

Regional Speed Limit Review Technical Report

Okaihau-Kaeo-Waimate Review Area

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1 Overview

Far North District Council (Council) is a Road Controlling Authority (RCA) within the Far North 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 Far North District Speed Limits Bylaw 2019 sets the speed limits on all local roads within the District, with the Schedules and maps in that Bylaw identifying the enforceable speed limits and where they apply.

Council is proposing to amend the posted speed limits on roads within the Okaihau-Kaeo-Waimate Review Area (Figure 1).

This Report sets out the proposed changes to speed limits that are currently set out in the Schedules and Maps of the Far North District Speed Limits Bylaw 2019, along with the matters that Council has considered in proposing the new speed limit, including:

- The proposed new speed limits within the review area
- Reasons for the proposed amendments
- Consultation process
- Matters considered under Section 4.2(2) of the Setting of Speed Limits Rule 2017
- Options analysis

Submissions are sought from any person or organisation and must be received by Council no later than 5pm, Friday 22nd November 2019.

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 in Northland.

20kmph	Shared space areas where the principle use is for pedestrians. These areas will typically incorporate street furniture. Roads that are used principally for parking purposes and do not have through traffic.
30kmph	Shared Space areas that provide equal access to pedestrians, cyclists and motor vehicles Beach access, including informal parking for pedestrian access to beaches Most beaches
40kmph	Urban areas where there are facilities that generate significant additional pedestrian activity such as schools, shopping centres, sports facilities or other developed recreational areas. Central Business District areas, particularly where there is on-road parking and pedestrians crossing roads at either at controlled or uncontrolled crossing points, but not a formal shared space.
50kmph	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.
60kmph	Semi-urban or rural roads that meet one or more of the following criteria: <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 • An access road that is unsealed
70kmph	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 zone, consideration will be given to the benefits of changing that speed limit to 60kmph or 80kmph.
80kmph	General rural roads that are un-divided two-lane roads with marked centre lines, shoulder areas and are not torturous in terms of curves.
90kmph	In accordance with National Speed Management Guidance, 90kmph zones are generally discouraged and will only be utilised in exceptional circumstances.
100kmph	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 and limited direct access onto the carriageway. Safety features will also be in place on these roads.

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.

Variable School Speed Zones will be considered for schools within the review area and where there is no current Variable School Speed Zone. Specific conditions need to apply before a Variable School Speed Zone can be introduced, including the number of students utilising a drop off zone adjacent to the road, or crossing the road.

2 Review Area

The Okaihau-Kaeo-Waimate Review Area is identified in Figure 1 and includes the wider catchment area bounded by:

- The north-eastern side of State Highway 1 from the intersection with state highway 10 to the intersection with Puketi Road in the west.
- The western side of State Highway 10 from the intersection with State Highway 1 to the intersection with Waiare Road in the north.
- The eastern side of Puketi Road and Waiare Road.

The review area does not include State Highway 1 or State Highway 10 as these roads are not controlled by Council.

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Within the review area, a Variable School Zone speed limit is being considered outside Springbank School on Waimate North Road. Te Rangi Aniwaniwa located on Quarry Road near the Kaitiaki Airport is also been considered for a Variable school Zone speed limit. It should be noted that Oromahoe School, located at the end of Oromahoe School Road does not meet current criteria for a Variable School School Zone.



Figure 1: Speed Management Review Area

3 Summary of Proposed Amendments

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

Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Amuri Road	100	60
Bullman Road	100	60
Caprine Road	100	60
Courthouse Lane	100	60
Daroux Drive	100	60
Herbert Road	100	40
Ironbark Road	100	60
Jennings Road	100	60
Jenkins Road	100	60
Kahikatearoa Lane	50	50
Karaka Road	100	40
Klinac Lane	50	50
Koranae Road	100	60
Koropewa Road	100	60
Lodore Road	100	60
Lodore Road East	100	60
Mangakaretu Road from Puketotara Rd to 50m south of Maungaparerua Stream Bridge	100	80
Mangakaretu Road from 50m south of Maungaparerua Stream Bridge to Puketotara Rd (unsealed)	100	60
Manuwai Road	100	40
Maritime Lane	50	50
McLeod Road	100	60
Montrose Road	100	80
Ness Road	100	80
Ngapuhi Road	100	60

Table 1.1: Summary of proposed Speed Limit changes

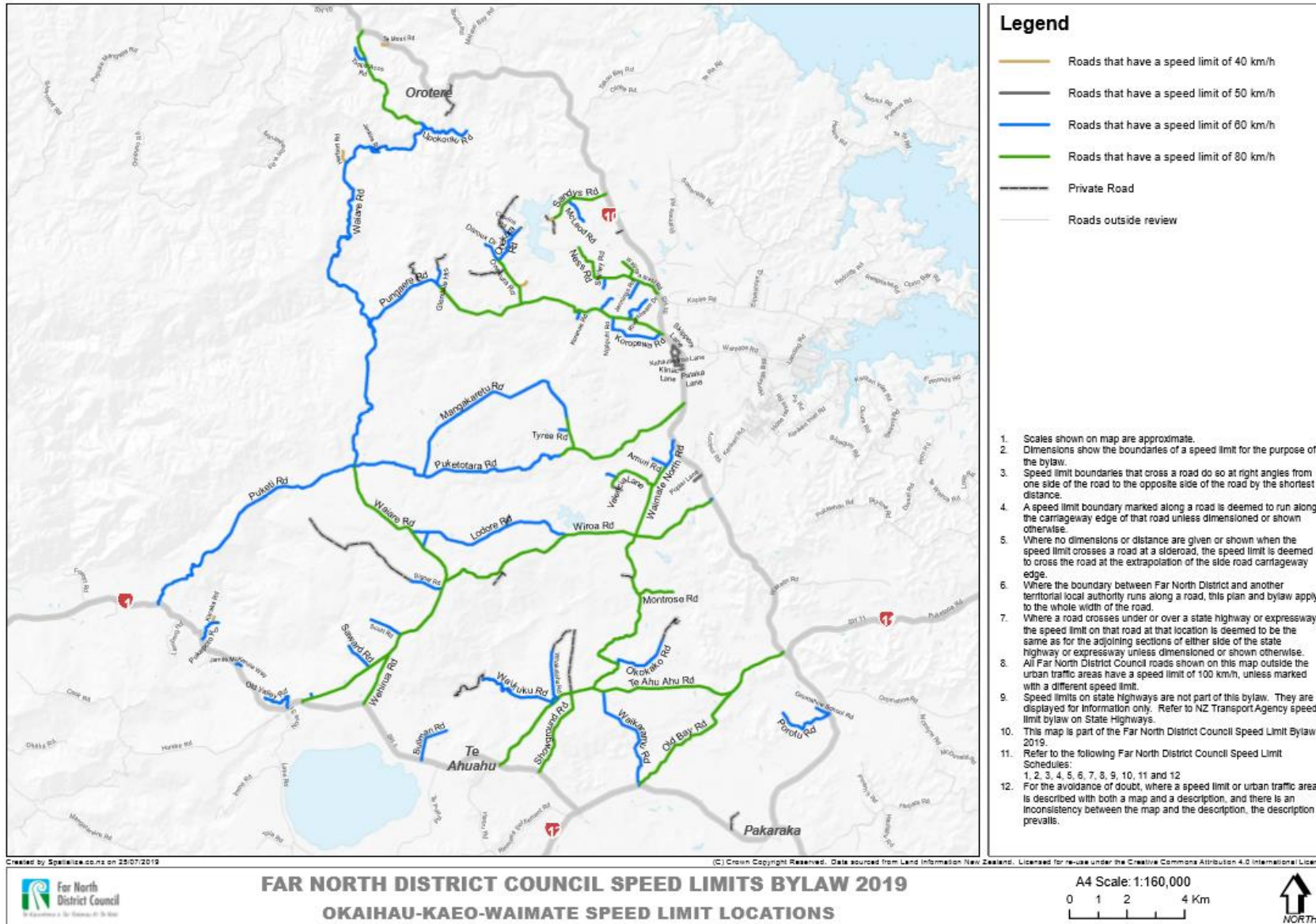
Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Old Bay Road	100	80
Old Valley Road	70	60
Onekura Road from Pungaere Rd to Daroux Dr	100	80
Onekura Road from Daroux Dr to end of road	100	60
Oromahoe School Road	100	60
Otaere Road	100	60
Pataka Lane	50	50
Poplar Lane	50	50
Porotu Road	100	60
Pukepoto Road	100	60
Puketi Road	100	60
Puketotara Road from SH10 to end of seal near Mangakaretu Rd	100	80
Puketotara Road unsealed to Waiare Rd.	100	60
Pungaere Road from SH10 to 120m south of Glendale Heights (end of seal)	100	80
Pungaere Road from 120m south of Glendale Heights (end of seal) to Waiare Rd	100	60
Riverstream Drive	100	60
Saward Road	100	60
Scott Road	100	60
Shirley Road	100	60
Showground Road	100	80
Te Ahu Ahu Road	100	80
Topps Access Road	100	60
Tyree Road	100	60
Upokorau Road	100	60
Valencia Lane	100	80
Waiare Road from State Highway 10 to Upokorau Rd (end of seal)	100	80
Waiare Road from Upokorau Rd to 50m north of Puketi Road	100	60
Waiare Road from 50m north of Puketi Road to State Highway 1	100	80
Waikaramu Road	100	60

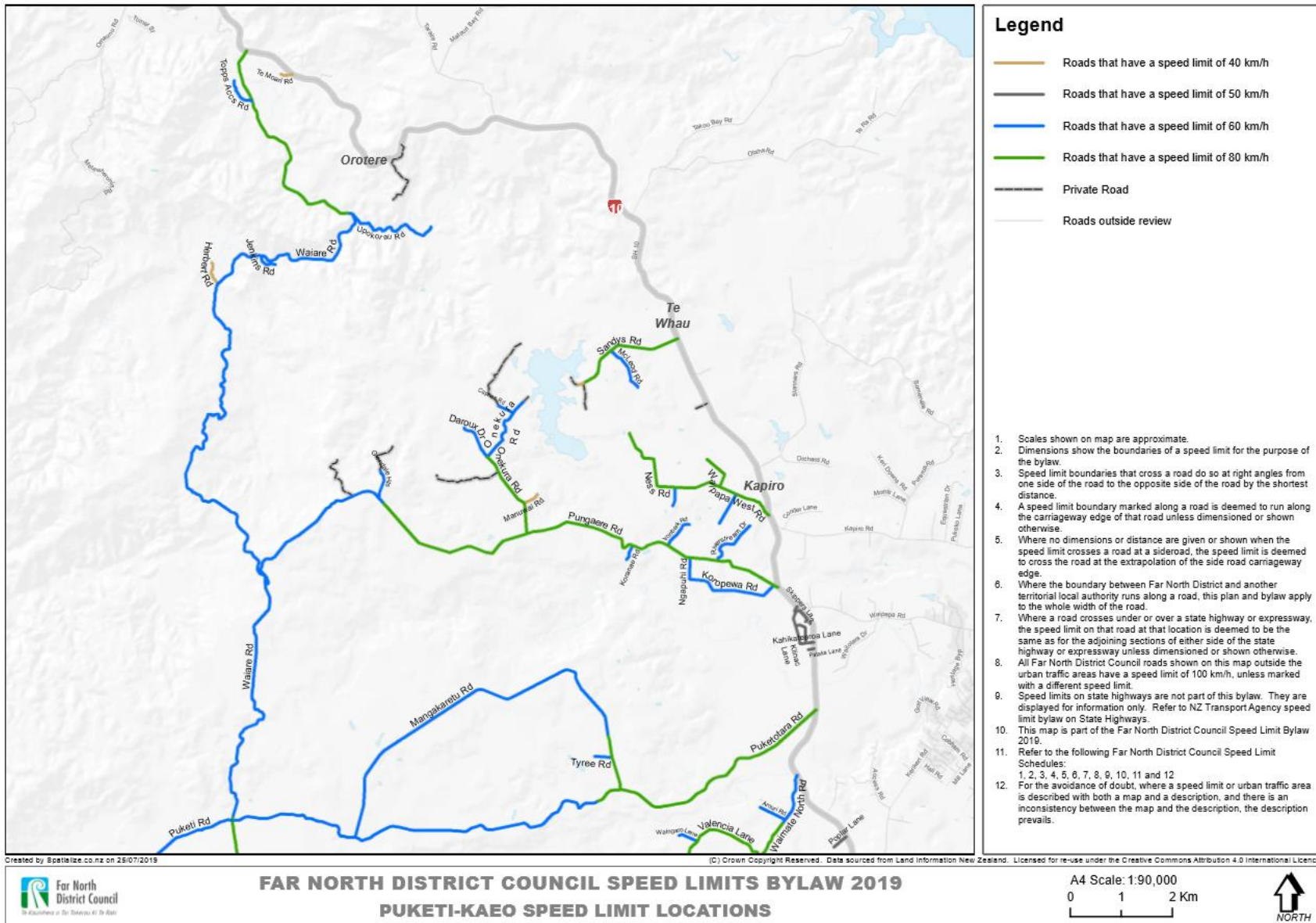
Table 1.2: Summary of proposed Speed Limit changes

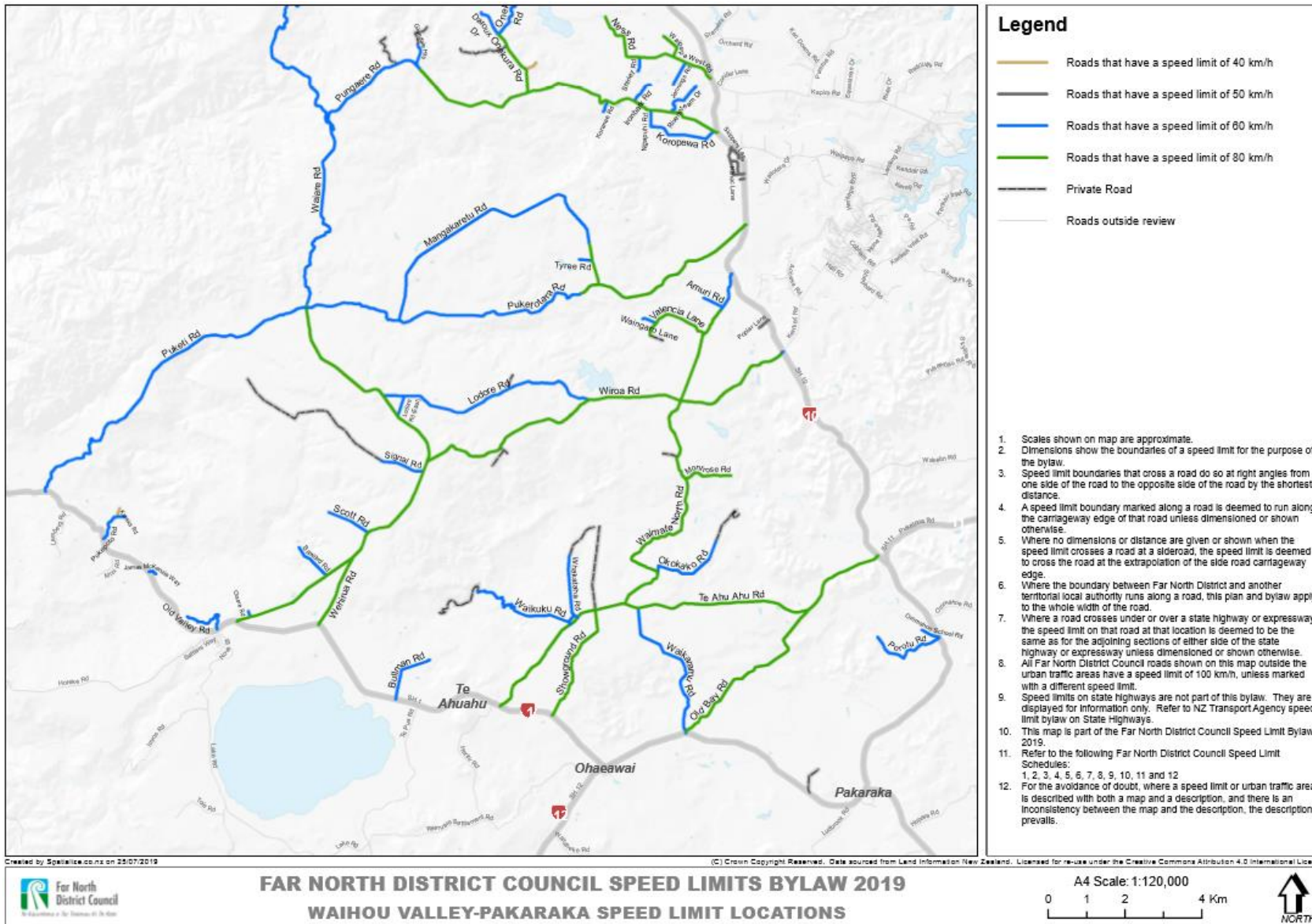
Road Name	Existing Posted Speed Limit	Proposed Speed Limit
Waikopiro Lane	100	60
Waikuku Road	100	60
Waimate North Road from SH10 to 50m south of Amuri Road intersection	100	60
Waimate North Road from 50m south of Amuri Road intersection to Te Ahu Ahu Rd	100	80
Waipapa Loop Road	50	50
Waipapa West Road	100	80
Wehirua Road	100	80
Whakataha Road	100	60
Wiroa Road from SH1 to 30m southwest of Kerikeri Entrance (current 100km/hr transition)	80	60
Wiroa Road from 30m southwest of Kerikeri Entrance to Waiare Rd	100	80

Table 1.3: Summary of proposed Speed Limit changes

The maps below set out the proposed new speed limits for within the review area.







4 Proposed Variable School Speed Zones

The following Variable School Zones are being proposed as part of this review:

4.1 Springbank School – Waimate North Road

Springbank School is an independent co-educational school that caters for Year 1 – 13 students with a junior, middle and senior school. The school is located on Waimate North Road approximately 500m south of State Highway 10.

Waimate North Road, from State Highway 10 to Springbank School is a two-lane winding road with a current speed limit of 100km/h. The southbound approach to the school is characterized by several curves that limit visibility of the main school entrance for northbound traffic.

The northbound approach to the school is characterized by a long straight with a gentle downward slope. The school, and the main school entry is not obvious until the driver is approximately 50m from the school. There is a school road sign located at Amuri Road intersection.

Most school students arrive by car or bus. However, some local students do walk to school.

It is proposed to introduce a Variable School Speed Zone commencing at a point 50m south of Amuri Road intersection and continuing to 50m north of the current School road sign. The proposed Variable School Speed Zone will extend 50m on Amuri Road.

The proposed Variable School Speed Zone will introduce a 40km/h speed limit for a period of 35 minutes before school starts and 20 minutes at the end of the school day. At all other times the proposed speed limit on this stretch of Waimate North Road is proposed to shift to 60km/h.



4.2 Te Rangi Aniwaniwa – Quarry Road Kaitaia

Te Rangi Aniwaniwa is located on Quarry Road, near the Kaitaia Airport. Although the School is outside of the Okaihau-Kaeo-Waimate Speed Review Area; the Ministry of Education has identified it as a priority for introducing a Variable School Speed Zone.

Te Rangi Aniwaniwa is a rural school that caters for Year 1 to 13 students with 162 students and 30 staff members.

Quarry Road, from the Kaitaia Airport to the Te Rangi Aniwaniwa is a two-lane undivided sealed road with a medium width carriageway and a very narrow shoulder width. The school buildings and main entrance to the school are located approximately 3m from the road carriageway. Quarry Road is curved around the school with no visibility of the main entrance and student drop off area for southbound vehicles.

Quarry Road transitions to an unsealed road approximately 50m to the south of Te Rangi Aniwaniwa. The road curves around the school, providing less than 50m visibility of the student drop off area, and of vehicles, including busses crossing the road.

All students and staff arrive at the school by bus or car. The bus drop-off point is outside the school buildings on Quarry Road. School buses utilize a turning area on the opposite side of Quarry Road, which requires busses to cross Quarry Road in order to drop off; or pick up students.

The current posted speed limit on Quarry Road is 100km/h, although it is anticipated that a lower speed limit will be proposed as part of a future speed review for this road.

It is proposed to introduce a Variable School Speed Zone commencing at the point where Quarry Road transitions from unsealed to a sealed carriageway and continuing to 50m north of the northern gate to the school.

The proposed Variable School Speed Zone will introduce a 40km/h speed limit for a period of 35 minutes before school starts and 20 minutes at the end of the school day. At all other times the proposed speed limit on this stretch of Quarry Road is 100km/h until the wider Quarry Road catchment area is reviewed.



4.3 Oromahoe School – Oromahoe School Road

Oromahoe School is located at the end of the “no exit” Oromahoe School Road. There is a constructed turning circle at the end of the road where students disembark from the school bus and/or private vehicle.

Oromahoe School does not meet the criteria for variable speed limits in school zones as set out in NZTA Traffic Note 37, Revision 2. Although Oromahoe School does not meet the criteria for a Variable School Speed Zone, it is proposed to reduce the speed limit in Oromahoe Road to 60km/h. Given the cul-de-sac nature of the road near the school, this proposed speed reduction is expected to provide an equivalent safety benefit as a Variable School Speed Zone.

Oromahoe School is not currently being considered for a Variable School Speed Zone.

5 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. Council updated it’s Speed Limit Bylaw in 2019.

Council, as the Road Controlling Authority are reviewing speed limits across the Far North District as part of central government Safer Journey’s Strategy, with the goal of setting safe and appropriate speed limits that will reduce fatal and serious injury crashes. The proposed changes to speed limits also takes account of the changing road environment, including the volume of traffic as well as current and planned 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 Okaihau-Kaeo-Waimate 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 semi-urban environments by providing for a safe and appropriate speed limit that recognises that environment.

There are two Variable School Speed Zones being considered outside Springbank School on Waimate North Road and Te Rangi Aniwaniwa on quarry road near Kaitaia. Both of these schools are located on roads with a current posted speed limit of 100km/h.

In the case of Te Rangi Aniwaniwa, all students arrive at the school by bus or private car. The school buses are required to turn across Quarry Road and students disembark alongside the road. In addition, the school buildings are located within 3m of the 100km/h road.

Springbank School is located on Waimate North Road which has a current posted speed limit of 100km/h and is utilised as an arterial route by heavy goods vehicles and other vehicles. A number of school students walk or cycle along Waimate North Road to get to the school. There has been strong community support for reducing the speed limit on this stretch of Waimate North Road and introducing a Variable School Speed Zone.

6 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.

6.1 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
- 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.

6.2 Speed Management Guidance

Guidance for the setting of speed limits is provided 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 a large road catchment area that is bounded by State Highway 1, State Highway 10 and Puketi Forest Park.

In accordance with the Speed Management Guidance, the identified Okaihau-Kaeo-Waimate catchment area has been identified for a speed review for the following reasons:

- The following roads within the review area have been identified as a High Benefit opportunity for speed review:
 - Part of Waiare Road
 - Wairoa Road
 - Parts of Te Ahu Ahu Road
 - Showgrounds Road
- There are some side roads that have a higher speed limit than the contributing State Highway, despite a narrower carriageway and more residential access to the carriageway, for example, Waimate North Road.
- There is a significant community desire to address speed limits on some roads within the review area.
- The overall catchment is well defined
- Parts of the catchment area has been subject to significant development in recent years

6.3 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).

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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

Figure 3: Recommended safe and appropriate speed ranges for road classes: Source: NZTA - NZ Speed Management Guidance, 2016

The review area consists of the following separate roads, with the following ONRC classification, road type and initial speed estimate range:

Road Name	ONRC Classification	Type of Road	Speed Range
Amuri Road	No information	No information	No information
Bullman Road	ONRC 4	Access	60 – 80kmph
Courthouse Lane	ONRC 4	Access	60 – 80kmph
Daroux Drive	ONRC 4	Access	60 – 80kmph
Herbert Road	ONRC 4	Access	60 – 80kmph
Ironbark Road	ONRC 4	Access	60 – 80kmph
James McKenzie Way	ONRC 4	Access	60 – 80kmph
Jennings Road	ONRC 4	Access	60 – 80kmph
Kahikatea-roa Lane	ONRC 3	Primary Collector	80 - 100kmph
Karaka Road	ONRC 4	Access	60 – 80kmph
Klinac Lane	ONRC 3	Secondary Collector	80 - 100kmph
Koranae Road	ONRC 4	Access	60 – 80kmph
Koropewa Road	ONRC 4	Access	60 – 80kmph

Table 2.1: ONRC Classification

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Road Name	ONRC Classification	Type of Road	Speed Range
Lodore Road	ONRC 4	Access	60 – 80kmph
Lodore Road East	ONRC 4	Access	60 – 80kmph
Mangakaretu Road from Puketotara Rd to north of Tyree Rd	ONRC 3	Secondary Collector	80 - 100kmph
Mangakaretu Road from north of Tyree Rd to Puketotara Rd	ONRC 4	Access	60 – 80kmph
Manuwai Road	ONRC 4	Access	60 – 80kmph
Maritime Lane	Unkown	Unkown	Unkown
McLeod Road	ONRC 4	Access	60 – 80kmph
Montrose Road	ONRC 4	Access	60 – 80kmph
Ness Road from Waipapa West Rd to Shirley Rd	ONRC 3	Secondary Collector	80 - 100kmph
Ness Road from Shirley Rd	ONRC 4	Access	60 – 80kmph
Ngapuhi Road	ONRC 4	Access	60 – 80kmph
Old Bay Road	ONRC 3	Primary Collector	80 - 100kmph
Old Valley Road	ONRC 4	Access	60 – 80kmph
Oromahoe School Road	ONRC 4	Access	60 – 80kmph
Otaere Road	ONRC 4	Access	60 – 80kmph
Pataka Lane	ONRC 3	Secondary Collector	80 - 100kmph
Poplar Lane	ONRC 4	Access	60 – 80kmph
Porotu Road	ONRC 4	Access	60 – 80kmph
Pukepoto Road	ONRC 4	Access	60 – 80kmph
Puketi Road	ONRC 4	Access	60 – 80kmph
Puketotara Road from SH10 to Mangakaretu Rd	ONRC 3	Primary Collector	80 - 100kmph
Puketotara Road from Mangakaretu Rd to Waiare Rd.	ONRC 4	Access	60 – 80kmph
Pungaere Road from SH10 to Ngapuhi Rd	ONRC 3	Primary Collector	80 - 100kmph
Pungaere Road from Ngapuhi Rd to Waiare Rd	ONRC 3	Secondary Collector	80 - 100kmph
Riverstream Drive	ONRC 4	Access	60 – 80kmph
Saward Road	ONRC 4	Access	60 – 80kmph
Scott Road	ONRC 4	Access	60 – 80kmph
Shirley Road	ONRC 4	Access	60 – 80kmph

Table 2.2: ONRC Classification

Road Name	ONRC Classification	Type of Road	Speed Range
Showground Road	ONRC 3	Secondary Collector	80 - 100kmph
Skippers Lane	ONRC 4	Access	60 – 80kmph
Te Ahu Ahu Road from SH10 to Old Bay Rd	ONRC 3	Secondary Collector	80 - 100kmph
Te Ahu Ahu Road from Old Bay Rd to SH1	ONRC 3	Secondary Collector	80 - 100kmph
Topps Access Road	ONRC 4	Access	60 – 80kmph
Tyree Road	ONRC 4	Access	60 – 80kmph
Upokorau Road	ONRC 4	Access	60 – 80kmph
Valencia Lane	ONRC 3	Secondary Collector	80 - 100kmph
Valencia Lane from Waingarō Lane	ONRC 4	Access	60 - 80kmph
Waiare Road	ONRC 4	Access	60 – 80kmph
Waikaramu Road	ONRC 4	Access	60 – 80kmph
Waimate North Road from SH10 to Montrose Rd	Low	Low	Low
Waimate North Road from Montrose Rd to Te Ahu Ahu Rd	ONRC 3	Primary Collector	80 - 100kmph
Waipapa Loop Road	ONRC 3	Secondary Collector	80 - 100kmph
Waipapa West Road	ONRC 3	Secondary Collector	80 - 100kmph
Wehirua Road	ONRC 3	Secondary Collector	80 - 100kmph
Wiroa Road from SH1 to Waimate Nth Rd	ONRC 3	Primary Collector	80 - 100kmph
Wiroa Road from Waimate Nth Rd to Waiare Rd	ONRC 3	Primary Collector	80 - 100kmph

Table 2.3: ONRC Classification

6.4 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 table below.

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Road Name	Collective Risk	Personal Risk	Infrastructure Risk
Amuri Road	Low	Low	Unknown
Bullman Road	Low	Unknown	High
Courthouse Lane	Low	Unknown	High
Daroux Drive	Low	Medium	Medium High
Herbert Road	Low	Unkown	High
Ironbark Road	Low	Unknown	Medium High
James McKenzie Way	Low	Unkown	Unkown
Jennings Road	Unknown	Unknown	High
Kahikatearoa Lane	Low	Unknown	Low Medium
Karaka Road	Low	Unknown	High
Klinac Lane	Low	Unknown	Medium
Koranae Road	Low	Unknown	High
Koropewa Road	Low	Medium	Unknown
Lodore Road	Low	Unknown	High
Lodore Road East	Low	Unknown	Medium High
Mangakaretu Road from Puketotara Rd to north of Tyree Rd	Unknown	Unknown	Unknown
Mangakaretu Road from north of Tyree Rd to Puketotara Rd	Unknown	Unknown	Unknown
Manuwai Road	Low	Medium	High
Maritime Lane	Unkown	Unkown	Unkown
McLeod Road	Low	Unknown	Medium
Montrose Road	Low	Medium	High
Ness Road from Waipapa West Rd to Shirley Rd	Low Medium	Medium High	Medium
Ness Road from Shirley Rd	Low Medium	Medium High	Medium
Ngapuhi Road	Low	Medium	High
Old Bay Road	Low Medium	Medium	Medium High
Old Valley Road	Low	Unknown	High
Oromahoe School Road	Low	Unknown	Medium High
Otaere Road	Low	Unknown	High
Pataka Lane	Low	Unknown	Low Medium
Poplar Lane	Low	Unknown	Medium
Porotu Road	Low	Unknown	High
Pukepoto Road	Low	Unknown	High

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Road Name	Collective Risk	Personal Risk	Infrastructure Risk
Puketi Road	Low	Unknown	High
Puketotara Road from SH10 to Mangakaretu Rd	Low	Medium	Medium High
Puketotara Road from Mangakaretu Rd to Waiare Rd.	Low	Medium	Medium High
Pungaere Road from SH10 to Ngapuhi Rd	Low	Medium High	Medium high
Pungaere Road from Ngapuhi Rd to Waiare Rd	Low	Medium High	Medium high
Riverstream Drive	Low	Unknown	Medium High
Saward Road	Low	Unknown	High
Scott Road	Low	Unkown	Medium High
Shirley Road	Low Medium	Medium High	High
Showground Road	Low Medium	Medium	Unknown
Skippers Lane	Unknown	Unknown	Medium
Te Ahu Ahu Road from SH10 to Old Bay Rd	Low Medium	Medium	Medium High
Te Ahu Ahu Road from Old Bay Rd to SH1	Low Medium	Medium	Medium
Topps Access Road	Low	Unknown	High
Tyree Road	Unknown	Unknown	Unknown
Upokorau Road	Low	Unknown	High
Valencia Lane	Low	Low	Medium High
Valencia Lane from Waingarō Lane	Low	Low	High
Waiare Road	Low	Medium High	Medium High
Waikaramu Road	Low	Unknown	High
Waikopiro Lane			
Waimate North Road from SH10 to Montrose Rd	Low	Low	Medium High
Waimate North Road from Montrose Rd to Te Ahu Ahu Rd	Low	Medium	Medium High
Waipapa Loop Road	Low	Unknown	Medium
Waipapa West Road	Low Medium	Medium High	Medium High
Wehirua Road	Low	Unknown	Medium
Wiroa Road from SH1 to Waimate Nth Rd	Medium	Medium	Medium
Wiroa Road from Waimate Nth Rd to Waiare Rd	Medium	Medium	Medium High

Road Name	Collective Risk	Personal Risk	Infrastructure Risk
Tyree Road	Unknown	Unknown	Unknown
Upokorau Road	Low	Unknown	High
Valencia Lane	Low	Low	Medium High
Valencia Lane from Waingarō Lane	Low	Low	High
Waiare Road	Low	Medium High	Medium High
Waikaramu Road	Low	Unknown	High
Waikopiro Lane			
Waikuku Road	Low	Unknown	High
Waimate North Road from SH10 to Montrose Rd	Low	Low	Medium High
Waimate North Road from Montrose Rd to Te Ahu Ahu Rd	Low	Medium	Medium High
Waipapa Loop Road	Low	Unknown	Medium
Waipapa West Road	Low Medium	Medium High	Medium High
Wehirua Road	Low	Unknown	Medium
Whakataha Road	Low	Unknown	High
Wiroa Road from SH1 to Waimate Nth Rd	Medium	Medium	Medium
Wiroa Road from Waimate Nth Rd to Waiare Rd	Medium	Medium	Medium High

Table 4.3: Risk Data

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.*

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 Figures 4 and 5 below:

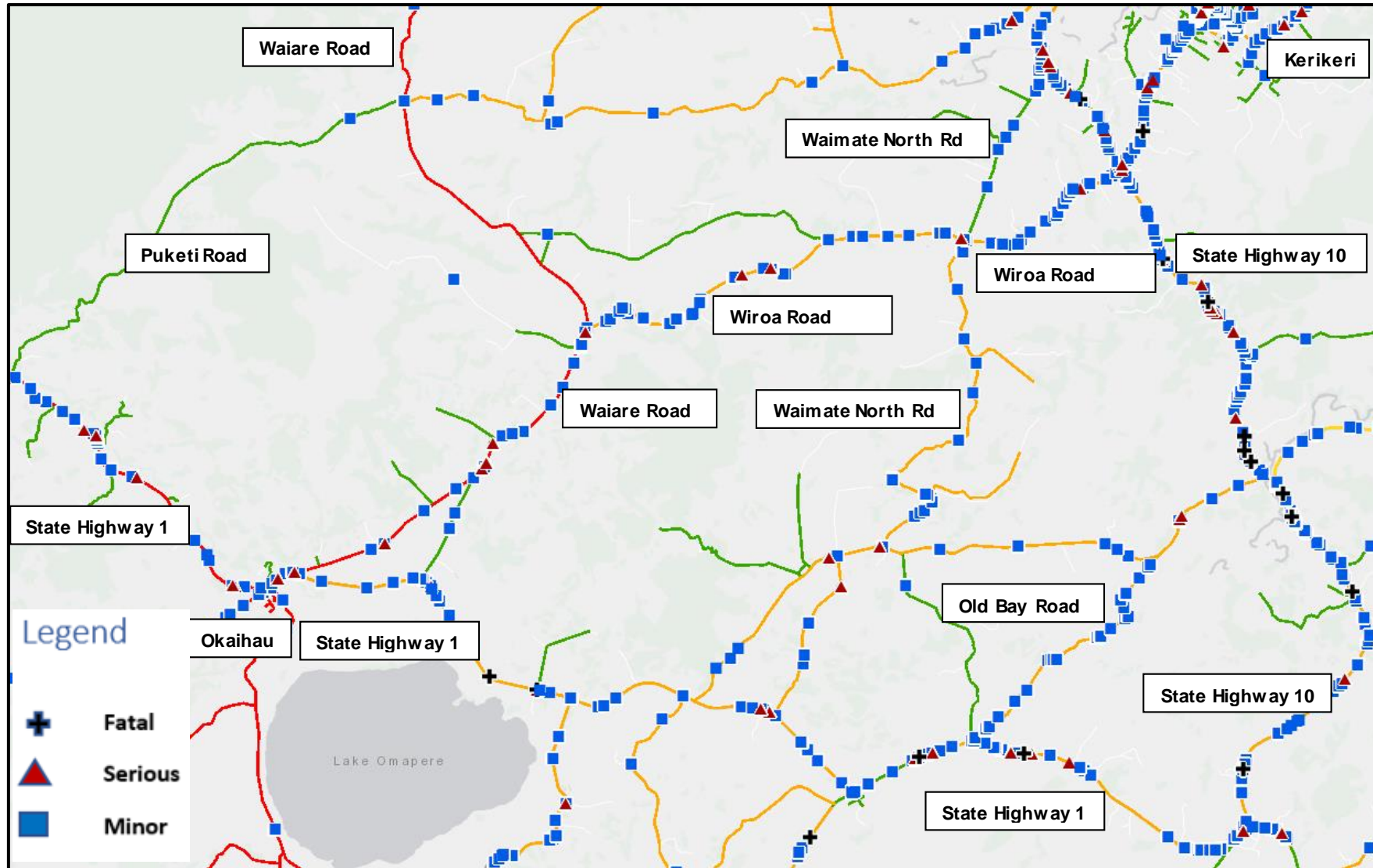


Figure 4: Reported crashes Okaihau-Kaeo-Waimate Review Area South

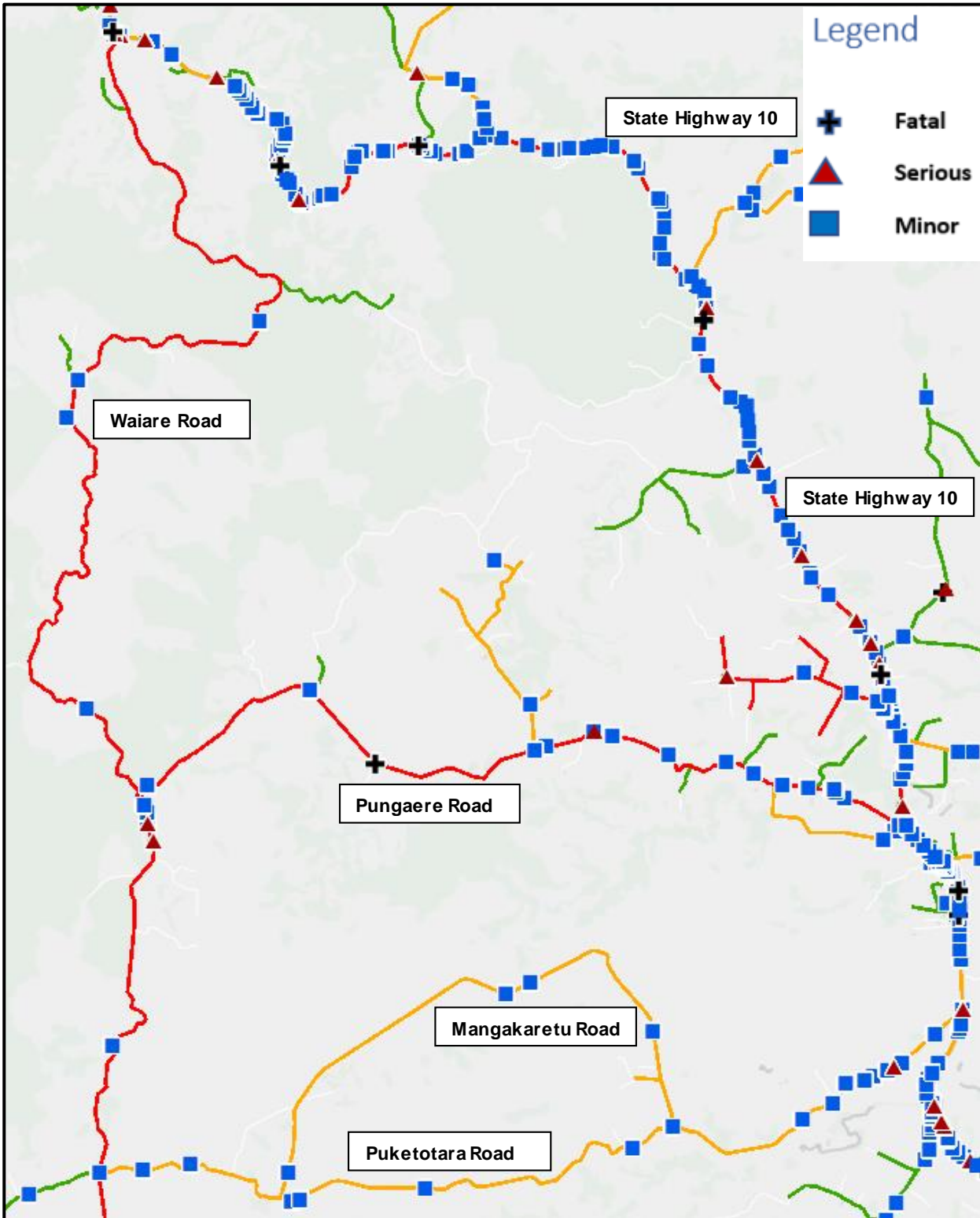


Figure 5: Reported crashes Okaihau-Kaeo-Waimate Review Area North

6.5 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. The Table below sets out the significant physical characteristics of the roads where a speed limit change is proposed.

Road Name	Road Character	Lane Width	Curves	Shoulder
Amuri Road	Unknown	Unknown	Unknown	Unknown
Bullman Road	Unsealed	Narrow	Curved	Very Narrow
Caprine Road	Single Lane Unsealed	Narrow	Torturous	Very Narrow
Courthouse Lane	Unsealed	Narrow	Winding	Very Narrow
Daroux Drive	Two Lane Undivided	Medium	Winding	Very Narrow
Glendale Heights	Unsealed	Narrow	Winding	Very Narrow
Herbert Road	Unsealed	Narrow	Torturous	Very Narrow
Ironbark Road	Two Lane Undivided	Medium	Winding	Very Narrow
James McKenzie Way	Unknown	Unknown	Unknown	Unknown
Jennings Road	Unsealed	Narrow	Straight	Very Narrow
Kahikatearoa Lane	Two Lane Undivided	Narrow	Curved	Very Wide
Karaka Road	Unsealed	Narrow	Torturous	Very Narrow
Klinac Lane	Two Lane Undivided	Medium	Winding	Very Wide
Koranae Road	Unsealed	Narrow	Torturous	Very Narrow
Koropewa Road	Two Lane Undivided	Narrow	Curved	Very Narrow
Lodore Road	Unsealed	Narrow	Curved	Very Narrow
Lodore Road East	Unsealed	Narrow	Curved	Wide
Mangakaretu Road from Puketotara Rd to north of Tyree Rd	Two Lane Undivided	Medium	Straight	Very Narrow
Mangakaretu Road from north of Tyree Rd to Puketotara Rd	Unsealed	Medium	Curved	Very Narrow
Manuwai Road	Unsealed	Narrow	Winding	Narrow

Table 5.1: Road Characteristics

Road Name	Road Character	Lane Width	Curves	Shoulder
Maritime Lane	Unknown	Unknown	Unknown	Unknown
McLeod Road	Two Lane Undivided	Medium	Winding	Very Narrow
Montrose Road	Unsealed	Medium	Winding	Very Narrow
Ness Road from Waipapa West Rd to Shirley Rd	Two Lane Undivided	Medium	Winding	Very Narrow
Ness Road from Shirley Rd	Two Lane Undivided	Medium	Winding	Very Narrow
Ngapuhi Road	Unsealed	Narrow	Winding	Very Narrow
Okokako Road	Unsealed	Narrow	Winding	Very Narrow
Old Bay Road	Unsealed	Medium	Winding	Very Narrow
Old Valley Road	Unsealed	Narrow	Winding	Narrow
Onekura Road	Two Lane Undivided	Narrow	Curved	Very Narrow
Oromahoe School Road	Two Lane Undivided	Medium	Curved	Very Narrow
Otaere Road	Unsealed	Narrow	Winding	Narrow
Pataka Lane	Two Lane Undivided	Medium	Straight	Wide
Poplar Lane	Single Lane Unsealed	Very Narrow	Straight	Narrow
Porotu Road	Unsealed	Narrow	Winding	Very Narrow
Pukepoto Road	Unsealed	Very Narrow	Winding	Very Narrow
Puketiki Road	Unsealed	Medium	Winding	Very Narrow
Puketotara Road from SH10 to Mangakaretu Rd	Two Lane Undivided	Medium	Curved	Very Narrow
Puketotara Road from Mangakaretu Rd to Waiare Rd.	Unsealed	Narrow	Winding	Very Narrow
Pungaere Road from SH10 to Ngapuhi Rd	Two Lane Undivided	Medium	Winding	Very Narrow
Pungaere Road from Ngapuhi Rd to Waiare Rd	Two Lane Undivided	Medium	Curved	Very Narrow
Riverstream Drive	Two Lane Undivided	Narrow	Torturous	Very Narrow
Sandys Road	Two Lane Undivided	Medium	Curved	Very Narrow
Saward Road	Unsealed	Narrow	Curved	Very Narrow
Scott Road	Unsealed	Narrow	Straight	Very Narrow
Shirley Road	Two Lane Undivided	Narrow	Curved	Very Narrow

Table 5.2: Road Characteristics

Road Name	Road Character	Lane Width	Curves	Shoulder
Signal Road	Unsealed	Narrow	Curved	Very Wide
Showground Road	Two Lane Undivided	Medium	Curved	Very Narrow
Skippers Lane	Unknown	Unknown	Unknown	Unknown
Te Ahu Ahu Road from SH10 to Old Bay Rd	Two Lane Undivided	Medium	Curved	Very Narrow
Te Ahu Ahu Road from Old Bay Rd to SH1	Two Lane Undivided	Medium	Winding	Very Narrow
Topps Access Road	Unsealed	Narrow	Torturous	Very Narrow
Tyree Road	Two Lane Undivided	Narrow	Straight	Very Narrow
Upokorau Road	Unsealed	Narrow	Torturous	Wide
Valencia Lane	Two Lane Undivided	Very Narrow	Winding	Narrow
Valencia Lane from Waingarō Lane	Unsealed	Very Narrow	Curved	Narrow
Waiare Road	Unsealed	Narrow	Winding	Very Narrow
Waikaramu Road	Unsealed	Narrow	Winding	Very Narrow
Waikopiro Lane	Unknown	Unknown	Unknown	Unknown
Waikuku Road	Unsealed	Narrow	Torturous	Very Narrow
Waimate North Road from SH10 to Montrose Rd	Two Lane Undivided	Medium	Curved	Very Narrow
Waimate North Road from Montrose Rd to Te Ahu Ahu Rd	Two Lane Undivided	Narrow	Winding	Very Narrow
Waipapa Loop Road	Two Lane Undivided	Narrow	Straight	Very Narrow
Waipapa West Road	Two Lane Undivided	Medium	Winding	Very Narrow
Wehirua Road	Two Lane Undivided	Medium	Straight	Very Narrow
Whakataha Road	Unsealed	Narrow	Curved	Very Narrow
Wiroa Road from SH1 to Waimate Nth Rd	Two Lane Undivided	Medium	Curved	Narrow
Wiroa Road from Waimate Nth Rd to Waiare Rd	Two Lane Undivided	Medium	Curved	Very Narrow

Table 5.3: Road Characteristics

6.5.1 Bullman Road

Bullman Road is a side road exiting off State Highway 1. The road provides access to several rural residential dwellings and farms.

The carriageway is unsealed and is a single lane. Opposing traffic are required to slow down and move to the edge of the carriageway to pass safely.

The proposed speed limit on this road is 60km/h. This proposed speed limit recognises that the road is unsealed and narrow, but only carries a low volume of local traffic. The road is generally straight, affording good visibility for oncoming vehicles.

A lower speed limit would be considered if this road had a higher volume of traffic and was not restricted to serving very local traffic only.



Figure 7: Bullman Road

6.5.2 Waiare Road

Waiare Road connects the Okaihau Settlement with State Highway 10 in the north. Waiare Road winds along the southern boundary of Puketi Forest and provides access to the forest. The northern section of the road that connects to State highway 10 is sealed and has two lanes with a marked centre line. The sealed section gives way to unsealed road at Upokorau Road. The unsealed road continues through to the intersection with Puketi Road, where the road becomes a two-lane sealed road again.



Figure 8: Waiare Road transition to unsealed road – proposed 80km/h to 60km/h transition

Tour buses accessing Puketi forest, including the Puketi Recreation Area Campsite, along with other Heavy Goods Vehicles are known to utilise the unsealed part of Waiare Road. The unsealed parts of the road are narrow, and torturous in many places with very limited forward visibility of oncoming traffic. In many cases, the road is characterised by drop-offs on one side of the road and

embankments on the other side of the road. There are few areas of the unsealed road that have any significant shoulder area to avoid on-coming traffic.



Figure 9: Waiare Road unsealed section proposed 60km/hr speed zone



Figure 10: Waiare Road unsealed section showing lack of shoulder areas proposed 60km/h speed zone

6.5.3 Waimate North Road

Waimate North Road connects State Highway 10 and Te Ahu Ahu Road. Waimate North Road is a two-lane sealed road over its entire length.

The section of Waimate North Road from State Highway 10 through to Amuri Road (Figure 11) is a winding road characterised by moderate density rural residential housing. Springbank School is located to the north of Amuri Road.

The northbound approach to Springbank School (Figure 13) curves and affords limited visibility of the school entrance and bus turning area. A Variable School Speed Zone is proposed for the approaches to the school and outside the school itself.

North of Amuri Road, Waimate North Road quickly transitions into a rural road with moderate density rural land uses and rural residential land-uses.

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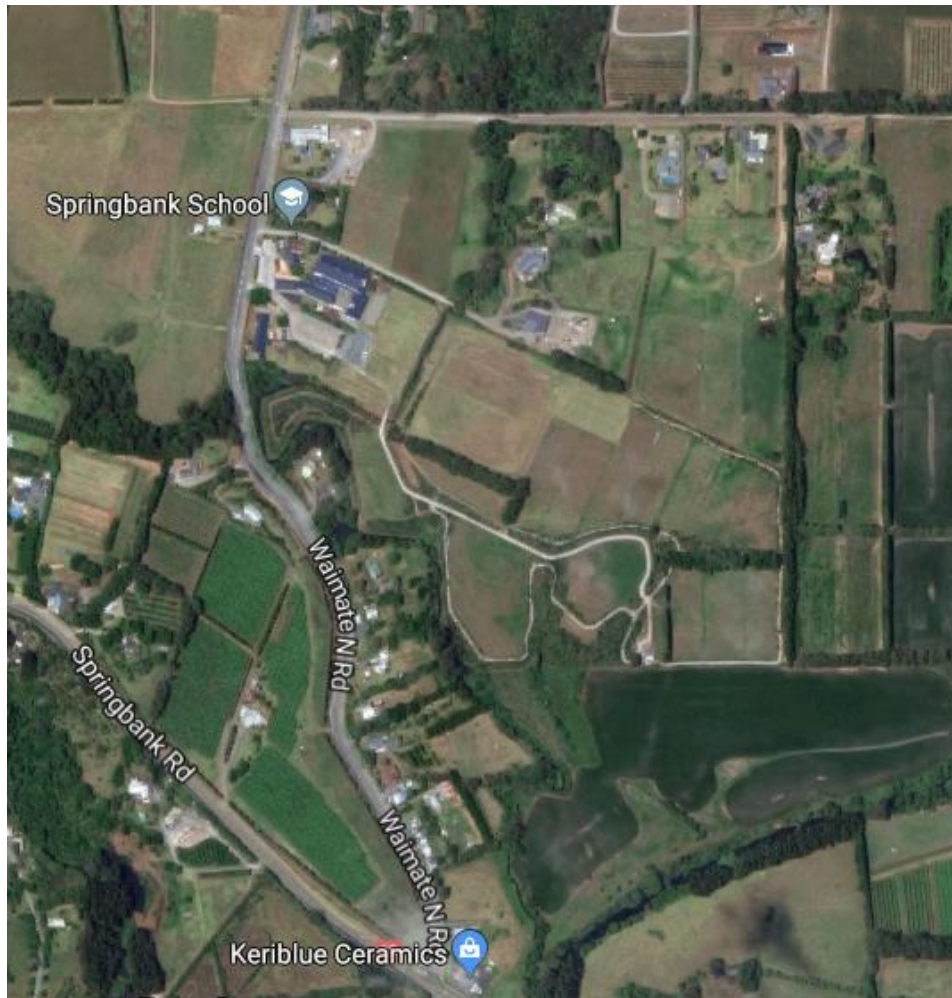


Figure 11: Waimate North Road Rural Residential Area



Figure 12: Waimate North Road proposed 60km/h speed zone



Figure 13: Waimate North Road approaches to Springbank School

6.5.4 Wiroa Road

The part of Wiroa Road that is within the review area connects from the State highway 10 – Wiroa Road roundabout to the Kerikeri Airport, Waimate North Road though to Waiare Road. This road has consistent crash statistics along the length of the road (refer Figure 4).

Wiroa Road has a two-lane sealed carriageway that is of medium width, with variable shoulder width (figure 14). The section of Wiroa Road from State Highway 10 through to Waimate North Road is a busy road and is characterised by a range of adjacent residential and commercial land-uses with a moderate density (figure 15).



Figure 14: Wiroa Road between State Highway 10 and Waimate North Road

Wiroa Road quickly transitions into a rural road with moderate to low density rural land-uses and low density rural residential land-uses.



Figure 15: Wiroa Road adjacent land-uses between State Highway 10 and Waimate North Road

6.6 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.

The review area as a whole is rural in nature with the roads in the general vicinity of Kerikeri, Waipapa and the Bay of Islands Airport being semi-rural with rural residential land-uses, and commercial land-uses, mainly related to horticulture.

Parts of the review area, particularly in the western part of the review area can be characterised as remote rural land-uses.

6.6.1 District Plan

The Far North 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 environments where specific activities will be encouraged, including the density of development.

Within the Okaihau-Kaeo-Waimate Review Area, the Far North District Plan identifies separate Planning Environments:

- Rural Production
- Industrial
- Waimate North (Showgrounds road)
- Conservation

The relevant Planning Maps are contained in Appendix 1.

6.6.1.1 Rural Production

The Rural Production Environment provides 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 Rural Production Environment is 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 forestry or dairy activities. Roads are generally narrower with limited shoulder areas and may be unsealed.

Within the review area, the density of development in the Rural Production Environment varies from very low density that can be characterised as "remote" through to more dense transitional areas near Kerikeri and Waipapa that still retain a rural character and density.

A safe and appropriate speed within a Rural Production 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.

6.6.1.2 Industrial

There are limited Industrial Environments within the review area. An Industrial Environment will generally give rise to a higher volume of vehicle movements with a high percentage of Heavy Goods Vehicle movements. This has the potential effect of increasing the number of turning vehicles and slowing overall traffic flow.

There are some isolated Industrial Environments within the review area. These areas generally have a relatively short frontage onto a rural road and provide for a single industrial activity. Klinac Lane is a significant Industrial Environment that encompasses multiple roads. The Klinac Lane Industrial Environment is entirely encompassed by an existing Urban Traffic Area with a posted speed limit of 50km/h. No changes are proposed within this Urban Traffic Area.

6.6.1.3 Waimate North

The Waimate North Zone is centred on Showgrounds Road near Okaihau and is rural in nature. It is an area with both distinctive physical features and a legacy of Maori and European settlement. The result of human occupation, particularly since the mid 1800's, has been the development of a landscape that has heritage value and outstanding visual qualities. This is expressed in the present-day roading pattern; the buildings and other historic and cultural elements; and settlement pattern which is characterized by low density lifestyle blocks and the park-like rural character in which puriri and other indigenous and exotic specimen trees are a significant part.

The Waimate North Zone promotes a low-density development and limits the number of employees per hectare within the zone. From a roading perspective, the effects on the roading network are expected to be similar to that of the Rural production Environment, with relatively low volumes of traffic movements and limited direct access onto the carriageway.

A safe and appropriate speed within the Waimate North Environment is expected to be 80kmph or less, with a lower speed limit for unsealed roads.

6.6.1.4 Conservation

The majority of conservation zoned land is esplanade reserves, public land administered by the Department of Conservation or land owned by the Council. Within the review area, there are small areas of conservation land that do not have an impact on the road speed environment.

Waiare Road provides access to the major conservation zone of Puketi Forest Park. Waiare Road is utilised by tour buses, as well as private tourist vehicles to access Puketi Forest. Waiare Road also provides a north/south link from Kaeo through to Okaihau and Kaikohe and is utilised by Heavy Goods Vehicles.

Although the Conservation Zoned land does not have a direct impact on the roading network in terms of development density and direct access onto the carriageway, it does influence the type of users on the road.

Waiare Road which accesses the Puketi Forest is largely unsealed, torturous and narrow. The safe and appropriate speed on this road, providing for increased numbers of tourist vehicles, is expected to be 60km/h.

6.7 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. Intersection and property access densities are set out in the table below where the information is available.

Road Name	Property Access Per km	Intersections Per km
Amuri Road	Unknown	Unknown
Bullman Road	2-5	<1
Courthouse Lane	2-5	5 <10
Daroux Drive	2 <5	3 <5
Herbert Road	2 <5	2 <3
Ironbark Road	2 <5	1 <5
James McKenzie Way	Unknown	Unknown
Jennings Road	2 <5	1 <2
Kahikatearoa Lane	5 <10	5 <10
Karaka Road	2 <5	3 <5
Klinac Lane	20+	1 <2
Koranae Road	2 <5	2 <3
Koropewa Road	2 <5	10+

Table 6.1: Access and Intersection Density

Road Name	Property Access Per km	Intersections Per km
Lodore Road	2 <5	<1
Lodore Road East	2 <5	3 <5
Mangakaretu Road from Puketotara Rd to north of Tyree Rd	2 <5	1 <2
Mangakaretu Road from north of Tyree Rd to Puketotara Rd	2 <5	<1
Manuwai Road	2 <5	3 <5
Maritime Lane	Unknown	Unknown
McLeod Road	20+	1 <2
Montrose Road	2 <5	3 <5
Ness Road from Waipapa West Rd to Shirley Rd	2 <5	1 <2
Ness Road from Shirley Rd	2 <5	<1
Ngapuhi Road	2 <5	2 <3
Old Bay Road	2 <5	<1
Old Valley Road	20+	1 <2
Oromahoe School Road	2 <5	2 <3
Otaere Road	2 <5	5 <10
Pataka Lane	5 <10	5 <10
Poplar Lane	2 <5	3 <5
Porotu Road	2 <5	<1
Pukepoto Road	2 <5	2 <3
Puketi Road	2 <5	<1
Puketotara Road from SH10 to Mangakaretu Rd	2 <5	<1
Puketotara Road from Mangakaretu Rd to Waiare Rd.	2 <5	1 <2
Pungaere Road from SH10 to Ngapuhi Rd	2 <5	2 <3
Pungaere Road from Ngapuhi Rd to Waiare Rd	2 <5	<1
Riverstream Drive	10 <20	<1
Saward Road	2 <5	<1
Scott Road	2 <5	<1
Shirley Road	2 <5	10+
Showground Road	2 <5	<1
Skippers Lane	Unknown	Unknown
Te Ahu Ahu Road from SH10 to Old Bay Rd	2 <5	<1

Table 6.2: Access and Intersection Density

Road Name	Property Access Per km	Intersections Per km
Te Ahu Ahu Road from Old Bay Rd to SH1	2 <5	<1
Topps Access Road	2 <5	1 <2
Tyree Road	2 <5	3 <5
Upokorau Road	1 <2	<1
Valencia Lane	2 <5	1 <2
Valencia Lane from Waingaro Lane	2 <5	<1
Waiare Road	2 <5	<1
Waikaramu Road	2 <5	<1
Waikopiro Lane	2 <5	<1
Waimate North Road from SH10 to Montrose Rd	2 <5	<1
Waimate North Road from Montrose Rd to Te Ahu Ahu Rd	2 <5	<1
Waipapa Loop Road	20+	5 <10
Waipapa West Road	2 <5	1 <2
Wehirua Road	2 <5	1 <2
Wiroa Road from SH1 to Waimate Nth Rd	2 <5	<1
Wiroa Road from Waimate Nth Rd to Waiare Rd	2 <5	<1

Table 6.3: Access and Intersection Density

Notes:

1. *Urban streets and roads have not been given a numerical estimate of intersections per km, but have been noted as being consistent with the general urban environment, which is a high number of intersections per km.*

6.8 Traffic Volumes

Traffic volumes within the review area are Average Daily Traffic (ADT) flows over a 7-day period. Generally, traffic volumes are low (<1000), reflecting the rural nature of Okaihau-Kaeo-Waimate Review Area.

Table 7 identifies the roads where the average daily traffic flow is higher. The roads and associated traffic volumes set out in the Table reflect the transitional nature of the surrounding land uses, including the use of the road as an arterial connection route.

Road Name	Average Daily Traffic Count
Kahikatearoa Lane	1000 - 6000
Klinac Lane	1000 - 6000
Old Bay Road	1000 - 6000
Pungaere Road from SH10 to Ngapuhi Rd	1000 - 6000
Te Ahu Ahu Road from SH10 to Old Bay Rd	1000 - 6000
Waikopiro Lane	1000 - 6000
Waimate North Road from SH10 to Montrose Rd	1000 - 6000
Wiroa Road from SH1 to Waimate Nth Rd	1000 - 6000
Wiroa Road from Waimate Nth Rd to Waiare Rd	1000 - 6000

Table 7: Estimated Traffic Volumes

6.9 Planned Modifications to the Road

There are a range of Plans and Strategies that potentially identify specific funding, plans or priorities that would give rise to road modifications within the review area. These are set out in the Table below.

Planning Document	Provisions for Review Area
Long-Term Plan (10 year)	The Long-Term Plan does not identify any significant new capital works on roads within the review area.
Infrastructure Strategy (30 year)	The Infrastructure Strategy identifies priority forestry roads that require strengthening. None of these roads are within the review area. Relief of congestion in the Kerikeri / Waipapa area is also identified, however, no specific projects or roads are identified.
Other Plans* and Strategies	There are no additional Plans or Strategies that apply to the roads within the review area.

Table 7: Planned modifications to the road environment

6.10 Views of Interested Persons and Groups

The purpose of this Document is to set out those matters that Council must consider when reviewing speed limits. One of those matters is the views of interested persons or groups. This

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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 by Council. This group 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.

7 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:** Reduce 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.

7.1 Option A - No change to the current speed environment

The review area is primarily rural in nature and encompasses a wide range of road types, including both sealed and unsealed roads. The current default speed limit across almost all of these roads is 100km/h, with a relatively few slower speed limits in areas where there is significant development, for example, Klinac Lane industrial area. Some newer subdivisions have slower speed limits.

The crash analysis indicates consistent crashes across the entire road network within the review area. More remote roads do have a lower number of reported crashes; however, this may reflect a lower number of road users.

The “no change” option would retain the existing speed limits.

The “no change” option has not been pursued because:

- The safe and appropriate speed on many roads within the review area is significantly slower than the current posted speed limit. Attaining a speed of 100kmph on many roads within the review area would require dangerous manoeuvres and crossing of the centreline with limited visibility.
- The roads within the review area, particularly unsealed roads are not designed to be travelled on at current posted speed limits. A continuation of the 100km/hr speed limit would require

extensive engineering solutions to ensure that the design and form of the road is suitable for current posted speed limits.

Although it is possible to engineer solutions to retain a safe environment at the current posted speed limits, it is considered that these solutions, on the scale necessary, would result in unsustainable costs to the community to design, engineer and construct engineered solutions.

The “no change” option is not recommended.

7.2 Option B - Reduce 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 setting safe and appropriate speed limits as proposed is the preferred option for the following principle reasons:

- The proposed speed limits reflect an appropriate speed environment that better reflects the current practical operational speed for roads within the review area, based on current road environment, including 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 and adjacent to the review area.
- The proposed slower speed limits will not have a significant effect on travel times.
- The proposed speed limits are consistent with the NZTA Speed Management Guidance 2016.

7.3 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 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.

7.4 Options Conclusions

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.

8 Significance of Change

The Far North District Speed Limits Bylaw 2019 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.

8.1 Significance and Engagement Policy

The amendments to the Speed Limits Bylaw 2005 have been assessed against Far North 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).

8.2 Section 156 Assessment

Council has assessed the proposed changes in speed limits in accordance with Section 156 of the Local Government Act. Given the size, diversity and public feedback already received relating to speed limits within the review area, it is considered that, collectively the proposal will give rise to 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 2019 schedules and Maps:

- 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.

9 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.

9.1 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 provide additional detailed information, including the information that must be considered in accordance with the Setting of Speed Limits Rule 2017.

9.2 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 Far North 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.

9.3 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 key stakeholders. Given the extent of the review area, it is considered that direct notification of the occupiers of properties adjoining the roads that

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are subject to a proposed change in speed limit is not reasonably practicable. Council will therefore notify the proposed changes in the normal manner for a Bylaw Review.

Council will proceed with a communications strategy that publicises and promotes that proposed changes to as wide an audience as possible. This may include:

- Public notice in appropriate media across the District
- Direct notification of community groups within the review area
- Notification and information in Councils Ratepayer Newsletter
- Notices on local notice boards and businesses
- Media releases, including social media advertising
- Information on council's website and at Council Service Centres

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.

9.4 How to have your say

Your views on the proposed new speed limits are important to us, but we need your feedback by **4pm on 22nd November 2019**.

There are several ways you can have your say. You can download a submission form from our Website and email, post or deliver it to us. You can also make a submission online.

Please ensure that you state in your submission if you want to present your submission in person at a Council hearing.

9.5 How to make a submission

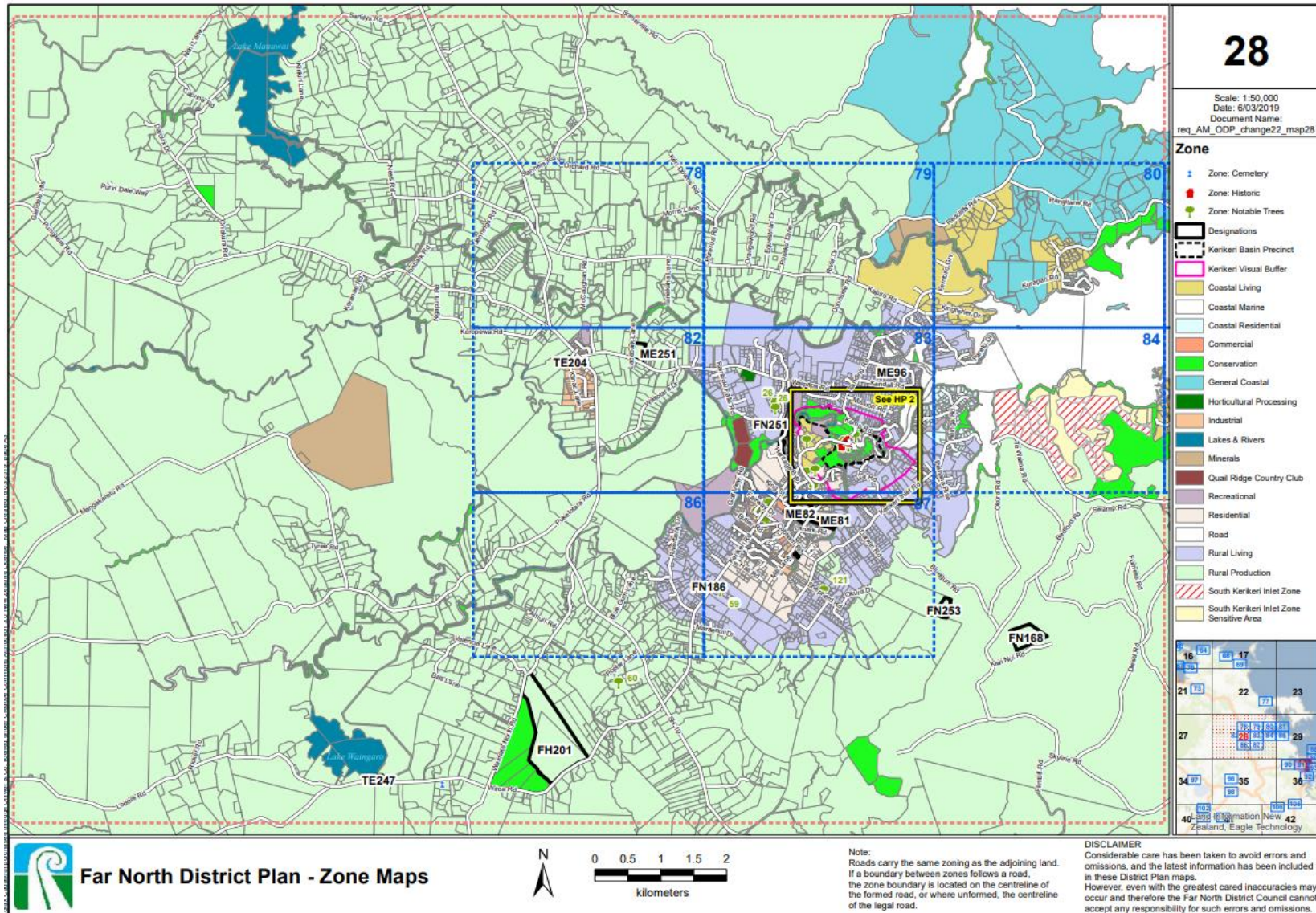
Council encourages any person or organisation with an interest in the Speed Limits Bylaw 2019 to give feedback. Submissions can be made **between 21 October and 4pm 22nd November 2019**. To make a submission you can:

- submit online <https://www.fndc.govt.nz/speedlimitsbylaw>
- email your comments to submissions@fndc.govt.nz
- drop-off a written submission at any Council service centre or library
- post your submission to: Far North District Council, Private Bag 752, Kaikohe 0440.

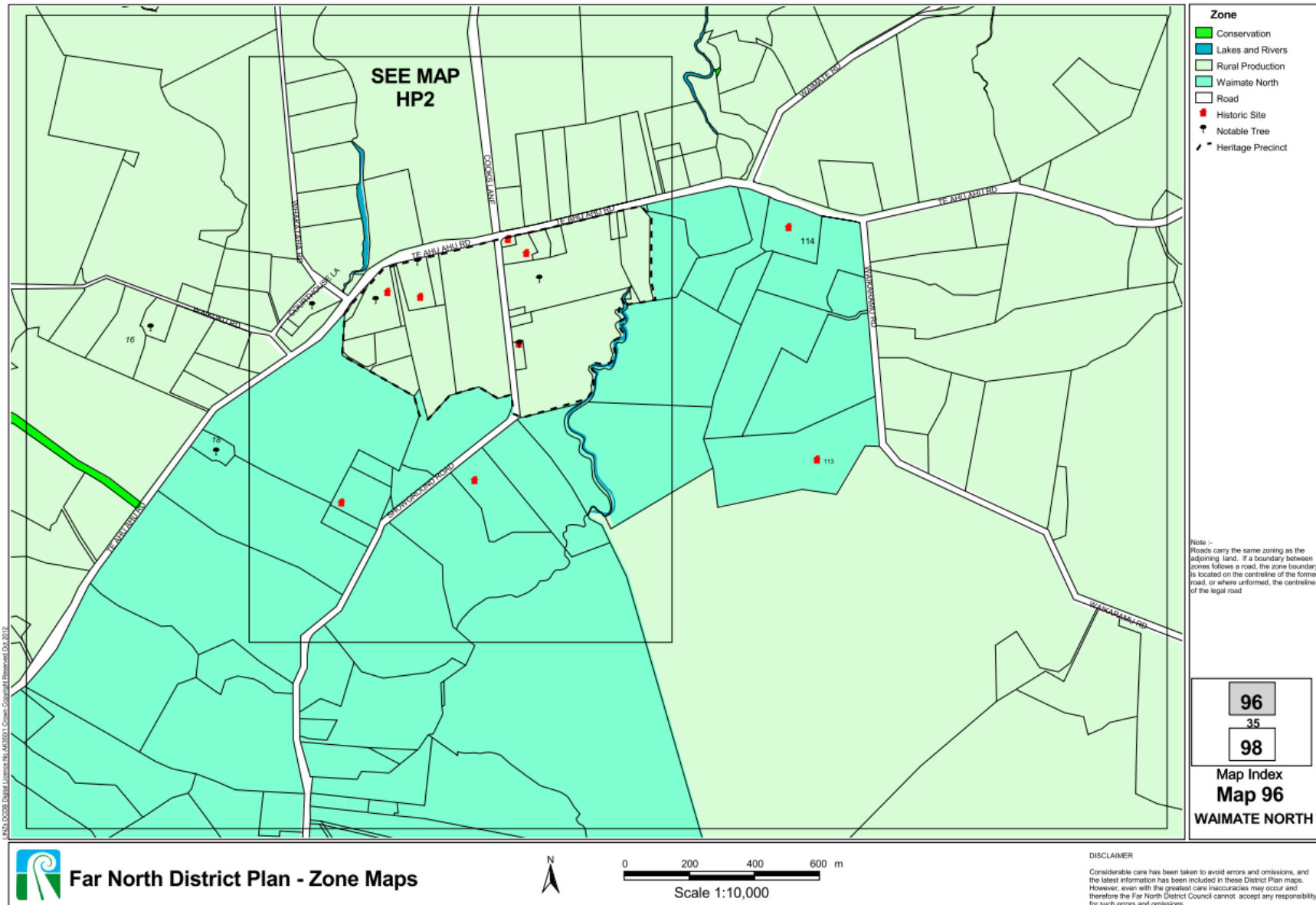
9.6 Timeline for considering the proposed speed limit changes

Submissions Period:	21st October until 4pm Friday 22nd November 2019
Hearings (if required):	4th December 2019
Council amends Bylaw:	February 2020
Any amendments come into force	February 2020

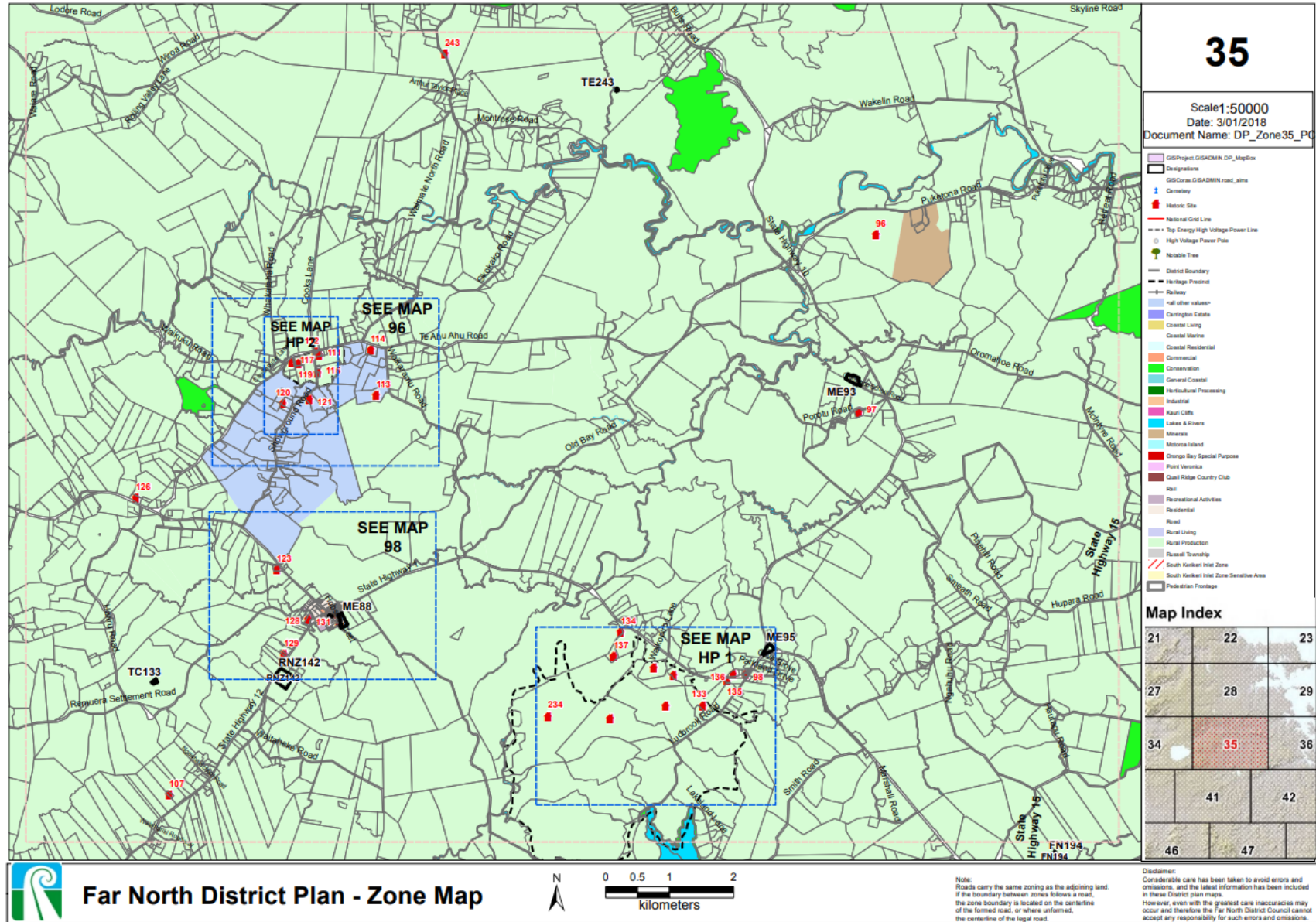
Appendix 1 – District Plan Maps



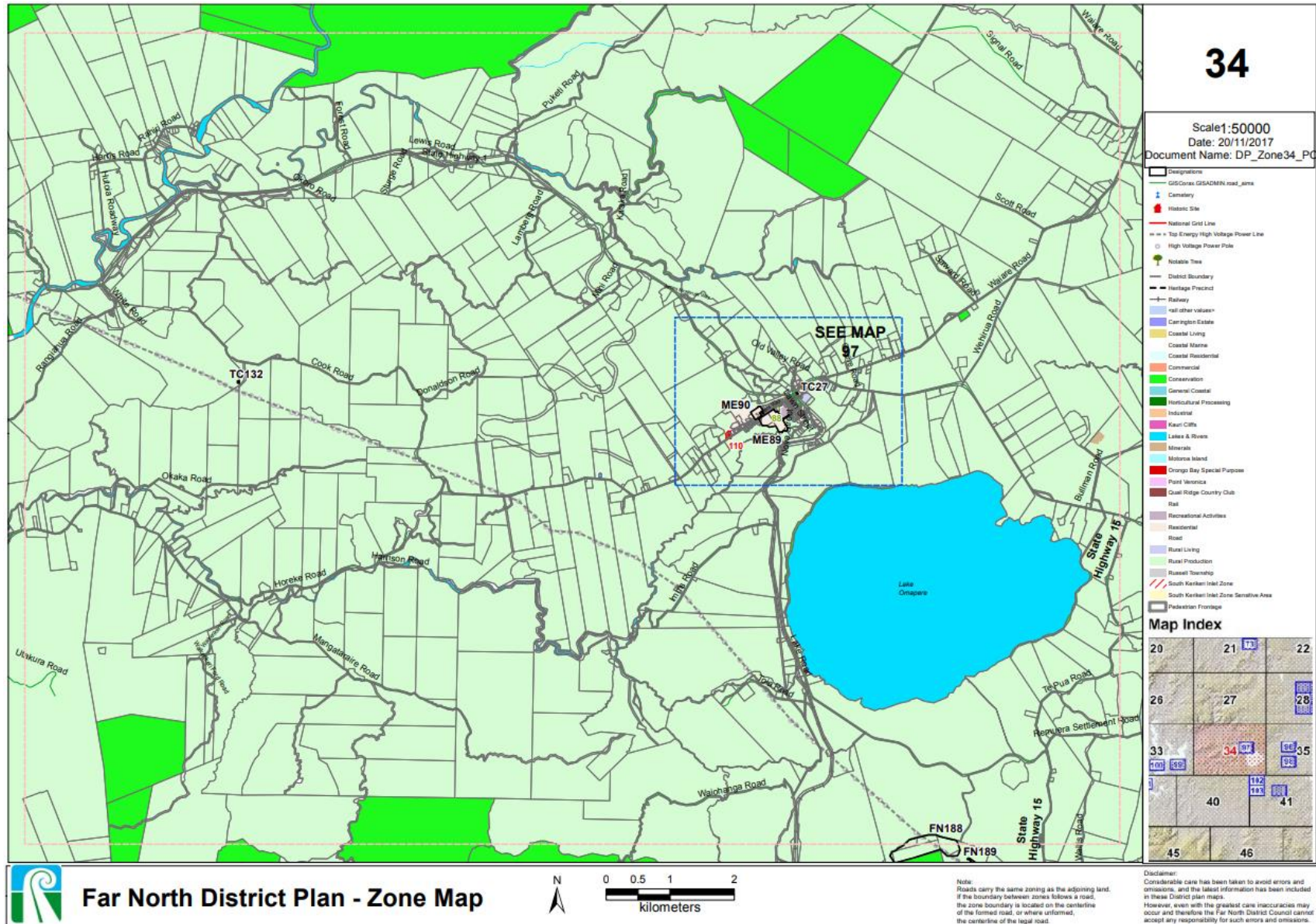
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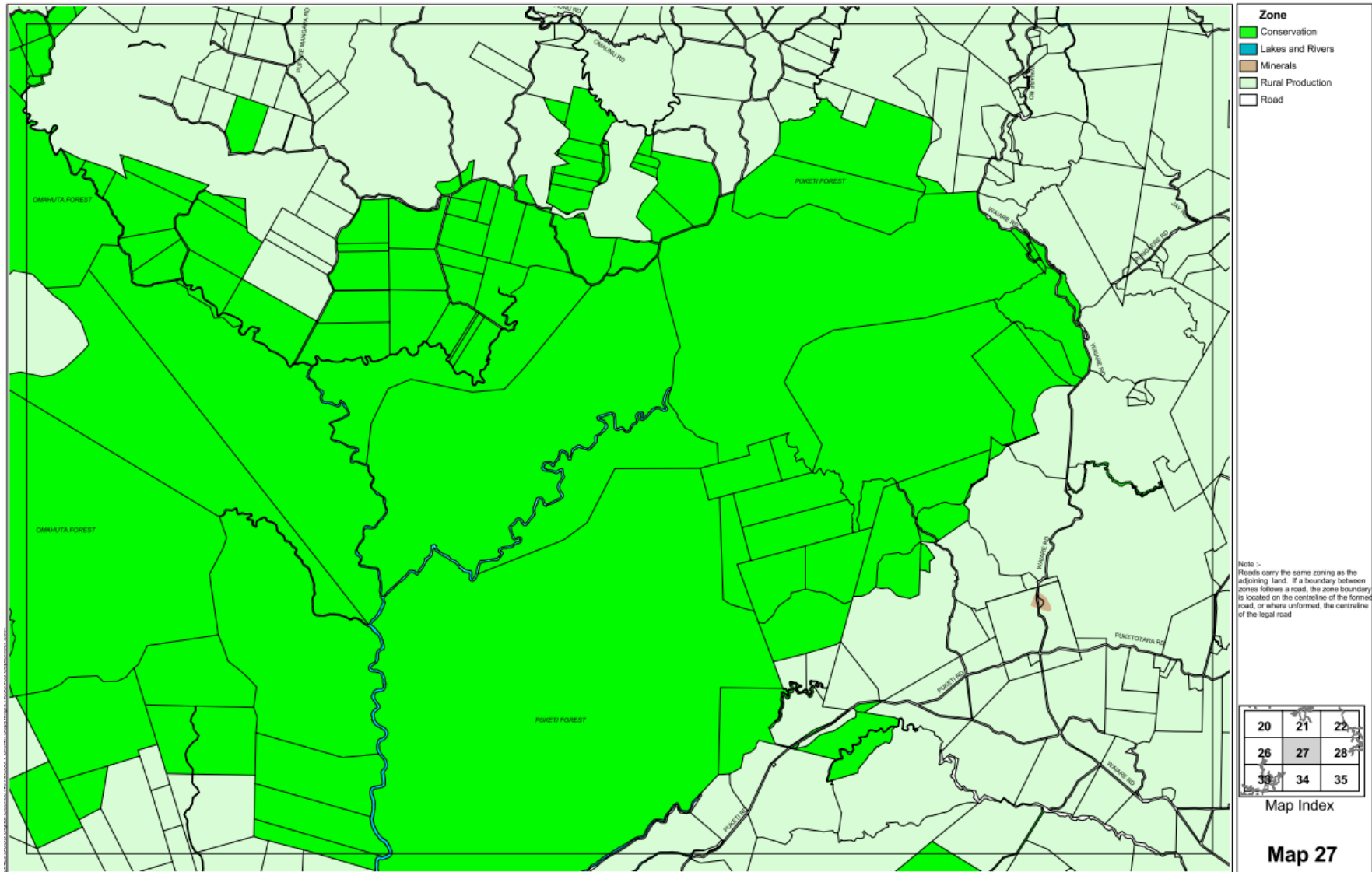
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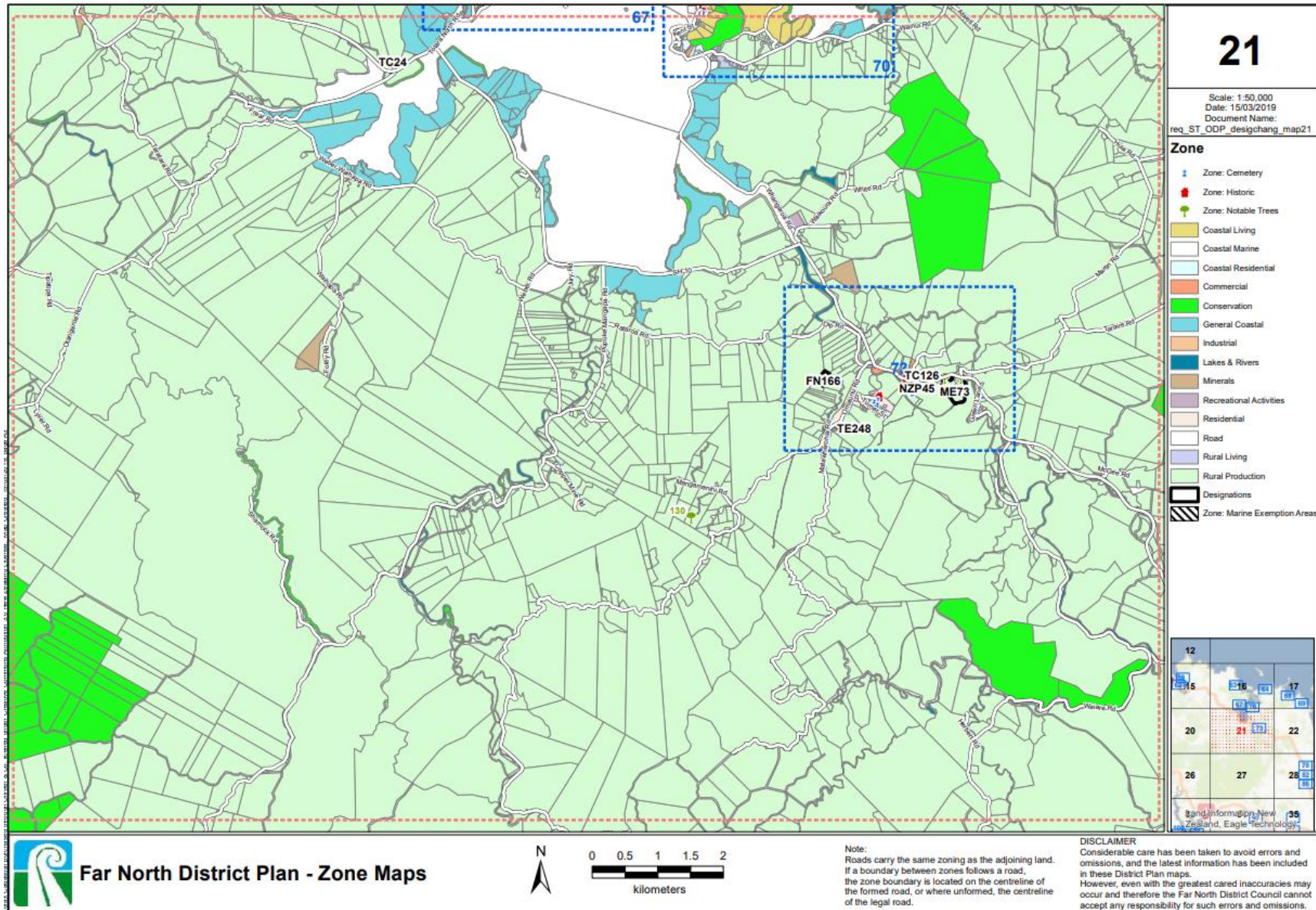
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