Te Kaunihera o Te Hiku o te Ika
Far North District Council

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

(Or Associated Consent Pursuant to the Resource Management Act 1991 (RMA)) (If applying for a Resource Consent pursuant to Section 87AAC or 88 of the RMA, this form can be used to satisfy the requirements of Schedule 4). Prior to, and during, completion of this application form, please refer to Resource Consent Guidance Notes and Schedule of Fees and Charges — both available on the Council's web page.

1. Pre-Lodgement Meeting

Have you met with a council Resource Consent representative to discuss this application prior to lodgement? ☑ **Yes** ☐ **No**

2. Type of Consent being applied for

(more than one circle can be ticked):

- ☑ **Land Use**
- ☐ **Fast Track Land Use***
- ☑ **Subdivision**
- ☐ **Consent under National Environmental Standard** (e.g. Assessing and Managing Contaminants in Soil)
- ☐ **Discharge**
- ☐ **Change of Consent Notice (s.221(3))**
- ☐ **Extension of time (s.125)**
- ☐ **Other (please specify)** _____

The fast track is for simple land use consents and is restricted to consents with a controlled activity status.

3. Would you like to opt out of the Fast Track Process?

☐ **Yes** ☐ **No**

4. Consultation

Have you consulted with Iwi/Hapū? ☐ **Yes** ☑ **No**

If yes, which groups have you consulted with?

Who else have you consulted with?

For any questions or information regarding iwi/hapū consultation, please contact Te Hono at Far North District Council tehonosupport@fndc.govt.nz

5. Applicant Details

Name/s: Erin and Caleb Casston

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

6. Address for Correspondence

Name and address for service and correspondence (if using an Agent write their details here)

Name/s: Heather Perring

Email: [redacted]

Phone number:

Postal address:
(or alternative method of service under section 352 of the act)

**** All correspondence will be sent by email in the first instance. Please advise us if you would prefer an alternative means of communication.***

7. Details of Property Owner/s and Occupier/s

Name and Address of the Owner/Occupiers of the land to which this application relates (where there are multiple owners or occupiers please list on a separate sheet if required)

Name/s: Philip and Ruth Gasston

Property Address/ Location: 194 Waimate North Road, Kerikeri

Postcode

8. Application Site Details

Location and/or property street address of the proposed activity:

Name/s:

Site Address/ Location: 194 Waimate North Road, Kerikeri

Postcode

Legal Description: Lot1DP207521 **Val Number:**

Certificate of title: NZ135D/143

Please remember to attach a copy of your Certificate of Title to the application, along with relevant consent notices and/or easements and encumbrances (search copy must be less than 6 months old)

Site visit requirements:

Is there a locked gate or security system restricting access by Council staff? ◯ **Yes** ✔ **No**

Is there a dog on the property? ✔ **Yes** ◯ **No**

Please provide details of any other entry restrictions that Council staff should be aware of, e.g. health and safety, caretaker's details. This is important to avoid a wasted trip and having to re-arrange a second visit.

Please call Erin or Caleb ahead of time

9. Description of the Proposal:

Please enter a brief description of the proposal here. Please refer to Chapter 4 of the District Plan, and Guidance Notes, for further details of information requirements.

Please see attached report

If this is an application for a Change or Cancellation of Consent Notice conditions (s.221(3)), please quote relevant existing Resource Consents and Consent Notice identifiers and provide details of the change(s), with reasons for requesting them.

10. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

11. Other Consent required/being applied for under different legislation

(more than one circle can be ticked):

- ◯ **Building Consent** Enter BC ref # here (if known)
- ◯ **Regional Council Consent (ref # if known)** Ref # here (if known)
- ◯ **National Environmental Standard consent** Consent here (if known)
- ◯ **Other (please specify)** Specify 'other' here

12. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health:

The site and proposal may be subject to the above NES. In order to determine whether regard needs to be had to the NES please answer the following:

Is the piece of land currently being used or has it historically ever been used for an activity or industry on the Hazardous Industries and Activities List (HAIL) ◯ **Yes** ✔ **No** ◯ **Don't know**

Is the proposed activity an activity covered by the NES? Please tick if any of the following apply to your proposal, as the NESCS may apply as a result. ✔ **Yes** ◯ **No** ◯ **Don't know**

- ✔ **Subdividing land**
- ◯ **Changing the use of a piece of land**
- ◯ **Disturbing, removing or sampling soil**
- ◯ **Removing or replacing a fuel storage system**

13. Assessment of Environmental Effects:

Every application for resource consent must be accompanied by an Assessment of Environmental Effects (AEE). This is a requirement of Schedule 4 of the Resource Management Act 1991 and an application can be rejected if an adequate AEE is not provided. The information in an AEE must be specified in sufficient detail to satisfy the purpose for which it is required. Your AEE may include additional information such as Written Approvals from adjoining property owners, or affected parties.

Your AEE is attached to this application ✔ **Yes**

13. Draft Conditions:

Do you wish to see the draft conditions prior to the release of the resource consent decision? ● **Yes** ◯ **No**

If yes, do you agree to extend the processing timeframe pursuant to Section 37 of the Resource Management Act by 5 working days? ✔ **Yes** ◯ **No**

14. Billing Details:

This identifies the person or entity that will be responsible for paying any invoices or receiving any refunds associated with processing this resource consent. Please also refer to Council's Fees and Charges Schedule.

Name/s: (please write in full)	Erin and Caleb Gasston
Email:	[redacted]
Phone number:	
Postal address: (or alternative method of service under section 352 of the act)	

Fees Information

An instalment fee for processing this application is payable at the time of lodgement and must accompany your application in order for it to be lodged. Please note that if the instalment fee is insufficient to cover the actual and reasonable costs of work undertaken to process the application you will be required to pay any additional costs. Invoiced amounts are payable by the 20th of the month following invoice date. You may also be required to make additional payments if your application requires notification.

Declaration concerning Payment of Fees

I/we understand that the Council may charge me/us for all costs actually and reasonably incurred in processing this application. Subject to my/our rights under Sections 357B and 358 of the RMA, to object to any costs, I/we undertake to pay all and future processing costs incurred by the Council. Without limiting the Far North District Council's legal rights if any steps (including the use of debt collection agencies) are necessary to recover unpaid processing costs I/we agree to pay all costs of recovering those processing costs. If this application is made on behalf of a trust (private or family), a society (incorporated or unincorporated) or a company in signing this application I/we are binding the trust, society or company to pay all the above costs and guaranteeing to pay all the above costs in my/our personal capacity.

Name: (please write in full)	[redacted]
Signature: (signature of bill payer	

15. Important Information:

Note to applicant

You must include all information required by this form. The information must be specified in sufficient detail to satisfy the purpose for which it is required.

You may apply for 2 or more resource consents that are needed for the same activity on the same form.

You must pay the charge payable to the consent authority for the resource consent application under the Resource Management Act 1991.

Fast-track application

Under the fast-track resource consent process, notice of the decision must be given within 10 working days after the date the application was first lodged with the authority, unless the applicant opts out of that process at the time of lodgement. A fast-track application may cease to be a fast-track application under section 87AAC(2) of the RMA.

Privacy Information:

Once this application is lodged with the Council it becomes public information. Please advise Council if there is sensitive information in the proposal. The information you have provided on this form is required so that your application for consent pursuant to the Resource Management Act 1991 can be processed under that Act. The information will be stored on a public register and held by the Far North District Council. The details of your application may also be made available to the public on the Council's website, www.fndc.govt.nz. These details are collected to inform the general public and community groups about all consents which have been issued through the Far North District Council.

15. Important information continued...

Declaration

The information I have supplied with this application is true and complete to the best of my knowledge.

Name: (please write in full)

Signature:

[redacted]

Checklist (please tick if information is provided)

- ◯ Payment (cheques payable to Far North District Council)
- ◯ A current Certificate of Title (Search Copy not more than 6 months old)
- ◯ Details of your consultation with Iwi and hapū
- ◯ Copies of any listed encumbrances, easements and/or consent notices relevant to the application
- ◯ Applicant / Agent / Property Owner / Bill Payer details provided
- ◯ Location of property and description of proposal
- ◯ Assessment of Environmental Effects
- ◯ Written Approvals / correspondence from consulted parties
- ◯ Reports from technical experts (if required)
- ◯ Copies of other relevant consents associated with this application
- ◯ Location and Site plans (land use) AND/OR
- ◯ Location and Scheme Plan (subdivision)
- ◯ Elevations / Floor plans
- ◯ Topographical / contour plans

Please refer to Chapter 4 of the District Plan for details of the information that must be provided with an application. Please also refer to the RC Checklist available on the Council's website. This contains more helpful hints as to what information needs to be shown on plans.

KAITIAKI

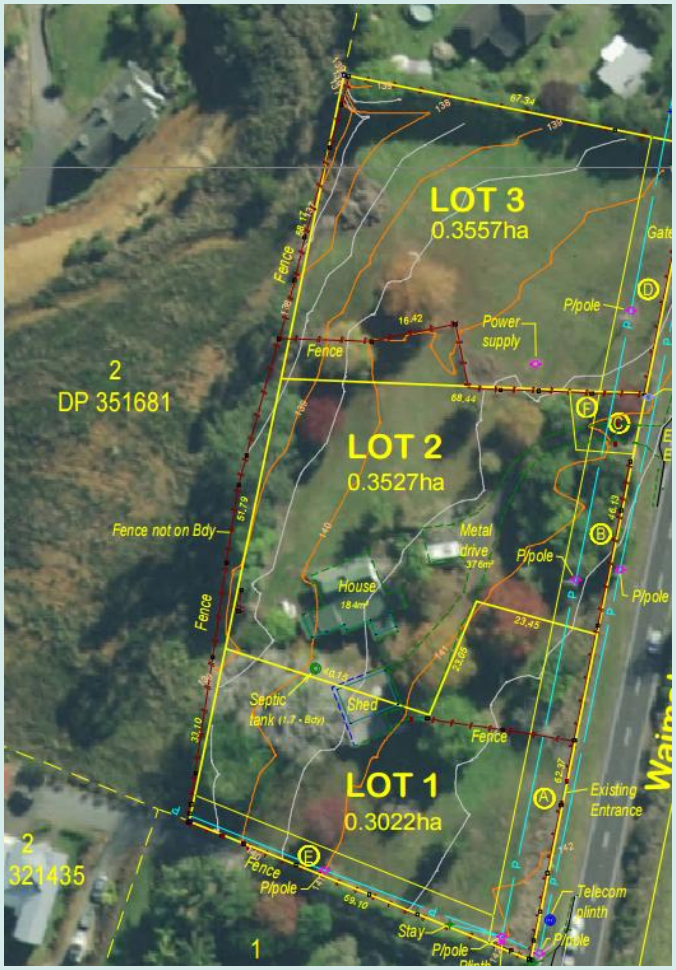
Report Version: 1.01

194 Waimate North Road,

Kerikeri

For:

C & E Gasston



Subdivision Resource Consent Application

Quality Assurance

Report Author	Signature	Date:
Connie Mills		**16 April 2025**
Planner		
NZPI Intermediate		

Reviewer	Signature	Date:
Heather Perring		**16 April 2025**
Planning Director		
MNZPI		

Executive Summary

Please find enclosed on behalf of the applicant **Caleb and Erin Gasston** a combined land use and subdivision resource consent application to subdivide the existing allotment containing an existing dwelling (identified as Lot 1 DP 207521) in the Rural Production Zone at 194 Waimate North Road, Kerikeri, to create three rural lifestyle allotments which result in a yard infringement and undersized lot dimensions.

All adverse environmental effects of the activities have been deemed to be less than minor. On this basis no parties are deemed to be affected by the proposal. The proposal is a non-complying activity, and the following report sets out that the proposal can meet both arms of the 'gateway test' under section 104D.

This application is made pursuant to Section 88 of the Resource Management Act 1991 **(RMA)**, and incorporates all information required by Form 9 and Schedule 4 of the Act.

An assessment against sections 95A and 95B (RMA) has been undertaken, which concludes that this application can be processed without the need for notification.

If you have any further queries, please do not hesitate to contact Connie Mills on 027 442 5686 or Kaitiaki Planning at Heather@Kaitiakiproperty.com.

Contents

1 Introduction

1.1 Purpose

Kaitiaki Planning has been engaged by Erin and Caleb Gasston to prepare a Resource Consent application to the Far North District Council (**FNDC**) to subdivide Lot 1 DP 207521 into three rural lifestyle allotments. The application has been prepared in accordance with the requirements of Section 88 of, and the Fourth Schedule to, the Resource Management Act 1991 (**the Act**), on behalf of Erin and Caleb Gasston (**Applicant**).

The applicant seeks a combined land use and subdivision resource consent to subdivide Lot 1 DP 207521 into three separate lots. Lots 1 and 3 are currently vacant, while Lot 2 contains an existing dwelling. Each of the proposed allotments exceeds the minimum site area of 3000m^2 however, fails to provide the balance farmland therefore is an undersized subdivision. The proposed subdivision layout results in a yard infringement for the existing dwelling on Lot 2, which falls short of the permitted setback by 3 meters. Additionally, Lot 1 will have a building envelop dimension infringement, with an area of 20m x 20m instead of the permitted 30m x 30m.

The application is supported by the following information:

- Scheme Plan prepared by Williams and King
- Development Concept Plan prepared by LDE Ltd
- Preliminary Site Investigation prepared by LDE Ltd
- Civil Suitability Report prepared by LDE Ltd
- Aircraft Noise Assessment prepared by Marshall Day Acoustics
- Soils, Land Use Capability Assessment prepared by Agfirst
- Correspondence from the Bay of Islands Airport and Top Energy

Resource consent is required as a **Non-Complying Activity** under the Far North District Plan ('**FNDP**') under Rule 13.11 to undertake subdivision of a property in the Rural Production Zone without a balance farmland. There are additional land use infringements 13.7.2.2 (Allotment Dimension), 8.6.5.1 (Setbacks), and 8.6.5.4.1 (Residential Intensity). Though not yet operative, the Proposed District Plan has been assessed within this report.

The information supplied in this application is intended to provide a full understanding of the activity and any actual and potential effects that the proposed activity may have on the environment.

CONSENTS SOUGHT

Under Section 11(1)(a)(i) of the Act and Rule 17.3.5(d)of the Far North District Plan to undertake a non-complying activity being to undertake undersize subdivision within the Rural Production Zone alongside an undersized building envelop dimension and yard setback infringement.

We include the following information:

- A description of the site and surrounding locality
- A description of the proposed activity at the location
- An assessment of the actual and potential effects of the proposal
- An assessment of the relevant Plan provisions under the Far North District Plan
- An assessment of the proposal against the relevant provisions of the RMA

FOURTH SCHEDULE:

We attach, in accordance with the Fourth Schedule of the Resource Management Act 1991, an assessment of environmental effects in the detail that corresponds with the scale and significance of the effects that the proposal may have on the environment.

OTHER CONSENTS:

No other consents are required.

ADDITIONAL INFORMATION:

We attach any information required to be included in this application by the District Plan, the Resource Management Act 1991, or any regulations made under that Act within the attached appendices.

1.2 The Applicant

Erin and Caleb Gasston

C/- Kaitiaki Property

402 Maungatapu Road, Maungatapu

Tauranga 3112

Attention: Heather Perring

1.3 Site Description Summary

Land Location:	194 Waimate North Road, Kerikeri
Legal Descriptions:	Lot 1 DP 207521
Owner:	Philip and Ruth Gasston
Record of Title:	NA135D/143
Site Area:	1.0108 hectares more or less
Zone:	Rural Production (Operative District Plan) Special Purpose Zone – Horticulture (Proposed District Plan)
Planning Overlays:	Airport Noise Buffer Overlay (Operative District Plan) Airport Protection Surfaces Overlay and Air Noise Outer Control Boundary (55 db Ldn) (Proposed District Plan)
Non-statutory overlays:	NIL

Figure 1: 194 Waimate North Road, Kerikeri. Source: FNDC Planning Map 28 (extract).

Figure 2: 31 194 Waimate Road North shown by outline, located within the Horticulture Zone and subject to the Outer Control Boundary and Airport Protection Surfaces). Source: Proposed FNDP Planning Maps.

1.4 Summary of Consent Requirements

The following table(s) provide a summary of the regulations under the Resource Management rules of the FNDP that the application does not comply with. The consent application is for a Non Complying Activity under the FNDP.

Table 1: Resource Consents Required under the Far North District Plan

Rule No	Rule Name	Comment on Compliance	Activity Status
Section 8 – Rural Production Zone			
8.6.5.1	Setbacks … No building shall be erected within 10m of any site boundary…	The indicative building platform on Lot 1 is located approximately 5m from the common boundary with Lot 2. The existing dwelling on Lot 2 is located approximately 7m from the common boundary with Lot 1.	Cannot comply
8.6.5.4.1	Residential Intensity …residential development shall be limited to one unit per 2ha of land. In all cases the land shall be developed in such a way that each unit shall have at least 2,000m² for its exclusive use surrounding the unit plus a minimum of 1.8ha elsewhere on the property.	The proposal will result in an average residential intensity of one unit per 3,369m2 with no other space elsewhere.	Cannot comply
Chapter 13 – Subdivision			
13.11	If a subdivision activity does not comply with the standards for a discretionary (subdivision) activity	Undersized allotment subdivision is a non-complying activity	Non-complying
13.7.2.1	Minimum area for vacant new lots and new lots which already accommodate structures 1. The minimum lot size is 4ha; or 2. A maximum of 3 lots in any subdivision, provided	The proposed subdivision fails to achieve the minimum lot size and residual land. The lots range in size from 3022m2 – 3557m2 and no additional land is available. It should be noted that the existing site was already undersized, i.e. less than 4ha.	Cannot comply

	that the minimum lot size is 2,000m² and there is at least 1 lot in the subdivision with a minimum size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; … Note 2: … Subdivision of small lots which does not meet this rule is a noncomplying activity unless the lots are part of a Management Plan application.		
13.7.2.2	Allotment dimensions Square building envelope minimum size: Rural – 30m x 30m (900m2)	Lot 1 fails to achieve the minimum building envelope dimensions, instead 20m x 20m (400m^2) has been shown	Cannot comply

As described above, the proposal to undertake a subdivision within the Rural Production Zone which fails to achieve the minimum allotment size is a non-complying activity. Moreover, the development fails to achieve subdivision standards for allotment dimensions and zone provisions for yard setbacks. When the bundling approach is applied, the activity is assessed as a **Non-Complying Activity**, and Council's discretion is unlimited.

Consent can only be granted if the application demonstrates that the effects are no more than minor or that the proposal is not contrary to the objectives and policies of the operative and proposed (if one exists) District Plan, under section 104D of the Resource Management Act 1991.

The National Environmental Standards for Contaminated Land (**NES-CS**) manages subdivision, use and development of potentially contaminated land, the site is not a piece of land under the NES-CS and resource consent for the activity is not required (see attached Preliminary Site Investigation **(PSI)** Report – **Appendix G**).

1.5 Authorisations from Other Authorities

There are no authorisations required from other authorities.

1.6 Legal Description and Interests

The property is a total land area 1.0108 hectares (more or less) and is legally described as Lot 1 DP 207521, comprised within Record of Title NA135D/143, issued on 13 April 2004.

The following Interests are registered on the title:

- Electricity supply right (B957340.1) and an easement to transmit electricity (5964808.5) There is a right to supply electricity along the southern boundary of the property, shown as 'A' on the title plan and an easement to transmit electricity along the road boundary of the property, shown as 'B'.

Both instruments will drop down on to the new titles, Lot 1 will absorb the electricity supply right (B957340.1) noted as 'F' on the scheme plan. All lots will be subject to the easement right noted as 'A', 'B', 'C' and 'D' on the scheme plan. Correspondence has been received from TOP Energy Limited confirming that these lines are less than 100 kV therefore there is no required setback under the FNDP. Correspondence is attached as **Appendix G.**

A copy of the title and relevant interests can be found attached in **Appendix A** and the scheme plan as **Appendix B**.

2 Site and Surrounds

2.1 Site Location

The site is located approximately 4.5km (as the crow flies) from the town centre of Kerikeri. It is located on a local road, Waimate North Road, which is accessed via State Highway 10. The wider environment reflects a combination of rural lifestyle,rural commercial and Airport. Along Waimate North Road are educational facilities (Springback School and Preschool), commercial activity (Cross Fit Gym and Northland Transport), hospitality (Ake Ake Vineyard and Sovrano Winery), and a range of lifestyle properties. The wider environment similarly reflects this pattern of development, properties accessed from Valencia Lane reflect more rural industrial based activities in the south and rural lifestyle sites in the north. While the Bay of Island Airport is located to the east and is protected via a designation.

Figure 3 below shows the site location (red) in relation to the wider environmental activities.

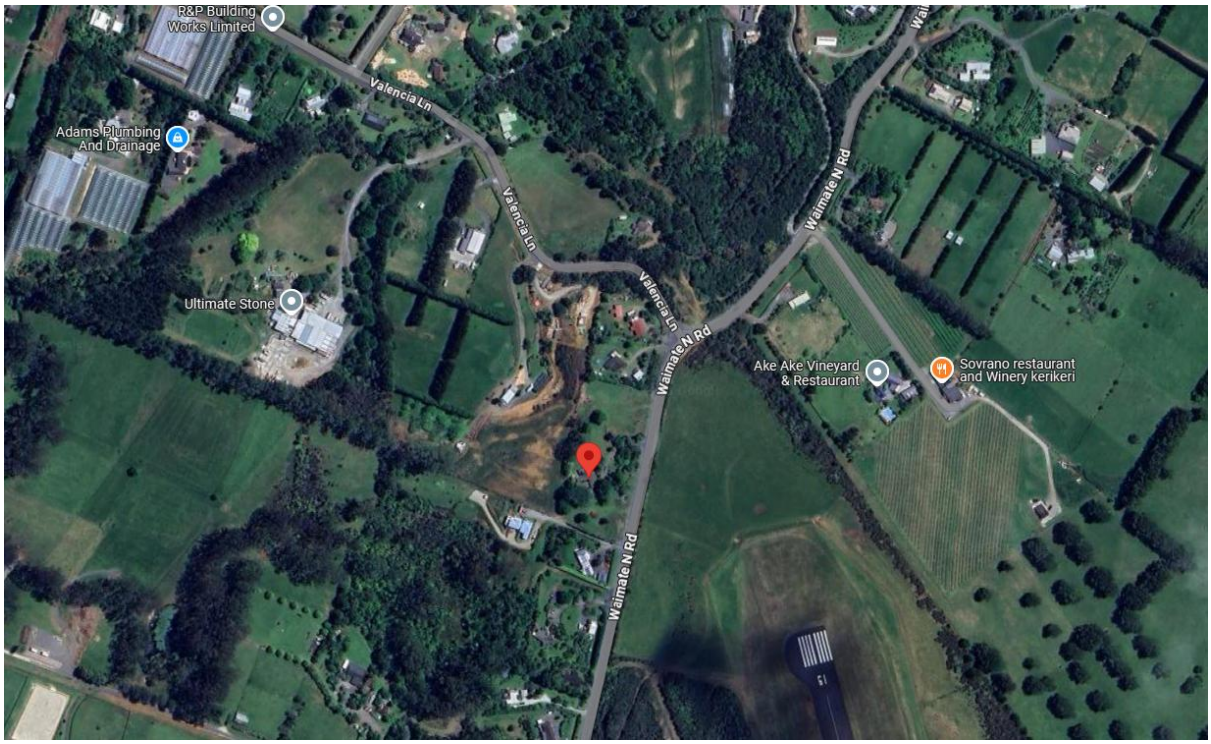


Figure 3: 194 Waimate North Road (red), site in relation a mixed-use rural environment. Source Google maps

2.2 Site History

The site was originally rural land previously subdivided into lifestyle lot sections in 1986. The following provides a summary of the site's historic consents:

- 1986 – Subdivision from a larger block into 10 smaller allotments.
- 1990 – Building permit for relocation of a dwelling.
- 1996 – Building permit for calf stables
- 2003 – Subdivision consent of one lot into two, the subject site being the larger allotment.

None of the above historic consents preclude the application to further subdivide from going ahead. A copy of the title and consents and conditions can be found attached in **Appendix A**.

2.3 Site Description

The 1.0108 ha (more or less) subject site is currently occupied by a single residential dwelling and timber shed (to be removed) in the central-south of the property. The remaining site area is vacant and grassed land. The site is generally flat with a gentle slope towards the rear of the property on the west.

The site has a frontage of 155 meters along Waimate North Road. There are two existing vehicle accesses: one provides legal access to the main dwelling via a driveway, and the second, located in the southern part of the lot, serves as a secondary farm access during wet weather conditions.

Overhead powerlines are located in the road corridor and overhead of the site. These are protected via existing easement in favour of Top Energy. The lines distribute energy less than 50 kW.

The property is not subject to any mapped natural hazards, sites of significance to Māori, heritage sites, or indigenous biodiversity.

Figure 4 shows the overall layout of the subject site with existing buildings and adjacent gully area. Figures 5-7 show the site buildings and views from the entrance along the road frontage.

Figure 4: Aerial view of the site layout showing existing wider environment. Source: FND GIS maps.

Figure 5: Views of Lot 1, garage to be removed. Source: Site visit.

Figure 6: Views of eastern Lot 3 towards Lot 2. Source: Site visit.

Figure 7: Views from existing crossings looking north, the northern crossing to Lot 2 and 3 on the left and southern most crossing to be used Lot 1 on the right.

3 Proposal

3.1 Proposal Overview

The applicant seeks to undertake a three-lot rural lifestyle subdivision within the Rural Production Zone. The purpose of the subdivision is to provide for multi-generational living, the current landowners, Phillip and Ruth Gasston (the applicants parents) will retain Lot 2 and Caleb and Erin Gasston (the applicants) intend to develop Lot 1 for their family home. Lot 3 may be sold independently in the future. The proposed lot's attributes are as follows:

Identifier	Size	Access	Existing Development
Lot 1	3022m^2	Independent crossing, to be upgraded	Vacant
Lot 2	3527m^2	To be upgraded, shared crossing with Lot 3	Dwelling
Lot 3	3557m^2	To be upgraded, shared crossing with Lot 2	Vacant

Figure 7 scheme plan shows the proposed site plan. Further detail can be found in Appendix B:

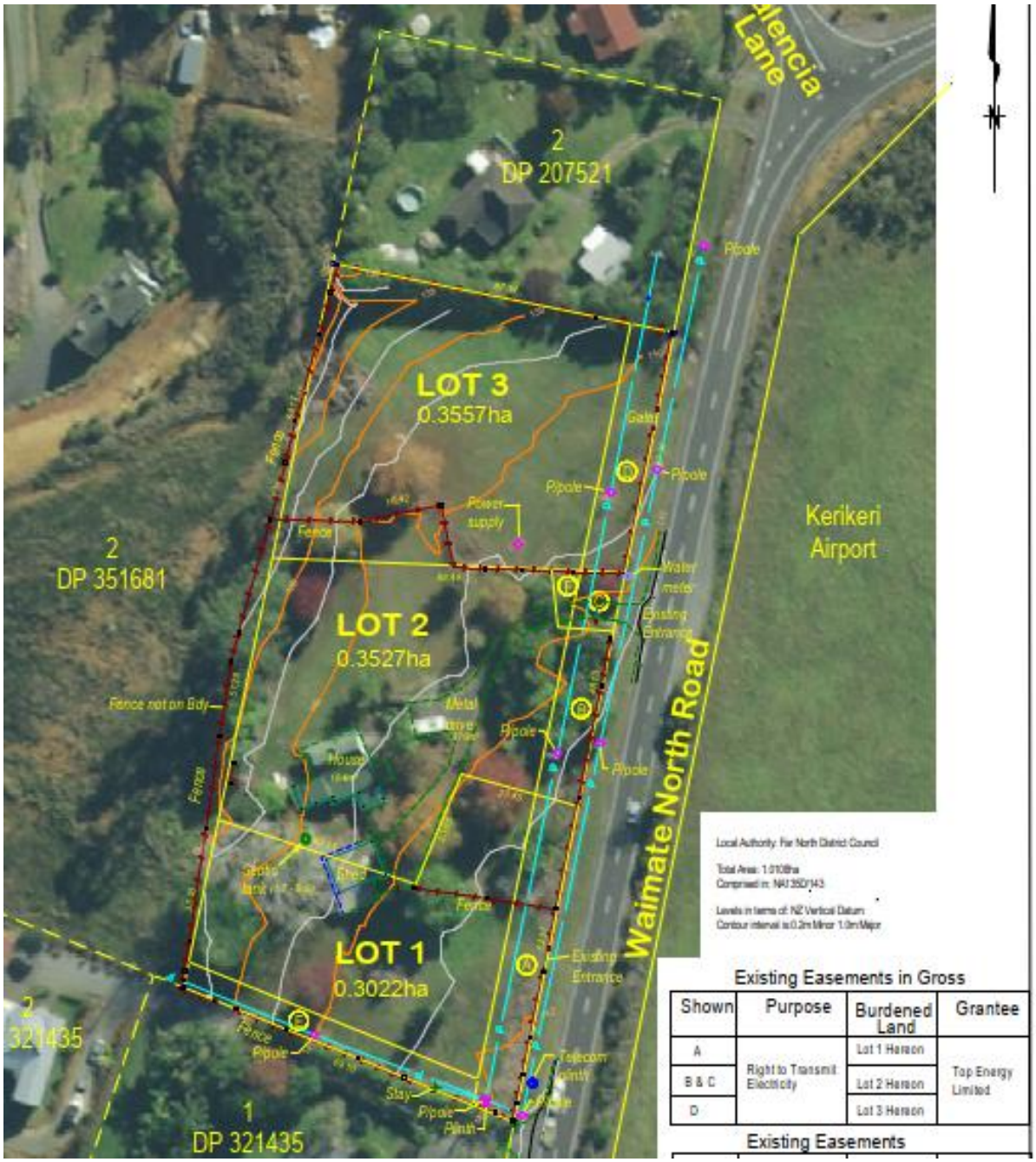


Figure 7: Scheme plan of proposal showing proposed boundaries, services and easements. Source: Appendix B

3.1.1 Buildings

Indicative building platforms are shown on the Development Plan included as Appendix C. Lot 1 fails to achieve the required 30m x 30m building envelope spatial requirement, instead a 20m x 20m has been shown. The indicative building platform fails to achieve the required 10m yard setback from the proposed boundary with Lot 2, instead 5m setback has been provided.

Lot 2 will contain the existing dwelling whilst the existing shed will be demolished prior to subdivision occurring. The existing dwelling fails to achieve the permitted 10m setback from the proposed boundary with Lot 1, instead a 7m setback has been provided.

A permitted building platform and yard setback can be accommodated on Lot 3.

The existing dwelling on Lot 2 is approximately 180m^2 or 5.1% of the net site area, within the permitted building coverage threshold of 12.5%. The total impervious surfaces on Lot 2 are approximately 460m^2 (including the dwelling) or 13% of the net site area, meeting the permitted standard of 15%.

3.1.2 Servicing

The property is not within the reticulated services boundary. A Civil Feasibility report is included as **Appendix D** which details all three waters services, access, and geotechnical features. To summarise:

- Lot 2 will retain its existing onsite disposal fields within the lot's boundary. Future dwellings on Lots 1 and 3 will be serviced via independent onsite wastewater disposal fields. Both primary and a reserve disposal field has been provided for. All disposal fields are setback 1.5m from property boundaries.
- Potable water will be provided for via roof water collection in water tanks. Based on a standard 4-5 bedroom dwelling a minimum storage of 50,000L shall be provided.
- Fire fighting water is intended to be provided in 45,000L tanks to be contained over two tanks, one near the accessway of Lot 1 and the other near the shared access of Lot 2 and 3.
- Stormwater not otherwise used for potable use will be discharged to land.

3.1.3 Access

Lot 1 is intended to be serviced via an independent crossing from Waimate North Road. A gravel crossing has recently been installed (Figure 8 below).

Lot 2 and 3 are intended to share a dual vehicle crossing and it is intended the existing crossing location for the subject site remains in situ and is upgraded to achieve FNDC Engineering Standards sheet 21 – Type 1A.

Figure 8: Recently upgraded access to Lot 1. Source: Civil Report in Appendix D

4 Assessment of Effects

Clause 2(3) of Schedule 4 RMA requires an assessment of the activity's effects on the environment. The level of detail should correspond with the scale and significance of the potential effects of the activity on the environment. The following actual and potential adverse effects, and positive effects have been identified and assessed for this proposal.

4.1 Existing Environment

Section 104(1)(a) provides that when considering a resource consent application, the consent authority must, subject to Part 2, have regard to the actual and potential effects on the environment of allowing the activity. Case law has determined that the 'environment' must be read as the environment which exists at the time of the assessment and as the environment may be in the future as modified by the utilisation of permitted activities under the plan and by the exercise of resource consents which are being exercised, or which are likely to be exercised in the future. It also includes existing use rights but does not include effects of consents that might be sought in the future.

In this case, the existing environment includes a series consented rural lifestyle developments along Waimate North Road, Amuri Road, and Valencia Lane**.** The lifestyle lots generally contain a principal dwelling, independent crossings and large garden curtilage, there are a few open space paddocks and orcharding. Within the site is an existing principle dwelling and separate garage (to be removed), and an existing vehicle crossing. The remaining area comprises open paddocks, farm fences, an off-grid cabin and mature vegetation scattered throughout.

4.2 Relevant Assessment Criteria

The consent triggers are as follows:

- Rural productive subdivision without a balance lot.
- Residential density infringement.
- Undersized allotment dimensions.
- Yard setback infringement.

As a non-complying activity, the councils discretion is unfretted however, to assist in the assessment of effects the following draws upon Section 13.10 of the FNDP.

4.2.1 Rural fragmentation, land use incompatibility and life supporting capacity of soils

The subject site, while located within the Rural Production Zone, does not reflect the typical characteristics of a productive rural environment. As outlined earlier in this report, the broader area is characterized by a mix of rural lifestyle activities such as lifestyle living, schools, hospitality venues, and rural commercial activities. The immediate surroundings of the site include rural lifestyle properties to the north and south, an overgrown gully to the west separating the site from rural industrial activities, and the airport to the east.

The property is already highly fragmented, with most surrounding properties being less than 1 hectare in size from previous subdivisions, and hosting rural residential qualities, such as large dwellings, hedges, and expansive gardens. There are very few large, contiguous rural productive blocks near the site. Consequently, there are limited opportunities for amalgamating this site with adjacent lots to

form a larger, unfragmented productive parcel. The overgrown gully to the west, which lacks a history of productive use and presents significant challenges for clearing due to its hilly terrain, further diminishes the potential for productive agricultural or horticultural use.

Given the fragmented nature of the surrounding land, the potential for conflicts with traditional rural land uses, such as noise, vibration, smell, smoke, dust and spray drift, is minimal. The nearest productive land is located 230 meters to the east, separated by a road, the airport's land, and a mature hedge. Similarly, the land to the west, currently used for pasture farming, is 260 meters away and is buffered by two non-productive parcels, several hedges, and topographic variations. These natural and man-made barriers effectively mitigate any potential rural land use conflicts, ensuring that the proposed subdivision will not adversely impact existing rural activities.

Attached as **Appendix F** is a soil and land use capability assessment prepared by AgFirst. This report confirms that though the property is contained within the Rural Productive Zone it does not contain soils of highly productive nature. Instead, the report summarises that the property is incorrectly mapped, as the scale of historic data is not helpful on a site-by-site analysis. Soil testing reveals that due to historic use, such as pastoral farming over burnt scrub, the soils typically associated with productive purposes have likely eroded, leaving bouldery and Pungaere clay, which are very low in fertility. This is further exemplified by the presence of boulder-based soils, as observed during the onsite visit (Figure 9).

The subject site, while located within the Rural Production Zone, does not possess the characteristics of highly productive land. The surrounding area is already highly fragmented, limiting opportunities for productive agricultural use. The soil assessment confirms that the property contains low-fertility soils, further supporting the argument that the proposed subdivision will not adversely impact the productive capacity of the zone. Consequently, the subdivision is consistent with the existing land use pattern and will not detract from the functionality of the Rural Productive Zone.

Figure 9: Lot 3 containing hard soils, boulders have been excavated and stored onsite (Source: site visit)

4.2.2 Rural Amenity and Onsite Liveability

The proposed subdivision, despite containing undersized lots for the Rural Productive Zone, aligns well with the established character and rural lifestyle lot sizes of the surrounding area. The existing environment predominantly consists of rural lifestyle developments without large balance allotments. The lifestyle properties generally border the road corridor while the larger productive parcels are setback. The proposed undersized allotments are not dissimilar in character to the established form of development in the vicinity, ensuring that the new lots will integrate seamlessly into the existing landscape.

Though Lot 1 contains an undersized allotment dimension, a viable 20m x 20m building platform has been shown. This space, 400m^2 suitably meets the needs of the proposed occupant who seeks to build a smaller dwelling with a deck positioned to the north to benefit from good solar access. It is noted that 400m^2 could contain a large family home in the future.

The effects of the yard setback infringement between the existing dwelling on Lot 2 and the proposed building platform on Lot 1 are largely internalised. As the applicants' parents own both allotments, written approval is implied, and future owners will be visually aware of the building's proximity to the boundary. This arrangement is particularly suitable for the applicant's desired outcome of multi-generational living between Lot 1 and Lot 2, where the closeness of the properties meets their needs.

From adjoining locations, including the road, the combination of the undersized allotment dimension and the yard setback infringement may result in a development intensity that appears more pronounced than typically expected in the Rural Productive Zone. However, provision 8.6.5.1.1 permits a residential unit per 3,000m², which the proposal achieves. The subdivision only falls short of the required balance area. Any potential adverse effect from the setback shortfall is internalised, as written approval is implied this effect is disregarded.

The visual impact of the setback infringement will be mitigated by the retention of existing mature vegetation on-site, which will soften the views to the west and help maintain the established rural lifestyle character of the area. This approach ensures that the potential adverse effects are minimised, and that the development remains in harmony with the surrounding environment.

In conclusion, the proposed subdivision maintains the established rural lifestyle character and amenity, and onsite liveability, by ensuring that the undersized lots are consistent with the surrounding development pattern. The design enables viable building sites and ensures that the allotments are functional and compatible with the existing environment. The potential adverse effects on rural amenity and onsite liveability are less than minor.

4.2.3 Reverse Sensitivity from Airport Operations

The following provisions are applicable to the proposed subdivision:

13.10.17: Proximity to Airports

a) The degree to which the proposal takes into account reverse sensitivity - adverse effects arising from incompatible land use activities arising from being in proximity to an airport (including, but not limited to, the hours of operation, flight paths, noise, vibration, glare and visual intrusion).

15.2.6.2: Noise

a) Whether the proposed land use is a noise sensitive activity which could limit airport operations.

b) Whether acoustic insulation should be required as a condition of consent

The site is adjoining the Bay of Islands Airport ('**Airport**') separated by Waimate North Road. The site is approximately 0.2km north-west of the runway. Under the ODP, the site is subject to Appendix 4B – Kerikeri airport buffer area, however there are no specific rules or noise limits or acoustic treatment thresholds that apply. Instead, the above two provisions assist plan users in determining effects. The property is partially subject to the 55 dB noise boundary (Figure 3 above) and is wholly contained with the Airport Protection Surfaces overlay within the PDP.

The applicant has engaged with representatives from the Airport and correspondence is attached as **Appendix H**. Consequentially, the applicant volunteers to a consent notice which contains the following:

- No complaints notice on the Bay of Islands Airport operations
- Roof surfaces shall be painted in non-reflective colours
- Prior to construction of any habitable building or non-habitable building greater than 15m², a licensed surveyor shall confirm the building height relative to the airport protection surfaces.

In addition to the volunteered consent notice, the applicants have engaged Marshall Day Acoustics to provide an Aircraft Noise Assessment. This report is attached as **Appendix E**. To summarise this report:

- Though no specific building parameters have been provided for consideration, the proposed building platforms are not contained within the proposed 55 dB L_{dn} noise contour (Figure 10).
- External noise level is estimated at 53-55 dB L_{dn} at the location of the identified building platforms.
- An appropriate indoor noise level is 40 dB L_{dn} in bedrooms and 45 dB L_{dn} in living rooms. Achieving these limits is broadly consistent with sound insulation requirements for residential development near airports, ports, road and rail around New Zealand.
- Based on the building platforms being outside of the 55 dB L_{dn} noise contour, with windows ajar for ventilation, internal noise levels would be expected to be around 38-40 dB L_{dn}.

To give effect to the Airport's written approval, the applicants have volunteered to conditions of consent, including a no-complaints notice, non-reflective roof colours, and height verification of future buildings by a licensed surveyor to ensure compliance with airport protection surfaces. The Airport has emphasised the importance of compliance with the District Plan. As noted above, there are no specific noise limits or acoustic treatment standards in the ODP. However, the acoustic report confirms that the proposed dwelling platforms are outside the proposed 55 dB Ldn noise contour (see Figure 10 below).

Overall, the ODP's restrictions on subdivision near an airport aim to prevent airport operations from being hindered by noise-sensitive activities and to ensure a healthy noise environment for future occupants. Both objectives are met through the proposed building locations and the imposition of consent notices and consent conditions. Consequently, it is unlikely that any reverse sensitivity effects will arise.

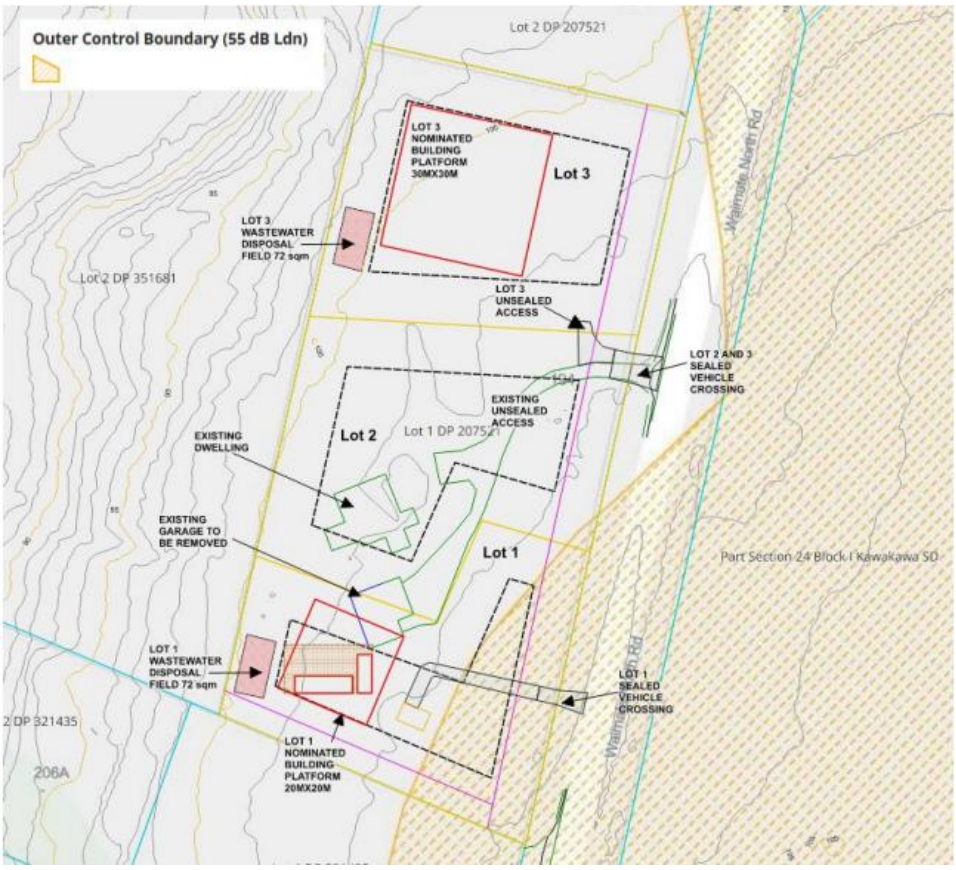


Figure 10: Extract from Airport Noise Assessment demonstrating building platforms are outside of proposed noise contour. Source: Marshall Day Acoustics.

As a precaution, the applicant has volunteered the following recommended consent notices to manage potential for reverse sensitivity effects if habitable buildings were proposed to be located within the noise buffer area:

> *No habitable buildings shall be constructed outside of the approved nominated building platforms on Lots 1 and 3 as shown on the approved development plan, unless an acoustic certificate prepared by a suitably qualified acoustic consultant is provided to Council confirming that the building will comply with the following acoustic internal noise level requirement:*
>
> - *Dwellings to be designed to ensure aircraft noise in any habitable room is no greater than 40 dB Ldn. If windows and doors are required to be closed to achieve 40 dB Ldn, a ventilation and cooling system shall be provided to enable occupants to remain comfortable without having to open doors or windows for ventilation or cooling.*

4.2.4 Transport Effects

The proposed subdivision will result in additional transport movements due to the creation of two new rural lifestyle properties. While no new accesses onto Waimate North Road are proposed, the use of the existing crossings will be intensified.

The local road has a posted speed limit of 60 km/h and is sealed to a width of approximately 6m, with a legal road corridor of around 20m. The site boasts a road frontage of approximately 155m, and the corridor is generally straight, providing good sight distances in both directions.

The existing crossing to Lot 2 is intended to become a combined vehicle crossing, servicing both Lot 2 and Lot 3. This crossing is situated approximately 110m from the intersection with Valencia Lane to the north, exceeding the required 85m sight distance as set by NZS 4404:2010. Sight distances to the south are unobstructed and extend beyond 250m.

Each proposed lot exceeds the permitted 3,000m², providing ample space for onsite parking and manoeuvring, ensuring that all vehicles can exit in a forward direction. Given the good condition of the road corridor and the clear sight distances in both directions, it is anticipated that the local road network can safely accommodate the additional transport movements.

In conclusion, the proposed subdivision is expected to have less than minor traffic effects.

4.2.5 Effects from Servicing

The property is not located within the reticulated services network therefore all three waters servicing needs will be met onsite. The provision of the wastewater, potable water and stormwater for each of the three allotments is outlined in Section 3 above.

Provision for both potable and firefighting water has been made for each lot. Potable supply will be independent of the other, however the firefighting supply will be shared between Lot 2 and 3. This is considered appropriate and efficient means of storing water and providing for fire fighting capacity as the position of the fire fighting supply tank is located adjacent to the shared access for these lots. Accordingly, the tank is well located to service either dwelling in case of emergency.

Turning to stormwater disposal, water not captured for potable use will be discharged to land. The Civil Suitability Report (**Appendix D**) outlines that the site is not subject to any mapped flooding and is contained within the wider Waipekakoura River catchment. The report concludes that the

stormwater run-off from the developed site is going to be insignificant in terms of the overall catchment size and characteristics. No modifications to natural waterways are required to give effect to this arrangement as stormwater not collected for potable use will continue to flow via gravity to a tributary of the Waipekakoura River, approximately 400m north west of the site.

The Civil Suitability Report also addresses wastewater management for a large house scenario on Lots 1 and 3, while assuming the continued use of the existing wastewater system on Lot 2. A site inspection confirmed that the existing system is in good working order, with no surface ponding or odour detected from the septic tank vent. For Lots 1 and 3, the report recommends a principal disposal area of 162m² with an 82m² reserve for Lot 1, and a principal disposal area of 200m² with a 100m² reserve for Lot 3. These disposal fields are shown on the development concept plan, ensuring they are located outside the building footprint and set back more than 1.5 meters from property boundaries.

As all services can be provided within each lot's respective boundaries, the potential adverse effects from servicing are less than minor.

4.2.6 Reverse sensitivity on Electrical Networks

There are existing TOP Energy Transmission Lines located along the road boundary of the subject site. These are currently protected via easements and will be continued to be protected under the proposed subdivision.

The applicant has engaged with TOP Energy representatives (**Appendix H**) to confirm the kilowatts of the transmission/ distribution lines to determine building setback. The lines do not operate at or above 50 kV, therefore there is no required setback under the District Plan. However, to minimise any potential disruptions, all proposed building platforms are located free of the transmission lines.

4.2.7 Positive Effects

The subdivision will result in positive effects including (but not limited to):

- Sustainable and efficient use of the land within close proximity to the Kerikeri township in a highly fragmented and mixed use rural environment.
- Enabling the landowner to provide for their and their families economic well-being by enabling a multigenerational property alongside being able to sell a vacant property.

4.3 Assessment of Effects Summary

The potential adverse effects of a three-lot rural subdivision in the Rural Production Zone have been assessed. The existing environment is highly modified and does not solely reflect rural production activities. Instead, it represents a mix of rural – rural lifestyle and Airport uses, with a strong emphasis on rural lifestyle living along the road corridor. The soils have little productive value, and the applicant has volunteered to adhere to a range of consent notices to ensure the ongoing operations of the Airport are not disrupted. Overall, the development is compatible with the surrounding context and poses minimal environmental or community risks.

5 Consultation

Pursuant to Section 36A of the RMA, there is no duty to consult about a resource consent application. However, it is considered best practise to consult with those parties considered to be potentially adversely affected by a proposal.

The applicant has consulted with FNDC in a pre-application to determine the consenting pathway forward and to confirm that overall status of the proposal being a non-complying activity.

Consultation has also occurred with representatives from the Airport and TOP Energy. Correspondence from both parties can be found in **Appendix H**.

Other adjacent landowners are not considered to be affected by the subdivision as all adverse effects will be contained within the site. No further consultation has therefore been undertaken.

6 Notification Decision (s95)

6.1 Public Notification Assessment

A consent authority must follow the steps set out below in the order given to determine whether to publicly notify the application:

Step 1: Mandatory Public Notification – s95A(2) and (3)

	Criteria	Yes/No
(a)	Public Notification at Applicant's request - s95A(3)(a)	No
(b)	Public Notification is required under section 95C (s95A(3)(b))	No
(c)	Public Notification is required as the application is a joint application with an application under section 15AA of the Reserves Act 1977, to exchange recreation reserve land (s95A(3)(c))	No

Step 2: Public Notification Precluded in Certain Circumstances – s95A (4) and (5)

	Criteria	Yes/No
(a)	Rules or National Environmental Standards that preclude public notification – s95A(5)(a)	No
(b)	the application is for a resource consent for one or more of the following, but no other, activities: (i) a controlled activity: (iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity.	No

Step 3: Public Notification Required in Certain Circumstances – s95A(7)

	Criteria	Yes/No
(a)	The application is for one or more activities and any of those activities is subject to a rule or NES which **requires** public notification – s95A(8)(a)	No
(b)	The consent authority decides in accordance with section 95D, that the activity will have or is likely to have adverse effects on the environment that are more than minor – s95A(8)(b). Considering also the permitted baseline, immediately adjacent neighbours being precluded, those parties that have given written approvals, the activity status, and any trade competition.	No

Assessment of Effects on the Wider Environment:

As outlined above in the Assessment of Effects, all potential adverse effects on the wider environment, are no more than minor and are therefore avoided, remedied or mitigated.

Step 4: Public Notification in Special Circumstances - s95A(9)

	Criteria	Yes/No
	Determine whether special circumstances exist in relation to the application that warrant the application being publicly notified	No

6.1.1 Conclusion on Public Notification

Based on the findings of the above assessments under s95A of the RMA the application does not need to be publicly notified.

6.2 Limited Notification Assessment

A consent authority must follow the steps set out in sections 95B(2) – 95B(10) to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified under section 95A.

Step 1: Certain Affected Groups and Affected Persons must be notified - s95B(2)-(4)

	Criteria	Yes/No
(a)	Are there any affected protected customary rights groups – s95B(2)(a)	No
(b)	Is the activity on or adjacent to or may affect land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11 – s95B(3)(a)	No

Step 2: Limited Notification Precluded in Certain Circumstances – s95B(5)(6)

	Criteria	Yes/No
(a)	The application is for one or more activities and each activity is subject to a rule or NES that precludes Limited Notification – s95B(6)(a)	No
(b)	The application is a controlled activity landuse - s95B(6)(b)(i)	No
(c)	The application is a prescribed activity (see section 360H(1)(a)(ii))	No

Step 3: Certain other persons must be notified in accordance with s95E

Criteria		Yes/No
S95B(7)(a)	In the case of a boundary activity, an owner of an allotment with an infringed boundary is affected	No
S95B(7)(b)	In the case of any activity prescribed under section 360H(1)(b), a prescribed person in respect of the proposed activity is affected.	No
S95B(8)	In the case of any other activity, determine whether a person is an affected person in accordance with Section 95E. Considering the permitted baseline, written approvals	No

6.2.1 Assessment of Effects on immediately adjacent sites

The Assessment of Effects in Section 4 of this application confirms any potential effects have been avoided, remedied or mitigated such that there are no adverse effects on adjacent landowners to a degree that is more than minor.

Step 3 Summary:

In consideration of the above, there are no persons who will be adversely affected by the proposal.

Step 4: Limited Notification in Special Circumstances - s95B(10)

Criteria		Yes/No
(10)	Determine whether special circumstances exist in relation to the application that warrant the application being publicly notified	No

6.2.2 Conclusion on Limited Notification

Based on the findings of the above assessment under s95B of the RMA that the application does not need to be limited notified.

7 Statutory Assessment

7.1 Section 104 Assessment Overview

Section 104 requires, *when considering a resource consent application, that the council must, subject to Part II, have regard to:*

(a) any actual and potential effects on the environment of allowing the activity; and
(b) any relevant provisions of –
(i) a national environmental standard.
(ii) other regulations.
(iii) a national policy statement:
(iv) a New Zealand coastal policy statement:
(v) a regional policy statement or proposed regional policy statement:
(vi) a plan or proposed plan; and

(c) Any other matter the consent authority considers relevant and reasonably necessary to determine the application.

The Assessment of Effects likely to result from the proposal are outlined in Section 4 of this report, and are summarised as:

- Rural fragmentation, land use incompatibility and life supporting capacity of soils
- Rural Amenity and Onsite Liveability
- Reverse Sensitivity from Airport Operations
- Transport Effects
- Effects from Servicing
- Reverse sensitivity on Electrical Networks
- Positive Effects

The proceeding sections evaluate the proposal against the relevant statutory provisions as required by s104 (b).

Despite all section 104 considerations being "subject to Part 2", the Court of Appeal in *RJ Davidson Family Trust v Marlborough District Council [2018] NZCA 316* has held that consent authorities should have regard to the provisions of Part 2 however, where the relevant planning instruments (or suite of instruments) clearly give effect to part 2, an additional evaluation may not add anything useful. That is, "genuine consideration and application of relevant plan considerations may leave little room for Part 2 to influence the outcome". Part 2 RMA covers the purpose and principles of the Act and outlines key matters for consideration.

Section 5 provides that:

The purpose of this Act is to promote the sustainable management of natural and physical resources.

In this Act, sustainable management means managing the use, development, and protection of natural and physical resources in a way, or at a rate, which enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety while—

(a) sustaining the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and

(b) safeguarding the life-supporting capacity of air, water, soil, and ecosystems; and

(c) avoiding, remedying, or mitigating any adverse effects of activities on the environment.

Section 6 covers matters of national importance which need to be provided for.
Section 7 covers other matters which particular regard shall be had towards.
Section 8 covers the requirement to take into account the principles of the Treaty of Waitangi.

In considering the proposed activity and after a review of the relevant statutory instruments and provisions relevant to this application (provided below), I consider that Part 2 RMA is comprehensively captured by those provisions, and there is no need for any further evaluation of Part 2.

7.2 National Policy Statements

7.2.1 National Policy Statement for Highly Productive Land (2022)

The National Policy Statement for Highly Productive Land (NPS-HPL) came into force on 17 October 2022 ("the commencement date"). The NPS-HPL provides direction to improve the way highly productive land is managed under the RMA.

Highly Productive Land means:

- Land that has been mapped in accordance with clause 3.4 of the NPS-HPL and is included in an operative regional policy statement as required by clause 3.5; or,
- Until a regional policy statement containing maps of highly productive land in the region is operative, is land that at the commencement date zoned general rural or rural production; and contains land mapped by the New Zealand Land Resource Inventory as Land Use Capability Class 1, 2, or 3;

Land is not classified as Highly Productive Land where it is identified for future urban development; or subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.

The NZLRI-LUC database has defined this property as highly productive with Papakauri soils classed as 3s2, potentially productive and versatile for horticultural activities.

NPS-HPL contains the following relevant objective and associated policies:

- *OBJ: Highly productive land is protected for use in land-based primary production, both now and for future generations.*
- *POL 1: Highly productive land is recognised as a resource with finite characteristics and long-term values for land-based primary production.*
- *POL 2: The identification and management of highly productive land is undertaken in an integrated way that considers the interactions with freshwater management and urban development.*
- *POL 3: Highly productive land is mapped and included in regional policy statements and district plans.*
- *POL 4: The use of highly productive land for land-based primary production is prioritised and supported.*
- *POL 7: The subdivision of highly productive land is avoided, except as provided in this National Policy Statement.*
- *POL 8: Highly productive land is protected from inappropriate use and development.*
- *POL 9: Reverse sensitivity effects are managed so as not to constrain land-based primary production activities on highly productive land.*

Attached as **Appendix F** is a soils, land use capability and highly productive land report prepared by AgFirst. The primary conclusion of this report is that the soils have been incorrectly mapped in the NZLRI-LUC database. The report states that the database operates at a scale too broad to accurately describe local variations. Additionally, historic land uses, such as pastoral farming on burnt scrub soils, have led to the erosion of fertile soils. Consequently, the property now consists of hardy volcanic soils, which are not conducive to productive agricultural activities.

Turning now to the relevant objectives and policies, the report helpfully notes:

> "*There are long-term constraints on the soils on this property, high iron and aluminium content, boulders and extremely low fertility which severely restrict its use for horticulture. Its use for arable farming, even a crop during pasture renewal, is also severely restricted. At best, part of the southern end of the property could be used to grow a fodder crop (maize-for-silage) once in 10 years, as part of a pasture renewal programme. The boulders on the norther part of the section are so large and so widely dispersed that even this option may not be practicable.*
> *…*

Development as proposed, may help avoid fragmentation of large and geographically cohesive areas of genuinely 'highly productive land'.

…

The constraints on this land, including extremely low fertility, strongly leached and bouldery soils are permanent, inherent, constraints on economic viability which cannot be addressed through any reasonably practicable options that would make the land suitable for soil-based primary production, practices such as land drainage or irrigation, or by alternative production strategies. This land has no attributes, water or resources which could be reallocated or transferred (water and nutrient allocations) to or from any adjoining highly productive land, (nor could productivity be improved by boundary adjustments, amalgamations) or lease arrangements.

…

This property is surrounded on 3 sides by residential and small lifestyle properties and on the fourth by the airport. Even if it was big enough and was on highly productive soils, development for horticulture would create reverse sensitivity issues with these very close houses. If planted in kiwifruit, for example, it would be very difficult to comply with Regional air quality rules for the use of hi-cane, with houses so close to the property boundaries. As it is, the property is too small for commercial horticulture."

The subdivision is consistent with the objectives and policies as the land has been determined to have low productive value due to its poor soil quality and inherent constraints, making it unsuitable for primary production. Overall, the NPSHPL does not limit the proposed subdivision.

7.3 National Environmental Standards

7.3.1 Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011

The method prescribed under 6(2)(a) and (b) of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 has been used to establish whether the site is a piece of land as described in regulation 5(7).

Attached as **Appendix G** is a Preliminary Site Investigation (PSI) prepared by LDE Ltd. The PSI outlines that prior to 1990 the land was used for pastoral farming. The introduction of residential use occurred between 1990-1991 including recreational farming such as hobby cattle, horse storage and grazing. In completing the PSI the report authors conducted soil sampling in the area of the grazed paddocks. The conclusion of the PSI is that it is highly unlikely that there will be a risk to human health if this parcel of land is to be subdivided.

Accordingly, the proposed subdivision is a permitted activity under Regulation 8(4).

7.4 Regional and District Planning Instruments

7.4.1 Far North District Plan

The proposal's relationship to the relevant objectives and policies of both the Proposed and Operative District Plan have been examined and are outlined below.

OPERATIVE DISTRICT PLAN		
Objectives	**Policies**	**Comment**
Chapter 8 – Rural Environment		
8.3.2: To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development. 8.3.3: To avoid, remedy or mitigate the adverse and cumulative effects of activities on the rural environment. 8.3.6: To avoid actual and potential conflicts between land use activities in the rural environment. 8.3.7: To promote the maintenance and enhancement of amenity values of the rural environment to a level that is consistent with the productive intent of the zone. 8.3.8: To facilitate the sustainable management of natural and physical resources in an integrated way to achieve superior outcomes to more traditional forms of subdivision, use and development through management plans and integrated development. 8.3.9: To enable rural production activities to be undertaken in the rural environment. 8.3.10: To enable the activities compatible with the amenity values of rural areas and rural production activities to establish in the rural environment. 8.6.3.6: To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones. 8.6.3.7: To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources	8.4.2: That activities be allowed to establish within the rural environment to the extent that any adverse effects of these activities are able to be avoided, remedied or mitigated and as a result the life supporting capacity of soils and ecosystems is safeguarded and rural productive activities are able to continue. 8.4.3: That any new infrastructure for development in rural areas be designed and operated in a way that safeguards the life supporting capacity of air, water, soil and ecosystems while protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna, outstanding natural features and landscapes. 8.4.4: That development which will maintain or enhance the amenity value of the rural environment and outstanding natural features and outstanding landscapes be enabled to locate in the rural environment. 8.4.5 That plan provisions encourage the avoidance of adverse effects from incompatible land uses, particularly new developments adversely affecting existing land-uses (including by constraining the existing land-uses on account of sensitivity by the new use to adverse affects from the existing use – i.e. reverse sensitivity). 8.6.4.1: That the Rural Production Zone enables farming and rural production activities, as well as a wide range of activities, subject to the need to ensure that any adverse effects on the environment, including any reverse sensitivity effects, resulting from these activities are avoided, remedied or mitigated and are not to the detriment of rural productivity. 8.6.4.4: That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone. 8.6.4.5 That the efficient use and development of physical and natural resources be taken into account in the implementation of the Plan.	The proposed subdivision is consistent with these objectives and policies as it ensures the life-supporting capacity of soils is not compromised, given the low productive value of the land. The site is already a fragmented site and offers little productive potential. Its re-purposing for rural-residential use is a more efficient use of the site. The development mitigates adverse effects on the rural environment by integrating well with the existing rural lifestyle character and avoiding conflicts with surrounding land uses. It promotes the maintenance and enhancement of rural amenity values through thoughtful design particularly in response to a narrower section than normal and retention of mature vegetation provides visual softening. Additionally, the subdivision supports sustainable management of natural resources and avoids reverse sensitivity issues by being well distanced and buffered by existing activities, ensuring compatibility with the productive intent of the Rural Production Zone. The subdivision is consistent with the zones intent to enable flexible use of the land by enabling development where it otherwise does not detract from the productive nature of the zone. Overall subdivision of the site as proposed is appropriate.

Chapter 13 – Subdivision		
13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities. 13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated. 13.3.5: To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage and include storm water management sufficient to meet the needs of the activities that will establish all year round. 13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created. 13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s). 13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services. 13.3.11 To ensure that the operation, maintenance, development and upgrading of the existing National Grid is not compromised by incompatible subdivision and land use activities	13.4.2 That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties 13.4.8: That the provision of water storage be taken into account in the design of any subdivision. 13.4.13: Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to s6 matters. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including: (a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns; (b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area; (c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas; (d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer Chapter 2 and in particular Section 2.5 and Council's "Tangata Whenua Values and Perspectives" (2004); (e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests; (f) protecting historic heritage through the siting of buildings and development and design of subdivisions. (g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development.	The subdivision is consistent with the relevant subdivision objectives and policies by ensuring the life-supporting capacity of soils is not compromised, given the low productive value of the land. The development mitigates adverse effects on the rural environment by integrating well with the existing rural lifestyle character and avoiding conflicts with surrounding land uses, including the airport and nearby residential properties. The design promotes sustainable management through thoughtful site layout, on-site water storage, and stormwater management. The subdivision ensures safe and effective vehicular and pedestrian access, with improvements to existing crossings and integration with the local road network. Additionally, the proposal maintains the rural amenity by retaining mature vegetation and minimizing visual impacts. There are no mapped sites of significance to Maori within the property or in the near vicinity nor historic heritage. There is an ecological habitat on the eastern side of the Waitmate North Road administered by DoC however the proposed subdivision is unlikely to interact with this environment, particularly as the road obstructs natural flows. The subdivision avoids reverse sensitivity issues, ensuring compatibility with the productive intent of the Rural Production Zone. Hydraulic neutrality will be achieved and there are no identified natural hazards risks.
Chapter 15.2 - Airports		
15.2.2.1 To maintain the safe and efficient operation of airports in the District.	15.2.3.1 That restrictions be imposed on use and development which could limit the operation of the airports. 15.2.3.2 That provision be made for the continued use and any future requirements for expansion of the existing airports.	The applicant has consulted with the Airport and provided an Airport Noise Assessment. The outcomes of both processes has led the applicant to volunteering to consent notices to ensure future owners and occupiers are aware of the no-complaints covenant, building height and colour of their roofs. As confirmed by the Marshal Day Acoustics report, future dwellings could be constructed on each of the vacant allotments with standard building materials to achieve a pleasant indoor noise environment of equal to or less than 40 dB. Overall, the proposal is consistent with these objectives and policies

ROPOSED DISTRICT PLAN		
Subdivision		
SUB-O1: Subdivision results in the efficient use of land, which: a) achieves the objectives of each relevant zone, overlays and district wide provisions; b) contributes to the local character and sense of place; c) avoids reverse sensitivity issues that would prevent or adversely affect activities already established on land from continuing to operate; d) avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located; e) does not increase risk from natural hazards or risks are mitigates and existing risks reduced; and f) manages adverse effects on the environment. SUB-O2 Subdivision provides for the: a) Protection of highly productive land; and b) Protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, Areas of High Natural Character, Outstanding Natural Character, wetland, lake and river margins, Significant Natural Areas, Sites and Areas of Significance to Māori, and Historic Heritage.	SUB-P3 Provide for subdivision where it results in allotments that: a) are consistent with the purpose, characteristics and qualities of the zone; b) comply with the minimum allotment sizes for each zone; c) have an adequate size and appropriate shape to contain a building platform; and d) have legal and physical access. SUB-P8 Avoid rural lifestyle subdivision in the Rural Production zone unless the subdivision: a) will protect a qualifying SNA in perpetuity and result in the SNA being added to the District Plan SNA schedule; and b) will not result in the loss of versatile soils for primary production activities.	The proposed subdivision is not contrary to the relevant objectives and policies. Overall, the works will not remove highly productive land from productive purposes as the AgFirst report confirms the land does not host productive qualities. Therefore, there is no strict direction to avoid subdivision of this nature. Similarly, though the proposal will result in the lack of a balance allotment in the Rural Productive Zone, all lots achieve the minimum 3000m^2. It should be noted that the previous subdivision of the existing title was already less than the discretionary activity minimum of 4ha. Therefore the 'lifestyle' character of the site is part of the existing environment. Furthermore, this pattern of development is consistent with the established form and function along Waimate North Road, Valencia Lane, and Amuri Road. Being close to Kerikeri township this environment is well located to provide for the rural lifestyle living style without compromising productive lands. The proposed 20m x 20m (400m^2) building footprint is a suitable area for future development, allowing for a viable and functional dwelling. This size is adequate to accommodate a range of residential designs consistent with the character of the area. Furthermore, the civil report demonstrates that a development could feasibly exist onsite with vehicle access and manoeuvring, compliant wastewater disposal fields and onsite stormwater disposal, ensuring that all onsite infrastructure servicing is achieved. The site is not subject to, nor does it assist in preserving qualities to, a significant natural area, outstanding landscape, site of significance to Māori, or any other special planning quality. While the objectives and policies may not be strictly enabling of this development, the existing environmental context supports its viability and there is no firm framework to avoid in this circumstance. The subdivision remains a practical use of the land resource and is generally consistent with the existing environment.
Horticultural Zone		

HZ-O1 The Horticulture zone is managed to ensure its long-term availability for horticultural activities and its long-term protection for the benefit of current and future generations. HZ-O3 Land use and subdivision in the Horticulture zone: a) avoids land sterilisation that reduces the potential for highly productive land to be used for a horticulture activity; b) avoids land fragmentation that comprises the use of land for horticultural activities; c) avoids any reverse sensitivity effects that may constrain the effective and efficient operation of primary production activities; d) does not exacerbate any natural hazards; e) maintains the rural character and amenity of the zone; f) is able to be serviced by on-site infrastructure.	HZ-P4 Ensure residential activities are designed and located to avoid, or otherwise mitigate, reverse sensitivity effects on horticulture activities, including adverse effects associated with dust, noise, spray drift and potable water collection. HZ-P5 Manage the subdivision of land in the Horticulture zone to: a) avoid fragmentation that results in loss of highly productive land for use by horticulture and other farming activities; b) ensure the long-term viability of the highly productive land resource to undertake a range of horticulture uses; c) enable a suitable building platform for a future residential unit; and d) ensure there is provision of appropriate onsite infrastructure.	The soil on the site is not considered to have productive qualities, and the land is situated between highly fragmented areas characterized by rural lifestyle development. The site itself is already less than 4ha. The site is well-buffered from existing and potential horticultural operations due to its position, bordered by rural lifestyle properties on three sides and the Airport to the east. Consequently, the subdivision will not exacerbate land fragmentation or reduce the potential for highly productive land to be used for horticultural activities. Additionally, all necessary infrastructure will be provided onsite within each respective allotment, ensuring that the subdivision is self-sufficient and does not place additional demands on external services. The proposal is not contrary to the relevant objectives and policies.

Overall, while the proposal is not entirely consistent with the objectives and policies of the ODP and, to a greater extent, the PDP, it is not contrary overall. The ODP follows a flexible policy framework in enabling rural lifestyle activities where they do not stifle productive activities from occurring.

The purpose of the Rural Production Zone under the ODP is to support a diverse range of farming, forestry, and rural lifestyle activities while ensuring the sustainable management of natural and physical resources. Under the PDP, the Horticultural Zone is set up to prevent land fragmentation, protect versatile soils, and mitigate reverse sensitivity issues between horticultural operations and residential activities.

In this case, the existing environment and land development pattern are somewhat at odds with the purposes of both the ODP and PDP. The surrounding environment has shifted more towards rural-residential or lifestyle character and landuse pattern. The proposed subdivision aligns with the established land use pattern of smaller rural lifestyle lots and does not detract from the functionality of either the Rural Productive Zone or the Horticultural Zone, or the Kerikeri Airport.

7.4.2 Other Statutes or Matters

Section 104(1)c) requires that any other matter the consent authority considers relevant and reasonably necessary to determine the application be considered.

7.5 Section 104B – Determination of applications for discretionary or non-complying activities

After considering an application for a resource consent for a discretionary activity or non-complying activity, a consent authority—

(a) may grant or refuse the application; and
(b) if it grants the application, may impose conditions under section 108.

The application has been determined to be a non-complying activity.

7.6 Section 104D - Restrictions for non-complying activities

1) Despite any decision made for the purpose of notification in relation to adverse effects, a consent authority may grant a resource consent for a non-complying activity only if it is satisfied that either—
(a) the adverse effects of the activity on the environment (other than any effect to which section 104(3)(a)(ii) applies) will be minor; or
(b) the application is for an activity that will not be contrary to the objectives and policies of—
(i) the relevant plan, if there is a plan but no proposed plan in respect of the activity; or
(ii) the relevant proposed plan, if there is a proposed plan but no relevant plan in respect of the activity; or
(iii) both the relevant plan and the relevant proposed plan, if there is both a plan and a proposed plan in respect of the activity.

The adverse environmental effects of the proposal have been identified and assessed in Section 4 of this report. There are no adverse effects of the proposal that are more than minor because the

subdivision is reflective of the existing wider environment, consent notices and conditions seek to manage potential conflicts with the Airports operations, and the soils are not considered to be of high productive value. The proposal passes the test under section 104D(1)(a).

The application has been assessed against the objectives and policies of both the Proposed and Operative District Plan in Section 7 of this report. The proposal has been found to overall not be contrary to the Objectives and Policies of either plan. The proposal is in accordance with section 104D(b).

The proposal passes both branches of the s104D 'gateway test', Council may grant consent.

7.7 Section 104 Assessment Conclusion

The proposal has been assessed against the relevant planning instruments and been found to be a **Non-Complying Activity** under the FNDP. The assessment of environmental effects has concluded that there are less than minor adverse environmental effects of the subdivision. The proposal has been assessed against the objectives and policies of the district plan and overall has been found to be not contrary to the momentum of the plan. The proposal has met both tests under section 104D and therefore the consent authority is able to grant consent.

7.8 Section 106

A consent authority may refuse to grant a subdivision consent, or may grant a subdivision consent subject to conditions, if it considers that the land is or is likely to be subject to or is likely to accelerate material damage from natural hazards, or where sufficient provision for legal and physical access to each allotment has not been made.

In this case, legal access to the sites has been provided for directly off the local road and protected via easements for Lots 2 and 3. There are no relevant mapped natural hazards that the proposal will accelerate or incur material damage as a result. I consider that the provisions of Section 106 do not limit the proposed subdivision from occurring.

8 Draft Conditions

The following conditions are offered by the applicant:

Pursuant to Section 221 of the RMA, a consent notice detailing the following:

- No complaints notice on the Bay of Islands Airport operations
- Roof surfaces shall be painted in non-reflective colours
- Prior to construction of any habitable building or non-habitable building greater than 15m^2, a licensed surveyor shall confirm the building height relative to the airport protection surfaces.
- No habitable buildings shall be constructed outside of the approved nominated building platforms on Lots 1 and 3 as shown on the approved development plan, unless an acoustic certificate prepared by a suitably qualified acoustic consultant is provided to Council confirming that the building will comply with the following acoustic internal noise level requirement:
    - Dwellings to be designed to ensure aircraft noise in any habitable room is no greater than 40 dB Ldn. If windows and doors are required to be closed to achieve 40 dB Ldn,

a ventilation and cooling system shall be provided to enable occupants to remain comfortable without having to open doors or windows for ventilation or cooling.

We request that draft conditions are circulated for feedback prior to the decision being issued.

9 Conclusion

The proposal has been assessed in accordance with the requirements of s104, S106 s108 and Part 2 RMA, and will have a positive impact and less than minor adverse effects.

The proposed subdivision involves creating three lots within a highly fragmented rural lifestyle area, with no significant new activities being introduced to the existing environment. The soil on the site is not highly productive, and the land is well-buffered from horticultural operations by surrounding rural lifestyle properties and the Airport. All necessary infrastructure, including on-site water storage, stormwater management, and wastewater systems, will be provided within each allotment.

The Assessment of Effects concludes that the effects are less than minor, and that public or limited notification of the application is unnecessary. The s104 assessment determined that the proposal is not contrary to relevant Objectives and Policies, or other relevant legislation. As a non-complying activity, the proposal is therefore able to pass both limbs of the tests under section 104D RMA and in our opinion the consent authority can grant consent for subdivision in accordance with this application.

Appendix A

Title and Legal Instruments

KAITIAKI

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**NA135D/143**
Land Registration District	**North Auckland**
Date Issued	13 April 2004

Prior References
NA106A/151

Estate	Fee Simple
Area	1.0108 hectares more or less
Legal Description	Lot 1 Deposited Plan 207521
Registered Owners	

Philip John Gasston and Ruth Judith Gasston

Interests

Subject to Section 59 Land Act 1948

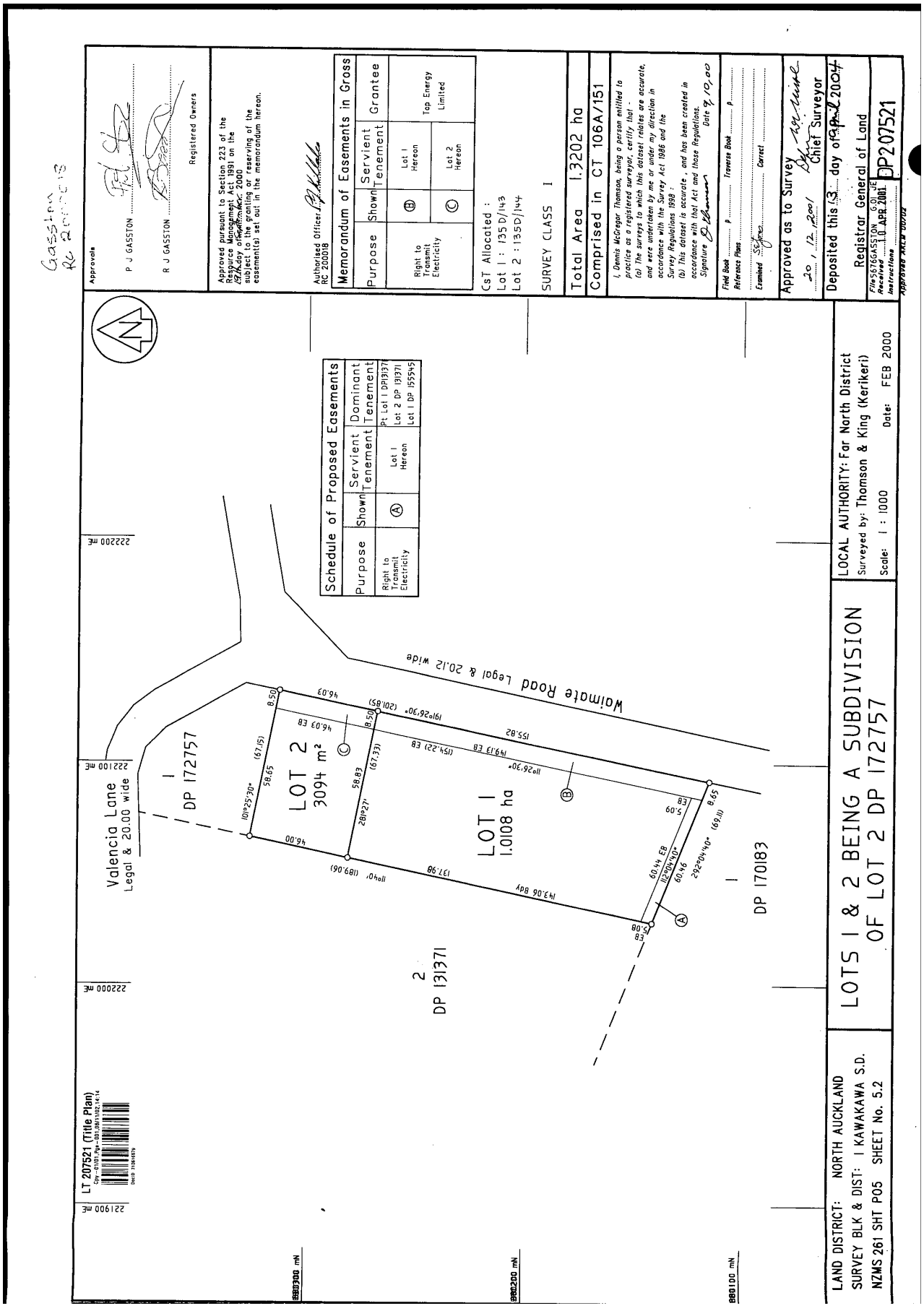
Subject to an electricity supply right over part marked A on DP 172757 created by Transfer B957340.1

D337853.2 Settled under the Joint Family Homes Act 1964 - produced 7.12.1998 at 1.19 pm and entered 17.3.1999 at 9.00 am

Subject to a right (in gross) to transmit electricity over part marked B on DP 207521 in favour of Top Energy Limited created by Easement Instrument 5964808.5 - 13.4.2004 at 9:00 am

The easements created by Easement Instrument 5964808.5 are subject to Section 243 (a) Resource Management Act 1991

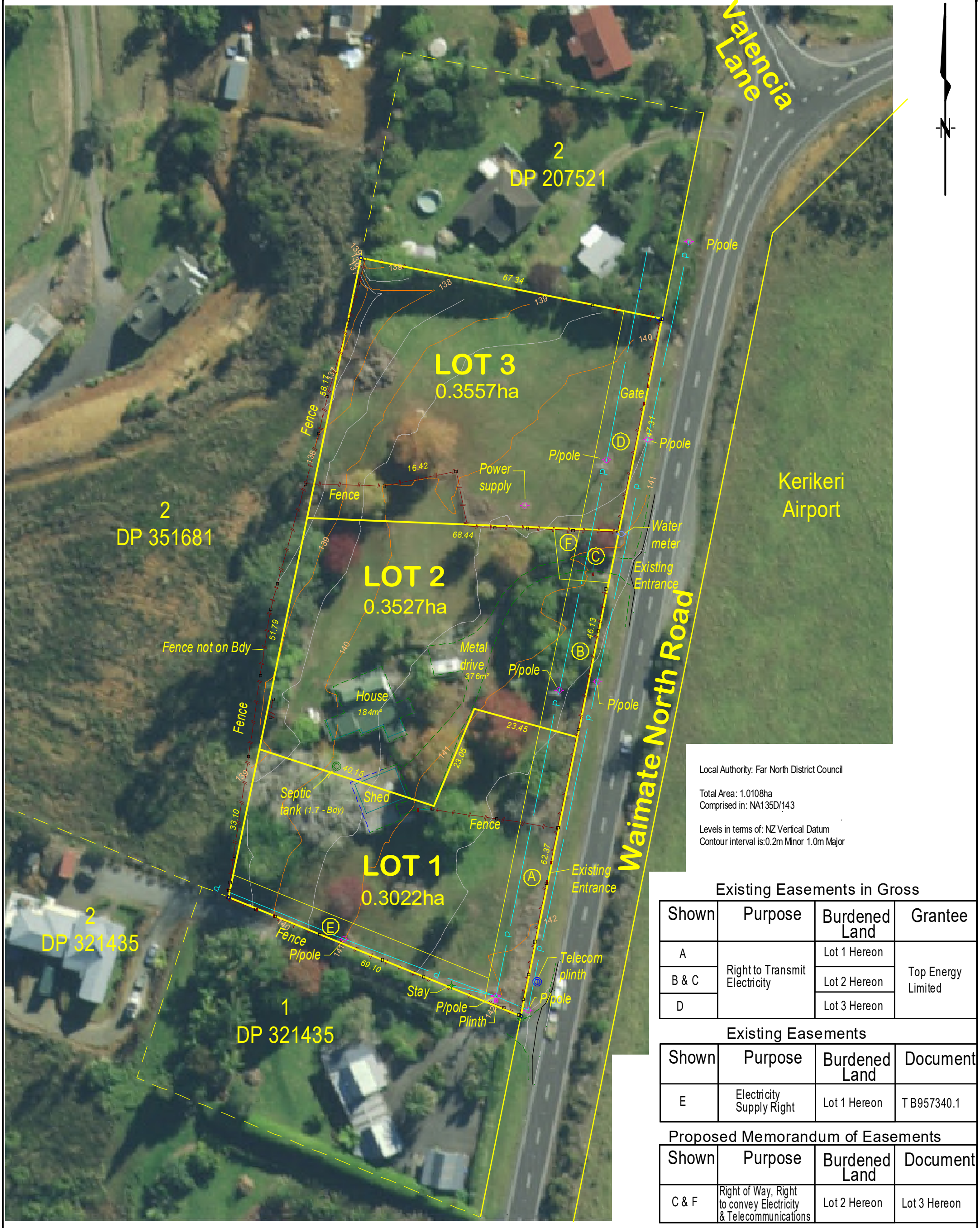
9583668.2 Mortgage to ASB Bank Limited - 11.12.2013 at 11:18 am


Gassing Re 200018
Approvals
P J GASSTON
R J GASSTON
Registered Owners
Approved pursuant to Section 223 of the Resource Management Act 1991 on the 13th day of December 2001 subject to the granting or reserving of the easement(s) set out in the memorandum hereon.
Authorised Officer: RC 200018
Memorandum of Easements in Gross
Purpose | Shown | Servient Tenement | Grantee
Right to Transmit Electricity | B | Lot 1 Hereon | Top Energy Limited
Right to Transmit Electricity | C | Lot 2 Hereon
Cst Allocated :
Lot 1 : 135D/143
Lot 2 : 135D/144
SURVEY CLASS I
Total Area 1.3202 ha
Comprised in CT 106A/151
I, Dennis McGregor Thomson, being a person entitled to practice as a registered surveyor, certify that -
(a) The surveys to which this dataset relates are accurate, and were undertaken by me or under my direction in accordance with the Survey Act 1986 and the Survey Regulations 1998 :
(b) This dataset is accurate, and has been created in accordance with that Act and those Regulations.
Signature Date 9.10.00
Field Book p
Reference Plans p
Traverse Book p
Examined Signed Correct
Approved as to Survey
20.12.2001
Chief Surveyor
Deposited this 13 day of Sept 2004
Registrar General of Land
File 56766ASSTON 6.01.JE
Received 10 APR 2001
Instructions
DP 207521
Schedule of Proposed Easements
Purpose | Shown | Servient Tenement | Dominant Tenement
Right to Transmit Electricity | A | Lot 1 Hereon | Pt Lot 1 DP 131371
Lot 2 DP 131371
Lot 1 DP 155545
Valencia Lane
Legal & 20.00 wide
Waimate Road Legal & 20.12 wide
LOT 2
3094 m²
LOT 1
1.0108 ha
1 DP 172757
2 DP 131371
1 DP 170183
LOCAL AUTHORITY: Far North District
Surveyed by: Thomson & King (Kerikeri)
Scale: 1 : 1000 Date: FEB 2000
LOTS 1 & 2 BEING A SUBDIVISION OF LOT 2 DP 172757
LAND DISTRICT: NORTH AUCKLAND
SURVEY BLK & DIST: I KAWAKAWA S.D.
NZMS 261 SHT P05 SHEET No. 5.2
LT 207521 (Title Plan)

Appendix B

Scheme Plan and Schedule of Easements

KAITIAKI



Local Authority: Far North District Council

Total Area: 1.0108ha
Comprised in: NA135D/143

Levels in terms of: NZ Vertical Datum
Contour interval is:0.2m Minor 1.0m Major

Existing Easements in Gross

Shown	Purpose	Burdened Land	Grantee
A	Right to Transmit Electricity	Lot 1 Hereon	Top Energy Limited
B & C		Lot 2 Hereon	
D		Lot 3 Hereon	

Existing Easements

Shown	Purpose	Burdened Land	Document
E	Electricity Supply Right	Lot 1 Hereon	T B957340.1

Proposed Memorandum of Easements

Shown	Purpose	Burdened Land	Document
C & F	Right of Way, Right to convey Electricity & Telecommunications	Lot 2 Hereon	Lot 3 Hereon

0 5 10 15 20 25 30 35 40 45 50m

Prepared for: P J & R J Gasston

This plan and accompanying report(s) have been prepared for the purpose of obtaining a Resource Consent only and for no other purpose. Use of this plan and/or information on it for any other purpose is at the user's risk.

AREAS AND MEASUREMENTS SUBJECT TO FINAL SURVEY

WILLIAMS AND KING
Registered Land Surveyors, Planners & Land Development Consultants
Ph: (09) 407 6030
Email: kerikeri@saps.co.nz
27 Hobson Ave
PO Box 937 Kerikeri

Proposed Subdivision of Lot 1 DP 207521

	Name	Date
Survey	MP	Oct 2024
Design		
Drawn	W & K	Oct 2024
Rev		Mar 2025

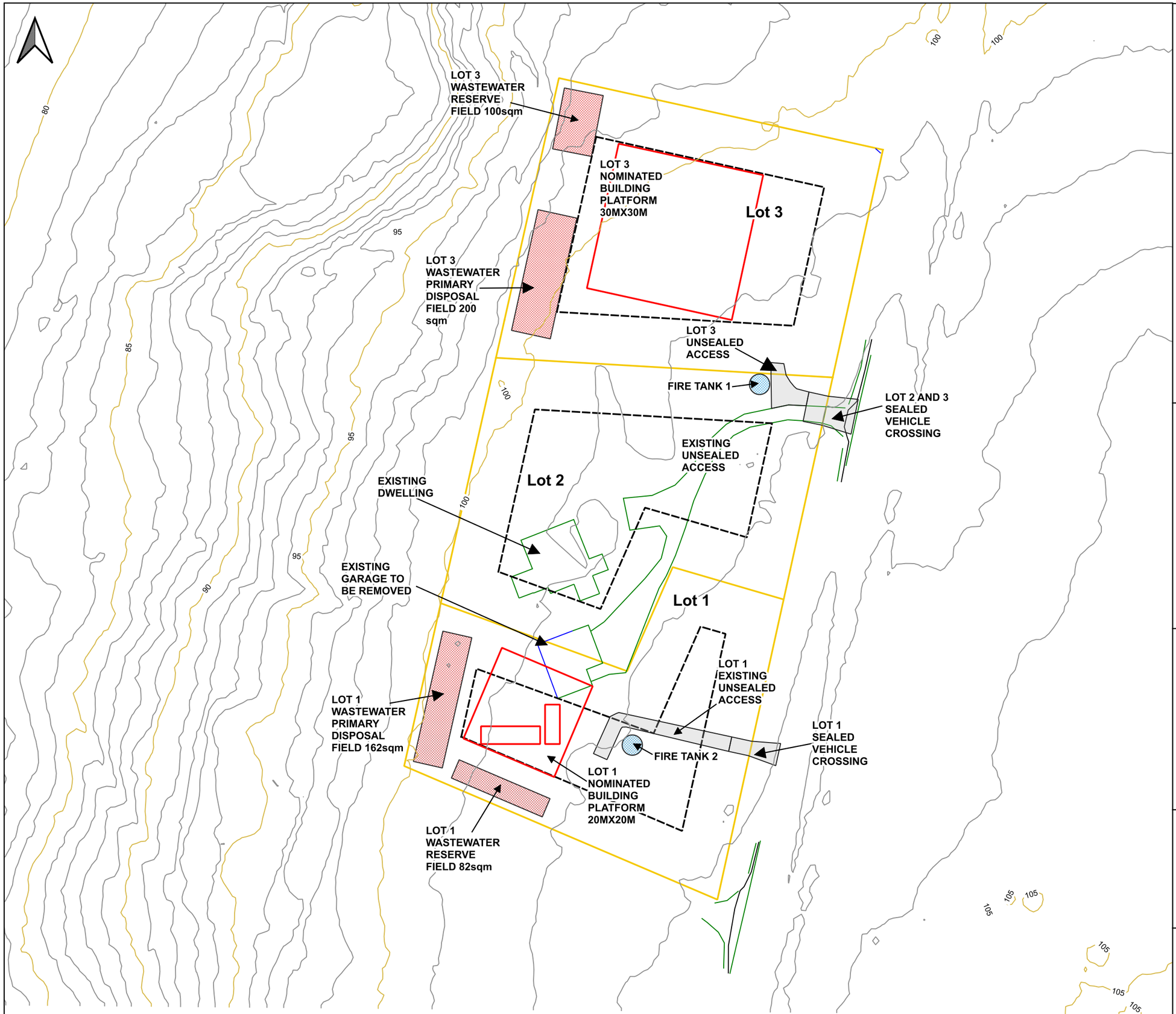
ORIGINAL
SCALE 1:750
SHEET SIZE A3

24473

Appendix C

Development Concept Plan

KAITIAKI



LEGEND

- Proposed Boundary
- Proposed Building Platform
- Proposed Accessway
- Proposed Wasterwater Disposal Field
- Proposed Stormwater Atternuation Field
- 10 m Boundary Setback

0 15 30 45 60 m

SCALE A3: 1:750

NOTES

1. Aerial basemap and property boundaries sourced from LINZ Data Service (CC-BY 4.0).
2. Topographic contours derived from LiDAR data.
3. Investigation locations shown approximately only.

CLIENT
C & E Gasston

PROJECT
Proposed Subdivision
194 Waimate North Road, Kerikeri

DRAWING TITLE
Development Plan

LDE
engineers • scientists

PROJECT REF	DRAWING REF	REVISION
27655	27655-1	A
DATE	PREPARED BY	CHECKED BY
25/02/2025	CJG	

FILE PATH
M-FILES\LDE - Project\49557-27655\Geo QGIS Zip Folder (ID 79084)\27655 QGIS Site Maps\27655 194 Waimate North Road.qgz

Appendix D

Civil Suitability Report

KAITIAKI

LDE
engineers • scientists

Caleb and Erin Gasston

SITE SUITABILITY AND CIVIL INFRASTRUCTURE REPORT

194 Waimate North Road, Kerikeri

Project Reference: 27655
March 20, 2025

DOCUMENT CONTROL

Version	Date	Comments
A	28/02/2025	Issued for Consent

Prepared By	Reviewed By	Authorised By
Hamish Gibson BEngTech – Civil, MEngNZ	**Neil Douglas** *BEng(Hons) Civil, MEngNZ*	**Conor Pullman** Chartered Engineering Geologist *BSc, PGDipSci, CMEngNZ (PEngGeol)*

CONTENTS

1 INTRODUCTION

LDE Ltd was engaged by Caleb and Erin Gasston to undertake a civil and geotechnical engineering assessment for the proposed subdivision of Lot 1, DP 207521, 194 Waimate North Road, Kerikeri (Figure 1). It is proposed to subdivide the existing property to create two additional residential lots. Lot 2 will contain the existing dwelling and lots 1 & 3 will contain proposed building platforms for 4-5-bedroom dwellings (Occupancy of 9 persons).

This report has been prepared for submission alongside a Resource Consent application.

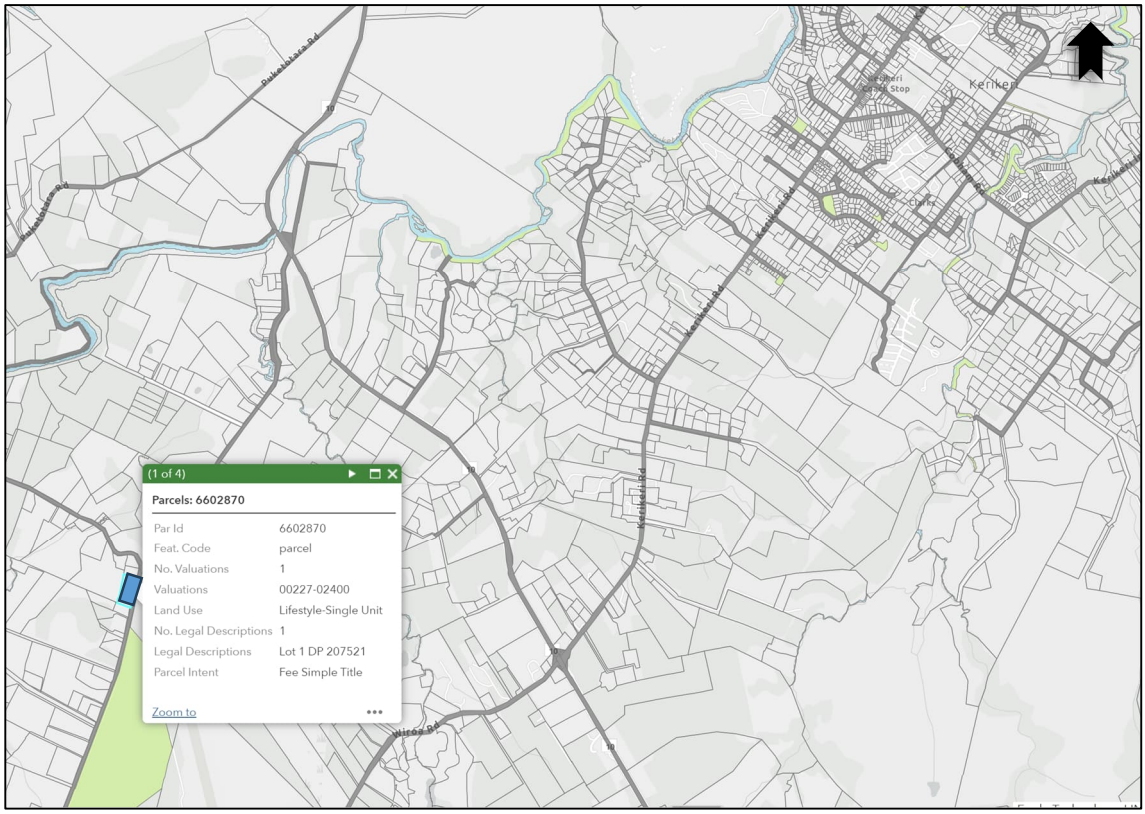


Figure 1: Location plan 194 Waimate North Road, Kerikeri

2 PROPOSED DEVELOPMENT

It is proposed to subdivide the site into three residential lots. The existing metaled accessway will be retained to provide access to proposed lot 2 (containing the existing dwelling) and access to the new proposed Lot 3. There is an existing farm access to Lot 1 which has recently been re-metaled this will be retained for access to Lot 1. The vehicle crossings from Waimate North Road will require upgrading to FNDC standards for both accessways.

A building site on each lot has been identified as a 30x20m on lot 1 and a 30x30m on lot 3 (marked with red squares Figure 2). The site is 4-5%, sloping towards the west. The site has no signs of instability. The proposed scheme plan is shown in Figure 2 below.

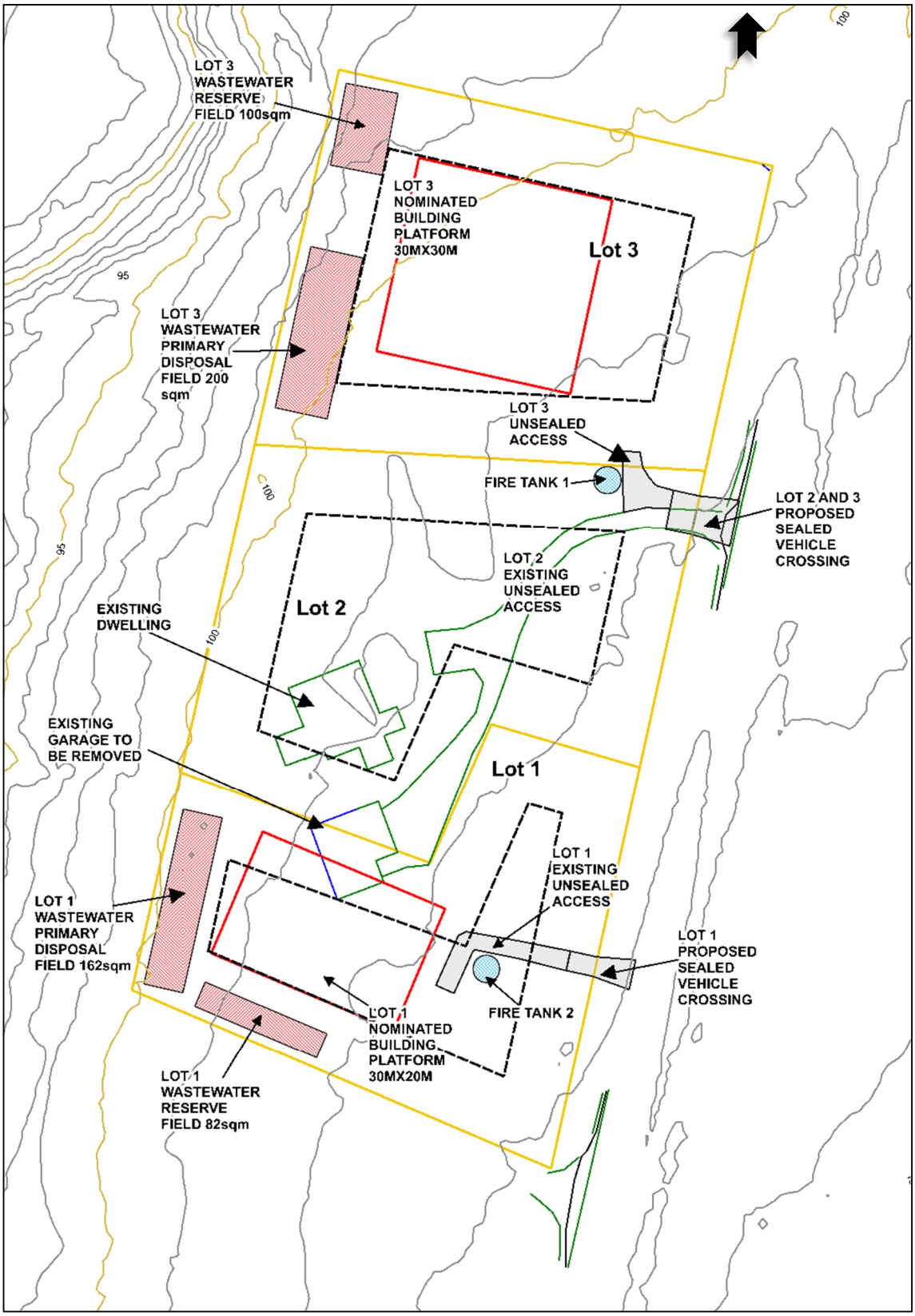


Figure 2: Site plan of proposed subdivision

3 DESKTOP STUDY

3.1 Site Description

The site is situated approximately 4.5 km to the southwest of the Kerikeri township. The site, legally described as LOT 1 DP 207521, is roughly rectangular in shape and comprises approximately 1.0 ha of land. The surrounding area consists mainly of rural lifestyle and residential block properties. The property directly east of 194 Waimate North Road, is the Bay of Islands Airport and will require planning considerations.

The proposed subdivision is situated along a straight section of Waimate North Road and is very moderate (4-5 %) sloping towards the west.

The existing lot is currently a single large residential lot.

Figure 3: Subject property marked.

An existing dwelling with a garage is located in the middle of the site (proposed Lot 2) (Figure 4). The existing dwelling has an unsealed vehicle crossing from Waimate North Road (sealed road). Another existing metalled accessway forms access to the paddock, which is proposed to become Lot 1. The existing garage which is located on the proposed boundary between Lot 1 and Lot 2 will be removed.

There is no public water supply, sewer or stormwater reticulation located along Waimate North Road in the vicinity of the site. The existing dwelling is serviced by a consented potable irrigation water supply and an on-site waste-water treatment and disposal system.

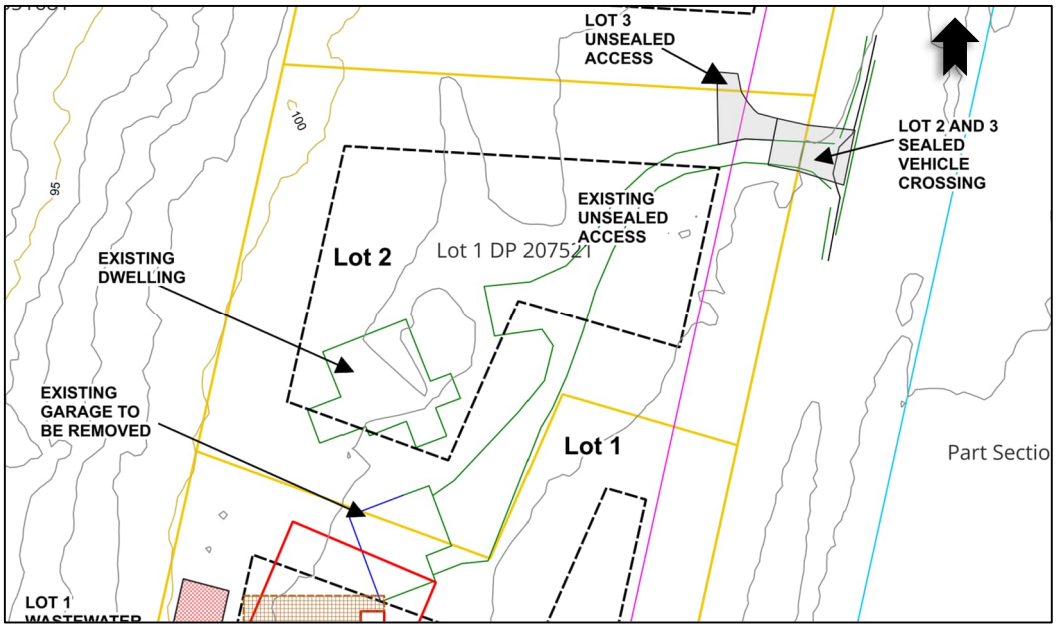


Figure 4: Existing access and structures (Garage to be removed).

3.2 Mapped Hazards

LDE reviewed FNDC's Far North Maps (FNDC, 2024) and NRC's Hazard Maps (Northland Regional Council, 2024). The site is not mapped as being impacted by any of the natural hazards mapped or assessed by FNDC or NRC.

3.3 Historical Information

LDE's review of relevant historical information including historic aerial photographs revealed the following:

- The existing structures were constructed at the site between 1990 and 1991. The dwelling is of timber construction and was re-sited from an original location in Paihia.
- A small shed once occupied the northern part of the site, this was demolished prior to the construction of the dwelling and garage in the 1990's.
- Throughout its history, the site has been predominantly covered in pasture.
- Since 1990 the site has been used for residential purposes, and occasional light grazing.

5 INFRASTRUCTURE ASSESSMENT

5.1 Water Supply

5.1.1 Onsite Supply

No reticulated water supply is available along Waimate North Road.

Accordingly, we consider that potable water supply can be satisfied by collecting rainwater from roof areas and storage in rainwater tanks. We recommend installing a minimum storage tank(s) containing 50,000L for potable water supply for a standard 4-5 bedroom dwelling.

Lot 2 is serviced by an irrigation water supply for drinking. Firefighting supply will be supplied by combined tanks with Lots 1 and 3. These will be adequate for future use.

Lot 1 and 3 shall have a minimum 2 x 25,000L tanks installed for drinking purpose. Appropriate filters should be installed to provide suitable drinking water.

A minimum of 45,000L of water will be provided for dedicated firefighting supply for the entire subdivision, one tank will be located on Lot 1 near the accessway and the other will be located on Lot 2 near access for Lot 3. This will allow adequate water supply in case of emergency to all buildings on site.

However, it should be noted that additional storage tanks can be installed at the property owner's discretion to provide redundancy during periods of drought.

5.1.2 Firefighting Water Supply

There are no stock/irrigation ponds or streams available for firefighting. There is an irrigation water main located along the road that 194 Waimate North Road has permission to use, the pressure in this line is fairly poor, therefore, cannot be used for firefighting, however, is an alternate source if necessary.

Therefore, we would recommend providing on-site storage of 45,000 litres for the entire development, the outlet is located at such height to ensure a minimum level of water is available at all times for firefighting purposes. The tanks need to be located in an appropriate location so access to the tanks is available from a hardstand area. The Tanks will need to be displayed with a Fire Fighting symbol and include a Float switch connected to the irrigation supply to ensure the tanks hold a minimum 45,000L.

The Fire fighting tanks shall be located, one on Lot 1 near the accessway and one on Lot 2 near the entrance to Lot 3 as shown in figure 5.

5.2 Onsite Wastewater Disposal

There is no existing public reticulated wastewater system available and therefore onsite wastewater disposal will be required for each lot.

5.2.1 Existing Onsite Wastewater System

The existing dwelling on proposed lot 2 has an onsite wastewater that services its existing building, this has annual inspections and is suitable for continued use for Lot 2.

The location of this system is located within the proposed boundaries of proposed lot 2 and appears to be in good working order with no surface ponding noticed and/or odour from the septic tank vent at the time of inspection

5.2.2 Proposed Onsite Wastewater System (Lot 1 & 3)

A geotechnical assessment of the proposed building site was completed by LDE on 19th November 2024. The soil was identified as Category 5 with a daily loading rate of 10mm/day for an AES system.

5.2.3 Daily Wastewater Demand

Lots 1 and 3 will be given to family members of Lot 2. The family has advised that during family events up to 20 persons will attend. Therefore, we propose providing upsized systems to ensure the system can handle the peak loads.

For Lot 1, we assume a six-bedroom dwelling with an occupancy of 9 persons is likely to be constructed, we have calculated the required disposal areas to demonstrate that onsite disposal is available within the proposed lot. As a result of the large family events, we recommend installing a larger septic tank to allow additional buffer and release of septic waste. Accordingly, a building-specific design will be required for the dwelling at building consent which will specifically size the treatment device and disposal field. With an on-site rainwater collection from the roof areas as water supply and assuming standard water-saving fixtures will be installed, a wastewater flow allowance of 180L/day/person has been used in the onsite disposal design system. These assumptions result in a daily wastewater flow of 1620 L/day for the dwelling.

For Lot 3, as a result of the large family events, we considered the demand to be the higher of a six-bedroom dwelling with an occupancy of 9 persons or a serviced camping ground with an occupancy of 20 persons. We have calculated the required disposal areas to demonstrate that onsite disposal is available within the proposed lot. Accordingly, a building-specific design will be required for the dwelling at building consent which will specifically size the treatment device and disposal field. With an on-site rainwater collection from the roof areas as water supply and assuming standard water-saving fixtures will be installed, a wastewater flow allowance of 180L/day/person for a 9 person dwelling results in a daily wastewater flow of 1620 L/day for dwelling or the a wastewater flow allowance of 100L/day/person for a 20 person service campsite results in a daily wastewater flow of 2000 L/day. Therefore, we have designed the system to cater for the higher daily wastewater flow of 2000 L/day.

5.2.4 Clearances

Minimum separation distances must be maintained as per the Far North District Council Guidelines and Auckland Councils TP58. The following setbacks are required for a secondary wastewater system:

- A 1.5 metre clearance from the disposal field to all site boundaries.
- A minimum 900mm groundwater table separation.
- A 15m setback from any surface water.

We consider a wastewater disposal field can be located within the proposed Lot 1 and Lot 3 meeting the required setback distances.

In the LDE investigation of the proposed wastewater disposal fields, no groundwater table was encountered 1.2m below the existing ground levels when a 50mm auger was sunk at the proposed location of the disposal field.

5.2.5 Subsurface Conditions

A borehole was undertaken near the proposed disposal field areas during the site investigation for Lot 1 and Lot 3.

Based on the findings of the site investigation and boreholes, the soil has been conservatively assessed as Category 5 – 'CLAY Loam – Moderately Draining.' A conservative design loading rate of 10mm/day has therefore been selected. It is proposed to dispose of the effluent via an AES system.

5.2.6 Recommended System

For resource consent purposes, a secondary treatment system is proposed. Many secondary treatment systems could be suitable which will be determined in the detailed design stage once developed plans for each dwelling are available. We consider the most viable option for the site is gravity discharging the secondary treated effluent to an AES treatment system. Given the daily wastewater demands above and the soil loading rate of 10 mm/day the disposal area for proposed Lot 1 will be 162m^2 (a 50% reserve area of 82m^2) and proposed Lot 3 will be 200m^2 (a 50% reserve area of 100m^2

The disposal fields of this size can be located within the lots as shown on Figure 5.

Accordingly, we consider that the proposed development can achieve wastewater disposal on site.

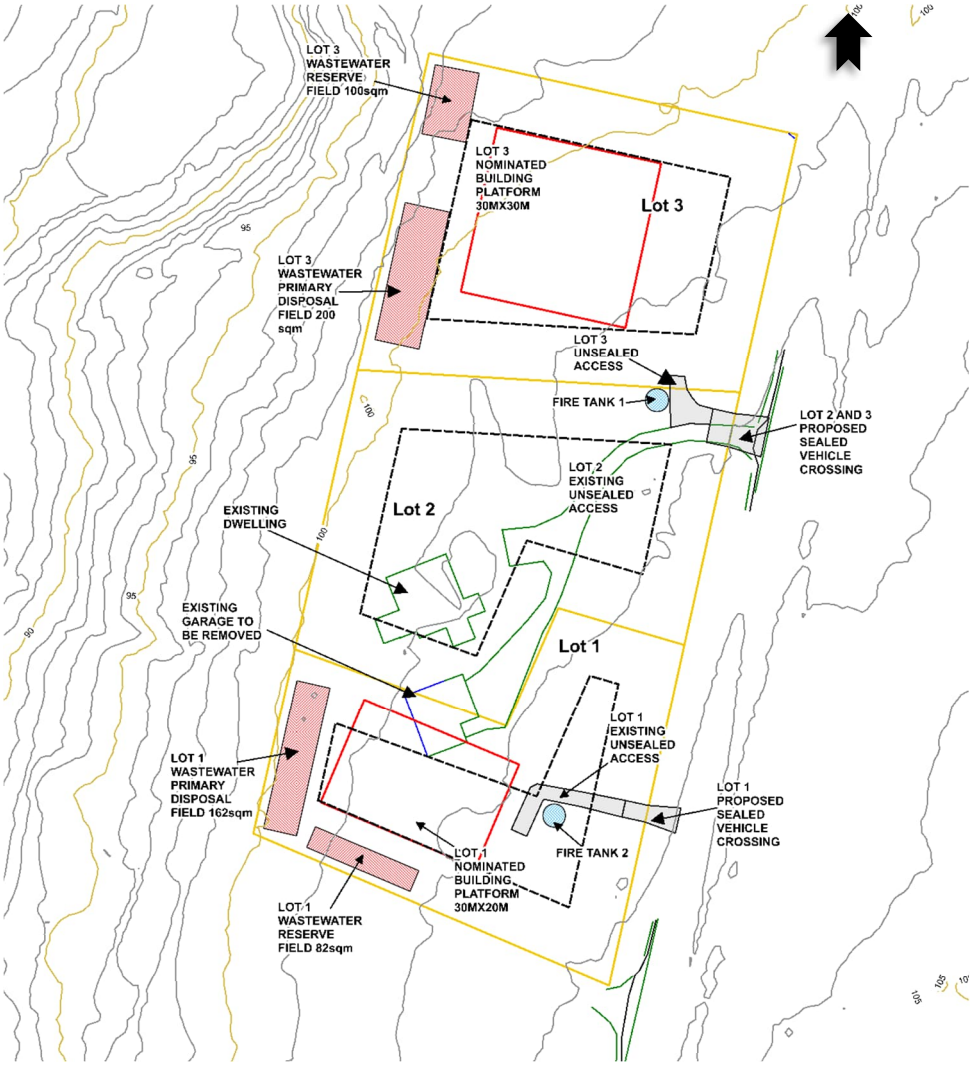


Figure 5: Site plan of proposed Wastewater and fire tank Layout

5.2.7 Detailed Design

We note the design outlined above is for resource consent application and a specific design suitable for building consent and construction will be required following the development of the house design plans for Lot 1 & 3.

At the time of building consent, it will be necessary to consider the installation of a cut-off drain above the proposed soakage field to intercept run-off from above and direct run-off around and away from the disposal area towards the overflow drain, which would be detailed in the site-specific wastewater design report for the building consent.

5.3 Stormwater

5.3.1 Existing Infrastructure

There is no existing public stormwater infrastructure within the vicinity of the subject site.

5.3.2 Overland Flow Paths / Flood Risk

Northland Regional Council GIS shows no flood-prone areas in the direct vicinity of the subject site.

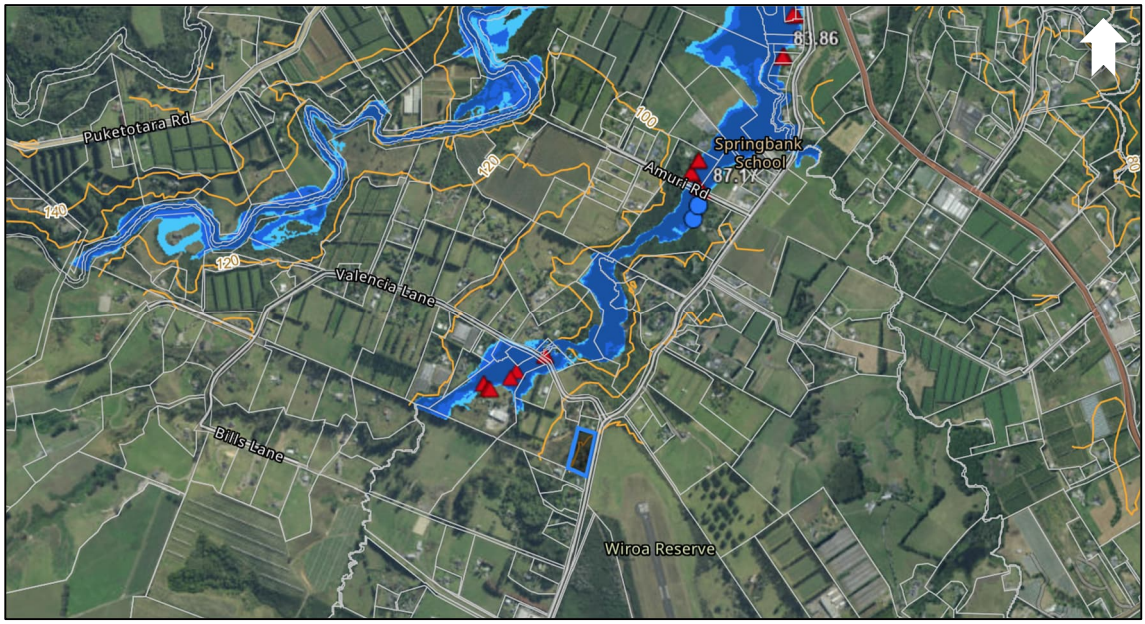


Figure 6: Natural Hazard Map (Northland Regional Council GIS)

No Flood-prone areas have been identified on the NRC map shown above. The subject site has been identified with a blue square.

5.3.3 Stormwater Disposal

This development will increase the impervious area of the site by a minimal amount compared to the overall catchment. The site is in a rural location and is close to the Waipekakoura River, hence, the tidal Kerikeri Inlet. Due to these factors, the stormwater run-off from the developed site is going to be insignificant in terms of the overall tidal system. There are no anticipated adverse effects on surrounding properties as a result of the proposed development.

As there are no water supply lines available for the site, we would recommend capturing and reusing all stormwater for water supply purposes and therefore don't consider the need for on-site stormwater attenuation.

Stormwater runoff from all Lots will be gravity discharged as an overland sheet flow towards the overland flow path and Waipekakoura River (Figure 7).

Figure 7: Stormwater overland drainage

The overflow outlets from potable water supply tanks shall also be directed towards the western boundary and discharged in spreader bars located below the Wastewater fields.

5.4 Accessway

5.4.1 Sight Distances

Access onto Waimate North Road will need an application to FNDC and certain conditions will likely be enforced. An upgrade to FNDC ES Drawing sheet 21 “Type 1A) will likely be the minimum required.

The work required for this upgrade will include the sealing of the vehicle crossing and ensuring adequate widening(s) of the crossings are allowed for if required.

Figure 8: Left – Existing crossing for proposed Lot 2 and Lot 3 looking south. Right – Existing crossing for proposed Lot 2 and Lot 3 looking North

Figure 9: Left – Existing crossing for proposed Lot 1 looking south. Right – Existing crossing for proposed Lot 1 looking North.

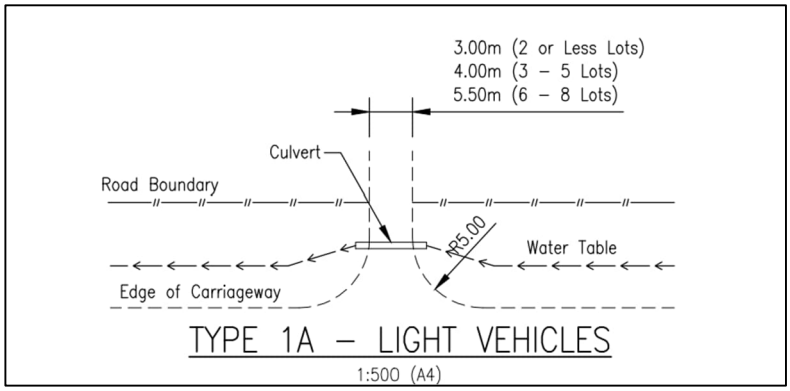


Figure 10: FNDC Diagram C for Unsealed accessway to Sealed Highway.

5.4.2 Proposed Access and Vehicle Crossing

A metal vehicle crossing exists for Lots 1 and 2, and an existing farm gate vehicle crossing exists for Lot 3. Both vehicle crossings will need to be upgraded to comply with FNDC Engineering Standards sheet 21 – Type 1A. There is an existing metalled accessway to Lot 2 to remain. A new metalled accessway will be required to service Lot 3. The existing accessway to the proposed Lot 1 area has recently been re-metalled to allow the owner better access in winter, this will need to be measured to ensure it is compliant with FNDC standards. The existing and proposed

accessways will comply with the council requirements with a formed width of 3.0 m and maximum grades of 5% along their alignments.

Figure 11 : Left – Existing metal vehicle crossing (for Lots 2 and 3)

Figure 12: Existing metal accessway for proposed Lot 1.

6 GEOTECHNICAL SUITABILITY ASSESSMENT

LDE undertook a geotechnical assessment at the site to assess ground conditions and quantify any potential geotechnical hazards which may impact on the subject development.

6.1 Geology

The 1:250k Geology Map of New Zealand (Heron, 2020) GNS Science identifies the site as being underlain by Late-Miocene aged Basalt lava flows of the Kerikeri Volcanic Group – Bay of Islands Volcanic Field. Our assessment of the site indicates that the basalt has weathered to an iron-stained soil with frequent boulders in the near-surface.

6.2 Geomorphology

The subject site occupies the crest of one edge of a broad, plateau. The flanks of which are moderately steep. The site itself slopes to the west at a gradient of 1V:25H. Just beyond the western boundary the gradient of the slope increases to 1V:6.5H. The Waiwhakangarongaro Stream is located approximately 300 m west of the property.

6.3 Site Investigation

A site walkover and hand testing were undertaken on the 19/11/2024 and 14/02/2025 by a senior engineering geologist from LDE. One hand auger was undertaken to refusal in the middle of each of the proposed building platforms for Lot 1 and Lot 3 (HA1 and HA2), and one in the location of each of the proposed wastewater disposal fields (HA3 and HA4). Shear vane tests were undertaken every 0.2 m depth in the tests for the building platforms. Test locations are shown on the geotechnical investigation plan below (Figure) and in Appendix A. Detailed test logs are provided in Appendix B.

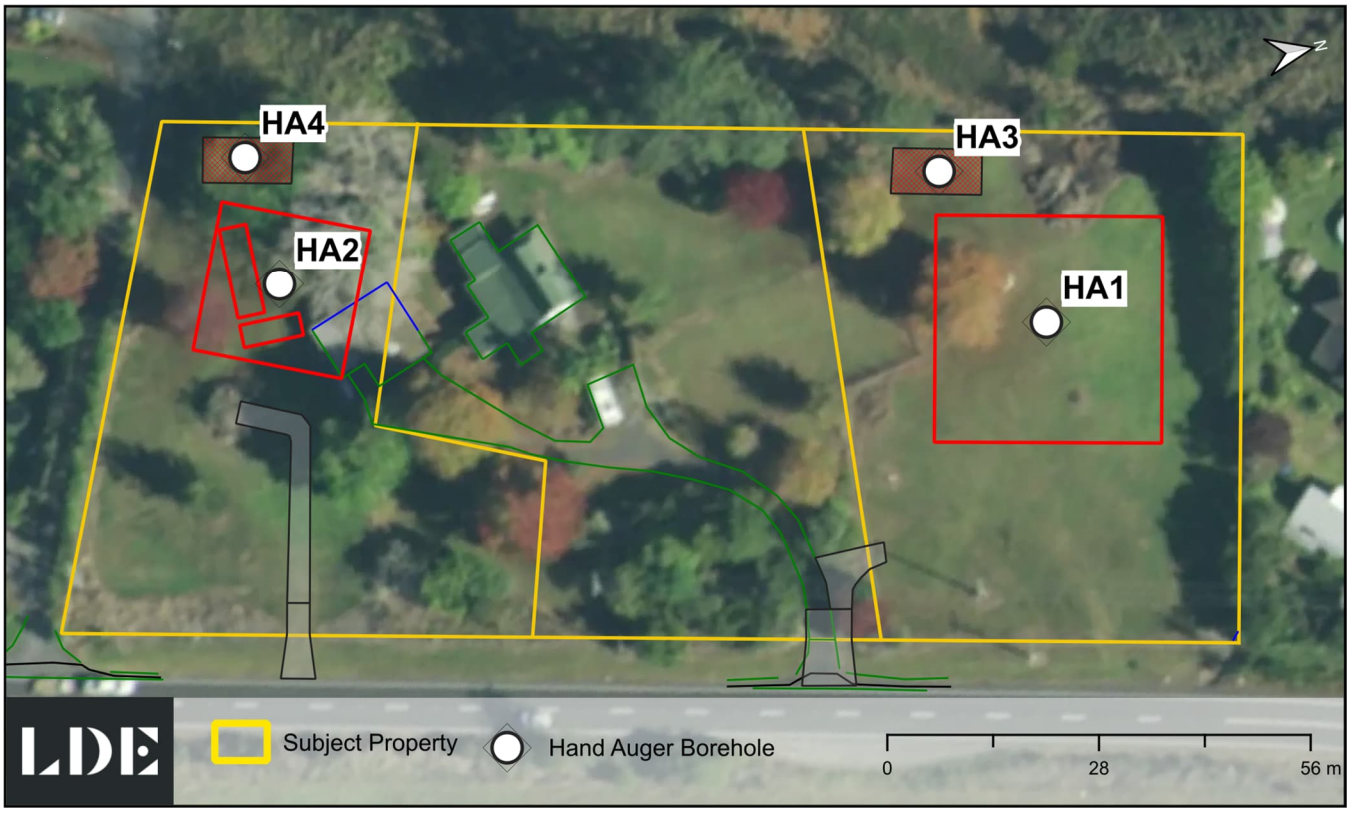


Figure 13: Geotechnical investigation plan.

6.4 Ground Conditions

Iron rich, orangish brown clay and silt, and large boulders up to 1.5 m in diameter, are exposed at the surface across the property.

The building platforms are underlain by very stiff (shear strength min 105 kPa, max >200 kPa, average 153 kPa), low plasticity clayey silts and silty clays which underlie a thin topsoil (0.05-0.1 m) and extend to depths of 2.2 m beneath Lot 1 and 1.0-1.2 m beneath Lot 3. At these depths an iron-pan or weathered rock was encountered which was unable to be penetrated with hand testing. Soils were found to be insensitive to moderately sensitive with ratios of peak to remoulded shear strength <3.

Ground water was not encountered in any of the test locations.

6.5 Natural Hazards

This section summarises our assessment of the natural hazards within the property in close proximity to the proposed building platforms as broadly required by Section 106 of the Resource Management Act (1991 and subsequent amendments) and including geotechnical and coastal hazards given Section 71(3) of the Building Act (2004). This includes erosion, inundation, subsidence, and slippage.

This section also includes our assessment of ground beneath the building site which is outside the definition of "Good Ground" as defined by NZS3604 (2011) "Timber Framed Buildings".

A summary of the hazards the site may be subject to is presented in Table 1. Further details for moderate and higher risk hazards are provided in the sections that follow.

Table 1: Summary of natural hazards, their impacts on the development and the interpreted risk.

Hazard		Assessment Description	Interpreted Risk
Ground Conditions	**Bearing Capacity**	The surficial soils beneath the site are typically stiff to very stiff. The surficial soils are expected to have a static geotechnical ultimate bearing capacity (GUBC) of >300 kPa	LOW
	Uncertified Fill and Compressible Soils	Uncertified fill and compressible soils were not encountered in our hand testing.	LOW
	Expansive Soils	The plasticity of the surficial soils encountered on site ranges from low to moderate. The anticipated reactivity of site subsoils based on field methods is moderate, with Characteristic surface deformations anticipated to be 20-40 mm.	MODERATE
Earthquake	**Surface Fault Rupture**	The GNS Active Faults Database (2022) does not show any faults passing beneath the site. There also does not appear to be any surface expressions which would indicate the presence of an active fault beneath or within proximity to the site.	LOW
	Seismicity	The national seismic hazard model for New Zealand shows that the area has low seismicity.	LOW

Hazard		Assessment Description	Interpreted Risk
	Liquefaction	The site is mapped by FNDC as being unlikely to be impacted by liquefaction. Ground conditions at the site reflect this assessment.	LOW
	Cyclic Softening	The clay soils encountered at the site were generally insensitive, hence the risk of cyclic softening is considered low.	LOW
	Lateral Spreading	The risk of lateral spreading occurring at the site is considered to be low given the low liquefaction risk.	LOW
Tsunami		The site is elevated at approximately 100 m and is not considered to be at risk of inundation during a Tsunami.	LOW
Slope Instability		The development area is generally level and set well back from the nearest slope, therefore we do not consider there to be a slope stability hazard impacting on the development area.	LOW
Flooding		The site is elevated approximately 25 m above the nearest water course and is not considered to be at risk from flooding.	LOW
Coastal Hazards		The site is not located near the coast and is not considered to be at risk from coastal hazards.	LOW

Notes
- LDE risk matrixing index values are: insignificant, low, moderate, high, severe.
- Multiple factors including, but not limited to, economic impact on development, life safety and frequency of occurrence have been considered in our assessment of the risk of each hazard.
- Where the risk is determined to be moderate, high, or severe, further detail is provided in the sections below.
- 'Good Ground' as defined in NZS3604 (2011).

6.5.1 Site Subsoil Class

Based on the published geological information for the region discussed in 13.2, we consider that the site classification of C- "Shallow Soil" Site is appropriate as defined by NZS 1170.5 (2004).

6.5.2 Seismic Actions

In accordance with the NZ Building Code and NZS 1170.5 (2004): Any proposed structures at the site are likely to be Importance Level 2 (IL2) with a design working life of 50 years, and therefore: -

- The Serviceability Limit State (SLS) design earthquake has an annual exceedance probability of 1/25.
- The Ultimate Limit State (ULS) design earthquake has an annual exceedance probability of 1/500
- Furthermore, an intermediate state event (ILS) has been considered in accordance with Module recommendations (New Zealand Geotechnical Society (NZGS) & Ministry of Business Innovation and Employment (MBIE), 2021) for an annual exceedance probability of 1/100.

Ground motions adopted in accordance with Module 1 (2021) for geotechnical design are summarised in Table 2.

Table 2: Summary of adopted seismic parameters

Seismic Parameters	SLS	ILS	ULS
Horizontal Peak Ground Acceleration (PGA), g	0.03	0.07	0.19
Effective Magnitude, Mw	5.8	5.8	6.5

6.5.3 Expansive Soils

No laboratory testing of the soil properties was completed. Based on field tests, the surficial soils display characteristics of low plasticity at the field moisture content and may maintain plastic behaviour over a broad range of moisture content. By extension of soil mechanics principles, the soils are best regarded as potentially being moderately reactive.

Foundations shall be embedded the minimum depths as outlined in section 7 below where effects of soil volume changes between seasons is expected to be minor.

7 ENGINEERING RECCOMENDATIONS

7.1 Building Platform Development

The proposed building platforms fall across topography of a relatively low grade (4-5%) bulk earthworks are not required to form the platforms or to enable site access.

7.2 Site Contouring and Topsoiling

The finished ground level should be graded so that water cannot pond against, beneath or around the buildings for the economic life of structure. To achieve this, it will be important that the building platform beneath the topsoil grades away from the site. Contouring should avoid the potential for concentration and discharge of surface water over point locations which could result in soil erosion or instability.

7.3 Foundation Recommendations

7.3.1 Foundation Type

Based on the site investigation and analysis, we consider that foundations comprising of timber piles embedded below a depth of 600 mm, or a reinforced, waffle raft, concrete slab are likely suitable for the site conditions though this should be confirmed at building consent.

Boulders encountered in pile excavations that protrude partially into pile excavations shall be removed entirely from excavations prior to pile placement and any over excavation shall be backfilled with site concrete.

Where excavations cannot be progressed to 600mm depth and boulders extend across the entire width of the excavation, discussion with the structural engineer shall be completed to ensure piles still meet design requirements for uplift loading, this may require widening of pile excavation

The presence of large boulders, protruding from the surface may limit the use of concrete slab-on-grade foundations, without first undertaking earthworks to remove the boulders and backfill the excavations. This should be confirmed at building consent.

7.3.2 Design Considerations

Based on the scope of work completed, the following aspects need to be considered in detailed design:

- Site Class - Class C - Shallow soil
- Expansive soils – M - moderately reactive

7.4 Surface Water

The stormwater system for the buildings should be operational as soon as the roof is in place. This is to ensure that the ground within the vicinity of the building is not compromised by the negative effects and potential consequences of soil saturation.

7.4.1 Effluent Disposal

In accordance with Section 5.2, we consider that the proposed development can achieve wastewater disposal on site.

7.4.2 Service Pipes

All service pipes, stormwater structures should be designed and constructed to ensure adequate capacity, strength, and water tightness to prevent leakage into the platform through blockage, running under pressure, or structural failure.

All service pipes installed within any fill should be flexible, or flexibly joined, so that they may deflect without breaking if the ground settles.

A record should be kept of the position, type, and size of all subsoil drains, and in particular of their outlets.

7.5 Trees and Shrubs

Trees can cause damage through heaving as a result of root growth and / or settlement resulting from soil shrinkage from the moisture uptake of the roots. An existing large tree is located on the edge of each of the proposed building platforms for Lots 1 and 3. This should be taken into consideration when determining the location of any future buildings/determining the appropriate foundation system/installing services. Mitigation may be required to prevent adverse effects of tree roots on services and building foundations.

If new trees, shrubs or gardens are established, care should be taken to ensure:

- The vegetation does not interfere with any subfloor ventilation or services to the structure.

- Over-watering of the vegetation does not saturate the ground near the foundations.
- Trees or shrubs with the potential to develop significant root systems should be planted a minimum distance equal to the mature height of the plant away from the foundations.

7.6 Site Maintenance

Prompt repair of plumbing leaks should be undertaken. Blocked, broken or faulty spouting should be attended to immediately.

The discharge of uncontrolled surface water over the site and surrounding areas should be avoided at all costs.

8 SUSTAINABILITY

Considering sustainability as early as possible in a project's development, could lead to significant project opportunities and wider positive outcomes. Geotechnical opportunities for increased sustainability for this project include:

- Stripping and stocking topsoil for reuse (dependant on presence/ levels of contaminants).
- Designing for cut and fill balance where possible.
- Reuse of site won materials, or using materials won from other sites including use of recycled crushed concrete aggregate for hard fill.
- Contributing site investigation data to the New Zealand Geotechnical Database (NZGD) to help reduce the site investigations needed in the future.
- Using local consultants and contractors to reduce transport related emissions

9 CONCLUSION

The purpose of this report is to accompany a resource consent application for the proposed three lot subdivision at 194 Waimate North Road, Kerikeri.

Following development of the site in accordance with our recommendations, we consider that:

a) The land in respect of which a consent is sought, or any structure on the land built in accordance with our recommendations, is unlikely to be subject to material damage by erosion, falling debris, subsidence, slippage, or inundation from any source; and

b) Any subsequent use that is likely to be made of the land is unlikely to accelerate, worsen, or result in material damage to the land, other land, or structure by erosion, falling debris, subsidence, slippage, or inundation from any source; and

c) Sufficient provision has been made for physical access to each allotment to be created by the subdivision.

d) the proposed development can be adequately serviced with regard to water supply, firefighting water supply, wastewater, stormwater using the recommendations outlined in this report.

10 LIMITATIONS

This report should be read and reproduced in its entirety including the limitations to understand the context of the opinions and recommendations given.

This report has been prepared exclusively for Caleb and Erin Gasston in accordance with the brief given to us or the agreed scope and they will be deemed the exclusive owner on full and final payment of the invoice. Information, opinions, and recommendations contained within this report can only be used for the purposes with which it was intended. LDE accepts no liability or responsibility whatsoever for any use or reliance on the report by any party other than the owner or parties working for or on behalf of the owner, such as local authorities, and for purposes beyond those for which it was intended.

Opinions given in this report are based on visual methods and subsurface investigations at discrete locations designed to the constraints of the project scope to provide the best assessment of the environment. It must be appreciated that the nature and continuity of the subsurface materials between these locations are inferred and that actual conditions could vary from that described herein. We should be contacted immediately if the conditions are found to differ from those described in this report.

This report was prepared in general accordance with current standards, codes and best practice at the time of this report. These may be subject to change.

11 REFERENCES

FNDC. (2024). *Far North Maps*. Retrieved from Te Kaunihera o Te Hiku o te Ika - Far North District Council: https://www.fndc.govt.nz/Services/Far-North-Maps

GNS Science Te Pū Ao. (2022, 11 5). *New Zealand Active Faults Database*. Retrieved from https://data.gns.cri.nz/af/

Heron, D. (2020). *Geological map of New Zealand 1:250,000. 3rd ed*. Lower Hutt, New Zealand: GNS Science.

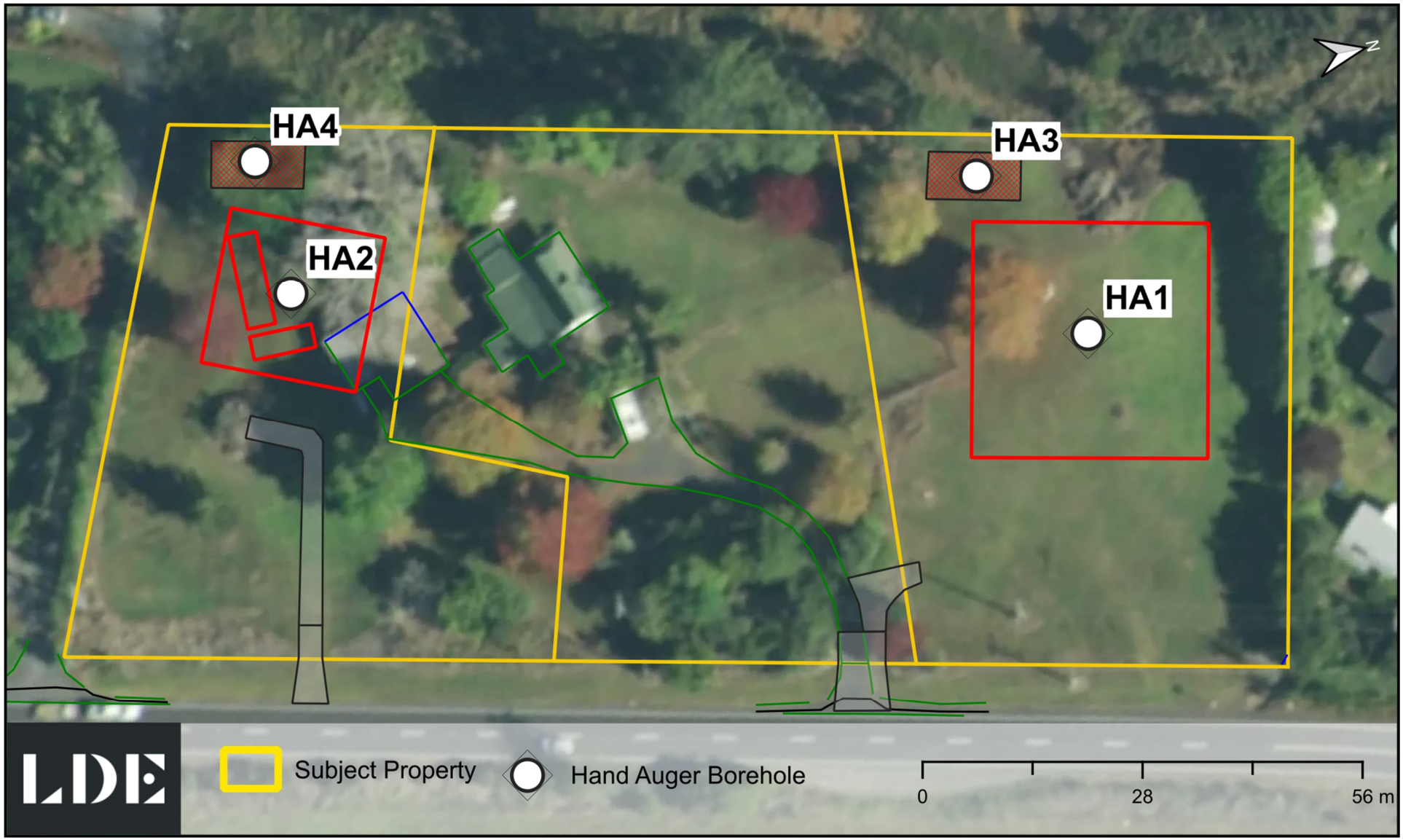
Northland Regional Council. (2024). *Natural Hazards*. Retrieved from NRC Local Maps: https://nrcgis.maps.arcgis.com/apps/webappviewer/index.html?id=81b958563a2c40ec89f2f60efc99b13b

Standards New Zealand- Paerewa Aotearoa. (2011). *NZS3604 Timber Framed Buildings*. Wellington: Standards New Zealand; Te Mana Tautikanga o Aotearoa.

Standards New Zealand Te Mana Tautikanga O Aotearoa. (2004). *NZS1170.5 Structural Design Actions: Part 5: Earthquake Actions-New Zealand*. Wellington: Standards New Zealand.

APPENDIX A

GEOTECHNICAL INVESTIGATION PLAN


HA4
HA3
HA2
HA1
N
LDE
Subject Property
Hand Auger Borehole
0
28
56 m

APPENDIX B

TEST LOGS

Hand Auger Borehole Log

Test ID: HA1
Project ID: 27655
Sheet: 1 of 1

Client:	Erin & Caleb Gasston	**Coordinates:**	6098806mN, 1682627mE	**Test Date:**	14/02/2025
Project:	194 Waimate North Road, Kerikeri	**System:**	NZTM	**Logged By:**	EG
Location:	194 Waimate North Road, Kerikeri	**Elevation:**	100.4m	**Prepared By:**	EG
Test Site:	Lot 3 Building Platform	**Located By:**	GIS/Web Map	**Checked By:**	CP

Depth (m)	Geology	Graphic Log	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm) 2 4 6 8; Vane undrained shear strength, s_u (kPa) 50 100 150 200	Values: Vane ID: 713, peak / residual (sensitivity)	RL (m)
0	op soil	TS	Topsoil				100.0
	Kerikeri Volcanics		Silty CLAY, with some gravel; dark brown; dry; gravel, fine, angular; slightly plastic.	Groundwater not encountered		192 / 62 (3.1)	
0.5						212 / 46 (4.6)	
						108 / 45 (2.4)	
						121 / 46 (2.6)	
1.0			SILT, with some clay, with trace gravel; orange brown; dry; Slightly plastic.			UTP	99.5
1.5							99.0
							98.5
2.0							
							98.0
2.5							97.5

Hole Depth: 1.00m
Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Hand Auger Borehole Log

Test ID: HA2
Project ID: 27655
Sheet: 1 of 1

Client:	Erin & Caleb Gasston	**Coordinates:**	6098708mN, 1682601mE	**Test Date:**	14/02/2025
Project:	194 Waimate North Road, Kerikeri	**System:**	NZTM	**Logged By:**	EG
Location:	194 Waimate North Road, Kerikeri	**Elevation:**	101.3m	**Prepared By:**	EG
Test Site:	Lot 1 Building Platform	**Located By:**	GIS/Web Map	**Checked By:**	CP

Depth (m)	Geology	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm) 2 4 6 8; Vane undrained shear strength, s_u (kPa) 50 100 150 200	Values: Vane ID: 713, peak / residual (sensitivity)	RL (m)
0.0	op so TS	Topsoil				101.3
		Silty CLAY, with minor gravel; brown to orange brown; dry; gravel, fine, angular; Slightly plastic.			167 / 43 (3.9)	
0.5					UTP	101.0
					UTP	
					UTP	100.5
		Clayey SILT, with minor gravel; orange brown mottled pink; dry; gravel, fine, subrounded to angular.				
1.0		CLAY & SILT; orange; dry.			188 / 65 (2.9)	
	Kerikeri Volcanics	CLAY, with minor silt; orange brown and pink; dry; Slightly plastic.	Groundwater not encountered		116 / 59 (2.0)	100.0
					214 / 87 (2.5)	
1.5					177 / 59 (3.0)	
		1.80m: Dry to moist; black/red inclusions.			105 / 36 (2.9)	99.5
2.0		SILT, with some gravel; orange; moist to wet; gravel, fine to medium, angular.			164 / 51 (3.2)	
		CLAY & SILT, with some gravel; orange; gravel, medium to fine, angular.			UTP	99.0
2.5						98.5

Hole Depth: 2.20m
Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

Vane peak
Vane residual
Vane UTP
Standing water level
Groundwater inflow
Groundwater outflow
UTP = Unable to Penetrate

Generated with CORE-GS by Geroc - HAxTP Log v9 - 7/03/2025 12:34:27 pm

Hand Auger Borehole Log

Test ID: HA3
Project ID: 27655
Sheet: 1 of 1

Client:	Erin & Caleb Gasston	**Coordinates:**	6098796mN, 1682604mE	**Test Date:**	19/11/2024
Project:	194 Waimate North Road, Kerikeri	**System:**	NZTM	**Logged By:**	CJG
Location:	194 Waimate North Road, Kerikeri	**Elevation:**	99.7m	**Prepared By:**	CJG
Test Site:	Lot 3 Septic Field	**Located By:**	GIS/Web Map	**Checked By:**	CP

Depth (m)	Geology	Graphic Log	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm) 2 4 6 8 / Vane undrained shear strength, s_u (kPa) 50 100 150 200	Values: Vane ID: N/A, peak / residual (sensitivity)	RL (m)
0	Kerikeri Volcanics		Clayey SILT; orageish brown; moist; low plasticity.	Groundwater not encountered			99.5
0.5							99.0
1.0			Clayey SILT; orange. Very stiff; moist; non-plastic.				98.5
1.5							98.0
2.0							97.5
2.5							97.0

Hole Depth: 1.20m
Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Hand Auger Borehole Log

Test ID: HA4
Project ID: 27655
Sheet: 1 of 1

Client:	Erin & Caleb Gasston	**Coordinates:**	6098707mN, 1682584mE	**Test Date:**	19/11/2024
Project:	194 Waimate North Road, Kerikeri	**System:**	NZTM	**Logged By:**	CJG
Location:	194 Waimate North Road, Kerikeri	**Elevation:**	100.3m	**Prepared By:**	CJG
Test Site:	Lot 1 Septic Field	**Located By:**	GIS/Web Map	**Checked By:**	CP

Depth (m)	Geology	Graphic Log	Material Description	Water	In-situ Testing: Dynamic cone penetrometer (blows / 50mm) 2 4 6 8; Vane undrained shear strength, s_u (kPa) 50 100 150 200	Values: Vane ID: N/A; peak / residual (sensitivity)	RL (m)
	Topsoil	TS	Organic Silt (Topsoil)	Groundwater not encountered			100.0
	Kerikeri Volcanics		Clayey SILT; brown. Very stiff; moist; low plasticity.				
0.5			0.50m: Orangish brown with orange silty mottles.				
			0.80m: With trace gravel; gravel, Highly weathered basalt.				99.5
			0.85m: Tree root - thin saturated halo around root.				
1.0			Silty CLAY; orangish brown. Very stiff; moist; low plasticity.				
			CLAY & SILT; redish brown. Very stiff; moist; low plasticity.				99.0
1.5			1.50m - 1.60m: SILT; grey; non-plastic.				
			1.80m: With black mottling.				98.5
			Clayey SILT; brown with black and grey. Very stiff; moist; low plasticity.				
2.0							98.0
2.5							97.5

Hole Depth: 2.20m
Termination: Reached target depth

Remarks:

Materials are described in general accordance with NZGS 'Field Description of Soil and Rock' (2005).
No correlation is implied between shear vane and DCP values.

- Vane peak
- Vane residual
- Vane UTP
- Standing water level
- Groundwater inflow
- Groundwater outflow

UTP = Unable to Penetrate

Appendix E

Aircraft Noise Assessment

KAITIAKI

MARSHALL DAY Acoustics

194 WAIMATE NORTH ROAD AIRCRAFT NOISE ASSESSMENT

Rp 001 20250044 | 13 April 2025

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Prepared for: **LDE**
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Attention: **Caleb Gasston**

Report No.: **Rp 001 20250044**

Document Control

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1.0 INTRODUCTION

Marshall Day Acoustics Ltd (MDA) has been requested by LDE to assess aircraft noise intrusion into two new dwellings at 194 Waimate North Road, Kerikeri. The site is proposed to be subdivided to three lots. The new dwellings are proposed at Lots 1 and 3, and Lot 2 will contain the existing dwelling.

The site is within the Airport Noise Buffer which requires that residential dwellings are constructed taking into account noise reduction measures to achieve acceptable indoor noise levels.

This report details the assessment of aircraft noise at the site and includes discussion on the acoustic treatment required to mitigate noise associated with Kerikeri airport operations.

Acoustic terminology used throughout this report is detailed in Appendix A.

2.0 SITE AND DEVELOPMENT DESCRIPTION

2.1 Site location

The proposed dwellings are to be constructed at 194 Waimate North Road, Kerikeri, as shown in Figure 1. The site is approximately 0.2 km north-west of runway 15.

Figure 1: Site location

2.2 Proposed Dwelling Design

The site is proposed to be subdivided into three lots. Two new dwellings would likely be constructed at Lot 1 and Lot 3 in the future. The existing dwelling at Lot 2 will remain.

At this stage, the location of the proposed dwellings has not been specifically confirmed, however building platforms have been nominated. For the purposes of this assessment, it is assumed that any dwellings will be constructed within these nominated platforms.

It is expected that there will be one new dwelling at Lot 1 and another new dwelling at Lot 3 constructed at some point in the future. We have not received any building construction details of the proposed dwellings as we understand no design is yet available. It is likely that the building design will be prepared by future developers of the proposed lots.

Our assessment has been based on site plans shown on the LDE Proposed Subdivision for the project (ref #27655), dated 20 December 2024.

3.0 AIRCRAFT NOISE ASSESSMENT

3.1 District Plan Requirements

The site is within the Airport Noise Buffer and is subject to rule 15.2.5.1.2 of the Operative District Plan. This rule is as follows:

15.2.5.1.2 NOISE

Subject to other rules in the Plan defining permitted activities, any new land use is permitted provided it is not a noise sensitive activity within 1.2km radius of the centreline of the runways at each of the Kaitaia, Kerikeri and Kaikohe Airports. For the purpose of this rule each end of the runway is defined as the point where the runway clear strip ends and the approach slope starts. Land within the 1.2km radius is identified on the Kaitaia, Kerikeri and Kaikohe Airport Buffer Area Maps located in Appendix 4.

15.2.5.2 DISCRETIONARY ACTIVITIES

An activity is a discretionary activity if:

(a) it does not comply with Rules 15.2.5.1.1 or 15.2.5.1.2; but

(b) it complies with the relevant standards for permitted, controlled, restricted discretionary or discretionary activities in the particular zone in which it is located set out in Part 2 of the Plan – Environment Provisions; and

(c) it complies with all other relevant standards for permitted, controlled, restricted discretionary or discretionary activities in Part 3 of the Plan - District Wide Provisions. The Council may impose conditions of consent on a discretionary activity application or it may refuse consent to the application. If an activity does not comply with the standards for a discretionary activity, it will be a noncomplying activity

Rule 15.2.6.2 provides the assessment criteria against which this development should be assessed:

15.2.6.2 NOISE

(a) Whether the proposed land use is a noise sensitive activity which could limit airport operations.

(b) Whether acoustic insulation should be required as a condition of consent

The activity is a noise sensitive activity (a dwelling).

This assessment provides information on "whether sound insulation should be provided as a condition of consent" for this development.

3.2 Site Specific Requirements

Far North Holdings Limited (FNHL) operate the airport and any potential reverse sensitivity effects would therefore affect their ongoing operation of the airport. With regard to the development, Far North Holdings have advised the following:

1. **Building Consent or land Use Consents with in the 1.2km buffer zone and inside the 55dB L_{dn} Noise boundary:**
    1. FNHL has an interest with all developments in and around the airport. Our primary interest is to ensure that the future development and use of the airport is not affected by sensitive activities that may impact its potential operations. This development is within the airport buffer zone and is on, or inside, the noise boundary area and therefore FNHL does have a concern with this proposed development.
        i. It is recommended that Council consider the effects of airport noise activities and seeks an acoustics report ensuring that noise sensitive activities proposed in the property are addressed against DP rules, particularly bedrooms and living areas.
        ii. A no complaints covenant is required for residences built inside the buffer zone.
        iii. It is recommended that roof surfaces are painted in non-reflective colours.
        iv. It is recommended that a survey confirm building height relative to the airport protection surfaces as attached.

This report provides the assessment requested in Part 1.1.i of FNHL's request.

4.0 AIRCRAFT NOISE LEVELS

4.1 Operative District Plan

In May 2002 Marshall Day Acoustics prepared a report for Far North Holdings Ltd on noise from Kerikeri Airport. As part of this study future airport noise contours were prepared in accordance with New Zealand Standard *NZS 6805:1992 "Airport Noise Management and Land Use Planning"*. These contours allow for a modest level of growth of the existing activities to the year 2022. This noise contour plot is shown in the following figure, together with the location of the proposed dwellings.

Figure 2: Noise contour from Kerikeri Airport is predicted for 2022 year

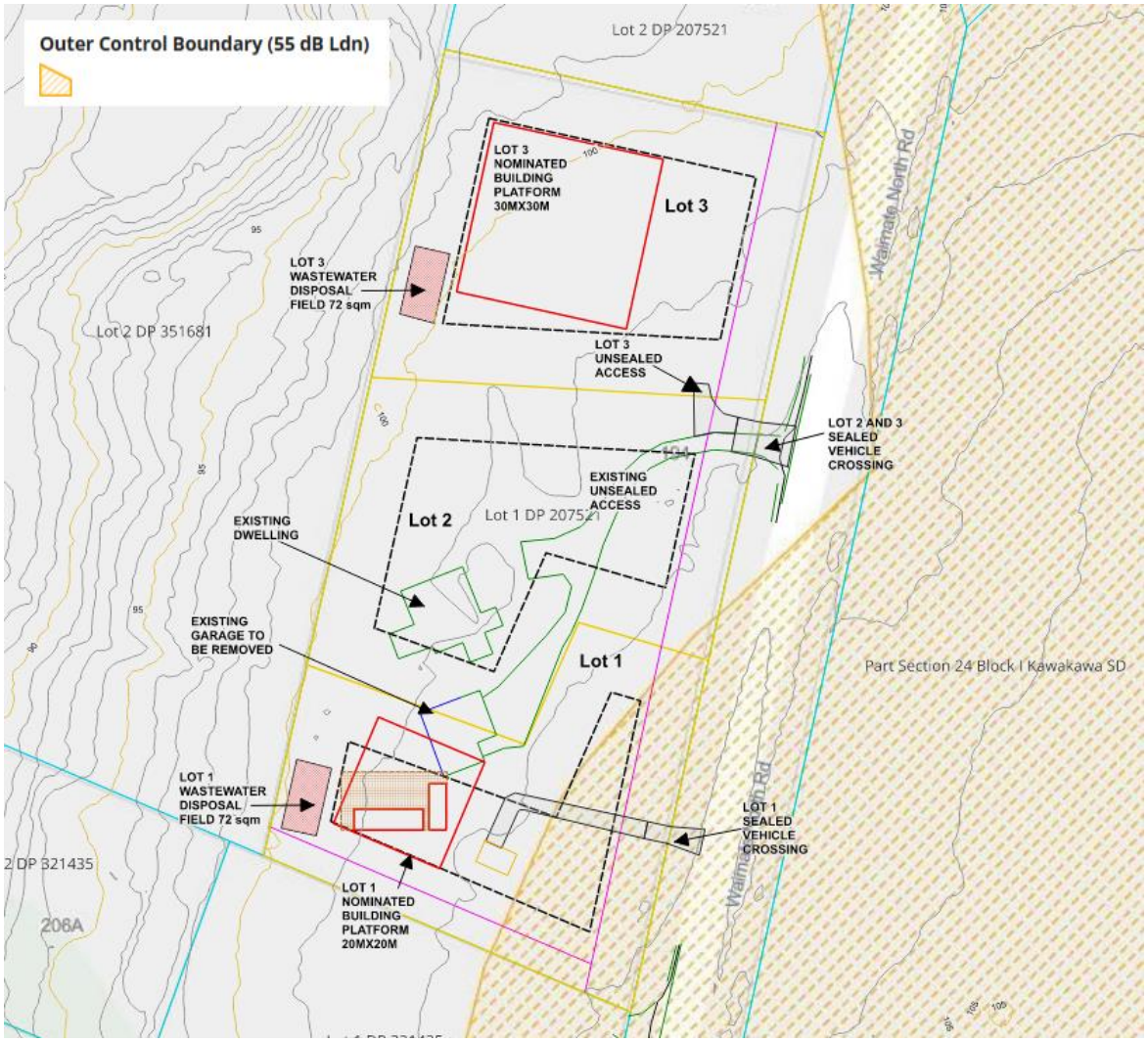
Based on the 2022 noise contours, the future airport noise exposure at 194 Waimate North Road was predicted to be below 55 dB L_{dn}. We approximate that the external noise level may be in the order of 53 to 55 dB L_{dn} at the proposed location of the dwellings according to the above figure.

4.2 Proposed District Plan

The proposed District Plan currently includes noise contours based on an updated forecast. The site partially falls within the 55 dB L_{dn} noise contour in the proposed District Plan. However, the proposed building platforms fall outside of the 55 dB L_{dn} noise contour.

Figure 3: Far North Proposed District Plan shows the site location and proposed 55 dB L_{dn} noise contour

Figure 4: Proposed 55 dB L_{dn} noise contour overlaid on proposed site



5.0 INDOOR DESIGN SOUND LEVEL

We have not been provided with an internal noise criterion for this project.

Previous consents in proximity of the Kerikeri Airport have included the following internal noise criterion:

- 40 dB L_{dn} in bedrooms
- 45 dB L_{dn} in living rooms.

Achieving a noise level of 40 dB L_{dn} is broadly consistent with sound insulation requirements for residential development near airports, ports, road and rail around New Zealand. This is considered to be an acceptable minimum for noise sensitive activity near noise generating infrastructure.

6.0 CALCULATED INTERNAL NOISE LEVELS

Modern dwellings constructed from standard materials required to meet the New Zealand Building Code typically achieve a noise reduction from outside to inside of 15-18 decibels with windows ajar for ventilation. As such, houses exposed to external noise levels of 50 to 55 dB L_{dn} can typically readily achieve an internal noise environment of 40 dB L_{dn} without additional acoustic treatment.

The proposed dwelling locations fall just outside the Proposed District Plan 55 dB L_{dn} contour. The external future noise level is likely to be in the order of 53-55 dB L_{dn} at the dwelling closest to the 55 dB L_{dn} contour. With windows ajar for ventilation, internal noise levels would be expected to be around 38-40 dB L_{dn} inside. This would be lower than the 40 dB L_{dn} internal noise criterion that is typically set for aircraft noise sound insulation near airports. Therefore, no additional acoustic treatment measures will be required, provided the dwellings sit within the nominated building platforms.

If the dwellings were located within the 55 dB L_{dn} contour (at the southeast corner of the site), minimal building modifications would likely be required (perhaps slightly thicker plasterboard to walls or ceilings). Mechanical ventilation and air-conditioning would be required to all rooms to avoid the need for windows to be open to maintain acceptable temperatures within the dwelling[1]. With windows closed, internal aircraft noise levels would be expected to be below 35 dB L_{dn} in the dwellings, without significant upgrading of the building envelope.

7.0 SUMMARY

Two dwellings are to be constructed at 194 Waimate North Road near Kerikeri airport.

The proposed dwellings fall outside the 55 dB L_{dn} noise contour and are likely exposed to future noise levels in the order of 53-55 dB L_{dn}.

We expect that noise levels within the dwellings will be below 40 dB L_{dn} with "standard" building envelope constructions and materials. Noise levels of around 38-40 dB L_{dn} are expected based on the external noise level, even if windows are ajar for ventilation.

If the dwellings are located within the 55 dB L_{dn} contour (at the southeast corner of the site), minimal building modifications would likely be required to achieve acceptable internal noise levels.

In conclusion, Marshall Day Acoustics considers that the subdivision is unlikely to introduce dwellings to within the 55 dB L_{dn} noise contour. Provided dwellings constructed on the future subdivision allotments use "typical" façade construction (e.g. weatherboard, timber, fibre cement or brick cladding on studwork with plasterboard linings and standard roof/ceiling constructions) then internal noise levels are expected to be below 40 dB L_{dn}. This level of noise is considered to be acceptable for dwellings near airports and is considered to avoid significant risks of reverse sensitivity to the airport.

Although internal noise levels will be largely acceptable for residents, it should be noted that aircraft noise will be clearly audible at times throughout the day and will contribute appreciably to the overall ambient noise level in this location.

Overall however, the proposed subdivision at 194 Waimate North Road will not result in a significant increase in dwellings exposed to unreasonable noise. Future dwellings can be sound insulated against aircraft noise from Kerikeri Airport based on noise contours in MDA report 30 May 2002 and Far North Proposed District Plan's outer control Boundary contour.

[1] Note that it is typical for sound insulation requirements in loud areas to require both ventilation and air-conditioning systems, on the basis that air-conditioning can maintain a cool environment in summer, and ventilation can avoid condensation in winter without windows being open.

8.0 RECOMMENDED CONDITIONS OF CONSENT

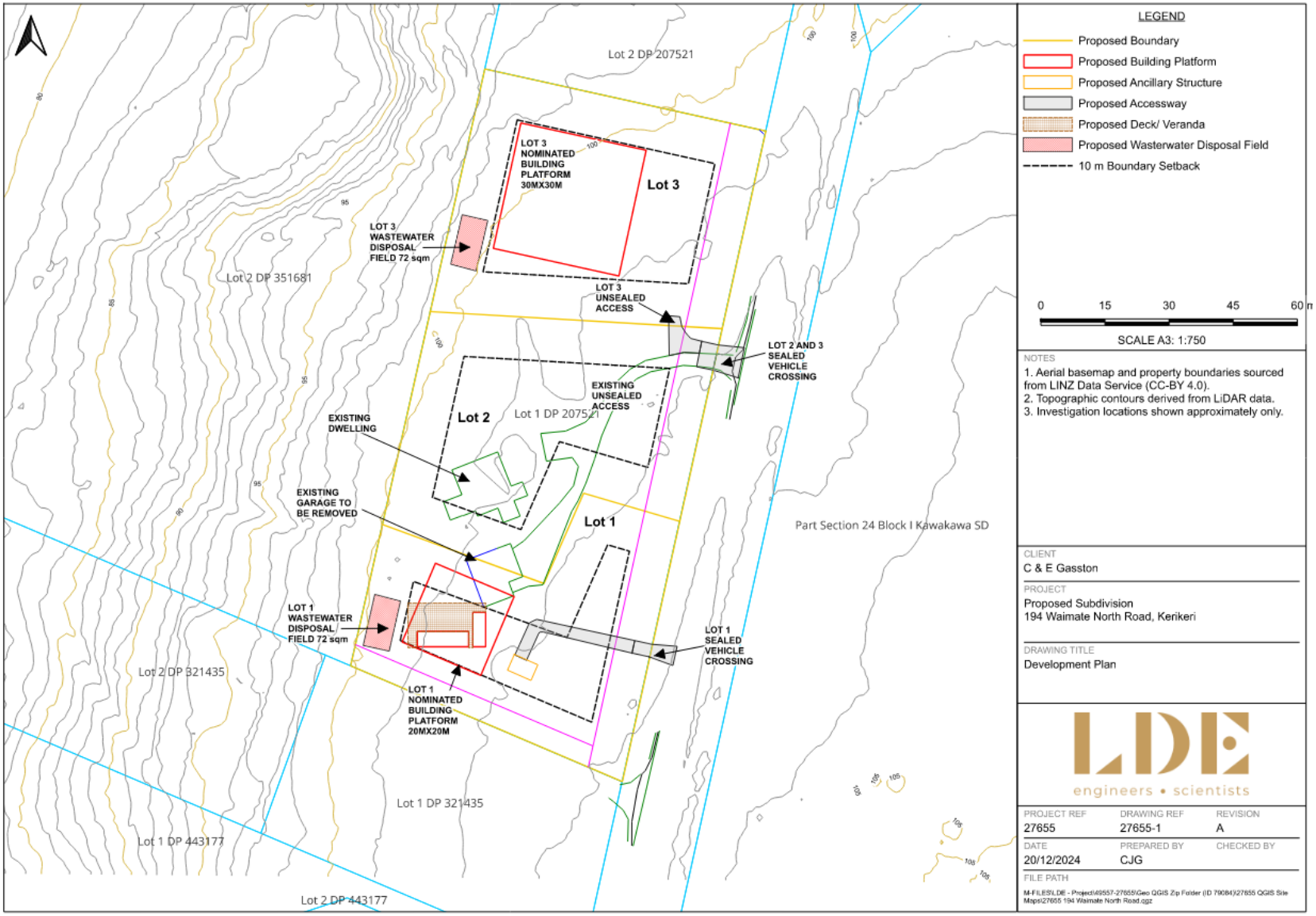
We recommend conditions of consent that require:

- *Any buildings used as dwellings within the approved nominated building platforms on Lots 1 and 3 as shown on the approved development plan, shall meet requirements of the NZ Building Code.*
- *No habitable buildings shall be constructed outside of the approved nominated building platforms on Lots 1 and 3 as shown on the approved development plan, unless an acoustic certificate prepared by a suitably qualified acoustic consultant is provided to Council confirming that the building will comply with the following acoustic internal noise level requirement:*
    - *Dwellings to be designed to ensure aircraft noise in any habitable room is no greater than 40 dB L_{dn}. If windows and doors are required to be closed to achieve 40 dB L_{dn}, a ventilation and cooling system shall be provided to enable occupants to remain comfortable without having to open doors or windows for ventilation or cooling.*

APPENDIX A GLOSSARY OF TERMINOLOGY

A-weighting	The process by which noise levels are corrected to account for the non-linear frequency response of the human ear.
dB	Decibel, the unit of sound level.
L_{dn}	The day-night sound level calculated from the measured L_{Aeq} over a 24 hour period with a 10 decibel penalty applied to the night-time period (2200-0700 hours)
Sound insulation	The ability of a material or construction to reduce sound travelling through it.
STC	Sound Transmission Class. A single number system for quantifying the transmission loss through a building element. The measured transmission loss, in third octave bands from 125 Hz to 4 kHz, is compared to a standard reference curve to determine the single number value. Can only be measured in laboratory conditions
R_w	Weighted Sound Reduction Index, a single number rating of the sound insulation performance of a specific building element. R_w is measured in a laboratory. R_w is commonly used by manufacturers to describe the sound insulation performance of building elements such as plasterboard and concrete.

APPENDIX B SITE PLANS



Appendix F

Preliminary Site Investigation

Caleb and Erin Gasston

PRELIMINARY SITE INVESTIGATION (PSI)

194 Waimate North Road, Kerikeri

Project Reference: 27655
26 February 2025

DOCUMENT CONTROL

Version	Date	Comments
A	25/02/2025	Issued for consent

Version	Issued For	Prepared By	Reviewed & Authorised By
A	Issued for Consent	 **Sarah Robinson** Environmental Scientist	 **James Gladwin** Environmental Group Manager *SQEP*

EXECUTIVE SUMMARY

A contamination preliminary site investigation (PSI) has been conducted for the site located at 194 Waimate North Road, Kerikeri. LDE understands that the site is to undergo subdivision that may not meet the permitted activity conditions (Regulation 8) of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

This PSI is therefore required to identify if there are or were any current or historical land-use activities that could have caused soil contamination that is a risk to human health in order to determine if the NESCS applies to the land and whether further investigation is required to accompany the consent application for the proposed development.

Evidence from the PSI, site history review and preliminary soil sampling indicates that it is more likely than not that the site has not had a HAIL activity on the site and that it highly unlikely to represent a risk to human health if the activity is done to the piece of land. The site is therefore considered a permitted activity under the NESCS as per Regulation 8 (4). As per Regulation 8 (4)(d) the regulatory authority must be provided a copy of this report.

CONTENTS

1 INTRODUCTION

LDE has been engaged by Caleb and Erin Gasston to undertake a soil contamination Preliminary Site Investigation (PSI) for the site legally described as 194 Waimate North Road, Kerikeri. LDE understands that the site is to undergo subdivision that may not meet the permitted activity conditions (Regulation 8) of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

This PSI is therefore required to identify if there are or were any current or historical land-use activities that could have caused soil contamination that is a risk to human health in order to determine if the NESCS applies to the land and whether further investigation is required to accompany the consent application for the proposed development.

This site investigation has been prepared in accordance with the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2021. It has been managed by a suitably qualified and experienced practitioner (SQEP); carried out in general accordance with the Contaminated Land Management Guidelines No.1- Reporting on Contaminated Sites in New Zealand (revised 2021) and Contaminated Land Management Guidelines No.5: Site Investigation and Analysis of Soils (revised 2021).

1.1 Investigation Objectives

The objectives of the investigation are to:

- Assess whether there has been (or there is more likely than not to have been) a potentially contaminating land use.
- Assess the nature and source of potential or likely contaminants.
- Identify the possible locations of contamination.
- Identify known or potential exposure pathways by which identified receptors could be exposed to the contaminants whilst undertaking the current or proposed future land use.
- Identify known or potential human and ecological receptors that could be exposed to contaminants.
- Assess if the project is covered by the NESCS Regulations.
- Determine if further investigation in the form of a Detailed Site Investigation (DSI) is required.

1.2 Site Identification

The site is located at 194 Waimate North Road, Kerikeri, approximately 4.4 kms to the south-west of Kerikeri town centre. The site is zoned Rural Production under the Operative District Plan. The site comprises approximately 1.01 ha of land and is legally described as LOT 1 DP 207521. Figure 1 and Table 1 show the site location and land parcel details respectively.

Figure 1. Site Location, outlined in yellow. Source: FNDC Maps[1].

Table 1. Site Details.

Detail	Description
Site Address	194 Waimate North Road, Kerikeri
Appellation	Lot 1 DP 207521
Area	1.01 Ha
Owners	Philip John Gasston and Ruth Judith Gasston
Proposed Site Use	Residential

[1] Property and land. Retrieved February 2025.

2 SITE DESCRIPTION

2.1 Environmental Setting

The site is generally flat with a gentle slope to the west along the western site boundary. The site sits at approximately 140 m RL and is set within a residential / rural residential area of Waimate North Road. The Bay of Islands / Kerikeri airport is located to the east.

2.1.1 Geology

The New Zealand Geology Web Map by GNS[2] Science identifies the site as being underlain by '*Kerikeri Volcanic Group Late Miocene basalt of Kaikohe – Bay of Islands Volcanic Field'* described as *'Basalt.'*

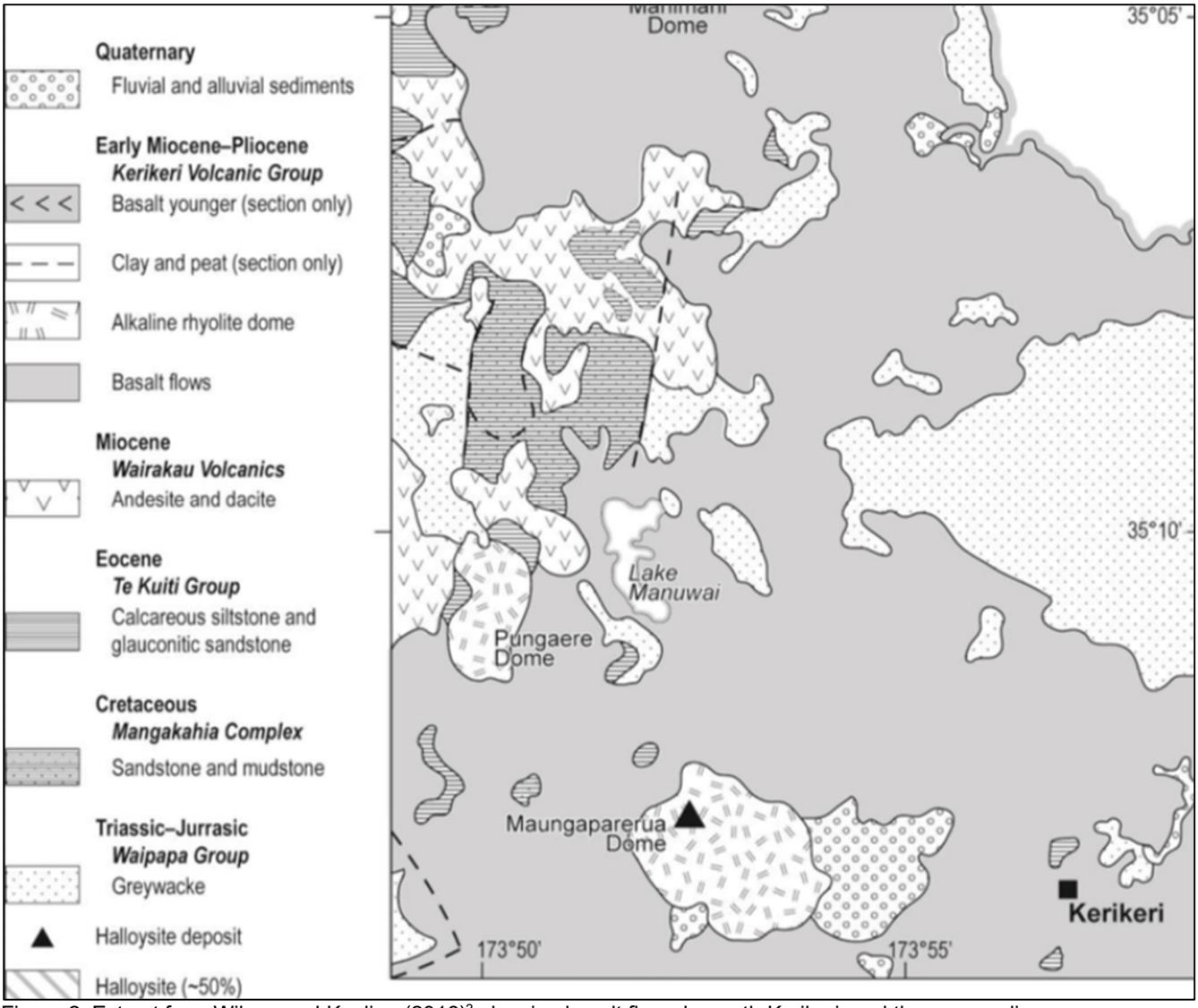


Figure 2. Extract from Wilson and Keeling (2016)[3] showing basalt flows beneath Kerikeri, and the surrounding area.

[2] http://data.gns.cri.nz/geology/. Retrieved February 2025.
[3] Wilson, I. and Keeling, J. (2016). *Global occurrence, geology and characteristics of tubular halloysite deposits*. Clay Minerals (51): 309-324.

2.1.2 Hydrology

Waiwhakangarongaro Stream is the nearest body of water from the property and is located approximately 300 m west of the property at its closest point.

Figure 3. Topo map showing nearby waterbodies. Site indicated in red. Source NZ Topo Maps [4].

2.2 Site Layout and Current Site Uses

The site is currently occupied by a single residential dwelling and an unpainted timber garage/shed. The remaining site area is vacant and grassed. The site is proposed to be subdivided into three lots, with the existing residential dwelling on proposed Lot 2 to remain as is. The lots are proposed between 3,010 and 3,838 m^2. The existing garage/shed is to be removed.

[4] New Zealand Topographic Map - NZ Topo Map. Retrieved February 2025.

Figure 4. Annotated location map showing the current site layout. Source: Google Earth (annotated image).

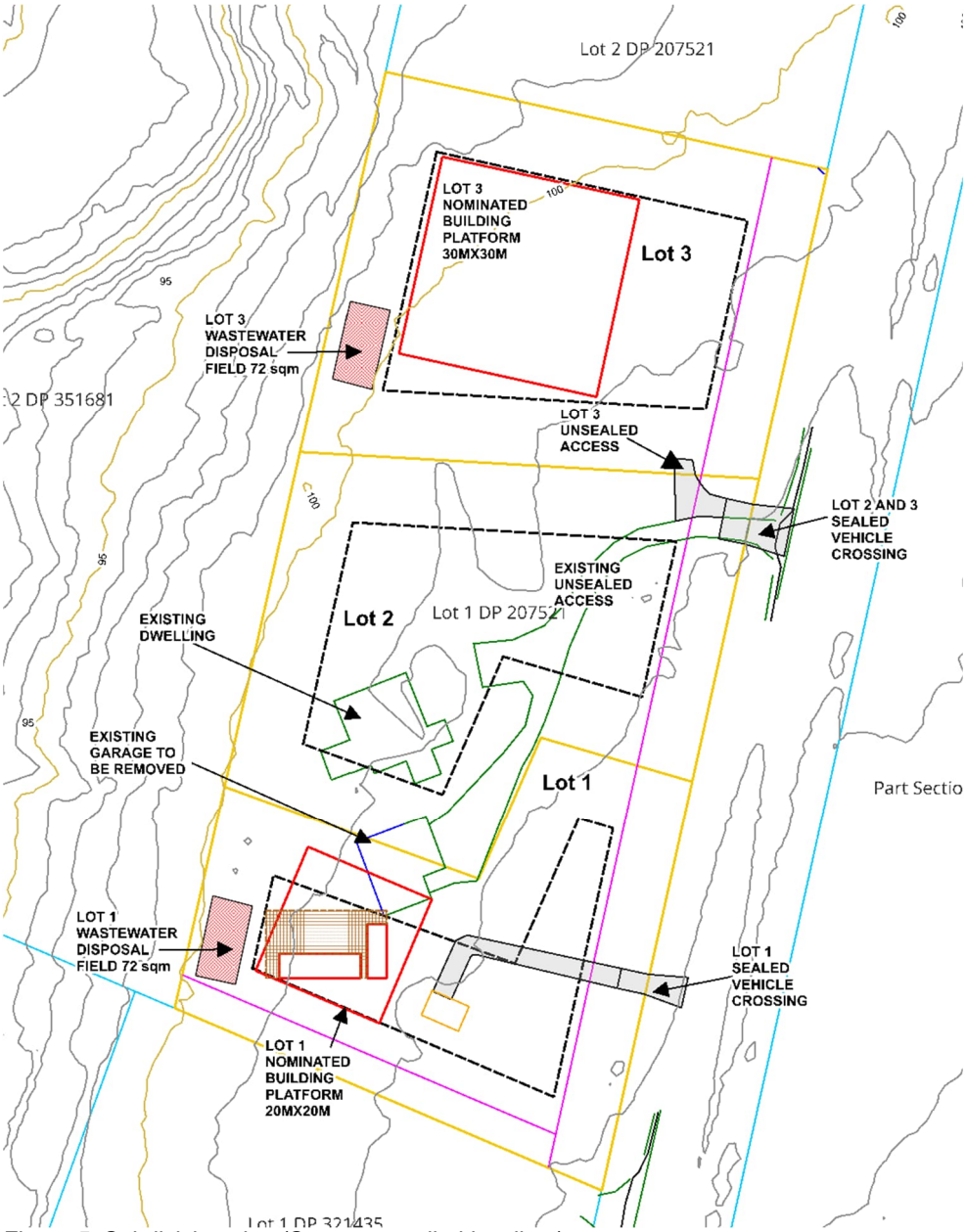


Figure 5. Subdivision plan (Source: supplied by client).

2.3 Surrounding Land Uses

Table 2 documents the surrounding land uses of the site.

Table 2. Surrounding Land Uses

Direction	Description
North	Residential
East	Kerikeri airport runway
South	Residential
West	Rural residential

2.4 Site Inspection

A walkover assessment was undertaken at the site on 12 February 2025. The site is generally flat with a gentle slope towards the rear of the site. Proposed Lot 1 is predominantly a vacant paddock with a caravan and portable cabin (on skids) present and several trees. The garage (to be removed) is unpainted timber, with a concrete base, used for car parking and miscellaneous storage. Proposed Lot 3 is vacant and grassed. A small water trough is present in the centre of the paddock, and a pile of large boulders is present towards the rear of the paddock.

Figure 6. Proposed Lot 1, looking west. Soil disturbance in the left of the image is from recent work at the site to remove large trees and form an accessway.

Figure 7. Proposed Lot 1, looking east.

Figure 8. Garage (to be removed) with unpainted timber and concrete base. Gravel hardstand surrounds the garage.

Figure 9. Proposed Lot 2, with residential dwelling to remain as is on site.

Figure 10. Proposed Lot 3, looking north. Small water trough is present in centre of site.

Figure 11. Proposed Lot 3, looking northwest. Pile of large volcanic boulders seen in the paddock, which have been removed from the site surface over time.

3 HISTORIC SITE USE

The following information was reviewed in order to establish the history of the site:

- Council Records
- Historical aerial photographs
- Site walkover/visual assessment
- Interview with current site owner / past site owner

3.1 Council Information

The following sections provide a summary of information held by the local councils.

3.1.1 Northland Regional Council (NRC)

The NRC Selected Land Use Register (SLUR) was reviewed. The site is not listed on the SLUR. The airport to the east is listed under HAIL category F1 – Airports.

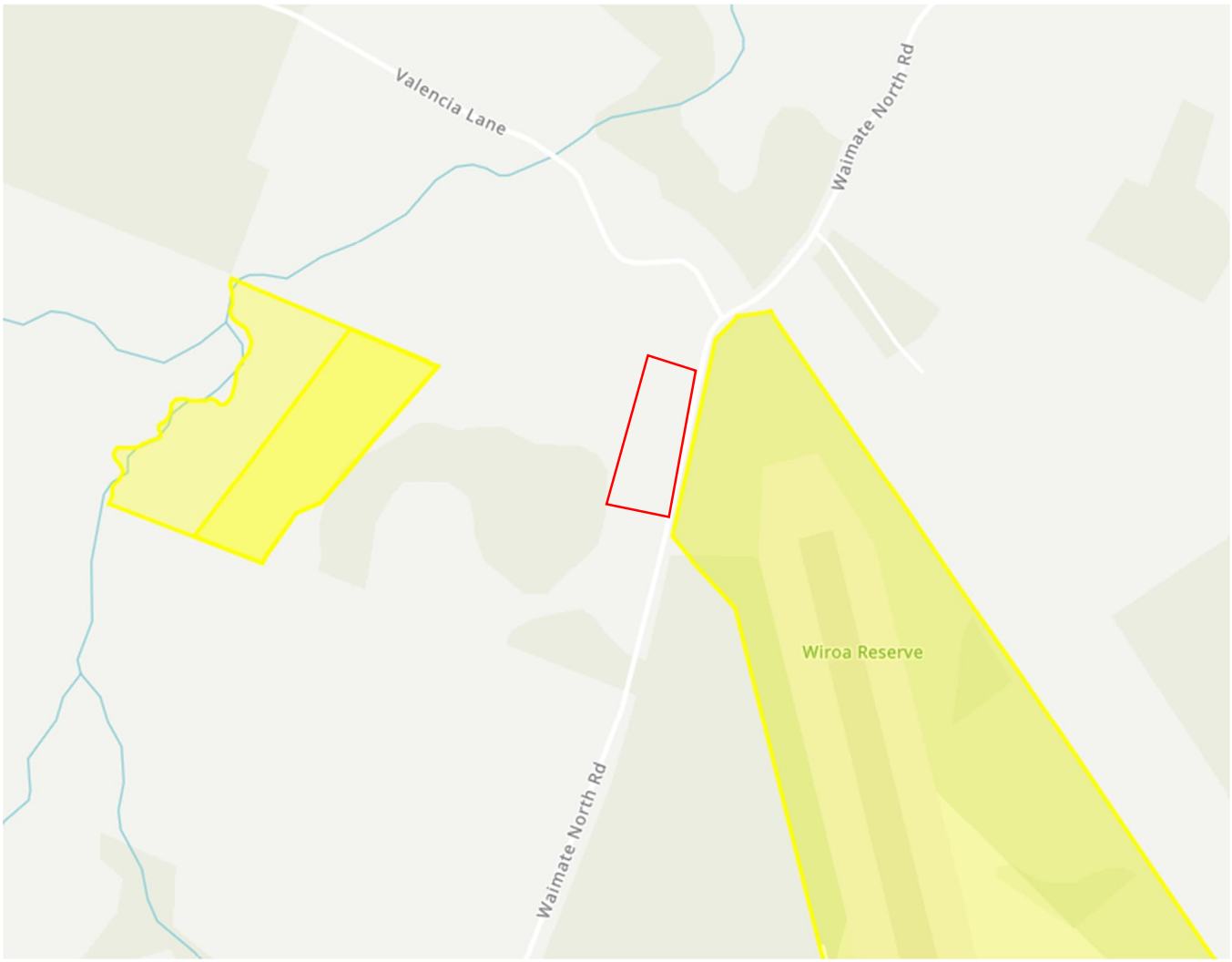


Figure 12. Extract from NRC SLUR register, with approximate site area outlined in red. Sites shaded yellow are listed on the SLUR.

3.1.2 Far North District Council (FNDC).

A search of the site property file was completed on 03/02/2025. A summary of the relevant points are as follows:

1986	Subdivision from a larger block into 10 smaller lots.
1990	Permits and commentary regarding relocation of dwelling and associated shed onto site (existing residential dwelling and shed)
1996	Retrospective permit for calf stables.
2003	Subdivision of the site into two lots, being the existing lot (1.01 ha) and a second lot to the north (3,094 m^2)

3.2 Historical Aerial Imagery

Aerial images from 1953 to 2023 have been analysed as part of this investigation. A summary of our review of these images is as follows.

1953: The site is vacant.

Figure 13. Aerial imagery 1953. Sourced from Retrolenz.nz and licensed by LINZ (annotated image). Approximate site boundary shown in yellow.

1968: The site is vacant. Some earthworks on the southern boundary for the adjacent lot.

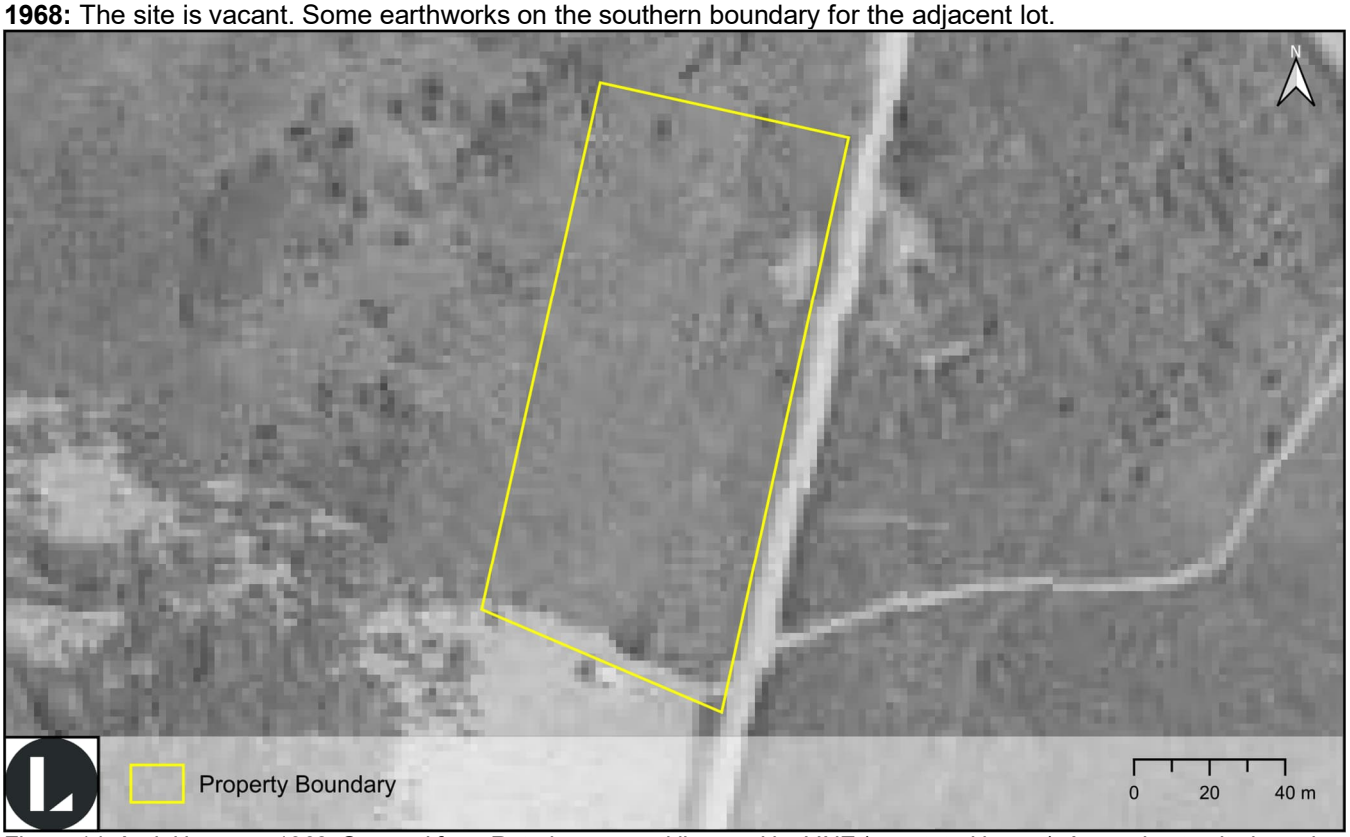


Figure 14. Aerial imagery 1968. Sourced from Retrolenz.nz and licensed by LINZ (annotated image). Approximate site boundary shown in yellow.

1977: The site is vacant.

Figure 15. Aerial imagery 1977. Sourced from Retrolenz.nz and licensed by LINZ (annotated image). Approximate site boundary shown in yellow.

1981: A small dwelling and shed are present in the northern site area. The remaining area is vacant and grassed.

Figure 16. Aerial imagery 1981. Sourced from Retrolenz.nz and licensed by LINZ (annotated image). Approximate site boundary shown in yellow.

2003: The small dwelling has been removed, and the site is in its present day layout, with a dwelling and garage located in the central/southern site area. The remaining site area is vacant.

Figure 17. Aerial imagery 2003. Sourced from Google Earth (annotated image). Approximate site boundary shown in yellow.

2012: The site remains unchanged.

Figure 18. Aerial imagery 2013. Sourced from Google Earth (annotated image). Approximate site boundary shown in yellow.

2023: The site is unchanged.

Figure 19. Aerial imagery 2023. Sourced from Google Earth (annotated image). Approximate site boundary shown in yellow.

3.3 Other Information

Information from the existing site owner, Phil Gasston, indicates the existing site dwelling and shed was relocated to site between 1990 – 1991. The property was first used as a residential dwelling, with paddocks and shed for horse storage and grazing. The site has been owned by Phil Gasston since 1995, and the property has been utilised as residential since this time. The paddocks have been sparsely grazed (cattle), however have remained vacant and grassed for the majority of the time.

4 PRELIMINARY SOIL SAMPLING

To supplement desktop information, preliminary soil sampling was undertaken to inform the conceptual site model. Samples were focused on the location of the former site building, evident in the 1981 aerial image. Contaminants of concern were heavy metals (associated with older buildings, including lead) and asbestos.

4.1 Sampling and analysis plan

The field investigation was undertaken on 14 February 2025 by an LDE contaminated land scientist. Discrete samples from locations SS01 to SS03 between ground level and 400mm below ground level (bgl) were collected from the location of the former site building (1981 aerial image) across the site. All samples were tested for heavy

metals, and one sample (S1 0-100) was analysed for asbestos. The sample locations and details are shown in Figure 20.

Figure 20. Soil sampling site plan. The approximate soil sampling locations are shown in blue. Source: Google Earth (annotated image).

Table 3. Sample Details.

Test Pit / Borehole	Depth (m)	Description	Sample(s)	Analysis	Rational
SS01	0 to 0.1	Topsoil / Clay/ Silt	SS01 0-100	Heavy metals Asbestos	Check for possible soil contamination in location of former site dwelling (1981)
	0.3 to 0.4	Clayey silt	SS01 300-400	Heavy metals	Check for contaminants at depth
SS02	0 to 0.1	Topsoil / Clay/ Silt	SS02 0-100	Heavy metals	Check for possible soil contamination in location of former site dwelling/shed (1981)
SS03	0 to 0.1	Topsoil / Clay/ Silt	SS03 0-100	Heavy metals	Check for possible soil contamination in location of former site shed (1981)

4.2 Quality Assurance and Quality Control

4.2.1 Field QA/QC

The following procedures were adopted during soil investigation works:

- All fieldwork was carried out in compliance with a project specific Health and Safety Plan prepared for the site works.
- All works were conducted by trained LDE staff with precautions including implementation of procedures for the appropriate handling of potentially contaminated material.
- Prior to sampling, and between sample locations, equipment used to retrieve samples was cleaned by washing with potable water to minimise the chance of cross contamination.
- Soil samples were collected using a hand trowel / hand auger.
- A clean pair of nitrile gloves was also used for each sample location. All samples were placed into labelled laboratory supplied sample containers.
- Additional laboratory containers were taken to the site as a contingency for grab samples (one-off samples of material or soil that are of interest and observed by the sampler during a site inspection or sampling event) including soil stains, burn patches or pits, filled areas, and treated timber stockpiles.
- Following collection, all samples were transported, under standard chain of custody procedures, to an IANZ accredited laboratory (Analytica) for analysis. The chain of custody documentation is attached in Appendix B.

4.2.2 Laboratory QA/QC

Laboratory reports from Analytica have been included in Appendix B. These include the analytical methods and detection limits used by the laboratory and the laboratory accreditation for analytical methods used.

All Laboratory Analysis was completed through Analytica. Analytica are accredited by International Accreditation New Zealand (IANZ), which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). Through the ILAC Mutual Recognition Arrangement (ILAC-MRA) this accreditation is internationally recognised.

4.3 Background Concentrations, Soil Contaminant Standards (SCSs) and Guideline Values (SGVs)

4.3.1 Human Health

The NESCS references the Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health (MfE, 2011). This is a national risk-based methodology for deriving soil contaminant concentrations protective of

human health. Soil Contaminant Standards (SCS) and Soil Guideline Values (SGVs) have been selected in accordance with regulation 7.

Regulation 7 states that if the contaminant of concern is a priority contaminant[5] and the land use fits within an exposure scenario adopted in the Methodology[6], the applicable standard is the soil contaminant standard for the priority contaminant. If the contaminant of concern is a priority contaminant and the land use does not fit within an exposure scenario adopted in the Methodology, the applicable standard is whichever of the following is more appropriate in the circumstances:

a) the guideline value derived in accordance with the methods and guidance on site-specific risk assessment provided in the Methodology:

b) the soil contaminant standard for the priority contaminant of the exposure scenario adopted in the Methodology with greater assumed exposure than the actual exposure.

If the contaminant of concern is not a priority contaminant, the applicable standard is whichever of the following is more appropriate in the circumstances:

a) the guideline value derived in accordance with the methods and guidance on site-specific risk assessment provided in the Methodology:

b) a guideline value for the protection of human health that is chosen in accordance with the current edition of Contaminated Land Management Guidelines No. 2–Hierarchy and Application in New Zealand of Environmental Guideline.

Following the guidance, the Soil Contaminant Standards (SCS) for selected priority contaminants and for non-priority contaminants guidelines values were selected following Regulation 7 and the Contaminated Land Management Guidelines No. 2: Hierarchy and Application in New Zealand of Environmental Guideline Values (Revised 2021) as screening criteria for the risk to humans at the site and to inform on-site management actions. If exceeded, further investigation and a Tier 2 assessment would be considered.

No applicable New Zealand guideline criteria exist for some of the tested metals (i.e., nickel and zinc) and therefore Health Investigation Level (HIL) values from the Australian Guideline on the Investigation Levels for Soil and Groundwater have been used under the residential land-use scenario as outlined in the MfE document.

The soil samples were tested at the laboratory for total chromium. However, the methodology document distinguishes between the stable chromium III and the potentially toxic and less stable chromium VI. For the purposes of this analysis all total chromium results have been conservatively compared to the chromium VI.

[5] a contaminant for which the Methodology derives a soil contaminant standard.
[6] The current edition of the Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health.

Asbestos results are compared against the New Zealand Guidelines for Assessing and Managing Asbestos in Soils (NZ GAMAS) for Fibrous Asbestos (FA), Asbestos Fines (AF) and Asbestos Containing Materials (ACM).

4.3.2 Environmental

All results are compared against the Predicted Background Soil Concentrations (Landcare Research Limited)[7] to determine if soil concentrations are anthropologically affected and the applicability of the NESCS.

4.4 Results

4.4.1 Heavy Metals

Table 4 summarises the laboratory results of soil samples tested for heavy metals. All metal concentrations were below the respective SCS for a '*Rural Residential/Lifestyle Block 25% Produce*' land-use scenario.

All soil samples also report concentrations of heavy metals (excluding chromium) at or below the Predicted Background Soil Concentrations. Concentrations of chromium are slightly elevated across all analysed soil samples, which may be a result of the volcanic soils present on site. Chromium is associated with soils of volcanic mineralogy, particularly basalts, which is similarly seen within the Auckland Volcanic Field. The Auckland Council TP153 (ARC, 2001) document states: *"The 1999 survey found chromium concentrations in volcanic soils ranged from 3-286 mg/kg, and in all other soil types ranged from 2-149 mg/kg. The maximum recorded concentrations for chromium in the 1999 survey was from Ti Point Basalt (286 mg/kg). The site was resampled, and concentrations of chromium were reported at 195-260 mg/kg. When included as part of the volcanic data set, these concentrations are outliers/extremes, however the verification of the chromium concentrations in soils at this location likely reflects the Kerikeri Volcanic mineralogy."* Taken in the context of volcanic soils, the chromium is highly likely to be naturally occurring, and the concentrations observed fall within those taken from previous surveys.

The full lab results are included in Appendix A.

[7] https://lris.scinfo.org.nz/layer/48470-pbc-predicted-background-soil-concentrations-new-zealand/

Table 4. Laboratory tests (heavy metal) compared against the soil contaminant standard (SCS) for a 'Rural Residential/Lifestyle Block 25% Produce' land-use.

Sample ID	Depth (mm)	Sample Description	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc
SS01	0-0.1	Topsoil / clay / silt	**9**	0.1	**132**	40.4	22.4	60.8	47.1
SS01	0.3-0.4	Clayey silt	5.7	0.045	**202**	23.6	11.3	51.4	12.7
SS02	0-0.1	Topsoil / clay / silt	8.7	0.1	**150**	28.9	16.9	39.9	64.5
SS03	0-0.1	Topsoil / clay / silt	5	0.067	**154**	20.1	10.4	36.8	22
Rural residential / lifestyle block 25% produce[1]			**17**	**0.8**	**290**	**10000**	**160**	**400**	**7400**
Background soil concentrations[2 or 4]			**8.87**	**0.51**	**128.5**	**108.3**	**56.34**	**77.43**	**295.8**

Notes: All results and standard values are presented in mg/kg (dry weight). All metals tested for 'Total Recoverable' at screen level. Depths are mm below ground level.

1 Methodology for Deriving Standards for Contaminants in Soil to Protect Human Health. Ministry for the Environment, 2011.

2 Predicted Background Soil Concentrations, New Zealand, Landcare Research Limited.

3 Module 2: Hazardous Waste Guidelines, Landfill Waste Acceptance Criteria and Landfill Classification. Ministry for the Environment, 2004.

4 Technical Guidelines for Disposal to Land - Revision 3. WasteMINZ, 2022.

4.4.2 Asbestos Results

Sample SS01 reported no asbestos detected. The laboratory transcripts are appended in Appendix A.

Table 5. Asbestos Semi-Quantitative Analysis.

Sample ID	Depth (mm)	Trace Asbestos (Presence / Absence)	Asbestos (Presence / Absence)	ACM (W/W%)	AF / FA (W/W%)
SS01	0-100	Absent	Absent	<0.001	<0.001
Residential[1]				**0.010**	**0.001**

Notes: Depths are mm below ground level.
ACM = asbestos containing material.
AF/FA = asbestos fines / fibrous asbestos.
W/W% = weight for weight %.

1. New Zealand Guidelines for Assessing and Manging Asbestos in Soil (GAMAS). BRANZ Limited, 2017.

5 RISK ASSESSMENT

This section uses a Conceptual Site Model (CSM) to assess the currently available information presented in this report to determine:

- whether there has been (or there is more likely than not to have been) a potentially contaminating land use.
- the nature and source of potential or likely contaminants.
- the possible locations of contamination.
- known or potential exposure pathways by which identified receptors could be exposed to the contaminants whilst undertaking the current or proposed future land use.
- known or potential human and ecological receptors that could be exposed to contaminants.
-

5.1 Conceptual Site Model

The preliminary site CSM is provided in Table 6. A human health risk can only occur where there is a complete pathway between contaminant source and a receptor. Building floors and paved or sealed areas will largely or completely prevent contact with underlying soils and therefore, direct exposure pathways are or will be incomplete for such areas.

Table 6. Conceptual Site Model at the PSI stage.

HAIL, Potential Contaminants and Location	Receptors	Potential Pathways
None identified	Construction workers	None identified
	Future site users	
	Workers at soil disposal sites	
	Ecological receptors	

5.2 NESCS

As per Regulation 6 (3) it is considered that it is more likely than not an activity or industry described in the HAIL has not been undertaken on the piece of land. The likelihood that the soil is contaminated and is a risk to human health as a result of activity or industry occurring is considered to be highly unlikely. As per Regulation 8(4)(b), LDE considers that it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land.

5.3 Proposed Regional Plan for Northland

As described above, HAIL activities have not occurred on site, therefore the contaminated land rules of Section C.6.8 of the PRPN do not apply to the proposed works.

6 CONCLUSION

Evidence from the PSI and site history review, indicates that it is more likely than not that the site has not had a HAIL activity on the site and that it highly unlikely to represent a risk to human health if the activity is done to the piece of land. The site is therefore considered a permitted activity under the NESCS as per Regulation 8 (4).

6.1 Preliminary Site Investigation Certifying Statement

The document signatories of LDE certify that:

1. this preliminary site investigation meets the requirements of the Resource Management (National Environmental Standard for assessing and managing contaminants in soil to protect human health) Regulations 2011 because it has been:
    a. done by a suitably qualified and experienced practitioner, and
    b. reported on in accordance with the current edition of Contaminated land management guidelines No 1 – Reporting on contaminated sites in New Zealand, and
    c. the report is certified by a suitably qualified and experienced practitioner.

For activities under Regulation 8(4) of the NESCS this preliminary site investigation concludes it is highly unlikely that there will be a risk to human health if the activity is done to the piece of land.

The activity to be undertaken as defined in Regulation 5(5) is described:

a. on page 1 of this preliminary site investigation.

Evidence of the qualifications and experience of the suitably qualified and experienced practitioner(s) (SQEPs) who have done this investigation and have certified this report is included in Appendix B.

7 LIMITATIONS

This investigation presents a preliminary site investigations of the potential for ground contamination, prepared exclusively for Caleb and Erin Gasston and Far North District Council with respect to the particular brief given to us. Information, opinions, and recommendations contained in it cannot be used for any other purpose or by any other entity without our review and written consent. LDE Ltd accepts no liability or responsibility whatsoever for or in respect of any use or reliance upon this report by any third party.

Opinions given in this report are based on a review of existing data, evidence gathered during a site walkover, anecdotal information, and specific soil sampling at discrete locations. There is still some possibility that contaminating activities have taken place or contamination at the site is in excess of that described in this report and we should be contacted immediately if the conditions are suspected to differ from that described.

APPENDIX A

LABORATORY RESULTS AND CHAIN OF CUSTODY DOCUMENTATION

ALS Food & Environmental NZ
Ruakura Research Centre
10 Bisley Road, Hamilton 3214, New Zealand
T: +64 7 974 4740
E: ALSEnviro.Hamilton@alsglobal.com

CERTIFICATE OF ANALYSIS

LDE Limited
Wilson James Centre, Level 1, 77 Peel St
Gisborne 4010

Attention: Erin Gasston
Phone: 022 415 9331
Email: e.gasston@lde.co.nz

Sampling Site: Waimate North

Lab Reference: 25-04554
Submitted by: Erin Gasston
Date Received: 17/02/2025
Testing Initiated: 17/02/2025
Date Completed: 19/02/2025
Order Number:
Reference:

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at ALS NZ (or at the subcontracted laboratories, when applicable). Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Heavy Metals in Soil

	Client Sample ID		SS01 0-0.1	SS01 0.3-0.4	SS02 0-0.1	SS03 0-0.1
	Date Sampled		14/02/2025	14/02/2025	14/02/2025	14/02/2025
Analyte	Unit	*Reporting Limit*	25-04554-1	25-04554-2	25-04554-3	25-04554-4
Arsenic	mg/kg dry wt	*0.125*	9.0	5.7	8.7	5.0
Cadmium	mg/kg dry wt	*0.005*	0.10	0.045	0.10	0.067
Chromium	mg/kg dry wt	*0.125*	132	202	150	154
Copper	mg/kg dry wt	*0.075*	40.4	23.6	28.9	20.1
Lead	mg/kg dry wt	*0.25*	22.4	11.3	16.9	10.4
Nickel	mg/kg dry wt	*0.05*	60.8	51.4	39.9	36.8
Zinc	mg/kg dry wt	*0.05*	47.1	12.7	64.5	22.0

Method Summary

Elements in Soil Samples dried and passed through a 2 mm sieve followed by acid digestion and analysis by ICP-MS. In accordance with in-house procedure based on US EPA method 200.8.

Thara Samarasinghe, B.Sci.
Senior Laboratory Technician

Lekeisha Tanner
Laboratory Technician

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CERTIFICATE OF ANALYSIS

LDE Limited
Wilson James Centre, Level 1, 77 Peel St
Gisborne 4010
Attention: Erin Gasston
Phone: 022 415 9331
Email: e.gasston@lde.co.nz

Lab Reference: 25-04822
Submitted by: Erin Gasston
Date Received: 19/02/2025
Testing Initiated: 20/02/2025
Date Completed: 20/02/2025
Order Number:
Reference:

Sampling Site: Waimate North
Description of Work: SQ - Waimate North

Report Comments

Samples were collected by yourselves (or your agent) and analysed as received at ALS NZ (or at the subcontracted laboratories, when applicable). Samples were in acceptable condition unless otherwise noted on this report.
Specific testing dates are available on request.

Asbestos in Soil (Semi-Quantitative)

Sample Details

Laboratory ID	Client Sample ID	Sample Location	Sample Description	Date Sampled	Date Analysed
25-04822-1	SS01 0- 0.1		Soil	14/02/2025	20/02/2025

Information in the above table supplied by the client: Client Sample ID, Sample Location, Date Sampled

Analysis Results (Summary)

Laboratory ID	Client Sample ID	Asbestos	Sample Weight as Received	Moisture Content	Trace Asbestos (Presence / Absence)	Asbestos (Presence / Absence)
	Units		g	%		
25-04822-1	SS01 0- 0.1	Asbestos NOT Detected. Organic Fibres	522.9	30.6	Absent	Absent

Information in the above table supplied by the client: Client Sample ID

Analysis Results (Size Fraction Breakdown)

Laboratory ID	Client Sample ID	Fraction Size	Fraction Weight*	AF/FA Weight*	ACM Weight*	ACM Content*	Asbestos Matrix	Asbestos Weight*	W/W% Asbestos*
Units *Reporting Limit*			g 0	g 0	g 0	% 		g 0	
25-04822-1	SS01 0- 0.1	>10mm	5.44	0.0000	0.0000	0	No Asbestos Detected	0.0000	<0.001 (ACM) <0.001 (AF/FA)
		2-10mm	202.94	0.0000	-	-	No Asbestos Detected	0.0000	
		<2mm	154.67	0.0000	-	-	No Asbestos Detected	0.0000	

Information in the above table supplied by the client: Client Sample ID

Asbestos in Soil (Semi-Quantitative) Approver:

Millie Campbell
Lab Technician

Method Summary

Asbestos Fibres in Soil (Semi-Quantitative)

Sample analysis was performed using polarised light microscopy with dispersion staining in accordance with AS4964-2004 Method for the qualitative identification of asbestos in soil samples.

Note 1: The reporting limit for this analysis is 0.1g/kg (0.01%) by application of polarised light microscopy, dispersion staining and trace analysis techniques.

Note 2: Trace asbestos is indicative that freely liberated respirable fibres are present and dust control measures should be implemented or increased on site. This is not the sole indicator for the friable nature of the asbestos present.

Note 3: If mineral fibres of unknown type are detected, by PLM and dispersion staining, these may or may not be asbestos fibres. To confirm the identity of this fibre, another independent analytical technique such as XRD analysis is advised.

Note 4: The laboratory does not take responsibility for the sampling procedure or accuracy of sample location description.

APPENDIX B

QUALIFICATIONS AND EXPERIENCE OF THE SQEPS

James Gladwin - BSc (Hons) Environmental Science, PgDip in Soil Science, CEnvP.

James is a Suitably Qualified and Experience Practitioners (SQEP). He has +15 years of experience in contaminated land covering a wide range of sites and contamination types, and as a result has an excellent understanding of the National Environmental Standards for Contaminated Land (NESCS) and the Contaminated Land Management Guidelines (CLMG).

James is a certified environmental practitioner (CEnvP) and has provided a wide range of contaminated land services to an array of clients. Key clients include the District and City Councils of the Bay of Plenty, the Bay of Plenty Regional Council, Christchurch City Council, Gisborne City Council, New Plymouth District Council and the NZ Transport Agency. He has been a panel member that provided technical review and guidance for the development of contaminated sites. He has also provided technical reviews for contaminated land investigations completed by third parties.

James worked on the Kopeopeo Canal Remediation Project, providing independent technical analysis for dioxin contamination in soils, sediment, water and air. He monitored and reported on the effectiveness of the dredge trial within resource consent requirements. This provided proof that the remediation methods were effective and practical so that the full-scale remediation of the canal could be completed. James continued to provide technical input through the remediation stage of the project.

Appendix G

Soils Capacity Assessment

KAITIAKI

Independent Agriculture
& Horticulture
Consultant
Network

SOILS, LAND USE CAPABILITY AND HIGHLY PRODUCTIVE LAND REPORT FOR 194 WAIMATE NORTH ROAD, KERIKERI

Prepared by Bob Cathcart
Land and Environmental Management Consultant
AgFirst Northland

1 February 2025

BACKGROUND

At the request of Caleb Gasston, this approximately 1.0hectare property on the west-side of Waimate North Road, just beyond the northern end of the Kerikeri Airport runways, has been inspected to gather land resource inventory data and assess Land Use Capability (LUC), following the procedures set out in the 3rd Edition of the Land Use Capability Survey Handbook(1), the recognised standard for LUC assessment. This involved walking over the property, measuring slope, digging holes and inspecting soil profiles, noting other land resource inventory data which may assist in assessing LUC, and help decide if this land is 'highly productive land' and should be protected for intensive primary production. Also, because it is within the Kerikeri Irrigation Scheme supply area, whether it should be protected for horticulture under a Proposed District Plan Change aimed at maximising horticultural production, on which the Far North District Council is currently consulting.

This almost rectangular rural residential Lot, about 148 metres long by 68 metres wide, has an old homestead, a relocated and restored building, mature trees and extensive garden including a grass tennis court, out-buildings and driveways. These are sited towards the southern end of the property and occupy its full depth/width from Waimate North Road. The northern, approximately one-third of the Lot is in mown grass.

LAND RESOURCE DATA AND LUC ASSESSMENT

The property is almost flat, with slightly more slope (2 to 3°) away from the road at the northern end. The back boundary is the edge of the plateau, dropping more steeply down into a valley. Smaller basalt boulders of old Kerikeri volcanics have been cleared from the surface and stockpiled near the back of the northern part of the section but there are many others scattered around the mown area, their tops flush with the surface. Even larger boulders can be seen on the hillside on a neighbouring property.

Holes were dug at six sites to check the profile and determine the soil type. Most of the soil profiles were those of Pungaere gravelly friable clay although with a shallower topsoil than would be expected. This suggests that topsoil has been lost to erosion, perhaps prior to settlement and land development in the area, when the land was in frequently burnt scrub. There is a deeper topsoil closer to the road, in the southern corner of the property where the land is flat.

Land Use Capability - 194 Waimate North Road

Contrary to the metadata accompanying the nzlri-luc digital database[2], this flat to gently sloping land has weakly to moderately leached Red Loam Papakauri silt loam, a soil formed on basaltic scoria and ash from a relatively recent volcanic eruption. Instead, according to DSIR Soil Bureau maps [3], and confirmed by field assessment, it has eroded, bouldery and strongly leached Pungaere gravelly friable clay soils formed on old (3 million-years), basalt lava flows. Whereas Papakauri soils, when on easy slopes, are potentially very productive and versatile horticultural soils, and would qualify as 'highly productive soils', the Pungaere soils are very deeply weathered and leached, with accumulations of iron and aluminium in their subsoil. Only very occasionally are Pungaere soils deep enough and boulder-free, suited to orcharding, vines and market gardening, but still limited by the presence of elevated levels of iron and aluminium in the subsoil.

They are also highly variable, with a sometimes relatively deep topsoil before encountering iron and aluminium nodules, while in other places there is very little topsoil. Pungaere soils are often mapped on the steeper edges of the old lava flows, with even older Okaihau soils ('ironstone soils') on the easier plateau tops, suggesting that some areas mapped as Pungaere may be an eroded phase of Okaihau soils.

As noted, the nzlri-luc data is at odds with the hard-copy Soil Bureau, DSIR, Soil Type maps published in 1984. The Soil Bureau maps show this area as having the mature Okaihau gravelly friable clay on the flat to gently sloping tops of the lava flows and Pungaere gravelly friable clay on the sloping land over the edges of the lava flows. Otaha clay, is a strongly to very strongly leached and sometimes gleyed soil which has formed on alluvial sediment in shallow basins on the old lava flows. These are 'ironstone soils' which have developed under Northland's warm, moist climate.

The soil-forming process has taken up to 30,000years to produce these iron and aluminium-rich soils. The iron and aluminium accumulation appears as a gravelly layer of nodules. At low pH, which this soil is naturally, the iron and aluminium is 'free' in the soil profile. High concentrations of 'free' iron and aluminium fix all phosphates and most other plant nutrients, making them totally unavailable to plants, and aluminium in these concentrations is toxic to plant roots.

Clay leaching through the soil profile accumulates as a very dense horizon immediately beneath the iron and aluminium nodules, resulting in not only a chemical barrier to plant root penetration but also a physical barrier. These are 'ironstone soils', very poor, old Brown Loams, which remained in short heathland scrub until the 1950s when they were developed for pastoral farming by the Lands and Survey Department of Government. Shelter belts and eucalypt woodlots were grown on some of this land to provide shelter for horticulture but orcharding was limited by a lack of water for irrigation. The Kerikeri Irrigation Scheme, constructed in the 1970s, encouraged orchard development on areas with deeper topsoils but even these soils are not suited to deep-rooted orchard trees like avocado.

A remnant of the former heathland vegetation occurs in the Department of Conservation Wetland Reserve opposite the Gasston property, in the triangle between Kerikeri Airport, Waimate North Road and Wiroa Road.

While there are kiwifruit orchards on similar but deeper soils to the south of this property, some suffered vine losses during a very wet 2022-23 period when the soil became waterlogged and anoxic (deprived of oxygen). Waterlogging not only 'drowns' plant roots and soil fungi, on which plants depend to take up nutrients, but reduces soil pH, making it acidic, which releases more free iron and aluminium. Weakened plants are also more susceptible to fungal and bacterial root diseases.

Holes dug and profiles inspected showed that the soil type over most of this 1.0hectare property is a shallow or eroded phase of Pungaere gravelly friable clay, much of it lacking the friable topsoil. It is very bouldery with most surface boulders cleared to enable a lawn to be established, although care is required to avoid protruding rocks when mowing. The soil shrinks away from the rocks and exposed boulders need to be removed every few years. The topsoil is so shallow in places that the lawn would probably die in a dry summer.

The topsoil is a bit deeper in the southeast corner of the property and around the dwelling but still contains ironstone nodules within 100mm of the surface. This area is assessed as Class 4s2 while the shallower soil on the northern one-third of the section is assessed as Class 6s1, as described by Harmsworth[4] except it is an older, more leached soil than the LUC Unit he describes. [***See Appendix 1*** - *Harmsworth classed the younger, less leached very stony basalt soils, Kiripaka, Ohaeawai and similar) as Class 4s1 and the strongly leached 'ironstone' Okaihau and Pungaere soils as Class 4s2. On even stonier land, he only had Class 6s1, not separating the very stony young basalt soils from the equally stony but much more strongly leached in which aluminium toxicity is a problem. More intensive mapping in the Mid-North suggests there is a need to introduce a new LUC unit incorporating only these older soils*.]

LAND USE CAPABILITY ASSESSMENT

In summary:

i. This land (including Kerikeri Airport) is recorded as Class 3s2 (nz3s-1) on the nzlri-luc[2] digital database and is therefore legally 'highly productive land', both as decided by the Courts and confirmed by a 2024 Amendment to the National Policy Statement for Highly Productive Land (NPS-HPL).[5]

ii. To enable the property to be subdivided as a lifestyle block(s), the applicant would need to convince the Council that, pursuant to S.3.10 of the NPS-HPL, despite the NPS-HPL designation, subdivision would not significantly affect the ability of the land to be managed and produce as HPL, affect neighbouring HPL, or reduce the productivity from HPL in the wider District.

iii. Reassessment of the land use capability of the 1.0ha property shows that, due to a fundamental error in the initial LUC assessment of this immediate area, the land is wrongly recorded as Class 3s2. The soil type recorded on the nzlri-luc[2] is PK Papakauri silt loam, a more fertile, free-draining and very versatile soil, capable of growing a very wide range of crops. In reality, as recorded on DSIR Soil Bureau Soil

Maps[3] and confirmed by my field inspection, it is Pungaere gravelly friable clay, a very low fertility 'ironstone soil' , which is suited to a much smaller range of uses. The exaggerated potential of the land is further confused by, in trying to correlate the various regional LUC Units, the older, strongly leached ironstone soils were grouped with the younger, free-draining and much more versatile Kiripaka and Ohaeawai soils as 3s1 and then nz3s-1.

[*The initial confusion in the nzlri-luc data is probably due to the wrong soil type symbol being recorded on the original land resource data, PK instead of PG, and subsequent LUC assessment was then skewed towards the more productive soil type. The DSIR Soil Bureau Soil Maps[3] record PG + OK (Pungaere gravelly friable clay plus Okaihau gravelly friable clay on this area*.

This mistake is repeated to the north of this area over an extensive polygon incorporating Valencia Lane. Later grouping younger, less leached 'Brown Loam' soils with the older 'ironstone soils' shows a lack of understanding of these soils.]

iv. Also, the smallest area that can be separately identified with any confidence on a 1:50,000 scale database, like the nzlri-luc database, is 10 hectares. The distribution of soils in Northland is so complex that not all soils can be mapped at 1:50,000 scale, only the dominant soils in an area. Patches of rock of less than 10 hectares, for example, cannot be isolated at this scale.

v. I have re-assessed the land use capability of this 1.0hectare property, following the protocols set out in the 3rd Edition, New Zealand Land Use Capability Survey Handbook, 2009[1], assessed the northern bouldery 1/3rd of the property as Class 6s1. The southern two-thirds of the section on which the house, cottage, garden and driveways are located, while not usually assessed because it is a dwelling, is Class 4s2.

vi. There are long-term constraints on the soils on this property, high iron and aluminium content, boulders and extremely low fertility which severely restrict its use for horticulture. Its use for arable farming, even a crop during pasture renewal, is also severely restricted. At best, part of the southern end of the property could be used to grow a fodder crop (maize-for-silage) once in 10 years, as part of a pasture renewal programme. The boulders on the norther part of the section are so large and so widely dispersed that even this option may not be practicable. These are constraints which cannot be overcome with known technology or within the next 30 years, a 'test' required by the NPS-HPL[5] when considering exemptions to the land use restrictions to protect actual or potential productivity.

vii. Subdivision of the property into large residential Lots would not result in the significant loss of productive capacity of highly productive land in the district, both because of the scale of the property and because, in reality, it is not actually or potentially highly productive land and is not, therefore, contributing to 'highly productive land' or could not contribute in the future to soil-based productivity;

viii. Development as proposed, may help avoid fragmentation of large and geographically cohesive areas of genuinely 'highly productive land'. There are no adjoining large and cohesive areas of land like the better (Class 4s2) part of this property to which the southern end of the property could be added. Adjoining land to the south is already in residential and commercial use.

ix. The constraints on this land, including extremely low fertility, strongly leached and bouldery soils are permanent, inherent, constraints on economic viability which cannot be addressed through any reasonably practicable options that would make the land suitable for soil-based primary production, practices such as land drainage or irrigation, or by alternative production strategies. This land has no attributes, water or resources which could be reallocated or transferred (water and nutrient allocations) to or from any adjoining highly productive land, (nor could productivity be improved by boundary adjustments, amalgamations) or lease arrangements.

x. This property is surrounded on 3 sides by residential and small lifestyle properties and on the fourth by the airport. Even if it was big enough and was on highly productive soils, development for horticulture would create reverse sensitivity issues with these very close houses. If planted in kiwifruit, for example, it would be very difficult to comply with Regional air quality rules for the use of hi-cane, with houses so close to the property boundaries. As it is, the property is too small for commercial horticulture.

xi. Unfortunately, the wrongly recorded soil type and LUC assessment on the nzlri-luc database relating to this property and land to the north in the vicinity of Valencia Lane gives an inflated potential area for horticulture within the Kerikeri Irrigation supply district.

REFERENCES

1. Lynn IH, Manderson AK, Page MJ, Harmsworth GR, Eyles GO, Douglas GB, Mackay AD, Newsome PJF 2009. NZ Land Use Capability Survey Handbook – a New Zealand handbook for the classification of land 3rd Edition. Hamilton, AgResearch; Lincoln, Landcare Research; Lower Hutt, GNS Science. 163.

2. NZLRI (New Zealand Land Resource Inventory), Landcare Research - Manaaki Whenua, Lincoln, New Zealand [https://lris.scinfo. org.nz/layer/76-nzlri-land-use-capability/]

3. Sutherland, C.F., Cox, J.E., Taylor N.H., Wright, A.C.S. 1980: Soil map of Whangaroa-Kaikohe area, Sheets P04/05, North Island, New Zealand. N.Z. Soil Bureau Map 186

4. Harmsworth, G.R. 1996. Land Use Capability classification of the Northland Region. A report to accompany the second edition (1:50,000) NZLRI worksheets. Landcare Research Science Series 9. Lincoln, Manaaki Whenua Press, 269p.

5. https://environment.govt.nz/publications/national-policy-statement-for-highly-productive-land/

APPENDIX – Northland Land Use Capability Units as described by Harmsworth

Class 4s2

LUC unit:		**IVs2** (4142 ha)
LUC suite:		6. Young basalt volcanic terrain: (LUC units Ic1, IIe1, IIs1, IIIe1, IIIs1, IIIs2, IVe2, IVs1, IVs2, Vs1, VIs1, VIe4, VIIIs2)
Description:		Flat to undulating slopes on deeply weathered basalt rock. Soils strongly leached brown loams, generally of low fertility and may be poorly drained in places. Internal drainage in some areas may be impeded by underlying basalt.
Type location:		P05/870635 Mangararetu Road
Altitudinal range:		0–400 m
Slope:		Flat to undulating (A, A+B, B), 0–7°
Landform:		Flat to gently rolling surfaces on basalt lava plains, terraces, and low domes.
Rock type:		Lavas (Vo), scoria (Sc).
Soils:		Brown loams on basalt flows and ash. Strongly to very strongly leached brown loams of Kiripaka suite (TA, OKu, OK, OKg, ODg, OD, PG, RT).
Erosion:	*Present:*	Negligible (0) to slight (1) sheet (Sh) and gully (G)
	Potential:	Slight (1) to moderate (2) rill (R) and sheet (Sh) when cultivated
Vegetation:		Improved pasture (gI), manuka, kanuka (sM), rushes, sedges (hR), subtropical fruit (cS).
Annual rainfall range:		1200–1600 mm
Land use:	*Present:*	Grazing – Intensive – Present average carrying capacity (s.u./ha) = 13 – Top farmer carrying capacity (s.u./ha) = 15
	Potential:	Grazing – Intensive – Attainable physical potential carrying capacity (s.u./ha) = 18 Cropping – Root and green fodder crops. Horticulture. Forestry – Production – site index for *Pinus radiata* = 26–28
Soil conservation management:		– When cultivating, contour cultivation and minimum-tillage practices recommended. – Soils strongly leached and deficient in some nutrients, adequate fertiliser/trace element applications required to counter nutrient deficiencies. – Maintain good pasture cover and pasture quality. – Shelterbelts, tree planting recommended for pastoral, cropping and horticultural land uses to minimise surficial erosion, maintain soil moisture levels, increase organic matter. – Irrigation may be necessary, particularly for horticulture. – Control grazing by avoiding overstocking and concentrated stock movement (e.g. repeated tracking). Bare ground difficult to revegetate when topsoil depleted.
Comments:		Soils prone to seasonal soil moisture deficiencies, particularly during summer months. Soils generally of low natural fertility and drainage may be impeded in some localised areas. Soils require phosphate and lime for pastoral purposes. Citrus and subtropical crops may be grown but require careful management in locations such as Kerikeri.

Class 6s1

LUC unit:		**VIs1** (5982 ha)
LUC suite:		6. Young basalt volcanic terrain: (LUC units Ic1, IIe1, IIs1, IIIe1, IIIs1, IIIs2, IVe2, IVs1, IVs2, Vs1, VIs1, VIe4, VIIIs2)
Description:		Flat to rolling slopes on relatively young basalt flow terrains with numerous stones, gravels and boulders scattered over land surface and throughout soil profile. Soil depths commonly less than 30 cm over hard weathered basalt rock, and gravels and boulders typically comprise greater than 35% by volume of soil profile. Stoniness and shallow soil depth preclude arable use. Soils mainly brown loams. Often mapped at edge of basalt lava flows, for example, terrace and plains.
Type location:		P05/889503 Ohaeawai
Altitudinal range:		0–400 m
Slope:		Typically flat to rolling, however strongly rolling and moderately steep slopes may also be recorded (A, B, C, D, E), 0–25°
Landform:		Flat to gently rolling surfaces on basalt lava terraces and plains.
Rock type:		Lavas and welded ignimbrites (Vo).
Soils:		Weakly to strongly leached brown and red loams with a bouldery or stony phase on basalt flows, scoria and ash. Weakly to moderately leached brown loams of Kiripaka suite (KB, KBb, KBe, KBeb, OWb), moderately to strongly leached brown loams of Kiripaka suite (YOb, MCb, KEb, RTb). Red loams of Papakauri suite (MUb) can be included where boulders and stones preclude arable use.
Erosion:	*Present:*	Negligible (0) to slight (1) sheet (Sh) and gully (G)
	Potential:	Slight (1) sheet (Sh) and gully (G)
Vegetation:		Semi-improved pasture (gS), improved pasture (gI), gorse (sG), podocarp forest (fP), lowland podocarp–broadleaved forest (fO), manuka, kanuka (sM).
Annual rainfall range:		1200–1600 mm
Land use:	*Present:*	Grazing – Present average carrying capacity (s.u./ha) = 17 – Top farmer carrying capacity (s.u./ha) = 20 Undeveloped land Reversion to scrub
	Potential:	Grazing – Attainable physical potential carrying capacity (s.u./ha) = 24 Cropping – Unsuitable Forestry – Production – site index for *Pinus radiata* = <18
Soil conservation management:		Land, although relatively stable, requires intensive management for productive use. – Maintain good-quality pastures/apply adequate fertiliser levels – major elements and trace element requirements. – Control of noxious weeds (gorse) required as part of pasture maintenance. – Management may involve stone removal. – Soils often shallow and experience moisture deficiencies in drier months. Irrigation may be required for intensive use.

Name & contact details

Bob Cathcart
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Appendix H

Correspondence from the Bay of Islands Airport and Top Energy

KAITIAKI

Heather Perring

From: Caleb Gasston <belacj@gmail.com>
Sent: Tuesday, 17 December 2024 10:46 am
To: Heather Perring
Subject: Fwd: 194 waimate north road, kerikeri

Hi Heather,

Please see below emails from topenergy including network plan.

Thanks,

Caleb

---------- Forwarded message ---------
From: **GIS Support** <gissupport@topenergy.co.nz>
Date: Tue, Dec 17, 2024 at 10:24 AM
Subject: Re: 194 waimate north road, kerikeri
To: <belacj@gmail.com>

Hi Caleb,

The LV lines are private services to customers houses; they will range from 230v to 480v
The HV lines are transmission, these are 33kv
The MV lines are distribution, these are 11kv

Regards

Paige Edwards
GIS Administrator
Top Energy Group

Level 2, John Butler Centre
PO Box 43, Kerikeri, 0245

www.topenergy.co.nz

On Tue, 17 Dec 9:42 AM , Caleb <belacj@gmail.com> wrote:

Thank you. When the key says HV, MV, LV what are the voltages for each of these. Council's guidance refers to specific line voltages in their set ack.

> On Tue, 17 Dec 2024, 08:27 GIS Support, <gissupport@topenergy.co.nz> wrote:
> Hi Caleb,
>
> Please see attached the map of 194 Waimate North Road, Kerikeri as requested.
>
> Disclaimer
> The information contained in this email is for design purposes only. These plans accurately reflect our records at the time of printing but may become inaccurate over time as network changes occur often. While Top Energy Ltd. endeavours to keep our information up to date and correct, we can make no representations or warranties of any kind, express or implied, about the completeness or accuracy of the supplied plans or data. Any reliance you place on such information is therefore strictly at your own risk.
> Before you undertake any works, an underground cable location is required. You can initiate a cable location request via our website; www.topenergy.co.nz/cablelocate. When undertaking works, beware that you may encounter underground cables at ANY depth.
> In no event will Top Energy Ltd. be liable for any loss or damage including without limitation, indirect or consequential loss or damage, or loss or damage whatsoever arising from the accuracy of these plans.
>
> Regards
>
> Paige Edwards
> GIS Administrator
> **Top Energy Group**
>
> Level 2, John Butler Centre
> PO Box 43, Kerikeri, 0245
>
> www.topenergy.co.nz
>
> 
>
> Please consider the environment before printing this email.
>
>
>
> > On Mon, 16 Dec 6:33 PM , Caleb <belacj@gmail.com> wrote:
> >

Hi there,

We are wanting to subdivide the above address and require information on the lines that pass through the property to determine the setbacks.

Thanks,

Caleb

--
Ngā mihi nui

Caleb Gasston PhD

Heather Perring

From: Daniel Alexander <Airports@fnhl.co.nz>
Sent: Wednesday, 15 January 2025 3:51 pm
To: Caleb Gasston
Cc: Heather Perring; Erin Gasston
Subject: RE: Approval for subdivision
Attachments: Appendix-4-Airport-site-plans-and-protection-surfaces.pdf; 15.-Transportation.pdf

Hi Caleb,

Thanks for your email. I have consulted internally and our reply is as follows.

1. **Building Consent or land Use Consents with in the 1.2km buffer zone and inside the 55dbl Noise boundary:**
    a. FNHL has an interest with all developments in and around the airport. Our primary intertest is to ensure that the future development and use of the airport is not affected by sensitive activities that may impact its potential operations. This development is within the airport buffer zone and is on, or inside, the noise boundary area and therefore FNHL does have a concern with this proposed development.
        i. It is recommended that Council consider the affects of airport noise activities and seeks an acoustics report ensuring that noise sensitive activities proposed in the property are addressed against DP rules, particularly bedrooms and living areas.
        ii. A no complaints covenant is required for residences built inside the buffer zone.
        iii. It is recommended that roof surfaces are painted in non-reflective colours.
        iv. It is recommended that a survey confirm building height relative to the airport protection surfaces as attached.

Please pass our conditions on to council and all the best with your project.

Let me know if you have any questions or this doesn't make sense.

Daniel Alexander
Airports Manager

+64 9 407 6133 | (+64) 27 5566 470

218 Wiroa Road, RD2 Kerikeri 0293
New Zealand
www.bayofislandsairport.co.nz

Bay of Islands Airport KERIKERI

From: Caleb Gasston <c.gasston@lde.co.nz>
Sent: Monday, 25 November 2024 9:34 am
To: Daniel Alexander <Airports@fnhl.co.nz>
Cc: Heather Perring <Heather@kaitiakiproperty.com>; Erin Gasston <e.gasston@lde.co.nz>
Subject: Re: Approval for subdivision

Hi Daniel,

Just following this up. If we could please get a response this week, that would be great. Happy to book in a time to sit down and discuss if that would help.

Thanks,

Caleb

Ngā Mihi | Kind regards,

Caleb Gasston
Geophysics Team Leader
Senior Engineering Geologist
+64 22 474 3081

From: Caleb Gasston <c.gasston@lde.co.nz>
Sent: Tuesday, October 29, 2024 1:19:49 PM
To: Daniel Alexander <Airports@fnhl.co.nz>
Cc: Heather Perring <Heather@kaitiakiproperty.com>; Erin Gasston <e.gasston@lde.co.nz>
Subject: Re: Approval for subdivision

Hi Daniel,

Sorry for the slow response.

Following up on our phone call last week, we plan to undertake the subdivision shown on the attached scheme plan at 194 Waimate North Road.
Could we please have a written letter of approval from FNHL/KK Airport stipulating any conditions or caveats you wish to impose on the new lots, to be submitte dby us to council alongside our resource consent application.
We are happy to accept a no-complaint caveat if required.

Thanks,

Caleb

From: Daniel Alexander <Airports@fnhl.co.nz>
Sent: Monday, 21 October 2024 1:49 pm
To: Caleb Gasston <c.gasston@lde.co.nz>
Subject: RE: Approval for subdivision

Hi Caleb,

Thanks for your message. You are correct – I haven't checked the exact location but given the address I assume we will be an affected party for both noise buffer and protection surfaces.

Typically we require two controls in place for new sections:

1. Restriction to the height of structures and trees – this prevents hazard to low flying aircraft near the aircraft. Generally, this does not create a tangible affect on property owners unless they are directly in line with the runway end. And-
2. Mitigation to any new buildings so that occupants are not exposed to undue aircraft noise. This typically includes acoustic insulation etc.

Both items are critical to the safe and continued operation of the airport and we thank you for engaging with us on this.

Moving ahead, I'm happy to email back and forth, take a phone call, and we can get our planner involved as well if required.

Daniel Alexander
Airports Manager

+64 9 407 6133 | (+64) 27 5566 470

218 Wiroa Road, RD2 Kerikeri 0293
New Zealand
www.bayofislandsairport.co.nz

Bay of Islands Airport KERIKERI

From: Caleb Gasston <c.gasston@lde.co.nz>
Sent: Friday, 18 October 2024 10:49 am
To: Enquiries @ FNHL <enquiries@fnhl.co.nz>
Cc: Phil Gasston <PhilG@solo.co.nz>; Erin Gasston <e.gasston@lde.co.nz>; gasstons10@gmail.com
Subject: Approval for subdivision

Hi There,

We are wanting to subdivide our family property at 194 Waimate North Road. Council have stipulated that as we are in the airport noise buffer zone we need written approval from the executive/board of FNHL to proceed with the subdivision.

Could you please put me in touch with a member of the executive who may be able to discuss and authorise such approval and any conditions FNHL may require of us?

Ngā Mihi | Kind regards,

Caleb Gasston PhD
Geophysics Team Leader
Senior Engineering Geologist

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+64 6 867 3035
Ext: 258

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