

# HEARING REPORT

To:	Paul Wanders   Vaishali Sankar
For:	Kaipara District Council   Northland Transport Alliance
From:	Rachel Gasson, Leo Hills
Date:	10 April 2024
Subject:	Private Plan Change 84 – Mangawhai Hills, Mangawhai
Commute Reference:	J002652 Mangawhai Hills PC Hearing Report 240410

## 1 INTRODUCTION

This hearing report summarises our transport review of Proposed Private Plan Change 84 of the historical Frecklington Farm area, which is now referred to as Mangawhai Hills, in Mangawhai (the 'plan change'). The documents we have reviewed are:

- The Proposed Private Plan Change (Revised) Transport Assessment, Frecklington Farm Mangawhai prepared by Traffic Planning Consultants Ltd.
- The Mangawhai Hills Development Area document prepared by Barker and Associates.
- The submissions in response to the application.

The plan change area is bounded by Moir Street in the south, Tara Road in the west, Cove Road in the north, and Old Waipu Road in the east. The plan change proposes to rezone the existing Rural - Harbour zoning to a Development Area that enables residential development.

## 2 SITE LOCATION AND ENVIRONMENT

We agree with the description of the site and the area of the site (approx. 218 ha).

The TPC ITA includes vehicle counts based on traffic surveys. The peak hour counts on Cove Road and Tara Road are stated to be in the order of 250-375 trips, while the volume of vehicles on Moir Street are stated to be in the order of 500-750 trips.

We agree with the summary of existing speeds near the site, in particular the 80 km/hr speed limit on the northern portion of Tara Road, Cove Road, and Old Waipu Road North. The southern portion of Tara Road, as well as the portion of Moir Street fronting the site, have posted speed limits of 50 km/hr.

We agree with TPC's findings that the crash history does not suggest any recurring crash types at any one specific location.

## 3 EXISTING ACCESSIBILITY

### 3.1 PRIVATE VEHICLE ACCESS

We are of the opinion that the site has good accessibility for private vehicles given Moir Street is an arterial road, and the site is located near the existing Mangawhai Village Centre which offers retail, commercial, and educational land use activities. Directly east of the site is Mangawhai Central, a new development area which underwent Private Plan Change 78 in 2022 (approved July 2022) to provide both residential and employment opportunities in the future.

### 3.2 WALKING AND CYCLING NETWORK

A shared path is provided on Moir Street. This path is generally located on the southern side of the corridor, however outside Mangawhai Domain the path is shifted onto the northern side.

There are currently footpath facilities on one side of Ulrich Drive (the western side), as well as the southern portion of Tara Road (the western side). There are no footpaths on Cove Road or Old Waipu Road North.

### 3.3 PUBLIC TRANSPORT

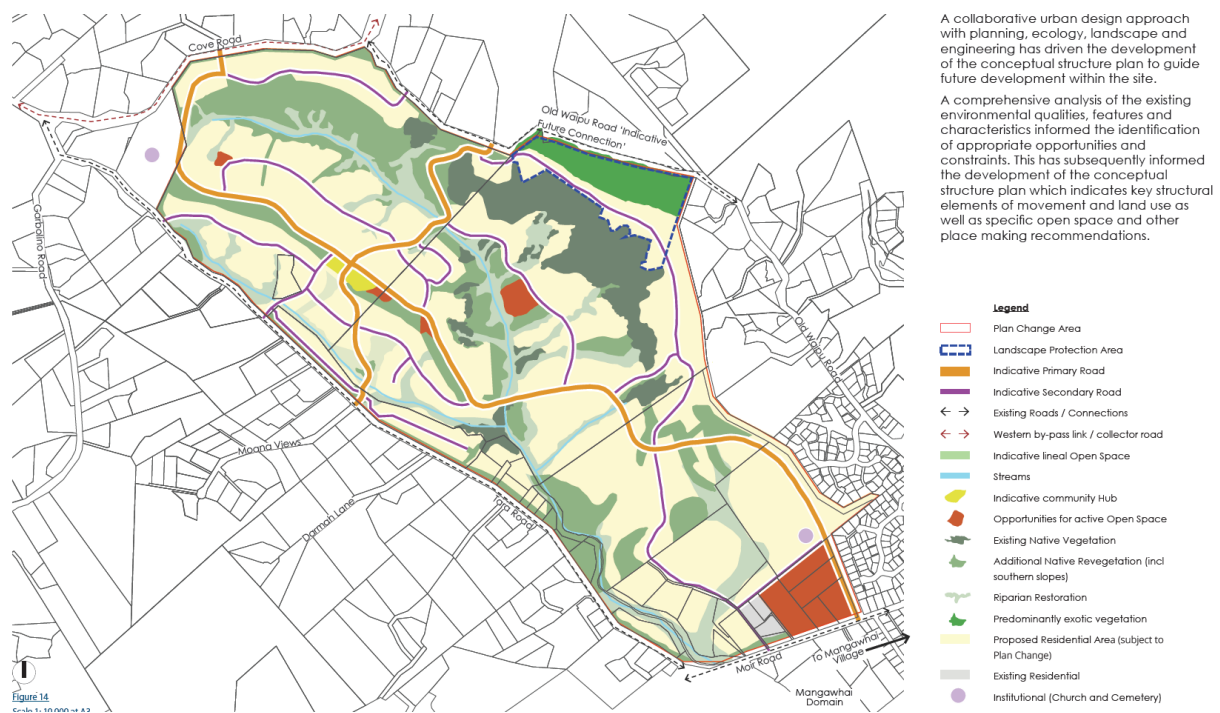
There are currently no public transport provisions in Mangawhai, however it is noted that several school buses that service the area. Some of these services include routes past the site, with school bus routes shown on the EasyBus website to include Moir Street, Tara Road, and Cove Road.

## 4 THE PROPOSAL

The plan change proposes to rezone the existing Rural - Harbour zoning to a Development Area that enables residential. The ITA states that plan change area of approximately 218 hectares of land will facilitate the development of approximately 400-600 dwellings, within an area of approximately 106 hectares (with large areas of land within the plan change area given as green space).

From a transport planning perspective, increased density, particularly where it is near the existing Town Centre is considered appropriate in supporting land use integration. However, in order to support the additional density proposed by the private plan change, consideration of the wider transport effects of this proposal is appropriate.

Figure 4-1: Structure Plan and Proposed Plan Change Area



## 5 ASSESSMENT OF TRANSPORT EFFECTS

### 5.1 POTENTIAL YIELD

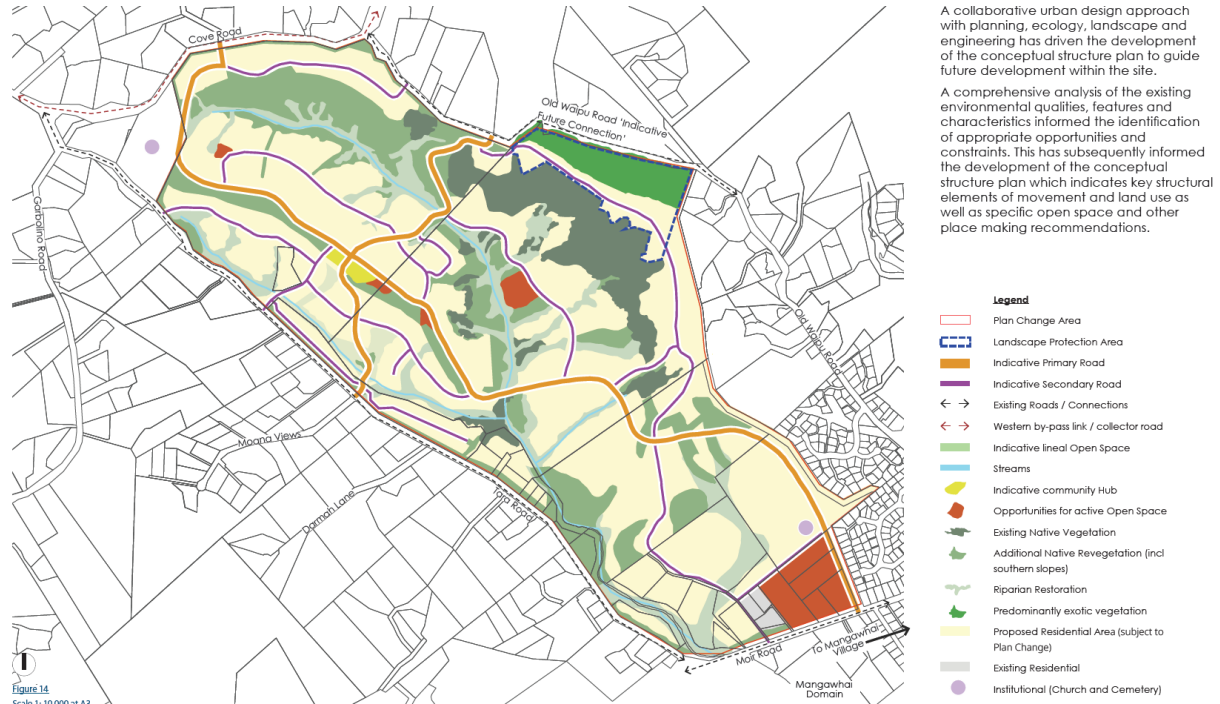
The TPC ITA estimates a likely yield of 400 - 600 residential lots on the site. The assessment contained in the ITA is based on the potential yield of 600 lots. We note that there is no assessment provided to determine how the yield of 600 dwellings was derived, or likely lot development. No additional sensitivity testing has been completed in the ITA should the zoning allow for yields greater than 600 dwellings.

**We therefore recommended a trigger should be provided that requires a further transport assessment should the cumulative development within the plan change area exceed 600 dwellings.**

## 5.2 PROPOSED ROAD NETWORK

The Structure Plan (provided within the ITA) provides an indicative roading network. This is comprised of two primary roads, and a number of secondary roads, as shown in Figure 5-1.

**Figure 5-1: Structure Plan and Proposed Plan Change Area**



The primary roads in the structure plan dissect the site into quadrants with one road providing a northwest-southeast connection and the other providing a south-west-northeast connection. These primary roads intersect with Moir Street, Cove Road, Tara Road, and Mangawhai Central (via Old Waipu Road North). We support the principle of this roading network.

The TPC ITA has assumed approximately 70% of vehicle movements will be to Mangawhai via either Moir Street or the Mangawhai Central Future Connection with 15% headed North Via Cove Road and 15% Headed west via Garbolino Road or the Kaiwaka Mangawhai Road.<sup>1</sup> We understand that the primary road connections to Moir Street and Mangawhai Central require the agreement of third party land owners, and therefore we are of the opinion that the timing and ability to implement these connections is uncertain. Without these connections, the effect of the Plan Change on surrounding intersections will be greater than that which has been assessed.

While these connections are beneficial in providing network connectivity, there is some capacity in the network. Should the Moir Street/Mangawhai Central connections not be provided in the short-medium term, with some upgrades it is likely that nearby intersections could operate acceptably with the majority of the Plan Change in place, however there is no assessment of this included in the applicants Transport Assessment. To address this it is recommended that further sensitivity testing be undertaken by the applicant prior to the

<sup>1</sup> TPC ITA, Table 2: Mangawhai Hills Trip Distribution Estimates, page 12.

hearing to assess the effects on the roading network in the event that the roading connection to Moir Street through the South of the site and to Mangawhai Central through the East of the site is not able to be provided. This will provide more information on the ability of the transportation network to cope with the additional vehicle movements and any upgrades, staging rules or further assessment criteria that are needed.

This is discussed further in Section 5.8.

Old Waipu Road North is currently an unformed gravel access corridor which serves approximately 7 lots. The TPC transportation assessment distributes vehicle trips to/from the site onto this corridor, and therefore it is recommended that any new intersection onto Old Waipu Road will require the corridor (Old Waipu Road) to be upgraded to a formed road between the intersection and Cove Road.

### 5.3 WALKING AND CYCLING CONNECTIVITY

The applicant proposes to provide a footpath on primary and secondary roads, and to extend the existing Tara Road footpath. Given that the timing of the primary road network is considered uncertain we are of the opinion that improved connections and a trigger for timing is required. We acknowledge that the full Plan Change frontage would typically be required to be upgraded by the developer, however given the zoning and demand for pedestrian connectivity to the north of the site, as well as the alternate pedestrian connectivity within the site, we are okay with the footpath terminating at Moana View Road. For these reasons we are also generally okay with Cove Road not being upgraded to include a footpath.

**We recommend that any development accessed off Tara Road should trigger a new footpath between 104 Tara Road and the Tara Road primary road access to the site. This path is shown to be located on the western side of Tara Road, and therefore a primary treatment facility is required to provide an appropriate pedestrian crossing facility. Should this development occur prior to the Moir Street primary road connection then this path should be a widened to a shared path.**

### 5.4 EFFECT ON EXISTING INTERSECTIONS

For the full build out scenario, we agree with the TPC conclusions that the assessed intersections are generally forecast to operate acceptably with regards to vehicle volumes. The safe systems assessment identifies that these intersections would benefit from a right turn bay, which we agree with, and discuss in Section 5.7.

The applicant has not assessed the intersection of Tara Road and Moana Views Road. This intersection is shown to become a cross-road intersection, and also provides connectivity to the pedestrian network. **To manage the traffic and safety effects of this intersection for all road users, we recommend that this intersection is controlled.**

### 5.5 ROAD DESIGN

The applicant proposes that primary roads are to be 20 m wide, while secondary roads are to be 16 m wide. We are of the opinion that these dimensions are appropriate for roads of these classifications. However, given the uncertainty of the primary road network timing

there is the possibility that some secondary roads will operate as a primary road in the short-medium term. As such, **it is recommended that the narrow corridor (16m) for secondary roads be a restricted discretionary activity.**

JOAL widths for private accesses serving up to 6 units are specified to be at minimum 3 m formed width and no longer than 50 m. JOAL widths for private accesses serving 7 to 30 units are specified to be at minimum 5.5 m wide and to have a 0.5m minimum footpath on one side where a path is not provided separately. These dimensions are generally considered appropriate, noting the widths above are the formed widths, and with the exception of the footpath. **Our opinion is that a footpath should be considered for accesses serving 10+ dwellings, and that the minimum width should be 1.4m (excluding the kerb) as per the Kaipara District 2011 Engineering standards.**

Furthermore, for the private access requirements specified in Tabel DEV1.1 of the Development Area document, **we recommend that the narrow private access requirement is more clearly defined as being for up to 3 allotments or 6 household equivalents, while the wider private accesses requirement is for up to 7 allotments or 14 household equivalents.** This uses the same terminology as that in the District Plan, and also recognises that rule DEV1-R2 of the Development Area allows two residential units per site. We understand that a challenge in Kaipara District is that residents with private accesses request that their access be vested, even when the access does not meet the KDC standards. For this reason, we have recommended that the wide private access is reduced from the 30 dwellings proposed to 14.

The Development Area document specifies that walking and cycling is proposed to be provided via paths on one side of the primary and secondary roads. These paths are to be 2.0m wide on primary roads and 1.4m wide on secondary roads. Based on the anticipated functions of these roads, it is **our recommendation that a pedestrian facility is provided on both sides of Primary Roads and that this facility is design to Waka Kotahi Pedestrian Network Guidance at minimum. Furthermore, to ensure safe cycling connections are provided it is our opinion that one of these footpaths is upgraded to a shared path.** Additional gravel pathways, nature trails, and shared paths are also understood to be intended, however the application does not show where these are and therefore these could not be considered. We note that the legal width is not directly a traffic engineering matter, with the traffic engineering matters being the width of the formed width, footpath, and shared path. The proposed legal widths can accommodate the recommended traffic widths and are therefore okay from a traffic perspective, however we note there are other considerations beyond traffic such as services, waste collection, and vesting that need to be considered.

The Development Area document specifies maximum grades of 20-25% for private accesses. These grades exceed the Kaipara District 2011 Engineering standards as well as the current Fire Emergency New Zealand requirements. As such, **it is recommended that accesses serving 8 or more allotments shall have a grade no greater than 12.5%, while accesses serving 7 or more allotments shall have a grade no greater than 20% provided the access is sealed.**

### 5.5.1 FUTURE SPEED ENVIRONMENT

We agree with the recommendation in the Transport Assessment to review the speeds along Tara Road (specifically the northern portion which has an 80 km/hr posted speed limit), Cove Road, and Old Waipu Road North. The road geometry, both horizontally and vertically, restricts visibility at these existing intersections as well as the indicative future intersection locations.

### 5.6 NEW INTERSECTIONS

The TPC ITA has not assessed the forecast operations or sight distances at the new intersections created as a result of the plan change. Commute has undertaken a high level assessment and note the following findings:

- The vehicle volumes forecast at each of the new intersections in the TPC ITA are such that the intersections are anticipated to operate acceptably. As noted above, the intersection of Tara Road / Moana Views Road has been assessed as an existing intersection.
- The sight distances at the following intersections look constrained based on the existing speed limits:
  - Primary Site Access / Cove Road
  - Old Waipu Road North / Cove Road

We anticipate that the speed environment on Cove Road will need to be reduced in order for a safe access to be provided, however we note that speed reductions sit outside of the plan change process.

### 5.7 ROAD SAFETY

The TPC ITA includes a Safe System Assessment for five nearby intersections. Based on this assessment, a number of network improvements are identified which we agree with, however the TPC ITA conclude that these improvements are “*subject to more detailed assessment and engineering design at subsequent subdivision stages, where more detail is known, along with coordination with NTA with respect to the implementation of the Heavy Vehicle Route*”.

We are accepting of this approach, however to ensure that subsequent transportation assessment include the intersections identified in the Plan Change assessment, **it is recommended that Information Requirement DEV1-REQ2 1. i. of the Mangawhai Hills Development Area document is updated to specify the same five intersections being:**

- **Tara Road / Garbolino Road**
- **Tara Road / Cove Road**
- **Cove Road / Old Waipu Road (North-End)**
- **Moir Street / Tara Road**
- **Moir Street / Ulrich Drive**

**An additional note should be included that specifies the assessment considers all previously consented applications within the plan change area to ensure the cumulative effects are considered.**

## 5.8 STAGING

The application predominantly considers the full buildout scenario with the exception to the following subdivision rule DEV1-R19 1. b. specified in the Mangawhai Hills Development Area document:

*“All primary and secondary roads are established in accordance with the indicative roads shown on the Mangawhai Hills Structure Plan; or the full extent of the primary or secondary road shown on the Mangawhai Hills Structure Plan is not provided, any subdivision shall establish any part of the indicative primary and secondary road within the site boundary in accordance with the indicative primary and secondary road plan shown on the Mangawhai Hills Structure Plan.”*

The first portion of this rule relates to all primary and secondary roads being established, while the second portion of the rule allows for the roads to be built in stages. Our understanding of the second part of the rule is that subdivisions are only required to construct roads fronting/within the subject parcel and therefore there is a possibility that parcels of land and road could be disconnected from the wider network.

**We recommend that this rule (DEV1-R19 1. b.) is amended to ensure connectivity as the Plan Change area is built out.**

The transport assessment only assesses the full build out scenario with all of the roading connections as shown on the structure plan provided. It therefore relies on a number of new intersections, notably the primary road connections to the existing road network. The Moir Street and Mangawhai Central roads require third party land owners to achieve the connection and or intersection. In our opinion there is real possibility for the site to be fully built out without these connections, and therefore we are of the opinion that this scenario should be assessed. A further assessment of the effects of the plan change area on the roading network without the Moir Street and Mangawhai Central connections will provide critical further information. In particular, it is needed to provide an assessment of how the roading network would function in the event the Moir Street and Mangawhai Central connections are not provided and any upgrades, staging rules or further assessment criteria that are needed in this scenario.

**We recommend further sensitivity testing is undertaken by the applicant prior to the hearing to assess the traffic effects of the plan change should the Moir Street and Mangawhai Central primary road connections not be constructed. This information will help inform any upgrades, staging rules or further assessment criteria that may be needed.**

Without these road connections the traffic distributions will vary and thereby have a greater effect than has been assessed in the TPC-ITA on a number of existing intersections. Should no further assessment of transport effects be provided by the applicant, it is recommended that a trigger is included in the Development Area document. This trigger should be commensurate to the volume that has been assessed, with the applicants Transport Assessment assessing the nearby intersections with the following net new trips:

- 38-39 trips at the Moir Street / Tara Road intersection
- 54 trips at Garbolino Road / Tara Road intersection



- 10-11 trips at Cove Road / Tara Road intersection

On this basis, in the absence of a further assessment by the applicant, we currently recommend a trigger of 50 dwellings for a connection to Moir Street, noting that this allows for all of these dwellings to be accessed via Tara Road, Cove Road, or a combination of both. We recognise that it is likely that without the Moir Street connection there is capacity in the existing network (especially Moir Street/Tara Street) to cater for more than 50 dwellings. With some upgrades to this intersection it is likely that all dwellings can access off Tara Road, however this has not been accessed by the applicant at this stage.

Further, the TPC ITA distributed 190 peak hour site trips via the Mangawhai Central link. Without this connection, it is assumed that approximately 80% of these trips would travel via the Moir Street connection and therefore, in the absence of any further assessment by the applicant, a 350 dwelling trigger is recommended for this connection. We acknowledge that the Transport Assessment shows that the network has some available capacity, and therefore this trigger could be reconsidered if further assessment is provided by the applicant prior to the hearing.

**Should no further assessment of transport effects be provided prior to the hearing, it is recommended that the Development Area include a number of triggers including:**

- **Moir Street connection is triggered when 50 dwellings have been approved, noting that the access will also need to connect to the development that has been approved; and**
- **Mangawhai Central connection is triggered when 350 dwellings have been approved, noting that the access will also need to connect to the development that has been approved.**

Based on conversations between KDC and NTA, it is Commute’s understanding that neither NTA nor KDC Rooding will force the connection to Moir Street or facilitate the link to the paper road.

## 6 SUBMISSIONS

A total of 76 submissions, plus 12 further submissions, were made regarding the Plan Change. These submissions have been reviewed in order to identify the traffic and transportation issues held by submitters. The following table details the specific matters and mitigation measures raised / proposed by submitters specifically relating to traffic / transportation.

**Table 6-1: Submission Summary**

Matter Raised / Relief Sought (in relation to traffic)	Submitter/s
<b>New Intersections</b>	
Any site access that will result in a four way traffic intersection or roundabout, namely a access directly opposite the entrance to at 161 Tara Road, should be given careful consideration.	A. van Niekerk (2) C. and R. Owen (5) G. Mitchell (16)

	<p>G. Van Niekerk (18)</p> <p>K. Moynihan (33)</p> <p>M. Hewitt (39)</p> <p>Moana Views Committee (45)</p> <p>T. &amp; J. Wilson (65)</p> <p>W. Neal (72)</p>
<b>Traffic Generation</b>	
<p>The traffic assessment does not give an accurate representation given only “normal” house numbers have been taken into account.</p>	<p>A. van Niekerk (2)</p> <p>C. and R. Owen (5)</p> <p>G. Mitchell (16)</p> <p>G. Van Niekerk (18)</p> <p>K. Moynihan (33)</p> <p>M. Hewitt (39)</p> <p>Moana Views Committee (45)</p> <p>T. &amp; J. Wilson (65)</p> <p>W. Neal (72)</p>
<p>The cumulative effects of Plan Change 83 and the subject Plan Change have not been considered.</p>	<p>D. Parker (11)</p>
<p>The proposed development will have adverse effects on traffic during school times, holidays, and weekends.</p>	<p>R. McQuerry (58)</p>
<b>Construction Traffic</b>	
<p>The traffic assessment has not considered additional traffic volumes from construction related vehicles during the ten year development period proposed.</p>	<p>A. van Niekerk (2)</p> <p>C. and R. Owen (5)</p> <p>G. Mitchell (16)</p> <p>G. Van Niekerk (18)</p> <p>K. Moynihan (33)</p> <p>M. Hewitt (39)</p> <p>Moana Views Committee (45)</p> <p>T. &amp; J. Wilson (65)</p> <p>W. Neal (72)</p>
<b>Staging</b>	
<p>Submitter seeks for the inclusion of provisions which set out a clear trigger for when the Primary Road needs to be connected</p>	<p>Berggren Trustee Co Ltd (4)</p>

between Cove Road and Moir Street and to secure required road upgrades recommended in the Transportation Assessment.	
<b>Existing Intersections and Corridors</b>	
<p><u>Tara Road</u> is narrow and currently not adequate for servicing the traffic. An increase in traffic would affect the intersections along the corridor namely Tara Road / Moir Street and Tara Road / Cove Road and impact safety.</p> <p><u>Moir Road</u> is narrow and without shoulders. The intersection of Moir Road/ Ulrich Drive would need to be upgraded.</p> <p>There is no footpath along Cove Road, and on lower Tara Road there is only a section of footpath at the southern end.</p>	<p>C. and R. Owen (5)          R. McQuerry (58)          K. &amp; S. Gow (28)          G. Arnerich (14)</p>
<p>Increased traffic on <u>Cove Road</u> would result in safety pressures, particularly for pedestrians and cyclists. Additional pedestrian facilities along Cove Road sought.</p>	<p>D. Parker (11)          K. Reid (34)          S. Reid (64)          Y. Reid (73)          J. Warden (26)          G. Arnerich (14)</p>
<p>The one lane bridges on <u>Cove Road</u> will not be able to support the additional traffic noting the bridges are prone to flooding.</p>	<p>J. Warden (26)</p>
<p>Increased traffic will put pressure on existing infrastructure connecting Mangawhai to the north / south and SH1.</p>	<p>F. Lienert (13)          L. Kendall (35)</p>
<p>Increased traffic on <u>Old Waipu Road</u>. Request for no connection between Cove Road and Molesworth Drive.</p>	<p>J. Mentzer (23)          K. &amp; S. Gow (28)          S. Brabant (60)          S. Hartley (62)</p>
<p><u>Old Waipu Road North</u> is not capable of the increased traffic should the proposed development proceed.</p>	<p>N. Gestro (48)</p>
<b>New Roads</b>	
<p>Width of new roads should be consistent with current Council Standards to allow for carparking on both sides of the road.</p>	<p>K. &amp; S. Gow (28)</p>
<p>Streets should include shared paths for cyclists and pedestrians. Shared path links should be provided to Mangawhai Central, the primary school, Mangawhai Village, the estuary, the Hotel, and the shared path from the village to the heads. An explicit precinct rule is sought to provide a connection to Mangawhai Central.</p>	<p>K. Marment (32)          S. Hartley (62)</p>

The proposed road network alignment as shown on the structure plan, through Mangawhai Church Trust Land, is opposed. A 20 metre wide paper road is located to the east, which is intended for this purpose.

The submitter is also concerned that the proposed roading network through their property will adversely impact the expected amenity (granted resource consents) for their site with a significant increase in traffic movements.

Mangawhai Church Trust (43)

## 6.1 NEW INTERSECTIONS

The application provides no indication of the future form of new intersections, that is intersections formed where plan change roads intersect with the existing road network.

From the submissions we understand the submitters would like assurance that a safe and efficient intersection will remain at Moana Views / Tara Road. We agree with the submitters that a safe and efficient intersection should be provided. We do consider this can (and should be) considered at subdivision stage however comments on this at the hearing would be useful for the submitter.

## 6.2 TRAFFIC GENERATION

The application specifies that the plan change is for 600 dwellings, which are forecasted to generate 540 peak hour trips in the TPC report. This equates to 0.9 trips per dwelling which is considered appropriate.

The application addresses peak vehicle volumes and operations during commuter peak hours as well as the weekend peak hour. This is considered appropriate given the proposed land use activity is residential.

The application does not consider the traffic effects of Plan Change 83. It is noted that the traffic report for Plan Change 83 states there to be some 380 lots. This Plan Change is located north of Mangawhai Heads Road and therefore majority of these trips are anticipated to travel via Mangawhai Heads Road. As such, the volume of Plan Change 83 trips that are likely to travel past/through the subject Plan Change are anticipated to be minimal and are considered to be captured by the general growth applied in the transport assessment.

From the submissions we understand the submitters would like assurance that the traffic effects have been assessed. With regards to the full build out proposal we are of the opinion that the effects have been reasonably assessed, with only the need to assess an interim scenario with and without the Moir Street and Mangawhai Central connections as discussed in Section 5.8 above.

## 6.3 CONSTRUCTION TRAFFIC

The application specifies that subdivision consent applications that involve a new road are required to provide an integrated transport assessment which includes a description of any construction management matters.

From the submissions we understand the submitters would like assurance that the construction traffic effects have been assessed. We agree that these effects are more appropriately assessed at subdivision stage, however we recommend the Mangawhai Hills Development Area rules are updated to specify “construction traffic”.

## 6.4 STAGING

The application provides no indication of construction staging, notably when the various roads will be provided.

From the submissions we understand that a portion of the land within the plan change is not owned by the applicant, which provides uncertainty as to whether the road network will be provided. The submitter would like assurance that the primary road network will be constructed and recommends a threshold trigger. We agree with the submitter that an assessment identifying when road connections are required would be beneficial, notably any connections that require a third party landowner. Comments on this at the hearing would be useful.

## 6.5 EXISTING INTERSECTIONS AND CORRIDORS

The application does not include any road upgrades on Cove Road, Moir Road, Tara Road (with the exception of extending the footpath on Tara Road). There is also no information provided on the one-way bridges.

From the submissions we understand that there is concern that these corridors are narrow, and that they will be impacted by additional traffic. The submissions raise safety concerns for pedestrians and cyclists on these corridors, as well as at key intersections. We do consider this can (and should be) considered at subdivision stage however comments on this at the hearing would be useful for the submitter.

The application mentions upgrading the intersection of Old Waipu Road and Molesworth Drive as a result of increased traffic on Old Waipu Road.

From the submissions we understand that a connection to Old Waipu Road is opposed. Based on our conversations with the applicant, as well as the updated TPC ITA, we understand that no connection to Old Waipu Road is to be provided. Comments on this at the hearing would be useful for the submitter.

## 6.6 NEW ROADS

The application specifies road widths for secondary roads that are narrower than the required dimensions under the Kaipara Engineering Standards.

From the submissions we understand that there is a concern that the secondary road will not allow for two-way traffic as well as on-street parking on both sides of the roads. Comments on this at the hearing would be useful for the submitter.

The application specifies that primary roads will include shared paths, with only footpaths provided on secondary roads. Furthermore, the application does not specify when the primary roads will be constructed and thereby provide cycle connections to local attractions and existing cycle infrastructure.

From the submissions we understand that the submitters would like the Plan Change to provide safe connections to existing infrastructure. In our opinion, provision of cycle paths on secondary roads is unnecessary given the low vehicle volume environment, however connections to wider infrastructure would be beneficial at an early stage of development. Comments on this at the hearing would be useful for the submitter and Council.

The application includes a primary road extending from Ulrich Drive.

From the submission we understand that the submitter who owns this land would like the existing paper road to the east to be utilised. We are supportive of a connection to Moir Street and consider that there are a number of benefits of this connection, however we are neutral on the alignment. Comments on this at the hearing would be useful.

## 7 SUMMARY OF RECOMMENDATIONS

The following summarises the matters identified in the above assessment which we recommend are addressed or considered.

- A trigger should be provided that requires a further transport assessment should cumulative development within the plan change area exceed 600 dwellings.
- Any new intersection onto Old Waipu Road will require the corridor (Old Waipu Road) to be upgraded to a formed road between the intersection and Cove Road.
- That any development accessed off Tara Road should trigger a new footpath between 104 Tara Road and the Tara Road primary road access to the site. To ensure there is a safe and appropriate crossing location to this path, a primary treatment facility is required. Furthermore, should this development occur prior to the Moir Street primary road connection then this path should be a 3.0m shared path.
- Control the intersection of Tara Road, Moana Views Road, and the new primary road to manage the traffic and safety effects of this intersection for all road users given a cross road intersection is proposed.
- That rule (DEV1-R19 1. b.) is amended to ensure connectivity as the Plan Change area is built out.
- Further assessment should be undertaken by the applicant prior to the hearing to assess the traffic effects of the plan change should the Moir Street and Mangawhai Central primary road connections not be constructed in the initial stage. This is needed to provide an assessment of how the roading network would function and help inform what upgrades, staging rules or further assessment criteria are needed in this scenario.
- Should no further assessment of transport effects be provided by the applicant prior to the hearing, it is recommended that the Development Area include a number of triggers including:
  - Moir Street connection is triggered when 50 dwellings have been approved, nothing that the access will also need to connect to the development that has been approved; and
  - Mangawhai Central connection is triggered when 350 dwellings have been approved, nothing that the access will also need to connect to the development that has been approved.
- That the narrow corridor for secondary roads is a restricted discretionary activity, to provide flexibility should the primary roads not be constructed in the initial stage.
- That footpaths serving 10+ dwellings should have a minimum width of 1.4m as per the Kaipara District 2011 Engineering standards.

- That a pedestrian facility (minimum 1.8m) is provided on both sides of Primary Roads. Furthermore, to ensure safe cycling connections are provided it is our opinion that one of these footpaths is upgraded to a 3.0m shared path.
- That the narrow private access requirement is more clearly defined as being for 3 allotments or 6 household equivalents, while the wider private accesses requirement is for 7 allotments of 14 household equivalents.
- That Information Requirement DEV1-REQ2 1. i. of the Mangawhai Hills Development Area document is updated to specify the intersections that need to be assessed and to ensure the cumulative effects are considered.
- The applicant responds to the matters raised by the submitters as per Section 6 above.

## 8 CONCLUSION

From a transport planning perspective, increasing residential density near the existing Town Centre is considered appropriate in supporting land use integration and providing travel mode choices. As such, we support the Plan Change, however recognizing that the traffic effects of the Plan Change need to be managed. The ITA that has been provided only assesses the full build out scenario with all of the roading connections as shown on the structure plan provided. A further assessment should be undertaken by the applicant prior to the hearing of the traffic effects of the plan change should the Moir Street and Mangawhai Central primary road connections not be constructed. This is needed to provide an assessment of how the roading network would function and help inform what upgrades, staging rules or further assessment criteria are needed in this scenario. Should no further assessment be provided by the applicant prior to the hearing it is recommended that the triggers and rules outlined above be included in the planning documents. Subject to the above, overall we are of the opinion that the plan change should be approved.