Before a Board of Inquiry
MacKays to Peka Peka Expressway Proposal

under: the Resource Management Act 1991

in the matter of: Notice of requirement for designation and resource consent applications by the NZ Transport Agency for the MacKays to Peka Peka Expressway Proposal

applicant: **NZ Transport Agency**
Requiring Authority

Statement of rebuttal evidence of **Andrew Murray** (Transportation) for the NZ Transport Agency

Dated: 26 October 2012

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STATEMENT OF REBUTTAL EVIDENCE OF ANDREW MURRAY FOR THE NZ TRANSPORT AGENCY

1 My full name is Andrew Peter Murray.

2 I have the qualifications and experience set out at paragraphs 1 to 7 of my statement of evidence in chief, dated 6 September 2012 (*EIC*).

3 I repeat the confirmation given in my EIC that I have read, and agree to comply with, the Code of Conduct for Expert Witnesses (Consolidated Practice Note 2011).

4 I confirm that I am authorised to give this evidence on behalf of the NZ Transport Agency (*NZTA*).

5 In this statement of rebuttal evidence, I respond to the evidence of:

5.1 Don Wignall, on behalf of Kāpiti Coast District Council (submitter 682);

5.2 Tim Kelly and Fraser Colgrave on behalf of Kāpiti Coast Airport Holdings Ltd (submitter 525);

5.3 Graeme McIndoe and James Lunday, on behalf of Save Kāpiti Incorporated (submitter 505);

5.4 Dr Wayne Hastie, on behalf of Greater Wellington Regional Council (submitter 684);

5.5 Loretta Pomare (submitter #309);

5.6 Sue Smith, on behalf of Waikanae on One (#514);

5.7 Julie Ann Genter and Dr Marie O'Sullivan, on behalf of Action to Protect and Sustain our Communities (submitter 677).

6 I have not directly responded to the evidence of Mr Adam Pekol (on behalf of Save Kāpiti Incorporated). However, I consider that similar issues he raises are addressed in my responses to Mr McIndoe and Mr Lunday.

7 The fact that this rebuttal statement does not respond to every matter raised in the evidence of submitter witnesses within my area of expertise should not be taken as acceptance of the matters raised. Rather, I rely on the technical reports, my EIC and this rebuttal statement to set out my opinion on what I consider to be the key traffic and transport matters for this hearing.

8 Consistent with my EIC, I have referred to the MacKays to Peka Peka Expressway Project as "the Project" in this rebuttal evidence (or sometimes as "the Expressway" to distinguish it during discussions on other transport improvement projects).

EXECUTIVE SUMMARY

9 I have read the evidence of those witnesses raising transportation issues and responded as appropriate. I summarise the key issues arising, and my responses to them, as follows:

9.1 Don Wignall (for KCDC) raises concerns about the assumptions used in the models, requesting additional modelling around alternative assumptions and suggesting that various local road upgrades are being relied on as mitigation. I have considered the issues raised by Mr Wignall and I have not identified any that would, in my opinion, justify further modelling. In regard to local road projects, the analysis undertaken has shown that certain upgrades to the local network will be required to support the level of growth anticipated in Kāpiti irrespective of the Expressway Project, and that the Project does not create an adverse impact on them. Therefore, I do not agree with Mr Wignall's assessment that such works should be included as part of the Project[1].

9.2 Mr Colgrave and Mr Kelly raise concerns about the level of growth assumed for the Airport Precinct in the traffic effects assessments presented for the Project. I have reviewed the growth predictions provided by Mr Colgrave and found that there is significant uncertainty in the rate of growth, and that the growth assumptions adopted for the purposes of assessing the traffic effects of the Project fall centrally within the feasible range, whereas Mr Colgrave's appear at the more optimistic end of the range. Recognising the uncertainties in the growth, I have concluded that the growth adopted in the AEE, along with a check of the project design under a 'Full Development' scenario, is an appropriate response. I have also identified that there is flexibility within the designation sought for the Project to consider capacity enhancements if needed in the longer-term.

9.3 In response to Mr Kelly, I have provided clarifications and additional model outputs which I consider address the concerns he has raised. I consider it appropriate that this additional information be discussed at the programmed expert witness conferencing.

[1] See in particular his paragraphs 5.29 and 5.47.

9.4 Alternative options are suggested by Mr Lunday and Mr McIndoe, involving provision of the Western Link Road (WLR) and substantial upgrades on the existing SH1 route. I have reviewed the transportation elements of their evidence and found that it is not based on appropriate understanding of the travel patterns and transport functions of the network. I conclude that the options they propose are unsuitable for achieving the Project's objectives.

9.5 General methodology and policy issues were raised by Ms Genter on behalf of Action to Protect and Sustain our Communities. I have provided clarifications on the methodology adopted and after considering the issues raised, I was able to confirm that the assessment methodology used was appropriate and I have not found cause to alter the opinions expressed in my EIC.

10 After considering the evidence provided, I consider that the methodology used is appropriate and that the methods to manage effects I recommended in my EIC (by way of designation conditions), appropriately address the issues raised.

DON WIGNALL ON BEHALF OF KCDC

11 Mr Wignall raises significant issues which I will address by topic.

Kāpiti Road Level of Service

12 At paragraphs 5.16 to 5.29, Mr Wignall discusses issues he sees with my assessment of effects on Kāpiti Road junctions. He summarises his position at paragraph 5.25 where he states that:

> *"In my opinion, the implementation of the Expressway proposal (in the absence of additional mitigation measures), will cause a deterioration of operational conditions with associated safety implications on Kapiti Road."*

13 As outlined below, I do not agree with this statement.

14 He commences by noting his understanding that there is a common view between us that the intersections adjacent to the Expressway ramps (namely the Te Roto Drive, Milne Drive and Arawhata Road junctions with Kāpiti Road) are a "single and closely connected system"[2].

15 I agree that the five closely spaced intersections along Kāpiti Road will have interactions with each other and that the whole corridor should be considered together, however I have not located anywhere in the two technical reports any reference to this as a single system. The modelling team has recognised the interaction

[2] Evidence of Mr Wignall, paragraph 5.16.

between intersections via the use of a detailed micro-simulation model of the relevant corridor. However, due to the relatively long overall distance, different control forms (giveway, signals) and different road controlling authorities (KCDC and NZTA), I would not describe it as a 'single system' (at least not to the extent that a level of service target should automatically be interpreted to apply to the whole corridor).

16 Mr Wignall then goes on to make some associated statements in support of the position. He states, (at paragraph 5.18) that *"In my opinion, if the traffic environment is assessed on the basis of a series of closely connected junctions, an acceptable Level of Service C (LOS C) as set out in the Guiding Objectives will not be achieved if the Te Roto Drive, Milne Drive and Arawhata Road junctions with Kapiti Road remain unsignalised and if Kapiti Road remains in its current form either side of the Expressway ramp junctions."*

17 And at paragraph 5.17, Mr Wignall states:

> *"the NZTA assessment also (incorrectly in my view) interprets the output from the AEE modelling analysis only in terms of achieving an overall LOS C based on the average delay for all vehicles using each of the Expressway ramp junctions with Kapiti Road. This interpretation is not sufficient even to adequately describe conditions at the Expressway ramps. This is because, as well as achieving an acceptable overall Level of Service (LOS),it is also essential in my opinion for minimum individual LOS criteria to be achieved on all arms and turning movements. This is consistent with professional advice on the interpretation of LOS criteria (see Annex E)".*

18 I consider that there are four key issues Mr Wignall is raising here, namely:

18.1 Should the target LoS be interpreted as applying to all individual movements or to the overall intersection LoS?

18.2 Should the target LoS be interpreted as applying only to the Expressway intersections or also to adjacent intersections?

18.3 Will the intersections of Kāpiti Road with Milne Drive/Te Roto Drive and Arawhata Road require upgrading to traffic signals?

18.4 Is the need for those upgrades a result of the Project, and hence should they be included as mitigation?

19 As I understand it, Mr Wignall's position is the LoS target of C should apply to each individual movement and for the whole corridor, and that the Project creates an adverse effect to this corridor. I do not agree with a number of his statements and his

overall position as to the need to signalise related intersections as part of the Project.

20 Firstly, I do not agree that the target performance (LoS C) identified in the Guiding Objectives for the Alliance should be interpreted such that this LoS "be achieved on all arms and turning movements".

21 I accept that the Guiding Objectives do not specify whether the target LoS applies to movements or overall intersection values. However, in my understanding, what the NZTA has proposed is consistent with standard practice, and Mr Wignall's alternative view is not.

22 In regard to applying the LoS objective to each individual movement, it is important to distinguish between intersections controlled by traffic signals and give-way or stop controlled intersections:

22.1 For traffic signal intersections, in my experience, standard practice is that LoS targets are interpreted as applying to the overall average unless explicitly stated to apply to the individual movements. I note my understanding of this is acknowledged in the work done by KCDC for the Western Link Road arterial (WLR), in which KCDC explicitly referred to both an overall LoS target and a movement target[3]. A further example of this practice is included in the contractual requirements for the design of a recent NZTA project (included as **Annexure A**), which clearly shows specific criteria separately for the intersection and individual movements.

22.2 In regard to give-way/stop controlled intersections, I agree that standard practice is not to assess an overall average LoS for all movements, because the main-road movements generally have no delay, meaning that any weighted-average value would not reflect the delays to the vehicles that have to give way. This is consistent with the approach taken by the SIDRA software developers as included as Annex E to Mr Wignall's evidence (and which does not refer to traffic signals). I note that the technical report (e.g. TR34 Tables 7.11) show an average for the 'controlled' movements (i.e. excluding the main road movements) as well as the individual movement values.

23 Therefore, I do not agree that the LoS C objective should be interpreted to apply to each movement at the proposed Expressway traffic signals. Nor do I accept that the information provided in Mr Wignall's Annex E supports his suggestion to do otherwise.

[3] See my EIC paragraph 269.

24 In regard to applying the Guiding Objectives' target LoS to other intersections, I covered this in paragraphs 268-272 of my EIC and do not resile from my view that the Guiding Objectives are quite clear that they only apply to "..the intersections between the Expressway and the local network [in the year 2026]".

25 The technical analysis has demonstrated that an overall LoS C will be achieved at the Expressway intersections in 2026, and as such I consider that the LoS target in the Guiding Objectives has been met.

26 Mr Wignall then goes on to say:

> *"In my opinion, if the traffic environment is assessed on the basis of a series of closely connected junctions, an acceptable Level of Service C (LOS C) as set out in the Guiding Objectives will not be achieved if the Te Roto Drive, Milne Drive and Arawhata Road junctions with Kapiti Road remain unsignalised and if Kapiti Road remains in its current form either side of the Expressway ramp junctions."*

27 To explore the LoS on the adjacent intersections and how these are impacted by the Project, I set out in **Table 1** below a summary of the assessed LoS. For the signalised intersections, I present the overall value, while for the giveway/stop intersections I present both the worst individual movement and the average for all controlled movements (in brackets). At the Milne and Te Roto Drive intersections, I present results for both intersections remaining as give-way intersections (as assumed in the AEE[4]) and also for the intersections controlled by traffic signals (as assessed separately in discussion with Mr Wignall in February 2012[5]). Here I present the worst predicted LoS between the morning and evening peaks:

Table 1 Level of Service Summary at Kāpiti Road Intersections

Intersection	Type	Do Minimum	Project
2016 Model			
Te Roto Drive	Giveway "T"	F (F)	F (B)
Milne Drive	Giveway "T"	F (F)	E (B)
Arawhata Road	Stop "T"	D (B)	C (A)
2026 Models			
Te Roto Drive	Giveway "T"	F (F)	F (E)

[4] See TR34 tables 7.2, 7.5, 7.8 and 7.11.

[5] As recorded in the "Bunnings Development Traffic Assessment" Report prepared by the Alliance in February 2012.

	Signals "T"	n/a	C
Milne Drive	Giveway "T"	F (F)	F (D)
	Signals "T"	n/a	C
Arawhata Road	Signal "X"	C	C

28 This summary shows that a poor LoS (F) is expected at the Milne and Te Roto Drive intersections if left as giveway controlled, by 2016 and irrespective of the Project[6]. It should also be noted that the 2026 models include the new 'town centre link' connecting into the Arawhata Road intersection to support the planned growth in the town centre. Given that Kāpiti Road is and will remain an important and busy arterial road, I consider that it would be necessary for that intersection to be signalised when such a link is added (see Annexure 4, page 92 of my EIC for a map of this link).

29 I discuss the Milne Drive/Te Roto Drive upgrade later, however my conclusion is that upgrades there and at the Arawhata Road intersection are required to address current and expected growth issues unrelated to the Project, and while a LoS C may not be achieved at those intersections if not upgraded, this does not mean that the Guiding Objective has not been met.

Queue lengths

30 In paragraphs 5.19 and 5.20, Mr Wignall raises a concern that the predicted maximum queue lengths exceed the available queuing space in some instances. At paragraph 5.21, he expresses his view that this will result in traffic from the west and east sometimes having difficulty accessing the Expressway, in the absence of signalisation of adjacent junctions. He goes on to state that this would reduce the reliability of movement along Kāpiti Road.

31 I agree with Mr Wignall to the extent that the detailed modelling undertaken has shown that, if the growth allowed for in the 2026 models occurs and the Milne/Te Roto Drive intersection is not upgraded, than queues associated with vehicles wishing to turn into those roads could impact traffic on Kāpiti Road. However as demonstrated above, that effect is likely even without the Expressway. As discussed later, I understand that KCDC will be upgrading those intersections prior to construction of the Expressway, and hence such discussions become somewhat irrelevant.

[6] Looking at the actual delays behind the LoS values, the Project is predicted to slightly improve the delays at these intersections, as the extra traffic signals provide gaps in the opposing traffic.

32 The maximum queues presented in the AEE reports[7] are a 'maximum-maximum' value. That is, the assessment undertaken was of the maximum queue of any 15 minute period in any of the 10 model replications[8] (run for each scenario). This will include short-lived instances of long queues which are not a suitable measure for design purposes. It is more typical to include queue measurements such as the '95 percentile queue', which exclude the few occurrences of short-lived queues. However, obtaining that kind of measure from the models used is very difficult, so the 'maximum-maximum' value was instead used to gauge the performance of the corridor.

33 I included updated queue results in **Annexure B** for this intersection which now include traffic signals at the Milne Drive and Te Roto Drive intersections which KCDC are progressing (and I return to this assumption later).

34 The output from those models was provided to Mr Wignall and KCDC in February 2012. These results show that the extensive queuing associated with Milne and Te Roto Drive signals have now substantially reduced. It also shows that, under the composite growth, the 'maximum-maximum' queues are generally contained within the critical queuing spaces. Visual observations of the running model show that the typical queues are less than the 'maximum-maximum' values, and that the corridor operates satisfactorily.

Kāpiti Road delay and safety implications

35 In paragraphs 5.20 to 5.25, Mr Wignall discusses delay and safety issues associated with the Milne and Te Roto Drive intersections (which in the AEE reports are assumed to remain as give way controlled). As described in my EIC, KCDC proposes to implement traffic signals here, so those issues will be resolved.

Connectivity - pedestrians, cycling and public transport

36 At paragraph 5.27, Mr Wignall states that the AEE has not adequately quantified effects on connectivity (related to pedestrians, cycling and public transport), and requests additional modelling to address this.

37 As a first response to these statements, I note that the effects on pedestrians, cyclists and bus services (and stops) have been assessed in the AEE (TR32). Similarly, the effects of pedestrian demand on the operation of the traffic signals has been considered in the AEE modelling[9].

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7 For example, TR34, Table 7.13, page 88.

8 The model is 'stochastic' in that it randomly samples vehicle and driver parameters for each vehicle, so the model must be run with different random sampling to obtain an average result.

9 See TR34, Section 7.2.3, page 73.

38 Secondly, it is unclear to me what Mr Wignall sees as necessary to address any concerns he has on these matters. As for modelling, I do not consider that more traffic modelling is the appropriate (or feasible) method to address pedestrian, cyclist and public transport demands and connectivity at this location. This is because the detailed models used for Kāpiti Road do not explicitly include cyclists and pedestrians, and as is standard practice, the connectivity for such modes is addressed through the design process rather than a modelling process.

39 In Annex I (page 60) of Mr Wignall's evidence, he states "*in my opinion it is important that these closely spaced junctions (ie Te Roto to Arawhata) are not only signalised but also that they are fully co-ordinated: This point is not specifically addressed by NZTA in its AEE or evidence."*

40 Firstly, to correct the record, I note that I did in fact address the operation of these traffic signals in my suggested mitigation (see Tables 8 and 9 of my EIC, page 84).

41 Secondly, I agree with Mr Wignall that co-ordination of the traffic signals would be desirable and appropriate. However, the two different road controlling authorities (NZTA and KCDC) may have different objectives and priorities in how the signals are operated. As such, general protocols for their operation should be agreed between those parties. Such protocols are in place elsewhere, such as in Auckland in regard to how motorway signals are operated in relation to the local road. This was recognised in condition DC.X3 (c) which I recommended in my EIC (page 85), and which would require the development of a management plan that includes:

> *"Details of the agreed protocols for operating the traffic signals on Kāpiti Road at and immediately adjacent to the Expressway interchange. This should include priorities for queue management and targets for pedestrian crossing times."*

Kāpiti Road Assumptions

42 In paragraphs 5.28-5.29, Mr Wignall states that "*NZTA relies on possible future improvements by the Council as part of the mitigation for the effects of the Expressway, despite there being no certainty about if and when those improvements will occur*". He requests additional modelling to address this and suggests different modelling assumptions as well as a possible contribution to the Ihakara Street Extension. Specifically (in his Annex B, page 40), he refers to the following three projects being included in the models:

42.1 The completed Ihakara Street Extension (from Rimu Road, through the Airport to Kapiti Road);

42.2 The widening of Kāpiti Road between Milne Drive and Arawhata Road to between two and three lanes; and

42.3 The signalisation of Arawhata Road / Kapiti Road junction.

43 At page 43 of his Annex B, Mr Wignall comments "*Whilst some judgement is required in determining the DM*[10] *scenario, the Kapiti Road widening, signalisation of Arawhata and Ihakara Street Extension are not currently committed projects and therefore should have been excluded.*"[11]

44 As to Mr Wignall's recommendation for more modelling (and the position he expresses now on the modelling assumptions), I must admit to being somewhat surprised. These matters were extensively discussed with him prior to the modelling commencing, and, regrettably, he did not express then the definitive opinion he expresses in his evidence as to an appropriate Do Minimum. The assumptions adopted by the Alliance team were developed from our knowledge of the various projects and growth plans and the feedback provided by Mr Wignall. The adopted assumptions for the AEE were that the year 2016 models would not include any new upgrades on Kāpiti Road (see TR34, table 4.3) while the 2026 models would include the Ihakara Street Extension, the Town Centre Link and signals at Arawhata Road. These assumptions were duly included as 'Do Minimum' network assumptions so are common with or without the Expressway.

45 Therefore, a full assessment of the Project has been undertaken both without (2016) and with (2026) the above upgrades.

46 I note that the Ihakara Street Extension is required as part of the development of the Airport precinct. The Town Centre Link (and signals at Arawhata) are associated with planned development in the Paraparaumu Town Centre. Signals at the Milne and Te Roto intersections are associated with the recently approved Bunning's development on Milne Drive. Therefore I do not consider it appropriate to exclude such upgrades from the 2026 models unless the associated development is also excluded (which Mr Wignall does not seem to have asked for).

47 In summary, a full assessment of the project has been undertaken for the year 2016 without upgrades to Kāpiti Road, as well as a full assessment for the year 2026 which includes both planned growth and the upgrades likely to be needed to accommodate that growth. Assessment of those models show that the Project does not increase delays at those intersections. I therefore do not agree with his suggestion that more modelling is required with different assumptions, nor his assertion[12] that the NZTA "*…relies on possible*

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[10] DM refers to 'Do Minimum'.

[11] The diagrams Mr Wignall includes in Annex B relate only to the intersection coding, while the models include only a single lane in each direction between the intersections.

[12] Evidence of Don Wignall, paragraph 5.28.

future improvements by the Council as part of mitigation for the effects of the Expressway…"

Growth Assumptions

48 At paragraph 5.32, Mr Wignall discusses the "composite" growth scenario adopted in the AEE and comments that "*a more realistic demand related scenario on which to base the AEE would have been an intermediate traffic growth forecast, higher than the composite forecast but lower than the full growth forecast*." He recommends further modelling to describe operational conditions in such a scenario.

49 Mr Wignall does not provide any rationale for this requested change, other than that the growth is low in comparison to other estimates. I note that the composite growth forecast used includes 139,300 m^2 GFA of development in the Airport precinct[13]. That level of development is above the 102,000 m^2 threshold at which the Ihakara Street Extension is required to be provided under the District Plan. Yet Mr Wignall is requesting more modelling[14] with a higher level of development and removal of the Ihakara Street Extension (which the District Plan acknowledges as being required to accommodate such growth). I do not consider such a model scenario to be appropriate.

Selection of the 'Do Minimum'

50 At paragraphs 5.37-5.41, Mr Wignall suggests that the Do Minimum scenario, against which the effects of the Project are assessed, should include the WLR (I note that in other evidence, the Do Minimum is also referred to as the 'reference case' or 'counter factual').

51 I have already addressed this suggestion in my EIC (paragraph 257), and I make the following additional points:

51.1 The Economic Evaluation Manual (*EEM*) is the guide for modelling assessments and it defines the Do Minimum as follows:

> "*For many transport activities, it is often not practical to do nothing. A certain minimum level of expenditure may be required to maintain a minimum level of service. This minimum level of expenditure is known as the do-minimum and shall be used as the basis for evaluation, rather than the do-nothing.*
>
> *It is important not to overstate the scope of the do-minimum, ie it shall only include that work which is absolutely essential to preserve a minimum level of service.*

[13] TR34, Figure B4, Appendix 34.B.

[14] Evidence of Mr Wignall, paragraph 5.32.

Particular attention is required if the cost of the do-minimum is comparable to the cost of the options being considered. In such cases, the do-minimum should be re-examined to see if it is being overstated.[15]"

51.2 The WLR represents a significant investment in a substantial piece of infrastructure, so in my opinion is not capable of fitting the EEM's intended meaning of a 'Do Minimum'.

51.3 Because the WLR and Expressway would substantially occupy the same corridor, they are mutually exclusive. This means that the Expressway project would not also include the WLR. Therefore, it is only possible to consider the WLR as an alternative 'option'.

51.4 As I understand Mr Wignall's present view it is that, were the Expressway not to proceed, the WLR would more likely be provided than the 'Do Minimum' (as defined in the model). Given that the WLR has a designation, I agree the certainty or otherwise of it proceeding (if the Expressway did not) can be considered. In that respect, I have relied on the advice of NZTA, as described in the EIC of Mr Nicholson. Mr Nicholson raises outstanding questions about the land purchase[16], staging sequence, form and function[17] and funding[18] of the WLR, together which suggest to me that its construction cannot be considered certain.

52 I note that the hearing panel for the recent Bunning's consent faced a similar question about the WLR, and stated the following[19]:

"*The Panel was of the view that although the Link Road was designated, NZTA had indicated that it would not fund the road and, as a consequence, it was highly unlikely that it would be constructed. Therefore it should not be considered as part of the "future" environment"*

53 Mr Wignall also states:

"Because modelling for the AEE has not been conducted which would address the level of effect relative to the planned WLR,

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15 EEM, page 2-14.

16 Evidence of Mr Nicolson, paragraph 52.

17 Ibid paragraph 63.

18 Ibid paragraph 64.

19 KCDC Notice of Decision, as attached as **Annexure C.**

> *there is a risk that the level of mitigation being offered in the application will not be adequate"*[20]*.*
>
> *"The WLR provides a higher benchmark for comparing operational conditions with and without the Expressway than the do minimum scenario benchmark used in the AEE".*[21]

54 I do not agree that including the WLR in the Do Minimum would necessarily provide a 'higher benchmark' or result in more 'adequate' mitigation. This is because any mitigation of increased traffic would only need to consider the marginal increase in traffic over that expected for the WLR, rather than the full level of expected traffic. This would be most evident for any extra traffic in the corridor itself and could result in any mitigation (such as for noise) being under designed.

55 At paragraphs 5.42-5.44, Mr Wignall recommends that more modelling be undertaken, using assumptions agreed with Council, in order to reduce the uncertainty in the operational performance. In addition to my earlier response to this call for more modelling, I consider that this would not deliver any greater certainty on the matter of operational performance.

Proposed Works to Address the Expressway's "Adverse Effect"

56 At paragraphs 5.23 and 5.24, Mr Wignall disagrees with an aspect of my assessment of effects, stating that:

> "*Mr Murray in his evidence states that although there are effects on Kāpiti Road, for example, 20-40 second increased waiting times for some intersections immediately adjacent to the Expressway ramps, these effects can be traded off against the fact that people travelling between Waikanae and Paraparaumu will have significantly shortened travel times.*
>
> *These shortened north / south travel times will occur but I do not consider that immediate traffic movement effects on a major community connector linking town centres, residential populations, schools, the airport and access to rail should be traded off or discounted in such a way. The effects instead need to be adequately mitigated*."

57 I disagree with his view because it is not uncommon with transport projects that an improvement to one movement can be at the expense of extra delay for another movement. This is clear where traffic signals are installed at give-way intersections to improve delays and safety for side road traffic, even though this may add delay to the main road movements.

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[20] Evidence of Mr Wignall, paragraph 5.39.

[21] Evidence of Mr Wignall, paragraph 5.41.

58 At paragraph 5.45, Mr Wignall comments "*Without mitigation measures, such as signalisation and road improvements, some turning movements at the Milne Drive, Te Roto Drive and Arawhata Road junctions with Kapiti Road will operate at a very low level of service, post Expressway opening and are therefore likely to become less safe*."

59 As discussed above, it is my opinion that upgrades at Milne Drive, Te Roto Drive and Arawhata Road intersections will be necessary given the planned growth in Paraparaumu, and that allowing such growth without upgrades could result in unsafe conditions. However, as I have stated above, I do not consider that these issues are as a result of the Project. As such, I do not consider that the upgrades are required to mitigate the effects of this Project.

60 At paragraphs 5.47-5.49, Mr Wignall suggests that it is essential that signals be installed at Arawhata Road, Milne Road and Te Roto Road as part of the Project to mitigate its effects. I note that Mr Wignall has not provided evidence to support the assertion that those works should be provided as part of the Project, and I disagree with his position.

61 In regard to Mr Wignall's comments here concerning the Arawhata Road signals, I refer to my earlier response. Additional analysis on this issue was reported[22] to KCDC and Mr Wignall. That analysis concluded that the Arawhata Road intersection would need to be upgraded irrespective of the Expressway, that the Expressway did not bring forward the need for this upgrade, and that the Expressway did not have a detrimental impact on that intersection. Mr Wignall has not previously provided any indication that he disagreed with that analysis. In his evidence he does not refer to that analysis, so I remain unsure of the basis for his statement.

Milne Drive/Te Roto Drive Traffic Signals

62 In regard to the Milne Drive and Te Roto Drive signals, Mr Wignall reports[23] that "*Such an improvement is included in the Council's forward programme but will be subject to a funding application to NZTA, the justification for which will include the need to respond to any effects caused by Expressway*."

63 I note that Mr Wignall acknowledges that this signalisation is included in the Council's forward work programme. While he indicates that this will be subject to a funding application to NZTA, he does not say that they are dependent on such funding.

64 Relevant to that, it is my understanding that KCDC has already made and announced a decision to provide traffic signals at these intersections. KCDC announced that it was installing the signals by

[22] Kāpiti Road Transport Modelling Workshop – Summary of Modelling Task Findings, Alliance, May 2012.

[23] Evidence of Mr Wignall, paragraph 5.48.

March 2013 (see **Annexure D**). I note that the last sentence in that media statement expresses hope of access to LTMA funding "because the improved intersection will ease traffic flows on and off the proposed Expressway onto Kāpiti Road". I do not have an opinion on whether the NZTA will or should contribute to that local road project. However, for the reasons outlined previously, I do not consider that it need be funded as part of this Project.

65 This decision to proceed with signalisation, as I understand it, occurred in conjunction with KCDC's decision granting consent to a Bunnings Limited development at 20 Milne Drive. I have read the decision, dated 7 March 2012, which I attach to my evidence as **Annexure C**. I refer in particular to [page 23] (under "traffic safety") and the "note" to condition 8 of the consent.

66 The fact that the traffic analysis undertaken for the Bunnings consent did not consider the presence of the Expressway would tend to suggest that KCDC's recognition of the need for and its decision to upgrade those signals was unrelated to the Expressway.

67 I note that the effect of the Bunnings development, and the signals, were assessed in modelling for the Expressway[24]. I am satisfied that this demonstrates that there will be satisfactory traffic performance with the Bunnings development in place.

68 For these reasons, I consider that the signals at these intersections with Kāpiti Road should be treated as a committed project, and hence be included in the Do Minimum[25]. Hence, I disagree with Mr Wignall that they are needed as mitigation for the Project.

69 Under the heading "Proposed physical works to address Expressway's adverse effects on Kapiti Road" (paragraphs 5.50 and 5.51), Mr Wignall quotes from various technical reports that accompanied the AEE. For example, he quotes the following statement from TR32:

> "*An additional lane on Kapiti Road in the section between the proposed interchange and Te Roto Drive/Kapiti Road and Milne Drive Kapiti Road is recommended to help increase the capacity of the road and the operation of these intersections*".

70 He relies upon these quotes to demonstrate his understanding that the AEE recognises a need for associated improvement works on Kāpiti Road, i.e. he says:

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[24] Subsequent to the AEE being completed.

[25] For the record, based on the AEE analysis I do not consider that the Project creates an adverse there that requires mitigation. We have however identified that any upgrade would be desirable to the performance of the network irrespective of the Expressway proceeding.

> "*It is also clear from the NZTA traffic assessment that the sections of Kapiti Road either side of the Expressway need to be widened and the associated side road junctions signalised in conjunction with Expressway implementation and I agree with this assessment. I estimate that four lanes are required on Kapiti Road between Arawhata Road and Milne Drive to avoid excessive congestion as a result of the Expressway opening. The AEE and associated evidence appears to accept that it would be beneficial to upgrade adjacent links and intersections on Kapiti Road, for example …*"

71 Importantly, however, Mr Wignall does not go on to reference two statements that preceded his above-quoted excerpt from TR 32 (at page 63):

> *"As mitigation to accommodate these additional trips*[26] *in the study network, provision of an extra lane capacity of Kāpiti Road is recommended, irrespective of the proposed Expressway being present"* [my emphasis]
>
> *The option scenario generally operates significantly better than the DM scenario".*

72 In this fuller context, it can be seen that the AEE does not consider that the Project creates an effect that requires mitigation at this location.

73 Another passage Mr Wignall quotes is from TR34 page 87 as follows:

> *"A high level of congestion and delay is expected for the Te Roto Drive and Milne Drive approaches."*

74 However, the following sentence from that report provides the fuller context for that excerpt:

> "*Although the LoS on these approaches remains at LoS F, the delays experienced by the movements on Te Roto Drive and Milne Drive is significantly less when compared to the DM Scenario*" [my emphasis].

75 To be clear, I support the installation of signals at Te Roto Drive and Milne Drive to address the existing and predicted issues associated with planned and expected growth. However, I do not agree that the Expressway creates an adverse effect that requires mitigation.

76 Mr Wignall also quotes excerpts from TR32 (table 3.9) as follows:

[26] In this context the additional trips relate to development growth, not traffic related to the Expressway being in place.

> *"Arawhata is considered in the assessment to be part of identified works that represent "the minimum investment needed in the study corridor to maintain operations."*

77 This is in fact a conjugation of two separate sentences in the AEE, although it appears in Mr Wignall's evidence as a single quote. That aside, the fuller context is provided when the additional sentence is added:

> "*It is however assumed to include new projects and upgrades outside the study area, and these assumptions are assumed to be common to both the 'no project' and 'project' scenarios".*

78 I consider the Arawahata Road signalisation upgrade to fall into this category. That is, I do not consider that it is strictly necessary to maintain operations, but has been adopted as an appropriate upgrade to include in the long-term (2026) model. I accept that here the term 'study area' is unhelpful, as it was intended to imply works outside the Project itself.

Te Moana Road

79 In his paragraph 6.2, Mr Wignall states that: *"The 100km/hr Expressway intersects with Te Moana Road."* For the discussion on safety that follows, it is important to note that it is the Expressway ramps that will intersect with Te Moana Road and those ramps will have a 50 km/hr speed limit.

80 In his paragraph 6.4, Mr Wignall states that "*To date NZTA's traffic modelling for this intersection has not adequately taken account of the Ngarara future development. In particular, the traffic zoning and connections in NZTA's model do not reflect the anticipated form of the development. This means that the traffic demands from the development are not being correctly loaded onto Te Moana Road, and this will underestimate the demand that will be attracted to and through the future Expressway."*

81 Again, I point out that the modelling team was proactive in consulting Mr Wignall about the appropriate assumptions for how that growth area should be modelled in this location. Putting that aside, I do not agree with Mr Wignall's statement that the growth is low or incorrectly loaded. My reasons are as follows:

81.1 Firstly, in his Annex D, Mr Wignall states that the models assume partial completion (approximately 30%) of the Ngarara development. This is not correct. The 2026 Composite models assume 84% completion of the Ngarara development. As described in Section 8.5.1, page 94 of TR34, the models assume that 30% of this level of development would use the existing Ngarara Road while 70% would use a new access road that connected directly to Te Moana Road.

81.2 Secondly, I disagree with Mr Wignall's statement (at page 52, Annex D) that the Ngarara development is "*accessed via an (incorrectly located) link and node on Te Moana Road 400m to the east of the Expressway intersection*". The loading position of that future road is not certain, hence the choice of an eastern, rather than western, location cannot be said to be "incorrectly located". The District Plan Maps (Maps 06/07 District wide and Urban Plan Features, and as attached as **Annexure E** to this evidence), shows a 'notional' road connecting to Te Moana Road in the same location as the proposed new interchange. As discussed in the evidence of **Mr Marc Baily**, previously indicated networks for the growth zones in this area will need to be revised, including how connections are made across the Expressway and to Te Moana Road. **Mr Baily** describes the proposed master planning exercise intended to confirm both the preferred form of intersection control and existing and future connections to Te Moana Road in the vicinity of the interchange.

81.3 In any case, I do not expect that either an eastern or western connection scenario would materially alter the total traffic flows through the interchange nor the flows on the wider network. In response to this issue, a sensitivity test was run on the performance of the interchange roundabouts with an alternative scenario with the connection to Ngarara development loaded west of the interchange. This showed that the level of service remained at LoS A.

Traffic signalisation for Te Moana Road?

82 In his paragraphs 6.10 to 6.22, Mr Wignall explains why he considers traffic signals should be used rather than roundabouts at the Te Moana intersection.

83 There are some aspects of Mr Wignall's reasoning in support of his preference that I do not agree with:

83.1 At paragraph 6.14, Mr Wignall appears to imply that an alternative to the proposed roundabouts would provide a better speed transition between the Expressway and the local network. I do not consider that the speed differential issue points in favour of traffic signals over roundabouts. This is because roundabouts can, through their geometric design, force low speeds for vehicles, whereas vehicles facing a green signal have no reason to slow down.

83.2 In his paragraph 6.22, Mr Wignall refers to NZTA traffic witnesses as agreeing that signals are feasible and would have a number of advantages. Although a reference is not provided, I presume he is referring to my EIC. If that

is the case, I think it should be noted that I actually stated that "*Overall, in traffic terms there are positive and negative elements to each control type*."[27] I think it would be inappropriate for any decision on the control type to be made without recognising that traffic signals also have disadvantages in terms of safety and delays.

84 In summary, I consider that either roundabouts or signals could work adequately, but that each has advantages and disadvantages that should be fully considered in making the final decision. In my EIC, I suggested this be resolved through a 'design workshop' (Condition DC.X3(g), page 85 of my EIC).

Park Avenue

85 In paragraph 6.21, Mr Wignall states that mitigation measures are required to be introduced as part of the Project, in agreement with the Council. This issue was addressed in my EIC (tables 8 and 9 Page 83), in which I recommended the addition of a condition requiring a pedestrian crossing facility as mitigation (Condition DC.X1).

GRAEME MCINDOE ON BEHALF OF SAVE KĀPITI (505)

Whether usage of Expressway for local trips is desirable

86 At paragraph 39, Mr McIndoe states that he understands that use of the Expressway route as the main local route for shorter distance local trips is not desirable and that this is a potentially significant issue.

87 I agree that the Expressway (between Paraparaumu and Waikanae) will be used by 'local' trips but disagree that this will be a significant issue.

88 Were usage of the Expressway to give rise to significant congestion that compromised the through traffic function of the Expressway, I agree that this would be undesirable. However, that possibility was considered in the selection and analysis of connection options and it is not expected to occur with the expected level of demands in relation to the 4-lane form of the Expressway[28].

89 I acknowledge that some drivers may not be comfortable using a high-speed Expressway for such short trips and would prefer a lower-speed arterial (this perceived intimidation of the Expressway has been raised by some submitters[29]). I understand and accept some motorists will feel this way. I would however note that median divided, grade-separated facilities generally have lower crash risks than arterials roads with multiple at-grade intersections.

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[27] My EIC, paragraph 281.

[28] See TR32, page 57.

[29] Including W Batterbee (223).

90 As such, I do not consider that this is undesirable or that it would give rise to any significant issue in terms of the Expressway's intended functionality.

91 At paragraph 34, Mr McIndoe states:

> *"It is sound urban planning and design practice to place a local, low-speed arterial through the centre of demand from residential development. Local roads should link the local neighbourhoods served in a logical and convenient way. However the proposed local road on the current SH1 alignment is distanced from the concentrations of residents who will be using it."*

92 I do not agree with the impression this statement gives that the existing SH1 route would be remote from those wishing to use it as a local arterial. Even if the WLR alternative was provided, a significant volume of 'local' traffic would be expected to use the current SH1 route as it better meets their needs than the WLR. This is shown in the Scheme Assessment Report undertaken for the WLR (and as attached to the evidence of Mr Lunday). That report shows that at present 69% of vehicles crossing the Waikanae River are 'local' to Kāpiti, yet with the WLR in place this will only reduce to 45%[30]. This implies that nearly half of the traffic remaining on SH1 would be 'local'.

93 To further define the likely demands of an 'eastern' and 'western' arterial, I have extracted data from the Kāpiti SH1 Strategy Study (I have used that report because the WLR has not been tested in the AEE models. The values are higher than those in the AEE, but are suitable for this assessment).

94 Based on Table 3-1 of that report (included as **Annexure F** to this evidence) I have estimated future traffic demands as follows:

94.1 Through traffic is estimated at up to 12,000 vpd;[31]

94.2 Local demand for a 'western' arterial is estimated at between 9,500 and 13,000 vpd, varying along its length;[32] and

94.3 Local demand for an 'eastern' arterial on SH1 arterial is estimated at between 11,800 and 17,000 vpd varying along its length.[33]

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30 Western Link Road Scheme Assessment Report, page 5.

31 With 69% of traffic on the Waikanae bridge in that report being 'local', 'through' traffic was estimated by applying 31% to the expected Do Minimum daily flow of 39,323 on the Waikanae bridge to get approximately 12,000 vehicles per day.

32 Based on the predicted flow on the WLR.

95 This analysis suggests that the 'local' demand for using the SH1 corridor is greater than that for the WLR, and as such does not support the suggestion that SH1 is distanced from those wishing to use it.

Connections and connectivity

96 At paragraph 50, Mr McIndoe states that the Project has 11 connections. I am not sure why he has excluded the crossings over the Expressway at Poplar Road and Peka Peka Road. He also appears to have failed to count the pedestrian/cycle link near Leinster Avenue[34] or to acknowledge the provision for the future Ihakara Street Extension[35].

97 At paragraph 84, Mr McIndoe expresses the view that the Expressway will preclude the ability for internal streets to connect beyond the boundaries of the Paraparaumu Town Centre zone and hence that the Expressway will inhibit movement, resulting in the Town Centre becoming an "isolated pod".

98 I simply note in this respect the provision for a future Ihakara Street Extension and the 'Town Centre Link' which are proposed with the development of the town centre and Airport precinct (see Figure A2, page 130 of TR34).

Expressway speed environment

99 At paragraph 125, Mr McIndoe suggests that the "flaws and adverse effects" he perceives could be avoided by "changing the speed environment in the new road".

100 I presume Mr McIndoe is referring to a lowered speed on the Expressway, in which I case I consider that his suggestion would be impractical. It would not be feasible to lower the speed environment for the Expressway, given its alignment and form (with its multiple lanes, divided carriageway, grade separated intersections and lack of direct property access).

Existing SH1 alignment comparison

101 At paragraph 126, Mr McIndoe suggests that the existing SH1 would be more capable of accepting high speed through traffic without compromise to local neighbourhoods.

102 As outlined in my EIC, I do not consider it would be possible to achieve the desired outcomes for the Project (as outlined in the Project objectives) without effectively creating a similar Expressway form in that corridor. The substantial change in property and street

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[33] This was estimated by subtracting the 'through' traffic of some 12,000 vpd from the flows predicted on SH1 with the WLR in place to gain an indication of the local traffic that would wish to continue using SH1. This gives values of between 11,800 and 17,000 vpd varying along its length.

[34] See chainage 3100 on drawing CV-SP-106.

[35] See chainage 5450 on drawing CV-SP-109.

access associated with such a facility would have a significant impact on the transport system in that area. I address this in more detail in response to the evidence of Mr Lunday.

JAMES LUNDAY ON BEHALF OF SAVE KAPITI (SUBMITTER 505)

103 The thrust of Mr Lunday's evidence is that insufficient consideration has been given to an option that has both the local WLR arterial and an upgrade of the existing SH1 corridor to provide the desired State highway through function. I have reviewed the suggested '4th option' he promotes, but first comment briefly on some transport-related statements in this evidence:

103.1 At paragraph 18, Mr Lunday states that the NZTA's option investigation omitted to consider the WLR option which he comments "*...eased traffic on SH1 sufficiently to achieve NZTA traffic improvement targets on National network without further improvements to State Highway*". He does not provide any details in support for this statement. However, I addressed this in my EIC (paragraph 205) explaining how, with the WLR on its own, the performance of the State Highway would be LoS D. That is below the desired level and would not, in my opinion, achieve the Project's stated objectives.

103.2 At paragraph 34, Mr Lunday states, in regard to the WLR, that Stage 3 and 4 "*was deemed unnecessary for National purposes*". This seems to contradict the Scheme Assessment Report (SAR) for the WLR that states that: "*Stage 1 of the Western Link Road can therefore not be constructed without Stage 3 and a grade separated SH1 interchange.*"[36]

Review of the Project

104 At his paragraph 91, Mr Lunday summarises his review of the proposed Project. I disagree with a number of the statements he makes regarding transportation issues, which I describe below:

"a) *Fails to separate the Local and National Networks.*"

104.1 The Project will fully separate 'national' (through) traffic and local traffic on the existing SH1. Local traffic will however use the new route and hence will not be fully separated from through traffic. However, unlike the existing SH1 route, this 'mixing' will occur on a facility that can better accommodate it, due to the removal of direct property access and at-grade intersections and provision of divided, multi-lane carriageways. In my opinion, no option that completely separated through and

[36] Western Link Road Scheme Assessment report, Page 13.

local traffic (such as an Expressway with no intermediate connections), would meet the Project objectives. Therefore, none is a valid option.

"d) Only partially alleviates congestion issues at the National/Local Network intersections (grade-separated as opposed to lights, intersections are Local Network as well as National Network connectivity points)."

104.2 I disagree with this because the through route is fully grade separated, and the intersections between the Expressway ramps and the local network have been designed to provide a good level of service.

"e) *Only partially alleviates State Highway inefficiency (Expressway still used as part of the Local Network)."*

104.3 This is incorrect, as the through route is expected to perform very efficiently at LoS B or better.[37]

"g) Slightly improves permeability across detuned State Highway (still a high speed road)."

104.4 The urban areas of the existing SH1 corridor already have urban speed limits of 50 or 70 km/hr. I consider that, irrespective of the traffic levels, those speed limits (as well as the 80km/hr speed limits through the rural sections) are appropriate to the environment through which they pass, and to the intended future arterial function of that corridor. Speed limits are generally set based on criteria and analysis defined in a 'warranting' process. That process considers the specific environment, including density of property access and intersection spacing. Even if a change in limit was considered appropriate, significant changes to that environment could be required to be able to achieve such a change, which is outside the scope of this Project.

"k) Provides not only no improvement to the Local Network, but degrades it due to the 'arterialisation' of the east/west connectors brought on by reduced permeability and overpass/underpass configuration."

104.5 In transport terms, this is also incorrect, as substantial benefits are expected to the local transport system.

Consideration of the alternative 'SH1 Upgrade'

105 I have reviewed the transport elements of the suggested 'Option 4' alternative presented in the "Urban Design Review" (2009) attached

[37] TR32, page 57.

to Mr Lunday's evidence (as "Attachment 2") and which forms the basis of his suggested 'alternative' option.

106 The 'fourth option' is shown to have a 4-lane, divided carriageway form, however very limited access is provided. In regard to the suggested access, I would note the following:

106.1 The south-facing ramps and a southbound off ramp at Paraparaumu would provide poor symmetry and 'legibility' of the network with all of the ramps entering or leaving at different locations and no northbound on ramp.

106.2 The single northbound access to Waikanae Town Centre would similarly provide very poor symmetry and legibility.

107 South of Paraparaumu centre, the information provided indicates that that the Expressway will not have direct property access. However, parallel service roads to provide property access are not shown and it is not clear that both a 4-lane expressway and 2-way service lanes could be accommodated in the room available.

108 Similarly, no detail is given of how the new alignment east of the railway at Paraparaumu would reconnect to the existing SH1 corridor, or whether a wholly new route is proposed parallel to the existing route.

109 The concept for Waikanae shown at page 16 seems more problematic due to:

109.1 Substantial changes to existing properties currently accessed of SH1; and

109.2 The apparent replacement of the current local functionality of SH1 by new parallel service roads east and west of SH1. The new 'main street' west of SH1 appears to travel right through the existing town centre as well as a substantial number of residential properties north of the centre.

110 North of Waikanae, no details are provided on how access to properties currently fronting SH1 would be provided, and I assume that service lanes are intended. Given the rural nature of this part of SH1, such service lanes would be significant in length and effectively result in 6 lanes of new road between Raumati and Peka Peka (4 on the new expressway and 2 on the new service roads/lanes).

111 This option appears similar to either Option 1 (upgrade existing SH1 route) or Option 3 (railway corridor) considered in the Kapiti SH1 Strategy Study. That report assessed that those two options were significantly more expensive, had much lower transport benefits and

would take up to 5 years longer to construct the Expressway option following the WLR corridor.

112 Overall, the suggested 'fourth option' would expect to perform very poorly in transport terms and have significant impact on local property access and the Waikanae Town Centre.

Issues with the 'WLR Plus SH1 Upgrade' alternative

113 At paragraph 103, Mr Lunday provides his summary of issues with his suggested alternative option. I respond to the following statements he makes on transportation issues:

a) *"By managing the configurations of the grade separated interchanges at Kapiti and Waikanae the only component of local traffic to use the National Network will be a small amount from Waikanae East and around Waikanae Town Centre".*

113.1 The concept provided indicates full connection south of Paraparaumu and north of Waikanae (with limited connections in between). I do not consider that the function of a 'National' road is to completely bypass major urban areas and this is reflected in the National State Highway Strategy[38] which describes the function of a State Highway as follows:

> State highways form an integrated national network of inter-regional and inter-district routes, and major urban arterials. While they form part of a wider roading network, the distinguishing functions of state highways are to:
>
> - Connect major centres of population
> - Serve major urban corridors
> - Provide access to:
>   - Major ports and airports
>   - Major industrial areas
>   - Major primary production areas
>   - Major tourist areas and places of interest

113.2 Therefore, if Mr Lunday is correct about the limited amount of local usage of the new route, in my opinion such lack of access to the 'national' route would mean it will not appropriately perform its 'State Highway' function in adequately providing access to major population centres, urban corridors, tourist and industrial areas within Kāpiti.

[38] http://www.nzta.govt.nz/resources/national-state-highway-strategy/docs/national-state-highway-strategy-2007.pdf

"Most Waikanae traffic will use the WLR route, providing relief to the State Highway."

113.3 As described in response to Mr McIndoe, this is incorrect, with more 'local' traffic crossing the Waikanae River expected to use the existing SH1 corridor than the WLR.

114 Although I addressed the WLR alternative in my EIC, Mr Lunday has provided further information on an alternative option that includes both the WLR and upgrades to the existing SH1 to provide the desired improvements to 'through' traffic function. Based on a review of the information provided and previous analysis, I have not found any reason to alter my previous conclusions. Specifically, it appears to me that consideration of such an alternative is based on an incorrect interpretation of the requirements of a 'national' route and incorrect assumptions about the level of local traffic demand on the existing SH1 corridor.

DR WAYNE HASTIE ON BEHALF OF GREATER WELLINGTON REGIONAL COUNCIL (684)

115 Dr Hastie has suggested amendments to the suggested Condition DC.X3 providing for passenger transport planning staff of GWRC to be involved in the consideration of the bus stops that need to be relocated as part of the Project, and that the costs associated with such works be part of the Project.

116 I consider this suggestion to be appropriate and support his suggested amendments, which are shown at **Annexure J.**

FRASER COLGRAVE ON BEHALF OF KAPITI COAST AIRPORT HOLDINGS LIMITED (525)

117 In essence, Mr Colgrave suggests that the level of growth assumed in the models for 2026 in Paraparaumu is low, and that a more realistic scenario would be the "Full growth" scenario used as a sensitivity test in the AEE[39].

118 I am not an economist or an expert in commercial demographics, although I am experienced in collating land use and other inputs for use in forecasting future travel. My response to Mr Colgrave's evidence does not here seek to prove or disprove his predictions. Rather, I clarify the process used in developing the forecasts in the AEE and consider the basis for Mr Colgrave's predictions.

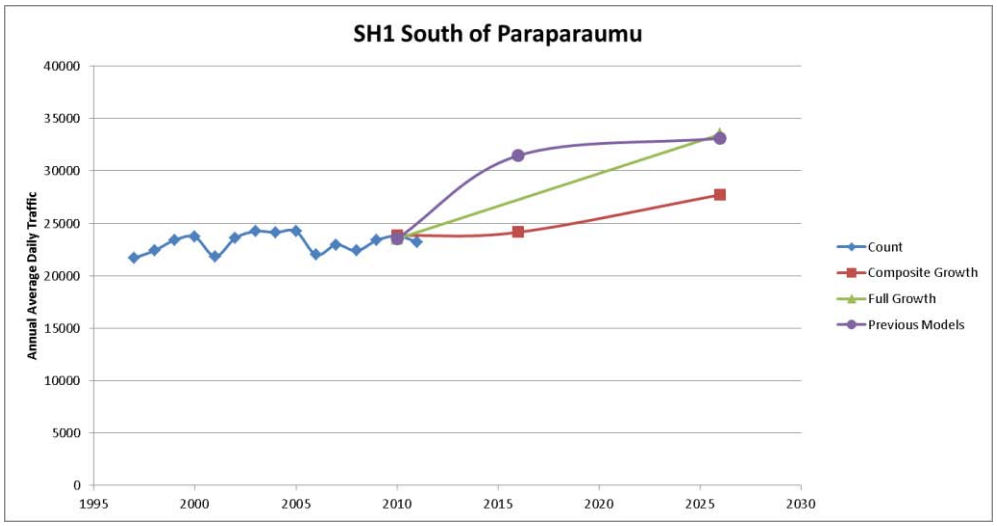
119 I would firstly note that, in my experience with growth forecasting to assess transport infrastructure, there is danger obtaining land use development predictions directly from those with a vested interest. For example, in the early years of using the regional transport model for Auckland (mid 1990's), it was not unusual for

[39] Evidence of Mr Colgrave, paragraph 87.

employment forecasts to be developed by each local authority when assessing projects in those areas. This led to a situation where large future employment levels were either added to the region or 'moved around' the region depending on the location of the project being assessed. This was a kind of 'optimism bias' which resulted in unrealistically high levels of growth being forecast for some projects.

120 The approach taken to the AEE forecasts was based on an initial review of the models previously developed for the Kāpiti Coast (and as used in previous assessments of both the WLR and early expressway options). This review indicated that growth levels in that model were substantially faster than those in the regional model, and implied levels of traffic growth significantly higher than recent trends. It was identified that the updated model being developed for the Project should revisit those forecasts as, in the professional judgement of myself and the modelling team, the implied rate of traffic growth in the previous models was not realistic, especially given the change in economic conditions and associated reductions in traffic growth.

121 To demonstrate the rate of growth in the previous and current models, I replicate below the graph from my EIC showing the predicted traffic growth in comparison to historic growth trends, but with the traffic prediction from the previous models[40] and the 'Full Growth' scenario tested in the AEE:



122 As reported in TR34 and TR32 of the AEE, the starting point for the updated land use forecasts used were the forecasts developed by the GWRC for use in their regional planning (and WTSM model). In my experience, the use of regionally-developed land use forecasts is the standard approach to the assessment of large transport infrastructure, such as has been used in Auckland, Christchurch, Wellington and the Bay of Plenty. However, a review of those WTSM

[40] Based on the value in Table 3-4, page 18 of the Kapiti SH1 Strategy Study.

forecasts showed levels of growth that clearly did not fully consider the planned growth in Kāpiti. Therefore the modelling team was faced with effectively two levels of forecasts. One, the regional forecasts, showed little, if any consideration of growth in the planned areas (especially Paraparaumu Town Centre, Kapiti Airport and Ngarara). Against those forecasts were previous forecasts which included full development of those zones, and which resulted in levels of traffic growth that in our considered judgement were not realistic within the modelling timeframe of 2026.

123 It was my professional judgement that use of the raw WTSM forecasts would understate growth in Kāpiti, but to assume full development by 2026 of the identified growth areas was likely to over-state the rate of growth[41]. The modelling team and I therefore acknowledged the high level of uncertainty in growth and adopted what might be termed a pragmatic approach to estimating the inputs to the 2026 models (to assess effects). This was effectively to split the difference between the regional forecasts and local (full growth) forecasts in those identified areas, but to also undertake sensitivity testing with higher growth to test the performance of the Project under those longer-term/higher forecasts. Mr Colgrave is somewhat critical of the approach adopted as being 'arbitrary'. He has developed his own method for forecasting growth in the Airport and town centre areas, which is basically to assume that commercial floor space growth is proportional to population growth. In doing this, he shows that the historic growth in this ratio is 13m^2 per person (see his Figure 4[42]).

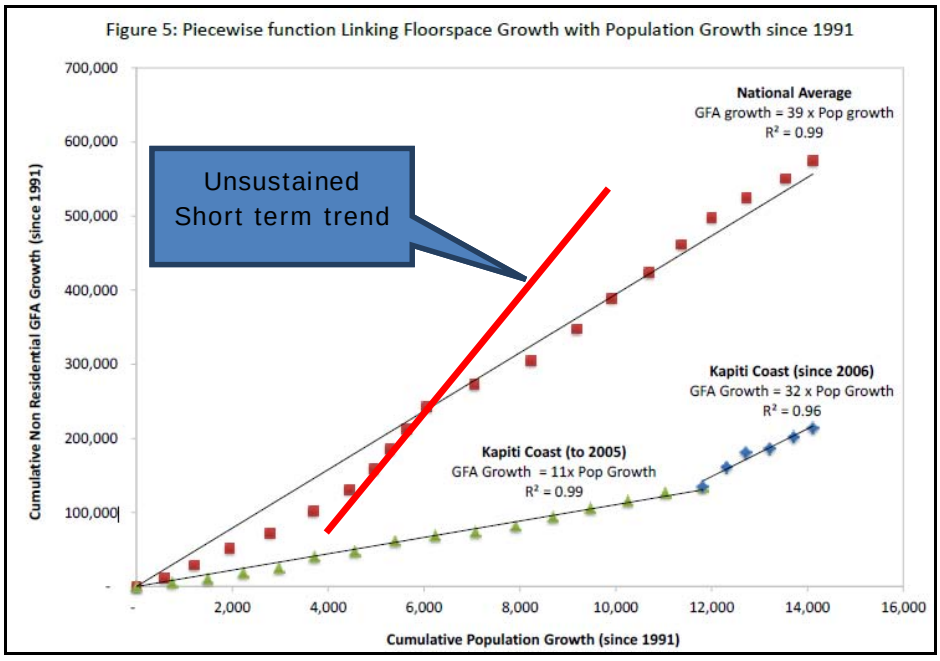
124 However, he has chosen to ignore the long-term trend and use a short-term trend, with a ratio nearly 3 times greater than the historic trend at 32m^2/person.

125 I do not consider it good practice to use such short-term trends for future predictions in this way, unless there are clear reasons that justify an underlying change in growth patterns. The dangers of using short-term trends can be seen in Figure 5 of Mr Colgrave's evidence for the national level data (which I reproduce below). Here it can be seen that a short-term change in the national level ratio was clear between population values of 4,000 and 6000, however that trend was not sustained over the longer term.

[41] This is a very similar process used elsewhere such as for the Tauranga Eastern Link RoNS project, where regional forecasts were used as a starting point, but with specific adjustments made to selected, known developments. I would also note that after the initial analysis, the growth forecasts in those identified areas were reduced as they were clearly found to be optimistic in terms of their assumed rate of growth.

[42] I note in his paragraph 42 he states that the value is 15m2/person, however this discrepancy is not critical to the approach I have used here.

Figure 1 reproduction of Figure 5 from the Evidence of Mr Colgrave



126 Mr Colgrave has not provided any reasons which would explain the underlying structural change, and hence I would not consider it prudent to assume such a short term trend was appropriate for long-term forecasts.

127 The second key element to Mr Colgrave's forecasts is his selection of population forecasts. From the three forecasts derived by Statistics NZ (low, medium and high growth), he has rejected the low growth values as being unrealistic and chosen to simply split the difference between the Medium and High growth forecasts (I note this 'splitting the difference' method is very similar to the one my team adopted, but which Mr Colgrave considered to be 'arbitrary').

128 I am not suggesting that Mr Colgrave's predictions are incorrect, only that they are based on assumptions which, if altered, give a significant range in values and hence remain subject to a high level of uncertainty. I believe it is prudent to recognise such uncertainty. For example, in **Table 2** below I show the potential range of floor area growth predictions using the short and long-term growth ratios and the range of population forecasts. I also include the 'mid-point' (between medium and high) population growth value preferred by Mr Colgrave. The bold (red) values are those recommended by Mr Colgrave.

Table 2 Range of Floor Area Growth Predictions

Population Growth	**2026**	**2031**
	Floor Area to Population Growth Ratio	

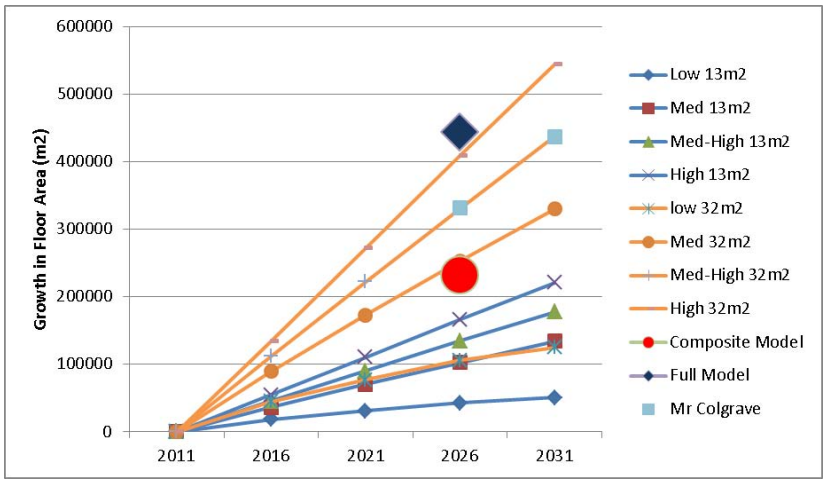
	13m2/pop	32m2/pop	13m2/pop	32m2/pop
Low	42,900	105,600	50,700	124,800
Medium	102,700	252,800	133,900	329,600
Med-High	134,550	**331,200**	177,450	**436,800**
High	166,400	409,600	204,000	544,000

129 Mr Colgrave's analysis showed a potential range of commercial growth (by 2031) of between 124,800m^2 and 544,000m^2. Based on the two main assumptions described above, he estimates the most likely result to be 436,000m^2. The table above shows that the longer-term GFA ratio and the medium population growth forecasts give a prediction of 133,900m^2.

130 Using Mr Colgrave's assumptions for the year 2026 suggests 331,200m^2, while using the longer-term growth ratio suggests a range between 42,900m^2 and 166,400m^2. The composite growth models used for 2026 have some 232,000m^2, which is clearly within the feasible range of values, and higher than any value indicated using the longer-term growth ratio of 13m^2/person.

131 I illustrate the range of values in the following graph. The orange coloured lines are those using Mr Colgrave's assumptions, while those in blue use the longer-term floor-area-to-population growth ratio. I have also indicated the level of growth used in both the 'Composite' and 'Full' growth models[43] and the values suggested by Mr Colgrave. In my opinion, this shows that the modelled assumptions are representative of the range of growth, while Mr Colgrave's are at optimistic end of the range.

[43] I have based these on the non-residential growth elements as indicated by Mr Colgrave, namely 443,183m^2 from paragraph 16 of his evidence. For this 2026 assessment I have used 139,531m^2 for the Airport and 90,000m^2 for the Town Centre.



132 Although the AEE included a sensitivity test using higher growth, Mr Colgrave states that the 'High Growth' scenario has effectively been ignored[44]. This is not correct, as the High Growth scenario has been used as a sensitivity test and to check that the Project will perform adequately under that higher growth.

133 I agree with Mr Colgrave that the Project itself might enable a higher level of growth. However, such a difference was not directly considered in the models used to assess effects (for the reasons I later explain in response to Ms Genter's evidence).

134 In summary, Mr Colgrave's own analysis shows the very wide range of possible commercial growth in Paraparaumu. Although he is critical of the 'arbitrary' approach that was adopted in the AEE, in my opinion his major assumptions of using only short-term growth trends and higher population growth than forecast by others are highly uncertain. When (what I consider equally if not more valid) alternative assumptions are used, the prediction is consistent with what my team has modelled. In fact, I consider that the information provided by Mr Colgrave has further confirmed the level of uncertainty in the forecasts and the appropriateness of the professional judgement we applied in developing the forecasts for the AEE.

135 I turn now to the potential implications of 'incorrect' forecasts. At paragraph 34, Mr Colgrave raises a concern that low growth forecasts may result in the network being of a lower capacity than required for key planned development to reach its full potential. The AEE undertook modelling using the Full Growth scenario (which Mr Colgrave supports[45]) to assess the performance and capacity of the Project and hence in relation to this Project I consider that this risk has been addressed.

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[44] Evidence of Mr Colgrave, paragraph 32.

[45] Evidence of Fraser Colgrave, paragraph 17.

136 At paragraph 14, Mr Colgrave discusses the 'virtuous cycle', where transport projects can result in higher growth. I agree that transport improvements have the potential to result in higher (or faster) growth. However, because the assessment of effects uses the same level of land use growth in both the 'with' and 'without Project' scenarios, it was not considered appropriate to overstate the level of growth likely in the assessment. Overall, I have not altered my view that the composite growth used in the models is realistic and that the methodology used appropriately considers both the short and long term growth potential.

137 I discuss this further in response to Mr Tim Kelly's growth forecasts related to the Airport Precinct.

TIM KELLY

138 Mr Kelly outlines[46] his general support for the Project including the significant improvement in accessibility it provides to the District. However, he expresses concerns about the effects on accessibility to the Airport. I have therefore focussed this response on those concerns.

Congestion on Kāpiti Road

139 At paragraphs 29-32, Mr Kelly outlines his view that the lower number of connections from the Expressway to the local network in comparison to the previous WLR could cause higher traffic flows and congestion at locations such as Kāpiti Road. As a first response, I note that the Expressway intersection with Kāpiti Road is being designed to a higher performance level (LoS C) than was proposed for the WLR intersection with Kāpiti Road (LoS D)[47]. I provide further information on this later in my evidence.

Traffic effects on Paraparaumu and Raumati Network

140 At paragraph 39, Mr Kelly requests information on traffic flow changes on a number of roads south of Paraparaumu Town Centre. In **Annexure G**, I provide a graphic showing the expected change in daily traffic flows in the area around the Airport and south of Paraparaumu. This is the same as that provided in the AEE (TR34 Figures 6.1 and 6.2), but focusses on this specific area. I show the 2026 daily traffic flows (Do Minimum and Option) at key locations in the following Table:

[46] Evidence of Mr Kelly, paragraphs 23 and 24.

[47] See paragraph 269 of my EIC. I note that the levels of growth in the current models are less at 2026 than those used for the WLR, however even with full growth the Expressway intersection is expected to have a LoS C.

Location		Do Minimum (2026)	Option (2026)	Abs. Difference	% Difference
1	Old' SH1 (Poplar Avenue - Raumati Road)	27,500	15,200	- 12,300	-45%
2	Old' SH1 (Raumati Road - Ihakara Street)	27,400	16,000	- 11,400	-42%
3	Raumati Road (SH1 - Rimu Road)	6,400	5,500	- 900	-14%
4	Ihakara Street (SH1 - Rimu Road)	9,400	10,700	1,300	14%
5	Ihakara Street (Rimu Road - Airport)	9,400	9,600	200	2%
6	Ihakara Street (Airport - Kapiti)	1,100	1,300	200	18%
7	Rimu Road (Raumati Road - Ihakara Street)	13,000	12,200	- 800	-6%

141 From this I note that the effects of the Project are similar to those previously identified, namely that:

141.1 Large reductions in traffic are expected on the 'old' SH1;

141.2 Medium levels of traffic reduction are expected on Raumati Road;

141.3 A small reduction in traffic is expected on Rimu Road; and

141.4 The changes on Ihakara Street are mixed with some increases and some decreases.

142 At paragraph 42, Mr Kelly suggests that a breakdown of the travel time changes is required to provide a holistic picture of the road conditions. Such a breakdown is provided in Appendix 34.E of TR34. With regard to Kāpiti Road, that data confirms that the additional delay caused by the Expressway is focussed around the interchange area.

143 At paragraph 43, Mr Kelly suggests that travel times to/from the Airport would be useful. I provide such information from the 2026 models in **Table 3** below. This shows travel times with and without the Project and for two locations related to the Airport: firstly to the access point on Kāpiti Road and secondly to an access point on the future Ihakara Street Extension (which would represent the mixed-use development area proposed around the Airport precinct).

Table 3 Airport Access Times

	2026 AM Peak Hour Airport Journey Times (Min)	Do Minimum		Option		Difference, Do Min. cf. Option	
	Route	To	From	To	From	To	From
1	Airport (Ihakara St Ext access) - Ihakara Street / SH1, Paraparaumu Town Centre	2.7	3.1	2.7	3.1	0.0	0.0
2	Airport (Ihakara St Ext access) - SH1 South, Poplar Avenue	5.3	15.9	4.2	4.8	-1.1	-11.1
3	Airport (Ihakara St Ext access) - SH1 North, Otaihanga Road	10.1	9.1	7.7	7.9	-2.5	-1.2
4	Airport (Kapiti Road access) - Kapiti Road / SH1, Paraparaumu Town Centre	3.4	3.2	4.4	4.3	1.0	1.1
5	Airport (Kapiti Road access) - SH1 South, Poplar Avenue	7.8	14.8	7.4	8.1	-0.4	-6.7
6	Airport (Kapiti Road access) - SH1 North, Otaihanga Road	8.9	8.1	9.0	8.5	0.1	0.4

	2026 PM Peak Hour Airport Journey Times (Min)	Do Minimum		Option		Difference, Do Min. cf. Option	
	Route	To	From	To	From	To	From
1	Airport (Ihakara St Ext access) - Ihakara Street / SH1, Paraparaumu Town Centre	3.2	3.7	3.1	3.5	-0.1	-0.1
2	Airport (Ihakara St Ext access) - SH1 South, Poplar Avenue	7.6	14.9	4.8	6.4	-2.8	-8.5
3	Airport (Ihakara St Ext access) - SH1 North, Otaihanga Road	8.8	13.8	7.7	8.5	-1.0	-5.3
4	Airport (Kapiti Road access) - Kapiti Road / SH1, Paraparaumu Town Centre	3.6	3.2	4.5	4.1	0.9	0.9
5	Airport (Kapiti Road access) - SH1 South, Poplar Avenue	10.4	11.9	7.6	7.9	-2.8	-4.0
6	Airport (Kapiti Road access) - SH1 North, Otaihanga Road	9.2	11.4	9.1	8.5	-0.1	-2.9

144 This shows that the Project is expected to significantly improve access to/from the Airport Precinct for most movements, with the exception of the route along Kāpiti Road to the Paraparaumu Town Centre. This increase is due to the extra Expressway traffic signals.

145 At paragraph 45, Mr Kelly questions whether the widening of Kāpiti Road has been included in the models. In the 2016 AEE models, no widening of Kāpiti Road has been assumed outside that required at the Expressway intersections. In the AEE 2026 models, widening is included between Arawhata Road and the Expressway because Arawhata Road was assumed to become a 4-arm 'cross' junction with the Town Centre Link with traffic signals. It was assumed that widening associated with that KCDC project would abut that needed for the Expressway intersections without a gap of a very short section of 2-lane road. Since those models were undertaken, KCDC has indicated that it will be installing traffic signals at the Milne/and Te Roto Drive intersections, so again it was assumed that those works tied into the Expressway works without a gap.

146 In my EIC (page 84), I suggested a condition that required a Network Integration Plan to be developed that co-ordinated these various works (DC.X3).

147 At paragraphs 48 to 51, Mr Kelly expresses concern about the uncertainty in how the Ihakara Street extension was treated in the AEE. I can confirm that the Ihakara Street extension was represented in the models as follows:

147.1 No connection was assumed to Waikare Road or Milne Drive;[48]

147.2 Connections were assumed to Tahi Road and Toru Road; and

147.3 A connection was assumed to Kāpiti Road at Magrath Avenue.

148 My understanding is that these assumptions are consistent with the 'Notional' roads shown for this area in the KCDC District Plan (map 11), with the exception that no notional road is shown connecting to Kāpiti Road. However, the transport assessment undertaken for the Plan Change included the link to Hurley Avenue, and such a link is included in the infrastructure thresholds for the development of the Airport mixed-use precinct.

Growth Assumptions

149 In his paragraphs 52 through 69, Mr Kelly raises his concern that the rate of growth for the Airport precinct has been understated and

[48] I note that Figure 4.2 of my EIC shows that a link to Milne Drive was intended, however following discussions with KCDC that link was not included in the AEE models.

that this "..*could lead to problems of congestion on the local road network for which the responsibility would then fall upon KCDC and/or the Airport to resolve."*[49]

150 I have addressed the growth forecasts for Airport and Paraparaumu Town Centre in response to the evidence of Mr Colgrave, which has confirmed my opinion that the approach taken to growth forecasting in the AEE is appropriate. I do however wish to further explore the development controls of the Airport precinct.

151 I have read the original planning commissioners' report for the Plan Change 73 hearing. It is clear that traffic congestion was a concern raised by a number of submitters, and also identified in the transport assessment undertaken by KCDC. Specifically, it was identified that the development could absorb all spare capacity in the network and could create unacceptable queuing on the local network[50]. The methods to address those concerns included:

151.1 Use of traffic thresholds that require infrastructure to be in place, so that development cannot proceed ahead of capability of transport infrastructure to support it; and

151.2 Use of a "ceiling' on "controlled activities" proposed in the plan change rules.

152 These themes are demonstrated in the issues, policies and standards of the operative District Plan, including:

152.1 Section B.19 (Page B-35) which has a description of the resource management issues as including:

"*Managing development to avoid, remedy and mitigate the effects of airport development on transport and service infrastructure*",

152.2 Policy 5: Traffic Effects (page C19-6):

"*Development within the Airport Zone shall ensure that any traffic effects are avoided, remedied and mitigated through restrictions on the timing of development",*

152.3 Chapter D.19, which includes the rules and standards for the Airport Zone and specifies the following activity status:

(a) below 102,900m^2 - Controlled activity;

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[49] Evidence of Mr Kelly, paragraph 68.

[50] Kapiti Coast District Council Plan Change 73 – Rezoning of Paraparaumu Airport Assessment of Transport Issues, section 16.

(b) between 102,900m^2 and 282,450m^2 - Restricted Discretionary activity;

(c) greater than 339,400m^2 - Non Complying Activity.

152.4 Restricted Discretionary activities require a full transport assessment, including assessment of:

(a) The expected traffic generation from the Airport Zone;

(b) The effects on the local road network and State Highway 1 within the District, and the timing of any improvement works on the local road network and State Highway 1.

153 There are also Standards requiring provision of various infrastructure prior to certain levels of development (which includes parts of the WLR and the Ihakara Street extension being in place below 102,900m^2).

154 I raise these issues not to suggest that development will not or is unlikely to occur in the Airport Precinct, but rather to identify that the concerns about traffic effects associated with that development still need to be considered as development exceeds the threshold of 102,900m^2. The rate of growth of the Airport Precinct and the generator of 'effects' (that is, does the development impact on the network or does the Project impact the development) are moot points. However I do not agree with Mr Kelly's opinion that the development should be considered 'committed'[51], with the implication that any residual congestion associated with that level of development is the responsibility of the Expressway Project to resolve.

Network Performance under Full Growth Scenario

155 At paragraph 71, Mr Kelly suggests that there is inconsistency in the additional traffic associated with the Full Growth development. The reference to the additional 1,000 trips in TR32 is in the context of the local corridor model, and hence only reflects the increase in traffic that would use that part of Kāpiti Road. This is therefore not inconsistent with the change in total traffic associated with the Full Growth scenario.

156 At paragraph 76, Mr Kelly describes the results of our assessment of the Kāpiti Road corridor under the 'Full Growth' scenario. The issues described in the AEE were generally due to congestion at the Milne and Te Roto Drive intersections, which in those models did not include traffic signals (the existing pedestrian traffic signals were included and were identified to create congestion). Given that KCDC has now included the upgrade of the two intersections in its forward works programme, I have requested those models to be re-run with

[51] Evidence of Mr Kelly, paragraphs 53 and 55.

those signals added. Again, my modelling team has focussed on the more critical PM peak, for which I provide results in **Annexure I**. In summary, the models show:

156.1 An overall LoS C at the Expressway intersections (worst movement LoS F);

156.2 Overall LoS C at the Te Roto/ Milne Drive intersections (worst movements LoS D); and

156.3 Overall LoS C at the Arawhata/ Town Centre intersection (worst movement LoS D).

157 From this, I have concluded that this corridor can accommodate the traffic demands expected under the Full Growth scenario, albeit with some movements showing relatively high delays and queues (and assuming that upgrades to the local network[52] to accommodate that growth are provided).

158 Although I consider the proposed Expressway design is appropriate, I consider that it would be prudent to provide for some flexibility to alter layouts in the future as traffic patterns change under the longer-term growth. Therefore, having sufficient designation width to consider options as follows would be helpful:

158.1 Potential to have double right turn lanes from the off-ramps at Kāpiti Road; and

158.2 Ability to add extra lanes at the Poplar Avenue interchange (or to add partial or full traffic signals if future flows become unbalanced).

159 I have discussed this with **Mr Noel Nancekivell**, who has confirmed that the designation in these areas is sufficient to provide for additional capacity in the future if needed. The potential future need for upgrade at Poplar Avenue was identified in the AEE[53], which showed that an additional lane at the roundabout would provide a LoS B under the Full Growth scenario.

160 At paragraph 78, Mr Kelly notes how the Full Development model tests show considerably higher travel times on some routes when compared to the Composite Growth. My interpretation of those results is that they confirm the concerns raised during the Plan Change process that the level of growth anticipated in the Airport area (along with that for the Town Centre) could indeed absorb all the available capacity on the local network and create adverse

[52] In this corridor this relates specifically to traffic signals at the Milne/Te Roto Drive intersection and the 'Town Centre Link' connecting into Arawhata Road with the associated installation of traffic signals.

[53] TR32 page 87.

effects[54]. I consider that the provisions in the District Plan for those effects to be explicitly assessed when development exceeds a set threshold are an appropriate way to address this. I do not believe that it is the place of the Expressway Project to provide the mitigation required to accommodate that growth.

Northbound Off Ramp at Ihakara Street

161 At paragraph 81, Mr Kelly considers the sensitivity test of an additional off-ramp connecting to Ihakara Street to be superficial as it only relates to the AM peak and was undertaken using the composite growth.

162 Mr Kelly is not correct about the growth scenario because, as described in TR34 (page 95), the test was undertaken using the Full Growth models. Only the AM peak model results were reported because, this is a northbound off ramp to the Airport and Paraparaumu Town Centre, and as such it was considered to be most useful to report at a time when commuters entered those employment areas.

163 At paragraph 82, Mr Kelly questions whether traffic was able to turn right from the end of the ramp. I can confirm that only left turning traffic was included in the models.

164 I have requested additional model scenarios that permit the right turn from the off-ramp to Ihakara Street east for both the AM and PM peak periods. The results of this are included as **Annexure I**. In the AM peak these extra tests show only a small demand for the right turn onto Ihakara Street, and confirm the earlier conclusion that the ramp does not materially alter the volume of traffic on Kāpiti Road (which was the purpose of the original test).

165 The PM peak test shows a similar pattern of change but with the additional ramp diverting some traffic from the Expressway northbound off ramp at Kāpiti Road onto the new off-ramp and onto the Ihakara Street extension. The model indicates some increases and some decreases in traffic through the interchange area, but no net reduction in traffic. Analysis of the new ramp shows it is heavily used by vehicles from the south heading to Paraparaumu Beach via the local roads such as Tahi Road. The transport assessment for the Airport Plan Change previously identified that such connections could create adverse effects on those local streets, so such a connection may not be suitable for that reason.

Summary of response to Mr Kelly

166 Overall, I do not agree with Mr Kelly's suggestion that the growth in the Airport precinct has been understated. Nor do I agree with his

[54] I also note that this was only a sensitivity test. As such, the Alliance modelling team has not investigated in detail the sources of that extra congestion in the wider area. However, I have undertaken a simple visual check of the predicted congestion in the models and identified that much of it relates to specific locations that could be addressed relatively simply.

view that the assessment of effects is therefore incomplete. I have however provided additional information on traffic effects on the network south of Paraparaumu and accessibility to the Airport, as well as additional tests on the suggested Ihakara Street Off Ramp and the performance of Kāpiti Road under the Full Growth scenario. As this is new information, I would suggest it be discussed further during witness conferencing.

167 From this, I have concluded that the design of the Project and the associated effects assessment is appropriate. Having said that, I understand that the designation is sufficiently wide around the Kāpiti Road and Poplar Avenue interchanges to allow scope to consider capacity enhancements, if required in the longer term.

JULIE ANNE GENTER ON BEHALF OF ACTION TO PROTECT AND SUSTAIN OUR COMMUNITIES (APSOC)

The Do Minimum scenario used

168 At paragraph 13, Ms Genter states that the Do Minimum scenario used in the traffic modelling and assessment is unrealistic because of what she describes as "*external factors underlying historic traffic growth are fundamentally changing*". She gives specific reference to her expectation that "*vehicle ownership has reached saturation and is likely to decline, petrol prices are at historic highs and may increase even further in the coming decades*".

169 Given that the WTSM multi-modal model used to forecast growth includes both a car ownership model and significant increased future fuel prices, I do not agree that the factors Ms Genter mentions make the Do Minimum unrealistic.

Land use assumptions

170 At paragraphs 18 to 20, Ms Genter asserts that the assessment of impacts is incorrect because the modelling has not included the effect of 'induced development'.

171 I do not agree with Ms Genter's opinion that the modelling approach applied "*means the assessment of impacts that is incomplete and necessarily incorrect*", for the following reasons:

171.1 The potential impacts that the Project might have on future land development have been assessed and considered during the design process. Specifically, the siting of connections to the Expressway was heavily influenced by the desire to encourage growth in the planned areas and discourage growth in the unplanned areas (see for example TR5, Section 5.3, page 59).

171.2 Predicting exactly how land use patterns will alter as a result of a Project is very difficult and the assessment of

effects would be highly sensitive to those land use assumptions[55].

171.3 It is not certain that such induced development is a direct result of the Project, to the extent that it should be considered an effect of the Project. This is because such development is dependent on many other things, such as the inclination and resources of land owners and developers, the details and context of the regulatory restrictions and the associated decision making process.

171.4 Most crucially, all such land use proposals are subject to their own detailed effects' assessments under the RMA, and decisions on their appropriateness are based on such assessments. Including the effects of such development in conjunction with assessment of the transport infrastructure would be highly problematic in regard to double counting of effects.

171.5 I consider that regional growth and transport strategies are the more appropriate forum for these issues to be addressed.

172 My preferred approach (and as adopted in the AEE), is for the land use to be common in the modelling when the transport effects of infrastructure are assessed, and for the potential impacts on development to be considered in option development and assessment.

Whether lacking a multi-modal context

173 At paragraph 21, Ms Genter raises further issues with the modelling. She maintains that it lacks a multi-modal context because it includes other sections of the RoNS without considering alternatives to a highway based solution.

174 As per my EIC, a multi-modal context was used in the developing the RLTS and Western Corridor Strategy. I consider this Project consistent with those strategies (and I note GWRC also provide evidence to this effect, via Mr Kelly).

Environmental, social and environmental costs of reduced public transport patronage

175 At paragraph 23, Ms Genter states that the environmental, social and economic costs of reduced passenger transport patronage have not been included as a disbenefit.

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[55] Ms Genter suggests such predictions could be possible using the DELTA model developed for Auckland (I presume Ms Genter is referring to the ASP model, as 'Delta' is simply the software that the model is implemented in). That model is helpful for high-level policy and strategy planning for Auckland, however in my opinion cannot be relied on to undertake detailed assessments of projects. This is because the decisions and implementation of land use developments is much too complex to be readily replicated by a mathematical model.

176 I note that the effects of reduced passenger transport patronage are reflected in the predicted increase in traffic, and therefore the effects of that increase have been captured in the subsequent effects' assessments. The impact of the project on the public transport system has been assessed in TR32 (Section 6.7, page 40).

177 At paragraph 23, Ms Genter also suggests that the Do Minimum may have underestimated public transport growth as it did not model alternative scenarios such as increased public transport supply. The planned improvements to the public transport system in this area were included in the modelling. Significant additional investment in that (or any) mode would not (by definition) constitute a 'Do Minimum' scenario.

178 The modelling included the improvements in passenger transport either recently completed or planned to be implemented in accordance with the RLTS and Western Corridor Strategy. As such, I disagree with Ms Genter's assertion.

Travel time savings

179 At paragraph 14, Ms Genter asserts that the assessment methodology is flawed because there is no evidence for travel time savings.

180 Ms Genter refers to the 2008 academic paper of David Metz, titled '*The Myth of Travel Time Saving'* to support her position. Without getting into a detailed discussion about that paper, it is important to be aware of the different definition and measurements of travel time savings being referred to. The standard practice, as used for this Project, involves the following:

180.1 Measure current travel times between selected key locations;

180.2 Predict the future travel times between those locations for both the 'Without-Project' and 'With-Project' scenarios; and

180.3 Compare the differences in those <u>future</u> travel times to give estimates of time savings between those locations.

181 A common mistake is made in comparing the future year 'With Project' travel times to the current travel times to get travel time savings. This relates to an issue with the standard method described above: once a decision is made on a Project (to proceed or not), the future travel time for that scenario can be measured, but the future travel time for the alternative cannot.

182 The transport assessment presented for this project shows the expected difference in travel time between selected locations under two future conditions (2016 and 2026). The subject of the Metz paper is different in that it considers the amount of aggregate

annual time an individual spends travelling. The core argument of the paper is that, if the aggregate amount of time an individual spends travelling does not change over time, then those individuals must be travelling further or more often or even relocating to newly accessible areas and retaining the same amount of total individual time spent travelling.

183 An analogy that shows the different interpretations of 'time savings' can be imagined with telecommunications. If the cost of a mobile call is high due to inadequate capacity, provision of additional capacity (or competition) could be expected to reduce the cost of such a call. However, after a number of years of the new service, the average household spend on telecommunications might remain the same as previously because the users have taken advantage of that improved service to expand their usage, increase the number of mobile devices, or even change careers to start a web-based company from their home. The fact that their total spend has not reduced, compared to 5 years earlier, does not mean that there is no evidence that extra service capacity reduces the cost of a mobile call.

184 In this context, therefore, I would make the following comments:

184.1 There are clear examples where improved transport infrastructure has or will reduce travel times between selected locations (for example, the travel time will be reduced between Paraparaumu Beach and Waikanae Beach as a result of the Project).

184.2 Metz (2008) deals with how individuals respond to the reduced time savings (improved accessibility), suggesting that measurement of this improved accessibility would be more appropriate than simple measurement of time savings between locations. However to my knowledge, no widely used methodology currently exists to measure such effects, especially as this also includes the issue of trying to value 'induced land use', as discussed above.

184.3 Although Metz based his analysis on private vehicle travel data, the same phenomenon (i.e. reduced travel time resulting in some people travelling further or relocating to take advantage of the improved accessibility), is also applicable to any transport improvement (such as passenger transport). It is not solely restricted to highway projects.

185 I acknowledge that the evaluation process used is not perfect. In particular, it cannot accurately predict nor monetise every behavioural response to improved transport accessibility. However, I disagree with Ms Genter's opinion that it is flawed and consider it remains the most appropriate method available for such appraisal.

Age of WTSM regional model

186 At paragraphs 27 and 28, Ms Genter suggests that the accuracy of the models should be questioned given the age of the WTSM regional model versus the recent indications of declining personal vehicle travel (VKT per person).

187 While I agree all models are likely to become less reliable as they age, I do not believe that those recent trends in VKT/person themselves indicate a fundamental flaw in the model. This is because models such as the WTSM respond to land use, travel costs and transport services, and, depending on the inputs, do show declining VKT/person. For example, I have extracted data from the Auckland regional model (which has the same general structure as WTSM model[56]), which shows the average daily VKT/person reducing from 25.7km in 2006 to 24.6km in 2026. While the magnitude of change will alter depending on the inputs to the models, it is not correct to say that the models are flawed because of the recent observed declines in travel.

In conclusion, Ms Genter presents interesting and important methodological and policy issues, however after considering them I have concluded that the approach undertaken to the effects assessment is appropriate and I have not found cause to alter the opinions expressed in my EIC.

DR MARIE O'SULLIVAN ON BEHALF OF ACTION TO PROTECT AND SUSTAIN OUR COMMUNITIES (APSOC)

188 At paragraph E.13, Dr O'Sullivan states that "*It does not appear plausible that 40,000 vehicles per day would exit the transmission gully* [sic] *route at McKays Crossing* [sic]*, and therefore either the Transmission Gully route has been overestimated or the traffic flows on the proposed expressway are likely to be higher than the transport agency has estimated*".

189 I do not agree with this statement because the AEE shows 26,900 vehicles per day on SH1 at MacKays Crossing in 2026[57] while the transport assessment for the Transmission Gully project shows 26,200 vpd in 2026 at MacKays Crossing[58]. I am not sure where the reference to 40,000 vpd has come from, however I consider that the difference between the two models is very small and will not materially alter the effects assessment.

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[56] I have used the Auckland model data solely because I had it to hand, while obtaining such data from the WTSM scenarios used for this project was identified as being more difficult. I do not consider that this is critical to the discussion.

[57] TR34, table 6.1, page 35.

[58] (http://www.nzta.govt.nz/projects/transmission-gully-application/docs/technical-report-4.pdf) , Figure 4.13.

LORETTA POMARE (#309)

190 At her paragraph 16, Ms Pomare states that the predictions of traffic usage are seriously inaccurate because recent traffic counts suggest reductions in traffic. The predictions are not based on recent traffic growth trends. Rather, as is appropriate, they are based on predictions on land use, and as such not undermined by recent changes in recorded traffic flows

191 At paragraph 18, Ms Pomare refers to her understanding of the "Law of Induced Traffic", whereby a new highway induces 39% more traffic. To my knowledge there is no universal law of induced traffic. However, standard procedures for estimating induced traffic have been used in the modelling for this Project.

192 At paragraph 30, Ms Pomare states that the Project will cut people off from bus stops and train stations. This is not correct. All bus stops directly affected will be replaced in the nearby vicinity, and the removal of significant volumes of traffic from the existing SH1 is expected to significantly improve the interface between the railway stations and the wider network, for all transport modes.

SUE SMITH ON BEHALF OF WAIKANAE ON ONE (SUBMITTER #514)

193 I have reviewed the suggested change to the Te Moana interchange configuration proposed by Waikanae on One (WOO). My understanding is that the rationale for change is not transport driven and it effectively shifts the interchange southwest approximately 200 metres.

194 Considering the proposal, I see a range of issues with the design that I would regard as "undesirable". The design lacks symmetry in its north-facing ramps and positions a motorway off ramp directly facing a residential cul-de-sac. It also adds a new intersection to Te Moana Road and makes Te Moana Road more circuitous (by 200 metres apparently). I accept, however, that none of these features are necessarily fatal in themselves. I disagree with Ms Smith's suggestion (at paragraph 80) that the design would dispense with the requirement for roundabouts. The new interchange would need the same intersection control form as the current design (either traffic signals or roundabout).

195 The more significant question concerns what the proposal would or would not offer in terms of incremental transport benefits. I do not consider that this design (even if refined to address its various difficulties) would offer incremental transport benefits as would make it worthwhile to progress over what is proposed.

Andrew Murray
26 October 2012

ANNEXURE A – EXAMPLE OF NZTA LEVEL OF SERVICE SPECIFICATIONS

Table A2.8: Minimum Performance Standards

Item	Detail
Minimum Performance Standards for Intersection Layouts Associated with the SH20 Waterview Connection	The level of service (LOS) using opening year (year 2016) and 10 year post construction (year 2026) flows during peak periods must have an intersection LOS 'C' or higher using the HCM delay criteria.
	No individual movements shall have a LOS lower than LOS 'D'
	The Degree of Saturation for individual movements for 2016 intersections should not be greater than 0.8.
	The Degree of Saturation for individual movements for 2026 intersections should not be greater than 0.9.
	Signalised intersections must not have a cycle time in excess of 120 seconds.
	Off-Ramp terminal intersections must not have the tail of the 95th percentile maximum queue within 140 metres of the motorway exit nose for 2016 and 2026.
	Intersection designs must provide adequate stacking capacity for queues, and ensure other movements within the intersection or upstream intersections are not affected by the queues.
Minimum Performance Standards for Additional Intersections outside the SH20 Alignment identified as requiring redesign	The level of service using opening year (year 2016) and 10 year post construction (year 2026) flows during peak periods must not be worse than the RLTS model using HCM delay criteria.
	Intersection designs must provide adequate stacking capacity for queues, and ensure other movements within the intersection or upstream intersections are not affected by the queues.

ANNEXURE B – KAPITI ROAD VISSIM MODEL QUEUE PREDICTIONS (2026 COMPOSITE AND FULL GROWTH, PM PEAK)

Intersection	Approach	Movement	Critical Queuing Length (m)	Option (Full Growth)		Option (Composite Growth)	
				Average (m)	Max (m)	Average (m)	Max (m)
Kāpiti Road/ Te Roto Drive/ Milne Drive	Kāpiti Road East	Through + Left Westbound at Milne Drive	180	23	213	8 {8}[1]	66 {83}
		Right Turn into Te Roto Drive	50 (115)[2]	19	83	11	71
	Kāpiti Road West	Through + Left Westbound at Te Roto Drive	160	61	437	18 {18}	104 {163}
		Right Turn into Milne Drive	50 (110)	16	82	14	77
Kāpiti Road/Arawhata Road	Kāpiti Road West	Through + Left Eastbound	185	29	144	22	90
		Right	50	29	144	22	90
	Kāpiti Road East	Through + Left Westbound	550	35	199	25	120
		Right	80	32	199	25	120
Kāpiti Road / Ramps	Northbound Off-ramp	Right + Left	310	30	287	21 {21}	149 {150}
	Kāpiti Road West	Through + Left Eastbound	170	22	142	39 {39}	152 {164}
		Right Eastbound	35	18	72	4	32
	Southbound Off-ramp	Right + Left	310	22	130	16 {16}	82 {82}
	Kāpiti Road East	Through + Left Westbound	185	24	221	25 {22}	158 {154}
		Right Westbound	35	9	68	9	55

Update of TR34 Table 8.9 – Queue Length Results; 2026 PM Peak Hour Queues; Option (Full Growth) VS Option (Composite Growth)

Notes:

1. Composite demand model has been rerun as not all of the queue data points were in original Bunnings model – queue length results are slightly changed from original report (original figures shown in { })
2. Stacking distance between intersections at Te Roto Dr & Milne Dr is 50m – total length of right turn lanes is 115m westbound (including through Milne Dr intersection) and 110m eastbound (including through Te Roto Dr intersection).
3. Critical distance for Kapiti Rd West at Te Roto Dr is to Arko Pl, a small cul-de-sac with unsignalised T-intersection west of Te Roto Dr – the closest major intersection is Langdale Ave, 710m west of Te Roto.
4. Some average & maximum queues at the ramps are higher under Composite than full growth – signals have not been changed from original LinSig timings in the Composite, whilst they have been further optimised with the full growth.

ANNEXURE C –BUNNINGS NOTICE OF DECISION

KĀPITI COAST DISTRICT COUNCIL

me huri whakamuri, ka titiro whakamua

NOTICE OF DECISION

HEARING DATE: 28th February – 1st March 2012 (Adjourned)
7th March 2012

HEARING PANEL: David Forrest (Chairperson)
Warwick Heal
Darrell Statham

DATE OF REPORT: 7 March 2012

Site Address:	**20 Milne Drive Paraparaumu**
Legal Description:	**Lot 2 DP 441854 (formerly Lot 6 DP 75592 and part Lot 1 DP 88703)**
Applicant:	**Bunnings Limited**
Proposal:	**To establish and operate a Bunnings Building Improvement Centre on the property**
Owner:	**Bunnings Limited**

1. THE DECISION:

The Panel of Independent Commissioners acting under delegated authority from the Kapiti Coast District Council and pursuant to Sections 104 and 104B of the Resource Management Act 1991 and the Kapiti Coast District Plan, grant their consent to the resource (land use) consent application to establish and operate a Bunnings Building Improvement Centre on the property at 20 Milne Drive, Paraparaumu, subject to the following conditions which are imposed under Section 108 of the Resource Management Act 1991.

Conditions:

Fees, Levies and Contributions

1. The consent holder shall pay Council Engineering Fees of $216 (GST inclusive) within 1 month of issue of the consent for plan approvals, site inspections and consent compliance monitoring.

   Note: the current charge out rate for the Sustainable Design team is $108 (GST inclusive) per hour, the Roading Engineer's charge out rate is $130 (GST inclusive) per hour. Extra fees may apply in accordance with the Engineering Fees Schedule adopted by Council from 1 July 2011.

Monitoring and Review

2. The consent holder shall notify the Council's Compliance Officer of the start and completion dates of the works in writing 48 hours before the works are carried out.

3. The consent holder shall pay to the Kapiti Coast District Council the actual and reasonable costs associated with the monitoring of conditions (or review of consent conditions), or supervision of the resource consent as set in accordance with Section 36 of the Resource Management Act 1991. These costs may include site visits, correspondence and the actual costs of materials or services which may have to be obtained.

   Note: Please refer to Kapiti Coast District Council's current schedule of Resource Management fees for guidance on the current hourly rate chargeable for Council's staff.

General Requirements and Procedures

4. The consent holder shall comply with the requirements of the Kapiti Coast District Council Subdivision and Development Principles and Requirements 2005, unless alternatives are proposed by the consent holder and approved by the Council.

   Note: This includes the requirement for the consent holder to advise the names and professional qualifications and experience of Suitably Qualified Persons required in terms of Clause B(iii) of Part 3 of the Kapiti Coast District Council Subdivision and Development Principles and Requirements 2005. If the Council considers any of the nominated persons are not acceptable then the consent holder shall nominate alternative persons, or the Council may require the consent holder to employ a specified Suitably Qualified Person or Persons at the consent holders cost. Suitably Qualified Persons are required for, but not necessarily limited to, the following areas:
   - Stormwater issues
   - Traffic engineering
   - Civil works

5. The consent holder shall submit to the Council the proposed construction schedule and submit for approval copies of the plans and specifications for the

engineering development in accordance with Paragraph 1 of Schedule 1 contained in Part 4 of the Council's Subdivision and Development requirements. No work shall commence until the plans and specifications have been approved by the Council in writing.

Note: Engineering drawings shall contain sufficient detail to clearly illustrate the proposal to enable assessment of compliance with the Council's Subdivision and Development Principles and Requirements and to enable accurate construction.

6. The consent holder shall provide a copy signed by the consent holder's contractor of the Contractor Health and Safety Obligation Form as set out in Appendix 2 of Section 6 of the Council's Health and Safety Manual for those situations where connections are to be made to Council owned existing services or roads.

Stormwater

7. (a) The stormwater disposal design shall ensure that there is no increase in the volume of stormwater runoff discharged from the site in any equivalent ARI 24-hour storm event up to a 100-year event. To achieve this standard, the stormwater disposal design shall be in accordance with the design recommendations detailed in the Aurecon letter dated 15th December 2011 and held on Council's file RM110153.

(b) The consent holder shall submit the stormwater disposal design to the Council for certification. No work shall commence until the Subdivision Engineer, Kapiti Coast District Council, certifies in writing that the proposed stormwater design plans and specifications fulfil the requirements of this condition. The design proposal shall include a monitoring and reporting schedule to ensure the continued compliance with the requirements of part (e) of this condition.

(c) The design shall be in accordance with the principles contained in Part 3 Section E of the Council's Subdivision and Development Principles and Requirements 2005 where applicable to the standard required by part (a) of this condition.

(d) The stormwater disposal design submitted to the Council under (b) above shall include, but not be limited to:

- Details of the rain gardens including site-specific soakage tests to confirm the design assumptions
- Details of the underground pipe system
- Detention pond design including best management practice of low impact urban design and site-specific soakage tests to confirm the design assumptions.

(e) All on-site infiltration devices shall achieve a soakage rate of 100mm/hr after being thoroughly soaked for at least 30 minutes. If inspection, or other observation, reveals that any of the on-site infiltration devices are not performing as designed, the owner of the system must take

appropriate action. The appropriate action may include, but is not limited to, remedial action to restore the performance of the stormwater features, or pumping or gravity feeding the stormwater from the dry retention pond into Council's network once the peak has passed. The design of the *appropriate action* must be undertaken by a suitably qualified and experienced person, and be subject to Council approval.

(f) The consent holder shall ensure that all on-site stormwater facilities are maintained in sound working order so as to achieve the standard specified in (a) and (e) of this condition for the duration of the consent.

(g) The consent holder shall monitor the performance of the stormwater facilities required by part (e) of this condition in accordance with the monitoring schedule described in part (b) of this condition. The consent holder shall report the findings of the monitoring to the Kapiti Coast District Council as required by the monitoring schedule prepared pursuant to part (b) of this condition. Where necessary, the consent holder shall take appropriate action as detailed in part (e) of this condition.

Traffic and Parking

8. (a) The Building Improvement Centre authorised by this consent shall not commence trading until the intersection improvements shown on Traffic Design Group plans Dwg No: 8210-12W1A 'Indicative Intersection Layout' and Dwg No: 8210-11W1F 'Indicative Intersection Layout – Enlargement 2' have been constructed and commissioned. The intersection improvements shall be in accordance with the plans referred to here except as authorised by the Council or as required as a result of the road safety audit process.

Note: The Council has agreed in principle to the construction of the intersection improvements shown in the Traffic Design Group plans and will authorise the construction of the changes to the intersecting roads at the earliest opportunity to enable the consent holder to implement this consent. The commencement of trading is tied to the physical implementation of signalisation and any subsequent physical implementation of appropriate remediation of any serious/significant Safety Audit concerns arising from a Stage III Detailed Design / Pre-Construction Safety Audit and a Stage IV Post-Construction Safety Audit.

(b) The consent holder shall construct the entrance to the site in the position shown on Hume Architects plan RC01 Revision D (showing the revised entrance location) except as authorised by the Council or required as a result of the road safety audit process and shall disestablish the existing vehicle crossing to the site and reinstate the kerb and berm to the satisfaction of the Roading Asset Manager, Kapiti Coast District Council.

(c) The Building Improvement Centre authorised by this consent shall not commence trading until the Roading Asset Manager, Kapiti Coast District Council has certified in writing that the constructed entrance meets the requirements of this condition.

9. The consent holder shall implement the recommendations of the Travel Plan dated 29 February 2012 and held on Council's file RM110153.

10. Vehicle accesses and parking shall be developed and constructed in accordance with the Hume Architects Limited drawing 'Proposed Site Plan' Drawing No. RC01, Revision No. D, dated Jan 2012.

11. (a) The consent holder shall undertake a trip generation and car park usage survey over the following periods in the first year after the Building Improvement Centre authorised by this consent opens to the public:
    - The last weekend in February or the first weekend in March; and
    - The first weekend in November; and
    - The 3-day Queens Birthday weekend; and
    - The 3-day Labour weekend.

    (b) The specific design/format of the survey required by Condition 11(a) shall be agreed with the Council's Roading Asset Manager. The data shall be collected in a format that is consistent with the New Zealand Trips Parking Database Bureau and shall cover all transport modes of access to the store, and be made available in Excel (spreadsheet) report format to Kapiti Coast District Council on request.

12. The consent authority may within 10 working days of the anniversary of the decision of this resource consent RM110153, serve notice of its intention to review Conditions 9-11 of this consent for the purposes of dealing with any adverse effect on the environment relating to the vehicle parking layout and vehicle through routes that may arise from the exercise of consent and which it is appropriate to deal with at a later stage.

Hours of Operation

13. The opening hours for trading to the public shall be limited to 7.00am to 9.00pm, seven days a week.

14. Waste and recycling collections and external building maintenance (including any mechanical cleaning) shall not take place between the hours of 6.00pm to 7.30am, seven days a week.

15. All forklift trucks on site shall be fitted and operated with broad band - type audible reversing signals. No other types of audible reversing signals shall be fitted to the forklift trucks operated on site.

16. Forklift trucks shall not be operated outside on site between the hours of 9.00pm to 7.00am, seven days a week.

External Speakers

17. Excluding fire or intruder alarms and speakers intended for low levels of music to be played in the outdoor nursery area, no external speakers shall be installed or operated on site.

Construction of Noise Bund and Fence Mitigation Measures

18. The construction of the noise bund and fence mitigation measures as defined on the Boffa Miskell Ltd plan titled 'Site Plan – PC 82 Overlays' dated 31 January 2012 Revision 1 shall be completed and inspected by the Council's Compliance Officer before any other construction work (excluding any earthworks authorised by consent number RM110014) takes place on site.

19. The earth bunds and acoustic fences on site as shown on the Boffa Miskell Ltd plan titled 'Site Plan – PC 82 Overlays' dated 31 January 2012 Revision 1 shall have a combined height of between 3.3 – 3.5 metres measured from the finished ground level on the Industrial/Service zoned section of the subject site. The noise mitigating fence as shown on the Boffa Miskell Ltd plan titled 'Site Plan – PC 82 Overlays' dated 31 January 2012 Revision 1 shall be 25 metres in length and have a height of 3.5 metres measured from the finished ground level on the Industrial/Service zoned section of the subject site.

20. The acoustic fences located on top of the earth bunds shall be of timber construction (minimum 25 mm thick timber palings), with no gaps between the panels of the fence or between the ground (earth bunds) and the bottom of the fence, with battens to cover gaps between palings. Construction of the noise bunds and acoustic fence(s) shall not commence until the Environmental Health Officer, Kapiti Coast District Council, has certified in writing that the plans and specifications of any acoustic fence fulfil the requirements of this condition.

21. Noise mitigating barriers and/or bunds shall be maintained without loss of acoustic performance throughout the life of this consent.

Mechanical Plant

22. Prior to installation of any external fixed plant, a report must be provided to the Kapiti Coast District Council Compliance Monitoring Officer by an acoustic engineer. The report must review the plant selection and model the noise from any external plant received at the nearest residential and rural zone boundaries.

    Note: For the avoidance of doubt, this condition relates to any external fixed plant (including the replacement of any external fixed plant) that is installed during the life of this consent.

Landscape Design

23.. (a) The consent holder shall implement the landscape treatment and planting detailed in Boffa Miskell Ltd's drawings W05146A_420-W05146A_423 and W05146A_451 revision C, dated 01.02.12.

(b) All landscape planting, shown on the plans referred to in part (a) of this condition, shall be completed prior to the Building Improvement Centre authorised by this consent commencing trading.

(c) The consent holder shall maintain the planted areas, as intended by the Boffa Miskell Ltd planting plans, for the duration of this consent and shall replace any dead or dying plants as soon as practicable.

(d) All landscape planting shown on the plans referred to in part (a) of this condition shall be irrigated by means of a suitable irrigation system and the earth bunds shall be suitably mulched and maintained for the duration of this consent.

Advice Notes:

- Under Section 125 of the Resource Management Act 1991, this resource consent will lapse in five years, unless it is given effect to within that time.
- It is the consent holder's responsibility to comply with any conditions imposed on this resource consent prior to and during (as applicable) exercising this resource consent.
- Please note that a resource consent is not a consent to build. A building consent must be issued prior to any building work being undertaken.
- All costs arising from the exercising of any of the above conditions are the responsibility of the consent holder.
- The consent holder should not encroach onto adjacent land owned by others without having first obtained their written consent.
- Contravention of the Land Drainage Act is not permitted and natural drainage patterns are to be preserved.

2. BACKGROUND

2.1 The Site

The site is located at 20 Milne Drive, Paraparaumu (Lot 2 DP 441854) and is approximately 4.2 hectares in area.

The site comprises a grassed area that was originally levelled as part of the earthworks for the Milne Drive subdivision several years ago. The site is generally flat with a slight east-west slope towards the south-western corner. There are no existing watercourses within the site, nor do any discharge into it.

There is a hedgerow of mature pine trees along the southern boundary.

The site was used as a golf driving range, prior to the purchase of the site by the current owners. This use has ceased. Until relatively recently, it was used intermittently by a local blow cart club. A small, relocatable Simon Hinds Show Home is currently situated near the north-eastern boundary of the site.

The site is bordered to the north-west by Paraparaumu Airport and a portion of the Midlands Retirement Village, to the north-east by an existing Industrially Zoned

commercial development [including a 'Z Energy' (formerly Shell) service station, and food and retail outlets], and to the south-east by a wetland area known as Andrews Pond. The wetland is managed by the Department of Conservation.

Access to the site is from Milne Drive via a vehicle crossing in the north-eastern corner. The site lies approximately 100 metres from the intersection of Milne Drive/Kapiti Road/Te Roto Drive ("the intersection").

The airport land closest to the site has been developed and a Mitre 10 Mega home improvement store has recently opened on this land. A temporary Airport terminal has also opened and development is currently underway to establish and operate retail shops and a grocery outlet store.

The remainder of the adjacent area to the west, north and east of the subject site is characterised by a mix of commercial and industrial premises/activities. Residentially utilised land is predominant to the south and south east of the subject site.

The Western Link Road designation lies approximately 120m southeast of the site.

Milne Drive is a long cul-de-sac with several other cul-de-sacs off it, serving a substantial residential subdivision development, as well as the Kodex Place industrial and commercial businesses. Milne Drive accesses Kapiti Road, which is a secondary arterial road, and the primary connection between Paraparaumu Beach and the town centre and State Highway 1. The intersection of Milne Drive and Kapiti Road is a give-way sign controlled T-intersection, with priority to through traffic on Kapiti Road.

2.2 Consent History

The applicant acquired the subject site in 2006 in order to establish on part of the site, a building improvement centre incorporating a timber yard, garden centre and building supplies outlet.

In 2006, the applicant requested a plan change to rezone the site from Open Space to a mix of Industrial/Service and Residential.

The Plan Change was the subject of an appeal to the Environment Court. The change was approved and provides for building improvement centres of the size Bunnings proposes as a Restricted Discretionary activity.

Under the Change, any application to establish the retail use on the subject site requires notification in accordance with section 95A(2) of the RMA 1991.

A land use consent was granted to Bunnings on the 23rd February 2011 to undertake preparatory site earthworks. This consent has not been given effect to.

On the 28th February 2011, Bunnings was granted a subdivision consent to undertake a boundary adjustment. This was to facilitate the purchase of land from the Kapiti Retirement Trust and its amalgamation into the main Bunnings site. The subdivision was certified under Section 223 of the RMA 1991 on the 15th April 2011.

On the 1st July 2011, Bunnings was granted a land use consent to construct a storage warehouse building on the site. The application included; a 5,270m^2 storage

warehouse, 88m^2 entry space, 1,545m^2 dispatch area, 1,114m^2 outdoor goods storage area; and a 1,487m^2 secure pallet storage area.

In terms of gross floor area (GFA) as defined by the District Plan, the total area of the consented building is 9,504m^2.

In addition, consent was given to construct 69 car parking spaces (including 3 mobility impaired spaces) to the east of the main building.

2.3 Description of Proposal

A detailed description of the proposal was contained within the written material and other plans submitted with the application and should be read in conjunction with this decision report.

The applicant seeks to establish a Building Improvement Centre incorporating the storage, display and sale of goods and materials used in the construction and renovation of buildings, plumbing equipment and materials, a garden centre offering for sale plants, products and equipment for gardening and home landscape planting, a café and ancillary staff facilities and administrative offices on the site.

In terms of a change in the use of the consented 'storage warehouse building' to a 'Bunnings Building Improvement Centre', the applicant proposes that:

- The 5,270m^2 storage warehouse (consented under RM110078) become a "covered warehouse for storage and sale of building improvement goods including café";
- The 88m^2 entry space (consented under RM110078) become a "main entry area";
- The 1,545m^2 dispatch area (consented under RM110078) become an internal timber trade sales and building products dispatch";
- The 1,114m^2 outdoor goods storage area (consented under RM110078) become an "outdoor timber storage yard"; and
- The 1,487m^2 secure pallet storage area (consented under RM110078) become an "outdoor nursery for storage and sale of outdoor garden centre products with children's playground adjacent to the café".

The applicant confirms that the administrative and staff facilities will be provided within the upper mezzanine floor spaces, as proposed and consented under land use consent RM110078, and that the GFA is consistent with what was consented to.

The applicant also proposes 216 on-site car parking spaces including 6 spaces for mobility impaired drivers. The sole entrance to the site will be from Milne Drive in the position shown on an amended site plan (Dwg No: 8210-12W1A, dated 14.02.2012).

All earthworks required to prepare the site for development of the proposed building improvement centre have been obtained from the Kapiti Coast District Council and from Greater Wellington Regional Council. No further resource consents are required for the construction of the warehouse building.

2.4 Notification/Submissions Received and Considered

The application was publicly notified on the 1st November, 2011 in accordance with Sections 95 and 95A of the Resource Management Act. All owners and occupiers of land in the immediate area were served a copy of the application.

A total of 144 submissions were received during the notification period and 14 late submissions were received after the close date of 1 December, 2011.

The Hearing Panel consulted with the applicant on the matter of the late submissions. As the applicant did not express any objection to acceptance of the late submissions it was resolved to extend the timeframe for receiving submissions and therefore to accept and consider these submissions.

Of the 144 submissions received on time:

- 126 were in opposition (including one submission signed by 87 residents of Midlands Gardens Retirement Village);
- 7 gave conditional support;
- 5 were in support,
- 1 was neutral; and
- 5 indicated that they support the application but did not state whether they wanted the Council to grant or decline the application.

Of the 14 late submissions;

- 11 were in opposition,
- 2 were support, and
- 1 gave conditional support.

The issues raised within the submissions can generally be summarised as follows:

- Traffic/Parking
- Noise and Amenity Values
- Building Design and Appearance (Layout)
- Appropriateness of the Site
- Ecological
- Economic

3. STATUTORY CRITERIA

3.1 Activity Status

The activity is a Restricted Discretionary activity under Rule D.5.1.3.(A)(iii) of the District Plan. It has this status because it meets the requirements for consideration under this rule. Specifically, the proposed activity –

- Is located on the site formerly legally described as Lot 6 DP 75592 and Part Lot 1 DP 88703 (Milne Drive, Paraparaumu); and
- Is for – *the storage, display and sale of goods and materials used in the construction, repair, alteration, and renovation of buildings and includes builders' supply and plumbing supply centres and building display centres and garden centres*, and
- Proposes to generate more than 50 vehicle movements in any hour; and

- Is proposed to be located within a building that has a floor area not exceeding 10,000m²; and
- Is proposed to comply with all the permitted activity standards for the Industrial/Service Zone (except where discretion is reserved over any matter that is the subject of a permitted activity standard).

3.2 Assessment Criteria

When assessing any application under D.5.1.3A (ii) the Council's discretion is restricted to the following matters:

(a) Traffic and parking, in particular the potential impact of traffic generated by the proposed activity on the amenity values and quality of access of the Midlands area, and on the existing and expected local road network (including roads under construction and State Highway 1);

(b) Design and appearance of car parking areas;

(c) Screening and landscape design and planting;

(d) Earthworks;

(e) The design and appearance of any building, in particular the inclusion or treatments of features on the exterior facades of any building facing south or east to mitigate the appearance of long blank walls (e.g. canopies and entrance structures), and the use of colours and advertising or business identification.

3.3 Relevant Objectives and Policies

The following Objectives and Policies apply to this application:

C.5.1 Industrial Zone Objectives and Policies
Objective 1.0
Policy 1 – Amenity Values
Policy 2 – Industrial Fringe
Policy 4 – Design & Appearance
Policy 7 – Natural Environment

C.11 Ecology
Objective 1
Policy 1
Policy 9

C.18 Transport
Objective 1
Policy 6
Policy 7
Policy 8
Policy 9

4. HEARING APPEARANCES AND SUMMARY OF EVIDENCE AND SUBMISSIONS RECEIVED

4.1 James Gardner-Hopkins (Legal Counsel for Kapiti Coast Airport Limited)

Mr Gardner-Hopkins tabled and presented a Notice of Application seeking the production of a legal opinion that the Council had received. The Notice was accepted by the Panel but not considered, as the information being sought by way of the application was supplied to Mr Gardner-Hopkins and other hearing participants by Council officers.

4.2 The Applicant

Submissions on behalf of the applicant were presented by Bunning's legal counsel, Andrew Hazelton

Mr Hazelton opened the applicant's case. He tabled and presented his written legal submissions. He noted that it was a straight-forward application and that the Hearing Panel was limited to considering very few matters and some of these have no greater effects than matters already consented to. He stated that such effects were either positive or could be mitigated by the imposition of conditions.

Evidence on behalf of the applicant was circulated prior to the Hearing and was taken as read.

The following applicant witnesses appeared before the Panel and answered questions in relation to their evidence:

David Boersen (Development Manager, Bunnings Ltd)

Mr Boersen answered queries from the Hearing Panel regarding the history of the site, the proposed layout and the operation and functioning of the building improvement centre.

He outlined the reasoning behind swapping the layout from that which had been originally presented to the residents of the retirement village and adjacent residential areas. He explained that the layout had been altered so as to improve the growing environment for the plants in the garden centre. It was significantly beneficial in terms of plant health if the centre was situated to the north of the building, rather than on the southern side.

Mr Boersen stated that the property was in one title and Bunnings currently had no plans to develop the surplus/vacant residential land that will lie between the complex and properties to the south.

Mr Boersen outlined that Bunnings were in negotiations with the Council regarding sharing of the costs of the signalisation of the Milne Drive/Kapiti Road intersection and the installation of the signals. He stated these were on going and he was actively involved in the negotiations, as the hearing was proceeding. Mr Boersen confirmed that Bunnings would agree to a condition that prevented the Building Improvement Centre commencing trading until the intersection had been upgraded and signalised.

Bill Wood (Acoustic Consultant)

Mr Wood answered questions from the Panel regarding his evidence on the acoustic aspects of the proposed activity. He outlined that the majority of the noise on site would come from the B Trains as they manoeuvred around the building and that passing traffic on Kapiti Road had a significant influence on the background noise levels.

He stated that courier vans and cars would not have any noise impacts.

He outlined that the noise from the saw that would be used to cut customer requested lengths of wood, was modelled with the doors open.

Mr Boersen confirmed that Bunnings would use electric forklifts with pulsed broadband signal reverse beepers. These have been found to reduce noise complaints from immediate communities due to the nature and character of the sound.

Brett Harries (Traffic Engineer Consultant)

Mr Harries provided a supplementary statement of evidence to the Panel. He summarised and highlighted points of his evidence which focused on the cost sharing aspect of the upgrading/signalisation of the Milne Drive/Kapiti Road intersection. He outlined the two calculation methodologies that he considered were appropriate to determine the share of the costs between the Council and Bunnings and of these the one that he preferred.

Mr Harries explained the details of the traffic modelling that had been carried out. He noted that this was the most modelled store that he had been involved in. In response to questions from the Panel, he explained the difficulties involved in modelling the proposed traffic movements, the various factors that need to be taken into consideration and the models that had been used. Mr Harries outlined that he had been involved in extensive discussions with Council officers and consultants, NZTA and Opus traffic engineers.

He outlined the proposed layout of the site with regards to vehicle movements and parking. He focused on the entrance to the site and the ability of vehicles to enter and leave the site safely and the effects of these movements on the safety of those using Milne Drive and the efficiency of the road and proposed traffic lights. He was of the opinion that there was sufficient width and sightlines to ensure that the use of the proposed entrance would have minimal effects on the safety and efficiency of the intersection and the section of Milne Drive in the vicinity of the Bunning's entrance.

Mr Boersen outlined that trucks delivering to the site included those contracted to Bunnings and general carriers. They did not tend to arrive at the same time or before the store was open, as the drivers sought to spend the least amount of time on the site.

Mr Boersen explained how Bunnings calculated the size of the store and the number of carparks that each store required.

Bronwyn Faulkner (Landscape Architect)

Ms Faulkner was not required to answer any questions.

Christine Foster (Consultant Planner)

Ms Foster discussed the draft conditions as proposed by the applicant and the changes that Bunnings had suggested to those that had been originally drafted and circulated previously to the Panel.

The Panel questioned Ms Foster on several of the changes, in particular those concerning the commencement of the store and the signalisation of the intersection, and the monitoring of the number of carparks that are to be provided. The Panel noted the suggested wording. Ms Foster's replies were supported by Mr Hazelton, Mr Harries and Mr Boersen.

4.3 Submitters

Alaire Dunlop

Mrs Dunlop spoke in opposition to the application. She stated that she represented 64 residents of the Midlands Gardens Retirement Village and had lived in the village since 2004. Mrs Dunlop referred to her letter to the editor of the Kapiti News in which she describes waiting for seven minutes to exit Milne Drive. She also referred to articles regarding the opening of the Whitireia Polytechnic Campus in the former Mitre 10 building and the car parking issues that had arisen since the polytechnic had opened. She was particularly concerned about cars parking on the left hand side of Milne Drive, as one heads south towards the village.

Mrs Dunlop was of the opinion that signalising the intersection may help but considered that the parking situation would worsen as would the flow of traffic through this section of Milne Drive.

Margaret Gall

Mrs Gall spoke in opposition to the application. In speaking to her written submission she began by questioning the Council on the amount of paper that she had received with regards to the application.

Mrs Gall stated that when she and her husband purchased their dwelling they were told the land was zoned Open Space and at that time it was occupied by a golf driving range. She also expressed concerns over: the fire risk that the timber yard would create and where the water to fight a fire on the site would come from and listed a series of fires that had occurred in other yards within the past few years, the potential state and safety of the entrance into Bunnings, the effects of storing treated timber on site, increased traffic on Milne Drive, the height of the roof of the proposed building, and the sound of any plant installed on the roof.

Matthew Richards

Mr Richards spoke in opposition to the application. He stated that he had been a resident of the area for seven years. Mr Richards outlined his concerns regarding the process and also the impact the proposed activity would have on the traffic on Milne Drive and through the intersection. He discussed solutions to the increase in traffic.

Mr Richards answered questions of clarification from the Panel regarding his concerns.

Kapiti Coast Airport Limited (KCAL)

James Gardner-Hopkins, Legal Counsel (for KCAL)

Mr Gardner-Hopkins tabled and presented legal submission on behalf of KCAL. He outlined who KCAL is, their intentions for the airport land and the reasons why KCAL submitted in opposition to the application.

He noted that KCAL was only concerned with the potential traffic effects of the proposal and, in particular, the efficient traffic flow through the intersection. He submitted that KCAL could not be considered as a trade competitor as they owned neighbouring land which they sought to develop, and which could potentially be affected by the traffic generated by the applicants proposal.

Mr Gardner-Hopkins outlined the history of the consents that Bunnings had been granted for the site. He noted that the three step approach was "well short of the concept of integrated resource management embodied in the RMA", and had the potential to undermine the requirements of Section 5 of the RMA. He added that this approach was highly questionable in light of the High Court's decision in Ngati Kahu Far North District Council.

He outlined the planning framework, emphasising the relationship of Plan Change 73 which spells out how KCAL's land is to be developed.

Mr Gardner-Hopkins (para 4.7) submitted that *"a clear distinction needs to be made between the "permitted baseline" (which now has a statutory basis)"* and whether the receiving environment can include the future environment. He noted that Hawthorn would indicate that regard should not be had to the expressway and the western link road.

He countered this by noting that "*the High Court in Ngati Kahu has demonstrated that the general proposition laid down by the Court of Appeal in Hawthorn needs to be still considered in each context, not blindly followed".*

He submitted that it would undermine the purpose of Part 2 to ignore the significant proposed change to the infrastructure, on the basis that it did not fit the artificial construct of "existing environment".

Mr Gardner Hopkins added that even if the matter could not be taken into account as a part of the existing environment, the expressway clearly falls into 'any other matter' provided for in s104(1)(c). He noted that this was accepted in the Councils advice and outlined the reasons why it should be considered, namely that the NZTA has carried out consultation and indicated its intentions to lodge a notice of requirement in the near future, the route follows an existing designation and that it would not be good planning practice or integrated or sustainable management to ignore the likelihood that the expressway will impact on the local roading network.

He noted that ignoring the future development on the airport due to no consents being issued would have similar consequences. Also approving one application may undermine the entire planning process.

He outlined that the most sensible approach would be to assess the proposal against a number of scenarios, including the expressway and not to do so disregards explicit intentions of the Plan.

Mr Gardner-Hopkins argued that in terms of proof, the onus was on the applicant to prove the effects, not (as in this case) the submitters.

He outlined Mr Kelly's evidence and concluded that the traffic assessment provided with the application was insufficient to assess the effects on the environment of the activity.

Mr Gardner-Hopkins suggested that it would be unwise for the Panel to adopt the position that "*if NZTA are OK with the proposal then so should we*", as they were only concerned with effects on its state highway network and were relying on some flexibility in the design of the intersection.

He concluded that "unless compelling information is provided to address the issues raised, there can be little confidence that the proposal represents sustainable management in accordance with Part 2".

Tim Kelly (Consultant Traffic Engineer)

Mr Kelly tabled and presented a written statement of evidence. He was of the opinion that while an upgrade of the Milne Drive intersection would provide significant relief to movements from Milne Drive, there was a risk that it would be associated with increased delays to vehicle movements on Kapiti Road. These delays would have detrimental impacts on vehicle movements associated with the airport as well as wider movements within the District.

He considered that the information that was required to assess these potential effects had not been provided. He noted that without this information, it was not possible to conclude that the proposal will not give rise to such adverse effects. He was of the opinion that the application should be declined until such time as information was provided that confirmed that the effects on Kapiti Road are no more than minor.

Jill Hansen

Mrs Hansen spoke in opposition to the application. Mrs Hansen outlined that she moved into the village three years ago. She had meet with Bunning's representatives who showed her a plan with the garden centre at the southern end of the building. Mrs Hansen also noted that the traffic on Milne Drive and at the intersection had worsened as a result of Whitireia operating from the former Mitre 10 site.

Kapiti Retirement Trust

Morgan Slyfield (Legal Counsel) for the Kapiti Retirement Trust

Mr Slyfield tabled and presented legal submissions on behalf of the Kapiti Retirement Trust.

Mr Slyfield outlined that the Kapiti Retirement Trust (the Trust) would be prepared to support the proposal if the layout of the site was altered so that the garden centre was located at the southern end of the building. However the Trust was not prepared to support the proposed layout.

Mr Slyfield acknowledged that the Panels discretion in its consideration of the application was limited as the activity was a restricted discretionary activity. He noted, however, that one of the express matters to be considered was the "design

and appearance of any building" and that the phrase was not defined in the Plan itself.

He argued that the design of the building can be used in addition to its basic elements, to describe matters such as orientation. He added that if the Plan sought to limit the consideration to how the building looked, it would just refer to appearance.

He added that the Trust did not seek that the Panel reorient the whole building but to re-design the interior layout by reversing the end activities. This would require the structural features at each end to be switched. These are elements of the building's design and therefore can be considered by the Panel.

In support of his approach, Mr Slyfield sought to draw the Panel's attention to the point that the Act draws a distinction between "effects" which the Panel shall have regard to and "matters" over which its discretion is reserved. The relevance of this distinction is that a building's design may impact on a wide range of effects.

Therefore the Trust is of the opinion that the Panel can consider the adverse effects that may be generated by the proposed layout, such as noise from trucks.

Mr Slyfield argued that Bunnings could not rely on the consented structure establishing a permitted baseline. Rather, the opportunity should be taken by the Panel to elevate the effects of the activity to the extent that they have a cumulative impact when taken together with the effects already authorised.

Mr Slyfield outlined that Bunnings had advanced no persuasive reasons why the layout of the store could not be altered in the manner sought by the Trust.

Mr Slyfield stated that there was a sound resource consent basis for the Panel to either decline or seek the reversal of the layout of the building. He outlined that the timber yard would generate adverse effects, particularly noise, on the residents of Midlands Gardens that they would not experience if the nursery was to be located at the southern end.

He acknowledged that the Trust had not presented any noise evidence but argued that although Mr Wood's evidence indicated that the noise levels would comply with the relevant District Plan standards, the standards don't recognise the nature of noise and that the noise environment would change if the nursery was switched with the timber yard. The option sought by the Trust would better enhance and maintain the amenities of the residents in a way that cannot be reduced to a scientific measure.

Wendy Huston (Chief Executive Officer of the Kapiti Retirement Trust)

Mrs Huston tabled and presented her written submission in support of the Trust's submission and spoke to a series of photographs that she submitted to the Panel. Mrs Huston outlined the history of the village and the Trust's dealings with Bunnings.

Mrs Huston stated that in her opinion the behaviour of Bunnings, in swapping the layout of the centre without telling the Midlands Gardens residents, gave business a bad name. She acknowledged that the Trust could not request that Bunnings switch the end activities.

Mrs Huston considered that lights would be beneficial at the Kapiti Road/Milne Drive intersection. She also agreed that planting the bund with appropriate trees would

mitigate any adverse visual effect the building may have on the residents of Midlands Gardens.

Norman Cogdale

Mr Cogdale spoke in opposition to the application. He outlined the current traffic situation, with regards to parking and the problems with exiting Milne Drive. He noted that the sightlines were poor and were exacerbated by cars parking around the curve in the road.

He questioned why the proposed Expressway off-ramp had not be taken into consideration and that it would place increased pressure on the intersection. He is of the opinion that Bunnings should not locate in a residential area and that the traffic signals will not be able to handle the volume of traffic that will be generated by the Expressway and Bunnings.

Tom Sheehy

Mr Sheehy tabled and presented a written submission in support of his submission as lodged. In addition to his concerns raised in his written statement, he noted that no party had taken into consideration the impact of the Whitireia Polytechnic on the parking and traffic flows. He had visited the polytechnic and had been told that they proposed to increase the number of courses that they offered from the campus. These increases would add to the situation and had not been taken into consideration. He was of the opinion that none of the proposed traffic measures would mitigate the problems.

Joyce Weatherhead

Mrs Weatherhead tabled and spoke to her written statement in opposition to the application. She outlined that she endorsed the comments of her fellow residents of Midlands Gardens, Mrs Dunlop and Mrs Gall.

Mrs Weatherhead noted that Bunnings had already reneged on the agreement with the residents of Midlands Gardens and the Trust over the siting of the timber yard and that this action did not inspire confidence that the company would have any regard to its elderly neighbours.

Mrs Weatherhead outlined that in addition to her concerns with regards to lack of confidence, she was of the opinion that the site was not suitable for an industrial use, the residents would be disturbed by noise from the site and exposed to fumes from the trucks.

Mrs Weatherhead pointed out that traffic lights were promised by the Mayor, seven years ago.

Overall, Mrs Weatherhead noted that the commercial business is not an appropriate neighbour to the retirement village and that the land should be rezoned Open Space until a more compatible use was found.

Diana Litten (Representative of 87 residents of Midlands Gardens Retirement Village)

Mrs Litten outlined that she was speaking on behalf of 87 residents of Midlands Gardens who opposed the application. Mrs Litten outlined that the group believed

that Bunnings had breached its agreement with them regarding the layout of the development. The group was concerned with regards to the noise generated by traffic around the site and believed that it would impact on their enjoyment of their homes.

Mrs Litten explained that the height and nature of the proposed noise bund had been altered. Mrs Litten requested that the Panel instruct Bunnings to revert to the previous layout and move the bund as far as possible from the boundary.

Michael Woods

Mr Wood spoke in opposition to the application. He outlined that he had been heavily involved in opposing Bunning's attempts to establish a warehouse on the site and gave a brief description of the steps undertaken by the applicant.

Mr Woods outlined two adverse environmental changes that had/would arise since the rezoning of the land. These were the establishment of the Whitireia Polytechnic and its associated car parking requirements and traffic movements and the effects the Expressway would have on the area's traffic. He acknowledged that the latter factor can not be considered due to legal reasons but that it was considered pivotal in the granting of Plan Change 73 for the Paraparaumu Airport.

Overall he was of the opinion that endless computer modelling and expert evidence did not alter the fact that nothing has been proposed to mitigate the effects of 600 vehicle movements from the site per day.

He also tabled a letter from Lesley Cecioni stating that the seven residents of Bearing West Court fully supported the submission and public speaking of Mr Michael Woods.

Diana Litten

Mrs Litten, speaking on her own behalf, reiterated the concerns that she had expressed as the spokesperson for a group of residents. She again outlined that Bunnings had initially shown the proposed centre with the garden centre to the south. Mrs Litten was concerned that the amenity of her garden that she currently enjoys would be adversely affected by the proposed configuration. The reduction in amenity would have a negative effect on the value of her property in her view.

Mrs Litten outlined her concerns regarding the proposed landscaping of the earth bunds, particularly with regards to the growth rate of any trees planted on the bund and its stability and potential erosion (soil run-off).

Mrs Litten requested that the Panel require the garden centre be relocated to the southern end.

Mrs Litten's son spoke in support of his mother. He reiterated the other submitters statements that Bunnings had changed the layout from what was agreed with neighbouring residents to what is now proposed. The change in the layout would have adverse effects on the residents, in terms of noise and fumes. He stated that the proposed change had caused his mother emotional distress and her loss in the trust that she held for Bunnings. Her and the other residents now held no trust in what Bunnings say and may be required to do.

Tabled Submissions

Z Energy, NZTA, Ray Green and Indo and Rickets Ltd requested that their submissions be tabled and considered by the Panel. The following is a summary of these submissions:

Z Energy

Z Energy's submission noted that the company was generally supportive of the position reached by Bunnings and the Council subject to Bunnings not commencing operations until the intersection was signalised and that Z Energy were consulted as to the detailed design of the proposed intersection upgrade.

NZTA

NZTA's submission confirms that the relief sought by NZTA with regards to the application is that if it is approved, then sufficient flexibility should be retained to the proposed arrangements for the intersection to enable co-ordination between the applicant and their design team and the NZTA.

Ray Green

Mr Green's submission outlined that although some of his original concerns had been met he did not want to withdraw his submission. He noted that there was no contingency plan with regards to any shortfall in parking and he was unsure as to the future of the bus stop opposite the Whitireia Polytechnic.

Indo & Ricketts Limited

Evidence on behalf of the submitter Indo & Ricketts Limited (Mitre 10 Mega), were provided by legal Counsel, Claire Kirman. Ms Kirman outlined that the company's interest in the application relates solely to the adverse effects of the proposed activity on the operation of Kapiti Road. Indo & Ricketts submission asks the Panel that in the absence of conditions which appropriately avoid, remedy or mitigate the adverse effects on the application that the Panel uphold Indo & Rickets submission and decline consent.

The legal submission from Ms Kirman was supported by tabled evidence from Philip Brown, traffic engineer.

Mr Brown outlined that he had identified a number of issues associated with the operation of Kapiti Road and the design details of the proposed signalisation of the intersection. He noted that these issues have the potential to adversely affect the efficient operation of the transport system in the vicinity of the Mitre 10 Mega store, which is heavily dependent on Kapiti Road.

For these reasons he considered that the application should be declined until such time as a full understanding of the impacts of the development on Kapiti Road with and without the Expressway have been obtained and it is concluded that these effects will be no more than minor on the surrounding traffic environment.

4.4 Council Officers Comments

Monique Robertson

Ms Robertson outlined that since her initial report to the Hearing Panel, further information had been received by the Council from Bunnings and external traffic consultants that allowed her to alter her recommendation. She now considered that the activity could be approved subject to the imposition of appropriate conditions.

Ms Robertson then spoke to each condition and outlined to the Panel which conditions were subject to no change and which, after further discussion between Council staff and Bunnings representatives, had been amended, since the list of conditions was first presented to the Panel in her Supplementary Report.

Ms Robertson and Rita O'Brien, Council's Subdivision Engineer, explained to the Panel the reasons for the changes and the new wording. The Panel questioned the new wordings until the parties were all in agreement.

In respect of Condition 13, recommended in Ms Robertson's Supplementary Report, Ms Robertson stated that she had received a legal opinion that supports the submission from Mr Slyfield that the Panel could consider that the matter for discretion (e) the design and appearance of any building would be broad enough for the Council to address the visual amenity effects of the building's design and appearance.

Ms Robertson was questioned by the Panel on this condition. Ms Robertson was of the opinion that reversing the layout of the building would better safeguard the amenity values of the adjacent Midlands area but could not add anything further to the recommendations made in her report and evidence.

Don Wignall

Mr Wignall was questioned by the Panel regarding the traffic modelling that had been undertaken.

He outlined the history of the modelling undertaken and the data used in the models. He concluded that the Council was confident that the signalisation of the intersection as proposed would negate the traffic concerns expressed by the submitters.

4.5 Applicant's Right of Reply

Mr Hazelton tabled and presented a written statement in exercising the applicant's right of reply. He noted that Mr Harries confirmed that the base model includes the current consents and likely activity that is to occur at the Airport retail park.

He reiterated that the Expressway is not consented and it is accepted by the Council that it cannot form part of the current environment.

Mr Hazelton requested that the hearing be adjourned until Wednesday 7th March as discussions with the Council regarding the cost-sharing of the Milne Drive/Kapiti Road/Te Roto Drive intersection are likely to be finalised by this date.

4.6 Comments from the Hearings Panel

The Panel acknowledged the concerns expressed by the submitters and thanked them for the constructive manner in which they had participated in the hearing and for the evidence and matters that were presented to them. The submissions they presented gave the Panel a clear residents insight into the daily situation with regards to traffic and parking at the intersection of Milne Drive, Kapiti Road and Te Roto Drive and the concerns they have with regards to the layout of the proposed centre.

The Panel acknowledged that the proposed development would have potentially adverse effects on the residents of Midlands Gardens and that the perception that these effects could be significantly adverse was distressing for the residents.

The Panel accepted the applicant's request to adjourn the hearing until at least Wednesday 7th March 2012 or until such time as an agreement had been reached between the applicant and the Council regarding cost-sharing of the intersection upgrade works, whichever came first.

5. POST-HEARING CONSIDERATIONS

5.1 All the written submissions received by the Council in respect of the application and all verbal and written submissions, evidence and reports presented at, or prior to, the Hearing, have been taken into consideration by the Panel in making its decision. The Panel also inspected the site and its vicinity both prior to and during the Hearing.

5.2 Principal Issues in Contention

At the adjournment of the Hearing, the principal issues that the Panel considered were in contention included:

1. Whether the environment included the designated Western Link Road and/or the future MacKay to Peka Peka Expressway (NZTA had not lodged a Notice of Requirement at the time of the hearing);

2. Whether the proposed activity would have an adverse effect on the safety and efficiency of the surrounding traffic network, and the Milne Drive/Kapiti Road intersection in particular;

3. Whether the process that Bunnings had adopted in gaining consent to operate the centre on the site constituted "environmental creep";

4. Whether the Panel's discretion in respect of "design and appearance" encompasses consideration of the internal layout of the centre;

5. Whether the proposed landscaping and planting would mitigate the adverse effects the activity may have on the amenity values of the adjacent residential properties.

5.3 Main Findings of Facts

The main findings of fact that have led to the Panel's decision outlined in section 1 of this report and the reasons for that decision are as follows:

Environment

The Panel considered the legal arguments that were presented by the various legal Counsel with regards to whether the existing Western Link Road designation and/or the proposed Expressway should be considered as part of the "future" environment as defined by the Environment Court in Hawthorn Estate v Queenstown Lakes District Council.

The Panel was of the view that although the Link Road was designated, NZTA had indicated that it would not fund the road and, as a consequence, it was highly unlikely that it would be constructed. Therefore it should not be considered as part of the "future" environment.

With regards to the proposed MacKays to Peka Peka Expressway, the Panel considered that as no application had even been lodged, it could not be considered to form part of the "future" environment.

The Panel therefore accepts that the modelling that has been carried out by the applicant and the Council's traffic consultant, Flow, and reviewed by the Council's consultant traffic engineer, formed the basis on which the traffic evidence had to be assessed.

Traffic Safety

The Panel took careful consideration of the issues raised by the submitters with regards to road safety along Milne Drive and through its intersection with Kapiti Road. The majority of the submitters opined that the current level of risk would be significantly compounded by the proposed activity.

The Panel acknowledges these concerns and recognises that the establishment of the activity on the site will generate an increase in traffic movements and manoeuvres at the northern end of Milne Drive. The increase will also, as the submitters pointed out, be magnified by the current and potential parking situation.

The Panel was, however, assured by the evidence presented by the Council's and the applicant's traffic engineering experts that, subject to the signalisation of the intersection and other treatments (e.g. yellow no parking lines, appropriate road markings), the intersection upgrade works and signalisation scheme would increase the safety along the subject section of Milne Drive and through the intersection, when exiting and entering Milne Drive.

The Panel acknowledges that the introduction of signals on Kapiti Road will generate delays for those motorists travelling along Kapiti Road. The Panel was of the view that any increases in delays along Kapiti Road would be acceptable in relation to planned levels of service.

Process

The Panel considered the three stage process that Bunnings had followed in seeking to gain consent to establish and operate the centre on the site. The Panel is of the view that this case differs from the case referred to by Mr Gardner-Hopkins (Ngati

Kahu v Far North District Council), in that it does not fall well short of the concept of integrated resource management embodied in the RMA.

The Panel accepts and agrees with the reasons outlined by Mr Hazelton in his right of reply with regards to this issue. The Panel is of the view that although the approach adopted by Bunning's is unusual, it considers that the applicant has followed due planning process throughout.

Design and Appearance

The Panel acknowledges that Bunnings holds a land use consent to erect the building on the site. The Panel were, however, disappointed with Bunnings decision to reverse the layout of the Building Improvement Centre from that which has been discussed with neighbouring residents. Many of these residents submitted strongly that Bunnings had shown them a plan that showed the garden centre at the southern end of the building and the timber yard at the northern end.

The Panel understands from the submissions considered, that Bunnings publicly told the submitters that the layout as presented in meetings with residents was the layout for which resource consent would be sought. When the application was lodged, the nursery location as shown on the plans had been reversed. Altering the layout without informing the neighbours is considered by the Panel to be short sighted and not be in the interests of good neighbourly relations.

The Panel considered the proposed nursery location in light of the arguments submitted by Mr Slyfield, the legal opinion from the Council's solicitors and the matters raised by the submitters.

The assessment criteria set out in D.5.1.3 (A) (iii) of the District Plan provides that the Panel must consider:

> *"The design and appearance of any building, in particular the inclusion or treatment of features on the exterior facades of any building facing south or east to mitigate the appearance of long blank walls (e.g. canopies and entrance structures) and the use of colours and advertising or business identification".*

The Panel noted that Policy 4 in the Plan, which deals with "Design and Appearance' states:

> *"Ensure that any adverse effects arising from design and style of buildings which design or face the residential zone are avoided, remedied or mitigated through the use of appropriate mitigation measures."*
>
> *"Poorly designed and constructed industrial buildings can be a visual "eyesore". While this is not an issue within industrial areas, it is an issue when viewed from the Residential Zone, if industrial activities are to be sited adjacent to the Residential Zone they should, <u>for aesthetic reason</u>, be compatible with the residential environment"* (emphasis added).

It can be seen from this Policy that the discretion that the Council has reserved to itself under D.5.1.3.A(iii) (e) is aimed at aesthetic considerations rather than operational factors.

The Panel doubted that it was appropriate to require the applicant to redesign its building to enable the timber and garden centre aspects of its business to be relocated, when that was not for the purpose of addressing an aesthetic effect.

The submitters concerns were aimed at noise, fumes and other elements which as the Panel have said will not in its view create the difficulties that the submitters fear. None of the submitters complained about the aesthetic impact on them of the building design.

The Panel considered, in the absence of any contrary evidence, that the proposed landscaped earth bund and fence would screen the actual building from the closest resident vantage points within the adjoining retirement village. The Panel considered the residents' concerns that the building would intrude into the views they enjoyed and concluded that they were more a matter of perception than real, as the applicant had designed the bund and fence with the specific objective of screening the building when viewed from adjoining residential properties.

The Panel also considered that the bund would mitigate any noise effects that the movement and unloading of vehicles may generate.

Without any evidence to the contrary, the Panel was of the opinion that the potential for diesel fumes to impact adversely on the neighbouring properties was minimal. In any event, were such evidence to have been presented to the Panel, it follows that a Regional Council 'Discharge to Air' permit may have been necessary to lawfully establish this aspect of the activity before it could commence.

The Panel considered that any fire hazard that the timber storage yard may generate would be mitigated by the requirement of Bunnings to comply with all the relevant standards of the Building Act 2004 including any particular requirements that are applicable to the storage of timber.

The Panel considered that the overall layout of the building, car parking and associated landscaping was of a high standard and when implemented as designed would result in a high quality and attractive development.

Screening and landscaping design and planting

As discussed above, the Panel was of the opinion that the proposed bund would provide the mitigation as envisaged under the District Plan provisions. The Panel considered that it would be reasonable in this case to require that the planting be irrigated to ensure that the landscaping of the bund provides the mitigation proposed in as timely a manner as possible. The Panel has included, as part of the landscaping condition, a requirement that the planting be irrigated and that the earth bunds are suitably mulched and maintained.

The Panel considered that the overall landscaping and planting proposed is of a high quality and would result in an attractive development.

5.4 Summary

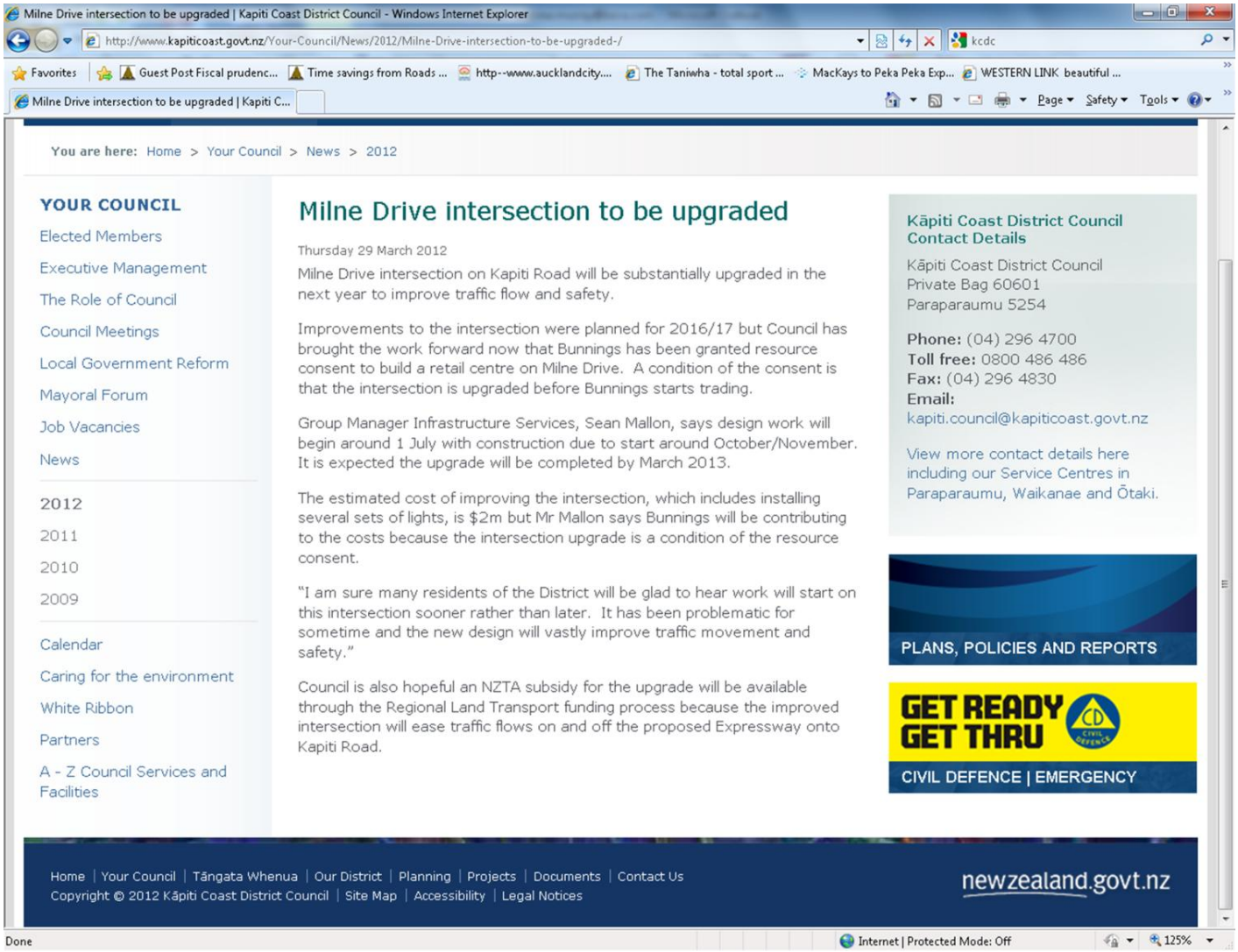
In summary, the Panel concluded that the proposal is consistent with the matters set out in Part 2 of the RMA and the S5 purpose of the Act, in particular, and that it is able to exercise it's discretion and grant consent to the application, subject to the imposition of appropriate conditions.

Commissioner David Forrest (Chairperson)

Commissioner Warwick Heal

Commissioner Darrell Statham

ANNEXURE D – KCDC ANNOUNCEMENT OF UPGRADE TO MILNE DRIVE/TE ROTO DRIVE INTERSECTIONS



Milne Drive intersection to be upgraded | Kapiti Coast District Council - Windows Internet Explorer

http://www.kapiticoast.govt.nz/Your-Council/News/2012/Milne-Drive-intersection-to-be-upgraded-/

Favorites | Guest Post Fiscal prudenc... | Time savings from Roads ... | http--www.aucklandcity.... | The Taniwha - total sport ... | MacKays to Peka Peka Exp... | WESTERN LINK beautiful ...

Milne Drive intersection to be upgraded | Kapiti C...

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Milne Drive intersection to be upgraded

Thursday 29 March 2012

Milne Drive intersection on Kapiti Road will be substantially upgraded in the next year to improve traffic flow and safety.

Improvements to the intersection were planned for 2016/17 but Council has brought the work forward now that Bunnings has been granted resource consent to build a retail centre on Milne Drive. A condition of the consent is that the intersection is upgraded before Bunnings starts trading.

Group Manager Infrastructure Services, Sean Mallon, says design work will begin around 1 July with construction due to start around October/November. It is expected the upgrade will be completed by March 2013.

The estimated cost of improving the intersection, which includes installing several sets of lights, is $2m but Mr Mallon says Bunnings will be contributing to the costs because the intersection upgrade is a condition of the resource consent.

"I am sure many residents of the District will be glad to hear work will start on this intersection sooner rather than later. It has been problematic for sometime and the new design will vastly improve traffic movement and safety."

Council is also hopeful an NZTA subsidy for the upgrade will be available through the Regional Land Transport funding process because the improved intersection will ease traffic flows on and off the proposed Expressway onto Kapiti Road.

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View more contact details here including our Service Centres in Paraparaumu, Waikanae and Ōtaki.

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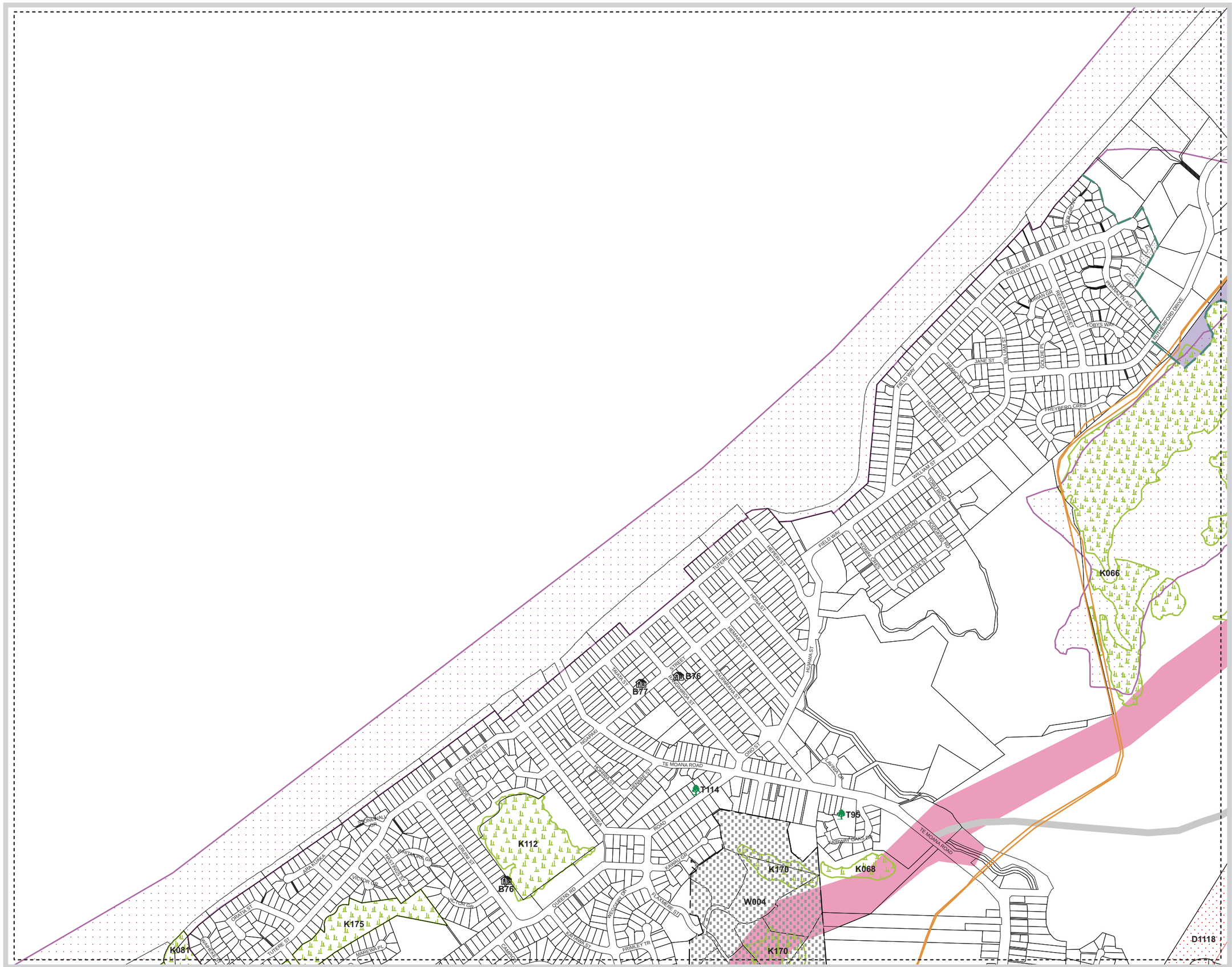
ANNEXURE E – KCDC DISTRICT PLAN MAP 06/07

Kapiti Coast District Council Planning Maps

Map 06 Districtwide and Urban Plan Features

	05	
	06	07
08	09	10



LEGEND

DESIGNATIONS
- General
- Railway
- SH1
- Mackays Overbridge
- Western Link Road
- Transmission Gully

HERITAGE
- Geological Site
- Geological Area
- Historic Building
- Heritage Tree
- Heritage Tree Area
- Waahi Tapu Site
- Waahi Tapu Area
- Ecological

WAIKANAE NORTH DEVELOPMENT PRECINCTS
- Preserve
- Perimeter
- Open Space
- Village
- Multi Unit
- Mixed Use

WAIKANAE NORTH POLICY AREAS
- Low Impact Urban Area
- Eco Hamlet Area
- Urban Edge

MISCELLANEOUS
- Urban Visual Sensitivity Area
- Outstanding Landscapes
- Exclusion Zone
- Notional Roads
- Waikanae River Walkway Designation General
- 70m Coastal Building Line
- 90m 6m Height Line
- 20m Build Line Restriction
- 30m Relocatable Area
- Natural Gas
- HV Transmission Lines
- Noise Corridor

Scale 1:10,000 / A3

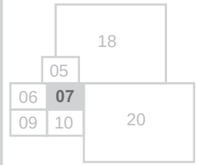
0m 100m 200m

NORTH

Last Revision:
P.C.79 26/03/10(update)

Kapiti Coast District Council Planning Maps

Map 07 Districtwide and Urban Plan Features



LEGEND

DESIGNATIONS
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- Heritage Tree Area
- Waahi Tapu Site
- Waahi Tapu Area
- Ecological

WAIKANAE NORTH DEVELOPMENT PRECINCTS
- Preserve
- Perimeter
- Open Space
- Village
- Multi Unit
- Mixed Use

WAIKANAE NORTH POLICY AREAS
- Low Impact Urban Area
- Eco Hamlet Area
- Urban Edge

MISCELLANEOUS
- Urban Visual Sensitivity Area
- Outstanding Landscapes
- Exclusion Zone
- Notional Roads
- Waikanae River Walkway Designation General
- 70m Coastal Building Line
- 90m 6m Height Line
- 20m Build Line Restriction
- 30m Relocatable Area
- Natural Gas
- HV Transmission Lines
- Noise Corridor

Scale 1:10,000 / A3

0m 100m 200m

NORTH

Last Revision:
P.C.79 26/03/10(update)

ANNEXURE F – EXTRACTS FROM SH1 KAPITI STRATEGY STUDY

Table 3.4 – Forecast SH1 and WLR Link Flows (AADT): 2016 and 2026

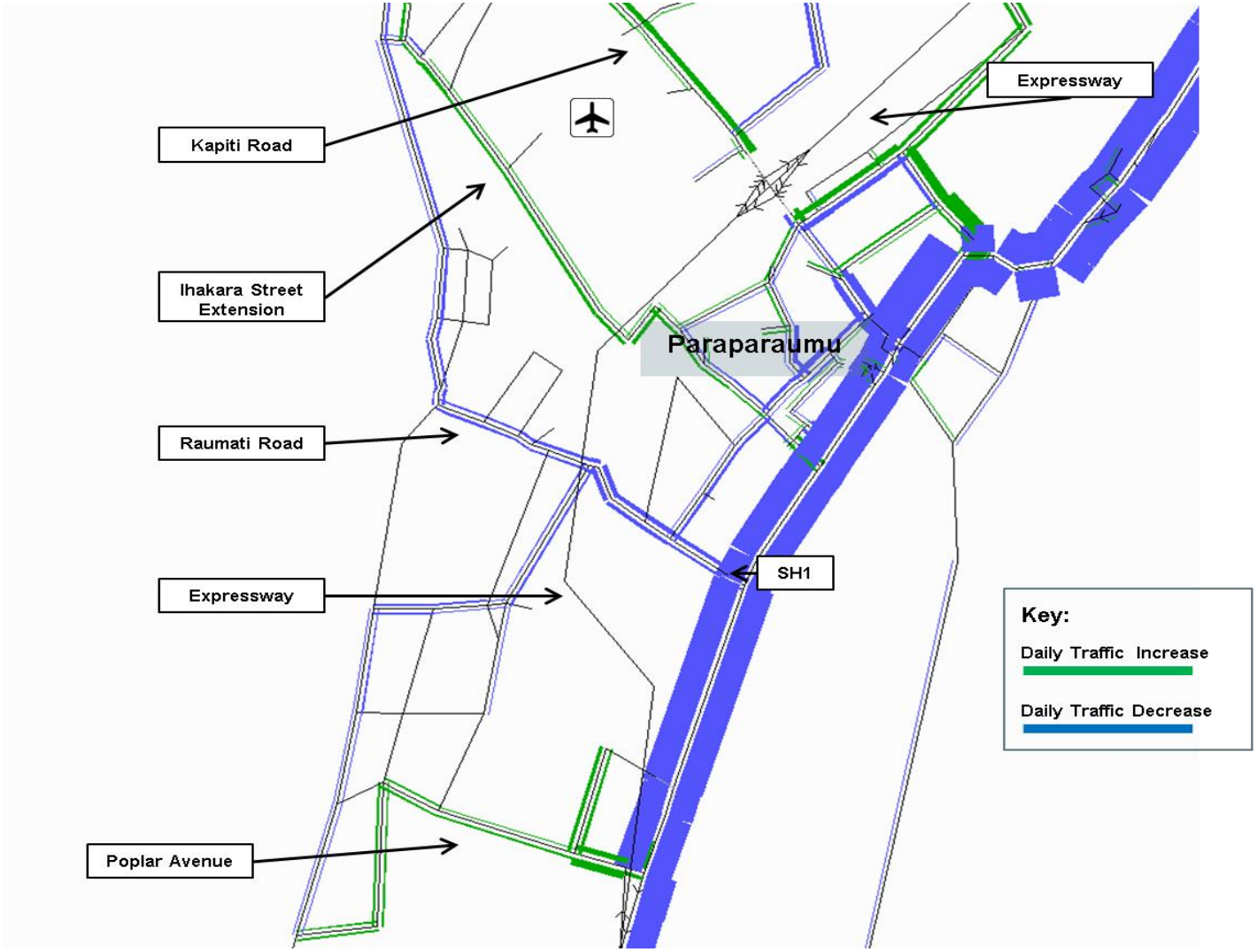
Screen Line		2016				2026			
		Do Minimum	Scenario 1 - Expressway Only	Scenario 2 - WLR Only	Scenario 3 - WLR & SH1 Expressway	Do Minimum	Scenario 1 - Expressway Only	Scenario 2 - WLR Only	Scenario 3 - WLR & SH1 Expressway
Waikanae River	Existing SH1	36,315	12,663	26,221	8,815	39,323	15,195	28,921	10,288
	SH1 Expressway		23,752		16,631		25,795		18,344
	WLR	n/a	n/a	10,893	11,619	n/a	n/a	13,008	13,198
Otaihanga Road	Existing SH1	31,975	8,972	23,725	6,278	37,686	11,305	26,445	7,374
	SH1 Expressway		15,695		15,033		17,126		16,662
	WLR	n/a	n/a	10,340	14,673	n/a	n/a	11,775	16,584
Kapiti Road	Existing SH1	29,034	n/a	25,362	n/a	31,076		26,638	
	SH1 Expressway		15,695		15,033		17,126		16,662
	WLR	n/a	n/a	9,137	9,805	n/a	n/a	9,511	10,677
Raumati Road	Existing SH1	29,966	n/a	21,648	n/a	31,534		23,778	
	SH1 Expressway		16,278		15,216		17,638		16,942
	WLR	n/a	n/a	12,214	12,365	n/a	n/a	11,805	13,061

Figure 3.1 – Generic SH1 Expressway and Local Arterial Road Option

Figure 5.1 – Option 1 - Upgrading the Existing SH1 Alignment

Figure 5.3 – Option 3 - Expressway Follows Rail Corridor

ANNEXURE G – PREDICTED CHANGE IN 2026 DAILY FLOW DUE TO PROJECT



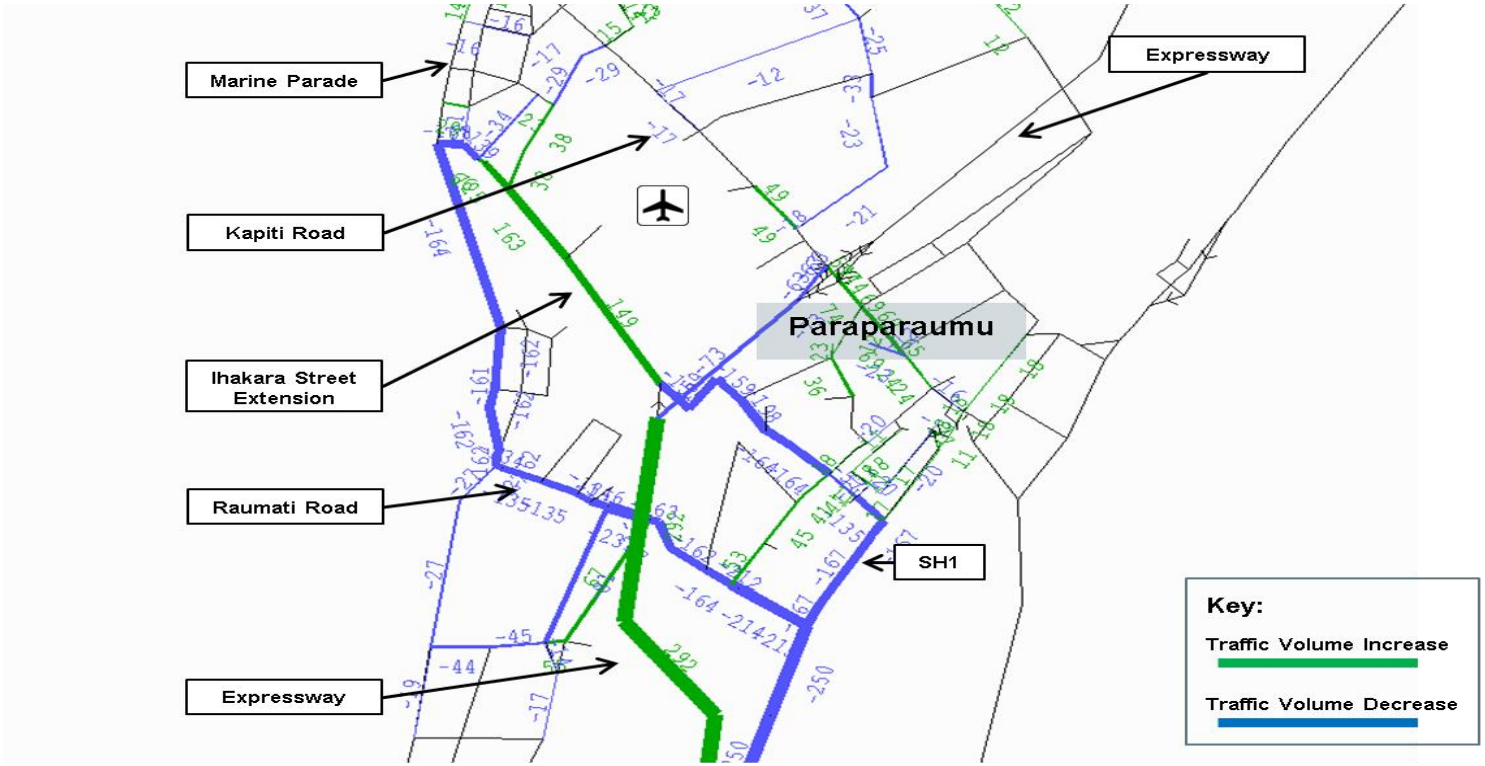
ANNEXURE H – SUMMARY OF KAPITI ROAD CORRIDOR MODEL WITH SIGNALS AT MILNE/TE ROTO DRIVE (2026 PM PEAK FULL GROWTH)

Scenario	**M2PP with Te Roto & Milne Signals**
Growth	**Full Growth**
Year	**2026**
Time Period	**PM Peak**

			Delay								
			Movement			Approach			Intersection		
			Delay	Volume	LoS	Delay	Volume	LoS	Delay	Volume	LoS
Kapiti Rd/ Te Roto Dr	**Signals**										
Te Roto Dr	Kapiti Rd (E)	L	15.2	363	B	16.3	380	B	17.8	3,294	B
	Kapiti Rd (W)	R	40.7	17	D						
Kapiti Rd (E)	Kapiti Rd (W)	T	4.0	1,114	A	8.0	1,589	A			
	Te Roto Dr	R	17.4	474	B						
Kapiti Rd (W)	Te Roto Dr	L	17.5	230	B	30.0	1,325	C			
	Kapiti Rd (E)	T	32.6	1,095	C						
Kapiti Rd/ Milne Dr	**Signals**										
Kapiti Rd (E)	Milne Dr	L	15.3	152	B	17.9	1,601	B	14.8	3,298	B
	Kapiti Rd (W)	T	18.2	1,448	B						
Milne Dr	Kapiti Rd (W)	L	27.9	138	C	33.1	239	C			
	Kapiti Rd (E)	R	40.1	101	D						
Kapiti Rd (W)	Kapiti Rd (E)	T	5.3	1,269	A	8.4	1,459	A			
	Milne Dr	R	28.7	190	C						
M2PP I/C Western/ Kapiti Rd	**Signals**										
Kapiti Rd (E)	Kapiti Rd (W)	T	3.7	1,112	A	4.4	1,462	A	13.8	3,401	B
	M2PP (N)	R	6.5	351	A						
M2PP (S)	Kapiti Rd (W)	L	24.8	483	C	29.2	568	C			
	Kapiti Rd (E)	R	53.9	85	D						
Kapiti Rd (W)	M2PP (N)	L	21.8	367	C	17.4	1,371	B			
	Kapiti Rd (E)	T	15.7	1,004	B						
M2PP I/C Eastern/ Kapiti Rd	**Signals**										
M2PP (N)	Kapiti Rd (E)	L	10.8	184	B	33.0	381	C	19.7	2,792	B
	Kapiti Rd (W)	R	53.6	198	D						
Kapiti Rd (E)	M2PP (S)	L	28.0	59	C	20.1	1,321	C			
	Kapiti Rd (W)	T	19.7	1,262	B						
Kapiti Rd (W)	Kapiti Rd (E)	T	14.9	913	B	14.6	1,090	B			
	M2PP (S)	R	13.2	177	B						
Kapiti Rd/ Arawhata Rd/ Town Centre	**Signals**										
Arawhata Rd	Kapiti Rd (E)	L	2.1	121	A	15.6	265	B	26.4	3,156	C
	Town Centre	T	22.0	92	C						
	Kapiti Rd (W)	R	35.2	52	D						
Kapiti Rd (E)	Town Centre	L	26.3	8	C	29.5	1,240	C			
	Kapiti Rd (W)	T	27.7	1,020	C						
	Arawhata Rd	R	38.5	213	D						
Town Centre	Kapiti Rd (W)	L	31.2	246	C	30.8	554	C			
	Arawhata Rd	T	31.7	216	C						
	Kapiti Rd (E)	R	27.8	93	C						
Kapiti Rd (W)	Arawhata Rd	L	22.1	204	C	23.4	1,096	C			
	Kapiti Rd (E)	T	21.1	726	C						
	Town Centre	R	34.9	165	C						

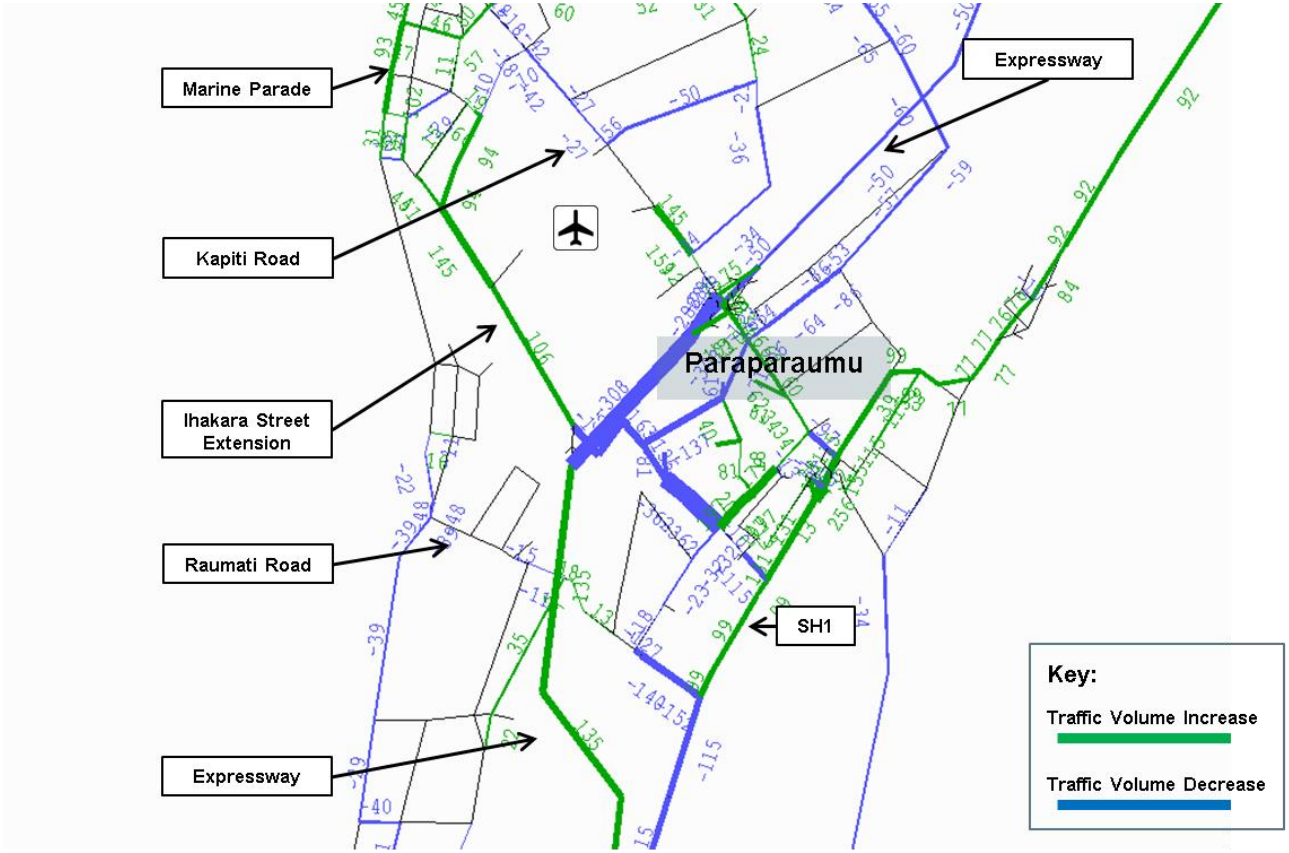
ANNEXURE I – PREDICTED FLOW CHANGE WITH IHAKARA STREET OFF RAMP

Figure I.1 Change in 2-way flows, 2026 AM peak (Full Growth)



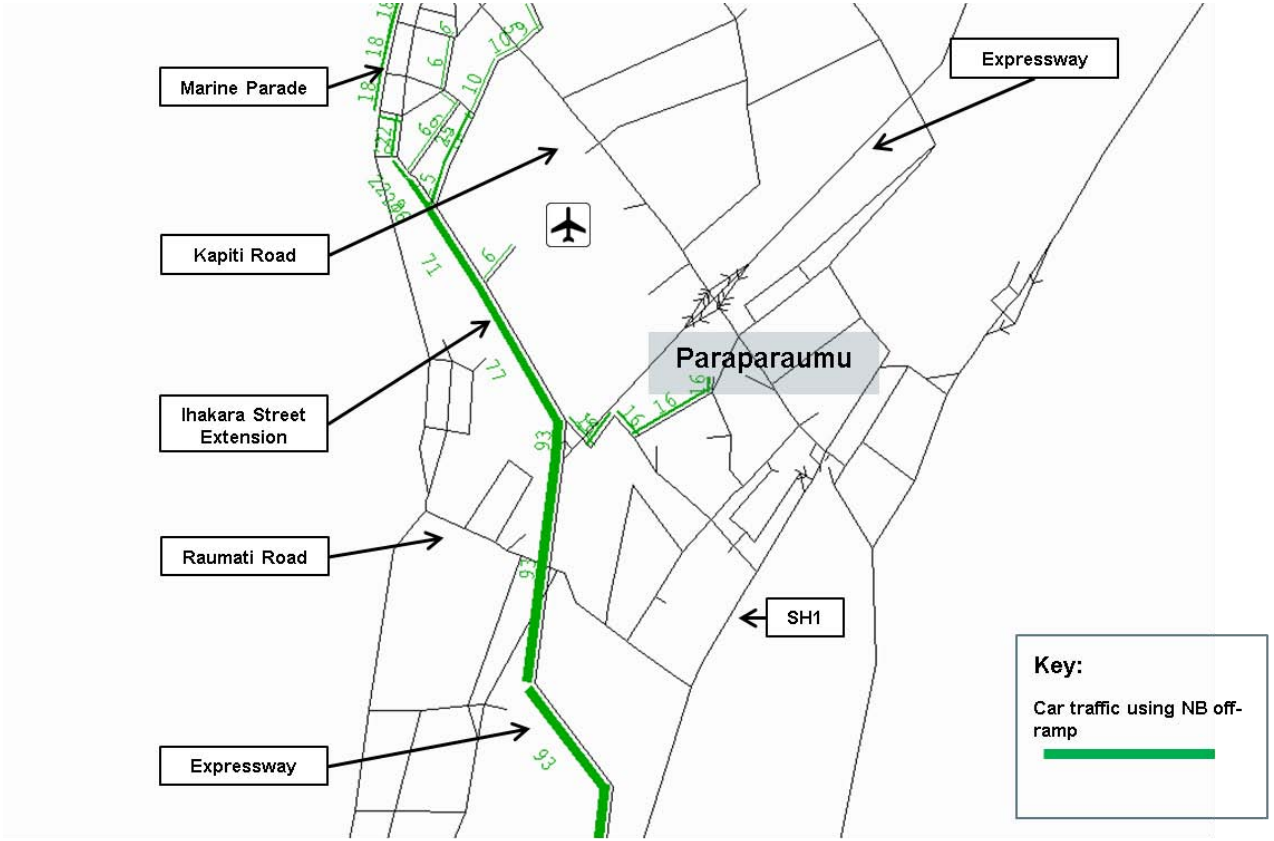
2026 AM Peak Hour Option "Full Growth" with NB off-ramp to Ihakara Street (left and rights allowed) minus Option "Full Growth" ie V12E – V12B. Zoom towards Paraparaumu Town Centre. Bandwidth units 100mm.

Figure I.2 Change in 2-way flows, 2026 PM peak (Full Growth)



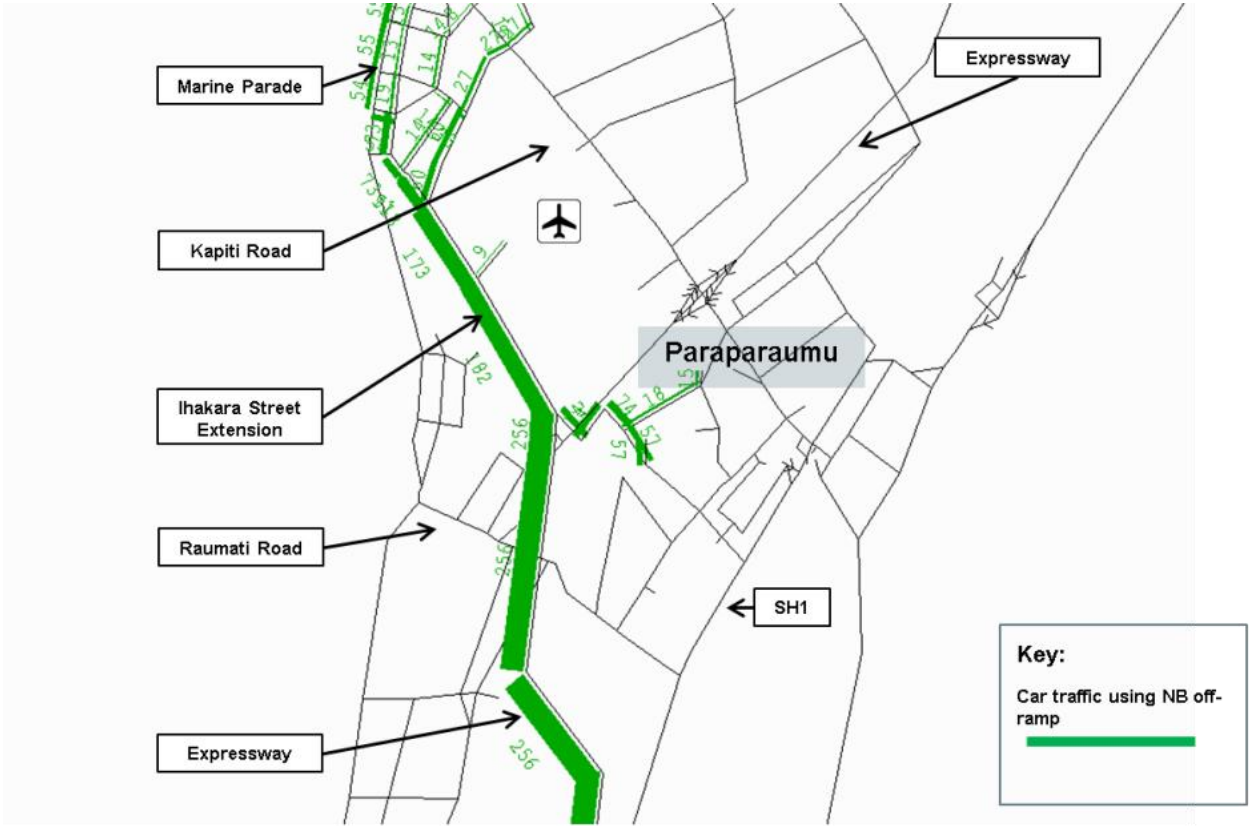
2026 PM Peak Hour Option "Full Growth" with NB off-ramp to Ihakara Street (left and rights allowed) minus Option "Full Growth" ie V12E – V12B. Zoom towards Paraparaumu Town Centre. Bandwidth units 100mm.

Figure I.3 Users of Ihakara Off Ramp, 2026 AM peak (Full Growth)



2026 AM Peak Hour Option "Full Growth" with NB off-ramp to Ihakara Street (left and rights allowed) select link analysis **(Cars only)**. Zoom towards Paraparaumu Town Centre. Bandwidth units 50mm.

Figure I.4 Users of Ihakara Off Ramp, 2026 AM peak (Full Growth)



2026 PM Peak Hour Option "Full Growth" with NB off-ramp to Ihakara Street (left and rights allowed) select link analysis **(Cars only)**. Zoom towards Paraparaumu Town Centre. Bandwidth units 50mm.

ANNEXURE J – PROPOSED AMENDMENTS TO DESIGNATION CONDITION

DC.X3	The NZTA shall prepare in collaboration with KCDC and Greater Wellington Regional Council for the public transport elements, a Network Integration Plan (NIP) for the Project, or relevant Project phases, to demonstrate how the Project integrates with the existing local road and public transport networks and with future improvements planned by KCDC. The NIP shall include details of proposed physical works at the interface between the State highway and the local road network, and shall address such matters as pedestrian/ cycleway design detail, lane configuration, traffic signal co-ordination and operational strategies, signage and provision for bus stops. In addition, the NIP will address: a) How the works required for the Project at the Kāpiti Interchange will interface with the upgrades to intersections on Kāpiti Road at Milne Drive and Te Roto Drive proposed by KCDC (in particular lane configurations to two continuous traffic lanes in each direction between the expressway intersection and Milne Drive). b) Design details of where the shared pedestrian/cycleway proposed as part of the Project will interact with the local network, especially where it uses parts of the local road network at Mazengarb Road, Otaihanga Road, Kauri Road, Ngarara Road, and the realigned Smithfield Road. This should include the details of the form and dimensions of the facility. c) Details of the agreed protocols for operating the traffic signals on Kāpiti Road at and immediately adjacent to the Expressway interchange. This should include priorities for queue management and targets for pedestrian crossing times. d) Design work carried out to finalise detail for alternative access to properties on Kāpiti Road whose existing access is affected by the Project. e) Detailed design work undertaken to replace bus stops on Kāpiti Road and at Peka Peka. f) Design details for provision of the pedestrian and traffic calming facilities referred to in condition DC.X1 and DC.X2. g) Arrangements for a design workshop with KCDC to confirm the preferred intersection control and concept design for the Te Moana Interchange. Works identified in the NIP which are the responsibility of the NZTA, including any works associated with the relocation of bus stops, will be undertaken as at the time of construction works for the Project.