

**UNDER** the Resource Management Act 1991 ("**RMA**")

**IN THE MATTER** of an application to **HAMILTON CITY COUNCIL** for private plan change 7 to the Operative Hamilton City District Plan by **GREEN SEED CONSULTANTS LIMITED**

**STATEMENT OF EVIDENCE OF HEATHER LOUISE PERRING (KAITIAKI PLANNING)  
ON BEHALF OF ROTOKAURI LANDOWNERS\*:**

**\*A list of Submitters whom this evidence represents is attached in Attachment A.**

**PLANNING**

**08 OCTOBER 2021**

## 1. SUMMARY OF EVIDENCE

- 1.1 I was engaged by a group of Rotokauri Landowners as a Planning Expert to prepare a submission and advise them on planning aspects regarding transportation effects generated by Proposed Plan Change 7.
- 1.2 The Landowners don't oppose the development of housing but are especially concerned about the potential transportation effects on Exelby Road which is unsafe for all modes of land transport. The road has significant topographical, alignment, and formation issues, which when combined with existing volumes of traffic, including heavy vehicles, is already very hazardous.
- 1.3 I have included in my evidence a short film (**The Film**) which features one section of Exelby Road south of the development site, and this demonstrates the aspects outlined in 1.2, and the physical risks and typical driver behaviour that occur daily. The Film: [https://kaitiakiproperty.sharepoint.com/:v/g/ESKBjDrQKlIOunVSR5a\\_oZYBKmks\\_nB\\_JqkBvJphEPtiT-w?e=QmLT5T](https://kaitiakiproperty.sharepoint.com/:v/g/ESKBjDrQKlIOunVSR5a_oZYBKmks_nB_JqkBvJphEPtiT-w?e=QmLT5T)
- 1.4 In my capacity as a planning professional, I have identified substantial gaps (both quantitative and qualitative) in the Applicant's Integrated Transport Assessment (**ITA**) regarding the nature of the existing environment, and the impacts that the proposed development is likely to generate.
- 1.5 I have, in my capacity as a Planning expert and as someone highly familiar with this locality, further characterised the existing environment.
- 1.6 However, no modelling of the interim scenario over the next 15 years, prior to the Minor Arterial and connecting roads being constructed, has been provided. In my opinion this means that determining appropriate trigger points for upgrades is, at this stage, no more than guesswork.
- 1.7 Notwithstanding that the applicant has informed me during expert conferencing on 5<sup>th</sup> October 2021 that additional modelling is being prepared, the assessments will still be lacking a well-considered and thorough safety audit.
- 1.8 Accordingly, I have formed the opinion that, in the absence of quality traffic modelling, the existing environment, and safety assessments, decisions should take a precautionary approach, and require additional mitigations on Exelby Road and

Burbush Road (outside the development area), over those already recommended by HCC.

- 1.9 For convenience I have named the group whom this evidence represents as the Rotokauri Landowners but will mostly refer to the group as **(The Landowners)**.

## 2. INTRODUCTION

- 2.1 My full name is Heather Louise Perring. I am the Planning Director of Kaitiaki Property Services Limited (trading as Kaitiaki Planning), based in Tauranga.

- 2.2 I hold a Bachelor of Arts - Geography (2001) and a Master of Planning Practice with honours (2003), both from the University of Auckland. I am a member of the Resource Management Law Association, and a Full Member of the New Zealand Planning Institute.

- 2.3 I have over 10 years' experience as a planning consultant based in Auckland, Hamilton and Tauranga. During this time, I have served secondments for New Zealand Transport Agency (**NZTA**) assessing traffic effects on the Waikato State Highway network, and for Waikato Regional Council in the policy team working on Proposed Plan Change 1 to the Waikato Regional Plan. As a consultant I both prepare and process resource consent applications, many of which require assessment of traffic effects and review of ITA's. I have also led resource consent applications for smaller developments within the Rotokauri Structure Plan area.

- 2.4 In this matter I have assisted the Landowners with the preparation of a pro-forma submission to Proposed Plan Change 7 to the Operative Hamilton City District Plan (**ODP**), and review of further submissions. I have read the relevant parts of the application material, and the Hamilton City Council (**HCC**) s42A Hearing Report. I have participated in two expert conferencing sessions for traffic matters, being on 21 September and 5 October 2021, and a special meeting also on 5 October 2021 with Mr Hills and Ms Fraser-Smith for the applicant, and Mr Black for Council.

- 2.5 My knowledge of the local roading environment is intimate from having lived on Lee Road (within the Rotokauri Structure Plan Area) from 2013 to 2019, and another 3 years prior living in the Rotokauri area.

- 2.6 My evidence will address the following topics:

- (a) Rotokauri Structure Plan background; and

- (b) Existing transport environment matters; and
- (c) Key Issues with the ITA in relation to Exelby and Burbush Roads south of the plan change site; and
- (d) Comments on Council's 42A report and recommended District Plan amendments
- (e) Relief sought.

2.7 I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. I have complied with the Code of Conduct in preparing this statement of evidence. Unless I state otherwise, this evidence is within my sphere of expertise, and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express. I do not consider that my previous residency in the Rotokauri area impacts my professional judgement given that I now reside in Tauranga, and I have nothing personal to gain or lose from the decisions made.

### **3. ROTOKAURI STRUCTURE PLAN BACKGROUND**

- 3.1 I take the Landowner's pro-forma submission as read, however wish to emphasise some key points that are pivotal to the remainder of my evidence.
- 3.2 The existing Rotokauri Structure Plan when read as a whole, sets the expectation that development and roll out of the transport network will be sequenced from south to north. The Structure Plan clearly articulates that any developer who wishes to develop out of sequence will be required to bear the full cost of infrastructure provision (3.6.2.9 Staging b)), and to provide infrastructure in a way that is efficient and sustainable from a city-wide perspective.
- 3.3 Provision 3.6.3.2 Roding, states that the release of land beyond stage 1A (the southernmost area of land) "*will be contingent upon the availability of network capacity which may arise as a result of traffic generation*".
- 3.4 And provision 3.6.2.3 g) stipulates that development outside of Areas A and B (Figure 15-7a) "*will need to coincide with the northward's extension of Rotokauri Minor Arterial Road to connect with Te Kowhai Road at the City Boundary*".

- 3.5 The Landowners therefore anticipate that development (and associated upgrades to local roads) would be rolled out in a south to north pattern, and that no major development would occur in the north of the Structure Plan until roading, and reticulation had been rolled out in Areas A and B; and certainly not before the Minor Arterial Road is available to the boundary of any such development site.
- 3.6 They also reasonably expect that any such development proposal would not be approved under the Resource Management Act (RMA) unless the safety of existing roads connecting the proposed development to the remainder of the Structure Plan area would not be affected by the new traffic generated from the out of sequence development, to a degree that is unacceptable.
- 3.7 The Proposed Plan Change (**PPC**) has the effect of removing the protection that the Landowners thought they had under the Structure Plan, as traffic will not be distributed around new roads east of Exelby and Burbush Roads, including the Minor Arterial Road and connections through to Te Rapa as intended. Instead, traffic will be concentrated on the existing substandard and unsafe rural roads for many years, or until the Structure Plan roads are delivered.
- 3.8 The Landowner's submissions therefore called for the plan change proponent to fully fund and construct the Minor Arterial Road from the south through to Rotokauri North to connect with Te Kowhai Road.
- 3.9 However, my understanding is that HCC has taken on the responsibility and costs for securing the Minor Arterial Road corridor through the Resource Management Act 1991 (**RMA**) designation process. Mr Black's Transportation Assessment on behalf of HCC states that "*it appears unlikely that the minor arterial network will be constructed until the mid2030's, a period of around 15 years*"<sup>1</sup>. As far as I am aware this timeframe has not been disputed by any party to these proceedings.
- 3.10 In the absence of the Minor Arterial Road being provided by the applicant, the other relief sought within the Landowner's submission is fundamental to addressing traffic effects. That is, for the plan change proponent to cater for the demand generated within the wider transport network with applicant funded upgrades based upon a robust and peer reviewed ITA.

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Section 3.2.3 page 6, PC7 Rotokauri North – Updated Transportation Review, 6 September 2021,

- 3.11 Specifically, the submission called for an updated ITA to thoroughly assess the existing performance of the road network south of the PPC area (Exelby and Burbush Roads), through the Exelby Road/Rotokauri Road intersection...including assessment of:
- existing sightlines from intersections and accessways;
  - existing peak flows and flow proportions;
  - actual vehicle speeds;
  - pedestrian and cyclist safety.
- 3.12 The Landowners and I are concerned that the applicant's traffic evidence before us is missing crucial information regarding the existing environment of Exelby Road and southern Burbush Road necessary to adequately inform the nature, timing and spatial extent of upgrades.
- 3.13 Further, no modelling of the interim scenario over the next 15 years, prior to the Minor Arterial and connecting roads being constructed, has been provided. In my opinion this means that determining appropriate trigger points for upgrades is no more than guesswork.
- 3.14 For this scale of development and the out of sequence nature, my professional opinion is that a specific transportation model should have been created to an agreed spatial area of effects, built from baseline physical traffic surveys.
- 3.15 The remainder of my evidence will outline how I have formed the opinion that, in the absence of quality traffic modelling and existing environment assessment, decisions should take a precautionary approach, and require additional mitigations on Exelby Road and Burbush Roads (outside the development area), over those already recommended by HCC.

#### **4. EXISTING TRANSPORT ENVIRONMENT MATTERS**

- 4.1 This section of my evidence is supported by a short film (link further below) prepared by one of the Landowner submitters. This was captured on Monday 4<sup>th</sup> October 2021, during Level 3 Covid lockdown, so is not a true reflection of typical weekday traffic and represents only a portion of Exelby Road south.
- 4.2 In my opinion, the existing road environment of Exelby and Burbush Roads has not been adequately described or assessed by the applicant. Given the concerns raised

in the Landowner's submission and by Mr Black in his September 2021 report<sup>2</sup> that **significant** [my emphasis] adverse safety effects are likely from the increased traffic, a full safety audit of Exelby and Burbush roads south of the site should be provided.

- 4.3 At 4.9 and 4.13 of the applicant's transport evidence, Mr Hills provides a single photograph each of the straightest sections of Burbush and Exelby Roads in locations fronting the development site. He has not included any photographs of these roads south of the site, and only provided a brief description of each road. In the original ITA<sup>3</sup> submitted with the PPC application Mr Hills does note that for Exelby Road, "*the topography and horizontal alignment of Exelby Road results in limited forward visibility at many curves*".
- 4.4 However, no assessment of measured sightlines has been provided, and Mr Hills evidence does not account for the limited visibility at many straight sections of road due to horizontal curvature, or poor visibility from key intersections or private vehicle crossings. The narrow, curving, and undulating character of Exelby Road in particular, combined with the lack of road shoulder, footpaths or cycleways, and the speed and volume of traffic (including heavy vehicles), makes the use of this road very dangerous. These factors of the existing roading environment are obvious in the Film presented here:  
[https://kaitiakiproperty.sharepoint.com/:v/g/ESKBjDrQKlIUnVSR5a\\_oZYBKmks\\_nBJqkBVjphEPtiT-w?e=QmLT5T](https://kaitiakiproperty.sharepoint.com/:v/g/ESKBjDrQKlIUnVSR5a_oZYBKmks_nBJqkBVjphEPtiT-w?e=QmLT5T)
- 4.5 Attachment B provides a map showing the locations of each image with timestamp identified.
- 4.6 Key film highlights:
- 0-31 secs – intersection of Exelby and Rotokauri Roads – demonstrates the strong curvature and restricted visibility, as well as drivers making split second visual assessments of whether its clear to turn. Also note the burnout tyre markings from 'boy racers'.
  - 31 – 36 secs – at the vehicle crossing of Kauri Lane – demonstrates a typical corner of Exelby Road with strong horizontal curvature and camber. Also shows a milk tanker driving fast and taking up two thirds of the carriageway width.

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<sup>2</sup> Ibid, Section 3.1,

<sup>3</sup> Section 2.4, Rotokauri North Proposed Plan Change, Integrated Transportation Assessment Report, 30 April 2019.

- 37 secs -1min 33 secs – outside 55 Exelby Road/Kauri Lane – vehicles including milk tanker crossing the centre line around a sweeping corner. Demonstration of the poor visibility and associated risk for right turning into Kauri Lane. Note, just before filming a driver was observed to have taken the corner too fast, overcorrected, and fishtailed, only just managing to avoid a crash. This is just one example of the number of near-misses that the landowners observe on a regular basis.
- 1min 34 secs – 1min 42 secs – school bus must drop the children off at a neighbour's driveway (80 Exelby) because there is nowhere safe to stop outside their home. The children then must walk 100m with no safe refuge and where both horizontal and vertical curvatures limit visibility.
- 1 min 43 secs – example of construction traffic taking up two thirds of the road width and forcing vehicles to move off the road to let the truck past.

4.7 This film is just a snapshot of the typical road conditions, and user experience. Other sections of Exelby Road are just as perilous. The Landowner's report that the road has become more dangerous than ever within the past 18 months, due to increased trucks on this road, going to and from local development sites. The Landowner's have told me that they walk and cycle significantly less than they used to, due to the increased volume of construction related traffic and the dangers that presents.

4.8 With no footpaths walking or jogging is a highly risky activity, and with the narrow carriageway/unsealed shoulder, cycling too. No data has been provided to account for the existing number of pedestrians or cyclists along these roads.

4.9 A crash history analysis has been provided in Mr Hill's evidence (4.19), including for Exelby and Burbush Roads south of the site, from NZTA data between 2016 – 2021. This records that all the recorded crashes on Exelby and Burbush Roads have been due to loss of control.

4.10 However, no assessment of safe operating speeds, or actual recorded speeds been provided. As a regular user of these roads in the past, and based on further anecdotal evidence from the Landowner's, observations are that vehicles regularly exceed a safe operating speed for the existing nature of the road.

4.11 I understand that other submitters will be presenting lay evidence of multiple other crashes that have occurred over the past 9 months on these local rural roads, which have not been captured in the NZTA crash data.

- 4.12 Mr Black has usefully provided his own assessments of various safety aspects for Burbush and Exelby south of the development site, especially of the intersections at Burbush/Exelby and Exelby/Rotokauri Roads. I concur with Mr Black's assessments of these two key intersections as they currently exist. In addition, Figure 1 below shows the northbound approach to the Burbush/Exelby intersection from Exelby Road, with very poor visibility on the approach.



Figure 1: Northbound approach on Exelby Road to intersection with Burbush Road (Source: Googlemaps Streetview, October 2019).

- 4.13 The intersection of Lee Road and Exelby Road, although on a relatively straight stretch of road, has poor visibility to the north due to the carriageway being hard east, meaning that vegetation on the adjacent property blocks the sightline. Drivers are forced to edge right up to the carriageway before they can get a clear view. Visibility is also restricted by vertical curvature to the north. Even if the carriageway was widened and shifted over here, the speeds at which vehicles come up over the rise to the north means that they are quickly upon you if you have just pulled out from Lee Road. I have personally experienced several times myself the frightening experience of turning southbound from Lee Road and suddenly finding a truck bearing down upon me.
- 4.14 Use of existing vehicle crossings along Exelby Road also poses significant danger. In the absence of an assessment by the applicant, I have undertaken my own basic desktop analysis<sup>4</sup> utilising my previous experience on secondment to NZTA, local knowledge and recent site visits.
- 4.15 This basic assessment indicates that well over half of the 38 households accessing Exelby Road outside the plan change area have sightlines that would not meet the

<sup>4</sup> I have utilised Google Streetview imagery and HCC's GIS maps including measuring tool.

minimum sightline requirement of Rule 25.14.4.1e) for an Urban Collector with an operating speed of 60km/ph<sup>5</sup>, which is 90m. There will be significantly more properties that would fail the minimum sightline for a rural road, operating speed of 80km/ph.

- 4.16 Mr Hills has confirmed via email (5 Oct 2021 – Refer Attachment C) that the existing daily volumes reported in his evidence for Exelby Road are for the northern portion of road only, near SH39. He also confirmed that these ‘existing’ daily volumes are in fact from 2017 records. Moreover, Mr Hills July 2021 revised traffic modelling<sup>6</sup> did not report on modelled volumes for the PM peak. Mr Hills maintained (in the same email and during expert conferencing) that the 2021 baseline model can be used as a suitable proxy for existing traffic volumes, and typically overestimate the volumes. However, I note Mr Black’s review<sup>7</sup> states that his “*understanding is that the current WRTM [Waikato Regional Transport Model] is under-reporting residential trips and there is a risk that the model is understating trips on the road network*”. In addition, data has not been provided for the proportion of heavy vehicles, nor of the baseline modelled daily volumes for the full length of Exelby Road.
- 4.17 Mr Black has confirmed by email on 7th October 2021 (refer Attachment C) that HCC’s mobileroad.org website provides the most up to date estimated volume but does caution that as it’s only an estimate, there is a degree of uncertainty. This shows existing volumes on the section of Exelby Road south of Burbush Road to be estimated at 855 veh/day with 10 percent heavy vehicles. In that same email Mr Black also confirmed that Mr Hills has separately provided to Mr Black the missing PM peak 2021 model output for Exelby Road south; however, this new information does not appear to be reported in Mr Hills evidence.
- 4.18 As the baseline volume against which to measure traffic effects has not been collected by a physical and current traffic survey, decisions regarding an activity with potential for significant traffic effects are expected to be made based on estimates over which there is noted uncertainty.

## 5. KEY ISSUES WITH TRAFFIC IMPACT ASSESSMENTS

- 5.1 The applicant’s traffic modelling only provides 2021 and 2041 scenarios. In my opinion, it is inconceivable that despite the large number and content of transport related

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<sup>5</sup> Exelby Road is shown in the Structure Plan as a future Collector Road, whilst HCC’s Speed Management Plan (Version 2, June 2019) indicates the future speed limit will be 60 km/ph.

<sup>6</sup> Ibid, section 3.3.1, pages 6-7

<sup>7</sup> Ibid, section 3.2

submissions and expressed views by both myself and Mr Black of the likely significant effects on roads south of the development site, the applicant has not provided modelling of the interim scenario over the next 15 years.

- 5.2 I consider that along with a thorough safety audit, this information is critical for determining appropriate trigger points for upgrades, as well as the form and spatial extent of those upgrades. I expressed this professional opinion in the expert conferencing on 5<sup>th</sup> October and called for modelling at 5-year intervals. In response, Mr Black and Mr Hills informed me that 5-year interval modelling is not feasible within the Waikato Regional Transport Model (**WRTM**) due to time and cost, as well as the number of assumptions about development in other areas of the structure plan that would need to be made. As such Mr Black confirmed that he has recently asked Mr Hills to provide modelling of the 2021 scenario with 2000 houses. I expect this will be presented at the Hearing by Mr Hills.
- 5.3 I hold reservations over whether that modelling will be totally adequate because it will not account for traffic associated with the proposed business zone. Nor will it account for construction related traffic associated with the incremental development of the site, or present the modelled traffic in clear incremental intervals (i.e. cumulative effects).
- 5.4 It is very important to the Landowners that construction traffic is accounted for and managed, as they have been exposed for several years already, and especially over the past eighteen months, to a high volume of trucks and trade vehicles using Exelby/Burbush. This has resulted in the road surface being damaged, and I have heard witness statements that a motorcycle accident outside 55 Exelby Road was directly attributed to loss of control from the surface corrugations caused by trucks. As demonstrated in Section 4, the roads are not suitable for any heavy vehicles, and certainly not for the 10% volume reported by HCC in June this year.
- 5.5 A further issue with the proposed plan change, as it relates to traffic effects and modelling, is the lack of staging information. It is unknown at what stage the business zone may be developed, or how development will be spatially sequenced. Moreover, without staging the Landowner's are left in the dark for how long they will be exposed to construction traffic, disruption from road works, and associated noise, vibration, and dust.

- 5.6 Regarding other travel modes, Figure 2-3 of the applicant's original ITA<sup>8</sup> includes a walking catchment based on a 1.5km or 20-minute non-recreational walking trip. This shows that this catchment would extend as far south as 91 Exelby Road. However, this does not capture recreational walkers or runners, who are likely to cover a longer distance in a single outing.
- 5.7 It would be naive of anyone to assume that residents in the Rotokauri North area would not be attracted to a 'lovely walk, run or ride in the countryside' and only use the roads within the site or external shared pathways. This is especially the case in the earlier stages of development when the Rotokauri North internal roads are not yet completed. I believe that all residents must be afforded reasonable protection for their safety, including any new residents in the development site.
- 5.8 Regarding the Burbush/Exelby Road intersection, I concur with Mr Black that "*the ITA Addendum provides an assessment of efficiency effects, it does not provide an assessment of the proposed intersection from a safety perspective*"<sup>9</sup>. Although Mr Hills has proposed an upgrade to the Burbush/Exelby Road intersection<sup>10</sup> consisting of a T-intersection, he has not provided a sightlines assessment, and I have reservations that the suggested design would achieve the necessary level of safety, especially if road widening leads to increased speeds. However, I defer to Mr Black regarding the appropriate type of upgrade necessary for this intersection.
- 5.9 One final matter on the ITA is that no monitoring regime for the volumes or effects of traffic on Burbush and Exelby Roads south of the development has been provided by the Applicant.
- 5.10 Overall, the applicant's ITA and proposed transportation mitigations fall extremely short of addressing the Landowners' submission and the risk of significant effects.

## 6. COMMENTS ON 42A REPORT AND RECOMMENDED OR PROPOSED DISTRICT PLAN AMMENDMENTS

- 6.1 I fully concur with Mr Black's statement that "*the proposed infrastructure responses lack in emphasis for providing interim transport solutions that reflect safe system design principles and Vision Zero. We are concerned that the proposed Implementation Plan will result in adverse incremental and cumulative effects,*

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<sup>8</sup> Ibid, section 2.6.3

<sup>9</sup> Ibid, section 3.4

<sup>10</sup> Ibid, section 3.6

*including a risk of death and serious injury crashes because of the mainly rural and per-urban network context*<sup>11</sup>.

- 6.2 I also agree with HCC's position and recommendations that applicant funded upgrades to Burbush and Exelby Roads south of the site and including the intersection of Exelby and Rotokauri Road, are necessary to avoid significant transport effects.
- 6.3 However, I am concerned that with the recommended road widening, without additional mitigations, road user safety risks will only worsen. This is especially because the road widening will do little to fix the poor visibility with vertical and horizontal curvatures. In fact, with the possibility of increased speeds, vehicles exiting their driveways and intersections may have less time to get clear of oncoming vehicles over rises or around corners.
- 6.4 During expert conferencing, neither Mr Hills nor Mr Black could deny that the proposed widening would not lead to increased speeds. Hamilton City Plan Figure 15-6c presents a line graph titled 'Design Speed Environment – relationship between carriageway width and forward visibility'. The supporting text states "*the two geometric factors that contribute to achieving the target operating speed are carriageway width and forward visibility. Figure 16-6c can be used to give an indication of the speed at which traffic will travel for a given carriageway width/forward visibility combination*" (page 15-55). By my simple measure against this graph, widening from 5.5 to 7.7m could increase the speed range by approximately 8-15 km/ph, dependent on forward visibility.
- 6.5 Given all the above, I consider that the recommended trigger point for the upgrades to Exelby and Burbush Roads south of the site (proposed standard 3.6A.4.2 f) ii) of 200 total lots, has not been adequately substantiated. Nor has the recommendation for road widening been tested for whether it will reduce road safety risks.
- 6.6 And given all the above, and particularly that the existing Structure Plan provisions did not intend for any development to occur in the north until the Minor Arterial Road was provided, I cannot reach any other conclusion than these upgrades should occur before land development commences.

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<sup>11</sup> Ibid, section 1.2, page 2.

## 7. RELIEF SOUGHT

7.1 As the precluding evidence has demonstrated, even with road widening, additional heavy vehicular traffic will not be acceptable on Exelby Road outside of the development area. There are no provisions in the ODP or proposed amendments that directly address this matter. When I have raised this during expert conferencing, the applicant's Planner, Ms Fraser-Smith, maintained that construction traffic could be dealt with at resource consent stage. However, my review of the ODP and proposed amendments concludes that there are no related standards or activity assessment criteria that explicitly refer to effects from construction traffic. Also, subdivision in accordance with the structure plan (as per rule 23.3d ix) is likely to be eligible for the notification preclusion under 1.1.9a of the ODP; therefore, the Landowners may have no further opportunity to raise concerns about construction traffic and have them addressed.

7.2 Moreover, the lack of information regarding construction traffic and development staging means there is no indication of the timeframe over which such traffic would occur. Whether residents must endure construction traffic and associated safety and amenity effects for 5 years or 15 is a big difference. Accordingly, my position is that the worst-case scenario should be assumed of 15 years until the Minor Arterial is available to take such traffic. I see no need for heavy vehicles associated with the development of Rotokauri North to travel by Exelby Road south, given the Waikato Expressway and State Highway 39 (**SH39**) are adjacent to the site which are designed for heavy vehicular traffic.

7.3 As such, I consider it appropriate and necessary to add a new standard under 3.6A.4.2 Staging and Infrastructure Provision f) transport as follows:

**v. Any development works shall not allow heavy vehicle movements along Exelby or Burbush Roads south of the site.**

7.4 The Landowners also seek that the following subclause be added to standard 25.14.4.3 n) (or to alternate restricted discretionary assessment criterion as discussed in expert conferencing):

*In addition to the Broad ITA content specified in 25.14.4.3 m), any Broad ITA prepared in relation to development within Rotokauri North shall include, but not be limited to:*

**ii an assessment of effects from construction related traffic and works within existing road corridors.**

7.5 I accept the applicant's suggested amendment to the structure of 3.6A.4.2 f) presented in evidence to replace the two separate triggers (with and without the minor arterial) with Tables and one trigger point (new proposed rule reference 3.6A.4.2 f) ii).

7.6 However, to ensure that road user safety, especially pedestrians, cyclists and residents exiting in vehicles from their properties is not worsened the Landowners seek the following additional mitigations:

a) That proposed Table 2, standard 3.6A.4.2 f) ii, as modified in expert conferencing Joint Witness Statement (5 Oct 2021) be further amended to provide:

*Table 2: Transport Triggers and upgrades outside of Rotokauri North*

<i>Transport corridor construction or improvement (refer map X)</i>	<i>Development trigger</i>	<i>Construction or improvement</i>
<b><u>Exelby and Burbush Roads South of Burbush Road the southern boundary of the Rotokauri North Structure Plan Area.</u></b>	<b><u>500 dwellings/lots</u></b> <b><u>The first new dwelling/lot within the Rotokauri North Structure Plan Area.</u></b>	<b><u>Seal widening to achieve a 7.7m sealed width (comprising 5.7m carriageway plus 1m sealed shoulders), and construction of a temporary footpath (compacted gravel) along the Hamilton City side and adjacent to these widened carriageways.</u></b>  <b><u>The design of the temporary footpath shall be submitted to Hamilton City Council's Transportation Manager for approval prior to works commencing.</u></b>
<del><b><u>Exelby Road North of Burbush Road</u></b></del>	<del><b><u>? Trigger ?</u></b></del>	<del><b><u>? Upgrade ?</u></b></del>
<del><b><u>Burbush Road between the PC area and Exelby Road</u></b></del>	<del><b><u>? Trigger ?</u></b></del>	<del><b><u>Seal widening to achieve a 7.7m sealed width (comprising 5.7m carriageway plus 1m sealed shoulders)</u></b></del>

Regarding the two intersection treatments, I am happy to defer to Mr Black on an appropriate intersection triggers and treatments.

- 7.7 I do not accept the applicant's proposal that upgrades to Burbush and Exelby Roads fronting the development can be deferred until the first new dwelling directly accesses each of these roads. As raised in Expert Conferencing, due to the lack of a staging plan this could result in a perverse outcome whereby upgrades to these roads are delayed by the development gaining access only from SH36 for an undefined amount of time.
- 7.8 Alternatively, the Landowners would accept a deferral of decisions on transport upgrades, at Commissioners direction, to allow the applicant to address the information gaps highlighted in this evidence such that appropriate trigger points and upgrades can be adequately informed. I consider that any such process must include peer review of new information by HCC's traffic expert.
- 7.9 Additionally, we urge Hamilton City Council to bring forward speed reductions for Exelby and Burbush Roads, as well as that section of Rotokauri Road between Rotokauri Heights and Exelby Road. I consider that the existing environment of Exelby Road warrants an immediate speed reduction.
- 7.10 One final matter that appears to have received little attention is potential effects on Te Kowhai Road east. Currently this has a speed limit of 80km/ph and like Exelby Road has no sealed shoulder. I understand that the applicant has agreed to forming a shared path alongside Te Kowhai Road east which is supported by the Landowners. However, I consider that the speed on this section of road should also be reduced by HCC.
- 7.11 To round out the policy suite related to the subject of my evidence, I also recommend that **Objective 3.6A.2.4(a) be amended to also include for minimising effects on Exelby Road, Burbush Road and Te Kowhai Road East.**
- 7.12 And that **Objective 3.6A.2.4(d) be amended to also include for managing speeds on Burbush Road, Exelby Road and Te Kowhai Road East.**
- 7.13 And that provisions be included in an appropriate location within Chapter 3.6 to require that:
- a) **Monitoring to include 5 yearly traffic effects review:** and

b) Any application for Subdivision to be accompanied with a **Construction Management Plan** which also covers methods to minimise effects from construction traffic on the surrounding transport network.

## 8. CONCLUSION

- 8.1 Based on all the information before me, I consider that there is insufficient quantitative and qualitative transport assessment to adequately inform decisions on the timing, nature or spatial extent of upgrades to the transportation network outside of the Rotokauri North development area.
- 8.2 The Landowners hold grave concerns for the safety of road users because of the proposed development being out of sequence, and I do not agree that the upgrades and triggers as proposed by the applicant or HCC fully address those concerns.
- 8.3 I therefore have reached the conclusion that either that information must be provided prior to any decisions on these matters being made; or a precautionary approach must be adopted, requiring all upgrades as requested herein from the start; and additional planning provisions added as requested.

Heather Louise Perring

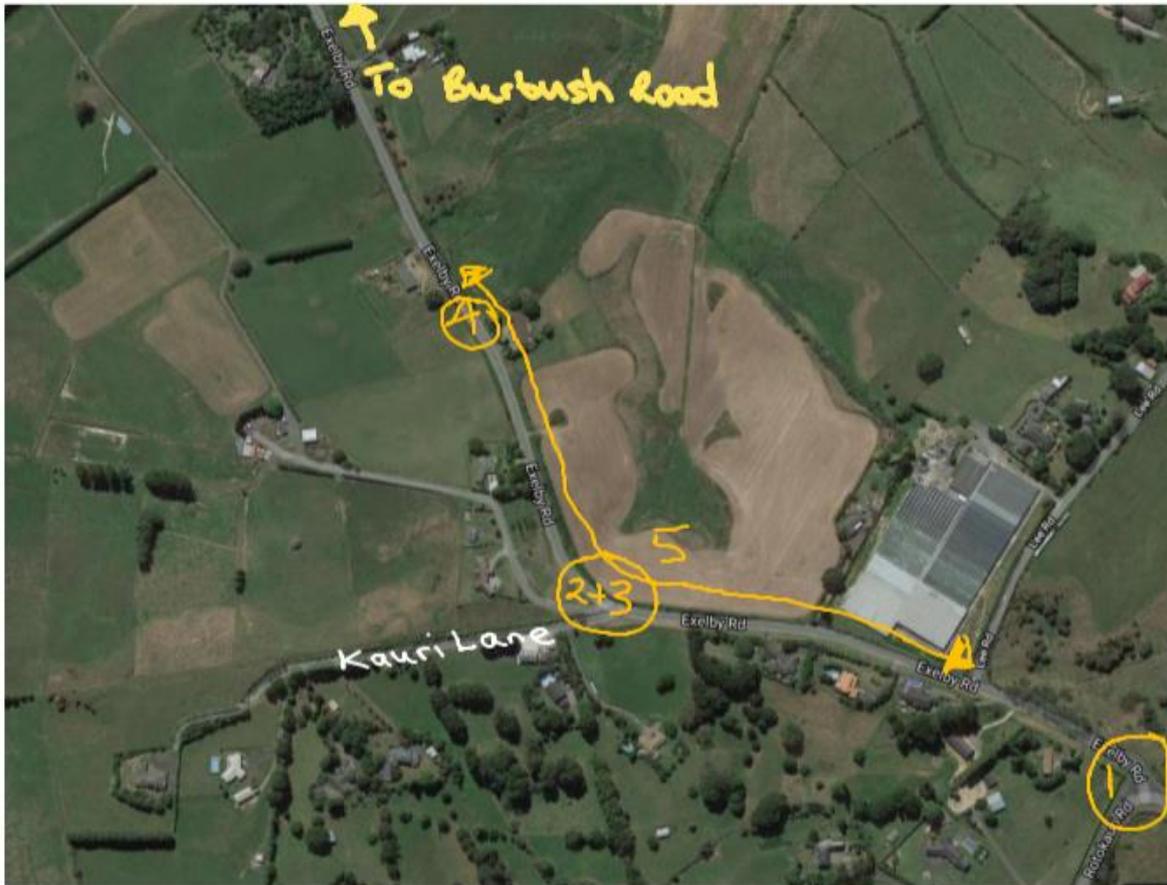
Date: 8 October 2021

**ATTACHMENT A – LIST OF SUBMITTERS REPRESENTED**

<b>Submission Number</b>	<b>Name</b>	<b>Address Represented</b>
7	Lance and Karen Managh	53D Exelby Road
9	Dennis Dove and Dianne Godden	95 Exelby Road
10	Batami and Arie Pundak	17 Exelby Road
12	Bob and Barbara Barris	55 Exelby Road
14	Jennifer and Ewen Drysdale	244 Exelby Road
25	Mark and Kay Moroney	80 Exelby Road
26	Tania Browning	27 Lee Road
27	Judith Browning	33 Lee Road
28	Ann Harvey	23 Lee Road
29	Shane and Antonia Withey	153 Exelby Road
31	Shane and Virginia Henderson	53B Exelby Road
33	Bruce and Robyn Whittaker	53E Exelby Road
37	David and Cathy Dewes	119 Exelby Road
38	Callum and Catherine Thorley	91 Exelby Road
39	Gerard Guzzo	71 Exelby Road
41	Josh and Michaela Gill	53A Exelby Road
42	Stuart Barris	55 Exelby Road
44 and 45	Jo and Glenn Stirling	341 Exelby Road

46	Julie Caddigan	161 Exelby Road
50 and 51	Jo Austin and Noelle Bryant	273 Exelby Road
55 and 56	Susan and Paul Rothery	250 Exelby Road
60 and 61	Barry and Dianne Heerdegen	225 Exelby Road
67	Jane and Dave Sole	189 Exelby Road
69	Murray and Jane Stewart	283 Exelby Road

## ATTACHMENT B – FILM LOCATIONS



1	0-31 secs: Intersection of Exelby and Rotokauri Roads
2	31 – 36 secs: At the vehicle crossing of Kauri Lane/55 Exelby Road
3	37secs -1min33 secs: At the bend outside 55 Exelby Road
4	1min 34 secs – 1min 42secs: Outside and between 80 and 91 Exelby Road
5	1 min 43 secs – end: Lee Road/Exelby Road intersection through to 91 Exelby Road

**ATTACHMENT C – EMAIL EXCHANGE WITH TRAFFIC EXPERTS**

**From:** Alastair Black <Alastair.Black@graymatter.co.nz>  
**Sent:** Thursday, 7 October 2021 11:08 AM  
**To:** Heather Perring <Heather@kaitiakiproperty.com>  
**Cc:** Craig Sharman <Craig.Sharman@beca.com>  
**Subject:** Re: PC7 - query about existing traffic volumes

Hi Heather  
 I provide responses to your queries in red

Regards  
 Alastair

**From:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Date:** Thursday, 7 October 2021 at 08:32  
**To:** Alastair Black <[Alastair.Black@graymatter.co.nz](mailto:Alastair.Black@graymatter.co.nz)>  
**Cc:** Craig Sharman <[Craig.Sharman@beca.com](mailto:Craig.Sharman@beca.com)>  
**Subject:** FW: PC7 - query about existing traffic volumes

Hi Alastair,

Please see the email chain below. Can you please clarify something for me for preparing my evidence. In your report dated 6 September 2021, at 3.3 you state:

“In 2020 the traffic volume was estimated as 550veh/day north of Burbush Road and 850veh/day south of Burbush Road.”

Where did you obtain these volumes from?

The traffic volumes in my report have come from the [mobileroad.org](http://mobileroad.org) website (mentioned in Jamie’s email). These volumes are generally updated every year and have recently been updated to a date of 28/06/21:

- 542veh/day north of Burbush Road
- 855veh/day south of Burbush Road

For both counts (est) means its an estimated value, not an actual count

The 550 for Exelby north of Burbush Road matches the number provided by Leo which he has confirmed dates to 2017. Based on that, can you confirm whether you would need to correct your above statement?

The above statement is true for the estimated volumes as at 2020. I don’t intend to update that part of my report.

Where did you get your 850 figure from for the southern section of road? Was that from HCC’s data as per the attached info from Jamie? I note Leo did not provide a volume for this section.

As above this came from the [mobileroad.org](http://mobileroad.org) website

Also, what do you consider is the most reliable figure for Exelby south – that provided in your report, or Leo’s calculation provided below from the baseline 2021 modelling of 2003 veh/day?

Both figures have a degree of uncertainty. As noted above, the volumes published by HCC are estimates not counts. The 2021 model was been developed from a 2018 base model validated at that time. The modelling is based on a number of assumptions. The model also only provides 2-hourly volumes so there is additional uncertainty introduced by converting these to daily volumes.

One other thing: I can't see that Leo has provided modelling of the PM peak for Burbush-Exelby south of the site – refer to his 22 July 2021 report, section 3.3 – Figures 7 and 8 show the AM peak only. Have I missed something here?

**No, he did not provide that information in his report. He has separately provided me with the AM and PM model outputs.**

Can you please ensure that the additional modelling being prepared now will include both peaks.

Thanks so much,

Heather

**Heather Perring** | *Planning Director* | **MNZPI**

[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com) |



**From:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>  
**Sent:** Tuesday, 5 October 2021 8:29 AM  
**To:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>  
**Subject:** RE: PC7 - query about existing traffic volumes

Hi Heather,

Daily volumes are as follows (at the intersection). This is 2021 daily volume. Base with no PC7 traffic.

Burbush 894 vpd  
 Exelby Road (north) 1112 vpd  
 Exelby Road (south) 2003 vpd

Cheers

Leo

**Leo Hills**

Director

**Commuter Transportation**

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**P** PO Box 128259, Remuera 1541, Auckland



**From:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Sent:** Tuesday, 5 October 2021 8:08 AM  
**To:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>  
**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>  
**Subject:** RE: PC7 - query about existing traffic volumes

Hi Leo,

The daily info for each leg / approach to the intersection would be great thanks – for the baseline 2021 scenario.

Kind regards / Ngā mihi nui

Heather

**Heather Perring** | *Planning Director* | **MNZPI**  
[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com) |



**From:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>  
**Sent:** Tuesday, 5 October 2021 8:01 AM  
**To:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>  
**Subject:** RE: PC7 - query about existing traffic volumes

Hi Heather,

Sorry, I was thinking of Burbush when I said the roundabout. Exelby count is the section up near SH39 (ie at the site).

On a midblock section on Exelby (eg south of Burbush) is pretty easy to do. In terms of the intersection Burbush / Exelby are you wanting the turning movements (which is a bit more tricky especially with the rather unusual nature of this intersection) or are you just wanting the daily info for each leg / approach to the intersection?

Cheers

Leo

**Leo Hills**

Director

**Commute Transportation**

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**From:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>

**Sent:** Tuesday, 5 October 2021 7:09 AM

**To:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>

**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>

**Subject:** Re: PC7 - query about existing traffic volumes

Thanks Leo,

How about at the intersection of Burbush/Exelby, and one other point further south along Exelby.

In your response below you state the Exelby data was from near the roundabout - but there is no roundabout on Exelby. Please clarify.

Thanks

Heather

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**From:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>

**Sent:** Monday, October 4, 2021 8:46:59 PM

**To:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>

**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com) <[craig.sharman@beca.com](mailto:craig.sharman@beca.com)>; Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>

**Subject:** RE: PC7 - query about existing traffic volumes

Hi Heather,

My comments below in **RED**. Hope this helps.

In terms of traffic engineering we typically look at peak hour in relation to modelling (hence the Waikato model uses 2 hourly and SIDRA modelling uses 1 hourly and the evidence looks at capacity in 1 hour) which is why we have typically looked a hourly.

Note, to get to hourly flows from the two-hour flows (including all the diagrams) you typically multiply by 0.55-0.57. Then to get to daily the peak hour is 15% of the daily. Is there a particular

spot etc you are more interested in? (its quite a long process to convert all the numbers to daily.....is it Burbush / Exelby?)

Cheers

Leo

**Leo Hills**

Director

**Commute Transportation**

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**From:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>

**Sent:** Monday, 4 October 2021 5:38 PM

**To:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>

**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>

**Subject:** RE: PC7 - query about existing traffic volumes

Thanks Leo, and apologies about the late notice!

In that case, I suggest it would be useful to have the 2021 modelled numbers being reported for vpd – I couldn't see those figures anywhere, only the peak two-hour period. But if I have missed those figures somewhere please let me know.

Notwithstanding, I would still like the answers to my below questions.

Thanks

Heather

**Heather Perring** | *Planning Director* | **MNZPI**

[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com) |



**From:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>

**Sent:** Monday, 4 October 2021 5:21 PM

**To:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>  
**Subject:** RE: PC7 - query about existing traffic volumes

Thanks Heather.

I will try to answer your questions before the meeting tomorrow but just a note that we have relied on the modelling base 2021 (and 2041) volumes than “current existing” in our analysis as they are typically higher than the existing ones.

Cheers

Leo

**Leo Hills**

Director

**Commute Transportation**

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**From:** Heather Perring <[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com)>  
**Sent:** Monday, 4 October 2021 4:39 PM  
**To:** Leo Hills <[leo@commute.kiwi](mailto:leo@commute.kiwi)>  
**Cc:** [craig.sharman@beca.com](mailto:craig.sharman@beca.com); Jamie Sirl <[Jamie.Sirl@hcc.govt.nz](mailto:Jamie.Sirl@hcc.govt.nz)>  
**Subject:** PC7 - query about existing traffic volumes

Hi Leo,

I have spoken to Craig Sharman and he suggested that I email you with questions I have about the existing traffic volumes. I do intend on raising these points in tomorrow’s expert conferencing, but thought it best to provide you with a heads up so you can be prepared.

1. In your traffic reports when discussing existing traffic you refer to a TDG Preliminary Transportation review (dated 2017). However HCC has informed me that this has never been provided as an attachment. Can you please provide a copy of the TDG report. Please see below the table (extracted from the TDG report) outlining the aforementioned traffic volumes on Burbush Road and Exelby Road. These volumes were taken from the Council traffic counts and the RAMM database (at that time i.e. report was prepared in 2017). Notwithstanding, as noted previously the volumes outlined in Table 3 of my evidence (referring to these volumes) are not specifically used in the analysis for PC7. The traffic modelling utilises the WRTM outputs (for 2021 and 2041) as they are higher than existing and they take into account other future development.

Road	Count Source/Type	ADT	Approximate Hourly Volume
Exelby Road	RAMM	550	70
Burbush Road	RAMM	590	70
Te Kowhai Road (SH39)	NZTA, tube count	3,761	450
Koura Drive (SH39)	Estimate, sum of Te Kowhai Rd and Burbush Rd	4,351	520
Onion Road	Waikato DC, estimate	400	5
Ruffell Road (Onion Rd to Te Rapa Rd)	RAMM	1,050	130
Rotokauri Road	RAMM	1,500	180

Table 1: Average Daily Traffic and Peak Hour Traffic Volumes

- Can you clarify if the reported existing traffic volumes for Exelby Road are for southern Exelby Road, or only for the intersection with SH39, or other? **It's near the roundabout**
- Can you confirm how old the existing traffic data reported for Exelby and Burbush Roads are – do they date back to 2017 or older? **Correct, however it's the 2021 model volumes that have been used as they are much higher than "existing".**
- HCC traffic count for Exelby Road recorded 855 vpd (10% heavy) at 28/06/2021. This is significantly more than the 550 vpd reported in your evidence for Exelby Road. As such do you think your 'existing' traffic volumes need to be adjusted or surveyed to reflect 2021 traffic?

**I don't think this is necessary as the traffic volume referred to above (550vpd) has not been used for the purpose of the traffic assessment. The 2021 Base volumes (as well as 2021 with 150 dwellings and 2041 with 2000 dwellings) were extracted from the WRTM and used in the analysis (again the 2021 base model is higher than the existing surveyed volumes).**

Thanks,

Heather

**Heather Perring | *Planning Director* | MNZPI**

[Heather@kaitiakiproperty.com](mailto:Heather@kaitiakiproperty.com) |