

**BEFORE THE INDEPENDENT HEARINGS PANEL OF HAMILTON CITY
COUNCIL**

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of Private Plan Change 17 to the
Hamilton Operative District Plan
("PC17")

**STATEMENT OF EXPERT EVIDENCE OF MARK APELDOORN
ON BEHALF OF HOROTIU FARMS LIMITED AND TE AWA LAKES
UNINCORPORATED JOINT VENTURE LIMITED (COLLECTIVELY
REFERRED TO AS "TAL")**

Partner: Transport Planner

29 October 2025

1.0 QUALIFICATIONS AND EXPERTISE

- 1.1 My full name is Mark John Apeldoorn.
- 1.2 I am a Transport Planner and Partner at Boffa Miskell Ltd.
- 1.3 I hold a Bachelor's degree with honours in Civil Engineering, a postgraduate Certificate of Proficiency in Transportation Planning and a postgraduate Diploma in Business Management, all from the University of Auckland. I am a Chartered Professional Engineer (CPEng) New Zealand, a Fellow of Engineers New Zealand (FENZ), an International Professional Engineer (IntPE), a member of the Resource Management Law Association (RMLA) and New Zealand Planning Institute (NZPI).
- 1.4 I have over thirty years of experience as a practising traffic and transportation engineer. I have worked as a local authority engineer and as a traffic engineering consultant. As a consultant, I have been engaged by local authorities, and private concerns to advise on traffic and roading development issues covering safety, management and planning matters of many kinds.
- 1.5 I have also advised extensively on traffic and transportation matters involving significant plan changes, designations, and resource consents. Including the Te Awa Lakes Plan Change which now forms part of the Operative District Plan (ODP).

2.0 CODE OF CONDUCT

3.0 I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 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 that I have relied on the evidence of other persons. I have not omitted to consider material facts known to me that might alter or detract from the opinions I have expressed.

4.0 SCOPE OF EVIDENCE

5.0 In this matter, I have been asked by TAL to advise on the potential traffic and transport effects arising from PC17, with particular consideration for the potential effects on the Te Awa Lakes Structure Plan and associated provisions in the ODP.

5.1 My evidence is structured to:

- a) Present an overview of the Te Awa Lakes development and its relationship with PC17;
- b) Address the transport related submission points with supporting technical analysis and recommended relief. I have grouped these as:
 - i. Traffic generation and modelling assumptions;
 - ii. Staging and transport infrastructure coordination;
 - iii. Ruffell Road rail crossing
 - iv. East-West arterial / Northern River Crossing corridor;
 - v. Active modes and road cross-sections; and
 - vi. Public transport integration;

- vii. Section 42A report;
- viii. response to matters raised in others submissions;
- ix. Response to evidence of Cameron Inder for Fonterra;
and
- x. Conclusion

6.0 TAL BACKGROUND AND RELATIONSHIP TO PC17

- 6.1 Te Awa Lakes is a mixed-use development located immediately south of the Horotiu interchange at the northern gateway to Hamilton. The land is owned and being developed by Horotiu Farms Limited and the Te Awa Lakes Unincorporated Joint Venture (jointly referred to as “TAL”). The site was formerly zoned Industrial but was rezoned through Private Plan Change 2 (Te Awa Lakes), which introduced the Te Awa Lakes structure plan into the Hamilton City ODP in 2020.
- 6.2 The development is a comprehensively master-planned urban precinct incorporating residential, tourism, commercial, and recreational components. It represents the northernmost urban extent of Hamilton and forms part of the city’s gateway environment along State Highway 1 (SH1) (Te Rapa Road).
- 6.3 Te Awa Lakes and PC17 share a common existing and future transport network environment. They interface directly along Te Rapa Road, at the Horotiu interchange, and via the future East-West Arterial corridor that will ultimately connect the two areas. These routes form part of Hamilton’s northern strategic transport system and will collectively accommodate movements generated by both developments and the remaining Te Rapa North areas to be live zoned.
- 6.4 Although Te Awa Lakes is only in the early stages of consenting and delivery, it is a master-planned urban area that has been assessed and incorporated into the Hamilton City ODP. The transportation assessments that informed that process established

the expected trip generation, distribution, and mitigation works for the whole of the Te Awa Lakes, which now forms part of the operative transport baseline for the northern Hamilton area.

6.5 Section 3.8.3 of the ODP describes that “*The roading network is capable of accommodating the effects except that the following infrastructure upgrades will be triggered or require monitoring and subsequent actions in accordance with Rule 3.8.5.3.*” The required infrastructure improvements to support full development of Te Awa Lakes are described in the Staging Rules at section 3.8.5.3.1. The “*monitoring*” requirements relate to four areas of the transport network and are described at section 3.8.5.3.2 of the District Plan as follows:

- a) *Te Rapa Road between the Fonterra Interchange and Hutchinson Road to determine whether an additional northbound lane is required;*
- b) *Te Rapa Road between the Fonterra Interchange and Ruffell Road to determine whether an additional southbound lane is required;*
- c) *the Te Rapa Road/Hutchinson Road intersection to determine if upgrading is required; and*
- d) *the Horotiu Interchange to determine if upgrading is required.*

6.6 The assessments set out in the Integrated Transport Assessment and in evidence supporting plan change concluded no further mitigation was necessary. In response to submissions by Fonterra, these four locations were included within the Rule provisions to be further evaluated at a point after the first 500 trips were generated, at a more detailed level (indicatively by way of hybrid or microsimulation modelling) to determine if any further mitigation, beyond that already identified as suitably supporting the whole of the Plan Change development, was likely.

6.7 TAL’s interest in PC17 arises from the proximity and shared reliance on the same strategic and local transport corridors and

future land accessibility, including the area to the south of Hutchinson Road and north of the current Fonterra site operations. Coordinated planning of network capacity, safety and multi-modal accessibility is important to achieving efficient and appropriate transport outcomes for both developments.

- 6.8 In its submission TAL expressed general support for PC17, subject to amendments that ensure adverse transport effects are appropriately avoided, remedied, or mitigated, particularly where they may extend beyond the PPC17 site. My evidence addresses those matters from a traffic engineering and transportation planning perspective.

7.0 TRAFFIC GENERATION AND MODELLING ASSUMPTIONS

Submission

- 7.1 TAL supports PC17 in part but seeks that traffic generation and modelling assumptions recognise the full development of the operative Te Awa Lakes structure plan.

Analysis

- 7.2 The PC17 supplementary transport assessment models traffic effects using a significantly reduced Te Awa Lakes baseline limited to consented stages. Only a small proportion of the overall Te Awa Lakes development is currently consented.
- 7.3 This under-represents future trip generation and therefore understates the scale of committed traffic demands on the transport network. In particular it significantly underestimates the potential transport effects on both the Te Awa Lakes required and the monitoring transport infrastructure (Sections 3.8.5.3.1 and 3.8.5.3.2)

of the District Plan. This same concern is raised in the HCC section 42A transport review.¹

- 7.4 Mr Inder's evidence, paragraph 8.2 describes a net developable land area of 63ha and a trip generation rate of 16.3 trips/ha. This is equivalent to about 1,030 trips in each peak hour, all converging within the Te Rapa Road corridor. It is not a sensible or practical interpretation in my opinion, that the operative Te Awa Lakes structure plan provisions require further assessment of the need for 4-laning sections of the Te Rapa Road corridor prior to adding just 500 trips, when the addition of a further 1,030 trips (1,530 trips in total, or in effect about 50% of the capacity of a single traffic lane) does not generate such a need. Enabling PC17 to introduce additional trips without a corresponding capacity mitigation response, and in the absence of adequate regard for the enabled full development of the operative Te Awa Lakes structure plan, results in a significant adverse effect on Te Awa Lakes. In effect, it introduces a new and additional burden of 1,030 peak hour trips to the baseline assessment, prior to assessing the effects beyond 500 trips due to Te Awa Lakes. It retrospectively changes the baseline on which the operative Te Awa Lakes plan change relied and was made operative.
- 7.5 By disregarding the operative Te Awa Lakes structure plan and its transport staging rules, the assessment doesn't fully account for foreseeable cumulative effects. The additional traffic generated by PC17 is not balanced by an equivalent increase in traffic capacity. This creates a situation where future infrastructure obligations are transferred to TAL and others to mitigate further as a consequence of PC17.
- 7.6 In my opinion, a more appropriate approach would be to require initial mitigation to mitigate staged additional capacity consumed by PC17, and enable further development of PC17 subject to a staged mitigation approach that has full regard the operative Te Awa Lakes structure plan baseline. The effects of PC17 should, in my opinion,

¹ S42A Report, Appendix A – Transport Review, paragraph 5, 32, 40, 54, and 76

be assessed on a baseline scenario that includes full development of the operative Te Awa Lakes structure plan.

Recommendations and/or Relief Sought

- 7.7 That the transport modelling for PC17 be revised to adopt a baseline scenario with full development of Te Awa Lakes in accordance with the operative structure plan and its staging rules, and further that appropriate mitigation be required to mitigate the additional traffic demand effects. Following these determinations, a Private Developer Agreement could readily address any staging, timing or other considerations in relation to the required transport infrastructure. Alternatively, require 4-laning the sections of Te Rapa Road identified at Rule 3.8.5.3.2 in the District Plan² and as additionally identified in the BBO ITA report³.

8.0 STAGING AND TRANSPORT INFRASTRUCTURE COORDINATION

Submission

- 8.1 TAL supports PC17 in part and seeks that network capacity, safety, and multimodal accessibility be planned and delivered in a coordinated manner between the PC17 and Te Awa Lakes areas. The submission recognises that both developments depend on the same strategic corridors and requests that the transport framework provides for integrated staging, infrastructure delivery and consistent design standards.

Analysis

- 8.2 By way of background, the Te Awa Lakes structure plan establishes a comprehensive movement network, detailed multimodal

² Hamilton City District Plan, 3.8 Te Awa Lakes, Rule 3.8.5.3.2 a. and b.

³ BBO ITA report December 2024, 1. Executive Summary, Recommended Transport Infrastructure Provision, page 1 and 2.

objectives, and explicit transport staging rules (Rule 3.8.5.3). Some network upgrades are required at the commencement of development. These include:

- a) Signalisation of the Te Rapa Road/McKee Street intersection;
- b) Assessment of the Te Rapa Road/Kapuni Street intersection at the time the Te Rapa Road/McKee Street intersection is signalised to ensure no transferred effects;
- c) Provision of a pedestrian crossing and bus shelter on Te Rapa Road;
- d) An upgrade of the Te Awa River Ride path; and
- e) On-road cycle improvements on Te Rapa Road between Hutchinson Road and Church Road.

8.3 Further assessments and upgrades are required when a threshold of 500 vehicle movements per hour (vph) in the peak hour is reached. These include:

- a) Upgrading of Hutchinson Road to minor arterial/collector road standard.
- b) Assessment of and (if required) upgrading of the Hutchinson Rd/Te Rapa Road intersection.
- c) Assessment of Te Rapa Road between the Fonterra interchange and Hutchinson Road and (if required) addition of a northbound lane.
- d) Assessment of and (if required) upgrading of the Horotiu interchange.
- e) Assessment of Te Rapa Road between the Fonterra interchange and Ruffell Road and (if required) addition of a southbound lane.

8.4 The revised staging proposal for PC17 (described in Sections 4.13 and 4.14 of the Harrison Grierson report) introduces alternative

Stage 1 options without corresponding network improvements or adequate modelling to support them. No additional traffic analyses were included with the supplementary assessment, and therefore there is insufficient information to confirm that the proposed staging can be accommodated within existing network capacity.

- 8.5 Stage 1 Option A enables approximately 25 ha of development connected via Old Ruffell Road, with no transport upgrades. This would place substantial additional traffic on the Te Rapa Road/Ruffell Road signalised intersection, with further demand expected to travel north through the Te Rapa Road/McKee Street intersection and the Horotiu interchange without any network improvements.
- 8.6 Stage 1 Option B provides for approximately 33 ha of development connected via Access 2 (opposite Horotiu East South (HES)) and proposes four-laning of Te Rapa Road from Hutchinson Road south to Access 2. While the four-laning is an appropriate response, this option still loads additional traffic to the Horotiu interchange and to intersections south of Access 2 (McKee Street and Ruffell Road) where no mitigation is proposed.
- 8.7 The proposed restriction of a right turn from Te Rapa Road south to HES east forecloses the potential future development of and access to the HES land parcels and results in excessive and unnecessary travel distances. Additionally, the Access 2 intersection road corridor east of Te Rapa Road is inadequate in width to support reasonably expected land development of this area and therefore forecloses (holds to ransom) its potential future development.
- 8.8 Stage 2 enables the full 51 ha development subject to the reopening of the Ruffell Road rail crossing and includes an upgrade of the Old Ruffell Road / Ruffell Road intersection to a roundabout. It is unclear whether Stage 1 Options A and B could proceed concurrently or are mutually exclusive until the crossing is reopened. I address matters regarding the Ruffell Road rail crossing at Section 9.0 of this evidence.

- 8.9 Each stage assumes no improvement to the wider Te Rapa Road corridor south of Access 2, including the mid-block sections, the Fonterra Interchange and on-ramp merge areas with Te Rapa Road, McKee Street intersection, Kapuni Street intersection, and Wairere Drive roundabout. The responsibility for future upgrades is shifted to TAL (and/or others) as a result of under-provisioning for the operative Te Awa Lakes structure plan in the PC17 assessments.
- 8.10 Development of what is referred to as the wider Te Rapa North Industrial Zone (beyond PC17) is described and referred to as being subject to either construction of the East-West arterial section of the Northern River Crossing (NRC), or a package of upgrades to Te Rapa Road.
- 8.11 This implies that responsibility for works including upgrades at McKee Street and the previously identified four-laning on Te Rapa Road would transfer to the Te Rapa North Industrial zone however there is no clear mechanism for how this would be enabled.
- 8.12 The absence of an internal PC17 north–south spine road in early stages will prevent efficient distribution of internal traffic movements. As a result, otherwise localised trips will have to use Te Rapa Road between Access 2 (opposite HES) and Ruffell Road. This increases pressure on intermediate intersections (including McKee Street and Pukete Road) and constrains opportunities for walking, cycling, and public transport integration.
- 8.13 Overall, the proposed staging relies on external infrastructure being delivered by others and lacks a transparent framework to ensure that development proceeds in step with network capacity.

Recommendations/Relief

- 8.14 Many of the above concerns are also raised in the HCC section 42A transport review. I support the following and further developed recommendations of that review:

- a) Require the baseline assumptions to include full Te Awa Lakes structure plan assumptions and for infrastructure to be required accordingly, particularly if PC17 progress ahead of Te Awa Lakes;
- b) Require a Rule and trigger for formation of the Link Road in the Fonterra North Block that ensures continuous formation of the road from Te Rapa Road through to Hutchinson Road. At present this is shown as two disconnected corridors that could prevent effective use and redistribution linked to Horotiu East North (HEN) and HES;
- c) Require a Rule that the Fonterra North Block road be required to be connected to align with the HEN Road 2 intersection and that this intersection be signalised as a 4-way intersection, unless already signalised by Te Awa Lakes;
- d) Require adequate road corridor width to be set aside to support both the future development of the HES block and a right turn provision from Te Rapa Road south to HES (east). Require Access 2 to be signalised at the time it is constructed, this is not specified. It is essential for this signalisation as the land use will generate large vehicle, high volume right turns across a multi-laned Te Rapa Road;
- e) Require Stage 1A to access Te Rapa Road via the McKee Street intersection and for this to be signalised and consequent integration with the existing Te Rapa Road/Ruffell Road intersection;
- f) Require Te Rapa Road pedestrian and safety improvement works to be at least consistent with the Te Awa Lakes requirements to achieve effective integration of the land uses in PC17;
- g) Require the PC17 North-South spine road to be constructed and connected at each end as part of the initial staging to support effective walk, cycle and public transport servicing;

- h) Require the four-laning of the at-risk sections of Te Rapa Road identified in the Te Awa Lakes structure plan, as had been identified in the initially lodged PC17 application which had regard for Te Awa Lakes, which included the operative Te Awa Lakes structure plan area;
- i) Require the formation of the Onion Road Rail Crossing prior to enabling land development of any Stage, or alternatively the E-W link between Te Rapa Road and Koura Drive;
- j) Require the further works at Kapuni Street at Te Kowhai Road/Church Road and along the Te Awa River Ride consistent with the Te Awa Lakes structure plan, the effects are similar;
- k) Require pedestrian and cycle cross Te Rapa Road connectivity at Access 1 commensurate with Stage 1A to support Te Awa River Ride integration and accessibility with the land use. This to include linking the Te Awa River Ride via Meadow View Lane and Pukete Road to Access 1;
- l) There is no Rule requirement in relation to Access 4 and land development of the Fonterra South or Meadow View East Blocks. Require safe pedestrian and cycle connectivity across Te Rapa Road at Access 4 to be established commensurate with development of these blocks;
- m) Require the Te Awa River Ride to be extended across the Meadow View East block along the River Edge to support future integration and continuity of the ride along the River.
- n) Require assessment and mitigation to the Horotiu interchange capacity and safety.

9.0 RUFFELL ROAD RAIL CROSSING

Submission

- 9.1 TAL supports the reopening of the Ruffell Road rail crossing as a way of mitigating potential traffic demands on the Te Rapa Road corridor and more efficiently PC17 generated traffic demands.

Analysis

- 9.2 The Ruffell Road rail crossing is an at-grade rail crossing located immediately east of the Onion Road/Ruffell Road intersection, some 500m west of Te Rapa Road. It was temporarily closed by HCC in April 2021 in response to safety issues.
- 9.3 The BBO assessments describe the crossing as being reopened, subject to a level crossing safety assessment process with KiwiRail. It also describes that this would be subject to realignment of Ruffell Road between Arthur Porter Drive and Koura Drive, enabling closure of Onion Road south of Koura Drive.
- 9.4 There appears to be commitment by HCC and KiwiRail to the process but no absolute certainty as to opening it. In my opinion, this opening is likely to be a temporary solution as once the Koura Drive extension (linking the interchange east with the NRC which includes a bridge over Onion Road and the railway line) is complete, the Ruffell Road crossing could be closed permanently. Without the Ruffell Road crossing enabling access to the Koura Drive interchange with SH1C and SH39, all PC17 generated traffic demands will be directed to the Te Rapa Rad corridor. The next closest state highway access point is the Horotiu interchange. In particular the Stage 1 Option A, in the absence of any internal PC17 connection north to south, will draw traffic onto Te Rapa Road, in both directions along the full length of the corridor from Ruffell Road to the Horotiu interchange.

- 9.5 There is reference in the supplementary assessment⁴ to potential overloading the capacity of the Te Kowhai Road crossing if this does not occur. The Te Kowhai Road crossing to the south is ultimately planned to be four-laned and grade separated to support expanded land development west of SH1, therefore the comment is more likely related to the current capacity of the at-grade crossing.
- 9.6 A key function linked with opening the Ruffell Road crossing is linking the PC17 area to the SH1C / SH39 interchange. It reduces demand on the Te Rapa Road corridor and also reduces traffic demands at the Access 2 location, the intersection in the north of PPC17.
- 9.7 The further merit/consequence of opening the Ruffell Road rail crossing is to enable access for other traffic to/from the Te Rapa Park area, south of Ruffell Road. This potentially alleviates traffic demands on the Horotiu interchange and across the Te Awa Lakes frontage area, noting there is no southbound off-ramp at the Wairere Drive interchange.
- 9.8 Overall, the opening of Ruffell Road crossing will minimise the transport effects due to PC17. Without this connection, or the East-West link to it, the transport effects will be unnecessarily and materially poorer in the Te Rapa Road corridor, further impacting the capacity of the corridor, additionally (subject to development timing), transferring additional mitigation risk to other land development. This is a further example of the impact of under-representing the operative Te Awa Lakes structure plan land uses. The necessity for 4-laning sections of the Te Rapa Road corridor is potentially brought forward and the cost burden transferred to others.

⁴ Harrison Grierson, Supplementary Information August 2025, section 4.1.2 Ruffell Road Level Crossing, paragraph 2, page 9

Recommendations/Relief Sought:

- 9.9 Enable Stage 1 Option A or Option B subject to a Level Crossing Safety Impact Assessment (LCSIA) for the Ruffle Road level crossing that demonstrates what further upgrades (if any) are required to reopen the temporary closure of the level crossing, and further subject to implementation of any identified works prior to any activity generating traffic demand associated with development.

10.0 EAST-WEST ARTERIAL / NORTHERN RIVER CROSSING CORRIDOR**Submission**

- 10.1 TAL supports the identification and protection of an East-West Arterial through the PC17 area, recognising its importance as the primary movement spine linking the Te Rapa North area east across the Waikato River and integrating with the wider strategic network. It will effectively create a new northern distribution corridor that enables future development of the R2 Future Growth Cell (east of the river) and links to form an efficient outer ring road network together with the now funded Southern Links transport network. The submission seeks that it be protected with a four-lane corridor and access controls.

Analysis

- 10.2 The East-West Arterial will form the key internal connection within PC17, linking the industrial area to Te Rapa Road and, at its eastern end, to Hutchinson Road. It also establishes the local foundation for a future multimodal link to the NRC, which is identified in regional transport strategies as a long-term strategic connection between the western and eastern sides of Hamilton.
- 10.3 In this context, the East-West Arterial will serve both a local distribution role and, over time, a strategic function as the western

approach to the NRC corridor. Its alignment therefore requires protection and design treatment consistent with a future arterial road accommodating a future four-lane cross-section.

- 10.4 It would be appropriate to limit direct access to the East-West Arterial with lots instead served by side roads or shared service lanes. Intersection spacing and geometry should reflect arterial design standards.
- 10.5 The Hamilton City Council section 42A transport review supports the arterial connection in principle and notes the need for clearer identification of its ultimate standard, timing and access control. I agree with that position.

Recommendations/Relief Sought:

- 10.6 To ensure the East-West Arterial is future-proofed, I recommend that PC17 be amended to:
- a) Provide for identification and protection of an East-West corridor in consultation with and to the satisfaction of HCC; and
 - b) Include access-control provisions limiting direct property access to it.

11.0 ACTIVE MODES AND ROAD CROSS-SECTIONS

Submission

- 11.1 TAL supports the intent of PC17 to provide an integrated internal road network but seeks assurance that walking and cycling connections are delivered to a consistent standard with the adjoining Te Awa Lakes network. TAL's submission emphasises the need for safe, direct and continuous active-mode routes along Te Rapa Road, Hutchinson Road and through the East-West Arterial corridor, connecting with the Te Awa River Ride.

Analysis

- 11.2 The Te Awa Lakes structure plan embeds strong multimodal principles, including separated cycle facilities, shared paths and on-street cycling provision linking to the Te Awa River Ride and the wider city network.
- 11.3 To achieve an integrated network, consistent standards should apply within PC17. Current PC17 plans illustrate local road cross-sections with narrow berms and intermittent active-mode facilities. In my opinion, these need to be refined to ensure safe continuity between developments and along the Te Rapa Road corridor.
- 11.4 In particular, the same Te Awa Lakes structure plan provisions and safety principles should apply consistently in the Te Rapa Road corridor. This will support safety and amenity and the travel demand management outcomes promoted through the Access Hamilton Strategy and the Te Awa Lakes District Plan provisions (Policies 3.8.1.2h and 3.8.1.2i).

Recommendations/Relief Sought:

- 11.5 I recommend the PC17 provision be amended to include the following:
- a) Prior to any building being occupied:
 - i. Te Rapa Road on-road cycle safety improvements including targeted road markings, signage and road surfacing work between Hutchinson Road and Church Road shall be identified, designed, submitted for Council authorisation to the design and constructed (reference: HCC ODP, Te Awa Lakes structure plan Rule 3.8.5.3.1.iv); and
 - ii. A pedestrian crossing facility is to be constructed at the bus stops on Te Rapa Road to facilitate safe crossing for pedestrians and cyclists (reference: HCC ODP, Te Awa Lakes structure plan Rule 3.8.5.3.1.ii).

12.0 PUBLIC TRANSPORT INTEGRATION

Submission

- 12.1 TAL's submission supports a transport framework that provides for public transport connectivity between Te Awa Lakes, PC17 and the wider Hamilton network.

Analysis

- 12.2 The Te Awa Lakes structure plan anticipates future public transport services operating along Te Rapa Road and through the internal collector network. There are opportunities for connectivity via the East-West Arterial and Hutchinson Road.
- 12.3 PC17 provides a logical extension of that network, with potential for a future bus route running north–south through the site and connecting to Te Rapa Road. To protect this outcome, the collector and arterial corridors should be designed with sufficient width to accommodate bus movements, stops and turning areas.
- 12.4 The Waikato Metro Spatial Plan (MSP) Business Case recognises the opportunity for a bus rapid transit (BRT) corridor along Te Rapa Road. Although the design of the BRT is not yet confirmed, a 30m corridor is likely to be required. Indicatively, this would provision for:
- a) 2 * 4.0m BRT, High Occupancy Vehicle (HOV) and/or general traffic lanes;
 - b) 2 * 3.5m general traffic lanes;
 - c) A 3.0m wide central turning lane; and
 - d) Nominal 6.0m berms each side to accommodate services, pedestrian, cycle and BRT infrastructure.
- 12.5 In my opinion the PC17 provisions should protect this and enable any width constraints to be removed at subdivision stage. This position is supported by the HCC s42A report.

- 12.6 There is also long-term potential for a transit corridor across the Waikato River, as referenced in the Te Awa Lakes Rules (Rule 3.8.5.3.4). The East-West Arterial and Hutchinson Road form part of the indicative alignment for that future link. Maintaining adequate corridor width and intersection geometry is important to preserving this option.

Recommendations/Relief Sought:

- 12.7 I recommend the PC17 be amended to:
- a) Include public transport design criteria for collector and arterial roads.
 - b) Protect a 30m or other appropriate BRT corridor along Te Rapa Road.
 - c) Maintain corridor width and geometry on the East-West arterial that could accommodate a future transit link across the river.
- 12.8 These provisions would support future public transport accessibility, complement the multi-modal transport framework in Te Awa Lakes and integrate the PC17 with the broader Hamilton public transport network.

13.0 SECTION 42A REPORT (TRANSPORT APPENDIX A)

- 13.1 I have reviewed the Section 42A transport memorandum prepared by Naomi McMinn of Gray Matter Ltd (dated 8 September 2025). The memorandum broadly acknowledges the issues raised in TAL's submission (Submitter 14), including the need for transport infrastructure staging that aligns with Hamilton's strategic network and for assessment of cumulative effects alongside the full Te Awa Lakes Structure Plan development.
- 13.2 Ms McMinn's review accepts or partly accepts most of TAL's submission points. Notably, she supports provisions for a future BRT corridor, a rail siding, and access management on the East-

West Arterial. Ms McMinn also agrees that intersection upgrades at McKee Street, Ruffell Road and Kapuni Road remain important and that the transport infrastructure table and clear staging triggers should be reinstated in the plan provisions.

- 13.3 Overall, my assessment is that the Section 42A transport review generally supports the approach advocated by Te Awa Lakes in seeking a coordinated transport framework between PPC17 and the Te Awa Lakes Structure Plan.

14.0 RESPONSE TO OTHER SUBMISSIONS

- 14.1 I have reviewed the relevant submissions addressed by TAL in its further submission. Several other parties raised transport matters consistent with the approach advocated by TAL.
- 14.2 In particular, I note the support of the NZ Transport Agency for the application of Rule 3.9.4.2(b), requiring that detailed transport mitigation be addressed through an Integrated Transport Assessment at the resource consent stage. This is consistent with the staged assessment framework I have described above.
- 14.3 I also note support from Waikato District Council (WDC) for construction of the East West Road to a standard that accommodates the future NRC and for coordination of walking and cycling infrastructure between HCC and WDC. Both matters reinforce the need for corridor protection and multimodal integration discussed in my evidence above.
- 14.4 The Waikato Regional Council (WRC) submission also notes the importance of collaborative and coordinated planning for walking, cycling, and public transport connections, aligning with the multimodal outcomes sought by TAL.

15.0 RESPONSE TO EVIDENCE OF CAMERON INDER FOR FONTERRA

15.1 I have reviewed the evidence of Cameron Inder. I set out my particular assessments in reply to his evidence as follows:

- a) Para 1.3, his reference to the ITA report prepared to support PC17 demonstrating that with the infrastructure upgrades and staging the transport effects can be managed and mitigated to acceptable levels, can only be relied on in the context that it recommends additional mitigation to accommodate PC17 having full and proper regard for the Te Awa Lakes structure plan, which it subsequently resiles from;
- b) Para 1.4, the minimum infrastructure and related triggers described can not be relied on as the basis for determining these does not have appropriate regard for the HCC ODP Te Awa Lakes structure plan;
- c) Para 1.5, I submit that in the absence of adequate regard for the HCC ODP Te Awa Lakes structure plan, a Broad ITA should be required for any land use or subdivision application;
- d) Para 1.9, in the absence of adequate consideration for the HCC ODP Te Awa Lakes structure plan, I do not concur with his conclusion on alignment with “...*national, regional, and local transport strategies and supports economic growth, resilience, and safety.*”
- e) Paras 8.10 – 8.18 describe some, but not all of the ITA identified mitigation on Te Rapa Road (the 4-laning improvements are excluded) where regard is had for the HCC ODP Te Awa Lakes structure plan in full.
- f) Paras 9.1 – 9.20, in my opinion, these assessments inappropriately and significantly exclude most of the Operative Te Awa Lakes structure plan land uses, which have informed determination of transport infrastructure need. It is no surprise that a lesser transport infrastructure need is determined as a

result of discounting the operative Te Awa Lakes land uses. The PC17 assessments rely on the assumption that development within Te Awa Lakes will establish transport infrastructure capacity, such as at Te Rapa Road / McKee Street intersection, however there is no assessment of the same need for this infrastructure where PC17 proceeds in advance of Te Awa Lakes;

- g) Paras 10.1 to 10.15 describes the revised modelling, exclusive of most of Te Awa Lakes land use. It draws from the Technical Note included at Attachment 1. The Attachment 1, para 2.2 describes revised modelling assumptions with the reduced Te Awa Lakes traffic demands forming the baseline to Scenarios A and B. The following general observations can be made in relation to the model results described at Attachment 1, Table No.3.:
- i. It indicates an assessment of the corresponding daily traffic demands, which provides a moderated view of the potential peak period traffic demand effects. Notwithstanding this, daily traffic flows in excess of about 20,000 vehicles per day (vpd) is another general indicator of significantly reduced corridor performance and an indicator of a potential need for 4-laning.
 - ii. The section of road between the Horotiu interchange and Hutchinson Road is shown with demands in the range 19,800 to 23,600 vpd and is currently 4-lanes. 4-lanes are also proposed to be extended south to Access Road 2.
 - iii. The section of the road between Access Road 2 and the Dairy Factory is not shown, however with the reducing capacity effect due to the Fonterra interchange on-ramps and merging traffic streams, the indicated 18,000 vpd would also be an indication of a potential need for 4-laning, particularly if regard is had for the full Te Awa Lakes development potential.

- iv. Further the section of the corridor south of Kapuni Street to Church Road is indicated as carrying in excess of 23,000vpd. By way of a comparison, the section of the road south of Church Street is shown carrying up to 22,800 vpd and is currently 4-laned.
- v. The results are indicative of a need to more closely assess the potential 4-laning need, as has already been identified for some sections in the application ITA report, where full regard was had for the operative Te Awa Lakes structure plan. The assessment in the Technical Note does not evaluate the mid-block network performance, concentrating only on the intersections. Even in those assessments, the underlying assumptions are that Te Awa Lakes will provide the capacity needed to support PC17.

16.0 CONCLUSION

- 16.1 I have reviewed and examined transport matters associated with PC17 on behalf of TAL, and in the context of the operative Te Awa Lakes structure plan and the existing and planned transport network in northern Hamilton.
- 16.2 Te Awa Lakes and PC17 share the same transport corridors and rely on the same strategic connections, including Te Rapa Road, the Horotiu interchange, and the future East-West Arterial and NRC. For these reasons, it is important that both developments proceed in a coordinated and staged manner so that network capacity, safety, and multimodal accessibility are enabled and not foreclosed by one or other of developments proceeding in the absence of the other or preceding it in an unanticipated order.
- 16.3 The PC17 modelling currently under-represents Te Awa Lakes and consequently, the cumulative network effects on the Horotiu Interchange and Te Rapa Road corridor. A revised baseline incorporating full Te Awa Lakes development and operative staging rules is necessary to provide a complete understanding of future network performance.

- 16.4 The proposed staging framework for PC17 enables development ahead of supporting network upgrades (to be provided by the Te Awa Lakes structure plan) and lacks clear triggers to align with available capacity. Key intersections including McKee Street, Kapuni Street, Ruffell Road, the Horotiu interchange and mid-block corridor sections will be subject to cumulative demands if staging is not carefully managed. The recommendations outlined in my evidence provide an appropriate mechanism to ensure infrastructure delivery keeps pace with development.
- 16.5 TAL supports the reopening of the Ruffell Road rail crossing subject to KiwiRail and HCC agreement and appropriate safety measures and it is recommended that this be required prior to development in the absence of alternative capacity enabled by the Onion Road realignment and related cross-railway linkages.
- 16.6 The East-West Arterial is a critical component of the long-term transport framework, forming part of the NRC corridor. The corridor should be, in my opinion, protected and provisioned to future-proof its strategic and arterial function.
- 16.7 Integration of walking, cycling, and public transport infrastructure across Te Rapa Road, Hutchinson Road, and the PC17 internal network is essential to achieving Hamilton's mode shift objectives and promoting connectivity with Te Awa Lakes. Consistent cross-section standards and shared path provision will support a safe and cohesive multimodal transport network across the northern growth area.
- 16.8 In my opinion the relief sought by TAL is reasonable, practicable, and aligned with the strategic transport planning framework for Hamilton. Adopting the recommended modelling baseline, staging triggers, and design standards, inclusive of regard for the full and operative Te Awa Lakes structure plan will enable PC17 to proceed in a manner that is coordinated, efficient, and consistent with the operative Te Awa Lakes transport framework.

A handwritten signature in blue ink, appearing to read 'M. Apeldoorn', with a stylized flourish at the end.

Mark Apeldoorn

Partner: Transport Planner

Boffa Miskell Limited

29 October 2025