

Regional Speed Limit Reviews

Mangawhai – Kaiwaka Catchment

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1 Overview

Kaipara District Council (Council) is a Road Controlling Authority (RCA) within the Kaipara District, and has a statutory role in managing the District's local roads (except State Highways), including the setting of speed limits. This statutory role as an RCA is set out under the Land Transport Act 1998, which also enables Council to make a bylaw that fixes the maximum speed of vehicles on any road for the safety of the public, or for the better preservation of any road (*Section 22AB(1)(d)*).

The Kaipara District Speed Limits Bylaw 2018 sets the speed limits on all Local roads within the District, with the Schedules in that Bylaw identifying the enforceable speed limits and where they apply.

Council is proposing to amend the posted speed limits on some roads within the Mangawhai urban area and the Mangawhai - Kaiwaka catchment area (refer Section 2 and maps).

This Report sets out the proposed changes to the Schedules of the Kaipara District Speed Limits Bylaw 2018, along with the matters that Council has considered in proposing the new speed limit, including:

- A summary of the proposed amendments to the Kaipara District Speed Limits Bylaw 2018 (new speed limits)
- Reasons for the proposed amendments
- Targeted consultation process
- Matters considered under Section 4.2(2) of the Setting of Speed Limits Rule 2017
- Options analysis

The purpose of this Report is to provide technical information in support of a separate Statement of Proposal that has been prepared in accordance with Section 83 of the Local Government Act 2002.

Submissions are sought from any person or organisation and must be received by Council no later than 18th December 2020.

1.1 Road Speed Environments

The NZTA Speed Management Guidance provides general guidance in assessing a safe and appropriate speed, based on the type of road and other broad-based assessment criteria. The following provides a regionally consistent description of the expectations for various speed limits.

20kmph	<p>Shared space areas where the principle use is for pedestrians. These areas will typically incorporate street furniture.</p> <p>Roads that are used principally for parking purposes and do not have through traffic.</p> <p>Some beaches</p>
30kmph	<p>Shared Space areas that provide equal access to pedestrians, cyclists and motor vehicles. Beach access, including informal parking for pedestrian access to beaches and some parts of smaller urban centres and coastal settlements.</p> <p>Most beaches</p>
40kmph	<p>Urban areas where there are facilities that generate significant additional pedestrian activity such as schools, shopping centres, sports facilities or other developed recreational areas, or where there are "slow street" urban design features.</p>

	<p>Central Business District areas, particularly where there is on-road parking and pedestrians crossing roads at either controlled or uncontrolled crossing points, but not a formal shared space.</p> <p>Unsealed roads that are particularly narrow, torturous or are short access only roads that may have a higher non-traditional vehicle use (eg: horses or agricultural vehicles).</p>
50kmph	<p>Urban roads that have a high residential density, but no facilities that would generate significant additional pedestrian activity such as schools, shopping centres, sports facilities, or other developed recreational areas. Note: smaller rural and coastal settlements are expected to have a lower speed limit that reflects the nature of that settlement.</p>
60kmph	<p>Semi-urban or rural roads that meet one or more of the following criteria:</p> <ul style="list-style-type: none"> • Significant industrial or commercial activity • A road principally used for access to rural residential dwellings with a narrow single lane carriageway or a carriage way that has no centre line marking • A road where significant residential or other development is directly accessed, including approaches to urban areas. • Urban arterial routes • Unsealed roads
70kmph	<p>In accordance with National Speed Management Guidance, 70kmph zones are generally discouraged and will only be used where there is clear evidence that both 60kmph and 80kmph are inappropriate. Where there is an existing 70kmph, consideration will be given to the benefits of changing that speed limit to 60kmph or 80kmph.</p>
80kmph	<p>General rural roads that are un-divided two-lane roads with marked centre lines, shoulder areas and are not torturous in terms of curves.</p>
90kmph	<p>In accordance with National Speed Management Guidance, 90kmph zones are generally discouraged and will only be utilised in exceptional circumstances.</p>
100kmph	<p>Rural open roads that are of good quality and principally used as arterial routes. Typically, these roads will have good visibility, shoulder areas and will be two lane roads with marked centre lines, or a barrier between opposing lanes. Safety features will also be in place on these roads.</p>
110kmph	<p>This speed limit is restricted to highly engineered motorway roads. There are no roads in Northland that meet the 110kmph speed limit criteria.</p>

1.2 Variable School Speed Zones

School Speed Zones are a variable speed limit that introduces a lower speed limit of 40km/h outside schools for a period 35 minutes before school starts and 20 minutes at the end of the school day. At other times, the normal speed limit applies.

New government policy seeking lower speed limits outside all schools, including rural schools was announced in December 2019. The new policy seeks a maximum 40kmph speed limit outside all urban schools and a maximum of 60kmph outside all rural schools.

Speed limits outside schools will therefore be considered in accordance with NZTA Traffic Note 37 and 56 (Appendix 2) to determine what the most appropriate speed limit treatment is. Options include but are not limited to:

- A permanently lower speed limit
- A variable speed limit for when children are present
- Engineering interventions to slow traffic and make the school entrance safer

2 Review Area

The review area is described as the Hakaru Review Area (Mangawhai-Kaiwaka) and incorporates an area to the east of State Highway 1 from the Auckland Council Boundary in the south to the Whangarei District Boundary in the north. The area includes Mangawhai Township, Mangawhai Heads and Kaiwaka (excluding State Highway 1).

The review area also includes a closed catchment area to the west of Kaiwaka between State Highway 1 and the Kaipara Harbour. This area is referred to as the Kaiwaka West Review Area (refer maps below).

Consistent with the Governments *Road to Zero: NZ’s road safety strategy 2020-2030*, which seeks to ensure a speed limit of 30kph- 40kph outside all urban schools or education facilities and 60kph outside all rural schools or education facilities, the following schools have been identified within the review area:

- Mangawhai Beach School – Insley Street, Mangawhai
- Mangawhai Kindergarten – Insley Street, Mangawhai
- Before 6 Early childhood Centre – Molesworth Drive, Mangawhai
- Kaiwaka School – Kaiwaka-Mangawhai Road, Kaiwaka
- Small Pukeko’s Early Learning Centre - Kaiwaka-Mangawhai Road, Kaiwaka
- Te Kura Kaupapa Maori O Ngaringaomatariki – Oruawharo School Road, Kaiwaka West

2.1 Cross Boundary Issues

The Review Area bounds the Whangarei District Council to the north and Auckland Council to the South. The following roads cross a boundary with another road Controlling Authority:

Road Name	Other RCA	How cross boundary issues are dealt with
Cove Road	Whangarei DC	Cove Road connects Mangawhai to Waipu. WDC will consult on changes to the Whangarei end of Cove Road, including Langs Beach and Waipu Cove. In accordance with a decision made by Whangarei District Council relating to an amendment to the WDC Vehicles on Beaches Bylaw (Langs Beach), all beaches with the Whangarei District will also be included in this consultation. Where appropriate, a joint hearing, decision-making and implementation process will be pursued to ensure consistency of approach.
Cames Road	Auckland Transport	A small section of this road is located within the Auckland Council Boundary. Maintenance is carried out by Kaipara District Council in accordance with an agreement with Auckland Transport.

Table 1: Cross Boundary Roads



Figure 1: Speed Management Review Area – Kaiwaka Mangawhai

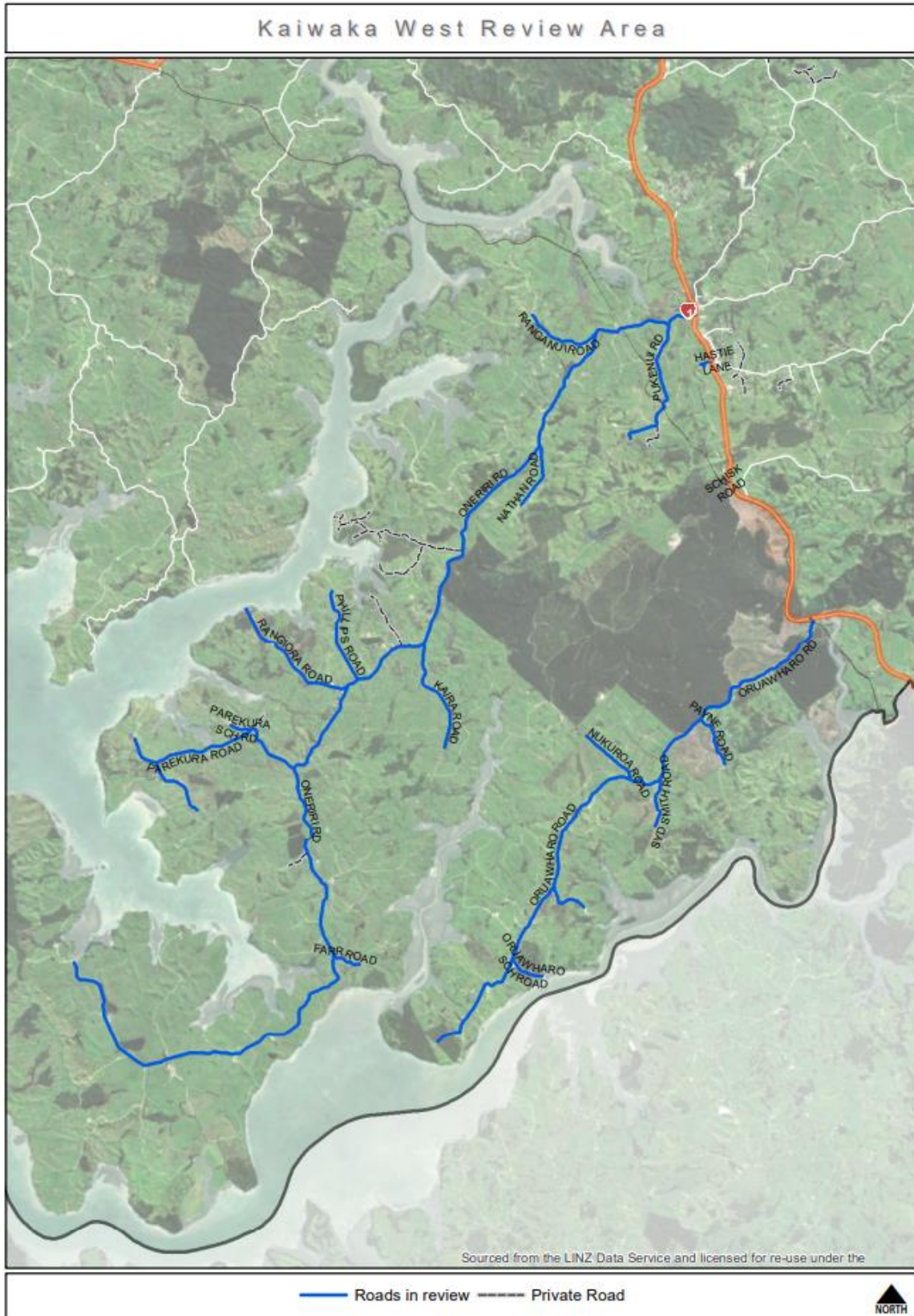


Figure 2: Speed Management Review Area – Kaiwaka West

3 Summary of Proposed Amendments

In Kaipara District Council's capacity as the Road Controlling Authority (RCA), the following amendments to the posted speed limits within the Kawaka-Mangawhai and the Kaiwaka West Speed Review Areas are proposed.

3.1 Mangawhai Urban Traffic Area

The proposed changes to the Mangawhai Urban Traffic Area are intended to reflect current and future development that is occurring in both Mangawhai Township and Mangawhai Heads. The proposed changes will consolidate three separate Urban Traffic Areas into a single Mangawhai Urban Traffic Area by:

- Combining the existing Urban Traffic Areas into a single consolidated area
- Expanding the Urban Traffic Area to encompass new development including Mangawhai Central, as well as proposed future urban development

In addition, it is proposed to make most urban residential streets within the Urban Traffic Area 40kph with some exceptions for key urban arterial routes that will remain at 50kph or higher.

The key proposed changes are set out below:

- Most urban streets in Mangawhai Heads and Mangawhai Township to have a 40kph speed limit, except for key arterial routes.
- The part of Molesworth Drive that is currently 80kph reduced to 60kph
- Estuary Drive from Molesworth Drive to the intersection with Moir Point Road, reduced from 70kph to 50kph and the remainder of Estuary Drive (east of Moir Point Road) from 70kph to 40kph.
- Old Waipu Road from Molesworth Drive to end of seal at 89 Old Waipu Road to remain 50kph, with the unsealed section to reduce to 40kph.
- The part of Moir Point Road that is currently 70kph reduced to 50kph.
- The part of Mangawhai Heads Road that is currently 70kph reduced to 60kph through to Cove Road.
- Jack Boyd Drive reduced from 70kph to 40kph
- Part of Tara Road from the current 50kph boundary to Garbolino Road reduced from 100kph to 80kph (Note: there is also a proposed reduction of the speed limit on Tara Road beyond the proposed Urban Traffic Area boundary).
- The current 50kph speed limit on Tara Road retained.
- Part of Kaiwaka-Mangawhai Road from the current 50kph boundary to Garbolino Road from 100kph to 80kph. (Note: there is also a proposed reduction of the speed limit on Kaiwaka-Mangawhai Road beyond the proposed Urban Traffic Area boundary).
- The current 50kph speed limit on Moir Street from the Mangawhai Chocolate Factory toward Tara Road to be retained.
- The part of Insley Street that is currently 100kph reduced to 80kph (Note: there is also a proposed reduction of the speed limit on Insley Street beyond the proposed Urban Traffic Area boundary).
- Cove Road, along the boundary of the Urban Traffic Area from 100kph to 80kph (Note: this is part of a proposed wider reduction in the speed limit along the length of Cove Road).
- Atkin Road from 100kph to 60kph
- Alamar Crescent from 50kph to 30kph

We are also proposing to reduce the speed limit within the Wood Street commercial area and the Moir Street commercial area to 30kph in recognition of the high pedestrian numbers, particularly during the summer months.

3.2 Proposed Kaiwaka Urban Traffic Area

The proposed Kaiwaka Urban Traffic Area is new. The Proposed Urban Traffic Area encompasses the urban residential area of Kaiwaka (Figure 6). All roads within the Urban Traffic Area have a speed limit of 40kph, except:

- State Highway 1, which has a speed limit of 60kph within the Urban Traffic Area.
- Gibbons Road from 50m north of the entrance to Kaiwaka Domain, which has a proposed speed limit of 60kph (reduced from 100kph)
- Settlement Road from 50m east of Wattle Lane, which has a proposed speed limit of 60kph for a distance of 500m.

Figure 6 sets out the Proposed Urban Traffic Area in Kaiwaka.

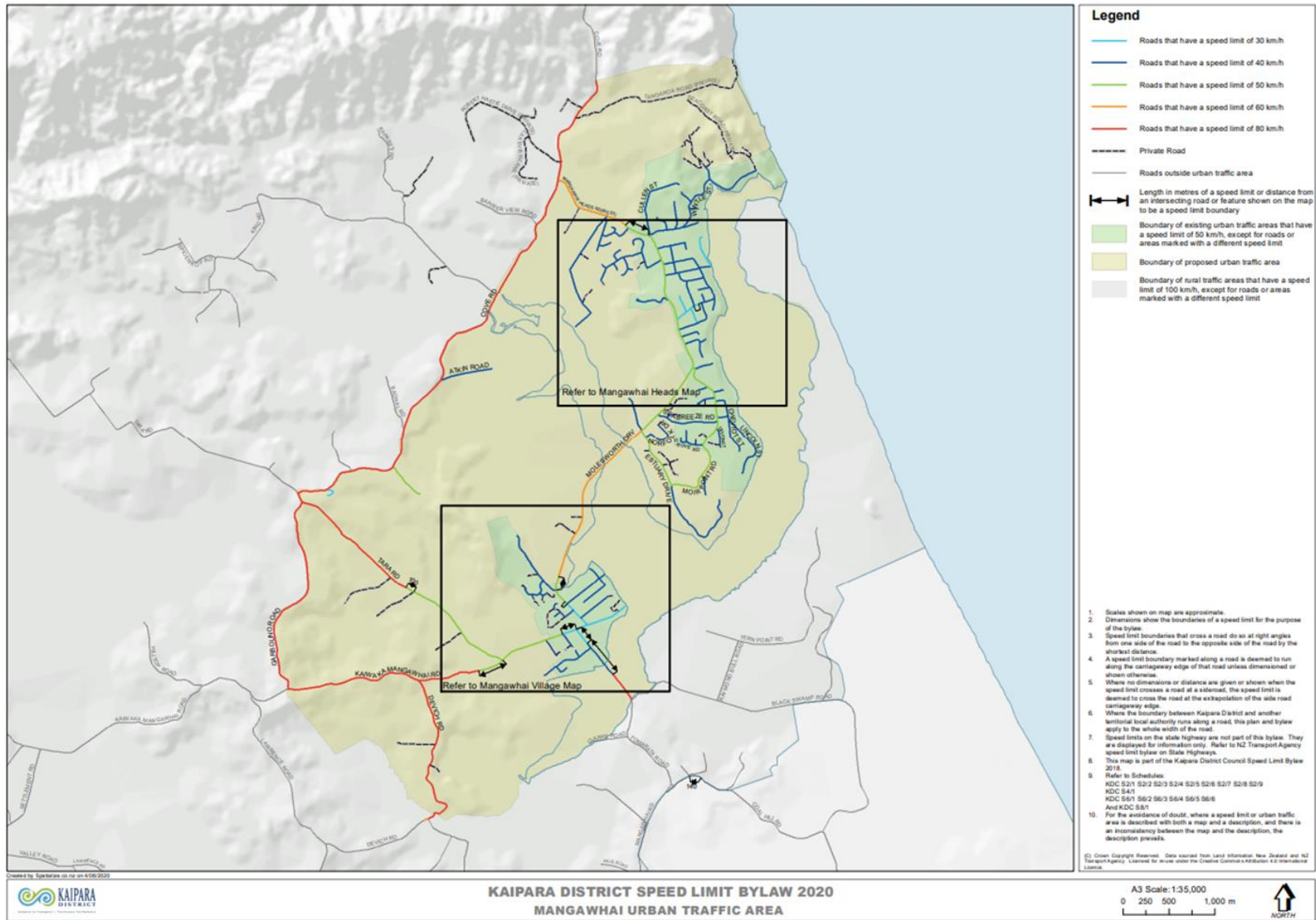


Figure 3: Proposed Mangawhai Urban traffic Area (consolidated)

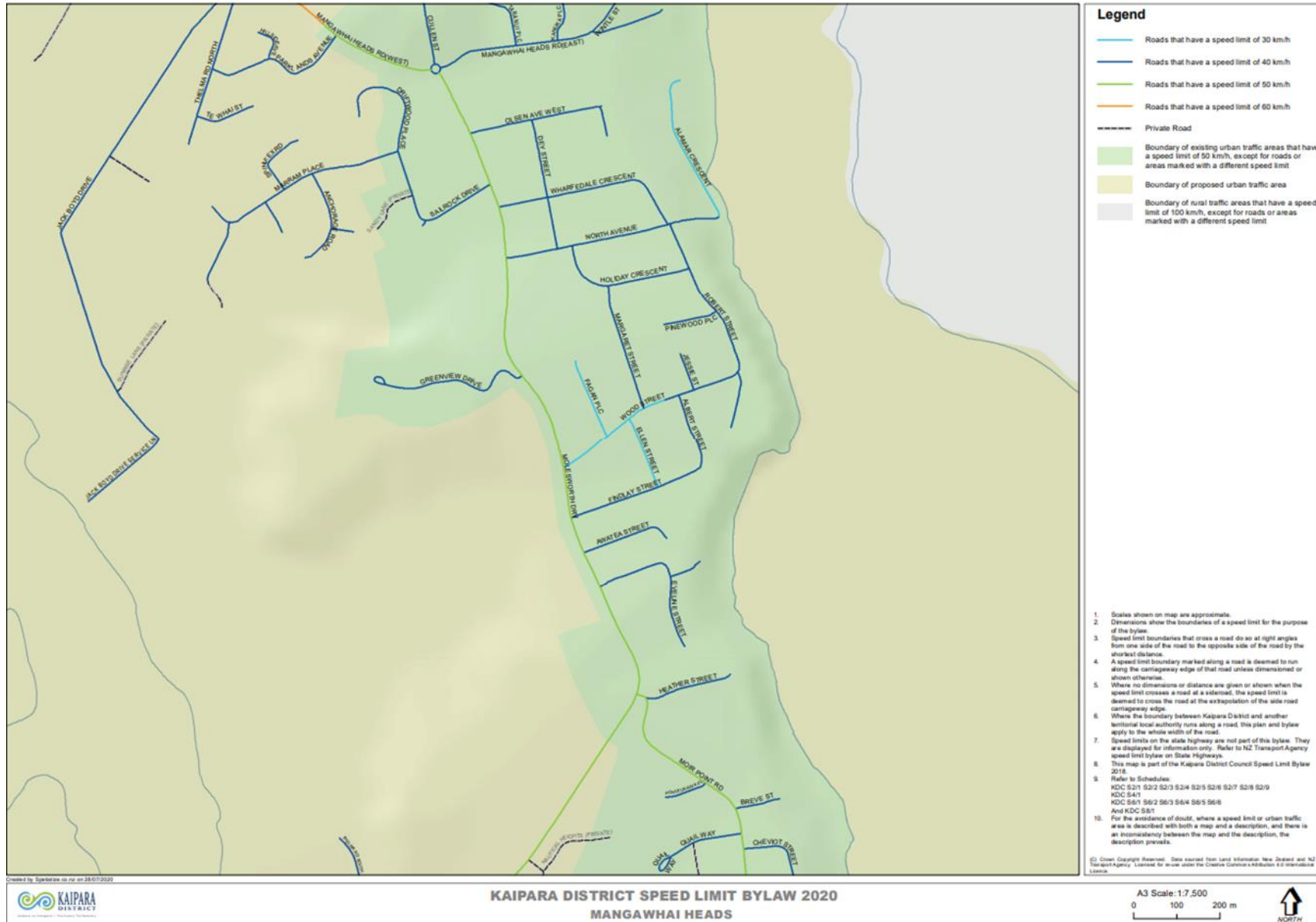


Figure 4: Proposed Wood Street (Mangawhai Heads) Commercial Area Speed Limits

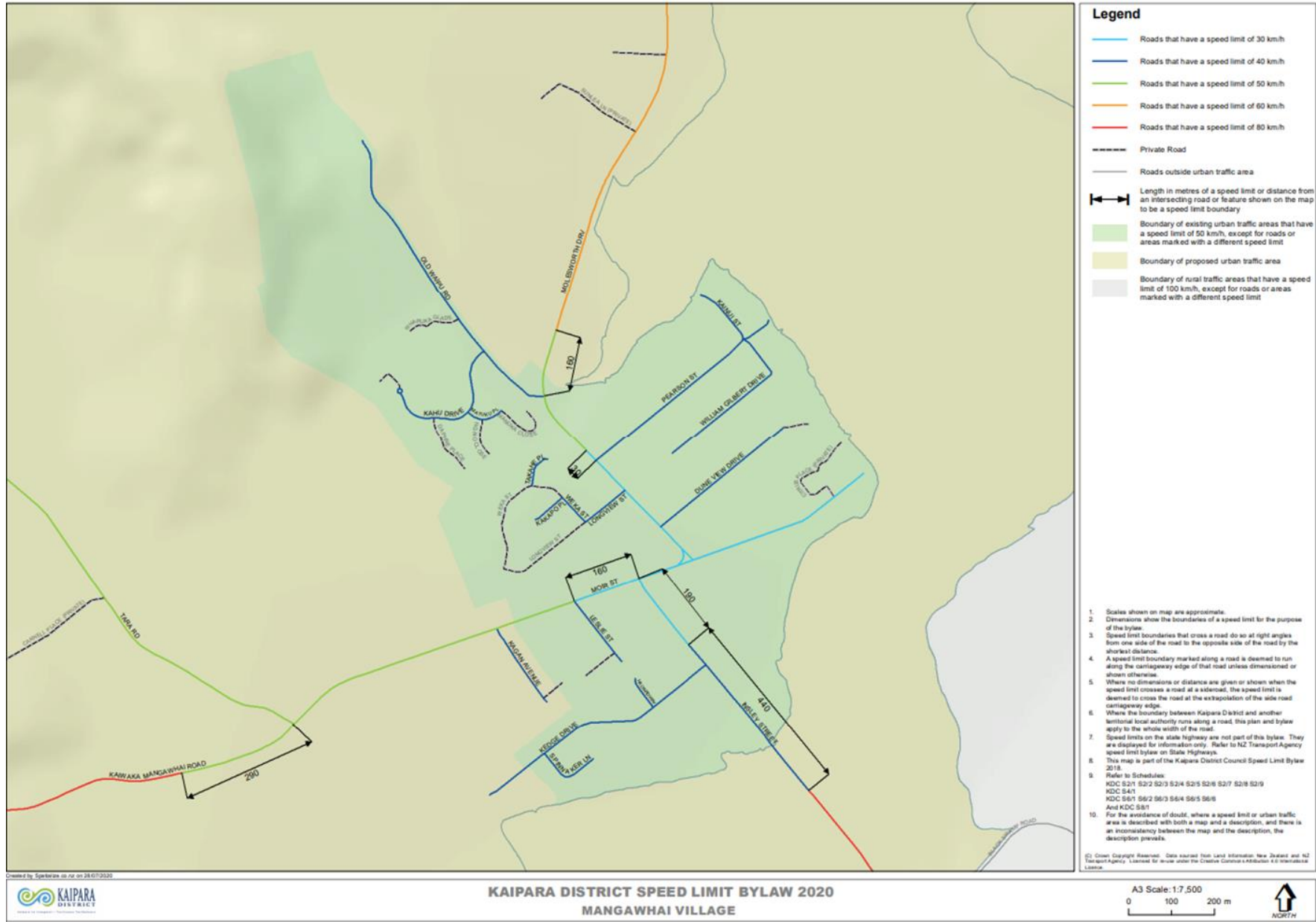


Figure 5: Proposed Moir Street / Mangawhai Township Speed Limits

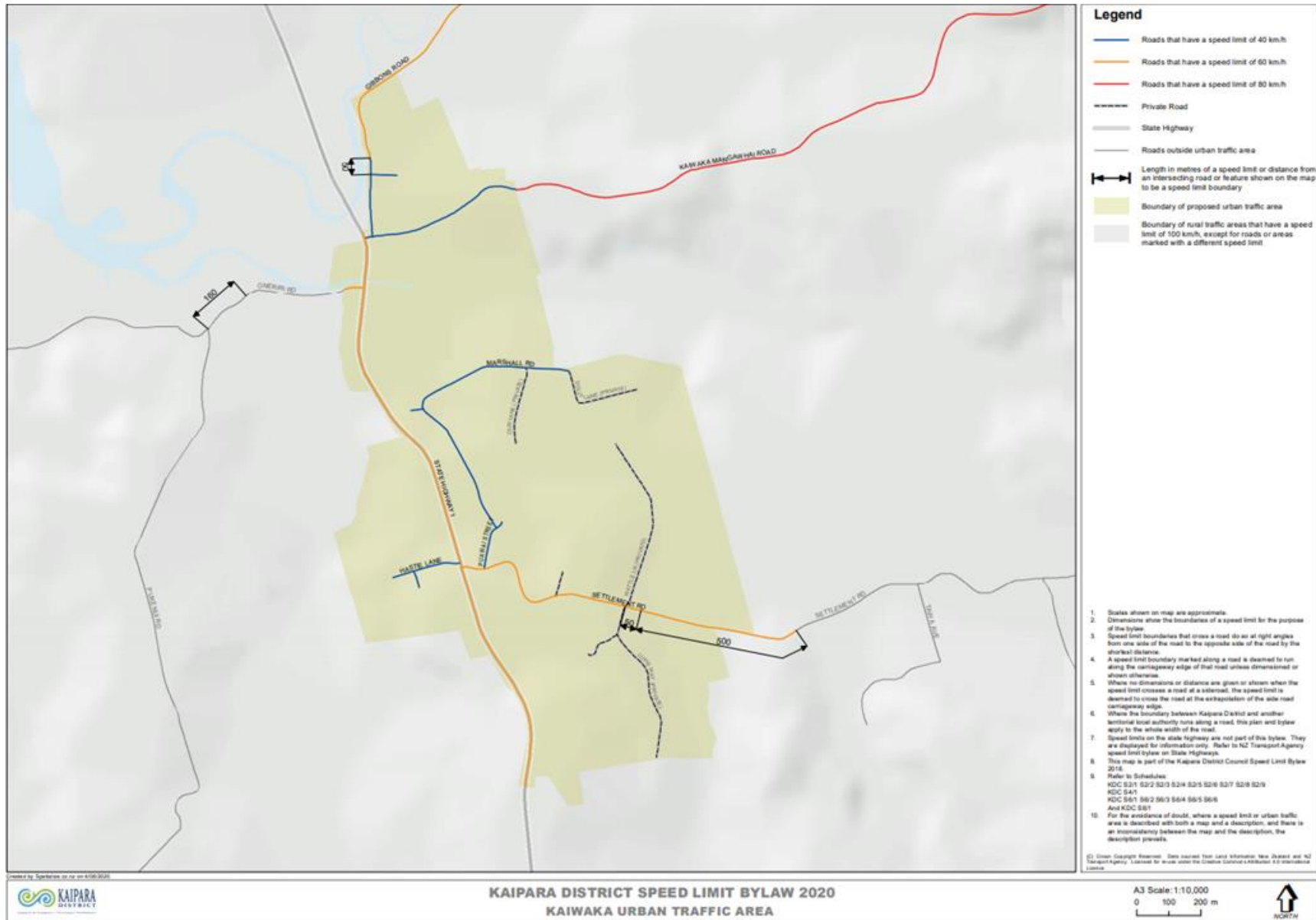


Figure 6: Proposed Kaiwaka Urban Traffic Area

3.3 Hakaru (Kaiwaka-Mangawhai) Catchment Review Area

The Hakaru Catchment Review Area encompasses all roads to the east of State Highway 1 as identified in Figure 1 and includes two proposed Urban Traffic Areas. It should be noted that private roads are outside the jurisdiction of the Kaipara District Road Controlling Authority; and are therefore not included in the table below.

In Kaipara District Council's capacity as the Road Controlling Authority (RCA), the following amendments to the posted speed limits within the Hakaru Speed Review Area are proposed:

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Bagnal Road	100	60
Baldrock Road	100	80
Barrier View Drive	100	60
Black Swamp Road (Insley street to Raymond Bull Road)	100	80
Black Swamp Road (Raymond Bull Road to Coal Hill Road)	100	60
Brown Road (North end branch to Tara Road)	100	40
Brown Road (Tara Road to Kaiwaka-Mangawhai Road)	100	60
Cames Road (from Lawrence Rd to Carters Rd)	100 (temporary 50)	40
Cames Road (from Carters Rd to Mangawhai Rd): Note part of this road is within Auckland District	100 (temporary 50)	60
Carter Road	100	40
Carters West Road	100	40
Cemetery Access Road (Mangawhai)	-	30
Clarke Road	100	40
Coal Hill Road (Tomarata Road to end of seal)	100	80
Coal Hill Road (End of seal to Te Arai Point Road)	100	60
Cove Road	100	80
Devich Road from Kaiwaka-Mangawhai Road to end of seal	100	80
Devich Road from end of seal to Lawrence Road	100	60
Echo Valley Road	100	60
Garbolino Road	100	80
Gibbons Road (State Highway 1 to 50m north of the entrance to Kaiwaka Domain)	100	40

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Gibbons Road (From 50m north of the entrance to Kaiwaka Domain to one lane bridge at 247 Gibbons Road)	100	60
Gibbons Road (From one lane bridge at 247 Gibbons Road to 30m North of 285 Gibbons Road – current 100kph sign)	100	40
Gibbons Road (From 30m North of 285 Gibbons Road – current 100kph sign to Baldrock Road)	100	60
Hilltop Road	100	60
Insley Street (From 440m south-east of existing 50kph sign to end)	100	80
Jude Road	100	60
Kiawaka-Mangawhai Road (Garbolino Road to Kaiwaka)	100	80
Kapawiti Road	100	60
King Road (From Cove Road to Spioenkop Road)	100	80
King Road (From Spioenkop Road to Bush Lane)	50	60
Lawrence Road (From Kaiwaka-Mangawhai Road to Cames Road)	100	80
Lawrence Road (From Cames Rd To Valley Rd)	100	40
Mangawhai Road	100	80
Old Waipu Road North	100	50
Otioro Road	100	60
Pakeho Road	100	60
Paul Road	100	60
Pebblebrook Road	100	60
Pritchard Road (note: joins with Ryan Road at Council Boundary)	100	60
Raymond Bull Road	100	60
Rua Road	50	40
Settlement Road	100	60
Spioenkop Road	100	60
Stewart Road	100	60
Tara Road (from Kaiwaka-Mangawhai Road to 100m west of Dharma Lane)	50	50
Tara Road (100m west of Dharma Lane to 679 Tara road)	100	80

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Tara Road (from 679 Tara Road to Brown Road)	100	60
Tara Road (from 679 Tara Road to Brown Road)	100	60
Tawa Avenue	100	40
Tern Point Road	100	60
Tomarata Road	100	80
Valley Road (Settlement Road to Lawrence Road)	100	80
Valley Road (Lawrence Road to end)	100	60

Table 2: Summary of proposed Speed Limit changes – Kaiwaka – Mangawhai (Excluding Proposed new Mangawhai Urban Traffic Area)

The proposed amendments to speed limits within the Hakaru Speed Review Area are also set out in the maps below (Figure 7).

3.4 Kaiwaka West

The Kaiwaka West Review Area encompasses all roads to the west of State Highway 1 at Kaiwaka as identified in Figure 2; and not within the Proposed Kaiwaka Urban Traffic Area. It should be noted that private roads are outside the jurisdiction of the Kaipara District Road Controlling Authority; and are therefore not included in the table below.

In Kaipara District Council's capacity as the Road Controlling Authority (RCA), the following amendments to the posted speed limits within the Kaiwaka West Speed Review Area are proposed:

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Dowson Place (Urban Traffic Area)	50	40
Farr Road	100	40
Hastie Lane (Urban Traffic Area)	50	40
Kaira Road	100	60
Nathan Road	100	60
Nukuroa Road	100	60
Oneriri Road (From current 50kph/100kph boundary sign to Parekura Road – end of seal)	100	80
Oneriri Road (From Parekura Road to end.)	100	60
Oruawharo Road (From SH 1 to Payne Road)	100	80
Oruawharo Road (From Payne Road to end)	100	60
Oruawharo School Road	100	40
Otara Road	100	60
Parekura Road	100	60
Parekura School Road	100	60

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Payne Road	100	40
Phillips Road	100	60
Pukenui Road	100	60
Ranganui Road	100	60
Rangiora Road	100	60
Syd Smith Road	100	60
Wiki Brown Road	100	40

Table 3: Summary of proposed Speed Limit changes – Kaiwaka West

The proposed amendments to speed limits within the Hakaru Speed Review Area are also set out in the maps below (Figure 8).

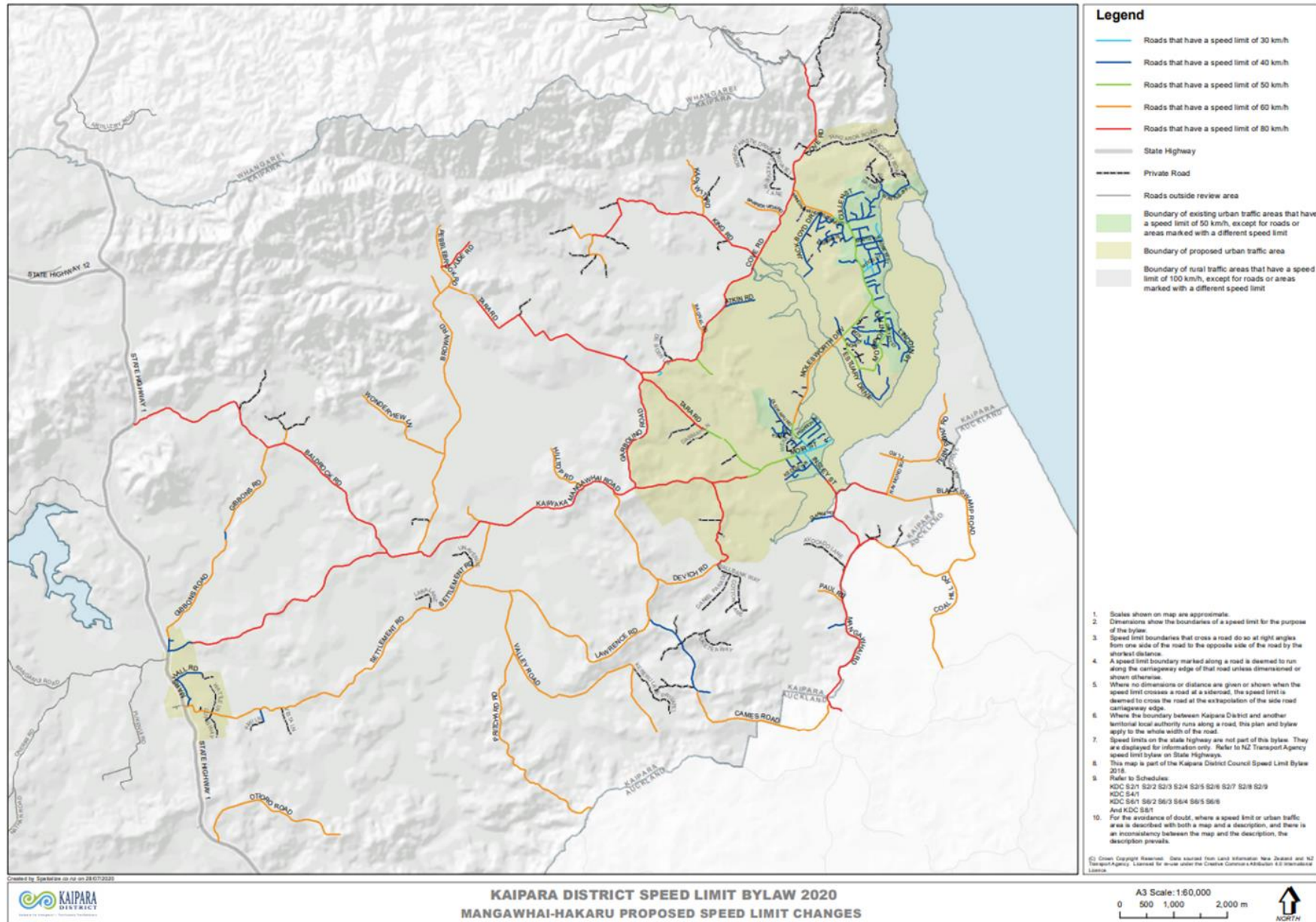


Figure 7: Proposed Speed Limits Hakaru Review Area (Map)

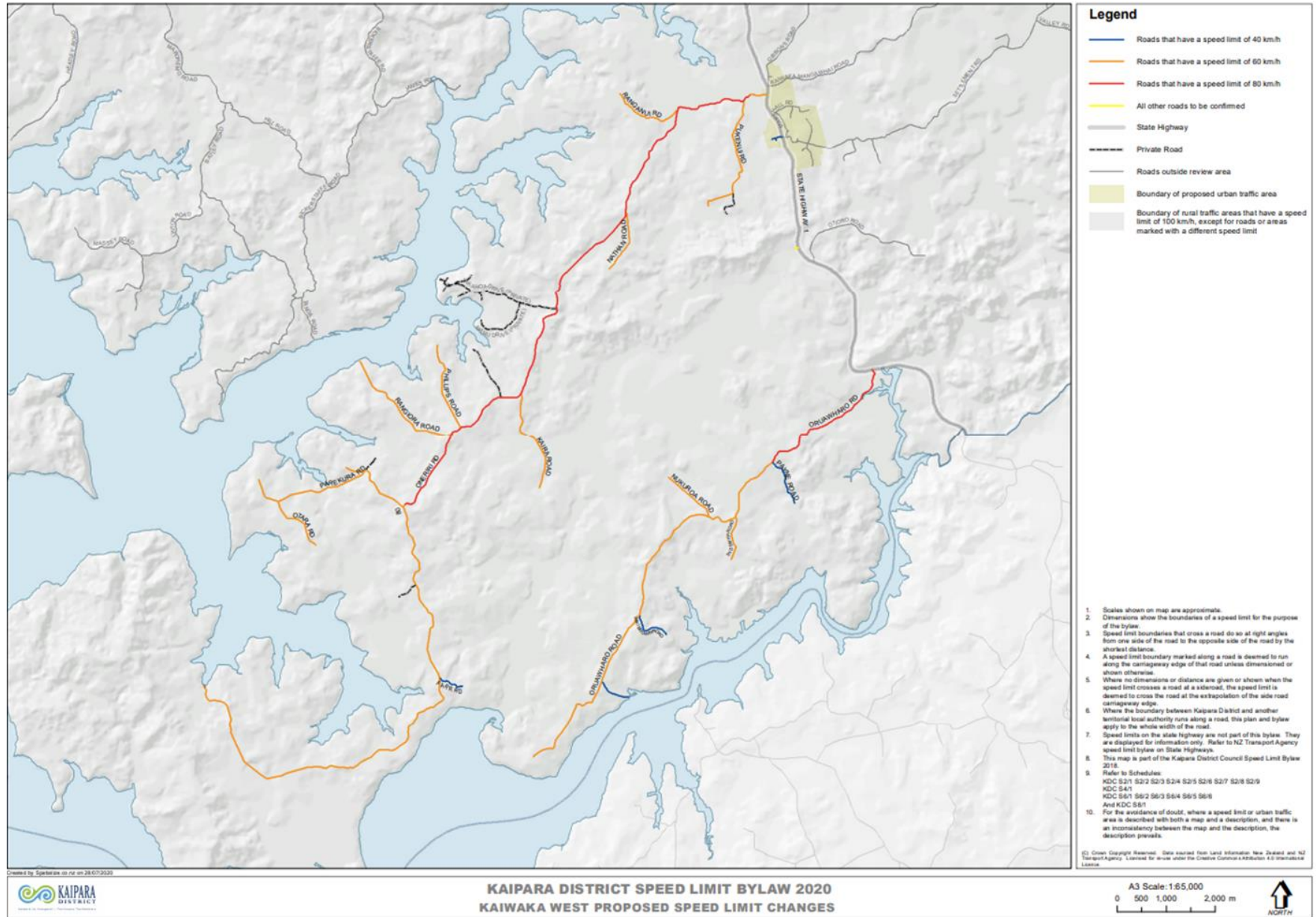


Figure 8: Proposed Speed Limits Kaiwaka West Review Area (Map)

3.5 School Speed Zones

In late 2019, central government updated and rebranded its Safer Journeys Strategy to the "Road to Zero Strategy". The updated Strategy includes provision that all urban schools should have a maximum speed limit of 40kmph when children are present, and all rural schools should have a maximum speed limit of 60kmph when children are present.

To ensure consistency with the Road to Zero Strategy, this review identifies all schools and education facilities within the review area and proposes any changes required to meet the intent of the Road to Zero Strategy.

The schools and education facilities identified are:

- Mangawhai Beach School – Insley Street, Mangawhai
- Mangawhai Kindergarten – Insley Street, Mangawhai
- Before 6 Early childhood Centre – Molesworth Drive, Mangawhai
- Kaiwaka School – Kaiwaka-Mangawhai Road, Kaiwaka
- Small Pukeko's Early Learning Centre - Kaiwaka-Mangawhai Road, Kaiwaka
- Te Kura Kaupapa Maori O Ngaringaomatariki – Oruawharo School Road, Kaiwaka West

3.5.1 Mangawhai Beach School and Mangawhai Kindergarten

Mangawhai Beach School and Mangawhai Kindergarten operate off the same site, located at 34 Insley Street. Mangawhai Beach School is a state run, full primary school catering for year 1 (age 5 years) to Year 8 (13 years). In addition to the schools, the site also has a recreation center that is available for hire.

Mangawhai Beach School has a School Roll (1st July 2019) of 480 students ranging in age from 5 to 13 years old. The School Roll has steadily increased from 353 in 2015 through to the current 480 students. Numbers of students attending the School are expected to increase over the coming years as the permanent population of Mangawhai increases.

Mangawhai Kindergarten is licensed for a maximum of 40 children over two years old. The Kindergarten is open from 0830 to 1530 (normal school hours).

Mangawhai Kindergarten Road Environment

There is a shared entrance to the Mangawhai Kindergarten and the Recreation Centre (Figure 9). The Kindergarten is located behind the Recreation Centre and has off-street parking and room for pick-up and drop-off of children attending the kindergarten. The off-street parking area for the Recreation Centre also provides for staff parking for Mangawhai Beach School and a student entrance to the school.

There is a marked turning bay from Insley street into the main entranceway. This provides for right turning traffic to be stationary, whilst through traffic can utilize the left lane. The left shoulder (eastbound) provides opportunity for parallel parking between the edge of the road and the footpath. The delineation between the footpath and the shoulder area on the eastbound lane is poor, with no kerb and channeling. The west bound lane (left turning) incorporates kerb and channeling, a grass verge and footpath.



Figure 9: Mangawhai Kindergarten and Recreation Centre Entrance

Mangawhai Beach School Road Environment

There are two entrances into Mangawhai Beach School. One entrance is a shared entrance with the Recreation Centre and the Kindergarten. This entrance provides off-street parking and is discussed above.

The second entrance is located a short distance to the east. The east bound approach has a pedestrian crossing with an island refuge (refer Figure 10). Immediately to the east (downstream) of the island refuge is a marked right turning bay. This turning bay enables vehicles to turn into a drop-off bay on the same side of the road as the school.

The eastbound lane has a continuation of the shoulder parking bay, however there is also kerb and channeling that separates the parking bay from the footpath.



Figure 10: Mangawhai Beach School Entrance

A 40kph speed limit is proposed within the majority of the Mangawhai Urban Traffic Area, including this part of Insley Street. A 40kph variable school speed zone is therefore not proposed for this school. The proposed speed limit will meet the requirements of the governments *Road to Zero* Road Safety Strategy as it applies to schools and educational facilities. However, it should be noted that a Variable School Speed Zone will need to be considered if a 50kph urban speed limit is adopted for this section of Insley Street.

Given the increasing roll at Mangawhai Beach School, and Mangawhai as a whole, consideration may need to be given to upgrading the road safety engineering features around this site.

3.5.2 Before 6 Early Childhood Centre – Molesworth Drive, Mangawhai

The Before 6 Early Childhood Centre is located on the corner of Molesworth Drive and Pearson Street. The Childcare Centre is privately run and caters for children from 0 – 6 years old. The 2017 Education Review Office (ERO) Evaluation noted that the Childhood Centre is licensed to provide full day (0745 – 1700) care for 50 children, including up to 15 that are under two years old.

The main entrance to the Early Childhood Centre is located off Molesworth Drive. There are no turning bays and the entrance resembles that of a normal residential dwelling. There is signage on

the property fence and at the entrance indicating that this is an Early Childhood Centre. However, for the casual driver, there is little to identify the Centre. The site is well fenced along both Molesworth Drive and Pearson Street. There are no secondary entrances into the site.

There is off-street parking located within the property and this may be available for drop-offs. There is a wide shoulder area located between the main carriageway and the footpath. This area is utilized for informal parking and may also be utilized to drop children into the Centre. The westbound lane has a limited shoulder area that incorporates kerb and channeling and a footpath.

A 40kph speed limit is proposed within the majority of the Mangawhai Urban Traffic Area, with a slower 30kph speed limit area within the Mangawhai Town Centre. This 30kph zone incorporates the part of Molesworth Drive where the Before 6 Early Childhood Centre is located and includes Pearson Street. This site does not meet Traffic Note 37 standards for a variable speed limit, however the proposed 30kph zone will provide an appropriate permanent slow speed outside this Centre. The proposed speed limit will meet the requirements of the governments *Road to Zero* Road Safety Strategy as it applies to schools and educational facilities.



Figure 11: Before 6 Early Childhood Centre – Molesworth Drive

3.5.3 Kaiwaka School – Kaiwaka-Mangawhai Road, Kaiwaka

Kaiwaka School is located at 33 Kaiwaka-Mangawhai Road on the edge of the Kaiwaka township. Kaiwaka School caters for Year 1 (5yrs) through to Year 6 (11yrs) and has a current roll (1st July 2019) of 143. The School Roll has slowly increased from 97 in 2015 through to the current 143 students.

The main entrance to the school is located off the eastbound lane of the Kaiwaka-Mangawhai Road. Eastbound, the road gently curves up-hill prior to the entrance. This curve limits visibility of the main entrance.

There is a footpath leading from the Kaiwaka Township to the school. The footpath has a physical barrier separating it from the road carriageway (Figure 12). The school has two off-street parking areas (Figures 13 and 14). Both carparks are accessed from two separate entrances at either end. This enables eastbound traffic to make an easy left turn into the main carpark. The main carpark is utilised for school drop-off and pick-up, school busses and visitors.

The second carpark entry is approximately 50m further east and provides for right turning traffic in the westbound lane of the main carriageway. The location of the eastern most entrance provides greater visibility of on-coming traffic when turning right. There are no marked turning bays on Kaiwaka-Mangawhai Road.

A secondary, but substantive carpark is located further away from the road carriageway and is accessed through the main carpark (figure 14). This carpark is reserved for staff carparking only and includes physical barriers.

The main school area is well fenced along its boundary. There are also associated sports fields behind the school. The sports fields are associated with a separate sport and recreation center that has its main entry off Gibbons Road. Although the main sports facilities are not directly

accessed from the school carpark, it is expected that some participants will access the sportsgrounds from the school carpark area, particularly at the weekend.

The School does not meet the criteria of NZTA Traffic Note 37 relating to Variable School Speed Zones, particularly as students are unlikely to be crossing the road near the school. It is proposed that the Kaiwaka urban area have a 40kph speed limit, except for State Highway 1. The proposed 40kph speed limit will extend to a point immediately to the east of the school. The proposed speed limit will meet the requirements of the governments *Road to Zero* Road Safety Strategy as it applies to schools and educational facilities.



Figure 12: Kaiwaka School entry - eastbound



Figure 13: Kaiwaka School entry - westbound



Figure 14: Kaiwaka School – eastern entrance to main carpark and staff carpark

3.5.4 Small Pukeko’s Early Learning Centre - Kaiwaka-Mangawhai Road, Kaiwaka

Small Pukeko’s Early Learning Centre is located at 8 Kaiwaka-Mangawhai Road and caters for children aged 3 months to 5 years. The Centre is open from 0730 – 1700. Small Pukeko’s is licensed for a maximum of 53 children, with a maximum of 17 under two years old.

Small Pukeko's Early Learning Centre is an attached building to the side and behind the Kaiwaka War Memorial Hall. The Centre is accessed via a carpark that also services several commercial buildings. The Centre has an outside play area located on the road frontage area that also fronts the carpark area. The play area is well fenced on all sides (figure 15).

The site is located in the Town Centre. There is angle parking on the Kaiwaka-Mangawhai Road outside the Early Learning Centre, with parallel parking located on the opposite side of the road.

Small Pukeko's Early Learning Centre does not meet the criteria of NZTA Traffic Note 37 relating to Variable School Speed Zones as the entryway is located away from the road. It is proposed that the Kaiwaka urban area have a 40kph speed limit, except for State Highway 1. The proposed speed limits will meet the requirements of the governments *Road to Zero* Road Safety Strategy as it applies to schools and educational facilities.

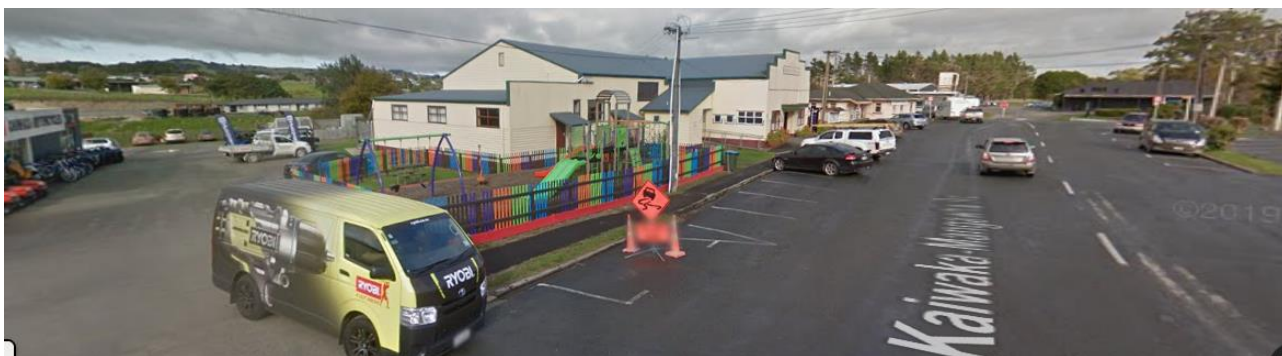


Figure 15: Small Pukeko's Early Learning Centre – Kaiwaka-Mangawhai Road

3.5.5 Te Kura Kaupapa Maori O Ngaringaomatariki – Oruawharo School Road

Te Kura Kaupapa Maori O Ngaringaomatariki is a state-run school located at 34 Oruawharo School Road in the Kaiwaka West Speed Review Area. The school is a full primary school that caters for Year 1 (5yrs) to Year 8 (13yrs) and has a roll of 48 students. The School roll has been steady between 24 and 28 from 2015 to 2018. There has been a marked increase in the roll to 48 in 2019. Given the location of the school and the school catchment area, it is not expected that the School Roll will significantly increase from current levels.

Te Kura Kaupapa Maori O Ngaringaomatariki is located at the end of the “no-exit” Oruawharo School Road. The road is very narrow and unsealed, with no shoulder areas on the approaches to the school (figure 16). The school has limited facilities for off-street parking, however, there is a fenced and gated entry that does provide access into the school grounds for pick-up or drop-off (figure 17). Given the low numbers of students attending the school, it is anticipated that extensive parking and drop-off areas are un-necessary.

Te Kura Kaupapa Maori O Ngaringaomatariki does not meet the criteria of NZTA Traffic Note 37 relating to Variable School Speed Zones. The location of the school at the cul-de-sac of the road, vehicles will be slowing on the approaches to the school. The proposed speed limit is 40kph. The proposed 40kph speed limit will meet the requirements of the governments *Road to Zero* Road Safety Strategy as it applies to schools and educational facilities.



Figure 16: Approach to Te Kura Kaupapa Maori O Ngaringaomatariki - Oruawharo School Road



Figure 17: Te Kura Kaupapa Maori O Ngaringaomatariki entrance - Oruawharo School Road cul-de-sac

4 Reasons for Change

Section 22AB(1)(d) of the Land Transport Act 1998 provides for a Road Controlling Authority to make a Bylaw to set a speed limit for the safety of the public, or for the better preservation of any road. In 2018, Council updated its Speed Limits Bylaw to ensure consistency across the Northland Region and with new legislation. The current Bylaw is known as the Kaipara District Council Speed Limits Bylaw 2018.

Council, as the Road Controlling Authority commenced reviewing speed limits across the Kaipara District in 2018 as part of central government Safer Journey's Strategy. The review process is being led by the Northland Transportation Alliance and has a goal of setting safe and appropriate speed limits that will reduce fatal and serious injury crashes.

Since the commencement of the review process, the government has updated the Safer Journeys Strategy and rebranded it the "Road to Zero Strategy". Although there are differences between the two Strategies, the base requirement to review speed limits on high risk local roads remains the same. The Road to Zero Strategy identifies the need to speed up the review process.

The proposed changes to speed limits are evidence based and take account of a variety of risk factors; the "One Network Road classification" system; and changing road environments, including the volume of traffic and development.

In response to changes in the roading environment, along with an assessment of the safe and appropriate speed for the road environment, Council is proposing to amend the speed limits in the Kaiwaka-Mangawhai and Kaiwaka West Review Area. The primary reasons for the amendments are:

- To better match the road speed limit with the wider environment to lower the potential for fatal, serious injury and minor crashes.
- To respond to a changing wider road environment, including existing, new, and planned access from residential land-uses onto the main carriageway.

- Lower the potential for fatal and serious injury crashes involving pedestrians and cyclists within growing urban and semi-urban environments by providing for a safe and appropriate speed limit that recognises that environment.
- Slower speed limits are being introduced around schools where they do not currently exist to improve safety for school students arriving or leaving school, and to ensure consistency with the governments “Road to Zero Strategy”.

In addition to the overall reasons set out above, the following roads within the Review Area have also been identified as High Benefit (top 10%) roads that will benefit from lowering the speed review:

- Kaiwaka-Mangawhai Road (First 5%)
- Sections of Brown Road (Second 5%)
- Sections of Tara Road (First 5%) – This section did not form part of the Tara Road speed review undertaken in late 2018.
- Hilltop Road (First 5%)
- Sections of Devich Road (First 5%)
- Wood Street (First 5%)
- Mangawhai Heads Road - West (First 5%)

It should be noted that Cove Road (Whangarei District) that connects Mangawhai with Waipu Cove is identified as a High Priority (First 5%) road. Cove Road is a cross boundary road and the implementation of any changes to the speed limit will be co-ordinated with Whangarei District Council.

4.1 Kaiwaka-Mangawhai Road

The Kaiwaka-Mangawhai Road is one of three main access routes from State Highway 1 to Mangawhai. The road has been identified as being within the top 5% of roads where a lower speed limit will lead to significant improvements in safety by lowering the serious injury and fatal crash rates.

4.2 Tara Road

The speed limit on part of Tara Road was reviewed and reduced in 2018 in response to urban development and the introduction of new pedestrian facilities and crossings. Feedback received during that review indicated a community desire to address the speed limit on the remainder of the road.

4.3 Cames Road

Cames Road has a current temporary speed limit in response to a strong community desire to address a range of issues on this road. The speed limit is only one aspect of the issues that the community wish to see addressed. This speed review will create permanent speed limits that are consistent with the current temporary speed limits.

4.4 Mangawhai Heads Surf Beach Area

Proposed changes to the speed limit in the Mangawhai Heads Surf Beach area reflect the small coastal community environment. There is an increased number of pedestrians accessing the main surf beach and the Mangawhai Harbour from neighbouring residential houses and holiday batches. Including the Mangawhai Heads Camping Ground.

Opportunities for enhanced and safer pedestrian facilities are limited, due to the topography of the area. As a result of the limited pedestrian facilities, particularly on Wintle Street, there is increased potential that pedestrians will utilise the road carriageway.

4.5 Mangawhai Heads Business Area

The Mangawhai Heads Business Area is located in, and around Wood Street, which has been identified as a first 5% High Benefit road for a speed review. Wood Street includes several café,

Bar and other retail businesses, including the only petrol station. Wood Street and the surrounding streets have a high number of pedestrians, particularly during the summer months. Matching the speed limit to the pedestrianised environment is a priority.

4.6 Molesworth Drive

Molesworth Drive connects Mangawhai Heads with the main Mangawhai Township to the south. Over recent years there has been significant sub-division development off Molesworth Drive, and it is increasingly becoming a more urbanised environment.

There is a planned major development, Mangawhai Central that will be located off Molesworth Drive. This development includes commercial, retail, and residential centres. A private plan change has been lodged to update the rules associated with Mangawhai Central. The private plan change, if adopted, will not come into effect until early 2021.

The proposed lower speed limit reflects the current and changing road environment, as well as the coastal community environment. It is expected that the proposed 60kph speed limit will need to be reduced to 50kph once Mangawhai Central is developed.

4.7 Mangawhai Township

The Mangawhai Township incorporates a range of commercial activities, including a supermarket, bakery, café's, service station, as well as other retail businesses. The area also includes the Mangawhai Chocolate Factory, which is a significant tourist attraction. There is a high number of pedestrians accessing the area, particularly during the summer months. The few streets that connect to the Township area are narrow slow speed streets. Matching the speed limit to the pedestrianised environment is a priority.

4.8 Kaiwaka Urban Traffic Area

The Kaiwaka Urban area is bisected by State highway 1 with a 60kph speed limit. The urban roads that connect off State Highway 1 are short urban access streets. A 40kph speed limit reflects the intent of national Speed Management Guidance and is consistent with a national approach to speed limits in urban areas where the carriageway is accessed for a variety of pedestrian related activities. The 40kph speed limit zone on Kaiwaka-Mangawhai Road reflects the busy shopping area, public toilets and schools located in this area.

4.9 Mangawhai Urban Area

Council has consistently received community feedback seeking a slower, safer speed limit within many urban areas, but particularly focussed on small townships and coastal communities. The small coastal community and holiday character of the Mangawhai urban area gives rise to a higher proportion of pedestrians accessing the road carriageway, as compared to larger towns and cities. Newer subdivisions within the Mangawhai urban area are designed with slower streets in mind, and generally have a design speed of 40kph or less.

5 Setting of Speed Limits Rule considerations

The purpose of the Setting of Speed Limits Rule 2017 is to give effect to a nationally consistent and evidence-based approach to speed management and to provide a mechanism for road controlling authorities to set speed limits for roads in their jurisdictions.

Section 4.2(2) of the Setting of Speed Limits Rule 2017 requires a range of matters to be considered when reviewing and setting a speed limit. The following sets out the matters which Council has had regard to in setting the proposed speed limit within the review area.

5.1 NZTA Information

NZTA provide larger scale information and crash data. NZTA data has been utilised throughout the Speed Management Review, and includes, but is not restricted to:

- Crash data reported to NZTA through the Police

- NZTA risk assessments, including Personal, Collective and Infrastructure Risk assessments
- Safe and appropriate speed data and assessment

Large scale NZTA data forms the basis for the speed management assessments undertaken and set out in this Report.

NZTA is also a member of the Key Stakeholders Group to facilitate consultation on speed reviews.

5.2 Speed Management Guidance

NZTA provides guidance for the setting of speed limits within *the NZTA National Speed Management Guide 2016*. The Speed Management Rule 2017 provides the process for reviewing speed limits across the District.

The Speed Management Guidance 2016 document has provided the basis for the assessments and processes (including consultation processes) utilised in this speed management review.

Generally, NZTA Speed Management Guidance promotes larger, catchment wide reviews in areas that are identified as high benefit. This Speed Review focusses on the Hakaru Catchment area incorporating Mangawhai and Kaiwaka urban areas and a smaller catchment referred to as Kaiwaka West.

In accordance with the Speed Management Guidance, the identified Hakaru and Kaiwaka West catchment areas have been identified for a speed review for the following reasons:

- There are seven roads, or part roads, that have been identified as High Benefit (first or second 5%) roads for a speed review.
- Both the Hakaru and Kaiwaka catchment areas are well defined and will lead to consistency in speed limits
- There has been significant development in and around Mangawhai, effecting the overall road environment.
- Speed limits need to be reviewed to address ongoing development and growth pressure on the road environment.
- There is a strong community perception that current speed limits are too high in some places.

5.3 Function and Use of the Road

The One Network Road Classification (ONRC) is a framework that provides a consistent system for the classification of roads throughout New Zealand. The ONRC considers the needs of all road users, be they motorists, cyclists, or pedestrians.

Initial assessments of appropriate levels of service, safety features and speed ranges are made based on the function and classification of the road. The initial assessment does not consider local factors and provides a starting range for identifying an appropriate speed limit for a given road. The initial speed ranges are based on Figure 1.4 of the NZ Speed Management Guide 2016 (below).

Classification	Straight open road /urban motorways	Curved open road	Winding open road	Urban (not motorway)
Class 1 High volume national	100–110km/h⁴ Depends on design and safety risk (e.g. divided 4–5 star, grade separated intersections, safety barriers) and factoring in enforcement thresholds			
Class 2 National, Regional, Arterial	80–100km/h Depends on safety risk and whether volumes justify investment to bring the road up to 3 star equivalent, also enforcement thresholds		60–80km/h	50km/h
Class 3 Primary and secondary collector				60–80km/h where safety risk allows, e.g. fewer intersections, mode separation for active users
Class 4 Access and low-volume access All winding/tortuous	60–80km/h Depending on roadside development, pedestrian and cyclist volumes, whether sealed or not			30–50km/h 30km/h if high volumes of cyclists/pedestrians Recognise access and place 10km/h for Shared Spaces

Recommended safe and appropriate speed ranges for road classes: Source: NZTA - NZ Speed Management Guidance, 2016

The ONRC classification, road type and initial speed estimate range is set out for each separate road or road section in the tables set out in Sections 5.3.1 and 5.3.2 below.

5.3.1 Function and use of road – Hakaru Catchment (Kaiwaka-Mangawhai)

Road	ONRC Classification	Type of Road	Speed Range
Atkin road	ONRC 4	Access	60 - 80kmph
Avocado Lane (private)	ONRC 4	Access	60 - 80kmph
Bagnal Road	ONRC 4	Access	60 - 80kmph
Baldrock Road	ONRC 3	Secondary Collector	80 - 100kmph
Barrier View Road	ONRC 4	Access	60 - 80kmph
Brown Road (North end to 289 Brown Rd)	ONRC 4	Access	60 - 80kmph
Brown Road (289 Brown Rd to Wonderview Ln)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Brown Road (Wonderview Ln to Kaiwaka - Mangawhai Road)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Cames Road	ONRC 4	Access	40-60kmph
Carters Road	ONRC 4	Access	60-80kmph
Carters West Road	ONRC 4	Access	60 - 80kmph
Clarke Road	ONRC 4	Access	60 - 80kmph
Coalhill Road (Tomarata Rd to Coastview Ln)	ONRC 3	Secondary Collector	80 - 100kmph
Coalhill Road (Coastview Ln to Blackswamp Rd)	ONRC 4	Access	60 - 80kmph

Table 5: Function and use of road

Road	ONRC Classification	Type of Road	Speed Range
Cove Road	ONRC 2	Arterial	80 - 100kmph
Devich Road	ONRC 3	Secondary Collector	60 - 80kmph ¹
Garbolino Road	ONRC 4	Access	80 - 100kmph
Gibbons Road (Domain Access Rd to One Lane Bridge)	ONRC 4	Access	60 - 80kmph
Gibbons Road (One Lane Bridge to 163 Gibbons Rd)	ONRC 4	Access	60 - 80kmph
Gibbons Road (163 Gibbons Rd to Quarry)	ONRC 4	Access	60 - 80kmph
Gibbons Road (Quarry to Baldrock Rd)	ONRC 4	Access	60 - 80kmph
Hilltop Road	ONRC 4	Access	60 - 80kmph
Jude Road	ONRC 4	Access	60 - 80kmph
Kaiwaka-Mangawhai Road (100kph zone to Tara Rd)	ONRC 2	Arterial	80 - 100kmph
Kapawiti Road	ONRC 4	Access	60 - 80kmph
King Road (From Cove Rd to Spioenkop Rd)	ONRC 4	Access	60 - 80kmph
King Road (From Spioenkop Rd to Bush Ln))	ONRC 4	Access	60 - 80kmph
Lawrence Road (From Kaiwaka - Mangawhai Rd to Devich Rd)	ONRC 4	Access	60 - 80kmph
Lawrence Road (From Devich Rd to Cames Rd)	ONRC 4	Access	60 - 80kmph
Lawrence Road (From Cames Rd to Valley Rd)	ONRC 4	Access	60 - 80kmph
Old Waipu Road	ONRC 4	Access	60 - 80kmph
Old Waipu Road North	ONRC 4	Access	60 - 80kmph
Otioro Road	ONRC 4	Access	60 - 80kmph
Pakeho Road	ONRC 4	Access	60 - 80kmph
Paul Road	ONRC 4	Access	60 - 80kmph
Pebblebrook Road (Tara Rd to Jude Rd)	ONRC 4	Access	60 - 80kmph
Pebblebrook Road (Jude Rd to end)	ONRC 4	Access	60 - 80kmph
Pritchard Road	ONRC 4	Access	60 - 80kmph
Raymond Bull Road	ONRC 4	Access	60 - 80kmph
Rua Road	ONRC 4	Access	60 - 80kmph
Settlement Road (Windmill Ln to Tawa Ave)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Settlement Road (Tawa Ave to Vista Ln)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Settlement Road (Vista Ln to Lara Ln)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Settlement Road (Lara Ln to Valley Rd)	ONRC 3	Secondary Collector	80 - 100kmph ¹
Settlement Road (Lara Ln to Kaiwaka - Mangawhai Rd)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Spioenkop Road	ONRC 4	Access	60 - 80kmph
Stewart Road	ONRC 4	Access	60 - 80kmph
Tara Road (Kaiwaka Mangawhai Rd to Darmah Ln)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Tara Road (Darmah Ln to 680 Tara Rd)	ONRC 3	Secondary Collector	60 - 80kmph ¹
Tara Road (680 Tara Rd to Brown Rd)	ONRC 4	Access	60 - 80kmph ¹
Tawa Avenue	ONRC 4	Access	60 - 80kmph

Table 5 (cont.): Function and use of road

Road	ONRC Classification	Type of Road	Speed Range
Tern Point Road	ONRC 4	Access	60 - 80kmph
Tomarata Road	ONRC 3	Primary Collector	80 - 100kmph
Valley Road (settlement Rd to end of Seal)	ONRC 4	Access	60 - 80kmph
Valley Road (Unsealed Section to St Michaels Church)	ONRC 4	Access	60 - 80kmph
Valley Road (one lane bridge end of seal to Kereru Ln))	ONRC 4	Access	60 - 80kmph
Wonderview Lane	ONRC 4	Access	60 - 80kmph

Table 5 (cont.): Function and use of road

5.3.2 Function and use of road – Kaiwaka West Catchment

Road	ONRC Classification	Type of Road	Speed Range
Dowson Place	ONRC 4	Access	60 - 80kmph
Farr Road	ONRC 4	Access	60 - 80kmph
Hastie Lane	ONRC 4	Access	60 - 80kmph
Kaira Road	ONRC 4	Access	60 - 80kmph
Nathan Road	ONRC 4	Access	60 - 80kmph
Nukuroa Road	ONRC 4	Access	60 - 80kmph
Oneriri Road (SH1 to Pukenui Rd)	ONRC 3	Secondary Collector	80 - 100kmph
Oneriri Road (Pukenui Rd to Rangiora Rd)	ONRC 3	Secondary Collector	60 - 80kmph
Oneriri Road (Rangiora Rd to Parekura Rd)	ONRC 4	Access	60 - 80kmph
Oneriri Road (Parekura Rd to end)	ONRC 4	Access	60 - 80kmph
Oruawharo Road (SH 1 to Payne Rd)	ONRC 4	Access	60 - 80kmph
Oruawharo Road (Payne Rd to Oruawharo School Rd))	ONRC 4	Access	60 - 80kmph
Oruawharo Road (Oruawharo School Rd to end)	ONRC 4	Access	60 - 80kmph
Oruawharo School Road	ONRC 4	Access	60 - 80kmph
Otara Road	ONRC 4	Access	60 - 80kmph
Parekura Road	ONRC 4	Access	60 - 80kmph
Parekura school Road	ONRC 4	Access	60 - 80kmph
Payne Road	ONRC 4	Access	60 - 80kmph
Phillips Road	ONRC 4	Access	60 - 80kmph
Pukenui Road	ONRC 4	Access	60 - 80kmph
Ranganui Road	ONRC 4	Access	60 - 80kmph
Rangiora Road	ONRC 4	Access	60 - 80kmph
Schisk Road	ONRC 4	Access	60 - 80kmph
Syd Smith Road	ONRC 4	Access	60 - 80kmph
Wiki Brown Road	ONRC 4	Access	60 - 80kmph

Table 6: Function and use of road

5.4 Crash Risk

Crash data is primarily sourced from data that is reported to NZTA from the NZ Police, and often does not report minor, non-injury crashes or near misses. The overall crash data provides a current personal and collective risk rating for the specified road, which are set out in the tables below.

5.4.1 Crash Risk - Hakaru Catchment (Kaiwaka-Mangawhai)

Road	Collective Risk ¹	Personal Risk ²	Infrastructure Risk ³
Atkin Road	Low	Insufficient Crashes	High
Avocado Lane (private)	Unknown	Unknown	Medium
Bagnal Road	Low Medium	Insufficient Crashes	High
Baldrock Road	Low	Insufficient Crashes	Medium High
Barrier View Road	Low	Insufficient Crashes	Medium High
Brown Road (North end to 289 Brown Rd)	Low	Medium High	High
Brown Road (289 Brown Rd to Wonderview Ln)	Low	Medium High	High
Brown Road (Wonderview Ln to Kaiwaka - Mangawhai Rd)	Low	Medium High	High
Carters Road	Unknown	Unknown	Medium
Carters West Road	Unknown	Unknown	High
Cemetery Access Road (Mangawhai)			
Clarke Road	Low	Insufficient Crashes	High
Coalhill Road (Tomarata Rd to Coastview Ln)	Unknown	Unknown	Medium High
Coalhill Road (Coastview Ln to Blackswamp Rd)	Unknown	Unknown	High
Cove Road	Low Medium	Medium	Medium
Devich Road	Low	Medium	Medium
Garbolino Road	Low	Insufficient Crashes	Medium High
Gibbons Road (Domain Access Rd to One Lane Bridge)	Low	Insufficient Crashes	High
Gibbons Road (One Lane Bridge to 163 Gibbons Rd)	Low	Insufficient Crashes	High
Gibbons Road (163 Gibbons Rd to Quarry)	Low	Insufficient Crashes	High
Gibbons Road (Quarry to Baldrock Rd)	Low	Insufficient Crashes	High
Hilltop Road	Low Medium	Medium	High
Jude Road	Low	Insufficient Crashes	High
Kaiwaka - Mangawhai Road (100kph zone to Tara Rd)	Low Medium	Medium High	Medium High
Kapawiti Road	Low	Insufficient Crashes	High
King Road (From Cove Rd to Spioenkop Rd)	Low	Insufficient Crashes	Medium High
King Road (From Spioenkop Rd to Bush Ln)	Low	Insufficient Crashes	High
Lawrence Road (From Kaiwaka - Mangawhai Rd to Devich Rd)	Low	Medium High	High
Lawrence Road (From Devich Rd to Cames Rd)	Low	Medium High	Medium High
Lawrence Road (From Cames Rd to Valley Rd)	Low	Medium High	High

Table 7: Crash risk

Road	Collective Risk ¹	Personal Risk ²	Infrastructure Risk ³
Old Waipu Road	Low	Insufficient Crashes	Medium
Old Waipu Road North	Low	Insufficient Crashes	High
Otioro Road	Low	Insufficient Crashes	High
Pakeho Road	Low	Insufficient Crashes	High
Paul Road	Low	Insufficient Crashes	High
Pebblebrook Road (Tara Rd To Jude Rd)	Low	Insufficient Crashes	High
Pebblebrook Road (Jude Rd To end)	Low	Insufficient Crashes	High
Pritchard Road	Low	Insufficient Crashes	High
Raymond Bull Road	Low	Insufficient Crashes	Medium High
Rua Road	Unknown	Unknown	Medium High
Settlement Road (Windmill Ln to Tawa Ave)	Low	Insufficient Crashes	High
Settlement Road (Tawa Ave to Vista Ln)	Low	Insufficient Crashes	High
Settlement Road (Vista Ln to Lara Ln)	Low	Insufficient Crashes	High
Settlement Road (Lara Ln To Valley Rd)	Low	Insufficient Crashes	Medium
Settlement Road (Lara Ln to Kaiwaka - Mangawhai Rd)	Low	Insufficient Crashes	High
Spioenkop Road	Unknown	Unknown	High
Stewart Road	Low	Insufficient Crashes	High
Tara Road (Kaiwaka Mangawhai Rd to Darmah Ln)	Low Medium	High	Medium High
Tara Road (Darmah Ln to 680 Tara Rd)	Low Medium	High	Medium High
Tara Road (680 Tara Rd to Brown Rd)	Low Medium	High	Medium High
Tawa Avenue	Unknown	Unknown	Medium High
Tern Point Road	Low	Insufficient Crashes	Medium
Tomarata Road	Low Medium	Medium	High
Valley Road (Settlement Rd to end of seal)	Low	Medium High	Medium High
Valley Road (unsealed section to St Michaels Church)	Low	Medium High	High
Valley Road (One Lane Bridge end of seal to Kereru Ln))	Low	Insufficient Crashes	High
Wonderview Lane	Unknown	Unknown	Medium High

Table 7 (cont.): Crash risk

Notes for Crash Risk Tables:

1. **Collective Risk** is a measure of the total number of fatal and serious injury crashes per kilometre over a section of road. Collective risk does not take account of the volume of traffic on the road
2. **Personal Risk** is a measure of the danger to each individual using a road. Personal risk takes into account the traffic volumes on the section of road.
3. **Infrastructure Risk** utilises a road assessment methodology designed to assess road safety risk based on eight key design and infrastructure features.
4. **Unknown Risk** indicates that there is insufficient data available to determine the specific risk factor.

A review of crash data reported to NZTA through the NZ Police in the ten years from 2008 to 31 March 2018 is set out in the figures below.

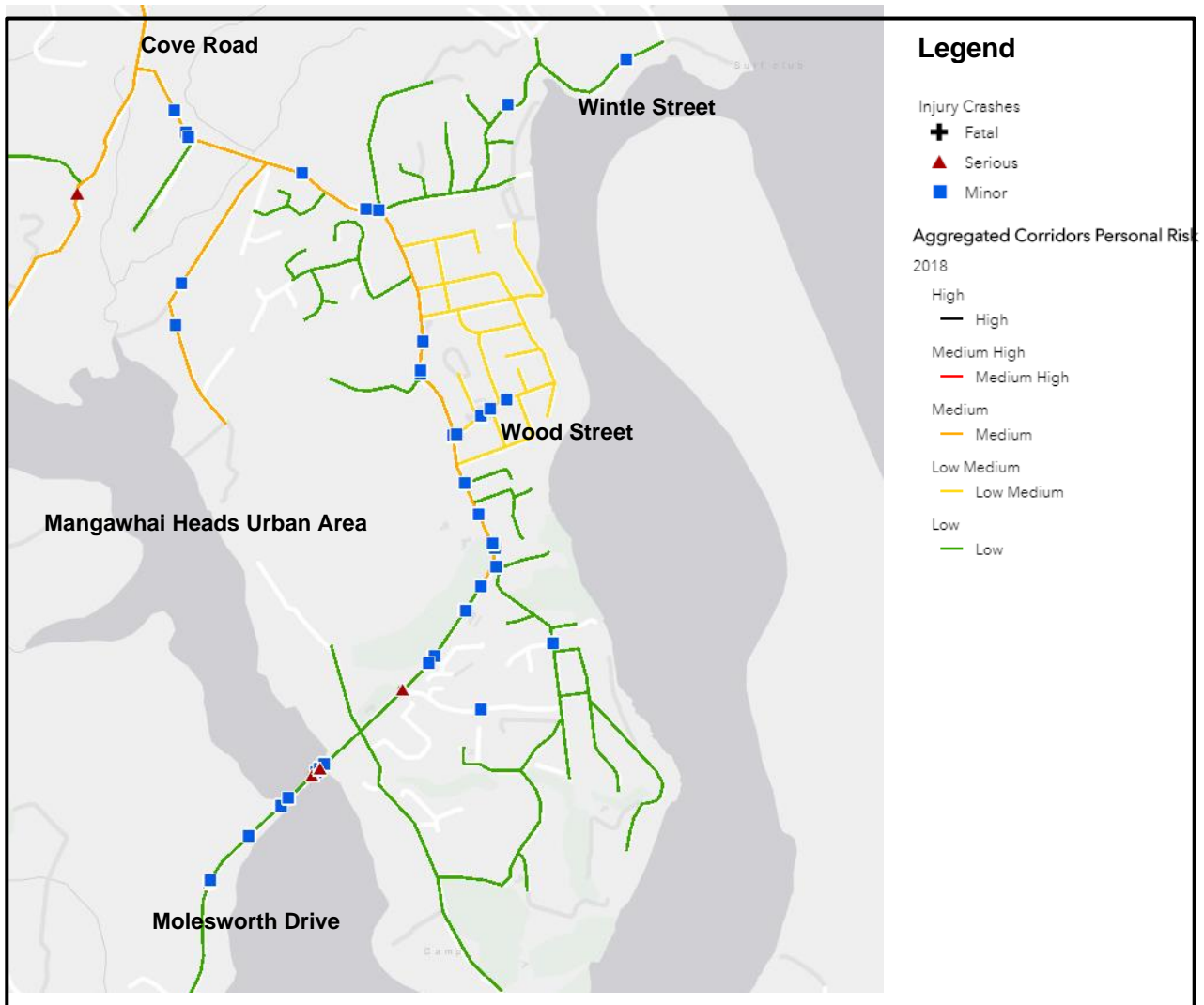


Figure 18: Mangawhai Heads Urban Area – crashes reported through NZ Police and NZTA 2008 - 2018

Reported crash data shows a cluster of crashes within the Wood Street shopping area. This area is highly pedestrianised, particularly during summer and holiday periods. Crash data also shows consistent crashes on Molesworth Drive, particularly near the causeway. There are several subdivisions occurring along Molesworth Drive, which will increase the number of vehicles access this part of Molesworth Drive.

There is a cluster of crashes recorded at the intersection of Wood Street and Molesworth Drive. These crashes generally involved right turning traffic not seeing, or mis-judging oncoming traffic. All recorded crashes on Wood Street involved vehicles manoeuvring.

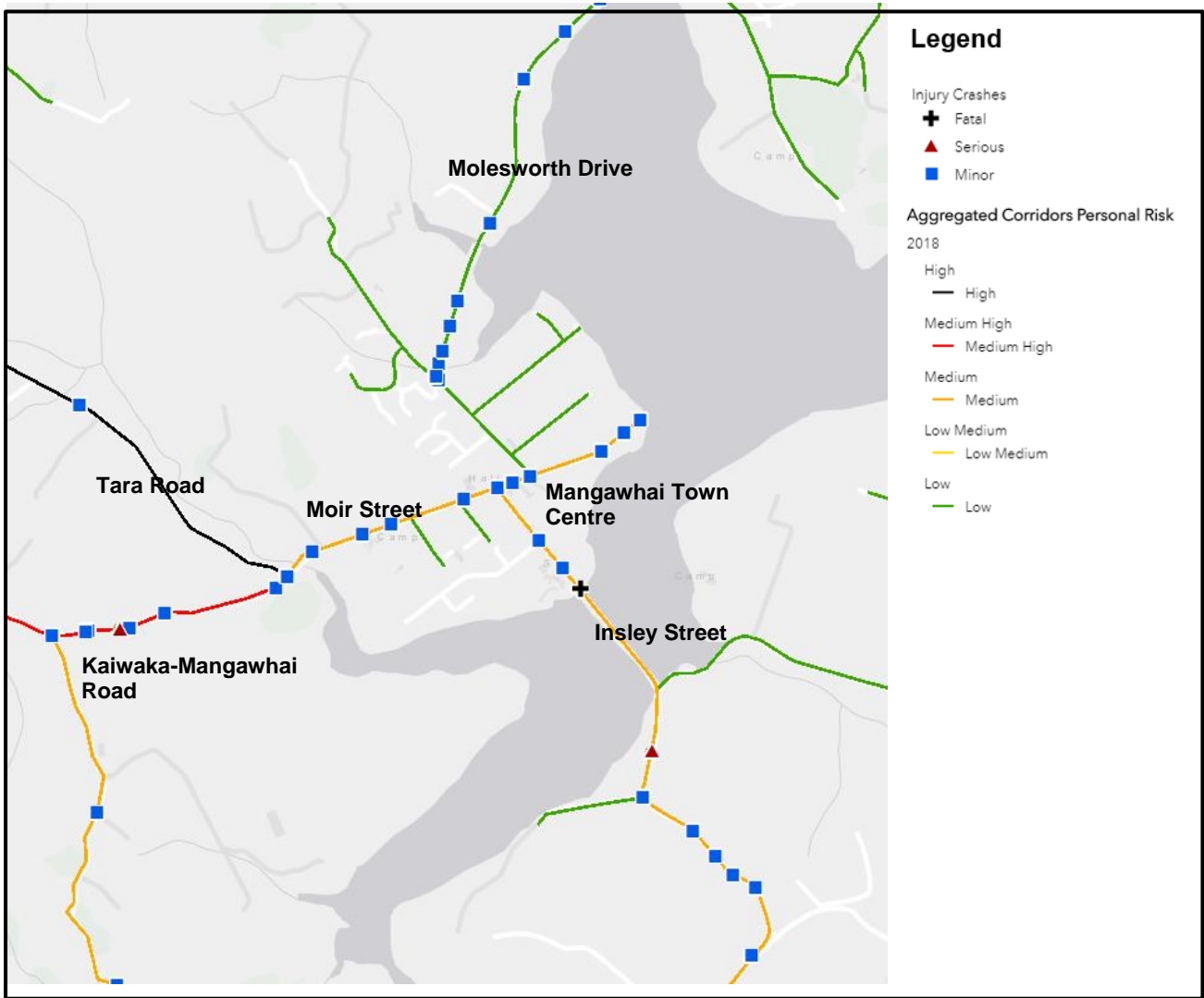


Figure 19: Mangawhai Township Urban Area – crashes reported through NZ Police and NZTA 2008 - 2018

Reported crash data shows clusters on Molesworth Drive near the entry to Mangawhai Township. This cluster corresponds with the current transition from 50kph to 80kph speed limits. The cluster also corresponds with new subdivision development that will connect to Molesworth Drive.

There is a cluster of crashes within the Town Centre area, with an associated cluster near the northern end of Moir Street, near the Mangawhai Tavern. There were a range of crashes in this area, including a “car hit pedestrian”, losing control whilst turning, vehicles hitting parked vehicles or rear-ending other vehicles. The root causes of these crashes included driver inattention or distraction. Although in several cases the vehicles were within the current speed limit, a lower speed limit may have provided greater time for reaction and crash avoidance. A consistent theme of crashes within the Town Centre area is driver distraction, indicating that this is a slower speed environment.

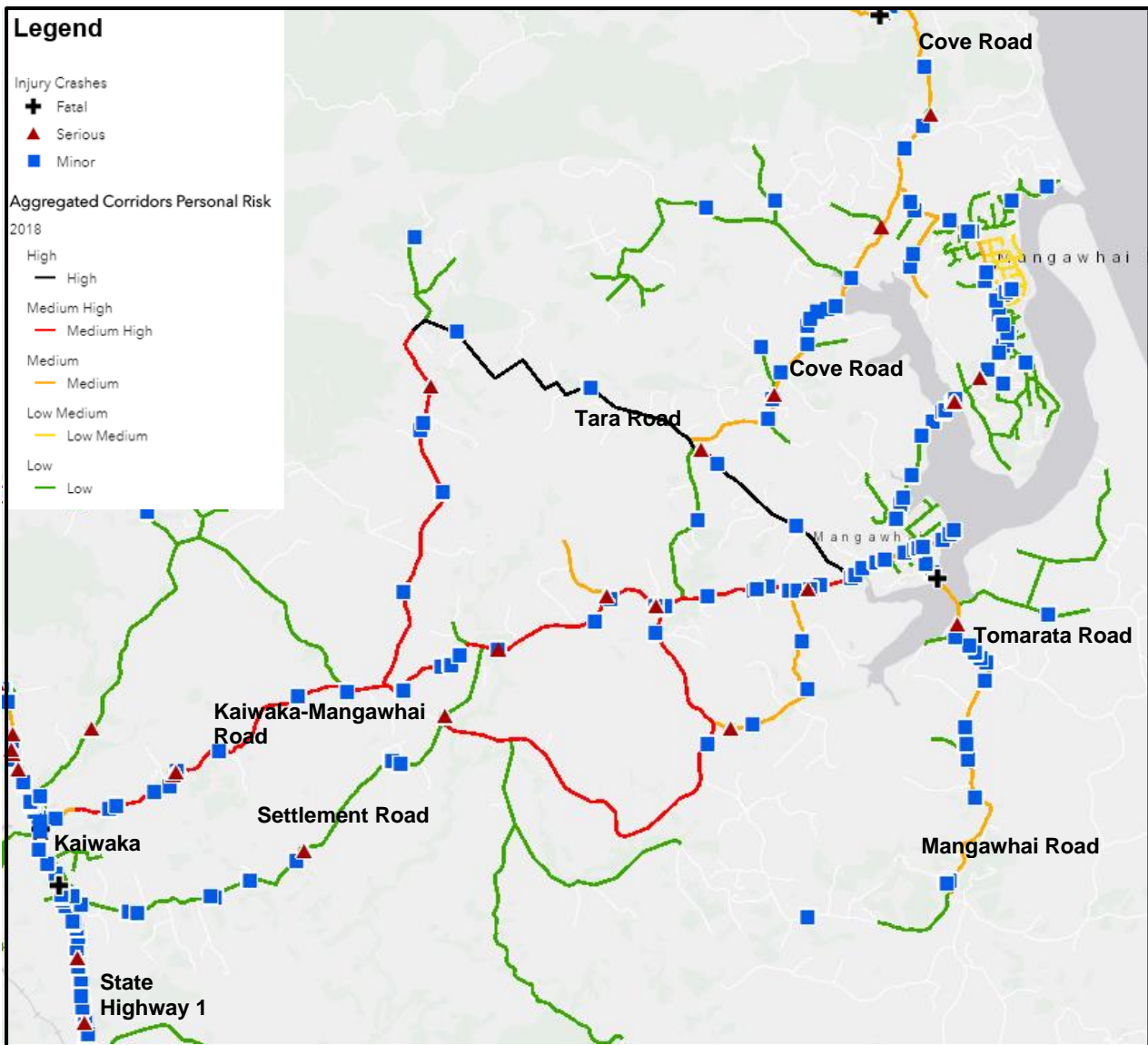


Figure 20: Hakaru Review Area – crashes reported through NZ Police and NZTA 2008 - 2018

The recorded crash data shows consistent crashes occurring along the full length of the Kaiwaka-Mangawhai Road. The crash rate is the principle reason why the road is rated in the first 5% high benefit roads for speed reviews. Consistent factors for crashes occurring on the Kaiwaka-Mangawhai Road includes speed and driver distraction resulting in a collision or loss of control. Failing to give way was a further cause of crashes.

A feature of crashes recorded on Cove Road is a loss of control whilst turning or navigating curves in the road, often resulting in a collision with an obstruction off the carriageway (tree or pole) or another vehicle. This type of crash can be indicative that the speed limit on the road is not appropriate for the road conditions.

Crashes recorded on Tomarata Road principally involved the loss of control of the vehicle, which is often a speed related issue.

5.4.2 Crash Risk – Kaiwaka West Catchment

Road	Collective Risk ¹	Personal Risk ²	Infrastructure Risk ³
Dowson Place	Unknown	Unknown	Medium High
Farr Road	Low	Insufficient Crashes	High
Hastie Lane	Low	Insufficient Crashes	Medium
Kaira Road	Low	Insufficient Crashes	High
Nathan Road	Low	Insufficient Crashes	High
Nukuroa Road	Low	Insufficient Crashes	High
Oneriri Road (SH1 to Pukenui Rd)	Low	Insufficient Crashes	Medium
Oneriri Road (Pukenui Rd to Rangiora Rd)	Low	Insufficient Crashes	Medium High
Oneriri Road (Rangiora Rd to Parekura Rd)	Low	Insufficient Crashes	Medium High
Oneriri Road (Parekura Rd to end))	Low	Insufficient Crashes	High
Oruawharo Road (SH 1 to Payne Rd)	Low	Medium High	Medium High
Oruawharo Road (Payne Rd to Oruawharo School Rd))	Low	Medium High	Medium High
Oruawharo Road (Oruawharo School Rd to end)	Low	Medium High	High
Oruawharo School Road	Low	Insufficient Crashes	High
Otara Road	Low	Insufficient Crashes	High
Parekura Road	Low	Insufficient Crashes	High
Parekura School Road	Low	Insufficient Crashes	High
Payne Road	Low	Insufficient Crashes	High
Phillips Road	Low	Insufficient Crashes	High
Pukenui Road	Low	Insufficient Crashes	High
Ranganui Road	Low	Insufficient Crashes	High
Rangiora Road	Low	Insufficient Crashes	High
Schisk Road	Low	Insufficient Crashes	High
Syd Smith Road	Low	Insufficient Crashes	High
Wiki Brown Road	Low	Insufficient Crashes	High

Table 8: Crash risk

Notes:

- 1. Collective Risk is a measure of the total number of fatal and serious injury crashes per kilometre over a section of road. Collective risk does not take account of the volume of traffic on the road**
- 2. Personal Risk is a measure of the danger to each individual using a road. Personal risk takes into account the traffic volumes on the section of road.**
- 3. Infrastructure Risk utilises a road assessment methodology designed to assess road safety risk based on eight key design and infrastructure features.**
- 4. Unknown Risk indicates that there is insufficient data available to determine the specific risk factor.**

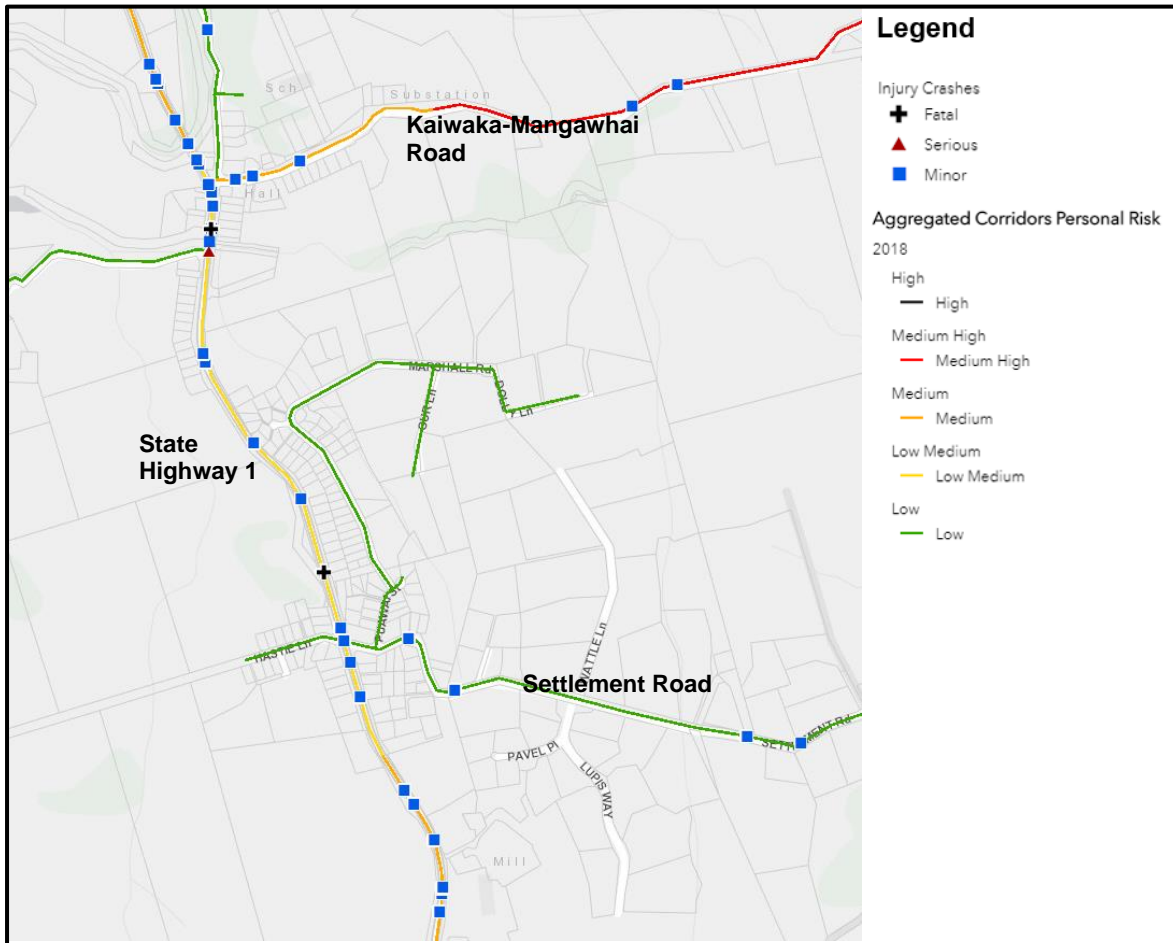


Figure 21: Kaiwaka Urban Area – crashes reported through NZ Police and NZTA 2008 - 2018

Recorded crashes, including fatal crashes within the Kaiwaka urban area are on State Highway 1 where the speed limit is within NZTA’s jurisdiction.

The cluster of crashes within the Town Centre of the Kaiwaka-Mangawhai Road included crashes resulting from poor visibility due to other parked vehicles and obstructions. This indicates that the current speed limit may not be appropriate for the road environment, which in this location includes angle parking and vehicles accessing the local supermarket, public toilets, Early Learning Centre and Kaiwaka School.

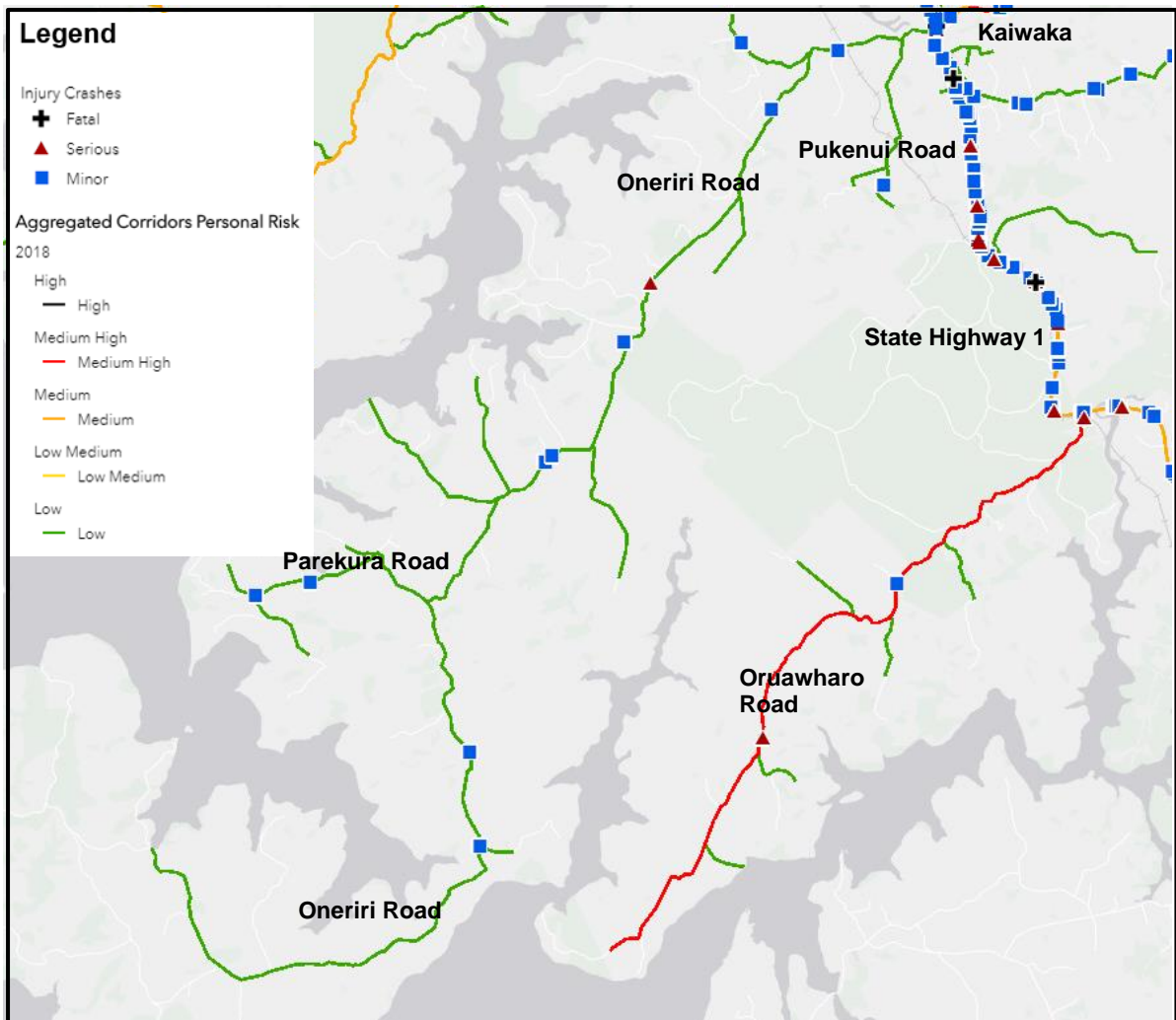


Figure 22: Kaiwaka West – crashes reported through NZ Police and NZTA 2008 - 2018

5.5 Characteristics of the Road

The characteristics of the road include the physical characteristics of the road that have an impact on crash risk such as the type of seal and shoulder width. The general environment also determines the characteristics of the road and crash risk, for example pedestrians and parking.

This section of the Report is divided into Tables and road descriptions. The Tables set out the significant physical characteristics of each road within the review area. The road descriptions provide an example of the characteristics of selected roads and are intended to provide an overview of different road types, and includes the three town centres of Mangawhai Heads, Mangawhai Township and Kaiwaka.

5.5.1 Road Characteristics - Hakaru Catchment (Kaiwaka-Mangawhai)

Road	Road Character	Lane Width	Curves	Shoulder
Atkin Road	Unsealed	Narrow	Winding	Very Narrow
Bagnal Road	Unsealed	Narrow	Winding	Very Narrow
Baldrock Road	Two Lane Undivided	Medium	Winding	Very Narrow
Barrier View Road	Two Lane Undivided	Medium	Winding	Very Narrow
Brown Road (North end to 289 Brown Rd)	Unsealed	Narrow	Curved	Very Narrow
Brown Road (289 Brown Rd to Wonderview Ln)	Unsealed	Narrow	Curved	Very Narrow
Brown Road (Wonderview Ln to Kaiwaka-Mangawhai Rd)	Unsealed	Medium	Winding	Very Narrow
Carters Road	Two Lane Undivided	Medium	Straight	Very Narrow
Carters West Road	Unsealed	Narrow	Curved	Very Narrow
Clarke Road	Unsealed	Narrow	Winding	Narrow
Coalhill Road (Tomarata Rd to Coastview Ln)	Two Lane Undivided	Narrow	Winding	Very Narrow
Coalhill Road (Coastview Ln to Blackswamp Rd)	Unsealed	Narrow	Winding	Very Narrow
Cove Road	Two Lane Undivided	Medium	Winding	Very Narrow
Devich Road from Kaiwaka-Mangawhai Road to Lake View Road	Two Lane Undivided	Medium	Torturous	Very Narrow
Devich Road (from Lake View Rd to Lawrence Rd)	Unsealed	Medium	Torturous	Very N/arrow
Garbolino Road	Two Lane Undivided	Medium	Winding	Very Narrow
Gibbons Road (Domain Access Rd to one lane bridge)	Unsealed	Narrow	Winding	Very Narrow
Gibbons Road (One lane bridge to 163 Gibbons Rd)	Unsealed	Narrow	Winding	Very Narrow
Gibbons Road (163 Gibbons Rd to Quarry)	Unsealed	Narrow	Winding	Very Narrow
Gibbons Road (Quarry to Baldrock Rd)	Unsealed	Narrow	Winding	Very Narrow
Hilltop Road	Unsealed	Narrow	Winding	Very Narrow
Jude Road	Unsealed	Narrow	Winding	Narrow
Kaiwaka - Mangawhai Road (100kph Zone to Tara Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Kapawiti Road	Unsealed	Narrow	Torturous	Very Narrow
King Road (From Cove Rd to Spioenkop Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
King Road (From Spioenkop Rd to Bush Ln))	Unsealed	Medium	Torturous	Very Narrow
Lawrence Road (From Kaiwaka Mgwahi Rd to Devich Rd)	Unsealed	Narrow	Winding	Very Narrow
Lawrence Road (From Devich Rd to Comes Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Lawrence Road (From Comes Rd to Valley Rd)	Unsealed	Narrow	Curved	Very Narrow

Table 9: Road characteristics

Road	Road Character	Lane Width	Curves	Shoulder
Old Waipu Road	Two Lane Undivided	Medium	Winding	Very Narrow
Old Waipu Road North	Unsealed	Narrow	Curved	Very Narrow
Otioro Road	Unsealed	Narrow	Winding	Very Narrow
Pakeho Road	Unsealed	Narrow	Winding	Very Narrow
Paul Road	Unsealed	Narrow	Winding	Very Narrow
Pebblebrook Road (Tara Rd to Jude Rd)	Unsealed	Narrow	Winding	Very Narrow
Pebblebrook Road (Jude Rd to End)	Unsealed	Narrow	Curved	Very Narrow
Pritchard Road	Unsealed	Narrow	Torturous	Very Narrow
Raymond Bull Road	Unsealed	Medium	Straight	Very Narrow
Rua Road	Two Lane Undivided	Medium	Straight	Very Narrow
Settlement Road (Windmill Ln to Tawa Ave)	Unsealed	Narrow	Curved	Very Narrow
Settlement Road (Tawa Ave to Vista Ln)	Two Lane Undivided	Medium	Torturous	Very Narrow
Settlement Road (Vista Ln to Lara Ln)	Unsealed	Narrow	Winding	Very Narrow
Settlement Road (Lara Ln to Valley Rd)	Two Lane Undivided	Medium	Curved	Very Narrow
Settlement Road (Lara Ln to Kaiwaka-Mangawhai Rd)	Unsealed	Narrow	Curved	Very Narrow
Spioenkop Road	Unsealed	Medium	Torturous	Very Narrow
Stewart Road	Unsealed	Narrow	Torturous	Very Narrow
Tara Road (Kaiwaka Mangawhai Rd to Darmah Ln)	Two Lane Undivided	Medium	Winding	Very Narrow
Tara Road (Darmah Ln to 680 Tara Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Tara Road (680 Tara Rd to Brown Rd)	Unsealed	Medium	Winding	Very Narrow
Tawa Avenue	Two Lane Undivided	Medium	Curved	Very Narrow
Tern Point Road	Two Lane Undivided	Medium	Curved	Very Narrow
Tomarata Road	Two Lane Undivided	Medium	Winding	Very Narrow
Valley Road (Settlement Rd to end of seal)	Two Lane Undivided	Medium	Curved	Very Narrow
Valley Road (unsealed section to St Michaels Church)	Unsealed	Narrow	Curved	Very Narrow
Valley Road (One lane bridge at end of seal to Kereru Ln)	Unsealed	Narrow	Curved	Very Narrow
Wonderview Lane	Unsealed	Narrow	Straight	Wide

Table 9 (Cont.): Road characteristics

5.5.2 Mangawhai Heads – Wood Street

Wood Street within the Mangawhai Heads retail shopping area is identified within the First 5% of high benefit roads where a review of speed limits will result in a significant improvement to safety. Wood Street connects to Molesworth Drive, which is the main arterial route that connects Mangawhai Heads with Mangawhai Township.

Wood Street and the immediately surrounding streets are characterised by both angle and parallel parking (Figure 23 and 24), with café's, eateries, and other tourist type retail outlets. There is a small local supermarket and petrol station located within the shopping area. During summer

months and other holiday periods, this road has a high pedestrian count, with many pedestrians informally accessing the carriageway.

Fagan Place, which provides access to a main carparking area located to the rear of the shopping area and provides access to the library and medical centre has a posted speed limit of 30kph.

Wood Street provides the most direct access to an area of coastal residential dwellings. Ellen Street is located at the western end of the shopping area; and has no formal pedestrian facilities (figure 25). Ellen Street is often utilised for informal overflow parking for people accessing cafés and other retail businesses.

Council is commencing a project to upgrade the Wood Street area by providing a boutique shopping and eatery experience that will incorporate pedestrian safety features, controls on vehicle movements and a trial shared space. It is expected that this area would be a 30kph speed limit zone.



Figure 23: Wood Street eastbound – entry into the Mangawhai shopping area.



Figure 24: Wood Street westbound – showing both angle parking and parallel parking and café areas on both sides of the street.

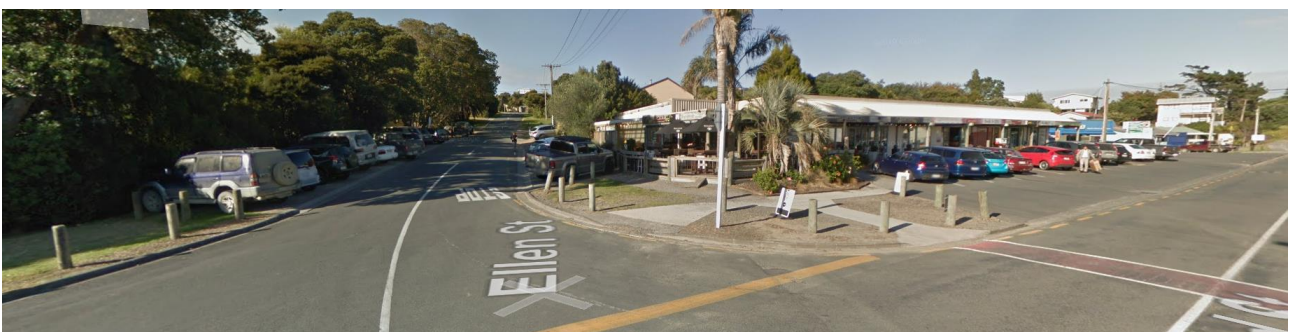


Figure 25: Wood Street – western end showing additional angle parking on Ellen Street.

5.5.3 Mangawhai Heads Road (West)

Mangawhai Heads Road (West) is located within the proposed Urban Traffic Area Boundary and provides the main access to Mangawhai Heads and Mangawhai Township from the northern centres, including Whangarei.

Mangawhai Heads Road (West) connects Cove Road to Molesworth Drive and has a speed limit of 50kph for approximately half its length, with the remainder being 70kph. Over recent years there has been significant subdivision development along this road, particularly within the 70kph zone. There are a number of subdivisions that have a single driveway entrance that services multiple dwellings (figure 26).

Pedestrian facilities are located from the eastern end of Mangawhai Heads Road (West) at the roundabout, but do not extend beyond Jack Boyd Drive, approximately 100m from the 70kph zone. There are no pedestrian facilities along the 70kph zone of the road (Figure 27). It is noted that some newer subdivisions provide pedestrian access to Mangawhai Heads Road (West) (Figure 28).



Figure 26: Mangawhai Heads Road (West) – current transition from 50kph to 70kph.



Figure 27: Mangawhai Heads Road (West) – 70kph zone showing lack of pedestrian facilities and direct access residential dwellings.

The increasing number of residential dwellings along Mangawhai Heads Road (West) indicate that the 70kph zone should be either a 50kph or a 60kph zone. Should the 50kph zone be extended to Cove Road, there may be a requirement to consider new pedestrian facilities or other engineering interventions to urbanise this section of the road.



Figure 28: Mangawhai Heads Road (West) – 70kph zone, multiple residential dwelling access.

5.5.4 Mangawhai Township – Moir Street

The Mangawhai Township incorporates parts of Moir Street, Insley Street and Molesworth Drive with complex intersections that incorporate parking areas immediately adjacent to intersections, and a service station located immediately opposite the Insley Street / Moir Street intersection (figure 29).

Moir Street, from Insley Street to Molesworth Drive is characterised by retail shopping, principally a supermarket, bakery, takeaway shops, and other retail shops. There is limited angle parking outside the supermarket and a wide pedestrian area incorporating some seating and dining tables (figure 30). There is also a public toilet.

The Service Station located opposite the Insley Street intersection has no formal or clear delineation between the road carriageway, footpath, and the forecourt area. This creates an angle parking area between the main ingress and egress areas of the Service Station. At this point there is no clear pedestrian area. In effect, this creates a small shared use area. Vehicles leaving the Service Station have complex considerations when determining the safety of entering the main carriageway, including manoeuvring vehicles, and informal pedestrian area, a significant intersection, and vehicles on the Moir Street carriageway.

Moir Street terminates (in the north) at the estuary, where there is an informal boat launching area and the Mangawhai Tavern.

Moir Street is a main thoroughfare from Mangawhai Heads to Kaiwaka and Auckland, with Moir Street merging onto Kaiwaka-Mangawhai Road and Insley Street merging into a main route to Auckland.



Figure 29: Mangawhai Township – Moir Street / Insley Street intersection.



Figure 30: Mangawhai Township – Moir Street retail area.

The Molesworth Drive part of the Town Centre is the main connection between Mangawhai Township and Mangawhai Heads. The Molesworth Drive / Moir Street intersection is an uncontrolled complex intersection with a large building supply company immediately opposite the “T” intersection. The main carpark area provides access to a range of retail shops and is accessed opposite and immediately adjacent to the “T” intersection.

Molesworth Drive features a range of retail and commercial / office activities, including eateries, and a mixed-use office building that currently houses Kaipara District Council Service Centre (figure 31). Access to this office building is located off Dune View Drive, with the entryway approximately 10m from the intersection.



Figure 31: Mangawhai Township – Molesworth Drive commercial area.

Current development of the Mangawhai Village area includes the construction of two roundabouts at the Moir Street – Insley Street intersection and the Moir Street – Molesworth Drive intersection. In addition, there will be more formalised pedestrian crossings, parking, footpaths, and traffic calming measures. The planned changes to the road environment will support a 30kph speed environment. Several of the surrounding streets and suburbs have a slower 40kph speed limit. A 30kph speed limit in the town centre would therefore be appropriate to clearly indicate a change of road environment and increased hazards.

The proposed 30kph zone extends along Molesworth Drive to include the early childhood centre. The zone also extends along Moir Street to incorporate the Mangawhai Tavern and boat launching area.

5.5.5 Kaiwaka-Mangawhai Road

Kaiwaka-Mangawhai Road is an arterial road that links the Kaiwaka township with Mangawhai. The road provides an east-west link between State Highway 1 and the East Coast. However, the road is not a primary access route from either Whangarei or Auckland.

Kaiwaka-Mangawhai is identified as a High Benefit Road (top 5%) where a reduction in the speed limit would provide a significant safety benefit and reduce the serious and fatal crash risk on the road.

Kaiwaka-Mangawhai is a well-formed sealed road with clearly marked lanes. However, the road character is winding with little or no shoulder width. Many of the curves have advisory speeds significantly below 100kph (figures 32-35). There are few significant straight sections along the length of the road.

Kaiwaka-Mangawhai winds its way through an undulating landscape resulting in corners that are cut into the hillside, providing limited visibility of oncoming traffic. Although rural in nature, there are a significant number of residential dwellings that have direct access onto the carriageway.

There are few places along the road where the current speed limit of 100kph can be sustained for a significant period. A slower speed limit matching the road environment is therefore appropriate.



Figure 32: Kaiwaka-Mangawhai Road.



Figure 33: Kaiwaka-Mangawhai Road – undulating curves typical of this road



Figure 34: Kaiwaka-Mangawhai Road – narrow shoulder widths typical of this road



Figure 35: Kaiwaka-Mangawhai Road – low advisory speeds for curves with limited visibility.

5.5.6 Tara Road

Part of Tara Road was subject to a speed review in late 2018. The outcome of this review was to reduce the speed limit from the intersection with Kaiwaka-Mangawhai Road to Darmah Lane to 50kph in response to the installation of new pedestrian facilities, pedestrian crossings and increased residential subdivision. This speed review is not proposing to revisit this section of Tara Road.

Tara Road, from Darmah Lane is largely rural in nature, with some rural residential land-uses. Tara Road has two-lanes with no median barrier or other significant safety features. There is little or no shoulder areas along much of the road, with drainage ditches located immediately on both sides of the road. Although there are short straight sections of road; overall the alignment is curved (figures 36 and 37).

The Characteristics of Tara Road indicates that 80kph is a safe and appropriate speed. There are some sections of road where a lower speed limit may be appropriate, however, multiple speed limit changes designating relatively minor changes in the road environment are not desirable.



Figure 36: Tara Road



Figure 37: Tara Road

5.5.7 Brown Road

Brown Road is an unsealed road that links Kaiwaka-Mangawhai Road with the northern end of Tara Road. Brown Road has a narrow lane width and very narrow shoulder areas. The overall road environment is remote rural in nature with limited direct accessways onto the road. There are short sealed sections of road on the approaches to several one-lane bridges (figures 38 and 39).



Figure 38: Brown Road



Figure 39: Brown Road

Safe achievable speeds on Brown Road and other similar roads are between 50kph and 70kph, with significant parts of the road where a safe speed below 50kph is common. There are sections of the road where opposing vehicles will need to significantly reduce speed as they approach each other. Farm vehicles and Heavy Goods Vehicles, for example, milk tankers and stock trucks are common on these unsealed rural roads. The risk of losing control on curves and under braking is significant on unsealed roads similar to Brown Road.

5.5.8 Hilltop Road

Hilltop Road is a relatively short access road off Kaiwaka-Mangawhai Road. Hilltop Road is unsealed and has no exit. There is a moderate density of rural residential dwellings that have direct access onto the carriageway.

Hilltop Road is winding with a narrow lane width and narrow shoulders. Farm machinery is common along this, and similar roads that provide access to rural properties (figure 40). Opposing vehicles need to slow significantly when approaching. The risk of losing control on curves and under braking is significant on unsealed roads.

Safe and appropriate speeds on unsealed access roads are generally between 40kph and 60kph. The no-exit access nature of Hilltop Road and other similar roads mean that, vehicles on the road are local residents.



Figure 40: Hilltop Road

5.5.9 Lawrence Road

Lawrence Road is a loop road with both ends connecting to the Kaiwaka-Mangawhai Road. Lawrence Road is principally an unsealed road with a short 800m sealed section from Devich Road to Cames Road.

A majority of Lawrence Road can be driven (in ideal conditions) at between 50kph and 70kph with a few areas where a slower speed is necessary where curves on the brow of a hill limits visibility. A safe and appropriate speed for the unsealed sections is 60kph, which is consistent with many unsealed roads.

The sealed section of Lawrence Road can be safely driven at an 80kph speed limit. However, the Setting of Speed Limits Rule 2017 sets out the minimum distance for speed limits that exceed 50kph. The minimum distance for an 80kph speed limit is 800m. The sealed section of Lawrence

Road only just meets the minimum distance requirements. The difference in travel time along the sealed section (80kph vs 60kph) is measured in a few seconds and is considered insignificant when compared to the overall travel time.

One of the broader aims of the speed management guidance is to ensure that speed limits are consistent and intuitive where possible. Very short sections of road with different speed limits creates confusion for the driver as to what speed limit applies and is inconsistent with speed management guidance. Given that the benefit (shorter travel time) of an 80kph speed limit along this 800m section of Lawrence Road is so small, it is considered appropriate to maintain a consistent 60kph speed limit for the entire road.

5.5.10 Devich Road

Devich Road connects Kaiwaka-Mangawhai Road with Lawrence Road and is a secondary collector road. The road is sealed from Kaiwaka-Mangawhai Road through to Lake View Road, which services a relatively new subdivision. The sealed road is two lane-undivided and has torturous curves along its length. The unsealed section continues with a similar torturous alignment to the intersection with Lawrence Road.

5.5.11 Cames Road

Cames Road connects Lawrence Road with Mangawhai Road. A short section of Cames Road is located within the former Rodney District, which is now part of Auckland Council. A significant issue (among others) for residents on Cames Road is through traffic, particularly Heavy Goods Vehicles seeking a shorter route south.

Overall, Cames Road is a poorly formed, extremely narrow road that is suitable for access only for rural residential dwellings located along the road. The road can be divided into three main sections:

Section one (western Section) comprises a very narrow sealed single carriageway (figure 41). The road is winding in nature, with significant undulations. There are parts of the road that provide only limited visibility of on-coming traffic, hazards or pedestrians. This section of Cames Road has a temporary speed limit of 50kph.

The Setting of Speed Limits Guidance only allows for a 50kph speed limit with an urban environment, with other speed limits such as 40kph and 60kph being options that are encouraged. The alignment, geometry, carriageway width and surfacing of the western section of Cames Road indicate that a 60kph speed limit may be unsafe on this section of road. This assessment is supported by the current temporary speed limit. A 40kph speed limit would reflect a safe and appropriate speed limit along this section of the road.

Although it is proposed to formalise a 40kph speed limit to maintain consistency with Speed Management Guidance, there is an argument that a 50kph speed limit may be appropriate given the relatively unique nature of the road carriageway.



Figure 41: Cames Road – Western Section

Section two (middle section) of Cames Road comprises an extreme narrowing of the road carriageway to what can be described as a narrow, sealed track (figures 42 and 43). The carriageway is sufficiently narrow that only overtaking or passing in opposite directions would be impossible without at least one car leaving the carriageway altogether. Some parts of this section of road are very steep and have been concreted to ensure proper traction when ascending or descending in wet weather. There is a temporary 30kph speed limit through this section of Cames Road.

Given the current very poor quality of the carriageway through this section of Cames Road, it is considered that a 40kph speed limit would be too high, and that the current temporary 30kph speed limit is appropriate.

Section three (eastern section) is unsealed but has a more typical unsealed road character. Although unsealed, the carriageway along this section is currently graded and in good condition (figure 44). Part of this section of Cames Road crosses the Kaipara / Auckland Local Government boundary.

Currently there is a temporary 50kph speed limit along this section of Cames Road. The temporary speed limit is a response to concerns of residents, particularly the inappropriate use of the road by through traffic as a short cut route to the South.



Figure 42: Cames Road – Middle Section



Figure 43: Cames Road – Middle Section

The Setting of Speed Limits Guidance only allows for a 50kph speed limit with an urban environment, with other speed limits such as 40kph and 60kph being options that are encouraged. The geometry and alignment of the eastern section of Cames Road indicate that a safe and

appropriate speed is 60kph. A lower 40kph speed limit along this stretch of road would be inconsistent with the current road environment.

A significant issue is the use of the road by heavier vehicles and through traffic. Making a permanent speed limit of 40kph and 30kph respectively for the other sections of the road will help address this issue. Maintaining consistency with national speed management by setting a permanent speed limit of 60kph on the eastern section of the road will not significantly compromise the local goal of encouraging local traffic and light vehicles only.



Figure 44: Cames Road – Eastern Section

5.5.12 Road Characteristics – Kaiwaka West

Road	Road Character	Lane Width	Curves	Shoulder
Dowson Place	Two Lane Undivided	Narrow	Curved	Very Narrow
Farr Road	Unsealed	Narrow	Torturous	Very Narrow
Hastie Lane	Two Lane Undivided	Medium	Straight	Very Narrow
Kaira Road	Unsealed	Narrow	Winding	Very Narrow
Nathan Road	Unsealed	Narrow	Winding	Very Narrow
Nukuroa Road	Unsealed	Narrow	Curved	Very Narrow
Oneriri Road (SH1 to Pukenui Rd)	Two Lane Undivided	Medium	Curved	Very Narrow
Oneriri Road (Pukenui Rd to Rangiora Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Oneriri Road (Rangiora Rd to Parekura Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Oneriri Road (Parekura Rd to end))	Unsealed	Narrow	Winding	Very Narrow
Oruawharo Road (SH 1 to Payne Rd)	Two Lane Undivided	Medium	Winding	Very Narrow
Oruawharo Road (Payne Rd to Oruawharo School Rd)	Unsealed	Medium	Curved	Very Narrow
Oruawharo Road (Oruawharo School Rd to end)	Unsealed	Narrow	Winding	Very Narrow
Oruawharo School Road	Unsealed	Narrow	Winding	Very Narrow
Otara Road	Unsealed	Narrow	Winding	Very Narrow
Parekura Road	Unsealed	Narrow	Curved	Very Narrow
Parekura School Road	Unsealed	Narrow	Torturous	Very Narrow
Payne Road	Unsealed	Narrow	Torturous	Narrow

Table 9: Road characteristics

Road	Road Character	Lane Width	Curves	Shoulder
Phillips Road	Unsealed	Narrow	Curved	Very Narrow
Pukenui Road	Unsealed	Narrow	Torturous	Very Narrow
Ranganui Road	Unsealed	Narrow	Winding	Very Narrow
Rangiora Road	Unsealed	Narrow	Winding	Very Narrow
Schisk Road	Unsealed	Narrow	Torturous	Very Narrow
Syd Smith Road	Unsealed	Narrow	Torturous	Very Narrow
Wiki Brown Road	Unsealed	Narrow	Torturous	Very Narrow

Table 9 (cont.): Road characteristics

5.6 Adjacent Land-use

Adjacent land-use has a range of impacts on the road environment and a safe and appropriate speed within that road environment, including:

- Influencing the number of pedestrians and cyclists accessing the road corridor.
- Effecting the number of direct accesses onto the road carriageway, which in turn increases the risk of crashes.
- Impacting on the type of vehicle using the road, particularly the proportion of Heavy Goods Vehicles.

Land-use within the review area ranges from the urban areas of Mangawhai, Mangawhai Heads, and Kaiwaka through to rural residential and remote rural in the remainder of the review area.

Urban

The principal urban areas of the review area are Mangawhai Heads, Mangawhai Township and Kaiwaka. Both parts of Mangawhai have been the subject of extensive urban subdivision over the past 10 years. The new Estuary Estates development on Molesworth Drive is currently being considered within the consenting process.

The expansion of urban subdivision and rural residential subdivision around the Mangawhai Area has resulted in a proposed extension of the Mangawhai Urban Traffic Area. This extension achieves two key objectives:

- To provide a single Urban Traffic Area that covers the previously separate Urban Traffic Areas of Mangawhai Township and Mangawhai Heads
- Extend the Urban Traffic Area to encompass the expanding urban area.

Both Mangawhai Heads and Mangawhai Village remain strong seasonal towns with expanding populations over holiday periods and during the summer months. The original urban areas are relatively small when compared to the expansion of new subdivisions. The original areas maintain a relatively informal “holiday batch feel” with wider street carriageways and shoulder areas, but more informal pedestrian use of the road environment.

Newer subdivisions provide a more formal residential feel, with clear distinctions between the carriageway, pedestrian areas, and residential lots. However, there has been a strong focus on providing pedestrian and cycling linkages between subdivisions, as well as connections to facilities such as retail areas, schools, and recreation areas. Slow street design is a feature of many new subdivisions, with a design speed of between 30kph and 40kph.

The urban retail centres are generally small, but feature cafés, small scale supermarkets and other retail shops that are centred on the holiday and tourism market. This creates less formalised pedestrian areas that are characterised by pedestrian seating, tables and outdoor dining opportunities. Main parking areas, coupled with limited angle parking increases the need for vehicle manoeuvring in these areas, and also encourages pedestrians to access the carriageway to visit different retail establishments.

The Kaiwaka urban area is unique within the speed review area as it is bisected by State Highway 1. There are several distinct retail areas within Kaiwaka, all centred around the State Highway. Although there are pedestrian facilities between these retail and commercial areas, foot traffic between these areas is limited.

The Kaiwaka urban area has a limited number of urban streets. These streets are generally narrow undivided no-exit access streets with a footpath on one side of the street.

Given the nature of the urban areas within the review area, it is considered appropriate to propose a 40kph speed limit on all residential access roads, with a 50kph speed limit on key collector roads or along main connecting routes within the urban area.

Rural

This is the predominant land-use within the review area outside the main urban areas of Mangawhai and Kaiwaka. The general rural area gives rise to relatively low volumes of traffic movements; with the exception of the three main connections to Whangarei and Auckland, being Cove Road, Kaiwaka-Mangawhai Road and Tomarata / Mangawhai Road.

Rural areas on the outskirts of the main urban areas, particularly Cove Road, Tara Road, Tomarata Road and Devich Road are characterised by rural residential areas. These are areas where slower speed limits are appropriate to reflect the higher residential density. Speed limits will typically be between 60kph and 80kph, unless additional pedestrian facilities or urbanisation of the road has occurred, in which case, a 50kph speed limit may be appropriate, for example, Tara Road from Kaiwaka-Mangawhai Road to Dharma Lane.

The review area includes areas that are considered “Remote Rural”. These areas are typically accessed by unsealed roads of mixed quality. Much of the traffic in remote rural areas is local only.

Remote rural roads include additional hazards such as slower farm machinery, stock and unexpected slippery road conditions where stock have been moved. Higher speeds are not attainable on these roads because of their unsealed and winding character. In most cases, the current travel speed on unsealed remote rural roads is between 50kph and 70kph. A safe and appropriate speed limit of 60kph is generally expected on these roads, unless the road environment dictates a lower speed limit, for example, parts of Cames Road.

5.6.1 District Plan

The Kaipara District Plan is the principle document that provides direction for future development within the District. It achieves this by setting policy and rules for development, including the identification of different zones where specific activities will be encouraged, including the density of development.

Within the review area, the Kaipara District Plan identifies the following separate Planning Zones:

- Rural
- Rural Harbour
- Business Commercial
- Business Industrial
- Residential
- Residential Harbour
- Estuary Estates

The relevant Planning Maps are contained in Appendix 1.

5.6.1.1 Growth Areas

The Kaipara District Plan identifies Growth Areas in Mangawhai and Kaiwaka (refer maps – Appendix 1). The Growth Areas identify where Council expects urban and residential development to occur over the lifetime of the Plan. Objectives, Policies and Rules encourage growth within

these areas. The Growth Areas are also supported by Structure Plans and Urban Growth Plans that provide greater detail as to how these communities are expected to grow.

The proposed Urban Traffic Areas for Mangawhai and Kaiwaka reflect the Growth Areas identified in the District Plan. The proposed Urban Traffic Areas will provide greater certainty with respect to design speeds for new developments.

5.6.1.2 Rural and Rural Harbour

The Rural zones provide for a diverse range of rural production activities, including commercial and industrial activities that have a functional need to service rural production activities, rural communities or provide location-based recreation or tourist activities. The District Plan is generally permissive within the Rural Zones.

The Kaipara District Plan provides for two Rural Zones, being Rural and Rural Harbour. From a roading perspective, the principle difference between these zones is the density of development. The general Rural Zone provides for a net lot size of 12 Hectares (excluding Network Utilities allotments) as a Controlled Activity. The Rural Harbour Zone provides for a net lot size of 20 Hectares as a Controlled Activity. Overall, both zones encourage low, or very low-density development.

The Rural Zones are low density and the road environment has typically low traffic counts. It should be noted that these low traffic counts will vary, particularly where there is a more intensive form of rural activity. Roads are generally narrower with limited shoulder areas and may be unsealed.

A safe and appropriate speed on a local road within a Rural Environment is expected to be 80kmph or less, with a lower speed limit for unsealed roads, or where roads are particularly narrow or with tight curves.

5.6.1.3 Business Commercial and Industrial

The Kaipara District Plan provides for two separate Business Zones, being Commercial and Industrial. All Business Commercial and Industrial Zones are located within the boundaries of the proposed Urban Traffic Areas.

The Commercial Zone incorporates the existing commercial areas of the District and provides for businesses designed to serve the business and retail needs of the community. Commercial activities are generally comprised of shops, offices and retail which are of a scale and design compatible with pedestrian streetscapes and the surrounding community and residential areas.

Mangawhai has developed with two commercial centres, one at the Mangawhai Village and one at Wood Street, Mangawhai Heads. A new third centre for Mangawhai is planned at Estuary Estates, adjacent to Molesworth Road. The commercial centre at Kaiwaka is principally centred around the State Highway 1 intersection with Kaiwaka-Mangawhai Road.

The Business Industrial Zone incorporates industrial activities that support rural activities such as dairy farming, agriculture, and horticulture. The Business Industrial Zones within the review area are relatively small scale with some developing manufacturing and fabrication industries in the Kaiwaka Business Industrial Zone. In Mangawhai industrial activity generally supports the surrounding residential community as well as boutique primary production operations like chocolates, olives, and wines.

The Business Commercial zones are expected to generate increased traffic flow, pedestrians, and vehicles that are manoeuvring on and off the road carriageway. There are increased hazards and distractions within a Business Commercial Zone. Within a Business Commercial Zone, a slower speed limit than that for the general urban area is expected.

The Business Industrial Zones are expected to generate increased heavy goods and other vehicle movements. Within the context of the review area, the Business Industrial Zones in Mangawhai and Kaiwaka are relatively small with little heavy industry currently occurring. Speed limits within the Business Industrial Zones will be between 40kph and 60kph, depending on the type of business operating.

5.6.1.4 Residential and Residential Harbour

The Residential and Residential Harbour Zones are located within the proposed Urban Traffic Areas. Residential areas are supported by commercial centres (shops and employment areas), social infrastructure (schools, libraries, and other community facilities) and utility infrastructure.

Both residential zones incorporate smaller access roads that provide access to residential dwellings. Key arterial routes connect different residential areas; or residential areas with more commercial and retail areas.

Speed limits within residential zones are expected to be 40kph or 50kph, depending on whether the road is principally used for residential access or as an arterial route. There may be some slower speed limits in specific areas where there are a larger number of pedestrians, or slow street design has been incorporated into the road environment.

5.6.1.5 Estuary Estates and Mangawhai Central

The Estuary Estates Structure Plan area is comprised of approximately 130 hectares of land located on the upper Mangawhai Harbour. It sits to the west of Molesworth Peninsula, south of the Mangawhai Heads settlement and northwest of Mangawhai Village and is accessed off Molesworth Drive.

The Estuary Estates Structure Plan incorporates transport policies that have a focus on providing for the safe and convenient movement of people by foot and cycle as well as cars, buses, and other vehicles. The Structure Plan Area also seeks to provide high quality safe open space, access and pedestrian linkages for people and facilitates, sustainable living options between activities.

Speed limits within the Estuary Estates Structure Plan area need to support the overall objective and policies of this area by providing lower speed limits that are consistent with pedestrian access to the road environment. Speed limits are expected to be 40kph throughout the development. In some cases, within some proposed commercial areas a slower speed limit of 30kph may be appropriate.

The inclusion of the Estuary Estates Area within the proposed Mangawhai Urban Traffic Area is consistent with the overall objectives of the Estuary Estates Structure Plan. The current approach to urban speed limits of 40kph for most urban streets is also consistent with the Structure Plan.

5.7 Intersections and Property Access

The density of property access onto the main carriageway has a direct influence on the number of vehicles turning on and off the road. This influences crash risk in the following ways:

- Increased risk of side impact crashes where a vehicle accesses the carriageway and fails to give way to an oncoming vehicle.
- Vehicles travelling along the road also have a higher risk of encountering stationary vehicles on the carriageway, or vehicles travelling at a significantly lower speed.

In both instances, the risk of a crash increases where the carriageway width is limited, or there is limited visibility. Higher densities of property access also indicate more potential for pedestrian and cycle activity on or near the carriageway. As property access density increases, the safe and appropriate speed on a given road should decrease.

Property access density is indicative of the following:

- Urban areas: 20 or more per km
- Urban transition areas: 10 to 20 per km
- Rural residential: 5 to 15 per km
- General Rural: 2 to 5 per km
- Remote rural: Less than 2 per km

Intersection density provides a measure of the frequency that vehicles may be crossing the carriageway, slowing to make a turn, or accelerating after having made a turn.

5.7.1 Access and Intersections - Hakaru Catchment (Kaiwaka-Mangawhai)

Road	Property Access / Km	Intersections / km
Atkin Road	2 <5	<2
Bagnal Road	2 <5	1 <2
Baldrock Road		Less than one
Barrier View Road	2 <5	1 <2
Brown Road (North End To 289 Brown Rd)	2 <5	Less than one
Brown Road (289 Brown Rd to Wonderview Ln)	2 <5	Less than one
Brown Rd (Wonderview Ln To Kaiwaka-Mangawhai Rd)	2 <5	Less than one
Carter Road	2 <5	3 <5
Carters West Road	2 <5	3 <5
Clarke Road	1 <2	2 <3
Coalhill Road (Tomarata Rd To Coastview Ln)	2 <5	2 <3
Coalhill Road (Coastview Ln To Blackswamp Rd)	2 <5	Less than one
Cove Road	1 <2	Less than one
Devich Road	2 <5	Less than one
Garbolino Road	2 <5	Less than one
Gibbons Road (Domain Access Rd to one lane bridge)	1 <2	Less than one
Gibbons Road (One lane bridge to 163 Gibbons Rd)	2 <5	Less than one
Gibbons Road (163 Gibbons Rd To Quarry)	2 <5	Less than one
Gibbons Road (Quarry To Baldrock Rd)	2 <5	Less than one
Hilltop Road	2 <5	Less than one
Jude Road	2 <5	Less than one
Kaiwaka Mangawhai Road (100kph Zone to Tara Rd)	2 <5	Less than one
Kapawiti Road	2 <5	Less than one
King Road (From Cove Rd to Spioenkop Rd)	2 <5	Less than one
King Road (From Spioenkop Rd to Bush Ln))	2 <5	2 <3
Lawrence Road (From Kaiwaka-Mangawhai Rd to Devich Rd)	2 <5	Less than one
Lawrence Road (From Devich Rd to Cames Rd)	2 <5	2 <3
Lawrence Road (From Cames Rd to Valley Rd)	2 <5	Less than one
Old Waipu Road	>20	2 >3
Old Waipu Road North	2 <5	2 <3
Otioro Road	2 <5	Less than one
Pakeho Road	2 <5	5 <10
Paul Road	2 <5	<1000
Pebblebrook Road (Tara Rd to Jude Rd)	2 <5	2 <3

Table 10: Access and intersection density

Road	Property Access / Km	Intersections / km
Pebblebrook Road (Jude Rd to end)	2 <5	1 <2
Pritchard Road	2 <5	Less than one
Raymond Bull Road	2 <5	1 <2
Rua Road	>20	>10
Settlement Road (Windmill Ln to Tawa Ave)	2 <5	Less than one
Settlement Road (Tawa Ave to Vista Ln)	2 <5	1 <2
Settlement Road (Vista Ln to Lara Ln)	2 <5	Less than one
Settlement Road (Lara Ln to Valley Rd)	2 <5	1 <2
Settlement Road (Lara Ln to Mangawhai-Kaiwaka Rd)	2 <5	2 <3
Spioenkop Road	2 <5	1 <2
Stewart Road	2 <5	2 <3
Tara Road (Kaiwaka Mangawhai Rd to Darmah Ln)	2 <5	<1
Tara Road (Darmah Ln to 680 Tara Rd)	2 <5	<1
Tara Road (680 Tara Rd to Brown Rd)	1 <2	<1
Tawa Avenue	2 <5	3 <5
Tern Point Road	2 <5	Less than one
Tomarata Road	2 <5	3 <5
Valley Road (Settlement Rd to end of seal)	2 <5	3 <5
Valley Road (Unsealed section to St Michaels Church)	2 <5	Less than one
Valley Road (one lane bridge at end of seal To Kereru Ln)	2 <5	Less than one
Wonderview Lane	2 <5	1 <2

Table 10 (cont.): Access and intersection density

5.7.2 Access and intersections – Kaiwaka West

Road	Property Access / Km	Intersections / km
Dowson Place	10 <20	>10
Farr Road	2 <5	1 <2
Hastie Lane	10 <20	5 <10
Kaira Road	2 <5	Less than 1
Nathan Road	2 <5	Less than 1
Nukuroa Road	2 <5	Less than 1
Oneriri Road (State Highway 1 to Pukenui Road)	>20	3 <5
Oneriri Road (Pukenui Rd to Rangiora Rd)	2 <5	Less than 1
Oneriri Road (Rangiora Rd to Parekura Rd)	2 <5	1 <2

Table 11: Access and intersection density

Road	Property Access / Km	Intersections / km
Oneriri Road (Parekura Rd To End))	2 <5	Less than 1
Oruawharo Road (State Highway 1 to Payne Rd)	2 <5	Less than 1
Oruawharo Road (Payne Rd to Oruawharo School Rd))	2 <5	Less than 1
Oruawharo Road (Oruawharo School Rd to end)	2 <5	Less than 1
Oruawharo School Road	2 <5	Less than 1
Otara Road	2 <5	Less than 1
Parekura Road	2 <5	Less than 1
Parekura School Road	2 <5	2 <3
Payne Road	2 <5	Less than 1
Phillips Road	2 <5	Less than 1
Pukenui Road	2 <5	Less than 1
Ranganui Road	2 <5	Less than 1
Rangiora Road	2 <5	Less than 1
Schisk Road	2 <5	<10 ??
Syd Smith Road	2 <5	1 <2
Wiki Brown Road	2 <5	1 <2

Table 11 (cont.): Access and intersection density

5.8 Traffic Volumes

Traffic volumes within the Hakaru and Kaiwaka West Review areas (except within the proposed Urban Traffic Areas) are typically less than 1000 movements measured as an Average Daily Traffic (ADT) flow over a 7-day period. Tomarata Road is an exception to this lower volume with an ADT of between 1000 and 6000. This reflects Tomarata Roads roll as a key link between Auckland and Mangawhai.

Although roads within the review area are generally low volume, it is important to note that there is a wide mix of vehicles using these roads, including agricultural machinery (tractors) and private vehicles.

5.9 Planned Modifications to the Road

The following projects and proposed modifications of the road environment within the review area are currently known:

- Proposed walkway (concept stage only) that, if developed, will extend along Alamar Crescent. It is proposed to make Alamar Crescent 30kph as it is located alongside a harbourside reserve that pedestrian's access.
- Wood Street redevelopment. This redevelopment will create a more pedestrian friendly shared space area in the Wood Street retail area. The development is expected to include pedestrian friendly boutique shopping and eating experience. Changes to the road environment are expected to include pedestrian safety features, vehicle movement controls and parking. A one-way traffic flow and shared space environment will be trialled as part of the project. It is proposed to make Wood Street a 30kph zone, which is consistent with the proposed modifications to the road environment.
- Moir Street Shopping area in Mangawhai Village. Two roundabouts are proposed at the intersection of Moir Street and Insley Street, and at the Moir Street and Molesworth Drive intersection. Formalised pedestrian crossing points, traffic calming, footpaths and parking will

be integrated into the roundabout project. It is proposed to make the Mangawhai Village Centre, including part of Moir Street and Molesworth Drive a 30kph zone, which is consistent with the proposed modifications of the road.

- There is a proposal to upgrade the boat ramp and carparking area at the northern end of Moir Street near the Mangawhai Tavern. This project is in the early stages of design and consent has not been applied for. The proposed 30kph zone on Moir Street will incorporate this development if it goes ahead.
- There is a long-term proposal to develop a new connection from Mangawhai Township to Cove Road using Old Cove Road (or a similar route). The proposed route has been included in the proposed boundaries of the Urban Traffic Area.
- Mangawhai Central. This is a significant development located off Molesworth Drive and is discussed elsewhere in this Report. The proposed development has been set out in the Mangawhai Structure Plan and includes a roundabout on Molesworth Drive to access the development. At the time of writing this Report, an application has been lodged for a Private Plan Change that will set out more detail as to the development. The development, as currently planned and subject to the Private Plan Change will have a significant impact on the Molesworth Road environment. Although there is a current 60kph zone proposed for Molesworth Drive, it is recognised that, once Mangawhai Central is developed, a further amendment to the speed limit (50kph) will be required.

5.10 Views of Interested Persons and Groups

The purpose of this Document is to set out those matters that Road Controlling Authority must consider when reviewing speed limits. One of those matters is the views of interested persons or groups. This includes key stakeholders (as identified by Council) and the community adjacent to the road where new speed limits are proposed.

A Key Stakeholder Group has been identified and includes:

- NZ Police
- The Automobile Association
- The Regional Land Transport Committee
- Regional Transport Associations (including Freight)
- Regional Road Safety Forum
- Road contractor representatives

The Key Stakeholder Group provides input into the overall prioritisation of speed reviews and other speed related issues through periodic workshops and direct requests for feedback. The Key Stakeholder Group is also directly notified for feedback on specific speed reviews. The feedback received is incorporated into the final decision-making process for Council.

A consultation process, consistent with the requirements of Section 156 of the Local Government Act 2002 and the Setting of Speed Limits Rule 2017 is being undertaken. This process enables Council to obtain the views of the wider community before any final decision is taken.

6 Options Analysis

In assessing the options, a range of matters were considered, including the matters required by the Setting of Speed Limits Rule 2017 (refer above), and future development within, and adjacent to the review area.

In determining the proposed amendments to the speed limit within the review area, the following options have been considered:

Option A: No change to the current speed environment

Option B: Amend the speed limit as proposed

Option C: Engineer the road to meet the current speed limits

This review of speed limits covers a wide area. The review itself is the result of considering a wide range of factors outlined in this Report. The Options Analysis therefore does not relate to individual roads but considers the high-level options.

6.1 Option A - No change to the current speed environment

Having assessed all the matters that must be considered under the Setting of Speed Limits Rule 2017 and set out in this Report; Option A is not being pursued for the following reasons:

- There are parts of the review area where the existing posted speed limit does not reflect the overall road environment, including adjacent land-uses and planned development.
- There are high risk roads within the review area, where a reduction in the speed limit will have significant safety benefits and is expected to reduce the risk of speed related serious and fatal crashes.

6.2 Option B - Amend the speed limit as proposed

Having assessed all of the matters that must be considered under the Setting of Speed Limits Rule 2017 and set out in this Report, it has been determined that amending speed limits as proposed is the preferred option for the following principle reasons:

- The proposed speed limits reflect an appropriate speed environment for roads within the review area, based on current road environment, adjacent land-uses, and planned development.
- The reduction in speed will have significant safety benefits:
- The proposed speed limits will address current and planned development in Mangawhai.
- The slower speed limits proposed will not have a significant impact on travel times.
- The proposed speed limits are consistent with the NZTA Speed Management Guidance 2016.

6.3 Option C - Engineer the road to meet the current speed limits

Engineering the roads to meet the current speed limits involves the implementation of a variety of engineering solutions to ensure that the road environment is at a standard that meets the posted speed limit.

Option C to engineer the road to meet current posted speed limits is not recommended in the short term for the following reasons:

- Council has a strategic plan for maintaining and upgrading roads on a district wide basis that considers population projections and other long-term planning aspects.
- Engineering roads to meet posted speed limits in the short-term is cost prohibitive.
- As roads are improved as part of an ongoing strategic plan, speed limits can be reviewed so that they match new engineered road environments.

6.4 Option Conclusion

Following an assessment of the options available with respect to the proposed amendments to the speed environment in the identified review area; and having considered the matters set out the setting of Speed Limits Rule 2017; it is recommended that Option B is adopted by Council for consultation.

7 Significance of Change

The Kaipara District Speed Limits Bylaw 2018 is made under the Land Transport Act 1998 (LTA). Section 22AD of the LTA requires Council to consult with the community in accordance with the requirements of Section 156 of the Local Government Act 2002.

The significance of changing the Speed Limits Bylaw is assessed to determine the methodology of the consultation process to be undertaken.

7.1 Significance and Engagement Policy

The amendments to the Speed Limits Bylaw 2018 have been assessed against Kaipara District Council's Significance and Engagement Policy (2017). A determination has been made that the proposed amendments to the Bylaw, either individually or cumulatively **do not** meet the significance criteria in the Significance and Engagement Policy (2017). However, Community Engagement is advised under Clause 7.2.

7.2 Section 156 Assessment

Council has assessed the proposed changes in speed limits in accordance with Section 156 of the Local Government Act. It is considered that, given the geographic extent of the proposals, there will be significant public interest.

In accordance with Section 156 of the Local Government Act 2002, it has been determined that the proposed amendments to the Speed Limits Bylaw 2018 Schedules:

- Is not significant in terms of Council's Significance and Engagement Policy (2017)
- Do not give rise to a significant impact on the public but is likely to impact on the local community and give rise to significant public interest.

Given the above assessment, and in accordance with Section 156(1)(a) of the Local Government Act 2002, it is appropriate that Council consult on the proposed amendments in accordance with the Special Consultative Procedure set out in Section 83 of the Local Government Act 2002.

8 Consultation Process

Consultation is undertaken in accordance with the requirements of Section 83, 83A and 83AA of the Local Government Act 2002 and the Setting of Speed Limits Rule 2017.

8.1 Local Government Act Requirements

In accordance with the requirements of Sections 83 - 86 of the Local Government Act, Council has produced a Statement of Proposal that is publicly available. The Statement of Proposal includes details of how interested persons can present their views to Council by making a submission and when submissions can be made.

This Report is intended to support the Statement of Proposal by providing additional detailed information, including the information that must be considered in accordance with the Setting of Speed Limits Rule 2017.

8.2 Setting of Speed Limits Rule Requirements

Section 2.5 of the Setting of Speed Limits Rule 2017 sets out the consultation requirements when setting a speed limit, and includes a requirement to consult with the following:

- The occupiers of any properties adjoining the road to which the proposed bylaw applies
- Any affected local community
- The Commissioner of Police
- Any other organisation or road user group that the road controlling authority considers affected
- The New Zealand Transport Agency

In terms of "other organisations or road user groups", The Northland Transport Alliance, which Kaipara District Council is part of, has established a Key Stakeholders Group. This Group includes the Northland Police, NZTA and representatives from the Northland Road Safety Forums, NZ Road Carriers Association and the Regional Land Transport Committee.

Northland Automobile Association (AA) are also included in the Key Stakeholders Group.

8.3 Giving Effect to Consultation Requirements

The consultation requirements of the Local Government Act and the Setting of Speed Limits Rule will be given effect to via direct notification of the organisations identified in 7.2 (above), public notification, advertising, and where practicable through community meetings.

The geographic extent of the proposals makes direct notification to all land occupiers within the review area unreasonable to achieve. To ensure land occupiers are notified, a public notice will be placed in appropriate media across the District with the information able to be viewed at Council service centres. Public notice and information will be posted as practicable on community notice boards.

Community drop-in information sessions are planned for Mangawhai, Kaiwaka and other community centres, where any public health restrictions may allow. The timing and location of these sessions will be advertised in local media.

Appropriate community groups and organisations will be directly notified. Direct notification will include:

- A summary of the proposed amendments
- Where further information is available
- How to present your views to Council (Having your say)

Following the close of submissions, submitters who wish to present their views to Council in person will be provided an opportunity to do so; and will be advised of the process.

9 Making a Submission

Any person or organisation can make a submission on the proposed amendments to speed limits within the Hakaru (Mangawhai-Kaiwaka) and Kaiwaka West Review Areas.

Submissions can be made, either electronically online, by email or on paper and should:

- State the submitters name, address and contact phone number or Email
- Clearly state the road or roads that the submission point relates to.
- Whether you support or oppose the proposed new speed limit.
- Your reasons for why you support or oppose the proposed speed limit.
- Other matters that you think Council should consider.

All submissions must be received by *[Insert Date]*

You can make a submission online at: www.Kaipara.govt.nz/haveyoursay, or

Email your submission to: speedreview@Kaipara.govt.nz, or

Post your submission to:

Kaipara Speed Limit Bylaw

Kaipara District Council

Private Bag 1001

Dargaville 0340

Submissions can also be hand delivered to the Kaipara District Council Service Centre, Unit 6- The Hub on Molesworth Drive in Mangawhai Village, or at the Council offices at 42 Hokianga Road, Dargaville.

Notes:

There may be ongoing restrictions relating to Covid-19 prior to and during the community engagement period. Electronic submissions are therefore preferred. However, Council will maintain a watching brief on the Covid-19 situation and will consider any necessary changes to the engagement process to ensure the health and welfare of the community and Council staff, and ensure that the community are still able to have their say.

All submitters that request it, have a right to further present their views to Council. Anyone wishing to present their views to Council personally will be advised of the process following the close of submissions. Depending on any Covid-19 restrictions that may be in place, this could take place remotely.

Feedback received from the community will be considered, along with a range of other matters in reaching a final decision on the proposals within this document.

The Council is legally required to make all written or electronic submissions available to the public and to Councillors, including the name and address of the submitter. The submissions, including all contact details provided, will be available to the public, subject to the provisions of the Local Government Official Information and Meetings Act 1987.

If you consider there to be a compelling reason why your contact details and/or submission should be kept confidential, you should contact the Northland Transpiration Alliance on 09 438 4200 or 0800 932 463

10 Where Can I Get More Information?

Copies of this Report and the Summary Document can be viewed on Kaipara District Councils website at www.kaipara.govt.nz/haveyoursay.

Alternatively, copies of this Report and the Summary Document can be viewed at any Kaipara District Council Offices.

Mangawhai	Unit 6 – The Hub: 6 Molesworth Drive
Dargaville	42 Hokianga Street







Alternatively, call the Kaipara District Council on 800 727 059.

or email: speedreview@kaipara.govt.nz

Speed Management Review Mangawhai - Kaiwaka Catchment



















Appendix 1 – District Plan Maps

Map Series One - Land Use Legend

-  State Highway
-  Railway
-  Bridge or Causeway
-  Unformed Road
-  Cadastral Parcel Boundary
-  Sea, Lakes and Rivers

Zones


















Each Zone has a Chapter in the Plan

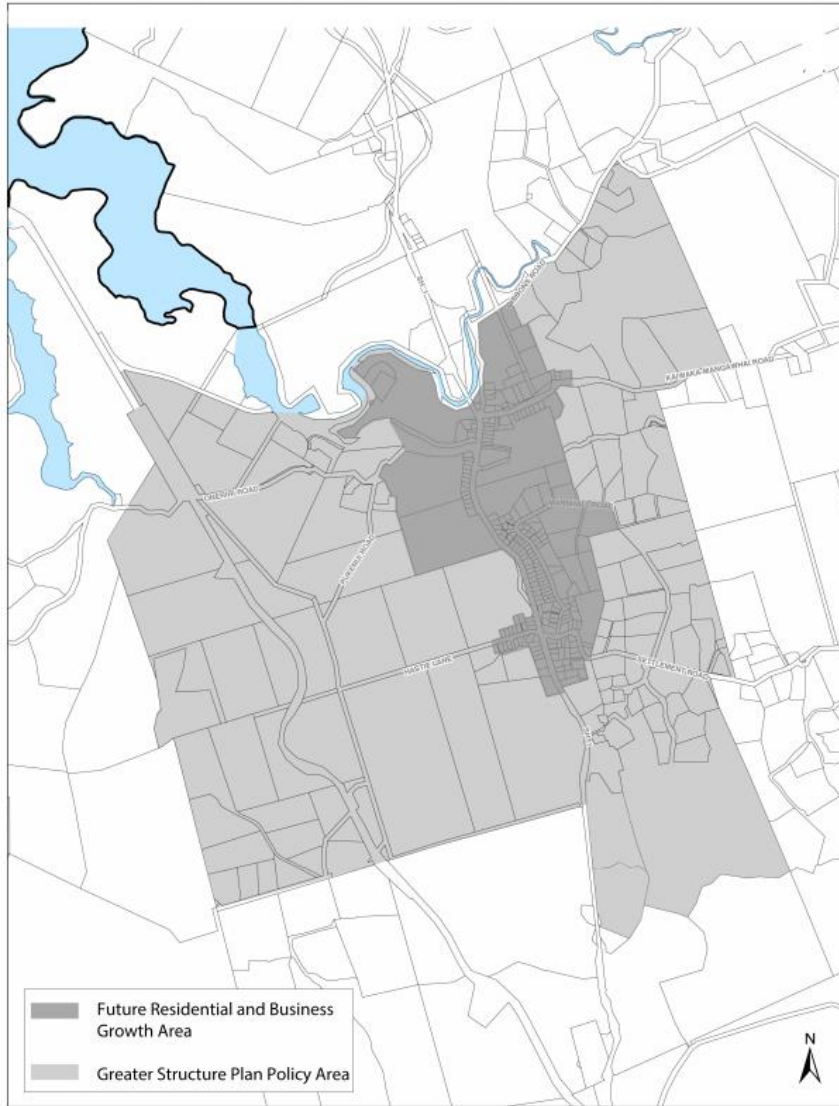
-  Rural (Chapter 12)
-  Kai Iwi Lakes
-  West Coast
-  East Coast
-  Harbour
-  Business: Commercial (Chapter 14)
-  Business: Industrial (Chapter 14)
-  Residential (Chapter 13)
-  West Coast
-  East Coast
-  Harbour
-  Maori Purpose: Maori Land (Chapter 15A)
-  West Coast
-  Harbour
-  Maori Purpose: Treaty Settlement Land (Chapter 15B)
-  West Coast
-  Harbour
-  Estuary Estates (Chapter 16)

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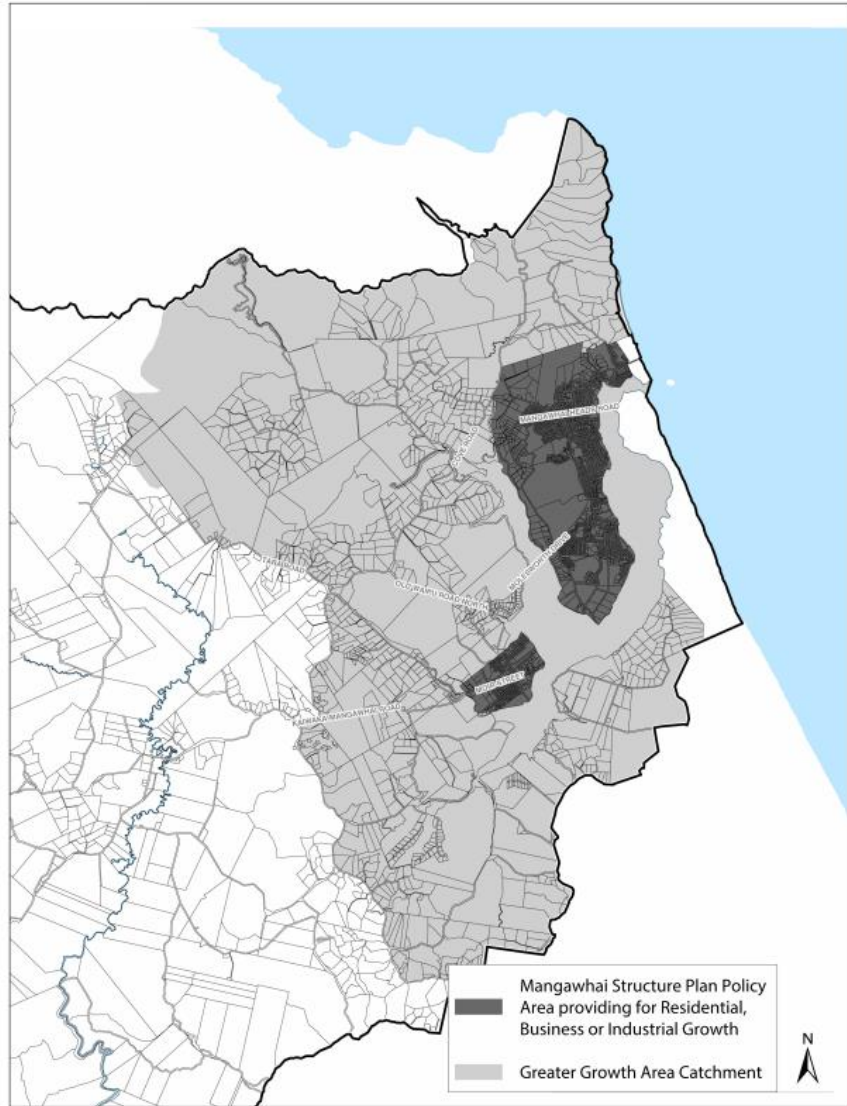
KAIPARA DISTRICT PLAN - OPERATIVE VERSION - NOVEMBER 2013

Map Series Two - Sites, Features and Units Legend

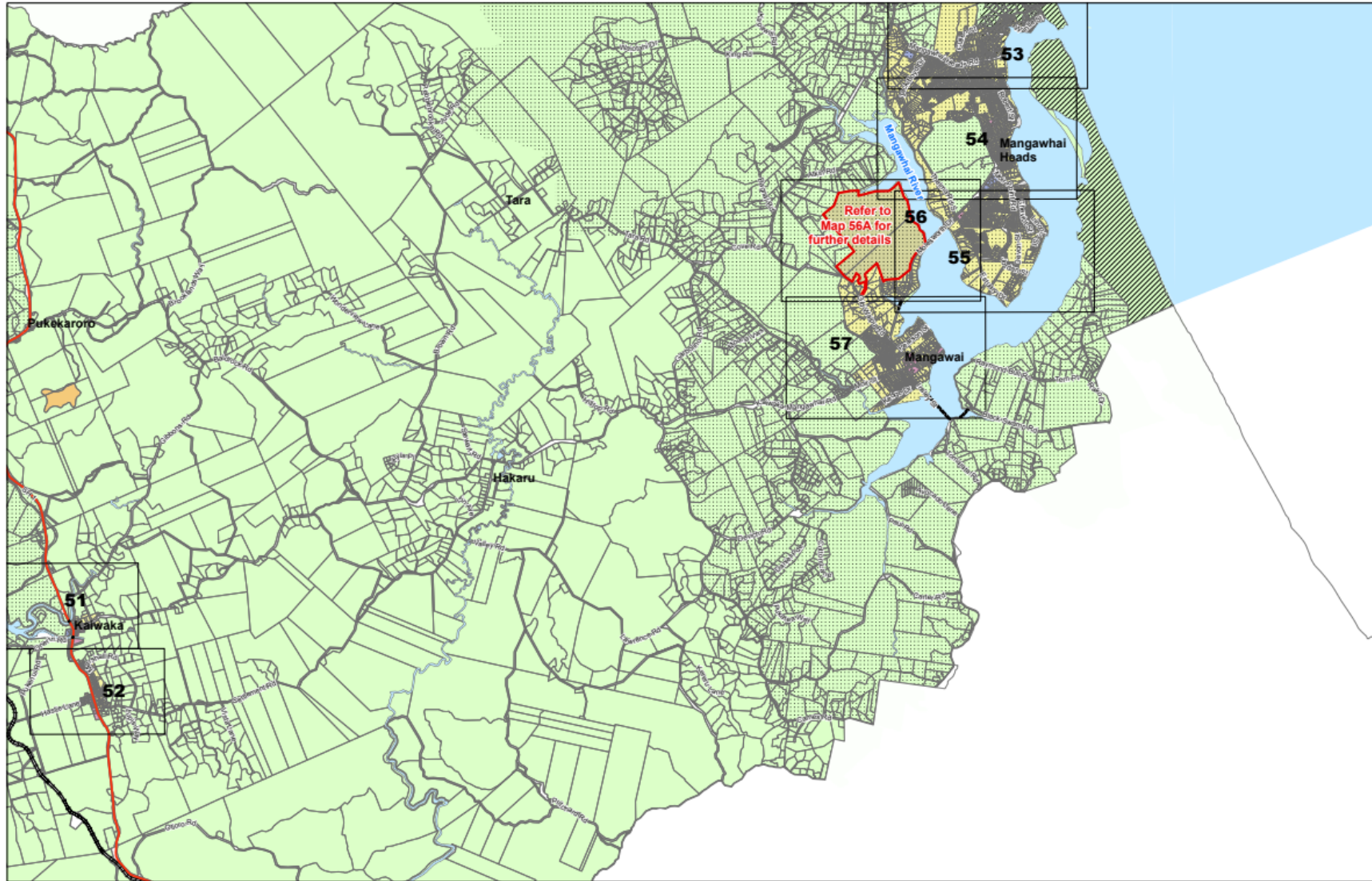
-  State Highway
-  Railway
-  Bridge or Causeway
-  Cadastral Parcel Boundary
-  Sea, Lakes and Rivers
-  Heritage Resource (Chapter 17)
-  Notable Tree (Chapter 19)
-  Areas of Significance to Maori (Chapter 17)
-  Reserve Management Units (Chapter 20)
-  Designation Areas (Chapter 21)
-  Outstanding Natural Landscapes
-  Maungaturoto Dairy Factory Noise Contour Boundary (45dBA leq)
-  50 kV Electricity Transmission Line
-  110 kV and 220 kV Electricity Transmission Line (Chapter 10)
-  Natural Gas Pipeline (Chapters 10 & 21)
-  Petroleum Gas Pipeline (Chapters 10 & 21)
-  Maungaturoto Dairy Factory Wastewater Pipeline




Appendix A: Indicative Growth Area
Kaiwaka
 KAIPARA DISTRICT PLAN - OPERATIVE VERSION - NOVEMBER 2013
 Scale: 1: 20,000 @ A4
 Contains Crown Copyright Data.
 Crown Copyright Reserved.
 The maps included are for information and as a matter for assessment (not rules) in the Plan




Appendix A: Indicative Growth Area
Mangawhai
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KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

**Map Series One
 Land Use**

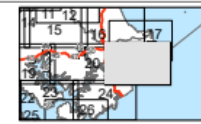
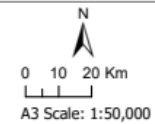


Plate 1 (continued) S4R070201

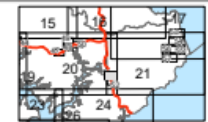
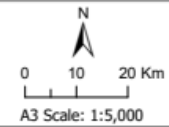


Date Updated: 14/03/2020

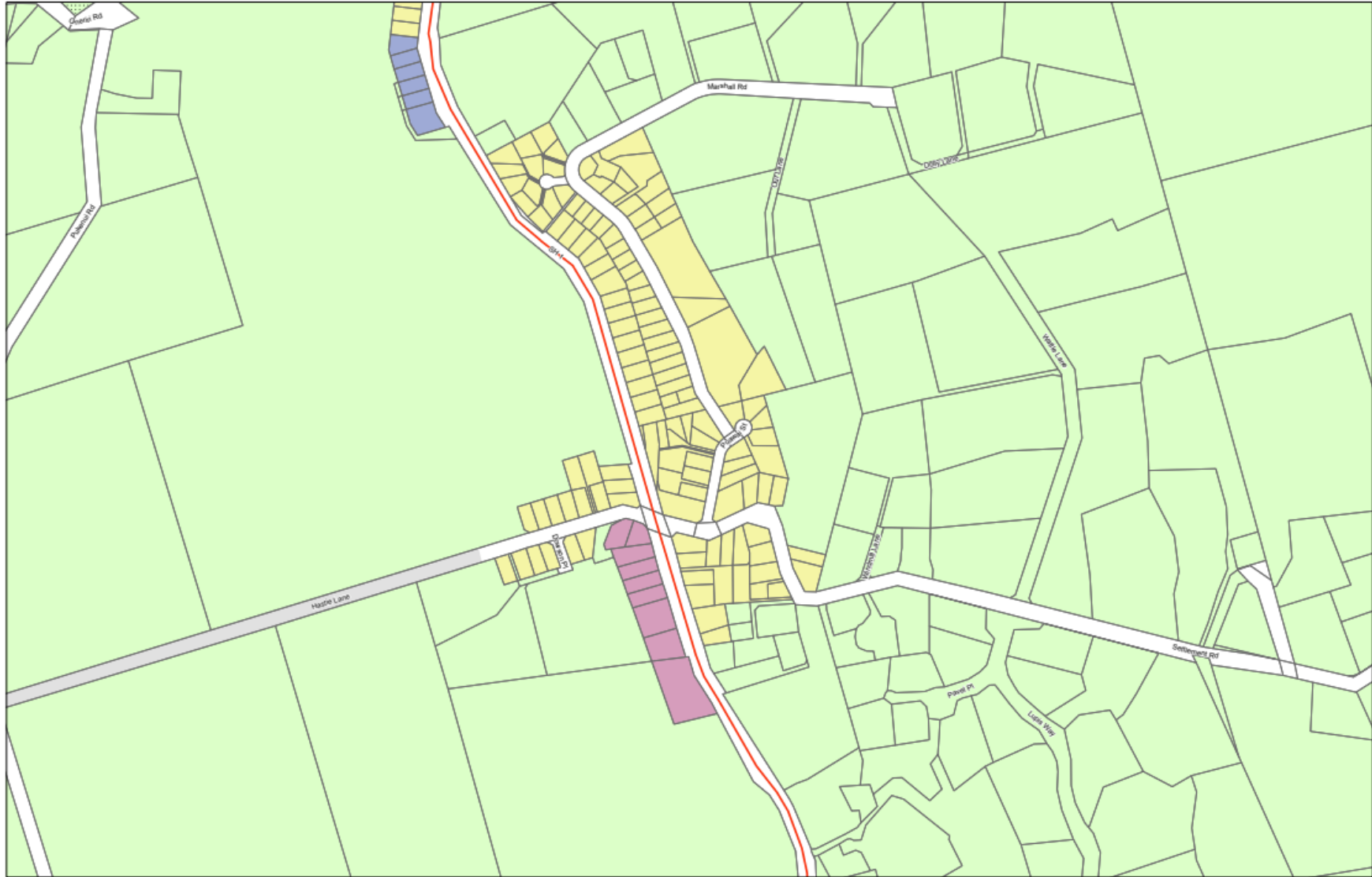
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**Map Series One
 Land Use Kaiwaka**



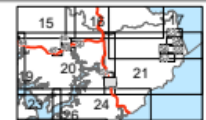
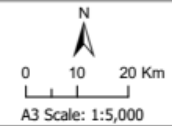
Map 51 of 60



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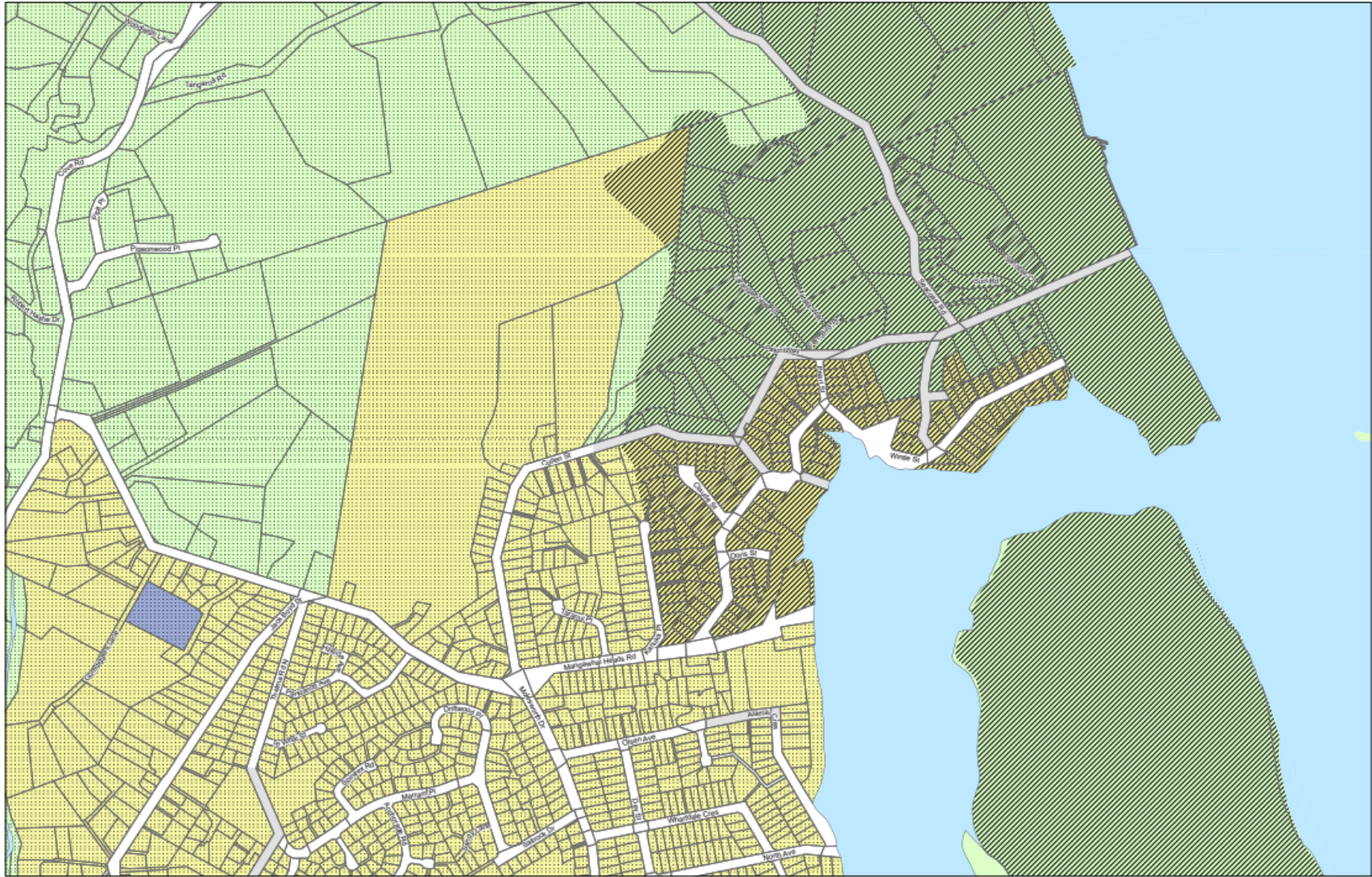
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**Map Series One
 Land Use Kaiwaka**



Date Updated: 14/02/2020

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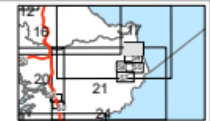
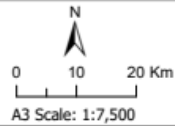


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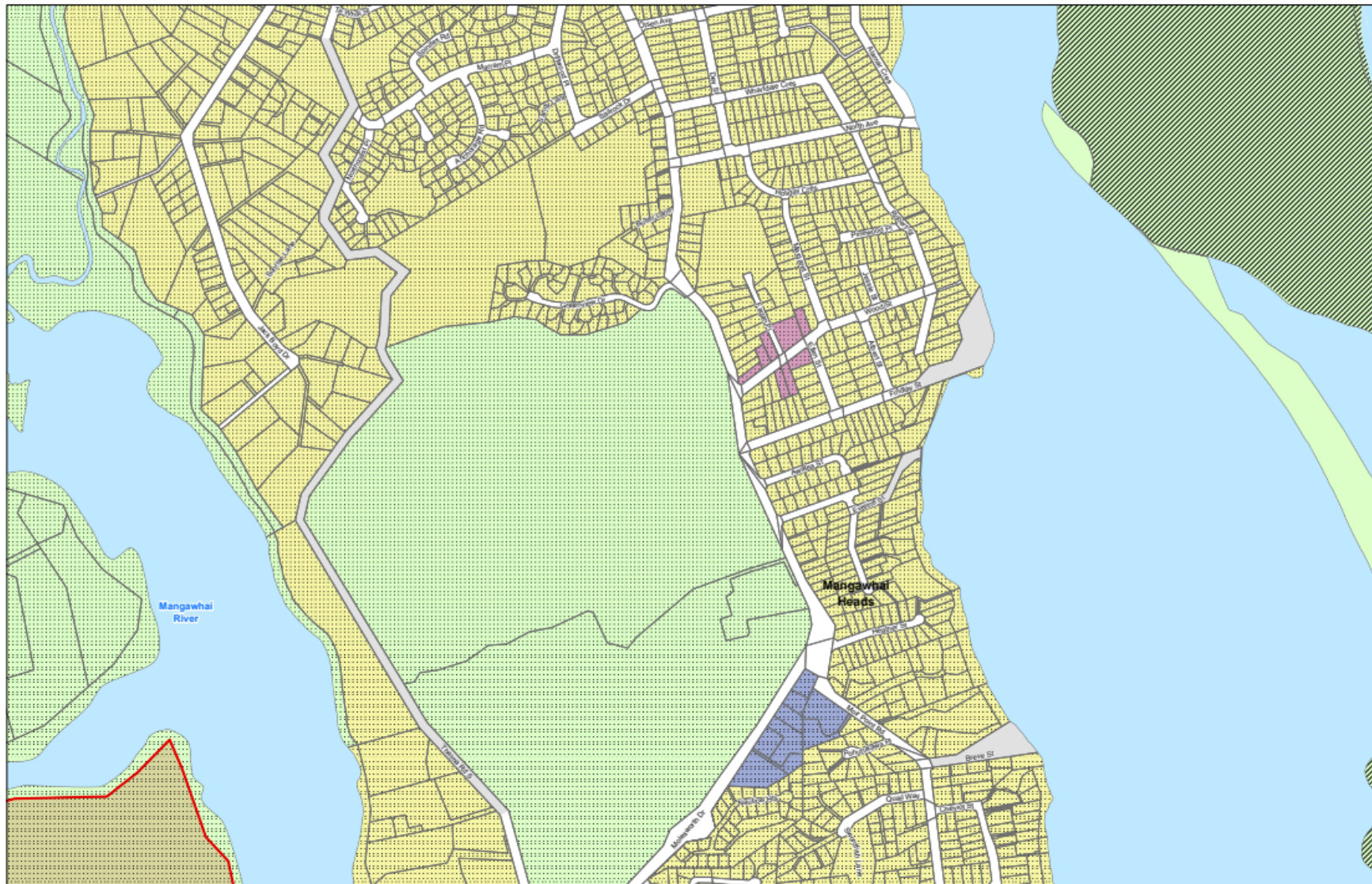
KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

**Map Series One
Land Use Mangawhai**



Date Updated: 14/02/2020

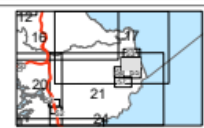
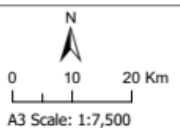
Map 53 of 60



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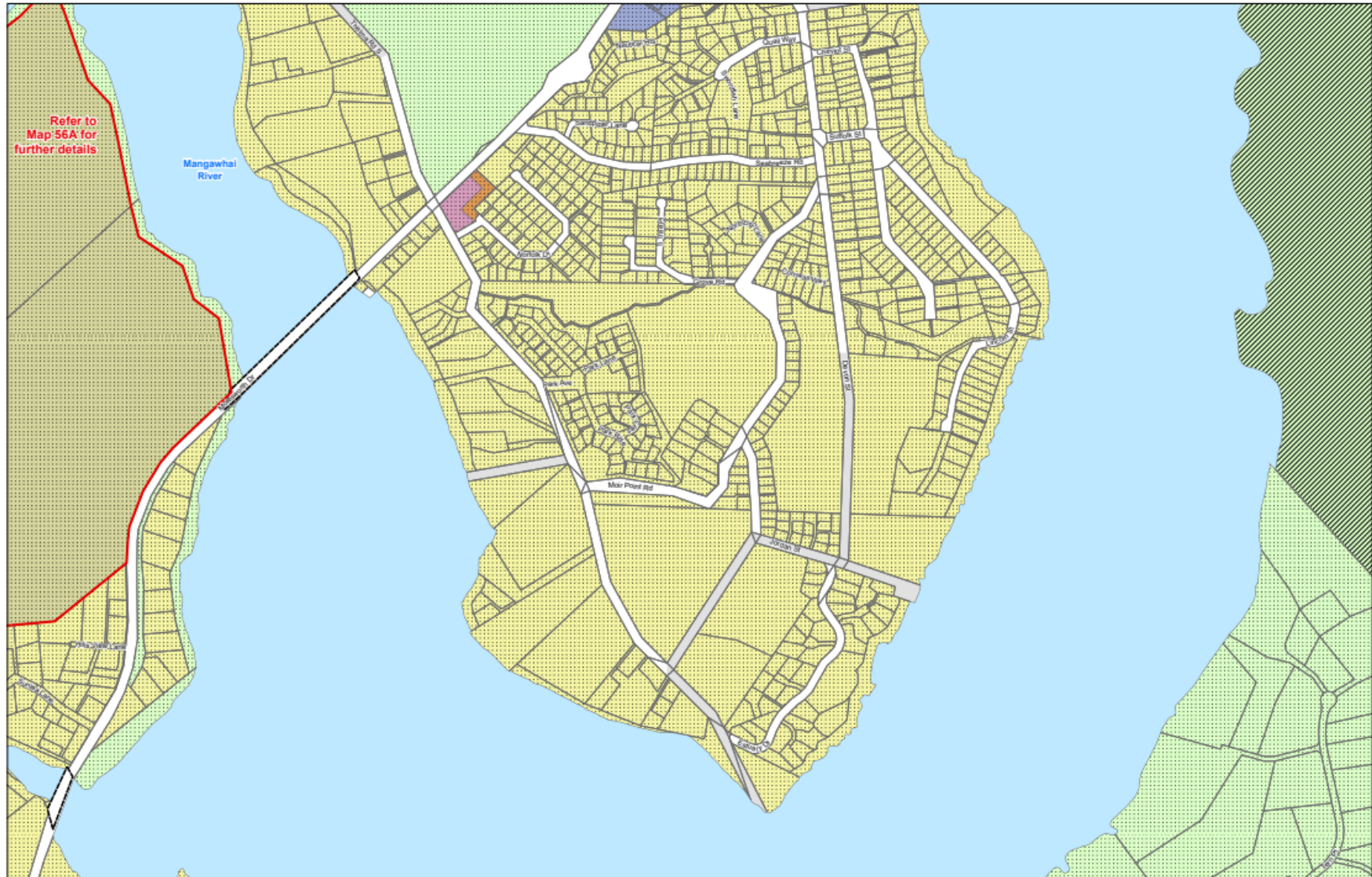
KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

**Map Series One
 Land Use Mangawhai**



Date Updated: 14/02/2020

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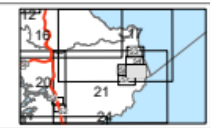
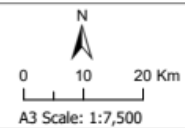


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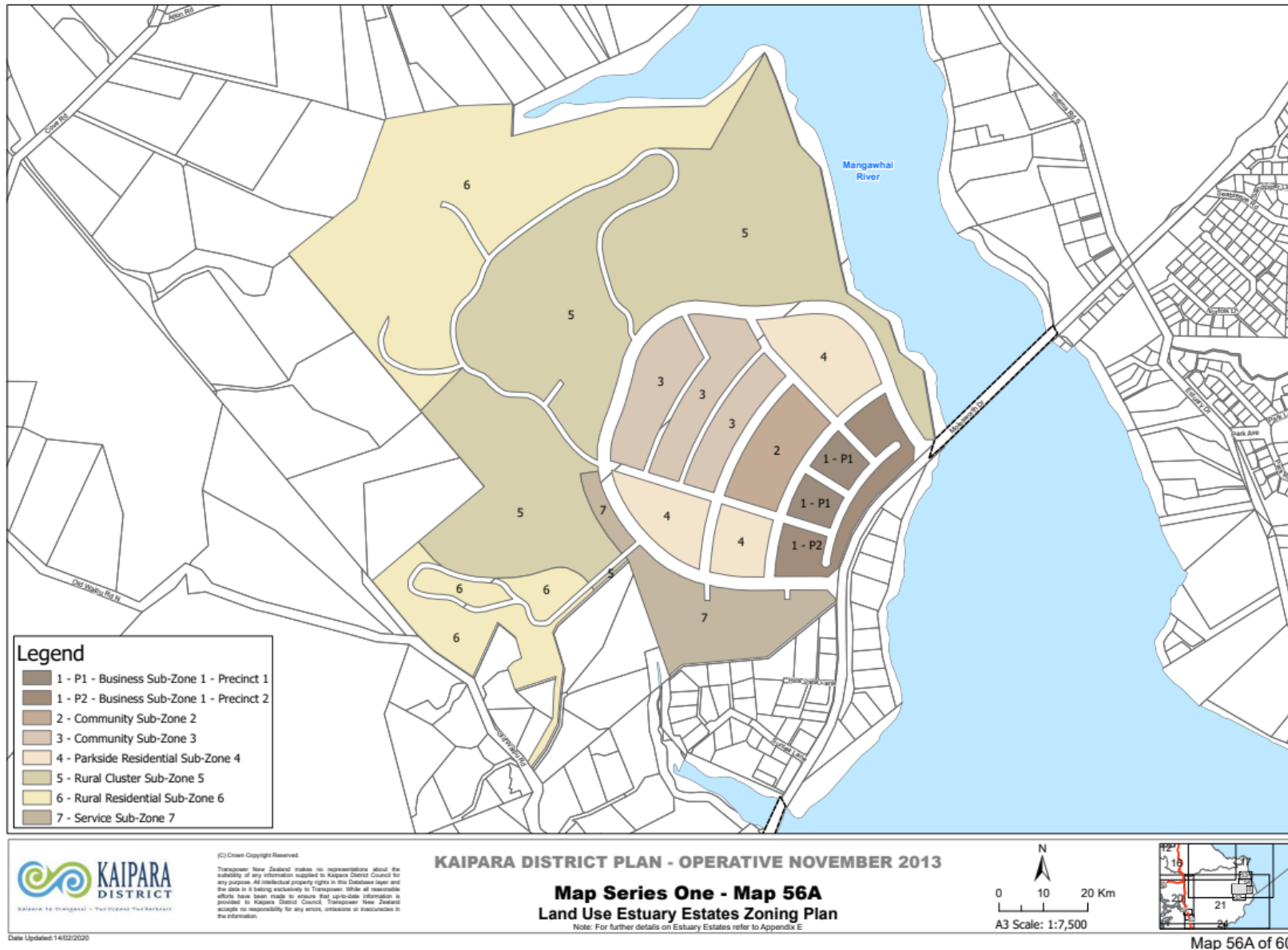
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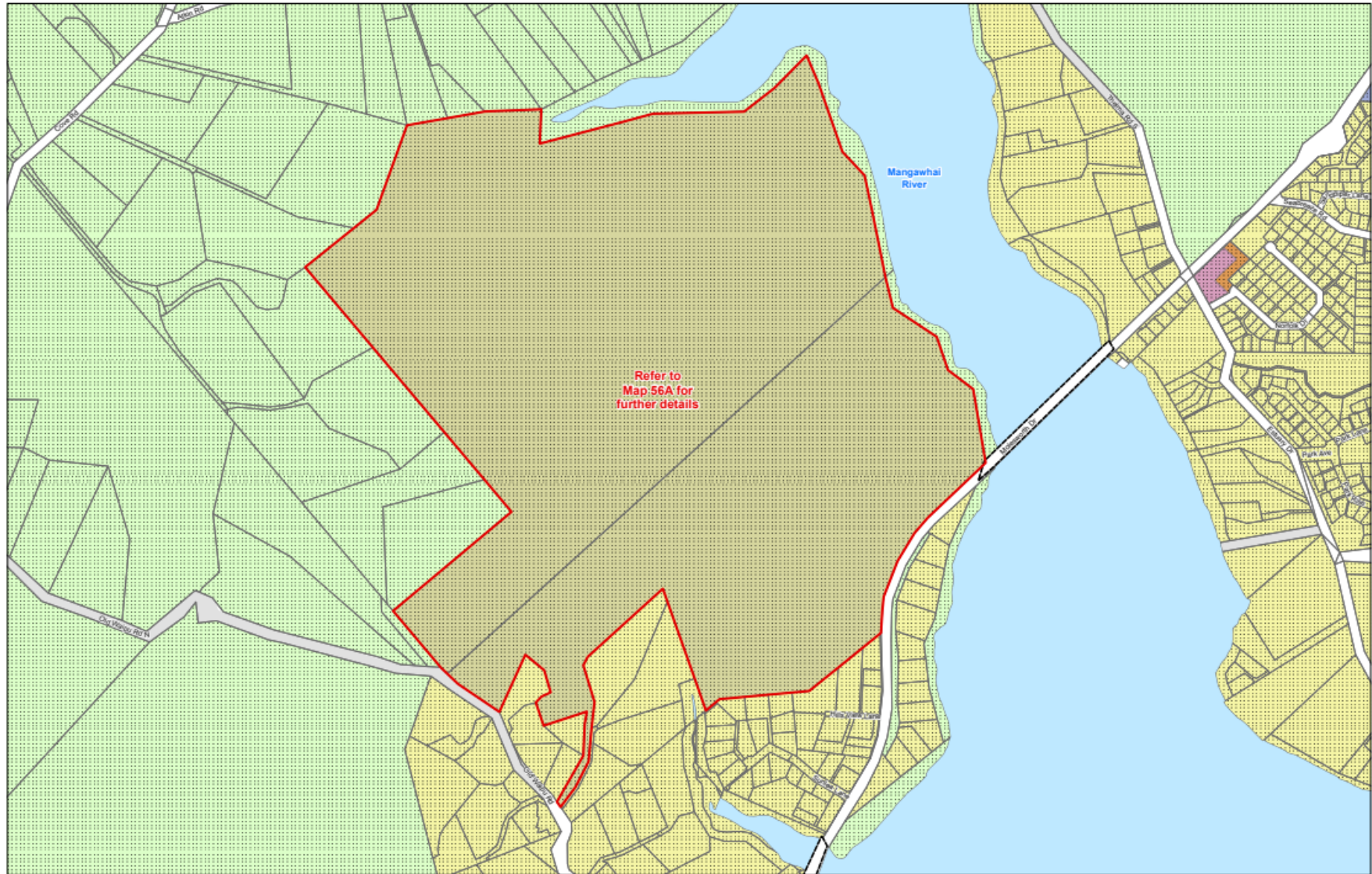
**Map Series One
Land Use Mangawhai**



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Note: Estuary Estates, now known as Mangawhai Central is subject to a Private Plan Change that provides an updated design. If adopted the change will be operative in early 2021. The proposed new detailed design is of a similar scale and intensity to the current planning map.

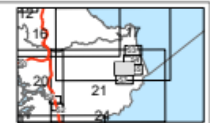
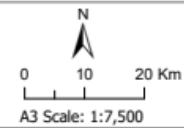


Date Updated: 14/03/2020

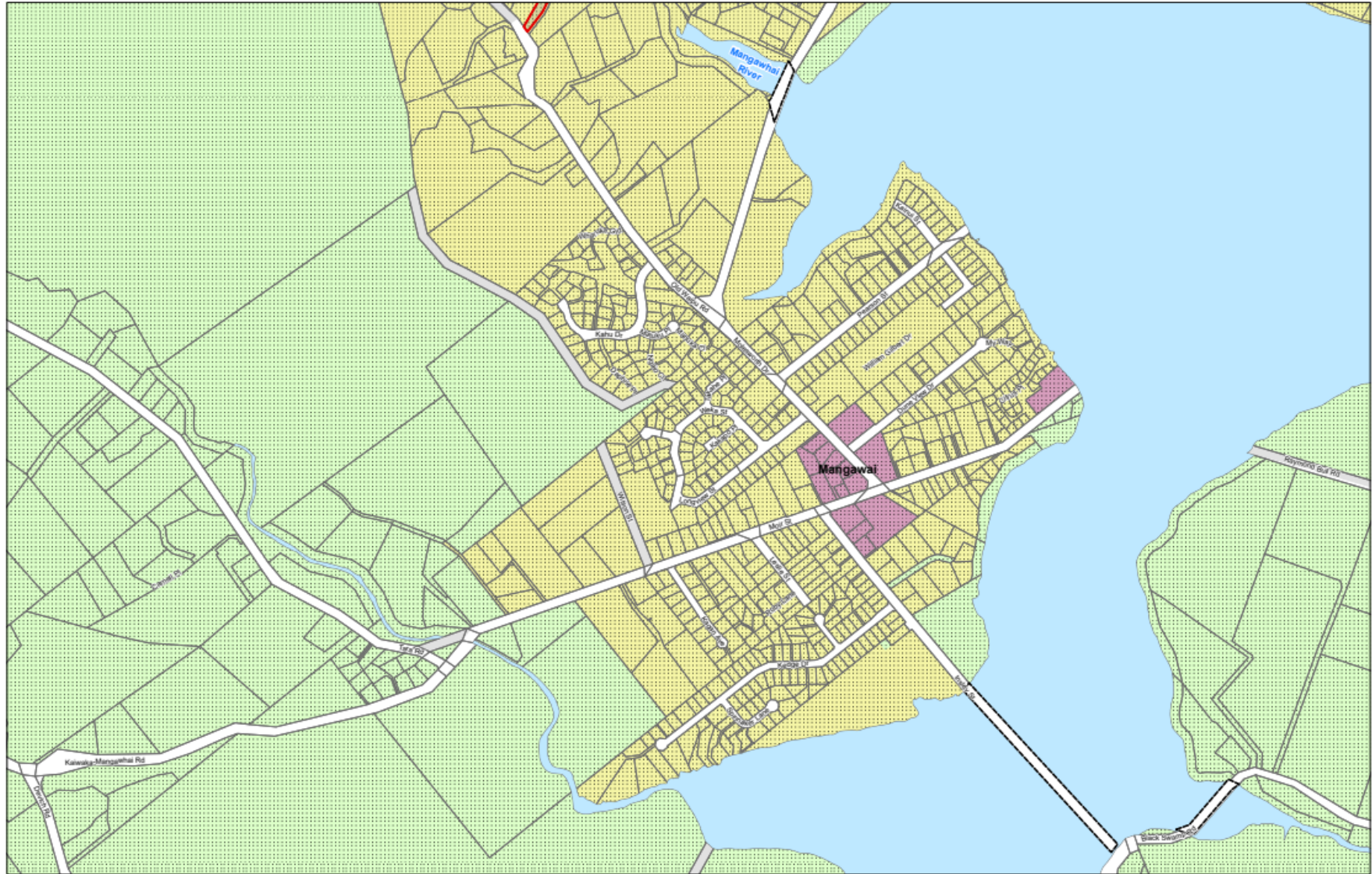
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KAIPARA DISTRICT PLAN - OPERATIVE NOVEMBER 2013

**Map Series One
 Land Use Mangawhai**



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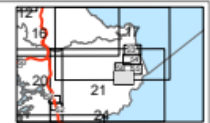
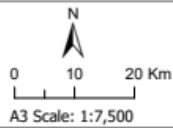


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**Map Series One
Land Use Mangawhai**



Date Updated: 14/02/2020

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Appendix 2 – NZTA Traffic Notes 37 and 56