

IN THE MATTER of the Resource Management Act 1991 ("RMA" or "the Act")

AND

IN THE MATTER of a submission in respect of the **PROPOSED WAIKATO DISTRICT PLAN** by **MOWBRAY GROUP LIMITED** pursuant to Clause 6 of Schedule 1 of the Act

STATEMENT OF EVIDENCE OF CAMERON INDER

1. INTRODUCTION

1.1 My name is Cameron Beswick Inder. I am a transportation engineer and the Transportation Engineering Manager at Bloxam Burnett & Olliver (BBO), a firm of consulting engineers, planners and surveyors based in Hamilton. I have been employed by BBO since 2004.

Qualifications and experience

1.1 I hold a Bachelor of Engineering (Honours) degree in Civil Engineering from the University of Auckland (1999). I am a Member of Engineering New Zealand (MEngNZ), a Chartered Professional Engineer (CPEng) and a member of the Engineering NZ Transportation Group.

1.2 I have 20 years' experience in the field of transportation and traffic engineering gained through 16 years of employment in New Zealand and approximately four years employment in the United Kingdom.

1.3 I have experience in transportation and traffic engineering matters associated with resource management, including effects assessment for resource consents, plan changes and structure plans. I also have experience in the design of traffic infrastructure and facilities, road safety engineering, traffic calming, urban design, subdivision design, and traffic modelling.

1.4 I have appeared as expert witness on numerous occasions, the most relevant to this proposal being:

(a) Ambury Property Ltd; Submission to Ohinewai Rezoning

- (b) Rings Scenic Tours for a private plan change to the Matamata Piako District Plan (Hobbiton, 2019);
- (c) Waikato Regional Airport Limited for a private plan change to the Waipa District Plan (Hamilton Airport, 2018);
- (d) Otorohanga District Council at the Board of Inquiry in relation to an alteration to designation for Waikeria Prison expansion (2017)

Involvement in project

- 1.5 I was engaged by Mowbray Group Limited (Mowbray) in 2020 to provide traffic engineering related inputs and advice in relation to their submission on the Proposed Waikato District Plan (PWDP) for the rezoning of approximately 5.2 hectares (ha) of land (the Site) located in Matangi village, 12 km south east of Hamilton CBD. The Site is #452 b and c Tauwhare Road, and also includes # 452, 456, 458 and 462 Tauwhare Road.
- 1.6 I have visited the Site and observed the transport network on numerous occasions. My most recent visit in this regard was on 24 November 2020.
- 1.7 I produced the Transportation Assessment report dated 16 February 2021, which is appended to Barker and Associates planning report for the rezoning.
- 1.8 I also commissioned the preliminary Level Crossing Safety Impact Assessment ('preliminary LCSIA') with Arrive Ltd and attended the site visit with Mr Edwards as part of that assessment process.

Purpose and scope of evidence

- 1.9 The purpose of my evidence is to provide an overview of the transport assessment carried out for the rezoning proposal, to identify the potential effects of the proposal on the transport environment, and any suitable mitigation measures that I consider are needed to address adverse effects (if any) on the safe and efficient operation of the transport network.
- 1.10 My evidence should be read in conjunction with the planning evidence by Mr Fraser McNutt, the Transportation Assessment (TA) report and the preliminary LCSIA report appended to the TA.

Expert Witness Code of Conduct

- 1.11 I have read the Code of Conduct for Expert Witnesses, contained in the Environment Court Consolidated Practice Note (2014) and I agree to comply with it. I can confirm that the issues addressed in this statement are within

my area of expertise and that in preparing my evidence I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

2. **Further Submissions**

2.1 I note there are three further submissions in response to Mowbray's submission to rezone the Site. Those further submissions are by:

- Heritage New Zealand
- Amy and Andrew de Langen, 436B Tauwhare Road
- Andrew Mowbray, 452 Tauwhare Road

2.2 I have reviewed the content of all three further submissions and confirm there are no points raised specifically in relation to transport effects that I need to respond to.

3. **Assessment of Transportation Effects**

Proposed Zoning

3.1 The current zoning of the Site is approximately 3.5 ha of Light Industrial and approximately 1.7 ha of rural zone.

3.2 The Notified Proposed District Plan (PDP) proposes rezoning the Site by including a 3980 m² Business Zone bordering the Tauwhare Road frontage, changing the Light Industrial zone to "Industrial" (which would allow Heavy Industry activities) and extending the Industrial zone to approximately 38,000 m² (cf. existing Light Industrial zone = 35,160 m²) while reducing the rural zoned land to approximately 1 ha.

3.3 Mowbray propose through their submission on the PDP to rezone the Site to a "Matangi Mixed Use Zone" (MMUZ) which will enable repurposing of much of the existing historical buildings with a mixture of different land use activities to create a complementary commercial precinct in the heart of Matangi.

3.4 An area is identified within the proposed MMUZ where Office and Commercial Services activities are to be concentrated (near the Tauwhare Road road frontage). This is referred to as the Commercial Area as shown on plan A5 in Appendix 4 of Mr McNutt's evidence.

Site Characteristics

- 3.5 The 5.2 ha site ('the Site') is located in the heart of Matangi village, opposite the existing superette store and adjacent to Tauwhare Road and the Matangi Road / Tauwhare Road intersection. The Hautapu Branch railway line and Tauwhare Road rail level crossing border the north east boundary of Site 1. There are two trains per day (4 movements) and the rail line operates with a speed limit of 20 kph.
- 3.6 Access to the Site is via two existing vehicle crossings on Tauwhare Road. Both are proposed to remain in use, although Access 1 (as identified in Figure 3 of the Transport Assessment) is the main access. Access 1 is formed in concrete to a high standard for two way vehicle movement, while Access 2 remains in its original form when the Dairy Factory operated. There is a vehicle crossing at Access 2 which leads to a gravel car park. Access 2 should be upgraded to current commercial vehicle crossing standards if it is to be more frequently used due to rezoning of the Site.
- 3.7 Both Access 1 and 2 have good sight distance that exceeds the PDP minimum requirement of 80 m (PDP Table 14.12.5.3) for accesses generating more than 40 vehicle movements per day in a 50 km/h speed environment.
- 3.8 However, sight lines at Access 1 can occasionally be obstructed by legally parked vehicles using the on-street car park spaces either side of the access. I have observed this on site and note that it is a common issue in any town or village centre where the need for access competes with the need for on street parking. Drivers of vehicles exiting the access do so cautiously in order to check the way is clear.
- 3.9 A speed limit of 40 km/h on Tauwhare Road within the commercial area of Matangi should be considered by WDC if either the proposed MMUZ of the PDP zoning is approved, since both zonings propose a commercial frontage to the Site. Pedestrian volumes across Tauwhare Road will increase as a result of either zoning.
- 3.10 Due to the rural speed environment either side of the village there is a need to actively manage vehicle speeds down through the village to increase the safety for pedestrians crossing the road between the superette and the future commercial services or business zone.
- 3.11 Access 2 is located opposite Matangi Road at the Intersection. While not an ideal location and no longer compliant with PDP minimum separation standards (30 m), the very good sight distance in both directions on

Tauwhare Road and also down Matangi Road together with the existing low volume of traffic using the access helps to enable its present safe operation.

- 3.12 The notified PDP rezoning did not propose closure or limiting any movements at either access. Similarly, given the proposed MMUZ Permitted Activity trip generation limits are less than that which could establish under the PDP rules (which I explain further on in my evidence), there is no proposal to close or limit movements at either access for land-use complying with the proposed Permitted Activity rules.

Intersection and Access Safety

- 3.13 The most recent 5 year period crash data in the Waka Kotahi CAS database shows two crashes occurred in the vicinity of the Intersection and the two site accesses. However, on closer inspection of the crash reports, none of the three crashes were actually related to the Intersection or accesses. One was a drunk driver losing control and hitting a property fence on Matangi Road; another was a shoplifter trying to escape and hit a road sign, the other was a small truck clipping a shop veranda as the driver performed a u-turn.
- 3.14 So the lack of any crash history indicates there are no apparent safety issues with the Intersection or the Site accesses at present.
- 3.15 Sight distance at the Intersection is very good in both directions from Matangi Road. It easily exceeds the Austroads Guide to Road Design (AGRD) minimum requirement of 123 m (AGRD Part 4a) for a 60 kph design speed. Figure 1 shows the intersection looking northeast.



Figure 1

Trip Generation; Proposed District Plan Zone vs MMUZ

- 3.16 As stated, there appears to be no transportation assessment by WDC relating to the PDP zoning for the Site.
- 3.17 Therefore, in the absence of such information I have made some assessment with reference to the notified PDP rules allowing any individual activity to generate up to 250 daily trips as a Permitted Activity (Rule 24.15.1 (a)). There is no limitation on the number of activities per site, but there is a maximum site coverage of 80%.
- 3.18 On this basis, a total cumulative permitted amount of vehicle movements per site could potentially be upwards of 3750 per day if there were 15 activities on site each operating at the maximum daily trip generation limit for permitted activities. If the typical peak hour volume is approximately 15% of the daily volume, then approximately 560 vph can be reasonably expected to be generated in the peak periods.
- 3.19 The PDP proposes an Industrial area on the site of approximately 3.8 ha, which at 80% site coverage could provide for circa 15 separate activities (covering an average of approximately 2000 m² each). So it is not fanciful to have 15 or more activities on site. Indeed, Mr Mowbray already confirmed there are 20 different businesses operating on site at present. Over time, more intensive trip generating businesses could rightfully establish as Permitted Activities under the PDP rules.
- 3.20 The PDP Business Zone would generate around 80 vph (530 vpd) in addition to the above 560 trip/hour, assuming development to the allowable 80% site coverage maximum.
- 3.21 Combining these, a cumulative Permitted Activity baseline trip generation of around 640 vph and 4300 vpd is possible under the PDP rules; although I acknowledge that this would be a low probability worse case.
- 3.22 Even so, it is my understanding that there has been no assessment of transportation effects carried out to support the notified PDP rezoning for the site. Not only has the effects of such trip generation not been assessed, but the PDP Industry zone would allow haulage companies and heavy industry to establish, potentially generating significant numbers of Heavy Commercial Vehicles (HCVs) operating from the site. Typically 15% to 20% of traffic from Industry zones is HCVs. That could result in excess of 100 HCV movements to and from the Site per day if the PDP rezoning was approved and a truck haulage company or bus depot established on site.

- 3.23 To my knowledge, the effects of such HCV movements on the Matangi transport network have not been assessed.
- 3.24 In contrast, I identified in the Transportation Assessment for the proposed MMUZ that the cumulative Permitted Activity trip generation on Site has the potential to reach approximately 405 trips in the typical peak hour if the high trip generating activities (Offices, Commercial Service, and Light Industrial and Childcare facility) were all developed to their Permitted Activity limits. This would then likely translate to a daily volume of between 2700 and 4000 trips per day (given the peak hour is typically 10% to 15% of the daily volume).
- 3.25 The HCV component of the traffic generation is likely to be very low as Light Industry typically relates to small manufacturing businesses and repair and maintenance businesses that typically receive and send goods via HCV once or twice a week. Such HCVs also tend to be smaller, single truck unit types instead of the large truck and trailer haulage units.
- 3.26 To ensure this is the case, Mr McNutt has proposed a specific zone called the Matangi Light Industry zone, with the following definition as described in Paragraph 8.6 (d) of his evidence;

Matangi Light Industry: *Means small scale manufacturing, warehouse, bulk storage, service and repair activities which do not involve the use of heavy machinery, are carried out indoors that can contain ancillary retail. They include but limited to the following: printing works, brewery, furniture manufacture, car repairs, light engineering, tradesmen's depots and the like.*

- 3.27 In addition, proposed Rule 81 for the MMUZ limits HCV movements to 1% of the Permitted Activity trip generation cap (discussed further in Section 4 of my evidence).

MMUZ R81(b)

No more than 1% of the volume limits set out in (a) above to provide for Heavy Commercial Vehicles (HCV) per activity.

- 3.28 I consider that together, this activity definition and rule appropriately ensures that only activities with very low daily numbers of HCV movements can establish as a Permitted Activity within the MMUZ.
- 3.29 On this basis, the potential Permitted Activity traffic generation from the proposed MMUZ is not only lower than under the PDP rules, it also provides a significantly better outcome for the Matangi village community as a whole

by avoiding the potential for large HCV movements to establish on Site. Low numbers of HCV movements provides a much safer urban environment for people to conduct everyday life in and around the other commercial activities in the village, and in future within the MMUZ.

- 3.30 I assessed the effects of the proposed MMUZ Permitted Activity combined trip generation on the local network in the TA, which I recap and highlight the key points below.

Intersection Capacity

- 3.31 Traffic volume surveys were carried out in Matangi on 27 and 28 October and on 2, 3 and 5 November 2020 at the main site access, the intersection of Tauwhare Road / Matangi Road (the Intersection) and at the railway level crossing. This information provided the basis for assigning the additional trips on the network due to rezoning.
- 3.32 The survey data for the Access identified that the existing peak hour volume accessing the Site is just 28 vehicles/hour (vph) in the PM Peak (4:45pm to 5:45pm). I refer to vehicles/hour instead of trips/hour as only vehicles were observed using the Site access. My observation is that walking and/or cycling trips are very occasional at best.
- 3.33 Modelling results for the Intersection (in the Transportation Assessment) demonstrate that if the MMUZ generated trips were all vehicle trips then it is likely that the performance of the intersection would decline from the current LOS B (a high level of efficiency) to LOS D on the Matangi Road approach in the peak periods.
- 3.34 Although LoS D in this context does not relate to there being significant congestion (as the modelled average delay is still just 27 seconds/veh), in my opinion the deterioration to LOS D from LOS B (currently) is more than minor in effect. For reference, LoS A for intersection performance relates to negligible average delays and LoS C is typically a minor delay between 15 seconds and 24 seconds / vehicle. This range is commonly experienced at intersections in towns during peak hours and cities during inter-peak hours.
- 3.35 I refer to LoS C being a minor effect because it is not a level at which a Road Controlling Authority would consider is worthy of or could justify the expense of upgrading an intersection operating at LoS C unless addressing a known safety problem. As identified above, there is no apparent safety problem at this Intersection of interest.

4. **Permitted Activity Trip Generation Cap**

4.1 On this basis, with a target maximum LoS C for any movement at the Intersection to ensure capacity (and thus safety) related effects remain no more than minor for Permitted Activities, I iteratively remodelled the Intersection with lower volumes to find the upper limit of LoS C (ie 24 seconds/veh, before transitioning to LoS D). From there I back-calculated to find that the maximum trip generation from the Site is 330 vph resulting in LoS C at the Intersection. This translates to approximately 2200 trips per day on the basis of the typical peak hour to daily volume ratio being 15%.

4.2 I note that at this volume the modelled 95th percentile peak hour queue on Matangi Road is just 44 m (7 cars) and the critical right turn into Matangi Road from Tauwhare Road is just 6 m (1 car length).

4.3 I recommend that these two figures (330 vph or 2200 vpd) be applied as a cumulative trip generation cap for all Permitted, Controlled and Restricted Discretionary Activities, in addition to each floor area or site area limits as proposed. This has been captured as I intended in proposed MMUZ Rule 81(a) which states a Permitted Activity is:

Any permitted, controlled or restricted discretionary activity within the MMUZ creating between 0-250 vehicle movements (vpd) per day up to a total of 2200 vpd and/or 330 vehicle movements per hour (vph) in the peak periods for all combined activities within the MMUZ.

4.4 I consider that including this cumulative traffic generation cap in addition to the Permitted Activity GFA and site area caps is preferred and appropriate as there is an infinite combination of different activities and sizes that could establish in the MMUZ. And this will change over time as well. Not all activities will establish to their maximum Permitted Activity levels at any one time.

4.5 However, any Activity that causes the cumulative trip generation limits of 330 vph or 2200 vpd to be exceeded should trigger a resource consent requiring an Integrated Transport Assessment (ITA). The ITA is to address any transport related effects of the activity and identify if any mitigation measures on the local network or at the access points are appropriate and necessary.

5. **Effects of Rezoning on Rail Level Crossing Safety**

- 5.1 It appears that KiwiRail did not submit on the PDP zone provisions for the Site, and neither did they provide a further submission to Mowbray's submission.
- 5.2 However, given the proximity of the railway level crossing and the fact that the railway passes through the Site, Mr McNutt consulted with KiwiRail to seek their feedback on the proposed MMUZ.
- 5.3 In terms of transportation effects, KiwiRail felt they are an affected party because of the potential for increased trips by traffic and pedestrians crossing the railway line.
- 5.4 On that basis I consider it likely KiwiRail would also see themselves affected by the PDP rezoning proposal, given the potential traffic generation that could occur.
- 5.5 As part of the consultation, KiwiRail requested that a Level Crossing Safety Impact Assessment (LCSIA) be carried out in order for them to understand fully the effects of the proposal and therefore whether they support or oppose the mixed use rezoning proposal.
- 5.6 The LCSIA process is specific to KiwiRail, and requires a safety team comprising a team leader who is a Certified Assessor by KiwiRail together with a team involving a KiwiRail safety engineer, locomotive drivers and the Council road safety engineer. It is a detailed safety assessment process, and one that can take a minimum of 3 weeks to schedule Locomotive drivers and KiwiRail staff for the site visit, then a further 3 to 5 weeks for each person involved to submit their scoring, the LCSIA report written and reviewed by all involved before completion.
- 5.7 The date for filing this evidence was previously 30 November 2020. It became apparent in late October 2020 that KiwiRail wanted the LCSIA report to inform their feedback on the rezoning. This was not going to be achievable by 30 November. I therefore commissioned Arrive consultants (Mr Edwards, who is a KiwiRail Certified Assessor) to provide a "preliminary" LCSIA which would essentially be a standard LCSIA except excluding input from KiwiRail locomotive drivers and KiwiRail safety engineer.
- 5.8 As stated by Mr Edwards in his report, the intention of the preliminary LCSIA is to indicate the range of possible LCSIA outcomes that could be expected with KiwiRail staff involved, and whether it is practicable for safety

improvement infrastructure (if required to support the rezoning), to be provided.

5.9 In other words, were there any likely 'show-stoppers' in terms of rail level crossing safety and improvements that could impact on the appropriateness to rezone the Site to the MMUZ.

5.10 The preliminary LCSIA process was underway when WDC confirmed on 5 November 2020 that that the filing date for submitter's evidence was to shift to 17 February 2021. With the Christmas break and office closure period soon to commence I considered it would likely be difficult to get a full LCSIA team organised and the assessment completed in time for submitter evidence to be written. Furthermore, in speaking to Mr Edwards about the process and given what we knew about the existing level crossing's condition I considered that a full LCSIA was unlikely to provide a significantly different conclusion than Mr Edward's preliminary LCSIA. Therefore, I opted to continue with the preliminary LCSIA as planned.

5.11 The key finding of the preliminary LCSIA is summed up at the end of the report's Introduction as follows:

After assessing the proposal using a partial LCSIA procedure we conclude that the proposed rezoning would have a minimal impact on the safety of the level crossings, and that no changes to the crossings would be required if the zoning being sought by Mowbray Group Ltd was approved.

5.12 Further to that, in the Conclusion Mr Edward's states concerning the assessment not being a full LCSIA:

This Preview report indicates that the possible change of use would result in a full LCSIA concluding that KiwiRail criteria would be met for all scenarios, regardless of the engineers' scores, and as a result changes to the level crossings are not required because of the possible change in use.

Irrespective of any change in use that may occur it is recommended that Council and KiwiRail improve sightlines at the crossings by modifying the vegetation on the north-eastern corner of the crossing.

5.13 From these conclusions, I consider that the transport effects of the MMUZ on the safety of the level crossing will be negligible. KiwiRail have been forward the preliminary LCSIA report for review and comment but as at 16 February, no feedback has been received.

Parking and Loading

- 5.14 There are currently ten parallel car park spaces provided on Tauwhare Road in the vicinity of the Site. Four of these are on the northern side adjacent to the superette store, and six on the southern side along the frontage of the Site. There are no time limits and no formal loading spaces on the street.
- 5.15 My observations are that the small commercial area of Matangi is often busy with a high rate of occupancy of the ten parking spaces. U-turns on Tauwhare Road are a common occurrence. With just ten spaces available it is also not uncommon to observe all car park spaces occupied. Indeed the Google Earth image in Figure 2 shows 90% occupancy at the time of the photo.
- 5.16 On this basis, it is my assessment that there would be insufficient on-street parking in the commercial area of the village to support the additional parking demand of either the MMUZ or PDP zoning. If the ten spaces was the only parking possible for the foreseeable future then it is likely that the increased demand due to rezoning would cause unacceptable congestion on Tauwhare Road at regular times through the day. Such congestion would likely lead to impacts on the safety of all road users, including pedestrians, as drivers scramble, double park, illegally park and aggressively u-turn in a small area to claim a rare car park space.
- 5.17 However, I am confident that will not be the case for the proposed MMUZ as the Site has ample available space for the provision off-street parking to the PDP requirements for each activity. Indeed it is Mowbray's intention to provide sufficient off-street parking throughout the site to enable businesses established in the MMUZ to be successful, and that the Site functions without adding to existing demand for the ten spaces on the street.
- 5.18 Therefore, I consider that car parking effects on the network can and will be mitigated by the provision of sufficient off-street parking within the Site.

6. Alternative Transport Modes (to Vehicles)

Walking

- 6.1 Existing infrastructure provision for pedestrians near the site consists of a footpath on the northern side on Tauwhare Road adjacent to the superette, and footpaths on both sides of Matangi Road. However, there is presently no footpath along the frontage of the Site. Existing footpaths are shown as orange lines in Figure 2.

6.2 The lack of a footpath along the Site frontage may be historical because the Site was a dairy factory and there was little reason for a footpath. However, I consider that it would be appropriate now for Council to extend the footpath on the south side of Tauwhare Road to finish in front of # 456 Tauwhare Road, as shown by the orange dash arrow below. Pedestrian flows will increase in this location with either the PDP zoning or the proposed MMUZ because both include a commercial frontage for the site.

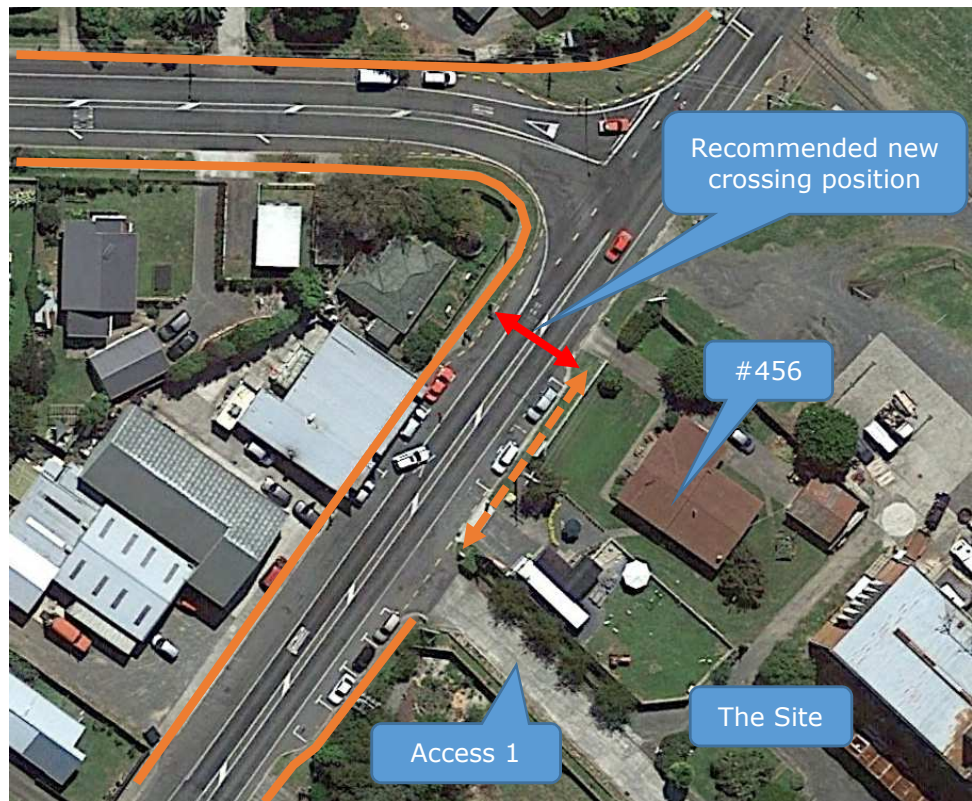


Figure 2

6.3 There is also a crossing point with on Tauwhare Road The only formal pedestrian crossing point on Tauwhare Road in the village is located approximately 65 m southwest of Access 1, as shown in Figure 3 below.



Figure 3

- 6.4 This crossing is clearly a basic central refuge island type, where pedestrians give way to vehicles. There is no active speed calming measures on the road approaches to the crossing. The location of this crossing appears to be adequate only for connecting residents in Good Street to the north side of Matangi (including the school). It is too far south of the commercial area of the village to be used by people whose desire line is between the superette or Matangi Road and the Site.
- 6.5 Accordingly, I recommend that WDC considers adding a raised platform pedestrian crossing (zebra style) in the location of the red arrow on Tauwhare Road in Figure 2, together with kerb extensions to reduce the length of the crossing. The location shown will address the desire line for pedestrians from Matangi Road accessing the future commercial services or business zone of the Site as well as create a needed safe crossing for others moving between the superette on the north side and the car park spaces on the south side of the road. The location is also not immediately adjacent to car park spaces that when occupied might cause sight distance problems for drivers seeing a pedestrian that is about to step on to the crossing.
- 6.6 Ideally, for maximum pedestrian safety benefit the raised platform zebra crossing should be implemented as a package improvement with the south side footpath extension (dashed orange arrow in Figure 2) and a 40 km/h speed limit through the commercial precinct of the village.
- 6.7 For the avoidance of doubt, I reiterate that I consider this safety improvement is warranted with either the PDP zoning or the proposed MMUZ because both provisions include a commercial land-use fronting Tauwhare Road. Pedestrian volumes and demand to cross the road will increase in this location with either zoning.

Cycling Facilities

- 6.8 There is no specific infrastructure for cycling in Matangi. However, sealed shoulders exist on Tauwhare Road (as shown in Photo 3) and on Matangi Road. There does not appear to be adequate berm width for off-road shared walking and cycling paths.
- 6.9 A reduced speed limit to 40 km/h within the commercial precinct of the village would improve safety for cyclists traveling on the road shoulders in the village. This further supports my recommendation that Council considers reducing the urban speed limit.

Public Transport

- 6.10 There is presently no Public Transport service operating through Matangi. In my opinion, it is unlikely that there would be sufficient demand in future for a PT service connecting Matangi to Hamilton even with the additional jobs enabled by the PDP or MMUZ rezoning.
- 6.11 However, it is important to note that the proposed MMUZ does not preclude the ability for a public transport service to operate in future if it became viable.
- 6.12 It is likely that some on-street parking spaces on Tauwhare Road would be lost in order to accommodate a bus stop in close proximity to the commercial hub of the village.

7. PROPOSAL ALIGNMENT WITH TRANSPORT STRATEGIES AND POLICIES

- 7.1 The following documents were referred to in order to determine the proposed rezoning consistency with national and regional transport strategies and policies:
- (a) Government Policy Statement (GPS) and Land Transport– 2027 / 28;
and
 - (b) 2018 Update to the Waikato Regional Land Transport Plan 2015 – 2045
- 7.2 This assessment finds that the proposed rezoning is consistent with the new GPS and directions set out in the Waikato Regional Land Transport Plan because:
- (a) There is strong emphasis on improving transport safety and accessibility for the community in Matangi through the proposed MMUZ rules and controls compared to the PDP zone provisions.
 - (b) The proposed rezoning will establish more employment options in close proximity to existing Residential development in Matangi, thus providing greater ability for current and future residents to reduce reliance on private motor vehicles for short trips and increase walking and cycling.

8. **CONCLUSIONS**

- 8.1 On the basis of the Transportation Assessment and subject to the proposed Permitted, Controlled and Restricted Discretionary rule provisions by Barker and Associates being adopted into the District Plan, I consider that any resulting transportation effects of the proposed MMUZ trip generation will be minor if not negligible.
- 8.2 Further land use activity on Site that does not comply with the Permitted Activity limits including the cumulative traffic generation caps, should trigger the need for a resource consent with an activity specific Integrated Transport Assessment to identify and mitigate any resulting adverse effects on the network. This is effectively reflected in the proposed MMUZ rules provided in Mr McNutt's evidence.
- 8.3 Suitable transport mitigation measures that an ITA might identify include, a contribution towards upgrading the Tauwhare Road / Matangi Road intersection to an urban roundabout, or alternatively limiting the traffic movements at Access 2 to Left in and Left Out only for improved safety.
- 8.4 An ITA should be required in support of any consent application to develop Site 2, due to the access separation distance to the railway level crossing being less than the required 30 m minimum.
- 8.5 I have reviewed the proposed MMUZ rules and objectives and policies attached to Mr McNutts evidence (Appendix 2 and 3) and confirm that, to the extent of my expertise as a Transportation Engineer, they adequately provide the controls I anticipated through my recommendations.
- 8.6 On this basis, it is my opinion that the proposed MMUZ will produce a much better outcome for the Matangi community in terms of transport safety and function when compared to WDC's PDP zoning that predominantly enables "Industrial" land uses. The Industrial zoning would permit heavy industry to establish on Site along with potentially significant numbers of large HCVs accessing the site on a daily basis.
- 8.7 In contrast, the proposed Matangi Light Industry zone restricts the types of industrial activities to small scale, low generators of HCV movements.
- 8.8 Car parking effects on Tauwhare Road due to increased demand associated with the MMUZ can and will be mitigated by the provision of sufficient parking on the Site for each land-use activity that establishes.

Summary of Transportation Infrastructure Improvements recommended to support rezoning to either the PDP or MMUZ rules.

- 8.9 For the increased safety of pedestrians in the community I recommend that WDC considers the addition of a raised platform pedestrian crossing (zebra) on Tauwhare Road in the location of the red arrow in Figure 2, together with kerb extensions to reduce the length of the crossing.
- 8.10 Ideally, to maximise pedestrian safety the raised platform zebra crossing should be implemented as a package improvement with the extension of the footpath southern side fronting the Site (dashed orange arrow in Figure 2) and a 40 km/h speed limit zone on Tauwhare Road through the commercial precinct of the village.
- 8.11 I consider this safety improvement is warranted regardless of which zoning is approved (the PDP zoning or the proposed MMUZ) because both provisions include a commercial land-use of the same size fronting Tauwhare Road. Pedestrian volumes and demand to cross the road will increase in this location with either zoning.
- 8.12 The preliminary LCSIA finds that the proposed rezoning would have a minimal impact on the safety of the level crossings (vehicle and pedestrian crossings), and that no changes to the crossings would be required if the zoning being sought by Mowbray Group Ltd was approved.
- 8.13 Irrespective of any change in use on the Site it is recommended that WDC and KiwiRail improve sightlines at the crossings by modifying the vegetation on the north-eastern side of the crossing.

**Cameron Inder
16 February 2021**