IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER Private Plan Change 56 – Lockerbie, Morrinsville

STATEMENT OF EVIDENCE OF VINISH ANAND PRAKASH Dated 13 July 2022





INTRODUCTION

- My name is Vinish Anand Prakash. I hold a Bachelor of Engineering Technology (Civil, 2014) from the Waikato Institute of Technology (WINTEC). I am Member of Engineering New Zealand. I have worked in the civil/transportation field for 7 years.
- 2. I am based in Hamilton and have worked for Gray Matter Ltd as a civil designer and transportation engineer since February 2014.
- I am familiar with the transport issues arising in and around the Waikato, having provided advice to Hamilton City Council (HCC), Matamata-Piako District Council (MPDC) and other local authorities and developers on a range of transport related projects in the area. I have the following specific experience relevant to the matters within the scope and purpose of this statement of evidence:
 - (a) Consultant transportation engineer for Road Controlling Authorities assisting in the review of consent applications including industrial, commercial, childcare and residential developments within the wider Waikato region;
 - (b) Consultant transportation engineer for developers, landowners and local authorities preparing traffic impact assessments for development proposals including, industrial, schools, and commercial and residential developments.
 - (c) Consultant transportation engineer for Matamata Piako District Council reviewing the transportation effects of the wider Lockerbie Estate. I reviewed stages 1-3, the Lockerbie Retirement Village and the Lockerbie Neighbourhood Centre (including a cafe and childcare centre). I have also reviewed the engineering plans for Stages 1 and 2 and provided safety engineer comments on behalf of MPDC for the Lockerbie Subdivision Stage 1b Post Construction Road Safety Audit.
 - (d) Designer and draughtsperson for Road Controlling Authorities assisting with design of minor safety improvements and intersection improvements for local roads, and intersection improvements on state highways.

(e) I have completed the Waka Kotahi Safer Journeys Safe System Engineering Workshop and have completed safety audits on urban and rural improvement projects for local roads and state highways.

EXPERT CODE OF CONDUCT

4. I confirm that I have read and am familiar with the Code of Conduct for Expert Witnesses in the Environment Court, Practice Note (2014), and agree to comply with that Code of Conduct. I state where I have relied on the statements of evidence of others for my assessment. I have not omitted to consider material facts known to me that might alter or detract from my opinions.

OVERVIEW OF EVIDENCE

- I have been retained by MPDC to provide traffic engineering and transportation planning advice relating to Private Plan Change 56 (PC56). I prepared the initial transportation review (Lockerbie Estate Plan Change Transportation Review, 6 October 2021) ("Transportation Review"). I then prepared a memo (Lockerbie Plan Change Initial Review of Updated Information, 24 November 2021) ("Further Information Review") following receipt of further information from the Applicant.
- 6. The purpose of this statement of evidence is to address transportation matters raised in submissions and expert evidence relating to PC56.
- 7. In preparing this evidence I have reviewed:
 - (a) The Request for the Plan Change;
 - (b) Submissions;
 - (c) Roading aspects of the Proposed Plan Amendments (4 July 2022)
 - (d) ITA prepared by Mr Hall (15 December 2021)
 - (e) Evidence Prepared by Mr Hall (4 July 2022)

INTRODUCTION AND SUMMARY

- 8. In both my Transportation Review and Further Information Review I considered that more information was required to assess the effects of Plan Change 56. This included:
 - (a) Assessment of the George Street/Coronation Road intersection;
 - (b) Assessment of the effects at the Morrinsville-Tahuna Road/Taukoro Road/Hangawera Road intersection; and

- (c) Confirmation of proposed Taukoro Road and Morrinsville-Tahuna Road cross-sections
- 9. Since the preparation of my Further Information Request, further information has been provided and I have participated in discussions and meetings with the Applicant to resolve my concerns.
- 10. In summary, I consider that the concerns raised in my Transportation Review have been resolved through the inclusion of appropriate transportation provisions and triggers in the District Plan, and inclusion of key infrastructure upgrades in the Private Developer Agreement (PDA).

CYCLING CONNECTIONS

- 11. Two submitters¹ raised concerns relating to the lack of cycling infrastructure connecting the plan change area to key destinations within the Morrinsville e.g. the town centre and schools.
- 12. I attended a meeting with Bike Waikato representatives on 6 April 2022 to discuss their submission. The Bike Waikato submission accepts the plan change but suggests amendments to PC56 including:
 - (a) Accessible street design;
 - (b) Design to encourage active modes; and
 - (c) Ensuring that the intersections and path crossing points are designed to give priority to vulnerable users living and accessing the development.
- 13. PC56 includes shared paths within the plan change area connecting to new shared paths on Morrinsville-Tahuna Road and Taukoro Road. The shared paths within PC56 will connect to shared paths provided in the consented subdivisions of the Lockerbie Estate.
- 14. Section 9.4.3 of the proposed Plan Change provisions includes the following Pedestrian Network Plan (shown in Figure 1). The blue dashed lines in Figure 1 indicate the paved shared path network and the green dashed lines are the grassed recreational links.

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¹ Bike Waikato (Submitter 32), Mr Southall (Submitter 19)



Figure 1: Proposed Pedestrian and Cycling Network (Figure 3 from Section 9.4.3 of Lockerbie Plan Change Provisions)

- 15. I consider that the proposal provides an appropriate internal shared path network with connections to new shared paths along Morrinsville-Tahuna Road and Taukoro Road.
- 16. Improvements to create a more integrated cycling network for Morrinsville will benefit both residents within PC56 and the existing residents of Morrinsville. I consider that these network wide responses are the responsibility of MPDC.
- 17. MPDC has funding allocated in the Long Term Plan (LTP) for cycling improvements², but the location of these improvements is not identified in the LTP. I recommend that MPDC engages with Bike Waikato when developing an implementation plan to ensure that the needs of the cycling community are understood and incorporated into the planning and implementation of cycling projects.
- 18. The final layout and design of intersections and shared path connections within PC56 will be subject to detailed design and MPDC approval at the time of subdivision. I consider that detailed design of the crossing facilities can be addressed and reviewed as part of future resource consent applications and MPDC Engineering Plan Approval processes.
- 19. Mr Hall (paragraph 60) relies on NZS4404 to inform his view that cycling in the carriageway is appropriate. However, more detailed guidance on cycle

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² MPDC Long Term Plan adopted 30 June 2021 - Infrastructure Strategy: Widening of existing footpaths within our towns to create shared pathways to allow for safe cycling and pedestrian movements (2021/22-2051/52) and Morrinsville to Te Aroha Cycleway (2031/32-2050/51)

facilities is provided in Waka Kotahi's Cycling Network Guidance. In my view, the detailed design of the internal intersections and cycling network should be in accordance with the following guidelines and design standards:

- (a) Waka Kotahi Cycling Network Guidance;
- (b) Austroads Guide to Road Design Part 6A Paths for Walking and Cycling; and
- (c) Austroads, Cycling Aspects of Austroads Guides.

GEORGE STREET/CORONATION ROAD INTERSECTION

- 20. In their submissions both Matamata-Piako District Council (Submission 30) and Mr Compton (Submission 18) raised concerns regarding the effects of PC56 at the George Street/Coronation Road intersection.
- 21. The consented development of the wider Lockerbie development adds traffic to this intersection. PC56 will add additional traffic to the intersection, but this is moderated by the plan change providing multiple points of access.
- 22. The existing, consented and proposed transport connections are shown in Figure 2. I have shown the indicative internal collector network as well.

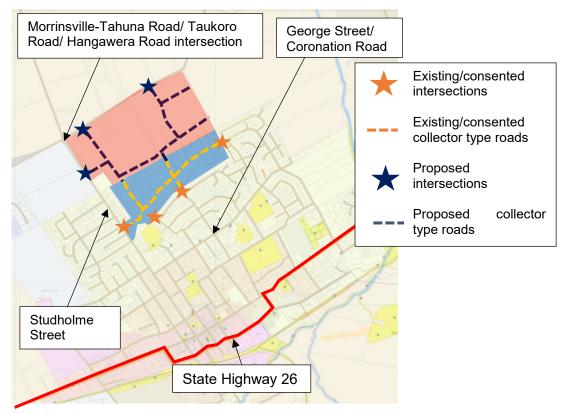


Figure 2: Roading Connections (road network shown within Lockerbie subdivision and PC 56 area is Indicative only)

- 23. There are no turning facilities at the existing George Street/Coronation Road crossroads intersection. I consider that the increase in traffic is likely to result in an increased crash risk at the intersection, both for vehicles turning right or travelling across the intersection on George Street.
- 24. I reviewed the safety assessment³ of the George Street/Coronation Road corridor prepared by Mr Hall ("Safety Assessment"). While I agreed with Mr Hall that the predicted injury and DSi crash rates remain very low, they increase by 20% when comparing the plan change to the consented development and more than double when compared to the pre-development traffic volumes.
- 25. I used the Austroads⁴ turn warrants to determine if the existing intersection layout is appropriate for the additional turning traffic expected at the intersection. My turn warrant assessment is based on peak hour traffic volumes. I have determined peak hour traffic assuming that 11% of daily traffic occurs during peak hour.

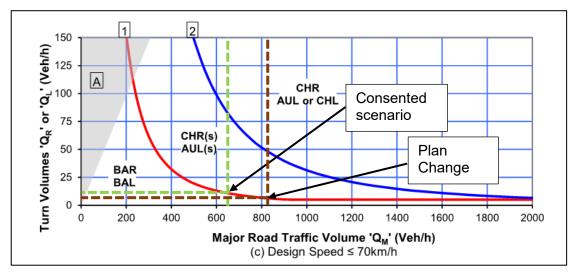


Figure 3: Austroads Turning Warrants – right turning traffic from Coronation Road (east)

26. In both the consented and PC56 scenarios, a right turn treatment is warranted if there are more than 5-10 veh/hr turning right from Coronation Road (east) into George Street. In my view, the right turn movements of the PC56 scenario are likely to be greater than 10 veh/hr and a channelised right turn treatment is warranted at this intersection.

³ George Street / Coronation Road Safety Review, CKL, dated 17 May 2022

⁴ Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings – Figure 2.25

- 27. In his submission Mr Compton seeks that a roundabout be provided along with appropriate crossing facilities. I agree that a roundabout is likely to provide the safest form of intersection as it reduces vehicle speeds at the intersection and reduces the number of conflict points. Based on my review of Mr Hall's Safety Assessment, I consider that mitigation in the form of a right turn bay is proportionate to the increased crash risk and is appropriate for this particular intersection.
- 28. From Mr Hall's evidence (paragraph 32), I understand that implementation of right turn bay markings, as shown in Figure 5 of Mr Hall's evidence, will be included in the Private Developer Agreement (PDA). When comparing the proposed plan change and consented development, I consider the proposed treatment is acceptable to address the increase in traffic and associated increase in crash risk at the intersection.

MORRINSVILLE-TAHUNA ROAD CROSS-SECTION

- 29. As part of PC56 (PC56 Appendix 9, Section 9.4.2), Morrinsville-Tahuna Road will be urbanised when a new road connection is provided on Morrinsville-Tahuna Road (north of the Rhonda Read hospital) and there are new residential lots fronting Morrinsville-Tahuna Road. In my opinion, the urbanisation of Morrinsville-Tahuna Road will support a reduction in posted speed limit and provision for direct vehicle access for the new residential lots with frontage to Morrinsville-Tahuna Road.
- 30. The current Morrinsville-Tahuna Road cross-section in the proposed District Plan provisions (Appendix 9 Schedule of Works, Section 9.4.2) includes 1.6m on-road cycle lanes, two 3m lanes, 2.5m wide flush median and a 3m wide shared path on the eastern side of Morrinsville-Tahuna Road.

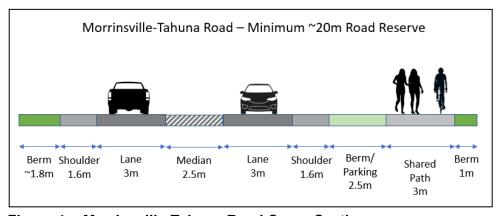


Figure 4: Morrinsville-Tahuna Road Cross-Section

- 31. This cross-section is based on a 20m wide road reserve. Using the MPDC Webmap Tool⁵, I measured the width of the Morrinsville-Tahuna Road road reserve north of the Rhoda Read hospital. The road reserve varies from approximately 20m to approximately 50m at the intersection with Taukoro Road/ Hangawera Road. South of the Rhoda Read hospital, I measured the road reserve as 20m wide.
- 32. Based on a 20m wide road reserve the proposed cross-section results in a 1.8m wide berm on the western side of the road. I consider this appropriate for the current Rural-Residential Zone on that side of the road.
- 33. I consider that the Morrinsville-Tahuna Road cross-section proposed in the PC56 District Plan Provisions is appropriate for the future form and function of Morrinsville-Tahuna Road. I consider that it will support urbanisation of the corridor, provide safe property access and support a reduction in the posted speed limit from 100km/h to 50km/h.

PARKING

- A number of submitters⁶ raised concerns about the potential increase in 34. parking demand around the Morrinsville Town Centre due to the increase in residential dwellings resulting from PC56.
- 35. PC56 does not directly affect town centre parking as the development is located approximately 2km from the Town Centre. I acknowledge that there may be an increase in parking demand due to the increased population resulting from the plan change.
- 36. Policy 11(a) of the National Policy Statement on Urban Development 2020 (NPS-UD) requires MPDC to remove minimum parking standards from the District Plan. Policy 11(b) strongly encourages local authorities to manage effects associated with the supply and demand of car parking through Comprehensive Parking Management Plans (CPMP).
- 37. Parking management within the town centre is the responsibility of MPDC, not the Applicant. MPDC can manage parking through a wide range of measures including:

⁵ https://webmap.mpdc.govt.nz/PublicPortalFull/

⁶ Mr Compton (Submission 18), Mr Wright (Submission 17), Mr and Ms Latto (Submission 22), Mr and Ms Holland (Submission 29), and Ms Gray (Submission 34)

- (a) Introducing time restrictions on existing parking spaces within the town centre:
- (b) Parking enforcement; and
- (c) Improving pedestrian connectivity to existing parking spaces to encourage use.
- 38. I understand that a CPMP is being developed for Morrinsville and the recommendations are currently being workshopped with Councillors. I understand that the initial work indicates that there is sufficient capacity within the wider town centre area to accommodate the anticipated parking demand, but more effective management of the parking supply is required to optimise its utilisation.

INTERNAL ROAD CROSS-SECTIONS

- 39. Three submitters⁷ are concerned that the internal roads are too narrow which may result in unsafe parking outside houses and insufficient space for emergency vehicle access.
- 40. The proposal includes both collector and local roads and the proposed cross-sections are consistent with those consented in the current stages of the Lockerbie development. The cross-sections for each road type are summarised in the tables below and have been assessed against the Development Manual (Part 3, Table 3.1) and NZS 44048.

Road Aspect	Development Manual	NZS 4404 (Table 3.2)	Proposed	Complies with MPDC DM
Reserve width	20m	20m	20m	Complies
Minimum Traffic Carriageway	7m	8.4m	7m	Complies
Total Carriageway width ⁹	12m	8.4m	7m	Does not comply
Berm	Subject to specific design	-	Back berm 1.5m both sides Front berm 0.7m both sides	No specific requirement
Parking	2.5m both sides	Parking separate and recessed	2.5m both sides	Complies
Footpath	1.5m both sides	2m both sides	1.8m both sides	Complies

⁷ Ms Adamski (Submission 16), Mr and Ms Latto (Submission 22) and Ms Mankelow-Hancock (Submission 25)

⁸ NZS 4404:2020 Land development and subdivision infrastructure

⁹ MPDC Development Manual "total carriageway width" allows for space for parking within the carriageway

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Road Aspect	Development Manual	NZS 4404 (Table 3.2)	Proposed	Complies with MPDC DM
Cycleway	-	Separate provision where defined cycle route.	-	None provided. No specific requirement
Service Corridor	Subject to specific design	-	Services in berm	No specific requirement

Table 1: Collector Road Cross-Section

Road Aspect	Development Manual	NZS 4404 (Table 3.2)	Proposed	Complies with MPDC DM
Reserve width	20m	15m	16m	Does not comply
Minimum Traffic Carriageway	3.5m	5.5-5.7m	5.6m	Complies
Total Carriageway Width ¹⁰	8.5m	5.5-5.7m	5.6m	Does not comply
Berm	Subject to specific design	-	1.5m berm both sides	No specific requirement
Parking	2.5m both sides	Shared if <100 du Separate if >100 du	2.2m both sides	Does not comply
Footpath	1.5m both sides	1.5m one side < 100 du or both sides if > 100 du.	1.5m both sides	Complies
Cycleway	-	Shared in movement lane	-	Complies
Service Corridor	Subject to specific design	-	Services located in berm	No specific requirement

Table 2: Local Road Cross-Section

- 41. The proposed collector road complies with most of the cross-section standards set out in the MPDC Development Manual except for the total carriageway width. The total carriageway width in the MPDC Development Manual allows for parking within the carriageway. The proposed collector road cross-section provides recessed parking bays instead of provision for parking within the carriageway.
- 42. The local road cross-section does not comply with road reserve, carriageway and parking bay standards set out in the MPDC Development Manual.
- 43. The proposed local road cross-section does not comply with the Development Manual but aligns with NZS4404 for access to 1 to 200 lots. The main difference between NZS4404 and the Development Manual is the carriageway width. The Development Manual requires total carriageway width of 8.5m (although noting that the traffic carriageway width required is only 3.5m) compared to 5.5-5.7m in NZS4404. I consider the use of the proposed 5.6m

¹⁰ MPDC Development Manual "total carriageway width" allows for space for parking within the carriageway

wide carriageway in residential areas to be acceptable to encourage lower vehicle speeds.

- 44. In my view, the proposed 5.6m carriageway is sufficient for two-way movement. I consider the risk of vehicles parking within the traffic lanes to be low as recessed parking bays are provided on both sides of the road. I understand that emergency services such as fire appliances require a minimum 4m road width¹¹. I consider that the proposed local road cross-section is acceptable for emergency service access.
- 45. The proposed parking bays are 2.2m wide and do not comply with minimum standards set out in the MPDC Development Manual which requires 2.5m. NZS 2890.5¹² provides guidance on minimum parallel parking bay width and states that 2.1m is the minimum required for spaces that are likely to be used by cars and light commercial vehicles and where there is a restricted roadway width, parking of wide vehicles is unlikely and where a continuously marked narrow parking lane will aid traffic flow.
- 46. I consider that the proposed 2.2m wide recessed parking bays are acceptable given the low speeds and residential activities.
- 47. In summary, I consider the proposed collector road and local road crosssections to be acceptable.

SURROUNDING TRANSPORT NETWORK

- 48. Two submitters¹³ raised concerns regarding the effects of the additional traffic generated by PC56 on the surrounding road network, in particular the State Highway 26 (SH26) intersections with Seales Road, and Avenue Road North/Avenue Road South.
- 49. The layout of the consented subdivisions and PC56 area provides multiple points of access to distribute trips to the wider transport network (refer to Figure 2 above). I consider that the key routes between the PC56 area and the wider arterial road network are via Taukoro Road, Morrinsville-Tahuna Road, Studholme Street and George Street. I consider that the proposed

¹¹ SNZ PAS 45009:2008, New Zealand Fire Service Firefighting Water Supplies Code of Practice, Section 6.1

¹² AS 2890.5-1993 Parking Facilities - On Street Parking, Table 2.1 Width of Parallel Parking Spaces.

¹³ Ms Chandler (Submission 12), Mr and Ms Holland (Submission 29)

urbanisation of Taukoro Road and Morrinsville-Tahuna Road is appropriate for the increase in traffic on those roads. I have considered the impact on the Coronation Road/ George Street intersection at paragraphs 21 to 28 above.

- 50. Mr Hall (paragraphs 44-56) has completed further capacity analysis of the Avenue Road/State Highway 26 and the Seales Road/State Highway 26 intersections. I consider his analysis adequate.
- 51. I agree with Mr Hall (paragraph 56) that the additional traffic from PC56 will disperse to multiple routes within the existing surrounding transport network. In my opinion, this minimises the risk of the traffic effects from PC56 being concentrated at a single intersection.
- 52. PC56 was publicly notified, and Waka Kotahi did not provide a submission and have not raised any concerns related to effects on the state highway network.

TAUKORO ROAD

- 53. Two submitters¹⁴ raised concerns regarding Taukoro Road, including:
 - (a) Safety concerns related to the mix of rural traffic such as milk tankers with urban/residential traffic;
 - (b) Sight distance deficiencies on Taukoro Road; and
 - (c) Safety concerns regarding the number the new intersections on Taukoro Road.
- 54. Taukoro Road is a no exit road with a current traffic volume of 195 veh/day with 10.4% heavy vehicles¹⁵. As a result of PC56 this is expected to increase to approximately 2,945 veh/day along the site frontage.
- 55. PC56 includes urbanisation of Taukoro Road along the site frontage as shown in Figure 5 below. The cross-section provides:
 - (a) A 7m wide carriageway which is sufficient for two-way movement.
 - (b) An off-road shared path on the development side to accommodate cyclists and pedestrians separated from vehicles

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¹⁴ Mr and Ms Johnston (Submission 24) and Mr and Ms Cameron (Submission 31)

¹⁵ Mobileorad.org

(c) Recessed parking within the southern berm to accommodate on-street parking. As there is no development on the northern side of Taukoro Road recessed parking is not necessary.

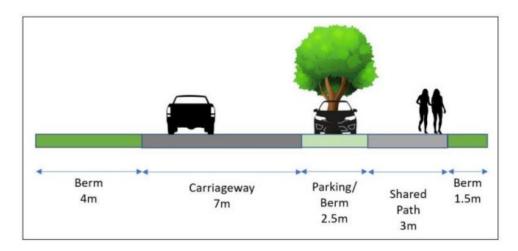


Figure 5: Proposed Taukoro Road Cross-Section

- I consider that the proposed cross-section is appropriate for the volume and mix of traffic expected on Taukoro Road. The 7m carriageway provides sufficient space for two-way vehicle movement and a shared path is provided to separate pedestrians and cyclists from traffic. Some cyclists may choose to cycle along the road, but the 7m wide carriageway provides sufficient space for traffic to pass cyclists.
- 57. I acknowledge that there are existing sight distance restrictions on Taukoro Road due to the vertical geometry on Taukoro Road.
- 58. Taukoro Road is currently posted as 100km/h which means that the sight distance required 16 at an intersection is 290m (based on an operating speed of 110 km/h). Where Taukoro Road is urbanised I anticipate that there will be a reduction in the posted speed limit. If a 50km/h speed limit is implemented then the operating speed of 60km/h would require 115m sight distance. At an operating speed of 70km/h the required sight distance is 140m. I consider that the sight distance deficiencies on Taukoro Road can be improved during detailed design of the intersections and urbanisation of Taukoro Road.
- 59. I consider that having two intersections with access to PC 56 from Taukoro Road will distribute the traffic between the two intersections, minimising the risk of capacity or safety effects arising from concentrating all the traffic to one

 $^{^{16}}$ MPDC Development Manual Section 3.7.1, Safe Intersection Sight Distance Standards (SISD) – All Roads/All Zones

- intersection on Taukoro Road. In my view providing two intersections on Taukoro Road is appropriate.
- 60. I consider that the proposed urbanisation and the provision of two intersections on Taukoro Road is appropriate for the anticipated level of increased traffic on Taukoro Road. In my view, the existing deficiencies in sight distance can be addressed through the proposed urbanisation and approval of the detailed design by MPDC.
- 61. In his evidence Mr Hall (paragraph 21) states "In my opinion the upgraded road should include extending the 50km/h speed limit to be north and west of the Taukoro Road / Morrinsville-Tahuna Road / Hangawera Road intersection. This would result in the full length of Taukoro Road being included within the 50kmh posted speed limit. The change in speed limits is a separate MPDC process that sits outside this Plan Change".
- 62. I agree that changing the speed limit on Taukoro Road will require a separate process to be completed by MPDC as the Road Controlling Authority (RCA) through the Matamata-Piako District Council Land Transport Bylaw 2008.
- 63. I consider that reducing the posted speed to 50km/h along the site frontage is appropriate as this section of Taukoro Road will be urbanised.
- 64. However, in my opinion the current rural road cross-section north-east of the site is not appropriate for a 50km/h posted speed and no improvement works on that section of Taukoro Road are planned as part of this Plan Change. I consider that reducing the speed limit to 50km/h may not be appropriate for the entire length of Taukoro Road. The future speed limit and extent of that lower speed limit on Taukoro Road will be assessed by MPDC as part of the urbanisation.

TAUKORO ROAD/ HANGAWERA ROAD/ MORRINSVILLE-TAHUNA ROAD INTERSECTION

- 65. Ms Gray (Submitter 34) raised concerns relating to the Morrinsville-Tahuna Road/ Taukoro Road/ Hangawera Road intersection and considers that a roundabout should be constructed at this intersection.
- 66. I agree with Ms Gray. I consider that implementing a roundabout at this intersection is an appropriate treatment to manage speeds at the intersection and will better facilitate the turning movements resulting in a safe intersection.

67. The plan change provisions (Section 9.4.9, Table 1 Trigger Points) require a roundabout at this location when the new intersections are constructed to Taukoro Road.

Transportation and pedestrian networks				
Requirement	When			
Roundabout at Morrinsville-Tahuna and Taukoro Roads including associated land take	When intersections to Taukoro Road are established			

Table 3: Morrinsville-Tahuna Road/ Taukoro Road/ Hangawera Road Roundabout Trigger

REVIEW OF ITA

- 68. Ms Chandler's submission (Submission 12) relates to the content of the ITA. She raises concerns related to the assessment of road safety, public transport and parking within the CBD.
- 69. I have reviewed the ITA and the submission from Ms Chandler. I agree with the Mr Hall's assessment that the trips will be distributed across the transport network and the effects are unlikely to be concentrated to a single intersection within the existing transport corridor. I have specifically considered safety and efficiency effects at the Morrinsville-Tahuna Road/ Taukoro Road/ Hangawera Road and Coronation Road/ George Street intersections and consider that improvements are required at both intersections. I consider that the proposed plan change provisions manage the effects of the additional traffic at these intersections to an acceptable level.
- 70. Ms Chandler comments on the lack of public transport in the area. The implementation of public transport services within the Waikato region is the responsibility of the Waikato Regional Council (WRC) and is subject to demand and funding. WRC did not provide a submission in response to public notification of PC56.
- 71. I have addressed the concerns raised by submitters in relation to CBD parking in paragraphs 34 to 38

PROPOSED DISTRICT PLAN PROVISIONS

72. I have reviewed the plan change provisions relating to transport and I have no further comments on them.

CONCLUSION

73. In summary, I consider that:

- (a) The proposed layout of PC56 provides appropriate connections between the plan change area and the existing transport network for both vehicles and active modes of transport;
- (b) The increase in traffic as a result of PC56 at the George Street/ Coronation Road intersection warrants a right turn treatment and right turn bays are proposed at this intersection
- (c) The provision of a roundabout at the Morrinsville-Tahuna Road/ Taukoro Road/ Hangawera Road intersection will manage the potential adverse effects to an acceptable level.
- (d) The urbanisation of Morrinsville-Tahuna Road and Taukoro Road is appropriate for the increase in traffic as a result of PC56.
- (e) Cyclist safety at intersections and crossings within the PC56 area can be addressed at detailed design.
- (f) The proposal does not directly affect parking within the CBD. Parking within the CBD is the responsibility of MPDC and I understand that MPDC are currently in the process of developing a Comprehensive Parking Management Plan for Morrinsville.
- (g) The proposed plan change provisions are appropriate to manage the likely transport effects.
- 74. In conclusion, I consider that the transportation effects of PC56 can be managed to an acceptable level through the transport provisions outlined in the proposed PC56 District Plan Provisions.

Vinish Prakash

Dated 13 July 2022