

Memo

To: Damien McGahan – Aurecon

From: Naomi McMinn- Gray Matter **Date:** 8 September 2025

Subject: Private Plan Change 17 – Te Rapa North Industrial – Technical Specialist
Memorandum for Section 42A Reporting

Technical Area: Transportation

Version: Final

Purpose

1. This memorandum has been prepared to provide technical assessment under section 42A of the Resource Management Act 1991 (RMA), in respect of transportation in relation to the Private Plan Change 17 – Te Rapa North Industrial (PPC17).

Introduction

2. My name is Naomi Claire McMinn. I am a Civil / Transportation Engineer at Gray Matter Ltd. I hold a Bachelor of Engineering degree (Civil, 2002) from the University of Canterbury. I am a Member of Engineering New Zealand. I have worked in the civil and transportation field since 2002. I am based in Hamilton and have worked for Gray Matter Ltd as a civil/transportation engineer since 2011. I have also worked for the London Borough of Richmond upon Thames and for the City of Melville, Western Australia. Before this, I worked as a civil engineer for Opus International Consultants Ltd in Hamilton and Whakatane for six years.
3. I am familiar with the transport issues arising in and around the Waikato, having provided advice to Hamilton City Council (HCC) and other local authorities, NZ Transport Agency (NZTA) and developers on a range of transport related projects in the area. I have the following specific experience relevant to the matters within the scope and purpose of this statement of evidence:
 - a. Consultant transportation engineer for Road Controlling Authorities (RCA), including Hamilton City Council, assisting in the review of consent applications for industrial, commercial and residential developments within the Hamilton city and the wider Waikato;
 - b. Consultant transportation engineer for developers, landowners and local authorities preparing and reviewing integrated transport assessments for development proposals including quarries, rest homes, residential, industrial and commercial developments;

- c. Consultant transportation engineer for Matamata Piako District Council for the Private Plan Change 58 Avenue Business Park (General Industrial Zone) to the Matamata Piako District Plan;
- d. Consultant transportation engineer for Waikato District Council for the Ohinewai Rezoning ("Sleepyhead") of the Proposed Waikato District Plan;
- e. Consultant transportation engineer for the Builtsmart Property Partnership Private Plan Change (PPC 22) to the Waikato District Plan; and
- f. I have completed Safe System Assessments and Safe System Audits training and attended the NZTA Road Safety Engineering Workshop. I have been team leader and team member for safe system audits on urban and rural improvement projects for local roads and state highways.

Code of Conduct

- 4. I have read the Environment Court Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2023 and agree to comply with it. I confirm that the opinions expressed in this memorandum are within my area of expertise except where I state that I have relied on the advice of other persons. I have not omitted to consider materials or facts known to me that might alter or detract from the opinions I have expressed.

Scope

- 5. This memorandum covers the following:
 - a. Consideration of the lodged and updated request.
 - b. Relevant matters raised, and relief sought, in submissions.
 - c. Concerns and gaps in information relating to the updated request.
 - d. Key conclusions.

Executive Summary

- 1. This memorandum focuses on transportation aspects related to the Fonterra Private Plan Change (PPC17) based on the proposal in the Supplementary Information. The purpose of this memorandum is to assist with providing technical assessment under section 42A of the Resource Management Act (RMA), focusing on transportation aspects. It also identifies gaps in the information provided.
- 2. The proposed zoning is aligned with surrounding land use and is expected by the District Plan.
- 3. The Supplementary Information presents transport infrastructure staging that is different to the Request. The Transport Memo relies on new information anticipated to be presented as evidence. Currently, there is insufficient information to adequately assess the transport effects of the PPC17.

4. The Supplementary Information presents two options for Stage 1 land use and transport infrastructure and one option for the Stage 2 – full development land use and transport infrastructure.
5. The Te Awa Lakes Structure Plan requires upgrade works on Te Rapa Road once development exceeds 500 vph. However, the PPC17 proposal provides for an additional 410 vph with no further improvements to Te Rapa Road. This raises concerns that the mitigations proposed by the PPC17 are not adequate. The Transport Memo does not consider full development of the Te Awa Lakes Structure Plan on the surrounding network. In my view, the full Te Awa Lakes Structure Plan traffic should be part of the baseline in 2045.
6. The proposal relies on the reopening of the Ruffell Road rail level crossing. There is a risk that the level crossing may not be reopened and while the Revised Structure Plan indicates the east-west road connection to Koura Drive (in the future Northern River Crossing (NRC) corridor), this requires an overbridge structure and connection through land not included in the PPC17. The Revised Structure Plan includes Access 1 on the map, but the Amended Provisions do not trigger the design or construction of the intersection. HCC does not have funding committed for the NRC. It is unclear who is responsible for the construction of this link or how the corridor will be protected to enable the future NRC. There is a risk that development could occur without the East-West Road, and a risk to Hamilton's strategic network and the ability for the NRC to be built in the future if it is compromised by development.
7. Compared to the lodged Provisions, the Amended Provisions do not trigger transport infrastructure that is consistent with Hamilton city's strategic long term transport network. While Access 1 and the East-West Road (future NRC corridor) are indicated on the Revised Structure Plan they are not triggered by the Amended Provisions. Stage 1A allows development to occur with sole access to Old Ruffell Road (Access 3) without the need to link the Structure Plan Spine Road directly to the existing arterial network resulting in poor transport outcomes (indirect and less efficient route between Te Rapa Road and PPC17).
8. The Amended Provisions lack clarity on proposed staging and triggers and responsibility for the upgrades. I recommend these are provided in the form of a table that clearly shows land use, areas, infrastructure provision, timing and responsibility, are specific to each development stage/area and align with HCC's preferred format.
9. In summary, The Transport Memo relies on new information anticipated to be presented as evidence to support the revised Plan Change. Currently, there is insufficient information to adequately assess the transport effects of the PPC17.

Documents considered

10. The following documents have been considered in the preparation of this assessment:
 - a. *Te Rapa Private Plan Change 17 Request* (the Request)
 - i. *Appendix 4 – Integrated Transport Assessment - BBO dated December 2024* (ITA)
 - ii. *Appendix 10 – Te Rapa North Industrial Structure Plan* (Structure Plan)
 - iii. *Appendix 12 – Proposed Provisions* (Provisions)

b. The Submissions listed in Table 1.

Table 1 Submissions that raise transportation matters

Number	Submitter
4	S&A.Coleman
6	NZ Transport Agency
7	Empire Corp
8	G.Boddy
9	H.Porter
10	WDC
13	WRC
14	Te Awa Lakes
16	Morth Trust (S.W.Morth)

c. The Further Submissions listed in Table 2.

Table 2 Further Submissions that raise transportation matters

Number	Submitter

d. *Private Plan Change 17 Supplementary Information prepared for Fonterra Limited - August 2025, Harrison Grierson (Supplementary Information)*

- i. *Appendix 1 - Te Rapa North Industrial Structure Plan (Revised Structure Plan)*
- ii. *Appendix 4 - Transport Memo (BBO, 19 August 2025) (Transport Memo)*
- iii. *Appendix 5 - Amended Provisions – Draft 24/3/2025 (Amended Provisions)*

Site visit

11. I have not visited the site specifically for the purpose of my review. I am familiar with the general area and transportation environment.

Analysis

Introduction

12. I have reviewed the above documents. The Supplementary Information presents transport infrastructure staging that is very different to the Request.

13. Attachment 1 includes the summary of key points from my initial draft review of the ITA that supported the lodged PPC17. My key conclusions are:

"The proposed zoning is aligned with surrounding land use and is expected by the District Plan. However, we have concerns that the proposal has not adequately provided for the Northern River Crossing (NRC), considered the effects of the rail level crossing on Ruffell Road being opened and there is a risk to the future of strategic network (NRC and BRT corridor)."

In summary, more detailed modelling is required to inform the development stages and infrastructure upgrades. The WRTM scenarios should be updated so that the Ruffell Road railway level crossing is closed and the ITA updated to ensure that the safety and efficiency effects on Ruffell Road and the wider transport network are acceptable.”

14. The Supplementary Information presents two options for Stage 1 and one option for the Stage 2 – full development. My comments focus on the proposal set out in the Supplementary Information and the gaps in information.
15. The Transport Memo relies on further information anticipated to be presented as evidence. In my opinion, there is insufficient information presented in the Transport Memo and the ITA to adequately assess the effects of the Private Plan Change 17 (PPC17).
16. The Supplementary Information states that a Level Crossing Safety Impact Assessment (LCSIA) for the Ruffell Road rail level crossing (currently closed to traffic) is being progressed in consultation with KiwiRail. The proposal relies on the reopening of the level crossing for Stage 2. However, at this time there is no certainty that it will be reopened.
17. In the following sections I discuss the proposed staging and provisions, my concerns and gaps where more information is needed to assess the potential transport effects of PPC17.

Revised Structure Plan and Proposed Staging

18. Compared to the lodged Structure Plan, the Revised Structure Plan includes land development names (Pukete Block, Ruffell Block. etc). However, the land development areas or stages are not indicated on the Revised Structure Plan and are not clearly identified in the Amended Provisions (Rule 3.9.3.2 Transport Upgrade Framework).

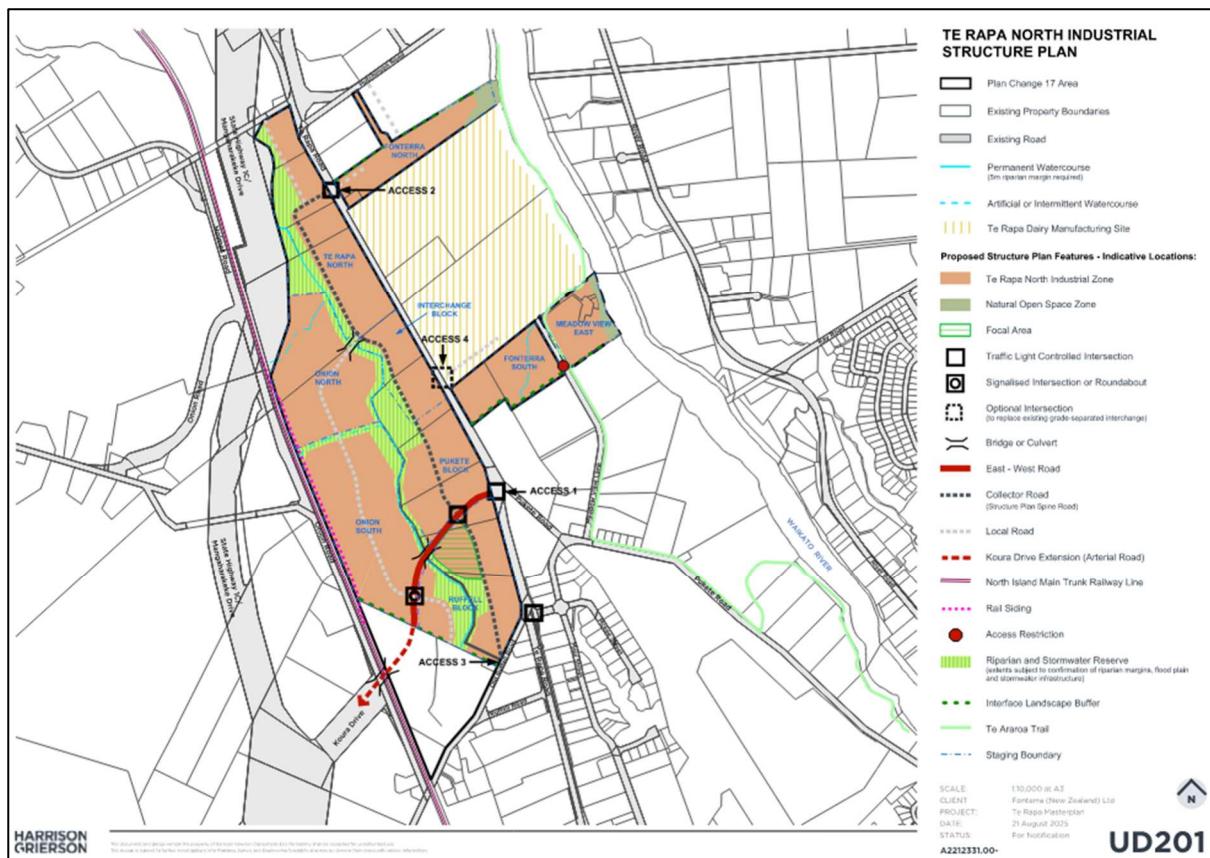


Figure 1 Revised Structure Plan.

Stage 1 - Proposal

19. Stage 1 development is proposed commencing from the southern end of PPC17 (Ruffell Block) progressing north into the Pukete Block and either to the west via the east-west road or continuing north with the Collector Spine Road extension.
20. The Amended Provisions outline two options for development of Stage 1; Stage 1A (25 ha) or Stage 1B (33ha).
21. The Transport Memo assessment of Stage 1 development is based on:
 - a. Development being completed within 10 years i.e. 2035.
 - b. The Ruffell Road rail level crossing remaining temporarily closed.
 - c. Te Awa Lakes development trip generation of 500 vph in the peak periods in accordance with their consented limits¹.
 - d. The Te Rapa Road/McKee Street intersection is upgraded to signals as per Te Awa Lakes Structure Plan requirements².
22. The Transport Memo states that further trip calculation, network assignment and modelling work has been undertaken by BBO to evaluate both Stage 1 options. However, there is no

¹ Condition 73 of Consent Application 010.2021.00011468.001

² Condition 73 of Consent Application 010.2021.00011468.001

detail or analysis of the trip generation, network assignment or modelling work provided with the Transport Memo.

Stage 1 Option A

23. Stage 1A includes Access 3 (Structure Plan Spine Road to Old Ruffell Road) as the sole access between the PPC17 area and the surrounding transport network. The Amended Provisions (Rule 3.9.3.2.1 a) enable subdivision and development of up to 25ha as a Permitted Activity subject to provisions (i – iv).

Concerns – Stage 1 Option A

24. The proposed Stage 1A does not align with good transport planning principles for road hierarchy and network connectivity. The proposed Access 3 to Old Ruffell Road results in a convoluted and indirect route to Te Rapa Road, along Old Ruffell Road and Ruffell Road to the signalised intersection with Te Rapa Road and requires turning at the priority T intersection (Old Ruffell Road/Ruffell Road). This results in increased travel distance and time, and increased conflict at the priority T intersection and need to travel along the existing low volume local road (Old Ruffell Road).
25. With only one access to the PPC17 area, development under Option 1A results in the Collector Spine Road being a cul-de-sac road. This is not aligned with good practice for a collector road that should link directly to a collector or arterial road to distribute traffic to the wider network. Instead, it connects to Old Ruffel Road, a local road with no footpath.
26. The Amended Provisions do not clearly include a land use and transport infrastructure staging table or an infrastructure plan. In some instances, the provisions do not state or clearly define the locations for development.
27. Rule 3.9.3.2.1a iv. includes a limit of 410 vph during the evening weekday peak hour traffic volume on the Structure Plan Spine Road. The Transport Memo does not provide the total trip generation of Stage 1A and it is not clear how this limit has been determined.
28. Rule 3.9.3.2.1 a ii, includes provision for design and construction of the east-west road and the intersection (if required) with the Structure Plan Spine Road. Without reference to a development block or area, the length or extent of the east-west road is not clear and there is the potential for the Stage 1A development to extend north into the Te Rapa North Block via a long Spine Road.
29. Rule 3.9.3.2.1 a ii refers to the East-West Road/Spine Road intersection if required. In my view, the intersection is required in the long-term and the initial subdivision should construct or future-proof for this intersection. It would be clearer to amend the provision to remove the bracketed (if required) in relation to the intersection design and construction.
30. The potential effects of the additional traffic using the Old Ruffell Road/Ruffell Road priority T intersection have not been assessed. The existing alignment of the intersection is skewed and may require mitigation to improve visibility, provide additional width for vehicle tracking, and/or a right turn bay. The potential safety or efficiency effects from the additional traffic using the intersection have not been assessed.
31. All of the development traffic will use the Old Ruffell Road /Ruffell Road priority T intersection and travel east to Te Rapa Road to join the wider transport network. The Transport Memo has not provided trip assignment. However, I expect high right-turn

demand from traffic traveling south towards The Base and Hamilton city. This will result in additional traffic using the already congested intersections along Te Rapa Road and the effects have not been assessed in the Transport Memo. More information is needed to understand if the Te Rapa Road corridor and intersections, including the Ruffell Road/ Te Rapa Road signalised intersection can accommodate the additional traffic.

32. The Te Awa Lakes Structure Plan requires works on Te Rapa Road once development exceeds 500 vph. However, Stage 1A provides for an additional 410 vph with no further improvements to Te Rapa Road. It is unclear why the upgrades proposed as part of PPC17 do not align with those required for the Te Awa Lakes Structure Plan.

Information Required – Stage 1 Option A

33. In my view more information is needed, including:
 - Analysis of trip generation and trip assignment of Stage 1A.
 - Clarification of the rationale for the trip generation limit for Structure Plan Spine Road.
 - Updated Waikato Regional Transport Model (WRTM) modelling with Stage 1A land use and access provision (i.e. Access 3 with the Ruffell Road level crossing closed).
 - Updated intersection modelling (based on WRTM outputs) and assessment of the impacts on the surrounding network (for example, at Old Ruffell Road/ Ruffell Road, Ruffell Road/Te Rapa Road and intersections along Te Rapa Road).
 - Details of the proposed form of Access 3 and the Old Ruffell Road/ Ruffell Road intersection, including the intersection form and vehicle tracking.
 - Updated provisions in the form of a table that clearly shows land use areas, infrastructure provision, timing and responsibility.

Stage 1 Option B

34. The proposed Stage 1B is alternative option to Stage 1A. Stage 1B includes Access 3 (Old Ruffell Road) at the south and Access 2 (Te Rapa Road) at the north with the Structure Plan Spine Road. The Amended Provisions (Rule 3.9.3.2.1 b) enable subdivision and development of up to 33ha as a Permitted Activity subject to provisions (i – x).

Concerns – Stage 1 Option B

35. Rule 3.9.3.2.1b ix. includes a limit of 230 vph during the evening weekday peak hour traffic volume on the Structure Plan Spine Road with sole access to Old Ruffell Road. The Transport Memo has not assessed the total trip generation of the proposed Stage 1B and it is not clear how this limit has been determined.
36. Rule 3.9.3.2.1b x. includes a limit of 260 vph during the evening weekday peak hour traffic volume on the Structure Plan Spine Road with sole connection to Access 2. The Transport Memo has not assessed the total trip generation of the proposed Stage 1B and it is not clear how this limit has been determined.

37. I am concerned that Rules 3.9.3.2.1b ix and x that refer to “sole connection” are inconsistent with the requirement for Stage 1B to include both Access 2 and Access 3 connections to the surrounding network. This provision should be amended.

38. The provisions need to be clear and consistent. Stage 1B Rule 3.9.3.2.1b includes the need for all the ten infrastructure upgrades outlined in the sub clauses. It does not make sense when ix and x refer to “sole” access. The provisions need to be rewritten to be clear and consistent. Similarly, it appears that all 10 upgrades need to be met to commence development in Stage 1B which appears onerous. For example, an initial development in the south appears to be required to build Access 2 and Access 3.

39. The combined trip generation limit (Rules 3.9.3.2.1 b ix and x) for the Structure Plan Spine Road is 490 vph. This is only 80 vph more than allowed by Stage 1A, yet the Stage 1B allows an additional 8 ha to be developed. This is around a third more land area compared to Stage 1A and a proportional increase in traffic would be in the order of 130 vph. The rationale for the trip generation limits (Rules 3.9.3.2.1 b ix and x) is not clear.

40. The Transport Memo has not assessed the impact of the additional traffic on the surrounding network and whether there is a need for transport upgrades such as Te Rapa Road and intersections along Te Rapa Road. The Te Awa Lakes Structure Plan requires works on Te Rapa Road once development exceeds 500 vph. However, Stage 1B provides for an additional 490 vph with no further improvements to Te Rapa Road. It is unclear why the upgrades proposed as part of PPC17 do not align with those required for the Te Awa Lakes Structure Plan.

Information Required – Stage 1 Option B

41. In my view more information is needed, including:

- Analysis including trip generation and trip assignment of Stage 1B.
- Clarification of the rationale for the trip generation limits for the Structure Plan Spine Road and provisions that state “sole access”.
- Updated WRTM modelling with Stage 1B land use and access provision (i.e. Access 3 with the Ruffell Road level crossing closed).
- Updated intersection modelling (based on WRTM outputs) and assessment of the impacts on the surrounding network (for example, at Old Ruffell Road/ Ruffell Road, Ruffell Road/Te Rapa Road and intersections along Te Rapa Road).
- Details of the proposed Access 3 including the intersection form and vehicle tracking.
- Updated provisions in the form of a table that clearly shows land use, areas, infrastructure provision, timing and responsibility.

Stage 2

42. Stage 2 enables full development of the PPC17 (51 ha). The Transport Memo assessment of Stage 2 development is based on:

- a. Development being completed within 20 years i.e. 2045.
- b. The Ruffell Road rail level crossing being reopened

- c. The intersection of Old Ruffell Road/ Ruffell Road upgraded to a three -leg roundabout
- d. Te Awa Lakes development trip generation of 750 vph in the peak periods as assessed in their 2023 ITA for the completed Medium Density Residential and Business 6 zones consent application.
- e. The Te Rapa Road/McKee Street intersection is upgraded to signals as per Te Awa Lakes consent requirements³.

43. The Amended Provisions (Rule 3.9.3.2.2 a) enable subdivision and development of up to 51ha as a Controlled Activity subject to provisions (i – xii).

44. Rule 3.9.3.2.2 a. xi. Requires a LCSIA for the Ruffell Road level crossing that demonstrates what further upgrades (if any) are required to reopen the temporary closure of the level crossing.

45. Rule 3.9.3.2.2 a. xii. Requires a Simple ITA that assesses the capacity and efficiency of the adjoining road network being undertaken including the:

- (a) Te Rapa Road / McKee Street signalised intersection
- (b) Te Rapa Road / Ruffell Road signalised intersection
- (c) Te Rapa Road/ Kapuni Road signalised intersection
- (d) Te Rapa Road/ Te Kowhai East Road/ Church Road roundabout

Concerns – Stage 2

46. The Transport Memo states that Fonterra has commissioned a LCSIA but it is not yet completed. Without the LCSIA, consultation with KiwiRail and RCA there is no certainty that the level crossing can be reopened to traffic.

47. Rule 3.9.3.2.2 a xi requires the LCSIA to demonstrate what upgrades area required. The PPC17 is relying on the level crossing being open for Stage 2 development but here is no requirement to implement or construct any upgrades. The provisions need to be amended to require the level crossing upgrades to be completed prior to Stage 2 development.

48. There is a risk that the level crossing may not be reopened and while the Revised Structure Plan indicates the east-west road connection to Koura Drive (aligning with the future NRC corridor), this requires an overbridge structure and connection through land not included in the PPC17. It is unclear who is responsible for the construction of this link.

49. Without a transport connection either via the level crossing or the overbridge link to Koura Drive all of the PPC17 traffic would need to use Te Rapa Road. The Transport Memo has not assessed the effects of the Stage 2 development on the wider network, should the level crossing remain closed.

50. The Transport Memo states that the intersection of Old Ruffell Road/Ruffell Road would be upgraded to a three-leg roundabout. There is no information provided in the Transport Memo that confirms the arrangement is feasible and can be accommodated within the

³ Condition 73 of Consent Application 010.2021.00011468.001

existing road reserve boundaries. The Amended Provisions do not include a rule that triggers the roundabout.

51. The proposal appears to retain the northbound right-turn movement at Access 2. The level of service at this intersection with the right turn banned has not been provided with the Supplementary Information. My preference is to include this right-turn movement. As a minimum, the provisions should ensure sufficient land is set aside to allow flexibility in the intersection design.
52. I am concerned that the Amended Provisions do not require a Broad ITA and there is a risk that the Simple ITA required to support Stage 2 development (Rule 3.9.3.2.2 a xii) focuses on local capacity and efficiency effects and will not address wider transport effects of the PPC17 or safety effects. For example, there is the potential that more intersections need to be included in this assessment, e.g. The Base/ Eagle Way/ Te Rapa Road.
53. Te Rapa Road/McKee Street is currently a priority T intersection. The Transport Memo relies on development at Te Awa Lakes triggering the intersection upgrade to traffic signals. There is a risk that PPC17 occurs prior to development at Te Awa triggering this upgrade, so the intersection upgrade should also be included in the Amended Provisions.
54. The Transport Memo bases the Te Awa Lakes traffic on 725 vph in 2045 and refers to a 2023 ITA. This is significantly less traffic than the WRTM includes for full development of the Te Awa Lakes Structure Plan (1,750vph). There is a risk that further development takes place within Te Awa Lakes prior to development of the PPC17 which means that the mitigation proposed is inadequate to mitigate the transport effects. In my view, the PPC17 should consider the full development scenario of Te Awa Lakes Structure Plan. It would be appropriate to do so in the 2045 scenario.
55. Stage 2 allows development in the Fonterra South and Meadow View Blocks. Access to these Blocks is proposed via the existing Dairy Manufacturing site and grade separated interchange on Te Rapa Road. The provisions require Meadow View Lane to be closed to motorised traffic south of Fonterra South Block. A separate Local Government Act process would be required to close or stop a legal road. Rule 12.5.1 includes the Vehicle Access Restriction and states that access to the Lot 1 DPS 85687 and Lot 5 DPS 18043 will be provided via the Te Rapa Dairy Manufacturing site onto Te Rapa Road. It is not clear if the Rule is sufficient to ensure access is provided to the two properties as they do not have access to a legal road. It is also not clear how Lot 1 DPS 61136 or Lot 3 DPS 61136 will be provided vehicle access. The proposal for road stopping and property access should be clarified and amended.
56. The Revised Structure Plan maps show a local road within the Dairy Manufacturing site, which is privately owned. The purpose of this road is unclear as it does not connect to Meadow View Lane and there is no provision requiring it to be formed.

Information Required – Stage 2

57. In my view more information is needed, including:
 - Analysis including trip generation and trip assignment for Stage 2.
 - Updated WRTM modelling with Stage 2 land use and access provision (with the Ruffell Road level crossing closed).

- Updated intersection modelling (based on WRTM outputs) and assessment of the impacts on the surrounding network (for example, at Old Ruffell Road/ Ruffell Road, Ruffell Road/Te Rapa Road and intersections along Te Rapa Road).
- Details and analysis of the Ruffell Road /Old Ruffell Road intersection to confirm that the proposed intersection form (roundabout) is appropriate and feasible and that the timing is appropriate.
- Clarification on how properties in the Fonterra and Meadow View Blocks would be provided access.
- Updated provisions in the form of a table that clearly shows land use, areas, infrastructure provision, timing and responsibility.
- Updated provisions that include the requirement for a Broad ITA.

Walking and Cycling and Bus Rapid Transport

58. Stage 1A does not include provision for walking and cycling links between the PPC17 and the surrounding network. Compared to the Lodged Request which included direct access to Te Rapa Road via Access 1, the proposal via Access 3 is less attractive for walking and cycling due to the lack of dedicated facilities and indirect route. Old Ruffell Road has only a short length of footpath on one side at the intersection with Ruffell Road and there is no footpath along Te Rapa Road. It is not clear how people walking and cycling between the PPC17 area and surrounding areas will be provided for.
59. The Amended Provisions require new bus stops on Te Rapa Road south of the Access 2 intersection and shared walking and cycling paths between the bus stops and Access 2 as part of Stage 1B and Stage 2.
60. There is no requirement for additional bus stops or footpaths on Te Rapa Road as part of Stage 1A. There are existing bus stops on Te Rapa Road north of McKee Street and the frontage of the Dairy Manufacturing site, however there are no footpaths from Stage 1A to these bus stops. The existing bus stops should be shown on the Revised Structure Plan map, and new provisions introduced requiring footpaths connecting to these bus stops as part of Stage 1A.
61. The proposed Bus Rapid Transit (BRT) Northern Corridor (RT1) is anticipated for implementation along Te Rapa Road in the future. While the corridor design is not confirmed, the Amended Provisions include Rule 12.4.1 iii requiring building setbacks along Te Rapa Road (10m on the western side and 5m on the eastern side). To protect the future BRT corridor design I recommend a new Provision be included that allows additional widening to be secured at the time of subdivision, so the full corridor width needed for BRT can be achieved.

Other Concerns

62. The lodged Provisions included a table of transport upgrades and implementation requirements that all land use and subdivision applications needed to include as well as a requirement for a Broad ITA for that identifies and evaluates effects of cumulative development in the Structure Plan area on the Components of the Structure Plan.
63. The Amended Provisions have removed the following aspects of the lodged Provisions:

- (a) The transport upgrade table and implementation requirements;
- (b) The need for an Infrastructure Plan;
- (c) The requirements for Broad ITAs;
- (d) The need to consider cumulative effects of development; and
- (e) The need to provide evidence of consultation with key Stakeholders (NZTA, KiwiRail, WRC, Fonterra, Mainfreight).

64. In my view, the Amended Provisions lack clarity on proposed staging and triggers, timing and responsibility for the upgrades.

65. The Revised Structure Plan illustrates the transport network including the east-west road and Koura Drive Extension (Arterial Road) outside the PPC17 area. Intersection upgrades are also indicated on the Revised Structure Plan including Access 1.

66. While the location of Access 1 and the East-West Road shown on the Revised Structure Plan are consistent with Hamilton's future strategic network, the Amended Provisions do not require the Access 1 intersection to be constructed. Without Access 1 the proposed Stage 1A has only one access point which requires traffic to travel to the south via Access 3 and the indirect route to Te Rapa Road. It would be preferable for Stage 1 to be served by Access 1 as it provides centralised and direct link to the arterial network (Te Rapa Road).

67. Stage 1B does not trigger construction of the East-West Road and the extent that is triggered in Stage 1A (Rule 3.9.3.2.1a.ii and iii) is not clear. There appears to be a risk that the Onion South and Ruffell Blocks can be accessed via the local road indicated on the Revised Structure Plan without construction of the East-West Road.

68. Access 4 (at the existing Dairy Factory Interchange) is indicated as an Optional Intersection (to replace existing grade-separated interchange) on the Revised Structure Plan. The Amended Provisions do not require or trigger the Access 4 intersection so it is unclear why it is shown.

69. The Amended Provisions include assessment criteria at Rule 3.9.3.7. However, there are inconsistencies in the assessment criteria. For example:

- (a) Criteria 3.9.3.7b.vi refers to Stage 1 access limited to Access 1 and Access 3 only. It does not differential between Stage 1A and Stage 1B and there is no criteria relating to Stage 2.
- (b) Criteria 3.9.3.7 b.i.a refers to trip generation thresholds set out in the Te Rapa North Industrial Structure Plan. However, the Amended Provisions have removed the trip generation limits from Chapter 12.4.7.

70. The Amended Provisions do not require an upgrade to the Te Rapa Road/Ruffell Road intersection which was included in the lodged Provisions. The Transport Memo has not considered the safety or efficiency impacts of the additional traffic on the Te Rapa Road/Ruffell Road signalised intersection. As Stage 1A has a single access to Old Ruffell Road, there will be a significant increase in turning movements at the intersection and it is likely that upgrade will be needed.

71. The lodged Provisions included requirements for upgrades along Te Rapa Road, including:

- Capacity increase at Te Rapa Road/Ruffell Road signalised intersection.
- Upgrading Te Rapa Road/Kapuni Street intersection to signalised T intersection.
- Modification to lane configuration on Te Kowhai Road at Te Rapa Road/ Te Kowhai Road/ Church Road roundabout from shared through and left turning lane to left turn only lane.
- Construction of new walking and cycling paths on both sides of Te Rapa Road connecting the Northern River Crossing to new bus stops.

72. The Amended Provisions have removed these upgrades. It is unclear if these upgrades (such as additional lanes) will be needed along Te Rapa Road or at intersections.

Key Conclusions

73. The proposed zoning is aligned with surrounding land use and is expected by the District Plan.
74. The Supplementary Information presents transport infrastructure staging that is different to the Request. The Transport Memo relies on new information anticipated to be presented as evidence. Currently, there is insufficient information to adequately assess the transport effects of PPC17.
75. The Supplementary Information presents two options for Stage 1 and one option for the Stage 2 – full development.
76. The Te Awa Lakes Structure Plan requires upgrade works on Te Rapa Road once development exceeds 500 vph. However, the PPC17 proposal provides for an additional 410 vph with no further improvements to Te Rapa Road or intersections along it. This raises concerns that the mitigations proposed by the PPC17 are not adequate. The Transport Memo does not consider full development of the Te Awa Lakes Structure Plan on the surrounding network. In my view, the full Te Awa Lakes Structure Plan traffic should be part of the baseline in 2045.
77. The proposal relies on the reopening of the Ruffell Road rail level crossing. There is a risk that the level crossing may not be reopened and while the Revised Structure Plan indicates the east-west road connection to Koura Drive this requires an overbridge structure and connection through land not included in the PPC17.
78. The Revised Structure Plan includes Access 1 on the map but the Amended Provisions do not trigger the design or construction of the intersection. HCC does not have funding committed for the NRC. It is unclear who is responsible for the construction of this link or how the corridor will be protected to enable the future NRC. There is a risk that development could occur without the East-West Road, and a risk to Hamilton's strategic network and the ability for the NRC to be built in the future if it is compromised by development.
79. Compared to the lodged Provisions, the Amended Provisions do not trigger transport infrastructure that is consistent with Hamilton city's strategic long term transport network. While Access 1 and the East-West Road (future NRC corridor) are indicated on the Revised Structure Plan they are not triggered by the Amended Provisions. Stage 1A allows development to occur with sole access to Old Ruffell Road (Access 3) without the need to

link the Structure Plan Spine Road directly to the existing arterial network resulting in poor transport outcomes (indirect and less efficient route between Te Rapa Road and PPC17).

80. The Amended Provisions lack clarity on proposed staging and triggers and responsibility for the upgrades. I recommend these are provided in the form of a table that clearly shows land use, areas, infrastructure provision, timing and responsibility, are specific to each development stage/area and align with HCC's preferred format.
81. In summary, the Transport Memo relies on new information anticipated to be presented as evidence to support the revised Plan Change. Currently, there is insufficient information to adequately assess the transport effects of the PPC17.

Response to submissions

82. The following table presents my response to submissions relating to transport.

Submission points

Sub No.	Relief Sought	Analysis / Reason
4.3	Seeks that Provision 12.5.1a is deleted. In addition, undertake a consequential Integrated Transport Assessment (ITA) (to include Meadow View Lane and Pukete Road) and amend the proposed District Plan provisions to reflect the ITA recommendations.	<p>Accept in Part</p> <p>Refer to discussion above. Clarification is needed.</p> <p>Amended Provision 3.9.3.2.2a ix. includes provision of a connection through the Dairy Manufacturing site and 3.9.3.2.2a x requires Meadow View Lane to be closed to motorised traffic south of Fonterra Block. It is not clear how this would be achieved (i.e. whether a road stopping process would be required under LGA).</p> <p>Preference is for local road access to the affected properties in Meadow View and Fonterra South Blocks. This will require a new local road or changes to the current Te Rapa Dairy Manufacturing access to allow public access.</p> <p>Submitter wants all TRNIZ land included - extent matter, with transport implications.</p> <p>If the full TRNIZ is included then further assessment is needed of Meadow View Lane and Pukete Road. The provisions would then need to include all transport recommendations, and should outline access for Meadow View Lane for all stages and options.</p>
4.10	Seeks that Rule 3.9.3.2 Transport Infrastructure Improvements is amended to include any requirements for Meadow View Land and Pukete Road.	<p>This rule has been removed through the Supplementary Information.</p> <p>If the full TRNIZ is included then further assessment is needed of Meadow View Lane and Pukete Road. The provisions would then need to include all transport recommendations, and should outline access for Meadow View Lane for all stages and options.</p>
6.1	No Relief Sought.	<p>Request accepted</p> <p>No actions needed.</p>
10.3	No specific relief sought.	<p>Request accepted</p> <p>No actions needed.</p>
10.7	No specific relief sought.	<p>Request accepted</p> <p>No actions needed.</p>
10.8	No specific relief sought.	<p>Request accepted</p> <p>No actions needed.</p>
10.9	No specific relief sought.	<p>Request accepted</p> <p>No actions needed.</p>

Sub No.	Relief Sought	Analysis / Reason
10.10	No specific relief sought.	<p>Request accepted No actions needed.</p>
10.11	No specific relief sought.	<p>Request accepted No actions needed.</p>
13.27	Retain provision 3.9.3.5 [3.9.2.5] Movement Network as it enables public transport in accordance with the Waikato Regional Land Transport Plan 2021-2051.	<p>Request accepted No actions needed.</p>
13.28	Retain Rule 3.9.3.5 [3.9.2.5], provision of walking and cycling infrastructure within the plan change area, and 3.9.4.2 a) (7) [3.9.3.2a(6)].	<p>Request accepted No actions needed.</p>
13.29	Retain Rule 3.9.4.2 b) [3.9.3.2b].	<p>This rule has been removed from the Supplementary Information. Refer discussion above.</p>
14.12	Seeks further provisions to be included in the District Plan to address the following matters: <ul style="list-style-type: none"> • Travel Demand Management measures • Enablement of electric vehicle charging facility • Address how “emissions reductions” outcomes can be achieved.* 	<p>Request accepted in part Emissions reductions in PPC17 will be supported through the provision of infrastructure for alternative transport modes, including connections to future residential growth areas. While TDM is not explicitly required in the District Plan and can be challenging in industrial areas due to shift patterns and frequent heavy vehicle movements, the plan’s design provides appropriate support for encouraging low-emission travel. Section 25.14 requires 10% of staff cycle and micromobility parking to include charging facilities. EV charging is not currently mandatory for industrial developments.</p>
14.28	The plan change should include an access restriction for the East West Arterial Road, to ensure any development adjacent to the corridor locates its access from an alternate road frontage.*	<p>Request accepted Agree that access from the East–West Road should be carefully managed. Access priorities are currently guided by the District Plan, which takes the road hierarchy into account. The most appropriate access arrangements will be assessed at the time of development. My preference is for sites to gain access via internal collector and local roads rather than directly from the East–West or Te Rapa Roads. This should be reflected in the provisions.</p>
14.29	The provision for cycling must be provided on the local roads and on a single sided shared path on the internal collector roads. Amend the carriageway width from 4m by adopting the ODP standard of 4.5m. Amend the Collector and local road cross sections to be consistent with the District Plan requirements.*	<p>Request rejected Collector roads include a shared path. I agree that the District Plan requires a 4.5m movement lane on local roads, rather than the 4m proposed. However, because the layout includes a flush median, the overall width is sufficient. This means the current proposed width is appropriate for the purpose of the plan change, noting that detailed design is still to be confirmed.</p>

Sub No.	Relief Sought	Analysis / Reason
14.30	Include an appropriate set-back of development from the Te Rapa Road frontage to support the future Bus Rapid Transit (BRT) system.*	<p>Request accepted (Noting that Access 1 is not included in the Supplementary Information)</p> <p>ITA states that: <i>PC17 is consistent with the MSP Business Case as it will introduce significant employment adjacent to the future RT1 route, along with two new signalised intersections on Te Rapa Road for accessibility. It will also enable the inclusion of traffic signal priority pre-emption for public transport vehicles, which is a core requirement for efficient RT networks. PC17 also recommends new public transport stops on Te Rapa Road which also supports RT1 identified in the MSP Business Case.</i></p> <p>Amended Provision 3.9.2.5g includes "Some flexibility is afforded in the alignment of the central spine Collector Road, but it will have a key role in providing for bus services and active transport routes."</p> <p>The design of Te Rapa Road is not yet confirmed, but a 30m corridor is likely to be required to accommodate future BRT. While this width is generally available along most of Te Rapa Road, it is constrained at the Te Rapa interchange. The provisions should therefore be updated to ensure that any additional widening is secured at the time of subdivision, so the full corridor width needed for BRT can be achieved.</p>
14.31	The proposed rail siding should be included on the Structure plan and in the supporting rule framework.*	<p>Request accepted</p> <p>Agree - the structure plan and provisions should reflect the proposed rail siding.</p>
14.32	Seeks that the access at the Te Rapa Road signalised intersection south of Hutchinson Road is further developed and that land is set aside, and identified on the Structure Plan with supporting Provisions.*	<p>Request accepted</p> <p>With the northbound right-turn movement banned, traffic wanting to turn right would instead need to use the Hutchinson Road roundabout, about 300m to the north. This is likely to encourage undesirable manoeuvres and could create unacceptable safety issues at the intersection. I understand that traffic modelling indicated banning the right turn would improve the intersection's level of service. The level of service with the right turn banned has not been provided with the Supplementary Information. Provision for a right turn should not be ruled out, and the provisions should ensure sufficient land is set aside to allow flexibility in the intersection design.</p>
14.33	Adopt the The Te Rapa Road / McKee Street intersection upgrade.*	<p>Request accepted</p> <p>Noting this provision has been removed from the Supplementary Information.</p>
14.34	Adopt the proposed Te Rapa Road / Ruffell Road intersection form.*	<p>Request accepted</p> <p>Noting this provision has been removed from the Supplementary Information.</p>
14.35	Adopt the signalisation of the Te Rapa Road / Kapuni Road intersection.*	<p>Request accepted</p> <p>Noting this provision has been removed from the Supplementary Information.</p>
14.36	Inclusion of appropriate identified mitigation in the upgrade and implementation table as per the applicants traffic assessment.*	<p>Request accepted in part (Noting the assessment has not been provided with the Supplementary Information)</p> <p>The eastbound through-movement at the western Horotiu Interchange roundabout is the movement affected. While the ITA looks at some mitigation options that depend on the timing of other changes and suggests installing chevron signage, no mitigation measures were included in the provisions. The provisions should be updated to reflect the recommended changes, while still allowing design flexibility so the final layout can respond to the latest information, which may shift with development progress, growth, or other external factors.</p>

Sub No.	Relief Sought	Analysis / Reason
16.2	Seeks that the East-West Road is moved northward to connect to the southwest corner of 1340 Te Rapa Road as shown in Figure 6 of their submission.	<p>Request rejected</p> <p>The PPC17 Revised Structure Plan includes an east–west road that's been aligned to connect with a possible future northern river crossing. Although the NRC location hasn't been designated yet, the plan change has been designed around this alignment, so it's not easy to shift. That said, access to any lots severed by the future NRC corridor will need to be provided for. My preference is to provide access to local roads.</p>
16.3	<p>The submitter proposes two options:</p> <p>That the Structure Plan map be updated to show a local road connection to the subject site from PC17 adjoining the northern boundary of the subject site; or</p> <p>That the East-West Road intersection with Te Rapa Road be moved northward to connect to the southwest corner of 1340 Te Rapa Road as shown in Figure 6 of their attachment.</p>	<p>Request accepted in part</p> <p>The PPC17 Revised Structure Plan includes an east–west road that's been aligned to connect with a possible future northern river crossing. Although the NRC location hasn't been designated yet, the plan change has been designed around this alignment, so it's not easy to shift. That said, access to any lots severed by the future NRC corridor will need to be provided for.</p> <p>My preference is to provide access to local roads. However, the subject site (1406 Pukete Road) is outside the PPC17.</p> <p>If the full TRNIZ is included then local road access should be provided. Clarification is required.</p>

Attachment 1: ITA Initial Review Key Points (Memo)

To: Laura Gault

Copy: File, Tony Denton, Nathanael Savage

From: Naomi McMinn, Alastair Black

Date: 20 May 2025

Job Number: 14_562

SUBJECT: Proposed Fonterra Private Plan Change (PC17) - ITA Initial Review: Key Points to facilitate discussion with Applicant



INTRODUCTION

Further to our meeting on Friday 16 May 2025, this memo shares key conclusions and identifies areas where further information is needed. This memo is intended to support discussions with the Applicant and is not a comprehensive review nor does it include a comprehensive list of further information points. We have provided a separate review to HCC.

KEY CONCLUSIONS

The proposed zoning is aligned with surrounding land use and is expected by the District Plan. However, we have concerns that the proposal has not adequately provided for the Northern River Crossing (NRC), considered the effects of the rail level crossing on Ruffell Road being opened and there is a risk to the future of strategic network (NRC and BRT corridor).

In summary, more detailed modelling is required to inform the development stages and infrastructure upgrades. The WRTM scenarios should be updated so that the Ruffell Road railway level crossing is closed and the ITA updated to ensure that the safety and efficiency effects on Ruffell Road and the wider transport network are acceptable.

AREAS OF CONCERN WHERE FURTHER INFORMATION IS NEEDED

The ITA has presented a number of WRTM modelling scenarios, none of which match the proposed PC17 development and transport network staging. The WRTM modelling includes scenarios with the level crossing open and the PC17 appears to rely on the level crossing being open. The Dairy Factory access is included as a signalised intersection but this is not included in the proposed provisions. The further information needs to include an updated WRTM model with scenarios that match the proposed staging and with the Ruffell Road level crossing closed. The updated modelling should include scenarios with:

- = The Ruffell Road level crossing remaining closed
- = The proposed stage 1 land use development (33ha)
- = The proposed access arrangements at Access 3 and at the Dairy Factory access
- = A scenario with the PC17 stage 1 developed area without the NRC (and without the Ruffell Road level crossing).

The proposed infrastructure upgrades and road hierarchy do not align with good transport planning principles for road hierarchy. For example, the north-south collector connects to local road (Old Ruffell Road) which connects to collector road (Ruffell Road), and the proposed east-west road (proposed local road) connects to Te Rapa Road (arterial).

The Ruffell Road railway level crossing is currently closed to traffic with barriers installed and Ruffell Road is severed. PC17 does not include a trigger for the east-west road connecting Koura Drive to Te Rapa Road, and the ITA does not appear to have adequately considered the safety and efficiency effects on the Ruffell Road level crossing and the surrounding transport network. For example, if the level crossing remains closed to traffic what are the impacts of

additional traffic using Te Kowhai Road and Te Rapa Road. Further information is required to understand the impact of the level crossing closure, protect the strategic network and provide appropriate staging and infrastructure triggers in the planning provisions.

Without agreement from KiwiRail that the level crossing can be opened, there is a risk that the proposed plan change and proposed staging is not adequate. Further information including engagement with KiwiRail and evidence that they support opening the Ruffell Road level crossing and the proposed rail siding is needed. A Level Crossing Safety Impact Assessment (LCSIA) for reopening the level crossing is required.

The further information will need to include updated intersection modelling using the WRTM updates to assess the impacts on the surrounding network (for example, at intersections along Te Rapa Road).

The form of the intersection with Old Ruffell Road (referred to as Access 3) is not detailed and the WRTM scenarios include it as a fourth leg to the McKee Street/Te Rapa Road intersection, which is different to the proposal. The proposed Access 3 to Old Ruffell Road results in a convoluted and indirect route to Te Rapa Road, along Old Ruffell Road and Ruffell Road to the signalised intersection with Te Rapa Road, requiring turning at the priority T intersection (Old Ruffell Road/Ruffell Road). The effects at the proposed and existing Ruffell Road intersections have not been assessed. The further information needs to include:

- = Justification for connecting to Old Ruffell Road (a local road) rather than to the McKee Street/Te Rapa Road intersection. This should include consideration of the road hierarchy as well as safety and efficiency effects.
- = Details of the proposed Access 3 including the intersection form and an assessment of the potential impacts on the surrounding network and intersections, including Old Ruffell Road/Ruffell Road intersection should be included.
- = The WRTM update should include the proposed Access 3 arrangement so that the effects on these corridors can be understood.

HCC does not have funding committed for the NRC and the ITA expects HCC to be constructing it. It is not clear how the east-west road corridor will be protected to enable future development of the NRC. The Structure Plan shows the corridor in the western area of the PC17. However, the planning provisions do not trigger the east-west corridor west of the north-south collector. There is a lack of clarity on timing for the east-west road extension and a risk that development beyond PC17 could occur without it, therefore compromising the ability for the NRC to be built in the future. The further information should:

- = Include amendments to the plan change to ensure that both the east-west road extension and Te Rapa Road will be protected for future widening.
- = Provide an assessment and details of the proposed internal intersection arrangements with the east-west road.
- = Provide cross-sections and long sections for the future NRC corridor between Koura Drive and Te Rapa Road as well as long sections of the side roads at the proposed internal intersections to confirm that the proposed vertical alignment is feasible and can achieve the relevant design standards.

The further information needs to include updated staging provision and triggers to ensure that they are reflective of the infrastructure upgrades and timing and are specific to each development stage/area and align with HCC's preferred format. For example, the proposed staging provision and triggers do not include details, timing or responsibility for the upgrades and the intersection with the north-south road is missing.