the opposite kerb (excluding any recessed parking but includes any separated cycle facility).

[4] Full transport corridor width.

[5] Measured from the property boundary to the face of the kerb. Berm width will vary in order to accommodate features as required, including: lighting, noise attenuation, landscaping, street trees, swale drains, footpaths, shared paths, cycle lanes, cycle paths, recessed parking. Landscaping or street trees will require a minimum width of 2m and be incorporated into the legal road width (typically replacing indented parking or medians). A berm width wider than that indicated in Table 15-5b may be required to accommodate indigenous trees.

[6] Location of services will be dependent upon the location of the footpath. The Regional Infrastructure Technical Specifications contains relevant guidance on locating services.

[8] Specific design requires case by case consideration of the design elements in the local context. This must be undertaken with input from Council's City Infrastructure engineers.

[11] For guidance on bus stop types refer to the Regional Infrastructure Technical Specifications. The design of kerbside bus stops will result in the positioning of a stopped bus partially or fully within the cycle or movement lane. This may require kerb extensions to achieve. Bus stops and other elements of public transport infrastructure are only necessary if part of a bus route.

[12] For guidance on pedestrian crossing facilities refer to the Regional Infrastructure Technical Specifications.

[15] Excluding shoulders.

APPENDIX 2: RESPONSES TO TRANSPORT-RELATED SUBMISSIONS

Submitter	Number	Summary of Submission Detail	Response
George Lane	6.2	MRZ – PREC1-PSP: R39 Setbacks The submitter supports the overall structure plan, but recommends that for the minimum setbacks in Table MRZ - PREC1-PSP: R39 Setbacks, the minimum distance on the Transport corridor boundary is changed from 3m to 1m. Clarify that verandahs, porches, decks, and access stairs/ramps for a front entrance may be built in the building setback. 1m set backs are common throughout heritage suburbs within Hamilton and we should be attempting to replicate this desirable design feature throughout the city. Smaller front setbacks allow more efficient use of small sites. For a small site with 10m street frontage, reducing the front setback may allow up to 20m2 more outdoor living space in the rear yard. Reduced setbacks also improve the relation to the street by allowing people in the front room of the house to see further along the street. *Relief sought:* Amend the minimum distance from the Transport corridor boundary in Table MRZ - PREC1-PSP: R39 Setbacks from 3m to 1m. Clarify that verandahs, porches, decks, and access stairs or ramps for a front entrance may be built in the building setbac	**Reject (from a transport perspective), noting that the rule will be amended in response to the MDRS provisions.** In my view, it is important that the intent of Rule 39 2) relating to setback of garage doors is retained to ensure that there is sufficient space to park a car between the garage and the transport corridor, or that there is clearly not enough space so that vehicles are parked elsewhere. The remaining points are not relevant to transport.
George Lane	6.7	General – minimum width of pedestrian and cycle links The submitter strongly supports the provisions included but suggests that design guidance is added for the minimum width of 3.5m for pedestrian and cycle links. *Relief sought:* Add design guidance for the minimum width of 3.5m for pedestrian and cycle lin	**Reject** The preferred approach is to provide separate walking and cycling facilities on collector roads. On local road the expected 30km/h speed environment is appropriate for cycling shared in the traffic lane with 1.8m wide footpaths for pedestrians.
Mithrandir Enterprises Ltd	8.2	Provision of bus stops within the road will mean that traffic can only move as fast as the bus which will be stopping regularly. This will create restrictions to traffic flow and frustration with motorists which is a risk for silly or dangerous driving/passing maneuvers. *Relief sought:* Provide bus stops where the bus can pull out of the stream of traffic	**Reject** The plan change seeks to prioritise walking, cycling and public transport in line with Waka Kotahi's Keeping Cities Moving and the Hamilton-Waikato Metro Spatial Plan. An important aspect is to prioritise public transport movements with kerbside bus stops preferred. As outlined in the draft RPTP (Network Diagram 2 and Section 2.3.8.3) the public transport routes in Peacocke are expected to operate at 15min (frequent services) or 30min (coverage services) frequency so the likelihood of buses impacting on following vehicles is low, and the number of vehicles affected will also be low. Reducing delays to bus passengers makes bus use more attractive and encourages mode shift. I note that recessed bus bays have the following disadvantages: - Difficult merging. Bus drivers find it difficult to merge into the mainstream of traffic increasing journey times. - Wasted space. Indented bus stops require a significant distance to ensure that buses can pull in 'flush' with the kerb. This means that there is less area available for wider footpaths, streetscape, berms, landscaping, or on-street parking. - Poor accessibility. Can result in difficulty for boarding where the bus is not parallel with the kerb due to poor geometry. - Illegal parking. Bus bays are prone to attract inconsiderate parking or loading especially in high-activity areas. (refer to Auckland Transport Public Transport – Bus Infrastructure Guide, Section 5.1)
Sub 10 Waka Kotahi	10.1	Amend DEV01-PSP: Vision as follows: The Peacocke area will be developed in line with Hamilton's vision for a 20-minute city, which seeks to provide residents access to everything they need within 20 minutes without relying on private motor vehicles. This means establishing a local centre, which will act as the central community hub, supported by a network of smaller neighbourhood centres, providing day to day convenience for residents. It also means developing direct and safe routes for cyclists to the CBD, Hospital, Grey Street, Hamilton Airport and surrounding existing local centres.	**Accept with changes** It is important that planning and development of Peacocke recognises that transport infrastructure to key destinations outside the growth cell will need to be developed to support mode shift. Insert "pedestrians and" before "cyclists to the CBD,…."
Sub 10 Waka Kotahi	10.2	Amend DEV01-PSP: Vision as follows: These hubs will be supported by a multi-modal transport network that provides access to frequent public transport on key routes and a direct and accessible walking and cycling network, that is safe and enjoyable to use. The network will be constructed to meet best practice principles related to safety, coherence, directness, attractiveness and amenity which will assist in encouraging mode shift~~, in particular for shorter trips of less than 3km.~~	**Accept**
Sub 10 Waka Kotahi	10.3	Submission in Support	N/A

Submitter	Number	Summary of Submission Detail	Response
Sub 10 Waka Kotahi	10.4	Submission in Support	N/A
Sub 10 Waka Kotahi	10.5	Submission in Support	N/A
Sub 10 Waka Kotahi	10.6	Waka Kotahi supports the intent of this policy and agree with requiring integration of transport routes with surrounding neighbourhoods and existing and planned transport networks. It is however noted that this may be repetition of earlier policies, notably DEV01-PSP:39 and DEV01-PSP:P51. Delete DEV01-PSP:P63 ~~Movement routes are integrated with surrounding neighbourhoods and existing and planned transport networks.~~	**Accept**
Sub 10 Waka Kotahi	10.7	Waka Kotahi consider that the intent of this policy is adequately addressed by policies DEV01-PSP:P39, DEV01-PSP:P40, DEV01-PSP:P45, DEV01-PSP:P46, DEV01-PSP:P47, DEV01-PSP:P48, DEV01-PSP:P49, DEV01-PSP:P50 and DEV01-PSP:P51. Delete DEV01-PSP:P65 ~~The transport network supports efficient passenger transport and opportunities for walking and cycling~~.	**Accept**
Sub 10 Waka Kotahi	10.8	Submission in Support	N/A
Sub 10 Waka Kotahi	10.9	Waka Kotahi consider that the intent of this policy is adequately addressed by policies DEV01-PSP:P39, DEV01-PSP:P40, DEV01-PSP:P45, DEV01-PSP:P46, DEV01-PSP:P47, DEV01-PSP:P48, DEV01-PSP:P49, DEV01-PSP:P50 and DEV01-PSP:P51. Delete DEV01-PSP:P67 ~~Opportunities for improved safety, accessibility, connectivity and efficiency within the transportation network are provided.~~	**Accept**
Sub 10 Waka Kotahi	10.10	Deletion of duplication	**Accept**
Sub 10 Waka Kotahi	10.11	Amend as follows: The transport network will be staged as development progresses within Peacocke. The principles for the transport network are: ~~Priorities~~ Prioritises residents of Peacocke's mobility and accessibility by active modes and public transport to places within Peacocke and to the rest of Hamilton, including employment areas. • provide clear, safe and direct access for residents by active modes and public transport to community facilities, commercial areas, places of recreation and other neighbourhoods. • provides people with transport choices (is multi modal) by promoting ~~Public Transport~~ public transport and active modes, at expense of level of service (LOS) for private car. ~~if necessary.~~ • Maximise network efficiency for ~~Public Transport~~ public transport, ~~buses, High Occupance Vehicles (HOV)~~ and active modes through design. • Flexible design to cater for evolution & steps changes in transport system, ~~such as future high occupancy vehicles.~~	**Accept with changes -** I recommend retaining the reference to "High Occupancy Vehicles (HOV)" as they may be provided for in the future.

Submitter	Number	Summary of Submission Detail	Response
Sub 10 Waka Kotahi	10.12	Amend as follows: Key Design Principles • Separate walking and cycling ~~where possible~~. • Provide facilities near destinations such as commercial areas, bus stops and schools. • Short block lengths to create a ~~permiable~~ permeable urban form that the most direct routes for cycling and • A local road network that prioritises walking and cycling and promotes safe vehicle speeds.	**Accept with changes** Recommend amending 'facilities' to 'end-of-journey facilities' to clarify the type of facilities. My recommended amendments in red text: Key Design Principles · Separate walking and cycling ~~where possible~~. · Provide end-of-journey facilities near destinations such as commercial areas, bus stops and schools. · Short block lengths to create a ~~permiable~~ permeable urban form that the most direct routes for cycling and · A local road network that prioritises walking and cycling and promotes safe vehicle speeds. While the term "end-of-journey facilities" is not currently defined in the ODP or PC5, it is used in the ODP. I prefer that the definition is introduced through PC12 to ensure consistency across the city. Through PC12 it is proposed to define end-of-journey facilities as follows: **End-of-journey facilities:** Means the following facilities at the destinations of journeys undertaken on foot or by cycle or micro-mobility device that support the uptake of those modes: a) Gear lockers: These are individual lockers, or equivalent secure storage facility, for use by each pedestrian, cyclist, or micro-mobility user for storage of, e.g., their helmet, wet-weather gear, clothing, toiletries, towel, back-pack, and other items. Each locker shall be at least 85cm high, 45cm deep, and 20cm wide. At schools, cubby holes will be acceptable in-lieu of lockers. b) Shower cubicles: Each cubicle shall have its own dry changing space, provide for users' privacy, safety, and personal security, and be clearly signed as gendered or non-gendered. c) Changing rooms: These are rooms, additional to the shower cubicles, for people to use to change clothes at the beginning or end of a journey. Each room shall be sized to accommodate the expected number of users at any time and clearly signed as gendered or non-gendered. d) Facilities for drying wet clothing, shoes, helmets, and towels.
Sub 10 Waka Kotahi	10.13	Amend as follows: Minor Arterial Transport Network: The minor arterial network is characterised by high ~~traffic volumes~~ through movement, with some limited ~~destination types~~ access points such as offices, shops and residences. Large volumes of mixed traffic are anticipated on these routes, including frequent public transport services. Public transport should be given priority over private vehicles. Safety of vulnerable users moving along and across the road should be ~~ensured~~ prioritised. Due to the high volumes of ~~traffic~~ through movement along ~~on~~ this network a ~~seperated~~ separated cycling network ~~need to~~ will be provided along with separate pedestrian facilities. Key Design Principles - ~~Higher speed environment; Allow for a high level of intersection density to reduce speeds~~ : Active frontages would still be considered acceptable on these routes as a means of implementing roading hierarchy and reducing vehicular speeds •Separated cycle facilities and pedestrian routes • High frequency public transport service with priority • Pedestrian crossings near bus stops and key land uses	**Accept with changes**. Further changes are required to improve this statement. My recommended amendments in red text: Minor Arterial Transport Network: The minor arterial network is characterised by high movement function ~~traffic volumes~~ ~~through movement~~, with ~~some~~ limited ~~destination types~~ vehicular access ~~points such as offices, shops and residences~~. Large volumes of mixed traffic are anticipated on these routes, including frequent public transport services. Public transport should be given priority over private vehicles. Safety of vulnerable users moving along and across the transport corridor ~~road~~ should be ~~ensured~~ prioritised. Due to the high volumes of ~~traffic~~ through movement along ~~on~~ this network a ~~seperated~~ separated cycling network ~~need to~~ will be provided along with separate pedestrian facilities. Key Design Principles - Higher speed environment (50-60km/h); ~~- Allow for a high level of intersection density to reduce speeds~~ ~~- Active frontages would still be considered acceptable on these routes as a means of implementing roading hierarchy and reducing vehicular speeds~~ ·Separated cycle facilities and pedestrian routes · High frequency public transport service ~~with priority~~ · Pedestrian crossings near bus stops and key land uses

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.14</td><td>Amend as follows:

This major arterial route along with the Mangkootukutuku Gully creates significant severance issues for the development of Peacocke. To minimise this impact for both vehicles and pedestrians access to and across the major arterial routes ~~needs to~~ will be provided.

Key Design Principles

• Highest speed environment (50, 60-80 km/h in peri-urban areas with no accesses)

• ~~Good parallel routes for local traffic and cycling~~

• No parking

• Keep high amounts of visibility</td><td>Support with changes. Changes are required to improve this statement. My recommended amendments in red text:

This major arterial route along with the Mangakootukutuku Gully creates significant severance issues for the development of Peacocke. To minimise this impact for ~~both~~ vehicles, cyclists and pedestrians, access to and across the major arterial routes ~~needs to~~ will be provided.
Key Design Principles
• Highest speed environment (50km/h, 60-80 km/h in peri-urban areas with no accesses)
~~• Good parallel routes for local traffic and cycling~~
·Separated cycle facilities and pedestrian routes
• No on-street parking
• Keep high amounts of visibility</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.15</td><td>Waka Kotahi seeks amendments be made to Stage D and Stage E to remove reference to upgrades to Hall Road/SH3 intersection. The structure plan staging table identifies the Hall Road/SH3 intersection upgrades in Stages D and E. As further detailed in the submission below on Appendix AA, Waka Kotahi does not support this intersection being formalised as part of the Structure Plan as there are a number of uncertainties which mean we are not in a position to support a new connection at this time.

Relief sought:
Waka Kotahi seek that amendments are made to wording of Stage D and E within table titles ‘Strategic Infrastructure Required’ to remove reference to upgrades to Hall Road/SH3 intersection as this prospect is not a given.
Council may want to consider some revised wording which requires developers to engage with Waka Kotahi at these stages if they seek a connection to the highway.</td><td>Accept in part
Recommend that the Peacocke Infrastructure and Staging Table (Chapter 3A) be amended as follows:
<table><tr><th>Stage</th><th>Strategic Infrastructure Required</th></tr><tr><td>B</td><td>- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout</td></tr><tr><td>D</td><td>- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout
- New collector road (if connecting to Hall Road then Hall Road urban upgrade to collector standard and ~~upgrades to~~ closure of the existing Hall Road/ SH3 intersection will also be required)</td></tr><tr><td>E</td><td>- East-west minor arterial (stage 1) and Ohaupo Road/SH3 roundabout
- Peacocke Road urban upgrade to minor arterial standard (from Stage F)
- Hall Road urban upgrade to collector standard and connection to east-west minor arterial, and ~~upgrades to~~ closure of the existing Hall Road/ SH3 intersection
- Peacocke Lane urban upgrade to collector standard
- New collector road linkages in the south-eastern catchment</td></tr></table>
Recommend adding an additional footnote to the Peacocke Infrastructure and Staging Table (Chapter 3A) and amending the Transport Network text (Chapter 3A, page 19) as discussed in Section 5 of this report.

Note that all new transport corridors are RD activities and the existing Assessment Criteria G3d) states:
Issues and outcomes arising from consultation with the relevant road controlling authorities and/or Kiwirail</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.16</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.18</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.19</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.20</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.21</td><td>Amend as follows: Incorporate public transport stops into the Local Centre. ~~where it will provide an efficient and convenient access to the network.~~</td><td>Accept – bus stops at the local centre have already been designed so reference to accessing the network is redundant.</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.22</td><td>Amend the activity status of Light Industry and Drive- through services in the Local Centre Zone to Non- Complying.</td><td>Support in principle – In principle, from a transport perspective, I support changing the status of light industrial activities to non-complying, although it may be appropriate to maybe retain drive-through activities as discretionary. There may be other land use considerations that inform these activity statuses.</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.23</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.24</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.25</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 10 Waka Kotahi</td><td>10.26</td><td>Submission in Support</td><td>N/A</td></tr>
</table>

Submitter	Number	Summary of Submission Detail	Response
Sub 10 Waka Kotahi	10.27	Submission in Support	N/A
Sub 10 Waka Kotahi	10.28	Submission in Support	N/A
Sub 10 Waka Kotahi	10.29	Incorporate a rule in Table 15-6b which limits the length of rear lanes.	**Accept** – refer amended version of SUB-PREC1-PSP: R20(3) and new assessment criteria for details. Refer to Table 15-6b for cross-section details.
Sub 10 Waka Kotahi	10.30	Submission in Support	N/A
Sub 10 Waka Kotahi	10.31	Submission in Support	N/A
Sub 10 Waka Kotahi	10.32	Consider how appropriate this rule is based on the comments made on collector roads in the general text above.	**Support in principle:** • No changes proposed to SUB-PREC1-PSP: R20 • Recommend amending Rule 25.14.4.1a)v) to retain a rule requiring 50m separation of crossings on minor arterials. Remove rule specifying separation distance on collectors and rely on assessment criteria.
Sub 10 Waka Kotahi	10.33	Submission in Support	N/A
Sub 10 Waka Kotahi	10.34	Offer clarification as to why 'Public Transport Station' has been defined and ensure that all intended references have been made to Public Transport Stations throughout the Structure Plan and supporting documents. **Passenger transport facility:** Means land and buildings, used for scheduled passenger transport services. This may include bus bays, taxi ranks, drop-off and pick-up points, cycle parking, shelters, waiting rooms, ticket office, information centre, luggage lockers, public toilets, showers, changing rooms and ancillary activities. **Public Transport Station:** A public transport stop that is or is planned to be serviced by a frequent public transport service during peak travel times.	**Accept in part** Agree that consistency in terminology is required. Proposed that public transport definitions align with the Regional Public Transport Plan (RPTP). Propose that any assessment of walking catchment relies on the policy within the RPTP. The term Public Transport Station is not used in PC5 so can be removed. I note that WRC are currently consulting on the draft RPTP 2022-3232. The draft RPTP includes the following definitions: *Major Bus Interchange* *Locations where multiple frequent lines intersect with at least one line being an existing or future rapid line. Major Interchanges enable the movement of very high volumes of people and buses and are situated in locations with the highest land use densities and activity.* *Primary Bus Interchange* *Locations where one or more frequent lines intersect with an existing or future rapid line. Primary interchanges will be busy with high volumes of people and bus movements and be surrounded by moderate to high land use densities and/or major activity centres.* *Key Interchange: Locations where two or more frequent lines intersect. The locations will be moderate passenger volumes and be surrounded by at least moderate land use densities.* I recommend that the definition for Primary Bus Interchange and Key Public Transport Interchange are included to support their use on the Transport Network Map (Appendix 2, Figure 2-2).
Sub 10 Waka Kotahi	10.35	Waka Kotahi supports the intent of this definition but recommends that it is amended to be in line with Section 3.1.2 of the Waikato Regional Public Transport Plan which states in policy P4 that accessing public transport services in Hamilton should require a walk of 600 metres or less. **Public Transport Station Catchments:** Means areas that are within 1.0-kilometre walking distance or 3.0-kilometre cycling distance from the public transport station. Investigate changes necessary to reduce walking distances for catchments in the Structure Plan area to 600 metres or less.	**Agree in principle, but reject proposed changes** Proposed that public transport definitions align with the Regional Public Transport Plan (RPTP). Propose that any assessment of walking catchment relies on the policy within the RPTP. The term Public Transport Station Catchment is not used in PC5 so it can be removed. ***Draft RPTP Policy P8*** *Coverage policy* *Over 95 per cent of all properties within Hamilton should have access to, within a 600 metre or less walking distance, one or more of the following public transport solutions between the hours of 7am and 9pm seven days per week:* *• a scheduled bus service operating every 60 minutes; and/or* *• a maximum wait time of 60 minutes of requesting a public demand responsive service; and/or* *• other service(s) or solution(s) that can provide access to essential services and that is more cost effective.*

Submitter	Number	Summary of Submission Detail	Response
Sub 10 Waka Kotahi	10.36	Waka Kotahi support the requirements of ITA's within the Peacocke Structure Plan Area. There is however a concern that only developments which generate an excess of 500 vpd are required to produce a design statement which requires an explanation of how the objectives and policies will be achieved. This means that if piecemeal development is allowed there is some potential for outcomes which lack universal design. **Relief sought:** Investigate changes necessary in the trip generation triggers within the Peacocke Structure Plan area to ensure all development is to demonstrate compliance with principles of universal design etc	**Accept in part** All new transport corridors are RD activities and it would be unusual for a new transport corridor to not require an ITA. However, the current text only requires that the design statement with an ITA is triggered by Rule 25.14.4.3 which broadly relates to trip generation, activity type, specific areas of the city and new vehicle accesses (vehicle crossings). The trip generation threshold triggering an ITA is currently 500vpd, or 50du (assuming 10veh/day/du) (Rule 25.14.4.3a)). A design statement is not specifically triggered by an ITA required to support a new transport corridor. As a result, there is the risk of piecemeal development. Recommend relocating the requirement for a Design Statement to the Information Requirements at Appendix 1.2.2.2.1 which applies to all subdivision. If the requirement for a Design Statement remains within Appendix 15-2, my recommended amendments to the text following Table 15-2b are in red text: Any development that is required to prepare an Integrated Transport Assessment by Rule 25.14.4.3 within the Peacocke Structure Plan area shall include the following additions: …. Any development within the Peacocke Structure Plan area that is required to prepare an Integrated Transport Assessment ~~by Rule 25.14.4.3 within the Peacocke Structure Plan area~~ shall include the following additions: ….
Sub 10 Waka Kotahi	10.37	Waka Kotahi concur with the ITA which states that the existing Hall Road / SH3 intersection is below standard and there shall not be any increase in traffic volumes on Hall Road from either developments or by connections to the road without this being addressed. Furthermore, Waka Kotahi agree that the options presented in the ITA for the relocated Hall Road intersection treatments are sensible, however being able to support a specific option or a new intersection at all is dependent on many factors. These include consideration of if SH3 remains a state highway at the time works would occur, timeframes for Southern Links, whether the Houchens Road Structure Plan proceeds, and if SH3/Raynes Road intersection is converted to a roundabout. Until more is known around these variables it is hard to conclude the Waka Kotahi strategy for a relocated Hall Road intersection. The ITA states that "…the developer of these stages will need to investigate options and deliver the infrastructure are part of their development", which describes that the intersection solution will need to be negotiated between the developer/s and Waka Kotahi in the future. Waka Kotahi support this approach but cannot support showing a link to State Highway 3 on the Structure Plan Maps at this time given the uncertainties around if we could practically approve this. **Relief sought:** Waka Kotahi seek that the relocated Hall Road does not connect with State Highway 3 and that this connection is removed from the Structure Plan Transport Network Plan**.**	**Reject removal of the connection from the structure plan map** The Structure Plan seeks that the existing Hall Road/ SH3 intersection be closed due to existing safety concerns and this connection be relocated to a more suitable location south of the existing intersection. As shown the connection maximises the sight distance from the new location approximately midway between the Whatukooruru Drive and Raynes Road intersections with SH3. In the long term, SH3 Ohaupo Road is expected to be revoked from State highway status and revert to local road. Refer to Sub 10.15 for details of proposed amendments relating to the indicative nature of the alignments shown on the structure plan and engagement with Waka Kotahi.

Submitter	Number	Summary of Submission Detail	Response
Hodgson Trustee Management Co. Limited	12.2	The submitter supports in principle the concept of a road connection to SH3 in the vicinity of the submitter's property (3165 Ohaupo Rd). The location of the connection needs further consideration and submitter requests further consultation including appropriate integration with the wider context, including potential later adjoining development such as within the SL1 urban expansion area west of Ohaupo Rd. *Relief sought:* The submitter requests that HCC undertake more in-depth investigation and consultation in relation to the matters raised in this submission and that subject to any objectives, policies, rules, and provisions being amended to address the matters raised in this submission (and any consequential relief) that PCS is approved.	**Accept in part** The location of the indicative local transport corridor has been reviewed in response to submission 50.29 (Stuart and Maylene Ross). The alternative road connection shown below is at a location that maximises sight distance at the proposed intersection. Subdivision of Hodgson property in 2014 anticipated a potential road access (HCC Ref: 11.2014.5972). Stage 2 Relocate the boundaries of the property and creating of one additional lot to result in three titles. • Lot 1 of 0.65ha (0.51ha NLA) being a vacant lot with access from Ohaupo Road at RAPID 3165 via a Right of Way over Lot 5. • Lot 4 of 1.65ha being a vacant lot with ponds and rough land with access from Ohaupo Road at RAPID 3165 via a Right of Way over Lot 5. • Lot 5 of 16.9ha containing implement buildings with access from Ohaupo Road at RAPID 3165 with access at least 20m wide for future roading if required. 

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 13 Jones Lands Limited</td><td>13.5</td><td>5. Extend the collector road proposed over the adjoining Aurora development south east toward Southern Links north-south Arterial to achieve better connectively and support the identified neighbourhood centre.
6. In conjunction with the above, reduce classification of road marked X above to a local road to afford a better urban design and ecological outcome.
7. Remove overbridge proposed along Peacocke Road crossing Southern Links and consider partial closure of Peacocke Road, re-routing of roads and better integration with adjoining growth cell.
8. Provide for any changes as a result of the above, including the possible relocation of neighbourhood centre in locality.
  </td><td>1. From a transportation perspective, submission points (1) and (2) are unlikely to result in adverse impact on the transport network and hierarchy. However, there may be topographical or ecological constraints that make this unacceptable.
2. From a transportation perspective, submission points (1) and (2) are unlikely to result in adverse impact on the transport network and hierarchy. However, there may be topographical or ecological constraints that make this unacceptable.
3. Reject partial closure of Peacocke Rd. This corridor is identified as minor arterial and the overbridge is required to maintain continuity of the arterial transport network. HCC is typically responsible for funding and constructing the minor arterial network.
4. Relocation of neighbourhood centre outside my scope</td></tr>
<tr><td>Sub 13 Jones Lands Limited</td><td>13.14</td><td>Oppose - Rear lanes
The submitters supports the inclusion of rear lanes as an option to achieve the medium density outcomes – however the PC5 provisions limiting the length, number of units, ownership model or any reference that they should provide for planting, walking and cycling or trip reduction, and/or large trucks and their manoeuvring are inappropriate and will have a deterrent effect on their use or will create perverse outcomes if designed to meet the PC5 provisions.</td><td>Accept in part – remove limit on lots, but include maximum length = 250m to match block length.
Minimum standards are necessary to ensure that rear lanes are suitable for use by vehicles, including trucks and pedestrians.
HCC view on ownership has changed and subject to a range of subdivision conditions and design standards allows privately owned rear lanes.
Refer amended version of SUB-PREC1-PSP: R20(3) and new assessment criteria for details. Refer to Table 15-6b for cross-section details.</td></tr>
<tr><td>Sub 13 Jones Lands Limited</td><td>13.15</td><td>Oppose - Walking and cycling “through block” provisions
The provisions for maximum lengths and minimum widths for pedestrian/cyclist access through blocks should be deleted – these will encourage the use of accessways through the rear of properties rather than the primary aim of having pedestrian and cyclists form part of the transport “street” network.</td><td>Reject
Minimum standards are necessary to ensure that where accessways are provided through blocks they are safe for use by the public. The proposed standards at SUB-PREC1-PSP: R23 (11) and (12) replicate the citywide standards at Rule 23.7.3.</td></tr>
<tr><td>Sub 13 Jones Lands Limited</td><td>13.17</td><td>Oppose - public transport
Any provision requiring public transport infrastructure provision or liaison/agreement with WRC should be deleted. These are inappropriate to be required in the District Plan when public transport is a Regional Council function.</td><td>Accept in part – consultation needed to ensure alignment of PT corridors with route planning by WRC. Recommend that references to consultation with WRC are included as Assessment Criteria, not within the Rules.
<table><tr><td>New assessment criteria</td><td>The outcome of consultation with the Waikato Regional Council regarding public transport.</td></tr><tr><td>New assessment criteria</td><td>The extent to which the transport corridor design provides public transport infrastructure including accessible bus stops, bus stop shelters, bus priority measures on key corridors or at key intersections, bus turning facilities, including interim facilities responding to staged development, and facilities for pedestrians to cross transport corridors to access public transport stops.</td></tr></table></td></tr>
</table>

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 14 Northview Capital Limited</td><td>14.13</td><td>Oppose - Rear lanes
The submitters supports the inclusion of rear lanes as an option to achieve the medium density outcomes – however the PC5 provisions limiting the length, number of units, ownership model or any reference that they should provide for planting, walking and cycling or trip reduction, and/or large trucks and their manoeuvring are inappropriate and will have a deterrent effect on their use or will create perverse outcomes if designed to meet the PC5 provisions.</td><td>Accept in part – remove limit on lots, but include maximum length = 250m to match block length.
Minimum standards are necessary to ensure that rear lanes are suitable for use by vehicles, including trucks and pedestrians.
HCC view on ownership has changed and subject to a range of subdivision conditions and design standards allows privately owned rear lanes.
Refer amended version of SUB-PREC1-PSP: R20(3) and new assessment criteria for details. Refer to Table 15-6b for cross-section details.</td></tr>
<tr><td>Sub 14 Northview Capital Limited</td><td>14.14</td><td>Oppose - Walking and cycling “through block” provisions
The provisions for maximum lengths and minimum widths for pedestrian/cyclist access through blocks should be deleted – these will encourage the use of accessways through the rear of properties rather than the primary aim of having pedestrian and cyclists form part of the transport “street” network.</td><td>Reject
Minimum standards are necessary to ensure that where accessways are provided through blocks they are safe for use by the public. The proposed standards at SUB-PREC1-PSP: R23 (11) and (12) replicate the citywide standards at Rule 23.7.3.</td></tr>
<tr><td>Sub 14 Northview Capital Limited</td><td>14.16</td><td>Oppose - public transport
Any provision requiring public transport infrastructure provision or liaison/agreement with WRC should be deleted. These are inappropriate to be required in the District Plan when public transport is a Regional Council function.</td><td>Accept in part – consultation needed to ensure alignment of PT corridors with route planning by WRC. Recommend that references to consultation with WRC are included as Assessment Criteria, not within the Rules.<table><tr><td>New assessment criteria</td><td>The outcome of consultation with the Waikato Regional Council regarding public transport.</td></tr><tr><td>New assessment criteria</td><td>The extent to which the transport corridor design provides public transport infrastructure including accessible bus stops, bus stop shelters, bus priority measures on key corridors or at key intersections, bus turning facilities, including interim facilities responding to staged development, and facilities for pedestrians to cross transport corridors to access public transport stops.</td></tr></table></td></tr>
<tr><td>Sub 18 Fire and Emergency NZ (FENZ)</td><td>Access</td><td>Adequate access to both the source of a fire (or other emergency) and a firefighting water supply is essential to the efficient operation of Fire and Emergency. The requirements for firefighting access are set out in the Code of Practice and further detailed in Fire and Emergency’s ‘Emergency Vehicle Access Guidelines’ (May 2015).
In general, the key requirements for urban environments include specific vehicular roading and access widths, and surface and gradients to support the operational requirements of Fire and Emergency’s appliances. These requirements are set out as follows:
The minimum roading and carriageway widths should not be less than 4m. This width is required for firefighters to efficiently work around the fire appliance to access hoses and pumps.
A clear passageway / vehicle crossing of no less than 3.5m wide should be provided as site entrances, internal entrances and between buildings.
The maximum negotiable gradient is 1:5, but in general the roading gradient should not exceed 16%.
The height clearance along accessways (for example trees, hanging cables and eaves must exceed 4m.</td><td>Accept that changes are requires to align the transport corridor criteria with these requirements.
Refer amended version of SUB-PREC1-PSP: R20(3) and new assessment criteria for details.
Refer to Table 15-6b for cross-section details.</td></tr>
<tr><td>Sub 18 Fire and Emergency NZ (FENZ)</td><td>18.5</td><td><table><tr><td>Fire and Emergency supports the intent of DEV01-PSP: P48 being that the transport network shall be designed to ensure access is provided to all users in a way that is safe, direct and convenient as possible.
Fire and Emergency note that there is a significant focus on the prioritisation of pedestrians and cyclists over vehicles, which is generally supported.
However, Fire and Emergency are concerned that consideration of emergency access requirements may be overlooked in the design process and result in unintended consequences for emergency services and the community more generally.
Fire and Emergency therefore consider that there needs to be policy that explicitly requires council and plan users to turn their minds to ensuring that safe and efficient access to developments is provided for emergency service vehicles in the event of an emergency. These general requirements are set out in detail on page 3.</td><td>Amend as follows:

DEV01-PSP: P48
The transport network shall be designed to ensure access is provided to all users (including emergency services) in a way that is safe, direct and convenient as possible.</td></tr></table></td><td>Accept</td></tr>
</table>

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 18 Fire and Emergency NZ (FENZ)</td><td>18.14</td><td>
<table>
<tr><th colspan="4">Chapter 23A - Subdivision Peacocke Precinct</th></tr>
<tr><td>SUB – PREC1-PSP: O8</td><td>Support in part</td><td>Fire and Emergency supports SUB – PREC1- PSP: O8 to the extent that it requires subdivision to create a transport network that is well connected and legible.
However, Fire and Emergency are concerned that consideration of emergency access requirements may be overlooked in the design process and result in unintended consequences for emergency services and the community more generally.
Fire and Emergency therefore consider that there needs to be an objective that explicitly requires council and plan users to turn their minds to ensuring that safe and efficient access to developments are provided for emergency service vehicles in the event of an emergency. These general requirements are set out in detail on page 3.
The amendment sought is considered to support the requirements within SUB-PREC1-PSP: R20 Provision of parking and access.</td><td>Amend as follows:

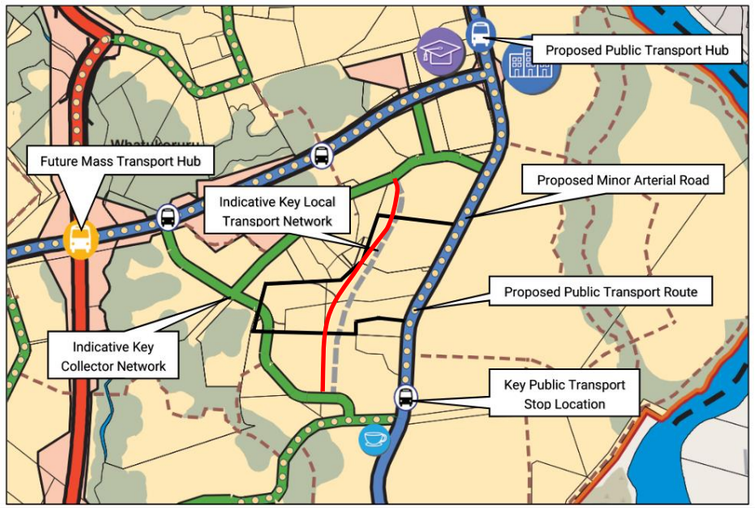
SUB – PREC1- PSP: O8
Subdivision creates a transport network that:
1. Is well connected and legible.
2. Delivers a high-quality walking and cycling experience.
3. Manages the amenity effects associated with parking.
4. Defines areas of public open space.
5. Creates a safe, low speed environment
6. Provides for a high quality public transport network.
7. Provides for emergency service vehicle access.</td></tr>
</table>
</td><td>Reject
All new transport corridors are RD activities where the design is considered by HCC. Amendments are proposed to SUB-PREC1-PSP: R20(3) and Table 15-6b so that minimum design criteria meeting FENZ requirements are included.

There is nothing in the related policies (P8, P11, P12, P13 or P16) that requires or supports the requested amendment.</td></tr>
<tr><td>Sub 18 Fire and Emergency NZ (FENZ)</td><td>18.21</td><td>Appendix 1.2 Information Requirement
1.2.2.2 Subdivision
1.2.2.2.1 Additional Requirements for Concept Plans for the Peacocke Structure
<table>
<tr><td>Support in part</td><td>i) Transport Network
Fire and Emergency support 1.2.2.2.1 b) i) in part insofar that it requires an applicant to demonstrate how vehicle access is to be provided while maintaining on street parking and safety of the transport network.
Fire and Emergency however consider that this is the opportunity for applicants to consider how emergency services will be able to access their subdivision. As such an amendment is sought to require that emergency service access is considered at the concept design phase.</td><td>Amend as follows:

i) Transport Network
The Concept Plan will need to:
…
• Demonstrate how emergency vehicle access can be achieved.

Note: For a development where a fire appliance is not able to reach either a dwelling or the source of the firefighting water supply from a public road in accordance with the NZ Fire Service Firefighting Water Supplies Code of Practice NZS PAS 4509: 2008, this code of practice should be consulted for compliance with the accessway dimensions required for the fire appliances. This applies to the legal road, the Right of Way or the Access Lot or access leg where this provides the primary access to the lot/site.</td></tr>
</table>
</td><td>Accept</td></tr>
<tr><td>Sub 18 Fire and Emergency NZ (FENZ)</td><td>18.24</td><td>
<table>
<tr><th colspan="4">Appendix 1 - District Plan Administration
1.3 Assessment Criteria</th></tr>
<tr><td>P - Peacocke Structure Plan
P3 Development in the Peacocke Precinct</td><td>Support in part</td><td>Fire and Emergency supports in part P3 h) to the extent that this assessment criteria enables consideration of the extent to which parking, manoeuvring areas and driveways have been designed and located.
Fire and Emergency however consider that there is a need to provide Council the discretion to assess the extent of which a development in the Peacocke Structure Plan area has designed and located parking, manoeuvring areas and driveways as to not obstruct emergency vehicle access in an emergency.</td><td>Amend as follows:

h) The extent to which parking, manoeuvring areas, driveways and outdoor service areas have been designed and located:
…
vi) To not obstruct access to buildings for emergency services.</td></tr>
</table>
</td><td>Accept</td></tr>
</table>

Submitter	Number	Summary of Submission Detail	Response
Nathan Cox	19.2	An Indicative Key Local Transport Network is proposed through 474, 476 and 490 Peackockes Rd as identified in Appendix 2 Figure 2-2: Peacocke Structure Plan – Transport Network. It is requested that this indicative road follows the western boundary of the site in question. This will allow for a more integrated development as the current layout proposes a skinny section of land to the west of the proposed transport network which will restrict the development potential on the site and the opportunities to create integrated development outcomes. *Relief sought:* Amend Figure 2-2: Peacocke Structure Plan – Transport Network found in Appendix 2 to move the proposed Indicative Key Local Transport Network west to follow the western site boundary of Lot 1 DP 423903.	**Accept in principle, but change to Figure 2-2 not required** From a transportation perspective, the submission point is broadly acceptable and is unlikely to adversely impact on the hierarchy. As indicated in red below, some changes to the alignment are acceptable, but the corridor will not be able to follow the boundary along the full length as the geometric alignment will not meet the required design standards. The indicative nature of the alignments is already described in the structure plan at Chapter 3A, Development Area 1: Peacocke Structure Plan, Peacocke Transportation network (page 18-19). There may be topographical or ecological constraints that make this proposed change unacceptable. 
Sub 36 WRC	36.2	Submission in Support in Part	N/A
Sub 36 WRC	36.5	Submission in Support	N/A
Sub 36 WRC	36.17	Submission in Support	N/A

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 36 Waikato Regional Council</td><td>36.34</td><td>Retain and include additional policy that encourages the development of infrastructure that is electric vehicle capable.

Or amend as follows:
Development should encourage the efficient use of energy and water, including consideration of
a) the role of low emissions transport options and
b) the requirements of electric vehicles in planning new infrastructure.</td><td>Support in part, but no changes recommend to PC5
The intent of the submission is supported. However, this issue is being more comprehensively addressed through PC12 which includes a more detailed review of the transport objective and policy framework to recognised greenhouse gases and climate change.

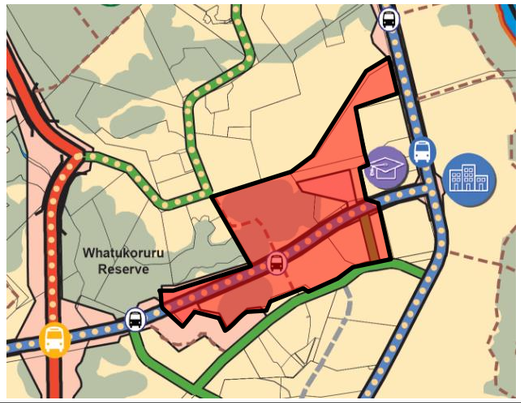
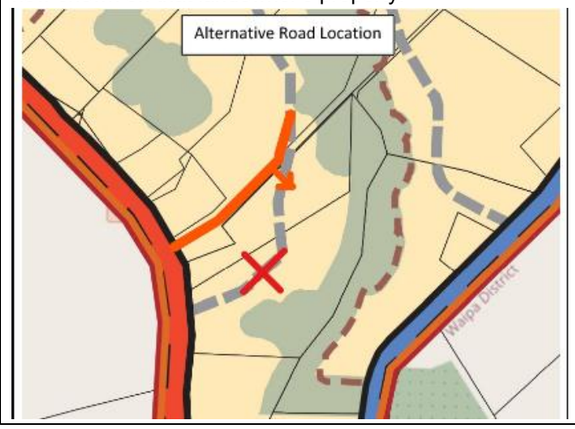
At the time of this report, the revised transport objective and relevant climate change policy of PC12 are:
Integrated Transport Network
25.14.2.1
An integrated, multi-modal, climate-resilient transport network with low embodied and operational greenhouse gas emissions that meets national, regional, and local transport needs, gives effect to Te Ture Whaimana, provides travel choices, supports high quality growth and development of the economy and an enjoyable, liveable city, and is:
i. Efficient, to the extent consistent with Policy 25.14.2.1bd.
ii. Affordable,
iii. Safe and where no one is killed or seriously injured.
iv. Accessible to all.
v. Sustainable.
vi. Integrated with land use to minimise the need to travel, the total distance travelled, and conflicts between transport modes.
vii. Easy to use and provides opportunities for play.

Climate Change
25.14.2.1ba
Promote the establishment and maintenance of a continuous tree canopy along transport corridors to improve amenity for corridor users and adjoining land use, minimise the urban heat island effects of urban intensification, enhance biodiversity and ecological function, provide summer shade to make the corridors more comfortable for walking, cycling, and micro-mobility during hotter weather, and store carbon.

25.14.2.1bab
Realise opportunities to reduce embodied and operational greenhouse gas emissions.

25.14.2.1bac
Plan the transport network to be resilient to predicted future extreme weather events.</td></tr>
<tr><td>Sub 36 Waikato Regional Council</td><td>36.48</td><td>Amend Policy to avoid or reduce the impact of proposed roading network on the ecological functions and connectivity of the defined ecological network. Where effects cannot be avoided, they are remedied, (including by the existing policy elements 1-3) or mitigated in other parts of the ecological network through active restoration measures.
<table><tr><td>SUB - PREC1-PSP: P20</td><td>Require roads that are proposed in ecological corridors to:
1. Take the shortest route practicable.
2. Design lighting to ensure that the bat corridor maintains its role and function.
3. Designed to enable bats to continue to access the rest of the corridor.</td></tr></table></td><td>Support intent, although I have no strong view on the proposed draughting</td></tr>
<tr><td>Sub 36 WRC</td><td>36.53</td><td>Submission in Support</td><td>N/A</td></tr>
<tr><td>Sub 36 Waikato Regional Council</td><td>36.62
36.63</td><td><table><tr><td colspan="4">Appendix 1.1 - Definitions and Terms</td></tr><tr><td>New definition for Public Transport Station:
A public transport stop that is or is planned to be serviced by a frequent public transport service during peak travel times.</td><td>Oppose</td><td>The purpose of defining a ‘Public Transport Station’ is not clear, as no reference to the terminology appears to be made in the proposed Structure Plan documents.
Further, the terminology is not commonly used, and it is cautioned that it could be confused with rail services / mass transit stops.</td><td>Offer clarification as to why ‘Public Transport Station’ has been defined and ensure that all intended references have been made to Public Transport Stations throughout the Structure Plan and supporting documents.</td></tr><tr><td>New definition for Public Transport Station Catchments:
Means areas that are within 1.0-kilometre walking distance or 3.0-kilometre cycling distance from the public transport station.</td><td>Support in part</td><td>Alignment with the Waikato Regional Public Transport Plan (WRPTP) could be strengthened here. Section 3.1.2 of the WRPTP sets policy (P4), that accessing public transport services in Hamilton should require a walk of 600 metres or less.</td><td>Investigate changes necessary to reduce walking distances for catchments in the Structure Plan area to 600 metres or less.</td></tr></table></td><td>Agree that alignment is needed with draft RPTP.
Recommend deleting the current definitions and replacing with definitions that align with the draft RPTP.
Consequential amendments are required to the legend of Appendix 2, Figure 2-2 Transport Network.</td></tr>
<tr><td>Sub 36 WRC</td><td>36.73</td><td>Submission in Support</td><td>N/A</td></tr>
</table>

Submitter	Number	Summary of Submission Detail	Response
Sub 36 Waikato Regional Council	36.75	<table><tr><td>A number of additional bus stop locations need to be defined to ensure connectivity and maximise access to the public transport network. It is considered that bus stops on public transport corridors should be spaced 400-600 metres apart.</td><td>Additional stops need to be included on the Arterial network as follows: 1. One pair of additional stops at the point at which the new Major Arterial severs Weston Lea Drive. 2. Two pairs of additional stops on the North-South Minor Arterial south of Peacocke Local Centre. 3. One pair of additional stops on the North-South Minor Arterial north of Peacocke Local Centre.</td></tr></table>	**Accept in part** – intention only to show PT interchanges and potential stops on the arterial network, not all individual stops. Prefer to rely on future consultation between developer, HCC and WRC to determine location of specific stops in response to the actual land use and subdivision. New assessment criteria relating to consultation with WRC are proposed in response to other submissions. Items (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. Item (2) – amend structure plan map to reflect current design for Peacocke Road Item (3) – map shows the bus stops as including on the construction/tender drawings
Sub 36 WRC	36.77	Submission in Support	N/A
Sub 36 Waikato Regional Council	36.78	Amend supporting documents to strengthen guidance on how various design speed environments, particularly that of 30km/hr for local roads, are to be achieved and enforced.	**Reject** Guidance on matters like speed management, street design and cycleway design continues to evolve and preference is to retain flexibility through the reliance on best practice guidelines that remain outside the District Plan. All new roads are RD activities. Guidance on design is provided through the notes to Table 15-6b.
Sub 36 WRC	36.79	Submission in Support	N/A
Sub 36 WRC	36.81	Submission in Support	N/A
Sub 42 Ohaupo Land LP	42.5	Realignment of Hall Road. We support the stopping of current Hall Road as safety issues are present. However, question the new connection point at SH3 which abuts several smaller lots. Seek a location south below the proposed reservoir locations. We seek further consideration to move the road further south to take advantage of roading efficiencies with the land owned by Ohaupo Land LP. We seek to slow the speed limit by promoting a signalised intersection or roundabout	**Reject** Reject concept of relocating relocated Hall Road intersection further south: - does not allow for potential integration of Houchens Structure Plan - results in poor sight distance for the Peacocke connection
Sub 43 Golden Valley Farms	43.5	Realignment of Hall Road. We support the stopping of current Hall Road as safety issues are present. However, question the new connection point at SH3 which abuts several smaller lots. Seek a location south below the proposed reservoir locations. We seek further consideration to move the road further south to take advantage of roading efficiencies with the land owned by Ohaupo Land LP. We seek to slow the speed limit by promoting a signalised intersection or roundabout	**Reject** Reject concept of relocating relocated Hall Road intersection further south: - does not allow for potential integration of Houchens Structure Plan - results in poor sight distance for the Peacocke connection

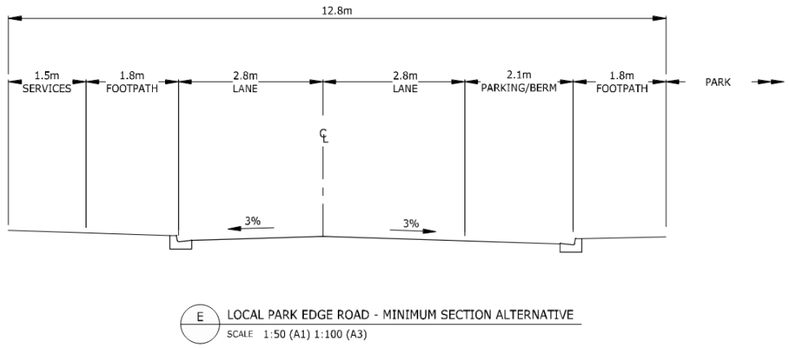
Submitter	Number	Summary of Submission Detail	Response
Sub 44 Cordyline Holdings Limited	44.3	Support in part but seek some amendments. Cordyline Holdings seeks that the Proposed Collector Roads shown on the map is deleted from the land held in Computer Freehold Register Identifier 628002. Cordyline Holdings agrees with the explanation in Chapter 3A – Structure Plan, that the final alignment of the transport network (other than those routes that are already designated) should be determined as individual subdivisions are progressed. This will ensure that the layout of the road network achieves block lengths and depths that are able to accommodate the anticipated housing typologies ***Relief Sought:*** Delete the Proposed Collector Roads shown on the land held in Computer Freehold Register Identifier 628002. Amend the maps to clarify that the transport network is indicative only and is not intended to show exact alignments.	**Support in part.** I understand that this submission relates to the properties shaded red in the figure below, broadly described as 398, 424, 428 Peacockes Road. In my view it is important that the Structure Plan clearly identifies the collector network and I do not support removal of the collector road from this property. The indicative nature of the alignments is already described in the structure plan at Chapter 3A, Development Area 1: Peacocke Structure Plan, Peacocke Transportation network (page 18-19) and changes are proposed to that text. I understand that there are on-going discussions between the submitter and HCC team delivering the minor arterial about the potential relocation of the intersection to the west (and remaining within the submitters property). The location of the collector may change as a result of those discussions. 
Sub 50 Stuart and Maylene Ross	50.29	The proposed location for the intersection between the indicative Key Local Transport Network road and Ohaupo Road has significantly limited sight distances in both directions. The sight distances (without crossing over private property) are approximately 145m northward and 210m southward as evidenced in the photos below. A safer location for this intersection is the current vehicle entrance to 3165 Ohaupo Road, 80m north of the structure plan location. This location affords sight distances exceeding 300m in both directions, as evidenced by the photos below. When subdivided in 2019 a 20m corridor was preserved for future road connectivity which aligns with the proposed alternative location. To maintain effective transport connectivity to the properties to the south (including the area of interest) provision for a roading connection from the alternative Key Local Transport Network Road would need to be provided to the boundary of 3169 Ohaupo Road.	**Accept** - Site visit complete and the relocated alignment maximises sight distance. Note: This overlaps with Submission 12.2 (Hodgson Trustee Management Co. Limited) as the road is now shown on that landowner's property. 

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.21
(1 of 2)</td><td>The minimum road cross-sections specified in PC5 for Local Roads and Collector Roads do not support the objectives of the plan change related to slowing vehicular traffic and promoting walking, cycling and public transport. Accordingly narrower minimum road dimensions that are consistent with NZS 4404 are sought.

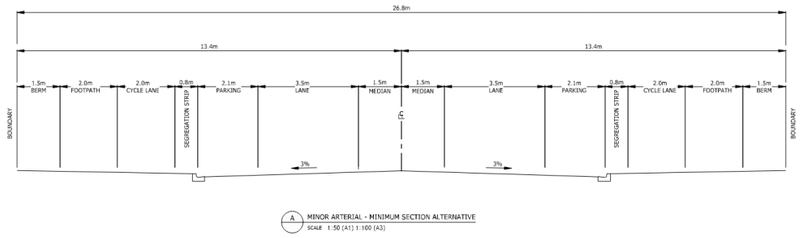
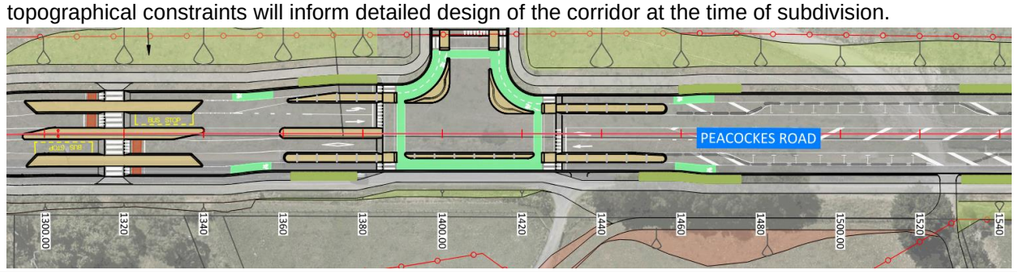
Minimum dimensions are not specified for Minor Arterial Roads and not all roads are designated. Cross sections with minimum dimensions are included in this submission to provide more certainty for affected parties.

The alternative road cross sections will also reduce the amount of land required for roading and enable more land to remain available for residential development. These changes will lead to significantly more efficient use of land over the whole extent of the Peacocke Structure Plan area.

Amend the road cross sections to reflect the changes sought to Rule 25.14.4.1(h) and Appendix 15-6b (below) and to reflect the alternative Local Road, Local Road – Park Edge, Collector Road (Public Transport Route), Collector Road (Non-Public Transport Route) and Minor Arterial Road cross sections which are enclosed with this submission (below).

 
</td><td>Reject local and collector road cross-sections -
Waka Kotahi's Aotearoa Urban Street Planning and Design Guide (Final Draft, September 2021) illustrates local suburban residential streets with typical width of 14-20m and speeds of 30km/h. Urban connectors are 18-20m and 27-30m wide. The proposed local road width of 16.8m and speed environment of 30km/h is consistent with that guidance. The proposed collectors are 24.2m and 24.6m wide. This design guide refers to the National Association of City Transportation Officials (NACTO) Global Street Design Guide (2017) for matters including pedestrian priority and roadway narrowing.
Through the RD activity status for new transport corridors and assessment criteria G and P there is flexibility to allow the local and collector networks to be designed to support low traffic neighbourhoods.
While I do not recommend any changes to the local and collector transport corridor criteria at Table 15-5b, I do support including new assessment criteria that provide additional flexibility.

Accept in relation to open space/ park edge roads – subject to ecological matters. Needs to be supported by new assessment criteria to address provision of parking and footpath.
All new transport corridors are RD activities and require consents. This allows specific open space edge roads cross-sections to be developed in response to site specific issues. This approach allows a flexible response based on integrating land use and transport, but can create duplication with cross-sections being developed for each subdivision application.
Adare's proposed cross-section can be reduced if the footpath provided were within the adjacent reserve to avoid duplication, but need to allow for kerb/berm on park side.
I recommend that the following cross-section be adopted along with new assessment criteria. A new cross-section is described in the amended version of Table 15-6b.

<table><tr><td>P5</td><td>Subdivision in the Peacocke Structure Plan</td></tr><tr><td>New</td><td>The extent to which the design of any Park Edge Transport Corridor:
- Considers the level of walking and cycling infrastructure provided within the adjacent open space
- Provides on-street parking for users of the adjacent open space</td></tr></table></td></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.21
(2 of 2)</td><td>Minor arterial – seeks 26.8m cross-section
 
</td><td>Accept in part minor arterial relief (also refer to submission 53.98(5))
Minor arterials require specific design to be developed in consultation with HCC. Much of the minor arterial network is currently being designed and constructed by HCC, except Peacocke Road south of the local centre.
There appears to be little risk in adopting the current design cross-section within the District Plan specific to Peacocke (subject to resolving berm widths). This results in a 32.2m wide corridor compared to the 26.8m sought in the submission. The additional width arises from including both recessed parking and a front berm for stormwater on both sides of the corridor. Specific design of matters like stormwater and topographical constraints will inform detailed design of the corridor at the time of subdivision.
 
</td></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.22</td><td>Move the road cross sections to Appendix 15 to follow Table 15-6b which sets out the criteria for the form of transport corridors in the Peacocke Structure Plan area.</td><td>Accept</td></tr>
</table>

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.38</td><td><u>Summary of Submission:</u>
The avoidance of off-street car parking along street frontages within the Neighbourhood Centre Zone removes opportunities for convenient short duration car parking which is important for the commercial viability of Neighbourhood Centres. Although in some cases car parking will be able to be provided on-street, the absence of any specific standards for Minor Arterials Roads results in uncertainty whether on-street car parking will be able to be provided in these locations. This is a potential issue for the Neighbourhood Centre which is located on Peacockes Road opposite Stubbs Road. A further implication if on-street car parking is not provided on Minor Arterial Roads and off-street car parking is required to be avoided between the street and buildings is that there is likely to be commercial pressure for buildings turning their backs on the street to front internal carparks, or a need to have dual frontage. This could result in the street-based frontage being secondary or inferior to the entrance facing the parking which would be a poor urban design outcome.
<u>Relief/Decision Sought:</u>
Amend NCZ-PREC1-PSP: P5 to read: “4) <u>Minimise</u> ~~Ensure~~ off street parking ~~is not located in~~ along the street frontage.”</td><td>Neutral
- At this specific location, on street parking can be provided on the lower hierarchy collector road
- Provision of on-street parking is subject to specific design considering the adjacent land use and function of the transport corridor at that location.
- On-street parking is provided on the minor arterial north of the local centre. I expect that this section of minor arterial would have a similar cross-section, but the ability to provide on-street parking will be limited by proximity to the intersection and influenced by the form of the intersection.</td></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.76</td><td><u>Summary of Submission:</u>
Clause (2), which requires vehicle crossings to be separated by a minimum of 50m on transport corridors with a physically separated cycle lane, is not conducive to achieving medium and high-density residential outcomes. It would be especially difficult to achieve in topographically constrained areas where access via a rear lane may not be a viable alternative.
<u>Relief/Decision Sought:</u>
Delete clause (2) in SUB-PREC1-PSP:R20.</td><td>Support in principle – the rule seeks to balance property access with cyclist safety. Frequent vehicle crossings adversely impact on user perception and cyclist safety. Without this rule vehicle crossings could have 7.5m separation (Rule 25.14.4.1a)) which limits the ability to provide an effective and safe separated cycle facility. The 50m spacing was based on providing rear access to a block of 6 terrace units each 8m wide (6 x 8m = 48m).

Detail of the recommended changes discussed elsewhere in this report</td></tr>
<tr><td>Sub 53 The Adare Company</td><td>53.77</td><td>
<table>
<tr><td>1. SUB-PREC1-PSP:R21 relates to road widths and widths and lengths of pedestrian and cycle accessways. An amendment is proposed to the heading of the rule to “Roading and <u>pedestrian/cycle</u> access” so that it is distinguished from SUB-PREC1-PSP:R20 “Provision of parking and access” which relates to parking and vehicular access to sites.</td><td>Amend SUB-PREC1-PSP:R21 to read:

Amend the heading of SUB-PREC1-PSP:R21 to “Roading and <u>pedestrian/cycle</u> access”.</td></tr>
<tr><td>2. The proposed amendments to clause (1) reflect the alternative cross sections for Local Roads and Collector Roads enclosed with this submission which are more appropriate minimum roading standards.</td><td>1. Amend clause (1) to read:
<table>
<tr><td>“Minimum road width of vehicle access to be formed and vested as public road:</td><td></td></tr>
<tr><td>a) Local Road</td><td><u>16.4m</u> ~~16.8m~~ (see note 1)</td></tr>
<tr><td><u>b) Local Road – Park Edge</u></td><td><u>12.8m (see note 1)</u></td></tr>
<tr><td>b) Collector Road - no Public transport</td><td><u>22.8m</u> ~~24.2m~~ (see note 1)</td></tr>
<tr><td>c) Collector Road – Public transport Route</td><td><u>23.2m</u> ~~24.6m~~ (see note 1)</td></tr>
<tr><td colspan="2">Note 1: This width does not provide for swales or stormwater management. Additional width may be required for these features, if present, and may be required to accommodate any other features or activities.”</td></tr>
</table></td></tr>
<tr><td>3. An amendment is proposed to clause (3) to correct a minor error due to the missing words “access way”.</td><td>Amend clause (3) to read “Minimum width for pedestrian/cyclist <u>access way</u> through a block:”.</td></tr>
</table>
</td><td>1. Accept in part. I suggest “Roading, and <u>Pedestrian and Cycle</u> Access”

2. Reject changes to local and collector roads.
Accept in part proposal for park edge roads (see discussion at submission 53.21 above)
- All new transport corridors are RD activities and require consents. This allows specific cross-sections to be developed in response to issues like park edge roads.
- The proposed local cross-sections seek a 5.6m carriageway reduced from 6m – consistent with consent cross-sections.
- Collector standards have been developed in conjunction with WRC. The lane widths are consistent with Auckland Transport Engineering Design Code for public transport routes. Refer to Submission 53.98 (4).

3. Accept</td></tr>
</table>

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr>
<td>Sub 53 The Adare Company</td>
<td>53.79</td>
<td><u>Summary of Submission:</u>
The widths proposed for accesses or private ways in the Local Centre Zone and Neighbourhood Centre Zone are unnecessarily space-consuming. 7m would be sufficient as this allows for between 5.5m and 6.0m for two-way slow moving traffic and for a combined 1.0m to 1.5m separation on either side.
<u>Relief/Decision Sought:</u>
Amend rule SUB-PREC1-PSP:R23 to reduce the widths of accesses and private ways within the Local Centre Zone and Neighbourhood Centre Zone in clauses (5), (6), (7) and (8) to 7m for all four scenarios</td>
<td>Reject – recommend deleting these provisions.
I understand that these are based on current subdivision standards for business and industrial zones (Rule 23.7.6). I am not aware of these current standards being applied to recent subdivisions in the business zones, and only very infrequently within the industrial zone. They do not appear relevant for subdivision of the local centre or neighbourhood centres in Peacocke.
I recommend that clauses ((5), (6), (7) and (8)) are deleted.
<table>
<tr><td>5.</td><td><u>Minimum access or private way width serving an allotment with a net site area of less than 2000m2</u></td><td><u>8m</u></td></tr>
<tr><td>6.</td><td><u>Minimum access or private way width serving an allotment with a net site area of 2000m2–5000m2</u></td><td><u>10m</u></td></tr>
<tr><td>7.</td><td><u>Minimum access or private way width serving an allotment with direct access to a major arterial transport corridor</u></td><td><u>10m</u></td></tr>
<tr><td>8.</td><td><u>Minimum private way width serving 1-5 allotments</u></td><td><u>10m</u></td></tr>
</table>
<table>
<tr><td>23.7.6</td><td colspan="2">Business 1 to 7 Zones, Te Rapa North Industrial Zone, Ruakura Industrial Park Zone, Ruakura Logistics Zone and Industrial Zone</td></tr>
<tr><td></td><td>a. Minimum transport corridor boundary length</td><td>8m</td></tr>
<tr><td></td><td>b. Minimum transport corridor boundary length adjoining a major arterial transport corridor</td><td>20m</td></tr>
<tr><td></td><td>c. Minimum access or private way width serving an allotment with a net site area of less than 2000m^2</td><td>8m</td></tr>
<tr><td></td><td>d. Minimum access or private way width serving an allotment with a net site area of 2000m^2–5000m^2</td><td>10m</td></tr>
<tr><td></td><td>e. Minimum access or private way width serving an allotment with direct access to a major arterial transport corridor</td><td>10m</td></tr>
<tr><td></td><td>f. Minimum private way width serving 1-5 allotments</td><td>10m</td></tr>
</table>
</td>
</tr>
<tr>
<td>Sub 53 The Adare Company</td>
<td>53.81</td>
<td><u>Summary of Submission:</u>
The standard in clause (a) requiring bus stops to be provided in locations agreed with Waikato Regional Council is uncertain and unlawful. The location of bus stops should be determined as part of detailed engineering design in accordance with HCC engineering standards. If the standards do not already address these requirements then they should be updated to do so. The standard in (c) requiring pedestrian crossing facilities that enable safe and step free access between stops is unclear because:
• The rule does not define what is meant by “step free”;
• The standard implies that people will move between bus stops on either side of the road which is unlikely unless the location is an interchange for different bus services. The requirement for the transport corridor to be designed to be accessible to all users is adequately covered by clause (b) of Rule R25.
<u>Relief/Decision Sought:</u>
Amend SUB-PREC1-PSP:R25 to read:
“1) Subdivision creating a new, or requiring the upgrading of an existing, transport corridor that is identified as a Public Transport Route in the Peacocke Structure Plan shall:
a) Provide bus stops in locations <s>as agreed with Waikato Regional Council</s> <u>which are consistent with the requirements of the Waikato Regional Infrastructure Technical Specifications.</u>
b) Design the transport corridor to ensure bus stops are constructed to be accessible to all users.
<s>c) Provide pedestrian crossing facilities that enable safe and step free access between stops.”</s>
<u>c) Include pedestrian crossing facilities at or near to bus stops.”</u></td>
<td>Accept in principle:
- Elsewhere in the District Plan references to WRC agreement and/or consultation are included as assessment criteria
- All new transport corridors are RD activities requiring consent which will capture design of new bus stops.
- RITS specifies the design standard for bus stop infrastructure but not its location. Locations are determined by the RPTP. The Draft RPTP 2022-32 has more detail on the spacing and type of infrastructure required at each type of stop. Therefore, do not support relying on the RITS for design of infrastructure.
- I recommend removing this rule (R25) and introducing new assessment criteria.
<table>
<tr><td><u>New assessment criteria</u></td><td><u>The outcome of consultation with the Waikato Regional Council regarding public transport.</u></td></tr>
<tr><td><u>New assessment criteria</u></td><td><u>The extent to which the transport corridor design provides public transport infrastructure including accessible bus stops, bus stop shelters, bus priority measures on key corridors or at key intersections, bus turning facilities, including interim facilities, and facilities for pedestrians to cross transport corridors to access public transport stops.</u></td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr>
<td>Sub 53 The Adare Company</td>
<td>53.83</td>
<td>
Some of the standards for internal vehicle access in Rule 25.14.4.1(h) are inconsistent with the standards in Table 15-6b in Appendix 15. The standards should be consistent.

The proposed standards for access to 1-6 units are the same as the standards that apply in Rule 25.14.4.1(h)(i). No changes are proposed relative to the requirements that apply in other parts of the City.

The proposed standards for 7-9 units where access is part of a fee simple subdivision reflect the minimum formation width of 5.5m in Appendix 15-6b. This standard allows for low speed, two-way movements and is appropriate for safe and efficient vehicle access to 7-9 residential units. The proposed minimum legal width of 6m is less than the 9m standard which is currently included in Table 15-6b. It is the same minimum legal width required which applies for private access to 7-20 lots. A legal width of 9m would be unnecessarily wide.

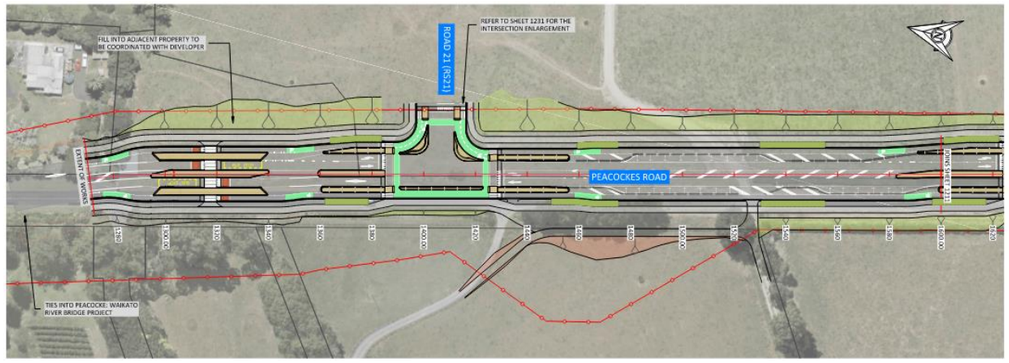
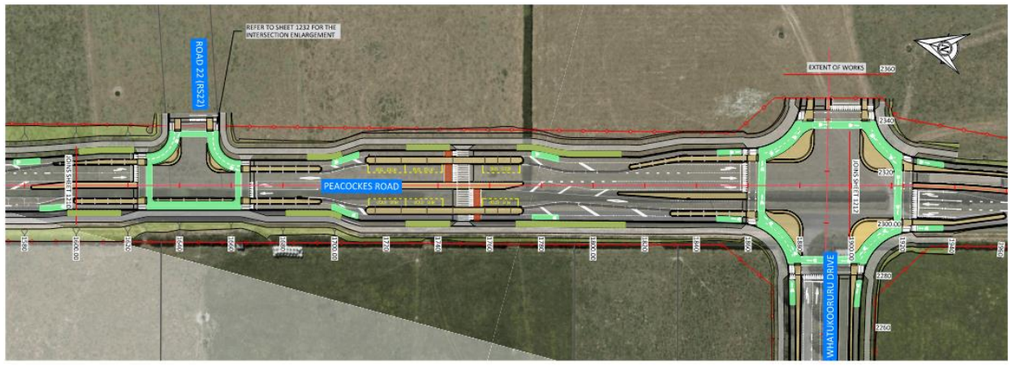
The proposed minimum formation and legal width standards for access to 7-20 units are the same as the standards that apply in Rule 25.14.4.1(h)(i). An amendment is sought so that the standards also would apply to jointly owned access lots held in fee simple title where a resident's society is formed to manage the access. This achieves a similar outcome to common property under a unit title arrangement by ensuring that there would be a suitable legal mechanism for the management of the access in perpetuity. It would allow more subdivisions to occur with fee simple title which is often a preferred form of land tenure.

The proposed standards for Local Roads and Collector Roads reflect the alternative cross sections which are enclosed with this submission which are more appropriate minimum roading standards.

The proposed standards for rear lanes adopt the same legal width that is currently proposed in Rule 25.14.4.1(h)(vii) and reflect the minimum legal width and minimum formation width which is currently proposed in Table 15-6b.

Amend Rule 25.14.4.1(h)(vii) to read:

"The internal vehicle access width requirements of ~~i,~~ for residential units and the requirements of iv and v do not apply to ~~rear lanes in~~ the Peacocke Structure Plan area. Instead the following shall apply:
<table>
<tr><th>Internal vehicle access</th><th>Use of access</th><th>Minimum formation width (m)</th><th>Minimum legal width (m)</th></tr>
<tr><td rowspan="4">Residential units</td><td>1-6 units</td><td>3.0</td><td>3.6</td></tr>
<tr><td>7-9 units (where access is part of a fee simple subdivision)</td><td>5.5</td><td>6.0</td></tr>
<tr><td>7-20 units (where access is to form common property under a unit title arrangement or a jointly owned access lot held in fee simple title where a resident's society must be formed to manage the access)</td><td>5.5</td><td>6.0</td></tr>
<tr><td>More than 20 units (Local Road)</td><td>5.6</td><td>16.4</td></tr>
<tr><td rowspan="5"></td><td>More than 20 units (Local Road – Park Edge)</td><td>5.6</td><td>12.8</td></tr>
<tr><td>More than 20 units (Collector Road – PT Route)</td><td>6.4</td><td>23.2</td></tr>
<tr><td>More than 20 units (Collector Road – Non-PT Route)</td><td>6.0</td><td>22.8</td></tr>
<tr><td>Residential units (rear lanes)</td><td>Rear lane</td><td>5.5</td><td>7.0</td></tr>
</table>
</td>
<td>Accept that Rule 25.14.4.1(h) and Table 15-6b) need to be aligned.</td>
</tr>
</table>

Submitter	Number	Summary of Submission Detail	Response
Sub 53 The Adare Company	53.93	**Summary of Submission:** The submitter suggests that a Local Road connection is provided between Peacockes Road and Peacockes Lane in the Indicative Key Local Transport Network. This would provide better certainty that road access will be able to be obtained to the submitter's property (Lot 8 DP 34164) from Peacockes Road and could occur at a relatively early stage without being dependent on the prior development of small surrounding land holdings which are owned by others. This would allow the potential for the site to be developed at the same time as the Amberfield development which is directly opposite on Peacockes Road. If necessary, the Key Public Transport Stop Location which is shown on Peacockes Road should be shifted to accommodate the proposed indicative Key Local Transport Network. **Relief/Decision Sought:** Amend Figure 2-2 as follows: • Insert a new 'Indicative Key Local Transport Network' within Lot 8 DP 34164 and Lot2 DP 519671 as shown on the figure included in the submission. • If necessary, shift the 'Key Public Transport Stop Location' on Peacockes Road to accommodate the proposed Indicative Key Local Transport Network.  	**Accept** I recommend that the Adare submission seeking a new indicative local road be included on the structure plan map is accepted. The proposed local road will connect to Peacocke Road midway between two signalised intersections and gives certainty that access between the affected land and Peacocke Road (a minor arterial) is anticipated. I note that bus stop location on Peacocke Road has been confirmed and is located further north than shown on Figure 2-2. It is planned for construction and cannot be moved with incurring significant additional costs to that contract.  
Sub 53 The Adare Company	53.97	**Summary of Submission:** Walking will be a very important "unit of movement" but so too will cycling, public transport and private vehicles. Utilisation of these other modes is likely to be significantly higher than walking for movements to destinations which are outside a reasonable walking distance from the point of origin. **Relief/Decision Sought:** Amend Appendix 15-2 to read: "A Design Statement that addresses the following: • An explanation of how the development will achieve the objectives and is consistent with the policies of the Peacocke Structure Plan Area, including: o Demonstrating how the design of the development prioritises walking as ~~the fundamental~~ an important unit of movement within the structure plan area. [Note: this will affect the consideration of desirable levels of service for motor vehicles.]"	**Reject.** Prefer that notified text is retained

Submitter	Number	Summary of Submission Detail	Response
Sub 53 The Adare Company	53.98 (1)	1. *Consistency with Rule 25.14.4.1(h)* The standards in Table 15-6b must be consistent with the decision sought for Rule 25.14.4.1(h) and to reflect the alternative minimum Local Road, Local Road – Park Edge, Collector Road (Public Transport Route), Collector Road (Non-Public Transport Route) and Minor Arterial Road cross sections which are enclosed with this submission. This change is necessary because there is currently inconsistency between some of the standards in Table 15-6b and Rule 25.14.4.1(h), because the alternative cross sections are more appropriate minimum roading standards and because there are currently no specific minimum standards for minor arterial roads included in the PC5 provisions. Amend Table 15-6b so that the standards are consistent with the relief sought for Rule 25.14.4.1(h) in submission [98.2].	**Accept in principle** – relates to consequential amendments. I agree that Rule 25.14.4.1(h) must be consistent with the standards at Table 15-6b and SUBPREC1-PSP: R21.
Sub 53 The Adare Company	53.98 (2)	2. *Private Ways* Table 15-6b includes standards for private ways. However, Rule 25.14.4.1(h)(vii) explains that different standards apply for rear lanes. Table 15-6b needs to be amended to clarify that the private way standards do not apply to rear lanes for consistency and to avoid confusion. Amend Table 15-6b so that it is clear that the 'Private way' standards in the second row of the table exclude rear lanes.	**Accept -** private ways and rear lanes are different types of access. As outlined in the report I propose amendments to SUB-PREC1-PSP: R20 and Rule 25.14.4.1(h), and Table 15-6b.
Sub 53 The Adare Company	53.98 (3)	3. Local Roads The Local Road minimum standards should be amended to reflect NZS4404 standards for narrower carriageways which are intended to support objectives associated with slowing traffic speeds to improve road safety and to promote more walking, cycling and public transport use. The proposal is indicated by the alternative Local Road cross section which is enclosed with this submission. The proposed alternative Local Road minimum legal width is 16.4m which is slightly narrower than the width of 16.8m which is currently proposed in Table 15-6b. New minimum standards should be included for Local Roads – Park Edge. These standards reflect that an alternative design is appropriate where roads adjoin the edges of public open space. Less landscaping (berm/rain garden) is required in the road reserve so more kerbside car parking can be provided adjacent to the open space removing the need for car parking on the opposite side. The proposed Local Road – Park Edge minimum legal width is 12.8m which is narrower than the width of 16.8m which is currently proposed in Table 15-6b for local roads. Similar design standards were proposed and accepted for the Amberfield subdivision. The alternative road cross sections will also reduce the amount of land required for roading and enable more land to remain available for residential development. These changes will lead to significantly more efficient use of land over the whole extent of the Peacocke Structure Plan area. Decision Sought: Amend the Local Road Residential criteria in Table 15-6b to reflect the alternative Local Road and Local Road – Park Edge cross sections which are enclosed with this submission.	**Local Road – refer to causing and discussion elsewhere within this Report** **Accept in part proposal for Open Space Edge roads (see discussion at submission 53.21 and 53.77 above)**

Submitter	Number	Summary of Submission Detail	Response
Sub 53 The Adare Company	53.98 (4)	4. *Collector Roads* The Collector Road minimum standards should be amended to reflect the Collector Road cross sections which are enclosed with this submission. The proposed narrower carriageways reflect NZS4404 minimum standards and are intended to support objectives associated with slowing traffic speeds to improve road safety and to promote more walking, cycling and public transport use. The proposed alternative widths are as follows: • For Collector Roads on Public Transport Routes the proposed alternative minimum legal width is 23.2m which is narrower than the width of 24.6m which is currently proposed in Table 15-6b. • For Collector Roads which are not on Public Transport Routes the proposed alternative minimum legal width is 22.8m which is narrower than the width of 24.2m which is currently proposed in Table 15-6b. The alternative road cross sections will also reduce the amount of land required for roading and enable more land to remain available for residential development. These changes will lead to significantly more efficient use of land over the whole extent of the Peacocke Structure Plan area. Amend the Collector – PT Route and Collector – Non-PT Route Residential criteria in Table 15-6b to reflect the alternative Collector Road cross sections which are enclosed with this submission.	**Reject –** collector road standards have been developed in conjunction with WRC. Also refer to Submission 53.21. Waka Kotahi's bus dimension for public transport design (https://www.nzta.govt.nz/walking-cycling-and-public-transport/public-transport/public-transport-design-guidance/bus-dimensions-for-design/) state the bus width as 2.85m (including mirrors) and show vehicle tracking for a 2.5m wide bus with 0.5m clearance (3m total width).
Sub 53 The Adare Company	53.98 (5)	5. Minor Arterial Roads There are currently no specific minimum standards included for Minor Arterial Roads in the Peacocke Structure Plan Area in Table 15-6b. Standards should be added to reflect the Minor Arterial Road cross section which is enclosed with this submission. The proposed minimum legal width is 26.8m. Without designations for all the Minor Arterial Roads in Peacocke, the inclusion of minimum standards for minor arterial roads in the Peacocke Structure Plan area is important so that the provisions are clear and so that landowners whose property fronts Minor Arterial Roads have a better understanding as to the form of those corridors. This information is particularly important for Peacocke Structure Plan area given the predominant land use along these arterial roads will be medium and high density residential. Understanding how adjoining uses will be required to interact with these roads is a critical design consideration. The provision of on-street car parking along Minor Arterial Roads, such as Peacockes Road, is very important to ensure that medium and high density residential uses, as well as other planned uses such as the Local Centre, Neighbourhood Centres and schools, are accessible to residents and visitors and that the centres are commercially viable. The standards in Table 15-6a for Minor Arterial Roads in Residential land use environments elsewhere in the City include "Recessed parallel parking bays (2m) on both sides" of the road as "On street parking requirements (min desirable)". A similar outcome is sought for the Minor Arterial Roads within the Peacocke Structure Plan Area (2.1m parking bays are proposed). Decision Sought: Insert new Minor Arterial Road Residential criteria in Table 15-6b to reflect the Minor Arterial Road cross section which is enclosed with this submission	**Accept in part minor arterial relief** Minor arterials require specific design to be developed in consultation with HCC. Much of the minor arterial network is being designed and constructed by HCC, except Peacocke Road south of the local centre. There appears to be little risk in adopting the current design cross-section within the District Plan specific to Peacocke (subject to resolving berm widths). Refer to amended version of Table 15-6b for details on the proposed minor arterial cross-section.
Sub 54 Bike Waikato	54.1	Submission in Support	N/A
Sub 54 Bike Waikato	54.2	Submission in Support	N/A
Sub 54 Bike Waikato	54.3	Submission in Support	N/A
Sub 54 Bike Waikato	54.4	Submission in Support	N/A
Sub 54 Bike Waikato	54.5	Submission in Support	N/A
Sub 54 Bike Waikato	54.6	Submission in Support	N/A
Sub 54 Bike Waikato	54.7	Submission in Support	N/A
Sub 54 Bike Waikato	54.8	Submission in Support	N/A

Submitter	Number	Summary of Submission Detail	Response
Sub 54 Bike Waikato	54.9	Submission in Support	N/A
Sub 54 Bike Waikato	54.10	Submission in Support	N/A
Sub 54 Bike Waikato	54.11	Submission in Support	N/A
Sub 54 Bike Waikato	54.12	Submission in Support	N/A
Sub 54 Bike Waikato	54.13	Submission in Support	N/A
Sub 54 Bike Waikato	54.14	Submission in Support	N/A
Sub 54 Bike Waikato	54.15	While the plan changes do not specify details for connection to the central city and key destinations within Hamilton, the structure plan needs specific requirements to construct early connections to the existing transport networks through Glenview, Melville and Hamilton East. Many early residents in Peacocke will need to regularly access services, education and employment in other parts of Hamilton while the area develops into a well serviced local centre. This connection to the existing parts of the city is just as crucial as the internal transport network. Of specific request is separated pedestrian and cycle facilities along the northern end of Peacockes Road.	**Reject** The Biking and Micromobility Business Case presented the coordinated 30-year programme of infrastructure and non-infrastructure activities. The network improvements and activities will be considered and prioritised through the LTP and the Annual Plan processes. Current works planned by HCC focus on providing connection to the path network at Sandford Park and Wairere Drive/ Cobham Drive. The Biking and Micromobility Business Case (Figure 23) indicates $4.8M for design and construction of the Bader Gully Connection in 2025/26 – 2027/28 and provides a separate line item for 'Projects within growth areas'.
Sub 54 Bike Waikato	54.16	The walking and cycling network also needs to connect to the public transport network, including providing safe and secure bicycle parking at the bus transit stations to enable bike-park and ride trips.	**Support in principle** - This is being addressed in PC12 which requires cycle parking at Key PT Interchanges. No changes recommended to PC5.
Sub 54 Bike Waikato	54.17	When pedestrian and cycle accessways connect to public road corridors they need to be designed in a manner that does not increase the risk to biking and micro-mobility users. The design should not require additional engineering measures to be installed to provide a safe connection, e.g. chicanes/staples. Accessway designs need to consider a variety of modes of transport including, cargo bikes, trailers, trikes, and mobility devices, etc.	**Reject** – This level of detail would normally be considered during detailed design of accessways. Rely on best practice being implemented through engineering plan approval and RITS references to Austroads and Waka Kotahi guidance.
Sub 54 Bike Waikato	54.18	When promoting high-quality walking and cycling networks, specific detail regarding roundabouts and intersections needs to be included. The plan change should include minimum requirements of protected cycle lanes through intersections.	**Reject** – separated cycleways are provided for on collector and arterial corridors, and therefore separated facilities are implied at intersections along these routes. New transport corridors (and therefor intersections) are RD activities with the ability for HCC to influence intersection design. Rely on best practice being implemented through engineering plan approval and RITS references to Austroads and Waka Kotahi/ NZTA guidance.
Sub 54 Bike Waikato	54.19	Inclusion of separated cycleways in all the transport corridors alongside the 'bat buffer zones' and 'bat corridors'. This will encourage people to use bicycles in dusk and after-dark periods which will reduce replaceable vehicle trips and 'disturbance effects' from vehicle lights.	**Support in principle** It is unclear which provision they are seeking to have amended. From a transport perspective cycling in/along the bat buffers and open space is supported but there are wider bat/ecological matters that need to be considered in specifying cycle facilities in bat buffer.
Sub 54 Bike Waikato	54.20	Neighbourhood Centre Zones need requirements for high quality cycling connections to surrounding transport networks that are clear and direct. By providing multi-modal transport options to access Neighbourhood Centres residents will be more likely to choose active or public transport options than rely on private vehicles for short trips.	**Reject** It is unclear which provision they are seeking to have amended. This seems like a matter to be considered as part of the subdivision matter. Cycle connectivity is already covered at SUB-PREC1-PSP: O7, P8. The relevant Assessment Criteria include G12, G14, G18, P4a, P4b and P5a,b,d,h,m.

<table>
<tr><th>Submitter</th><th>Number</th><th>Summary of Submission Detail</th><th>Response</th></tr>
<tr><td>Sub 54 Bike Waikato</td><td>54.21</td><td>Section 1.4.1.4 h): The Peacocke Structure Plan needs to emphasize the requirements in this section of the design guide to provide pedestrian and cycle links on the end of cul-de-sacs where they cannot be avoided.</td><td>Reject
It is unclear which provision they are seeking to have amended. The existing provision at 1.4.1.4 h) includes the following:
h) Where culs-de-sac cannot be avoided, they should provide, where appropriate, pedestrian and cycle links to other streets and/or open spaces at their heads to create connectivity and accessibility (refer Figure 1.4.1o)
Figure 1.4.1o: Where vehicle connections cannot be made culs-de-sac should include, where appropriate, pedestrian and cycle links
  </td></tr>
<tr><td>Sub 54 Bike Waikato</td><td>54.22</td><td>Table 15-6a: One-way separated cycleways are specified with a desirable minimum width of 2.0m. This should be amended to ‘absolute minimum’ and note requirements for berm space to facilitate future cycleway widening as cycle volumes increase with uptake of biking for transport needs. Retrofitting bike infrastructure into existing roads in Hamilton is constrained by current road widths. Making allowances for increases in bike use will reduce these retrofitting issues in Peacocke in the future.</td><td>Accept – Proposed widths are broadly aligned with Waka Kotahi Cycle Network Guidance. Extracts below
Width of facility
The following tables give the base widths that should be used for separated cycleways, depending on whether they are for one-way or two-way cycling and the volumes of cyclists:
Table 1: Base widths of one-way separated cycleways
<table><tr><th>Cyclists / hour (peak period)</th><th>Ideal minimum</th><th>Tolerable minimum</th><th>Absolute minimum (isolated sections only)</th></tr><tr><td>< 150</td><td>2.1 m</td><td>1.8 m</td><td>1.6 m</td></tr><tr><td>150 – 500</td><td>2.4 m</td><td>2.1 m</td><td>1.8 m</td></tr><tr><td>> 500</td><td>3.0 m</td><td>2.6 m</td><td>2.4 m</td></tr></table>Table 2: Base widths of two-way separated cycleways
<table><tr><th>Cyclists / hour (peak period)</th><th>Ideal minimum</th><th>Tolerable minimum</th><th>Absolute minimum (isolated sections only)</th></tr><tr><td>< 150</td><td>3.0 m</td><td>2.5 m</td><td>2.3 m</td></tr><tr><td>150 – 500</td><td>3.5 m</td><td>3.0 m</td><td>2.5 m</td></tr><tr><td>> 500</td><td>4.0 m</td><td>3.5 m</td><td>3.0 m</td></tr></table>Between a cycleway and active traffic lane:
○ Provide a 1.0 m horizontal buffer (0.5 m normal) between a cycleway and adjacent traffic lane.
▪ Consider the effects increased separation (and the devices used) may have on inter-visibility at driveways, etc.
▪ Consider the effects of passing traffic on higher speed roads.
○ Narrower separators (ie <0.5 m) may be considered where space is at a premium (eg intersections, temporary treatments).
Between a cycleway and parking lane:
○ Provide a 1.0 m (0.85 m tolerable minimum, 0.7 m absolute minimum) between the cycleway and adjacent parked vehicles.</td></tr>
<tr><td>Sub 54 Bike Waikato</td><td>54.23</td><td>Table 15-1a: Add a requirement for secure, protected resident bicycle parking spaces. In response to the removal of the minimum car parking spaces in activity oo) there will be an increase in bicycles. These bicycles will need dedicated long term and short term storage. This may require the introduction of a new requirement in this table that can progressively be applied to development across the rest of Hamilton.</td><td>Support in principle – More comprehensive changes to the Transportation rules are proposed through PC12 which will apply city-wide. I prefer to rely on that process to ensure that cycle parking standards are consistent across the city rather than specific to individual structure plans. No changes recommended to PC5.</td></tr>
</table>

Submitter	Number	Summary of Submission Detail	Response
Sub 57 Victoria Collins & Troy Radovancich	57.2	Relates to property at 241 Dixon Road Relief Sought: Amend to create a “Key Local Road” connection to Whatukooruru Drive (on the northern side) around the location of the existing paper road.	**Reject.** The subject propoerty already has frontage to a paper road which provides certainty that access can be provided along that corridor.