

BEFORE THE HEARING PANEL APPOINTED BY KAIPARA DISTRICT COUNCIL

Under the Resource Management Act 1991

In the matter of the hearing of submissions on Proposed Private Plan
Change 84: Mangawhai Hills Limited

**REBUTTAL EVIDENCE OF RACHEL ERICA GASSON ON BEHALF OF KAIPARA DISTRICT
COUNCIL**

TRANSPORTATION ENGINEERING

13 May 2024



Warren Bangma
T: +64-9-358 2222
warren.bangma@simpsongrierson.com
Private Bag 92518 Auckland

1. INTRODUCTION

1.1 My full name is Rachel Erica Gasson. I am currently employed as a Senior Transport Consultant at Commute Transportation Consultants Ltd (Commute).

1.2 I prepared the transportation engineering memorandum that informed the section 42A Report for proposed Private Plan Change 84.

1.3 I hold a Master of Engineering Studies from the University of Auckland (2016) and a Bachelor of Engineering with Honours also from the University of Auckland (2013). I am a Chartered Professional Engineer (CPEng) and a Chartered Member of Engineering New Zealand (CM EngNZ).

1.4 I have over ten years' experience as a specialist traffic and transportation engineer. During that time, I have been engaged by local authorities and private companies/individuals to advise on traffic and development issues covering safety, management and traffic planning matters of many kinds.

2. CODE OF CONDUCT

2.1 I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2023 and have complied with it in preparing this evidence. I confirm that the issues addressed in this evidence are within my area of expertise and I have not omitted material facts known to me that might alter or detract from my evidence.

3. SCOPE OF EVIDENCE

3.1 This statement of rebuttal evidence on behalf of Kaipara District Council responds to various transport matters arising from the statements of evidence prepared by:

- (a) Peter Kelly on behalf of Mangawhai Hills Limited dated 29 April 2024; and
- (b) Amitabh (Amit) Arthanari on behalf of Berggren Trustee Co. Limited dated 6 May 2024.

4. RESPONSE TO EVIDENCE OF MR KELLY AND MR ARTHANARI

4.1 The transport matters raised in the evidence of Mr Kelly and Mr Arthanari address a wide range of topics. My rebuttal is limited to responding to the parts of their evidence which I consider warrant additional comment relating to:

- (a) Pedestrian and cycle connectivity to Moir Street;
- (b) The Moir Street / Tara Road / Kaiwaka Mangawhai Road intersection;
- (c) The north-south primary road connection to Moir Street;
- (d) Network upgrades; and
- (e) Proposed new rules.

Pedestrian and cycle connectivity to Moir Street

4.2 There is uncertainty as to the timing of the road connections from the Plan Change area to Moir Street and Mangawhai Central, and whether or not these will be provided.

4.3 At paragraph 71 of his evidence Mr Kelly states that the initial development works are expected to occur in close proximity to Tara Road and Cove Road, and that staging is currently unconfirmed. He is of the view that DEV1-REQ2.1.i would be able to identify network improvements for all travel modes.

4.4 Given that Tara Road is highly likely to be the primary access route in the short to medium term, I am of the opinion that a shared path facility on Tara Road is required with any development that has road or property access to Tara Road and should be included in the Development Area rules. This facility should connect the existing footpath on Tara Road to the new primary road network within the Plan Change area and include a crossing facility on Tara Road.

4.5 I note that Mr Arthanari also states that improved pedestrian and cycle integration with Moir Street is essential at paragraph 2.7 of his evidence.

4.6 I confirm that my opinion on this matter is unchanged, and I continue to be of the view that a shared path along with a crossing facility is required on Tara Road with any development from this corridor.

Moir Street / Tara Road / Kaiwaka Mangawhai Road Intersection

4.7 Mr Kelly has undertaken further traffic modelling which includes sensitivity testing as well as scenario testing¹.

4.8 This traffic modelling has addressed the concerns outlined in my memorandum provided in support of the section 42A Report, with the further modelling showing that the road network can operate at an acceptable level with regards to vehicle flows, if the Moir Street and Mangawhai Central connections are not constructed.

¹ Supplementary Transport Assessment, Mangawhai Hills, April 2024

- 4.9** Given that the scenario testing shows that the Plan Change area has the potential to considerably increase vehicle volumes at Tara Road / Moir Street / Kaiwaka Mangawhai Road, I have reviewed the safety at this intersection in more detail.
- 4.10** Mr Kelly's Transportation Assessment dated May 2023 includes a Safe System Assessment for this intersection which states that there is good sight distance².
- 4.11** Based on my assessment, the sight distance to the western Moir Street approach does not meet the required standards as provided in Austroads Part 4A³, and the speeds from this direction are perceived to be in excess of the current posted speed.
- 4.12** In paragraph 3.7 of his evidence Mr Arthanari has also identified that the visibility at this intersection is limited.
- 4.13** Rule DEV1-REQ2 of the Mangawhai Hills Development Area requires that an Integrated Transport Assessment is provided when a new road is to be vested. This assessment must include a Safe System Assessment of the Tara Road / Moir Street / Kaiwaka Mangawhai Road intersection.
- 4.14** This assessment would require an updated assessment of available sight distance and any necessary mitigation measures to address any identified deficiencies.
- 4.15** In my view, there are several variables that would impact this assessment including the use of the land adjacent to the intersection as well as the road environment and speeds. Furthermore, there are a number of design treatments that could be implemented to improve the safety at this intersection including vegetation / earthwork removal to improve the sightlines, speed management, and layout upgrades.

² Page 33 of Proposed Private Plan Change Transportation Assessment, Frecklington Farm, dated May 2023

³ Guide to Road Design Part 4A, Unsignalised and Signalised Intersections

4.16 As such, it is my opinion that the safety at this intersection will need further consideration at subsequent stages of the development and design process, and provision for this to occur is facilitated through Rule DEV1-REQ2. Furthermore, I am of the view that there is sufficient space in the road reserve for a range of mitigation measures to be implemented at this intersection.

4.17 North-south Primary Road connection to Moir Street

4.18 At paragraph 4.16 of his evidence Mr Arthanari shows an alternate north-south primary road connection to Moir Street, which he views could be provided should the Moir Street connection via Ulrich Drive not be realised.

4.19 I am indifferent on the location of the north-south connection to Moir Street and consider that the key outcome of connectivity for pedestrians and vehicles can be achieved through either location.

4.20 Mr Arthanari states that a connection between Moir Street and Tara Road is required to be provided at the first stage of development at paragraph 4.21.

4.21 With regard to private vehicles, I agree that a connection would have wider connectivity benefits, however as stated earlier, the subsequent traffic modelling shows the network can operate at an acceptable level without a connection to Moir Street. Furthermore, the southern properties within the Plan Change area have legal access to Moir Street, offering a potential secondary connection, and therefore I am of the opinion that this connection is not a prerequisite for development to occur.

4.22 Similarly, at paragraph 4.26 of his evidence Mr Arthanari states that pedestrian and cycle connectivity are dependent on the link to Moir

Street, and that the effects of not providing a connection will significantly diminish the active mode connectivity.

4.23 Again, I agree that a connection would provide connectivity benefits for active modes, however I note that the southern portion of the site has legal access to Moir Street and therefore active mode connectivity can be provided in this location.

4.24 I note that at paragraph 4.8 of his evidence Mr Arthanari incorrectly attributes a quote related to the provision of the Moir Street connection to me. I would like to clarify that both of the quotes provided by Mr Arthanari were made by Mr Clease as part of the Section 42A report.

4.25 On review of Mr Arthanari's evidence, I agree that connectivity for all modes within the Plan Change area, and to wider land use activities, is important. I consider that these connections and outcomes are provided for within the Plan Change.

4.26 Network Upgrades

4.27 At paragraph 54 of his evidence, Mr Kelly agrees that a connection from the Plan Change area would trigger the need to upgrade Old Waipu Road to a sealed corridor, specifically the portion between the new intersection and Cove Road. He is of the view that the Precinct Provisions appropriately address this.

4.28 I am of the view that the Precinct Provisions focus on intersection capacity and safety, not corridor upgrades, and that an additional rule is required to capture this upgrade.

4.29 I also note that in my transportation engineering memorandum for proposed Private Plan Change 84 provided in support of the section 42A Report, I identified the need for a roundabout at the intersection of Moana Views Road, Tara Road, and a primary Plan Change Road.

Subsequent to this recommendation, the Structure Plan layout has changed to include two primary road connections onto Tara Road.

4.30 This update removes the need for a roundabout as the vehicle volumes will be split across two intersections. Specifically, the number of turning movements at each intersection will be less, and therefore the potential delay to vehicles is expected to reduce. I acknowledge that the turning movements through the southern access will be converted to through movements, however the effect of through vehicles is less than turning vehicles.

4.31 New Rules

4.32 The Precinct Plan rules have been updated and now include separate standards for roads, vehicle access/driveway, and pedestrian and footpath cycleways. I am of the view that the updated rules adequately address the transport and traffic engineering matters of future developments.

4.33 With regard to land use, the Plan Change now proposes to include three new community hubs for various commercial/ community/ education activities. The Precinct Plan rules include a traffic intensity cap of 200 trips per day, and where this is exceeded an assessment against DEV1-REQ3 is triggered.

4.34 Based on the traffic intensity cap, I anticipate that the peak hour trip generation for these facilities to be in the order of 60 movements. While no assessment of these trips has been included, in my opinion these movements can be accommodated within the sensitivity testing undertaken.

4.35 Furthermore, as identified by Mr Kelly in paragraph 42 of his evidence, many of the trips generated by these community hubs are anticipated to

be local trips from within the Plan Change area and therefore will have minimal effect on the wider network.

4.36 I have reviewed the rules specified under DEV1-REQ3 and am of the opinion that this requirement adequately addresses the transport and traffic engineering matters of future developments.

4.37 Matters of Agreement

4.38 I consider the following matters to be resolved and have no further comment:

- (a) The development potential of the site and corresponding traffic effects;
- (b) The network operation from a capacity perspective if the Moir Street and or Mangawhai Central connection are not realised;
- (c) Pedestrian and cycle provisions on primary roads; and
- (d) Pedestrian provisions and grades of private accesses.

Conclusion

4.39 In conclusion, I consider the only residual matters that require inclusion within the Plan Change provisions to be:

- (a) A shared path on Tara Road between 104 Tara Road and a new primary road connection onto Tara Road; and

- (b) Upgrades on Old Waipu Road between Cove Road and any connection to the Plan Change area.

Rachel Gasson

13 May 2024