

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Private Plan Change 20 to the Waipā District Plan.

**STATEMENT OF EVIDENCE OF JAMES TINNION-MORGAN
ON BEHALF OF WAIPĀ DISTRICT COUNCIL**

TRANSPORT

1. INTRODUCTION

- 1.1 My name is James Robertson Tinnion-Morgan. I am employed as a Technical Director in the Auckland Office of Aurecon Ltd.
- 1.2 My qualifications include a Masters (MSc) Degree in Transport Planning & Engineering from Southampton University; and a BTEC in Civil Engineering from the University of Canterbury, both in the UK.
- 1.3 I am a Member of the Chartered Institute of Highways and Transportation (MCIHT,UK) and a Chartered Member of the Institute of Transport and Logistics (CMILT, NZ).
- 1.4 I have been carrying out professional planning and engineering tasks related to the impact of development and planning and design of transport systems and infrastructure for over 32 years in the New Zealand, the United Kingdom, Europe and Asia.

Code of Conduct

- 1.5 I confirm I have read the Code of Conduct for Expert Witnesses 2023 contained in the Environment Court Practice Note and I agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this brief of evidence are within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

Involvement in the Plan Change

- 1.6 I have been engaged by Waipā District Council ("**WDC**") to prepare evidence on behalf of Waipā District Council for the Private Plan Change 20, Airport Northern Precinct.
- 1.7 WDCs interests in this plan change from a transportation perspective are as follows:
- (a) The non-state-highway impacts of the development which are focussed mainly on Raynes Road, Narrows Road and Middle Road for which WDC has an overriding interest as the Road Controlling Authority ("**RCA**").
 - (b) WDC also has a transport interest on the State Highway network as far as the traffic impacts and mitigation proposals that may affect local residents and businesses, and for providing safe and efficient access for freight and passengers to the Airport.
 - (c) WDC has interests in ensuring that the plan change aligns with relevant transport strategies and programmes including the Waipā Transport Strategy and Metro Spatial Plan Transport Programme Business Case.

Scope of evidence

- 1.8 This evidence is based on my assessment of the transport effects of the proposed Private Plan Change 20 submitted by Titanium Park Limited and Rukuhia Properties Limited.
- 1.9 This statement of evidence will:
- (a) provide an overview of the relevant existing land transport network and connections;
 - (b) assess the effects of the plan change on the existing land transport network around Hamilton Airport;
 - (c) discuss the broader land transport planning context in the Hamilton Metropolitan area;
 - (d) respond to relevant submissions;
 - (e) provide a brief conclusion.

- 1.10 In preparing my evidence I have had regard to the following documents:
- (a) Titanium Park Limited and Rukuhia Properties Limited Northern Precinct Integrated Transport Assessment v2 dated April 2022 prepared by Bloxham Burnett and Oliver Consultants, the “ITA”.
 - (b) Document arising from pre-lodgement discussions with the applicants transport consultants regarding the ITA
 - (c) Proposed WDP Provision Changes (Appendix 19)
 - (d) Waka Kotahi’s Plan Submission (18), dated 28 October 2022.
 - (e) Hamilton City Council’s Plan Submission (23), dated 28 October 2022.
 - (f) PPC20 – Harrison Grierson Response to Request for Further Information, dated 18th August 2022.
 - (g) The Transport Expert Witness Statement dated 10th February 2022.
 - (h) The Transport Expert Witness Statement dated 15th February 2022.

2. EXECUTIVE SUMMARY

- 2.1 I have been engaged by Waipā District Council (“WDC”) to prepare evidence on behalf of Waipā District Council for the Private Plan Change 20, Airport Northern Precinct.
- 2.2 WDCs has transportation interests in this private plan change relating to the non-state-highway impacts of the development which are focussed mainly on Raynes Road, Narrows Road and Middle Road for which WDC has an overriding interest as the Road Controlling Authority. WDC also has a transport interest on the State Highway network as far as the traffic impacts and mitigation proposals that may affect local residents and businesses, and for providing safe and efficient access for freight and passengers to the Airport, and its environs.
- 2.3 My evidence is based on my assessment of the transport effects of the proposed Private Plan Change 20 submitted by Titanium Park Limited and Rukuhia Properties Limited.
- 2.4 My statement of evidence provides an overview of the relevant existing land transport network and connections; assesses the effects of the plan change on the existing land transport network around Hamilton Airport; discusses the broader land transport planning context in the Hamilton Metropolitan area; responds to relevant submissions; and provides a brief conclusion.

- 2.5 The proposed private plan change area comprises an area of approximately 130ha to the northwest of Hamilton Airport. 41 hectares (ha) of the plan change area is land already zoned for industrial use (“The Northern Precinct”) with a minor retail component and the rezoning of a further 89 ha of farmland that is presently zoned Rural under the Operative Waipā District Plan (District Plan) as primarily industrial.
- 2.6 The proposed plan change site is bordered by Raynes Road to the north-east; a two-way two-lane rural road with a posted speed limit of 80 km/h. Narrows Road runs between State Highway 3 to the south-west and Raynes Road to the north-east.
- 2.7 To the west of the site is State Highway 3 (“SH3”) which connects the settlements of Te Awamutu, Ohaupo, and Rukuhia to the Airport and to Hamilton to the north where it joins State Highway 1C. Indirectly to the north-east of the plan change area is State Highway 21 (“SH21”).
- 2.8 I believe that the traffic effects of the development (as set out in the draft private plan change notified 26th September 2022 and the draft plan change provision amendments from the expert conferencing dated 15th February) are likely to be acceptable to Waipā District, however some additional evidence is required including:
- (a) Evidence including modelling results and rationale for proposed trigger points for access points and intersection mitigation.
 - (b) An assessment of the effects of the development on Narrows Road (assuming no Southern Links) and proposed mitigation if required.
 - (c) Proposed mitigation of or clarification of the traffic effects of the development on the Tauwhare Road and Tamahere Drive at the SH1 on slip / off slip roundabouts.
 - (d) Details of how the development will provide future proofing for the proposed rapid transit corridor(s) to the Airport as set out in the Hamilton Waikato Metro Spatial Plan Transport Programme Business Case (2022).

3. LAND USE AND PLANNING CONTEXT

- 3.1 The proposed private plan change area comprises an area of approximately 130ha to the northwest of Hamilton Airport. 41 hectares (ha) of the plan change area is land already zoned for industrial use (“The Northern Precinct”) with a minor retail component and the rezoning of a further 89 ha of farmland that is

presently zoned Rural under the Operative Waipā District Plan (District Plan) as primarily industrial.

- 3.2 The draft plan change provisions cover a total developable area of 130ha however this area would include non-ancillary retail not exceeding 5,000m², and 5,300m² of retail within the Northern Precinct (a total of 10,300m²). The remainder of the site would be zoned for industrial uses.
- 3.3 The rural part of the Northern Precinct site is identified in the District Plan as a 'Possible Future Growth Area' beyond the existing 40 ha zone however this has no committed planning status.

4. CURRENT LAND TRANSPORT CONNECTIONS

4.1 Roothing Network

- 4.2 The proposed plan change site is bordered by Raynes Road to the north-east; a two-way two-lane rural road with a posted speed limit of 80 km/h which is identified as a Local Road in the District Plan Road hierarchy, and for which Waipā District Council is the Road Controlling Authority ("RCA") for the purposes of the Land Transport Act 1998 ("LTA").
- 4.3 The main *existing* point of vehicular access for the site from the north is via Middle Road, and Narrows Road onto which it forms an access. The RCA for Middle Road and Narrows Road is WDC. Both roads are rural in nature. Middle Road south of Narrows Road is a single lane track. Narrows Road runs between State Highway 3 to the south-west and Raynes Road to the north-east.
- 4.4 To the west of the site is State Highway 3 ("SH3"), for which Waka Kotahi is the RCA. SH3 is identified as a Major Arterial Road and a Significant Road Corridor in the District Plan roading hierarchy. SH3 connects the settlements of Te Awamutu, Ohaupo, and Rukuhia to the Airport and to Hamilton to the north where it joins State Highway 1C.
- 4.5 Indirectly to the north-east of the plan change area is State Highway 21 ("SH21"), for which Waka Kotahi is also the RCA. SH21 provides a connection between SH3 just south of the Airport to SH1 at Tamahere.
- 4.6 Given the location of the site as remote from Hamilton and other major settlements in Waipā, the vast majority of traffic generated by the development (both freight and commuting) is expected to be longer distance in nature and

will therefore route via either State Highway 3 or State Highway 21. Therefore, it is likely that the most significant traffic impacts of the development of this plan change would occur on, or adjacent to the State Highway Network. As set out in my evidence below, the Waikato Regional Transport Model (WRTM) strategic transport modelling undertaken by the applicant supports this view.

Public Transport

- 4.7 The existing, limited public transport services operating in the vicinity of the plan change area comprise:
- (a) An 'on-demand' shuttle service between Hamilton Transport Centre and the Airport Terminal between under the Flex brand seven days a week between 9.15am and 4pm.
 - (b) A regional bus service '24' operating between Hamilton Transport Centre and Te Awamutu along State Highway 3. The service operates seven days a week, with an approximately 2 hourly service pattern on weekdays.
- 4.8 There is currently no bus infrastructure within or adjacent to the plan change area and neither of the above bus services would provide public transport access to the proposed plan change area without changes to infrastructure and/or the services themselves.

Walking and Cycling

- 4.9 There are no pedestrian or cycling facilities on SH3, SH21 or Raynes Road presently.
- 4.10 A connection between Southern and Central Precincts has been completed and a walking and cycling path will soon be constructed from Ozzie James Drive to Raynes Road adjacent to the runway reserve and Raynes Precinct as part of the Stage 5 development of Titanium Park Central Precinct.
- 4.11 The current Airport Business Zone Structure Plan also provides for walking and cycling links between Titanium Park Southern Precinct, to Western Precinct and Central Precinct and Raynes Precinct.

Potential and Committed Future Schemes

Southern Links

- 4.12 The Southern Links Arterial roading project would involve the realignment of SH3 and construction of a new grade separated interchange between SH3 and SH21 to the north-west of the site. The plans (*as part of the Notices of Requirement lodged to protect Southern Links Transport Network in July 2013*) for the scheme include a major north south arterial road through the Peacocke structure plan area growth cell. An east west link from State Highway 1 (SH1) to the Hamilton West industrial areas with an intersection at Kahikatea Drive is also proposed.
- 4.13 The ITA acknowledges that whilst the future Southern Links corridors and interchanges are designated, that the project remains a concept with no detailed design having been completed, or construction timeframe or funding confirmed. Implementation of the project was not included in the 2021- 2024 National Land Transport Plan as there was no expectation that the route would be delivered within a 10-year time horizon.
- 4.14 I note as per Waka Kotahi's evidence that they are currently undertaking a 'form and function' review of southern links due to a number of factors including changed emphasis in the Government Policy Statement on Transport (GPS), the completion of the Waikato Expressway, the development of the Hamilton – Waikato Metro Spatial Plan, and significant development proposals to the south of Hamilton.
- 4.15 Given the lack of confirmed designation status, Southern Links is a consideration for this plan change in terms of potential longer term transport connections, but it cannot be assumed or relied upon for assessment of transport effects or mitigation of the local road network.

Waka Kotahi Future Safety Schemes and Capacity Schemes

- 4.16 I understand from Waka Kotahi's submissions on PPC20 that their view of other relevant potential schemes on the state highway network are as follows:
- (a) SH3 / Ingram Drive: Waka Kotahi has no funding to undertake any works at this intersection.
 - (b) SH3 / Raynes Road intersection - a roundabout project is included within the Waka Kotahi Speed and Infrastructure Programme and would be delivered later than the 2022/2023 stated in the ITA. The roundabout is anticipated to have a single lane on the State Highway

3 approaches, and therefore would not provide the capacity to allow for the additional through trips related to PPC20.

- (c) SH21 / Raynes Road intersection - Waka Kotahi has put forward this intersection for a roundabout upgrade in the next NLTP (24-27), however funding confirmation will only be known mid-2024 once the NLTP has been confirmed. There are also complex consenting and Memorandum of Agreement obligations in relation to the Meridian 37 development. In essence however, there is no certainty over any party delivering this scheme.

Public Transport

Two future public transport initiatives have relevance to this plan change area:

- (a) Improvements to the Te Awamutu to Hamilton bus route: This will bring the Te Awamutu service to an hourly frequency with additional peak period services. I understand that these improvements will be aligned with a new operator contract which will start in the next 12-18 months and are funded by WRC, Waipā DC and Waka Kotahi.
- (b) The Hamilton-Waikato Metro Spatial Plan Transport Programme Business Case: contained within the MSP is the aspiration for a rapid transit route from Hamilton CBD to the Airport (including servicing the northern industrial zone) via Peacocke. The PBC proposals would provide a step change in connectivity for the Airport and environs.

There are no other committed or funded public transport improvement schemes that I am aware of in the vicinity of the Airport.

5. TRANSPORT EFFECTS

Vehicle movements and Trip Generation

- 5.1 The total trip generation for the proposed plan change area adopted in the ITA is 2,500 (two-way total) vehicles per hour for AM and PM peak hours (as per the WRTM model).
- 5.2 The trip generation for the new industrial areas of the plan change area is based on a vehicle trip generation rate of 20.9 vehicles per hectare per hour.
- 5.3 I understand that this trip rate has been accepted elsewhere in the region for industrial developments such as Ohinewai Plan Change, Northgate Business Park, and Titanium Park Central southern and western Precincts located near to the state highway network.
- 5.4 The applicant has relied on a standard vehicular trip rate for the assessment and has not made any assumptions regarding multi modal person trips or diversion of trips to other non-vehicular modes.

5.5 Within the ITA, part of the total trip generation for the site has been derived from the elements of the extant plan provisions using trip generation from a previous ITA.

5.6 The total composition for trip generation for the site is provided as follows:

	Land Use	Trip Rate	Gross Area	Net Area	Peak Hour Trip Generation (vehicle / hour)
1	Airside Logistics	59.1 trips / ha	11	9.9	234
2	Industrial	20.9 trips/ ha	24	19.5	408
3	Industrial	20.9 trips/ ha	19	12.9	270
4	Industrial	20.9 trips/ ha	17.8	15.1	316
5	Eco-tech	20.9 trips/ ha	19.5	13.4	408
'The Hub'	Visitor accommodation,	100 rooms	10.1		403
	Non ancillary retail	5000m ² GFA			
	Childcare	1.4 / child / hour			
RPL Land	Industrial	20.9 trips/ ha	12.5	25	523
Total					2,560

5.7 The trip generation according to this tabulation is 2,560 (two-way total) veh/hr. An alternative methodology for trip generation is presented in the ITA applying the 20.9 vehicles per hour uniformly across all of the proposed developments in the plan change area resulting in a trip generation of 2,490 (two-way total) vehicles / hour.

5.8 A rounded figure of 2,500 (two-way total) vehicles / hour has been used for the transport modelling. This is 60 vehicles/hour greater than the total from the primary methodology however given the conservative assumptions made in regard to the trip generation I consider this a reasonable approximation and unlikely to change the conclusions of the ITA.

5.9 The conservative assumptions with regards to the trip rate mean that the ITA potentially overstates the trip generation for the site.

5.10 In terms of mitigation and access arrangements this means that intersections could be designed to accommodate a higher volume of traffic than is required. This has the potential to lead to increased adverse environmental impacts including increased embodied carbon and increased surface water run-off due to the increased footprint of the design, and induced traffic demand.

- 5.11 In broader transport modelling terms inclusion of higher trip generation in the WRTM (or other strategic transport model as used at the time) may imply the need for higher capacity interventions than are desirable or required in the future.
- 5.12 Therefore, I believe the 2,500 (two-way total) vehicles per hour figure to be a robust figure, potentially overestimating the traffic generation for the site, hence there is reduced risk that the impacts of the development will be understated in the modelling however some degree of caution needs to be exercised when using and interpreting the effects of the vehicular trip generation with regards to the above points.

Plan Change 20 Proposed Roothing Network

- 5.13 The primary features of the proposed roading network and access points set out in PPC20 are:
- 5.14 Roads:
- (a) A new north-south spine road running between a new access onto Raynes Road and SH3.
 - (b) A major connector road running east-west between the spine road and the Narrows Road / Middle Road intersection.
 - (c) A supporting network of secondary roads serving industrial units mainly connecting directly with the Spine Road.
- 5.15 Access Points:
- (a) A northern access point onto Raynes Road (which may become a restricted movements access at 70ha)
 - (b) A new southern roundabout access point onto SH3
- 5.16 The two access points can be delivered with staging provisions as set out below.

Transport Modelling and Scenario Testing

- 5.17 The traffic impact of the development is assessed within the ITA as increasing the volume of traffic distributed to adjacent roads by 2,500 (two-way total) vehicles in the morning and afternoon peaks. As stated, prior in my evidence, this is likely to be an overestimate of the traffic generated by the development.

- 5.18 The most relevant strategic transport model for assessing the transport effects of the development is the WRTM 2017. The model has established and widespread use in the Waikato region for the assessment of transport impacts for developments and strategic planning and I have confidence that it is the most appropriate tool for strategic assessment of traffic impacts for this proposed private plan change. A version of the model “the Waikato River Bridge and Strategic Services project model” has been used as the base model. This base model includes 40ha of development at the Northern Precinct site, which is reflective of the current structure plan.
- 5.19 Three strategic model scenarios are presented within section 7.3 of the ITA for the development, both of which include two access points for the development with a western access via a roundabout onto SH3, and the other by means of a north-eastern access on Raynes road:
- (a) One scenario includes an all-movements access onto Raynes Road (Option 6) without southern links.
 - (b) and the other contains a restricted movement access arrangement onto Raynes Road (Option 4) without southern links.
 - (c) An additional Option 5 is discussed which is stated to be a variant of Option 4 with Southern links included.
- 5.20 No Option 1, 2 or 3 are presented within the ITA report itself (or a technical note addendum to the ITA dated 16 June), and there is no strategic model scenario presented which demonstrates the impacts of any quantum of development serviced either solely from Raynes Road with no access onto SH3. Nor is there any testing of the development presented in the ITA which assumes a level of development solely accessed from SH3.
- 5.21 Assessment of Traffic Effects
- 5.22 The following table was presented in the response to Response to Request for Further Information - 22 August 2022) I have added the absolute change in vehicle volumes to column c for ease of reference.
- 5.23 The applicant was requested to provide with and without traffic flows for the design year so that the scale of impacts could be understood. The following table was provided which provides a limited summary of the two-way link flows on selected roads.

Table 1 Two-way flow comparison

		A - 2031 (with no development within northern precinct)		B - 2031 baseline + full development volume		C (= b-a)change	
		AM	PM	AM	PM	AM	PM
SH21	100m south of intersection with Raynes Road	1,089	1,184	1,036	1,213	-53 (-4.9%)	+29 (+2.4%)
SH21	100m north of intersection with Raynes Road	1,357	1434	2,029	1,996	+672 (+49.5%)	+562 (+39.2%)
Raynes Road	150m southeast of intersection with Narrows Road	278	319	1,983	1,417	+1,705 (+613%)	+1,098 (+344%)
SH3	North of Ingram Road	1,189	1,472	1,580	2,138	+391 (+32.9%)	+666 (+45.2%)

5.24 Individual intersection assessments have been undertaken using the SIDRA package. I have not independently verified the modelling undertaken by the applicant's consultant within the ITA and have relied on the submitted evidence in the ITA to form the basis of our opinion on the effects below, however I note that reference case SIDRA models have not been provided which would enable an assessment of how well the models reflect the current operation.

5.25 I note that during the expert witness caucusing, significant discussions were held in regards to the issues related to the intersections and the criticality of the turning movements to the intersection operation – whilst also considering the ability to have sufficient flexibility to adapt to changing transport considerations in the medium to long term.

Staging

5.26 The proposed plan change provisions, through Rule 10.4.2.13A proposes staged arrangements for upgrades and access points which are based on trigger points (or thresholds) of:

- (a) The already consented 40ha (gross) envelope for the Northern Precinct
- (b) The development quantum exceeding 70ha (related to traffic effects)

5.27 A summary of the phasing arrangements (based on the proposed plan change provisions as of 26 September 2022) is as follows:

	Proposed change	To be completed prior to any section 224c certificate for subdivision under the RMA being issued for the completion of any subdivision within Northern Precinct	To be completed prior to Any industrial / commercial activity being able to generate traffic that gains access off SH3;	To be completed prior to any industrial / commercial activity being able to generate traffic that gains access off Raynes Road;
		Or	Or	Or
	Condition	Any industrial / commercial activity being able to generate traffic	When the cumulative total consented land area in Northern Precinct with sole access to Raynes Road exceeds 40 ha (gross)	When the cumulative total consented land area in Northern Precinct with sole access to SH3 roundabout exceeds 70 ha (gross)
A	Upgrade of SH21 / Raynes Road intersection to a 3-arm roundabout	✓		
B	Capacity Increase at SH21 / Raynes Road roundabout to double circulating lanes and dual approach lanes			✓
C	3-arm roundabout at SH3 / Raynes Road intersection	✓		
D	3-arm roundabout on SH3 for access to Northern Precinct		✓	
E	Restricted movement intersection access from Northern Precinct to Raynes Road			✓
F	Construction of a new walking and cycling shared path connecting Peacocke Road to the Northern Precinct via Middle Road and Faiping Road	✓		

5.28 In essence the draft plan change provisions stipulate that prior to commencement of any development the following must be implemented:

- An upgrade to the SH21 Raynes Road intersection to a 3-arm roundabout
- A 3-arm roundabout must be constructed at the SH3 Raynes Road intersection
- A walking and cycling shared path between Peacocke Road via the Northern Precinct and Middle Road / Faiping Road.

5.29 In the Joint Witness Statement for expert conferencing 10 February 2023 there was a shared view that “The planners and transport experts agree that the PPC20 upgrade provisions under Rule 10.4.2.13A should include a degree of flexibility to account for changes that are likely to occur in the future, including network and operator requirements. This should be achieved by strengthening the policy to enable deviation from the upgrades where it’s supported by an assessment and achieves the outcomes set out in the provisions.”

5.30 The revised plan change rules would supported by an information requirement provision (21.1.10.12.e) that:

“Where subdivision or development does not provide the transport upgrades specified for the Northern Precinct (by Rule 10.4.2.13A), it is supported by an Integrated Transport Assessment that:

(i) Identifies the reasons why the upgrades set out within Rule 10.4.2.13A are not required, deferred or varied; and

(ii) Includes an assessment of the transport effects of the proposal (including all modes of transport) that would support the land uses proposed or be enabled under the Airport Business zone; and

(iii) Outlines the extent of any consultation undertaken with Waka Kotahi and Waipā District Council (as the relevant road controlling authorities) in relation to the proposed design of the transport network and upgrades.

(f) Whether the proposed subdivision or development will enable the provision of public transport within the Northern Precinct.”

5.31 This wording is designed to provide some flexibility should the circumstances change, for instance a major change to the road network.

5.32 In my opinion the proposed thresholds need to be better evidenced by the applicant and I note that the Joint Witness Statement dated 15th February acknowledges that the applicants transport consultant will need to provide further information regarding the thresholds set out in the report. I have referred in my evidence here to the thresholds set out in the applicants ITA and draft plan provision from 26 September 2022.

5.33 Until 40 ha of the plan change area is developed, the sole access point for the development *could* be via Raynes Road, where upon any development exceeding this threshold requires a new southern access onto SH3 via a new 3 arm roundabout.

5.34 Despite the stipulations to provide upgrades to the intersection of Raynes Road to the State Highway at commencement, the Plan Change Provisions as

drafted would not require *any* access onto Raynes Road to be constructed until 70ha of development is reached. Indeed, the applicant's response to the request for information states "*The decision about which access will be constructed first is not yet made as the staging of the development is still to be determined.*"

- 5.35 The ITA states that BBO has undertaken modelling to understand the land area that could be developed if the site were to be serviced by only the proposed SH3 / RPL roundabout. The modelling and further manual refinement of the traffic flows indicated that approximately 80 ha of the plan change area (gross area) can be serviced by the single access. This is stated as equating to approximately 1,520 trips per peak hour (i.e., 71 ha developable land x 20.9 trips per hectare per peak hour). The methodology for this threshold assessment is unclear and we understand that the applicant's consultant will be providing further evidence in advance of the plan change hearing. On the basis of the information presented to date however, I am unable to form a view over whether this is an appropriate or acceptable threshold.
- 5.36 Once 70 ha of the site is developed any further development would be subject to a scheme at SH21 / Raynes Road to increase capacity, and a restricted movement intersection from the Northern Precinct to Raynes Road.
- 5.37 The delivery mechanism for these State Highway schemes should Waka Kotahi not deliver them is unclear. The plan change provisions however are clear that they need to be completed at the relevant stages. The issue therefore lies with the applicant to resolve with Waka Kotahi at the appropriate stage.

Walking and Cycling Provisions

- 5.38 A walking and cycling shared path along Faiping Road is required to be delivered prior to any development taking place on the site as per the draft plan change provisions. This would connect the site to the southern end of the Peacocke development at Peacockes Road.

Public Transport Provisions

- 5.39 It is recognized that the provision of a public bus service(s) to the site is beyond the applicant's control, however there are no commitments by way of triggers for public transport infrastructure that would enable such a service in the draft plan provisions. I will address public transport provision to the site later in my evidence.

Development effects on the transport network

5.40 Staging Provisions

5.41 The proposed plan change provisions specify that *any* quantum of development beyond the 40ha already zoned must be preceded by an access onto SH3. Since 40ha of development has already been consented via an access onto Raynes Road, there cannot be considered to be a detriment in this respect.

5.42 As I have stated earlier in my evidence there is no requirement for an access onto Raynes Road until 70ha of development has been reached. It is possible therefore that the SH3 access may be the sole point of access for the development for a considerable time period. This has not been reflected in either the strategic or detailed intersection modelling, both of which assume that two accesses are utilised.

5.43 The implication of a lack of access onto Raynes Road would be that higher traffic volumes than have been modelled may utilise the SH3 access, and hence delays at that intersection may be higher (including for strategic traffic on SH3).

5.44 I note that a limited assessment of traffic impacts on the adjacent roading network has been undertaken. There is no analysis of the change in vehicle movements beyond the immediate access points and State Highway connections undertaken as per figure 17 of the ITA. From the perspective of the local RCA this makes it difficult to assess the wider impacts of the proposed plan change on the local roading network beyond the immediate confines of the site.

Raynes Road

5.45 There is a significant traffic impact on Raynes Road, south of the intersection with Narrows Road as a result of the proposed plan change with over a sixfold increase in traffic in the AM peak and over threefold increase in the PM peak. Traffic flows north of Narrows Road have not been presented by the applicant's consultant.

5.46 Raynes road is currently a rural road with no footways or central median, of approximately 7m in width between Meridian Drive and State Highway 3. From just west of Meridian Drive up to the intersection with State Highway 21 the road expands to having a central median to accommodate for the access

points. There are no provisions for an upgrade of this road in the draft plan change provisions.

5.47 A number of minor access points are located along Raynes Road. Whilst I do not consider it necessary to upgrade this road beyond the current rural standard for to accommodate the traffic generated by this plan change, it would be desirable to reduce the potential delay and improve resilience on the route given the higher volume of traffic. The applicant has sought to mitigate this impact, north of the intersection with Raynes Road with a form of intersection which restricts travel to / from the northern end of Raynes Road towards SH3.

5.48 It may be appropriate to consider upgrades for walking and cycling on Raynes Road in the future in view of the likely increased accessibility via public transport and active modes on the corridor resulting from the proposed MSP transport changes.

5.49 SH21 / Raynes Road Intersection

5.50 The SH21/Raynes intersection improvement scheme is covered by an existing agreement between Waikato Regional Airport Limited, Waka Kotahi and Meridian 37 developers; and Waka Kotahi has also stated in their submission that there is also potential for this scheme to be included in the 2024-2027 NLTP. However, in either case, there is no certainty over if or when this infrastructure will be brought forward.

5.51 I note that NZTA states in its submission that “Given the likely trigger timing for the single lane roundabout plus the uncertainty of NLTP funding, the applicant is expected to be responsible for funding of the single lane roundabout, the work to adapt the single lane roundabout to a dual lane roundabout and the work to demonstrate that a dual lane roundabout would be able to fit within road reserve or land within the applicant’s control.”

5.52 I agree with other submitters assessments that it would be preferable to deliver a dual lane roundabout at the outset since the disruption and additional costs incurred by retrofitting capacity increases are likely to be significant.

Site Access / Raynes Road Intersection

5.53 A movement restriction at this access is triggered by the proposed plan change provisions once development has reached a threshold of 70ha.

5.54 Waka Kotahi has raised concerns regarding a restricted movement access in regard to:

- (a) Enforcement and compliance of vehicles using this access.
 - (b) The ability of this restriction to endure long-term to protect the strategic highway network and the legal / planning mechanisms for doing so.
- 5.55 The applicant has proposed this solution as a feasible layout to restrict traffic movements, however the draft plan provisions as written set out the outcome required but still allow some flexibility for the RCA to work with the applicant to develop the design concept further through the design process.
- 5.56 Any improvements triggered at the 70ha threshold are relatively far into the development envelope for the overall site (over halfway). Given that a small proportion of the site would be pending consent above this threshold there is a risk that such improvements do not get delivered for an extended period or at all, however the relatively conservative trip generation assumptions made by the applicants traffic consultant mitigate the risk to the surrounding road network.

Northern Precinct Spine Road (GTL) / State Highway 3 Intersection

- 5.57 Generally, Waka Kotahi appears to be satisfied with the conditions for the Northern Precinct Spine Road / State Highway 3 intersection in the ITA and plan change provisions, however they have identified that "Waka Kotahi have assumed that Appendix B supersedes the earlier design, although it is unclear if the concept design can be provided within the road reserve or requires land outside of the control of the Applicant or Waka Kotahi. Clarity on this issue is required to understand the viability of the infrastructure proposals to support access for PPC20." I support Waka Kotahi's submission on this point.

SH3 Intersection / Raynes Road Intersection

- 5.58 It appears to be Waka Kotahi's view that the committed scheme at State Highway 3 / Raynes Road would not have sufficient capacity to accommodate additional traffic associated with the proposed PPC20 development.
- 5.59 This perspective seems to be confirmed by the modelling within the ITA with the 95th percentile queue recorded on the southbound SH3 at approximately 307m during the AM peak hour. Although, the approach performs at LOS A, the queue distance is relatively long.
- 5.60 The applicants ITA states that introducing a short left turning bay for the southbound traffic would reduce the queue distance on SH3 to approximately 60m.

- 5.61 Because the queueing issue appears to be caused by the applicant's development traffic, the onus should be on the applicant to design and demonstrate an appropriate mitigation measure that mitigates the effect of the plan change development on the State Highway network. On the basis of the information provided I am not satisfied that the applicant has demonstrated this is the case.

State Highway 3 / Ingram Road.

- 5.62 I understand that there is the potential for modification of this intersection to left in / left out given changes to the roading network however the applicant believes that it is not required for this development.
- 5.63 This was previously a requirement under the Northern Precinct consent for the SH3 / Ingram Road intersection to be modified to left in / left out (LILO) movements when the current zoned Northern Precinct was given access to SH3 via Western Precinct road network.
- 5.64 This plan change no longer provides for a shared access arrangement with Western precinct.
- 5.65 Whilst the traffic effects from the northern precinct zone are no longer present at the Ingram Road intersection, the full development of the Western Precinct would remain accessible from Ingram Road. The implications of this change in terms of safety and delay are not well understood and are not explored in the ITA.

Narrows Road

- 5.66 There are no proposed amendments to Narrows Road. Narrows Road in the future may be severed by southern links however as stated prior in my evidence the consideration of the effects of the development should not assume Southern Links being in place. The ITA states that the SH3 / Narrows Road intersection could potentially be closed or become a left in and left out intersection to help improve safety once the new SH3 roundabout is constructed for accessing Northern Precinct.
- 5.67 In my view the impacts on Narrows Road and in particular its intersection with SH3 have not been adequately assessed by the applicant.

Southern Links

- 5.68 For the reasons provided above: that Southern Links is not a committed scheme, it is not appropriate to assess the development impacts in a with -

Southern Links scenario, so I will not therefore provide commentary on this aspect. The applicant has provided a potential layout for a connection to the main southern links interchange.

Safety

- 5.69 The applicants transport consultant has sourced Crash data from Waka Kotahi's Crash Analysis System (CAS) over a ten-year period from 2011 – 2020, including the available data for 2021. The study area sourced included all crashes within a 200 m radius of the proposed accesses to the subject site and key intersections in the vicinity of the subject site (as identified in Appendix O12 of the District Plan).
- 5.70 The proposed plan change will result in a significant increase in the volume of vehicles on local roads, particularly on Raynes Road and Narrows Road which may lead to an increase in the volume of accidents on these roads, however the applicant has proposed access treatments and will rely on staged upgrades to State Highway intersections.

State Highway Safety Impacts

- 5.71 The crash data indicates that the current right turn bay intersection forms of the SH3 / Raynes Road intersection and SH21 / Raynes Road intersection are likely to be contributing to the crash types observed at these intersections. The applicant states that these intersections will likely be upgraded to roundabouts by Waka Kotahi, and the proposed conditions in the plan change provisions stipulate that any development would be subject to delivery of these schemes. As the RCA for state highways, Waka Kotahi has responsibility for ensuring the safe and efficient operation of these intersections, and I therefore defer to their evidence in relation to state highway issues on this matter.
- 5.72 The indicative cross sections from the ITA in Figure 7 (section 5.5) indicate a relatively narrow and restricted corridor for the spine roads, which is an appropriate level of intervention to discourage rat-running and encourage lower speeds. At expert conferencing further amendments to this cross section were discussed which would afford a greater degree of segregation for cyclists and pedestrians.

6. SUSTAINABLE TRANSPORT

Walking and Cycling

- 6.1 The applicant proposes a dedicated shared walking and cycling path along the existing Faiping Road alignment and off-road walking / cycling provision within the site.
- 6.2 It is my opinion that the location of the plan change area is such that it is unrealistic to expect any substantial level of walking or cycling to the site. It is also the case that outside of the plan change area very little in the way of walking and cycling infrastructure presently exists.
- 6.3 Walking / cycling infrastructure external to the site is proposed by the applicants which would provide connections to the nearest proposed residential area (Peacocke) however the distance (in excess of 2km from the edges of the sites) is likely to be prohibitive to attracting a significant walking trips. Cycling from the Peacocke area may be viable, however uptake is likely to be fairly low. Nevertheless, the proposed link provides for a degree of future proofing for pedestrian and cycling connectivity to the proposed plan change area and the surrounding area.
- 6.4 The nature of the proposed and adjacent land uses (industrial / commercial) means that there is likely to be very little in the way of linked trips between the proposed plan change area and surrounding developments. The implication of this is that the resulting impacts of proposed walking and cycling measures within the site will be very limited.
- 6.5 I note that Hamilton City Council has raised reservations in their plan submission regarding the use of Faiping Road as a walking and cycling connection between the Airport Business Zone and Peacocke, however they have not indicated the reasoning for this objection in their submission. At expert conferencing HCC elaborated that the reasons for their objections were that the alignment could prejudice the delivery of a water treatment plant and also that the gradients would be unsuitable for cyclists. Alternative alignments are proposed by HCC in Appendix 3 of their submission. In my opinion these alignments are inferior to the route proposed by the applicant along Faiping road since they are either less direct (Option 1) or less able to service a walkable catchment to the proposed plan change area (Option 2)
- 6.6 It is my opinion therefore that the best opportunities for reducing single occupancy vehicle mode share would be through providing a good public transport service to the site.

Public Transport and MSP Rapid Transit Corridor

- 6.7 Waipā District Council funds public transport jointly with Waikato Regional Council and Waka Kotahi for services between Te Awamutu / Cambridge and Hamilton. There is presently no funding allocated by any party which would enable bus services for this proposed plan change area.
- 6.8 Waipā District Council is aligned with the strategic direction set out in the Metro Spatial Plan Programme Business Case which includes the long-term aspiration of a frequent bus rapid transit route to the Airport. PPC 20 presents an opportunity to safeguard an alignment for this rapid transit line between Hamilton and the Airport.
- 6.9 Whilst the ITA sets out some hypothetical scenarios around bus services, this is largely with a view to how the proposed roading network could be serviced with public transport as it evolves, rather than delivering on an outcome of maximising public transport mode share or enabling the desired outcomes from the Metro Spatial Plan Transport PBC. As stated earlier in my evidence, the implementation of Southern Links cannot be considered as a committed scheme. The proposed public transport arrangements set out in the ITA rely on either a connection via Faiping Road or Southern Links.
- 6.10 Whilst the Metro Spatial Plan Transport PBC identifies a rapid transit line and broad corridor for a public transport route to the Airport, the nature of a programme business case means that this concept is in early stages and no Notice of Requirements, or any form of corridor designation have yet been developed. However, given the orientation of the proposed plan change area with respect to the Airport there is a very high likelihood that the corridor would pass through, or very near to the plan change area and as such some provision for buses (short and longer term) should be considered.
- 6.11 Since such an alignment will depend on longer term infrastructure investment it cannot be relied upon to provide public transport access to the site in the short to medium term. It is my opinion that in the short to medium term the best option for providing public transport access to the site would be to utilise existing bus routes and provide additional bus stops on State Highway 3, with associated safe crossing facilities.
- 6.12 I support Waka Kotahi's submission that "the best mechanism to provide for this would be for inclusion of Public Transport infrastructure within the Staging of Transport Infrastructure Table 9 (and Rule 10.4.2.13A) alongside that for

private vehicles.” This holds for infrastructure which can be well defined at this stage i.e. providing bus stops on State Highway 3.

- 6.13 It is my view that further planning and engagement work will need to be undertaken between the applicant, WDC, HCC, Waka Kotahi and WRC to ensure that this proposed plan change does not preclude a rapid transit alignment for the airport. One potential means of doing this would be by increased setback distances along the length of the spine road.
- 6.14 Agreement between the parties for a mechanism for the long-term safeguarding of a rapid transit alignment through the site to align with the MSP has not been resolved.

Faiping Road

- 6.15 Faiping road is a single lane track “paper road” which is located within Waipā District. Without a very significant upgrade this road would be completely unsuitable for public transport and an upgrade would require land acquisition, and road construction, increasing cost and risk considerably. Currently the plan change rule 10.4.2.13A makes no provision for the use of this corridor as a public transport route; only for a walking / cycling connection.
- 6.16 There is also no consideration in the ITA of how such a link would be funded or delivered, however this is a requirement for development to commence in ITA, and thus it is for the applicant to satisfy this rule, and the risk therefore lies with the applicant.

7. RESPONSE TO SUBMISSIONS

- 7.1 Waka Kotahi
- 7.2 The submission of Waka Kotahi raised the following main transport issues in their evidence.
- 7.3 Waka Kotahi queried the “mechanism for funding, designing and implementing the single and dual lane roundabouts at SH21/Raynes Road.” This is critical for the deliverability of the applicant’s access strategy and mitigation, and I therefore support Waka Kotahi’s request for confirmation that this is possible.
- 7.4 Waka Kotahi also queried the “The mechanism for funding/implementing a multilane roundabout at SH3/Raynes Road.” This is critical for the deliverability of the applicant’s access strategy and mitigation, and I therefore support Waka Kotahi’s request for confirmation that this is possible.

- 7.5 Waka Kotahi also requested confirmation that the delivery of the SH3/GTL access is achievable within land under the control of the applicant or Waka Kotahi. This is critical for the deliverability of the applicant's access strategy and mitigation, and I therefore support Waka Kotahi's request for confirmation that this is possible.
- 7.6 Waka Kotahi requested that they retain oversight and approval of the Raynes Road restricted movement access, and the retention of this as a restricted intersection into the future. I believe since the intersection is located solely on the local road network that it is appropriate for Waipa District council to retain oversight and control over the form and format of this intersection and consult Waka Kotahi as appropriate during the design process for the Raynes Road access and any future potential changes.
- 7.7 Waka Kotahi submits that further detail on the Tamahere Intersection operation is requested, alongside possible mitigations to address the level of service decline. I note that the ITA does consider the performance of the Tamahere intersection, however no mitigations are recommended or discussed by the applicant. According to the ITA the most significant impacts on delay and queueing at this intersection are on Tauwhare Road with a potential 5-minute delay in the AM peak on this approach to the northern roundabout.
- 7.8 Waka Kotahi also requested the inclusion of references to the infrastructure support for Public Transport and active mode access between the Airport Precincts within Table 9 of the ITA (and subsequently proposed Rule 10.4.2.13A) however I believe that the Faiping Road connection and the other plan provisions do allow for adequate connectivity between adjacent areas.
- 7.9 Hamilton City Council
- 7.10 The submissions of Hamilton City Council ("**HCC**") raise the following main transport issues, and reliefs sought:
- 7.11 A number of Hamilton City Council's submission points appear assume that Southern Links will be delivered at some stage, however as I have stated earlier in my evidence, there is no commitment or guarantee that Southern Links will actually be delivered, and as such it does not hold as a planning assumption. I have not responded directly to each of HCC's submissions in relation to Southern Links for this reason. Whilst a consideration for longer term connections for the plan change, it is my view that Southern Links should not be included as a committed scheme for modelling tests unless it is demonstrable that it is required to mitigate the impacts of the development. I

do not therefore agree with HCCs requests for further strategic modelling tests to be undertaken in relation to Southern Links.

- 7.12 I agree with HCC's submission seeking clarity on the delivery mechanism for the Faiping Road walking and cycling link. There are some apparent risks over land ownership and funding for this corridor if it cannot be delivered within the existing highway boundary. HCC has made representations that walking and cycling connection should be staged until links to the southern portion of the Peacocke Structure Plan is better developed, however in my view this creates an unnecessary dependency and makes the delivery mechanism more complex. Furthermore, my view is that whilst alternative alignments for this link could be further investigated as per HCC's submission point, Faiping Road is likely the best broad alignment for both a walking / cycling and public transport corridor as it is the shortest and most direct route to connect into the Peacocke development area.
- 7.13 I agree with HCC's submission that bus infrastructure needs to be better defined, however any infrastructure within the site itself would need to be supported with an agreed bus service plan with Waikato Regional Council to avoid abortive investment by the applicant. As I have stated earlier in my evidence, providing stops on State Highway 3 would be the most straightforward short-term mechanism for providing public transport access to the site. With regards to this intersection at State Highway 3 and the new southern site access I agree with HCC's submission that pedestrian connectivity and bus stops need to be provided.
- 7.14 Hamilton City Council's submission points on both the access point onto Raynes Road and the traffic impact and mitigation of traffic on Raynes Road are noted. The applicant has not suggested mitigation for the increase volume of traffic which is likely to affect Raynes Road. The form of intersection at the northern access point will restrict access to the northernmost portion of Raynes road, where the intersection with Peacocke will be located.
- 7.15 With regards to the State Highway 21 / Raynes Road intersection I agree with HCC's assessment that it would be preferable to deliver a dual lane roundabout at the outset since the disruption and additional costs incurred by retrofitting capacity increases are likely to be significant.
- 7.16 HCC states that there may be some risk in relation to the retail component of the plan change area exceeding the assumptions used in the trip generation for the site used in the ITA. It is my opinion that given that the ITA has been

relatively conservative in its assumptions and any differences are likely to be immaterial.

- 7.17 HCC has stated that development could increase traffic on Peacockes Road if proposed infrastructure upgrades are not attractive or commuters do not comply with proposed turning movement restrictions. It is feasible that some additional traffic could route via Peacocke road if the measures at the access onto Raynes road, particular if the measures are not successful at deterring light vehicles, however there is insufficient evidence to consider if this will be a significant issue, and I would support Hamilton City Council's submission point seeking additional information.
- 7.18 HCC has submitted in relation to various intersection impacts within the confines of Hamilton City but on State Highway 3, including SH3/Raynes Road, SH3/Normandy Ave and SH3/Saxbys/Tomin. Of these, SH3/Normandy is modelled within the ITA and shows that the intersection would operate at LOS C with the development, however no results are presented in a 'without development' scenario for comparison, hence it is not possible to determine if there would be a material detriment. The other two intersections are not modelled at all. I would support Hamilton City Councils submission seeking additional information.

8. CONCLUSION

8.1 In conclusion I believe that the traffic effects of the development (as set out in the draft private plan change notified 26th September 2022 and the draft plan change provision amendments from the expert conferencing dated 10th and 15th February 2023) are likely to be acceptable to Waipā District, however some additional evidence is required including:

- (a) Evidence including modelling results and rationale for proposed trigger points for access points and intersection mitigation.
- (b) An assessment of the effects of the development on Narrows Road (assuming no Southern Links) and proposed mitigation if required.
- (c) Proposed mitigation of or clarification of the traffic effects of the development on the Tauwhare Road and Tamahere Drive at the SH1 on slip / off slip roundabouts.
- (d) Details of how the development will provide futureproofing for the proposed rapid transit corridor to the Airport as set out in the Hamilton Waikato Metro Spatial Plan Programme Business Case.

James Tinnion-Morgan

21st February 2023