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)
- ☐ **Other (please specify)** _____
- ☐ **Discharge**
- ☐ **Change of Consent Notice (s.221(3))**
- ☐ **Extension of time (s.125)**

**** 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: Rob Vellenoweth

Email: [redacted]

Phone number: [redacted] Home

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

Postcode

6. Address for Correspondence

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

Name/s: Bay of Islands Planning - Steven Sanson

Email: [redacted]

Phone number: [redacted] Home

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

Postcode

**** 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: Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft

Property Address/ Location: [redacted]

Postcode

8. Application Site Details

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

Name/s: Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft

Site Address/ Location: [redacted]

Postcode

Legal Description: Lot 2 DP 198209 **Val Number:**

Certificate of title: NA127A/757

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.

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.

4 x lot subdivision in the Rural Production Zone.

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) Robert George Vellenoweth Colleen Wendy Wardlaw.

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) Robert George Vellenoweth

Signature: [redacted]
(signature of bill payer

Date 23/9/25.

MANDATORY

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) Steven Sanson

Signature: [redacted] Date

A signature is not required if the application is made by electronic means

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.

BAY OF ISLANDS PLANNING (2022) LIMITED

Kerikeri House
Suite 3, 88 Kerikeri Road
Kerikeri
Email – office@bayplan.co.nz Website - www.bayplan.co.nz

23 September 2025

Far North District Council
John Butler Centre
Kerikeri

Application seeking consent for a four-lot subdivision on Lot 2 DP 198209 in the Rural Production zone at 57 McCaughan Road, Kerikeri.

Rob Vellenoweth seek consent to subdivide a 1.7040ha site creating four lots as a Non-Complying activity in the Rural Production zone within the operative Far North District Plan (**ODP**). The property is zoned Horticulture under the Proposed Far North District Plan (**PDP**)

Land use consent is also required for consequential breaches to stormwater management, setback and sunlight for the existing development on proposed Lot 3.

The proposed subdivision will create the following lots:

- Lot 1 – 4,019m^2
- Lot 2 – 4,283m^2
- Lot 3 – 4,738m^2
- Lot 4 – 4,000m^2

The application is supported by the following information –

Planning Report, including Assessment of Environmental Effects;
Appendix A - Certificates of Title
Appendix B - Scheme Plan prepared by Simpson Shaw
Appendix C – Engineering Report prepared by Haigh Workman
Appendix D – Geotechnical Report by Haigh Workman
Appendix E – PSI Report prepared by Haigh Workman
Appendix F – Written Approvals.
Appendix G – Soils Report prepared by Haigh Workman

Regards

Andrew McPhee
Consultant Planner

1.0 APPLICANT & PROPOETYR DETAILS

Applicant	Rob Vellenoweth
Address for Service	Bay of Islands Planning [2022] Limited Kerikeri House Suite 3 88 Kerikeri Road Kerikeri C/O – Andrew McPhee andrew@bayplan.co.nz 021-784-331
Legal Description	Lot 2 DP 198209
Certificate Of Title	NA127A/757
Physical Address	57 McCaughan Road, Kerikeri
Site Area	1.7040ha
Owner of the Site	Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft
Operative District Plan Zone / Features	Rural Production zone
Proposed District Plan	Horticulture zone
Archaeology	Nil
NRC Overlays	Nil
Soils	3s2 and 4e2. The Soil report in **Appendix G** determined the soils are not highly productive and are functionally Class 4.
Protected Natural Area	Nil
HAIL	The PSI in **Appendix E** concludes that it is highly unlikely there is a risk to human health from soil contaminants.

Schedule 1

2.0 SUMMARY OF PROPOSAL

Proposal	A four-lot subdivision in the Rural Production zone at 57 McCaughan Road, Kerikeri.
Reason for Application	The lot sizes proposed are not provided for within the ODP making the application for subdivision a Non-Complying activity. Land use consent is also required due to breaches to stormwater management, setbacks and sunlight for the existing development on proposed Lot 3.
Appendices	Planning Report, including Assessment of Environmental Effects; Appendix A – Records of Title Appendix B – Scheme Plan prepared by Simpson Shaw Appendix C – Engineering Report prepared by Haigh Workman Appendix D – Geotechnical Report by Haigh Workman Appendix E – PSI Report prepared by Haigh Workman Appendix F – Written Approvals. Appendix G – Soils Report prepared by Haigh Workman
Consultation	Consultation was undertaken with adjoining neighbours and approval provided. A record of approvals is provided in **Appendix F**.
Pre Application Consultation	A concept development meeting was held with Council on the 23rd June 2025 (Ref CDM-2025/102). No formal notes received.

3.0 INTRODUCTION

The applicant seeks resource consent to undertake a four-lot subdivision in the Rural Production Zone on McCaughan Road, Kerikeri. The site is identified as 57 McCaughan Road and is legally described as Lot 2 DP 198209. The title is provided in **Appendix A.**

4.0 DESCRIPTION OF THE SITES AND SURROUNDS

The site is situated on McCaughan Road, approximately 500m south of the intersection of Kapiro Road and 900m north of the Waipapa Township. The sites and surrounding area are zoned Rural Production in the operative Far North District Plan (ODP), except for a portion of the western boundary which abuts a marginal strip and is zoned Conservation.

The site is zoned Horticulture in the PDP, however the land south of the Waipapa Stream is proposed to be zoned Rural Residential, which has a controlled subdivision standard of 4,000m^2.

The property contains an existing dwelling, driveway, and associated buildings in the southwest corner, which will be retained on the proposed Lot 3. The balance of the site is grassed, with established gardens and extensive tree planting along the boundaries and the central driveway.

The topography is generally flat to gently sloping towards the Waipapa Stream, which abuts the western boundary of the site. While adjacent to the stream, the property is not identified as being subject to any River Flood Hazards.

The surrounding environment is fragmented and not characteristic of a working rural landscape. The immediate area is defined by residential lifestyle properties, with many lots under 1ha in size, rather than productive agricultural or horticultural operations (see Figure 8 below).

While the wider area is zoned Rural Production in the ODP, the PDP proposes to rezone the land south of the Waipapa Stream (including the subject site) to Horticulture, and the area on the other side of the stream to Rural Residential, which has a controlled subdivision standard of 4,000m^2.

Figure 1: Site Aerial (Source: Proposed District Plan Maps)

Figure 2: ODP Zoning (Source: Far North Maps)

Figure 3: PDP Zoning (Source: Far North Maps)

The landholding has historically been cropped, identified in Councils land cover and land use database as Cropland – Annual (Refer Figure 4).

Figure 4: Land cover and land use (Source: Far North Maps)

The site has not been cropped for some time and is largely grass covered with extensive tree planting on all boundaries, save the roadside boundary, and internally within the site. The Soil Report in **Appendix G** concludes that the soils are not highly productive and are functionally Class 4.

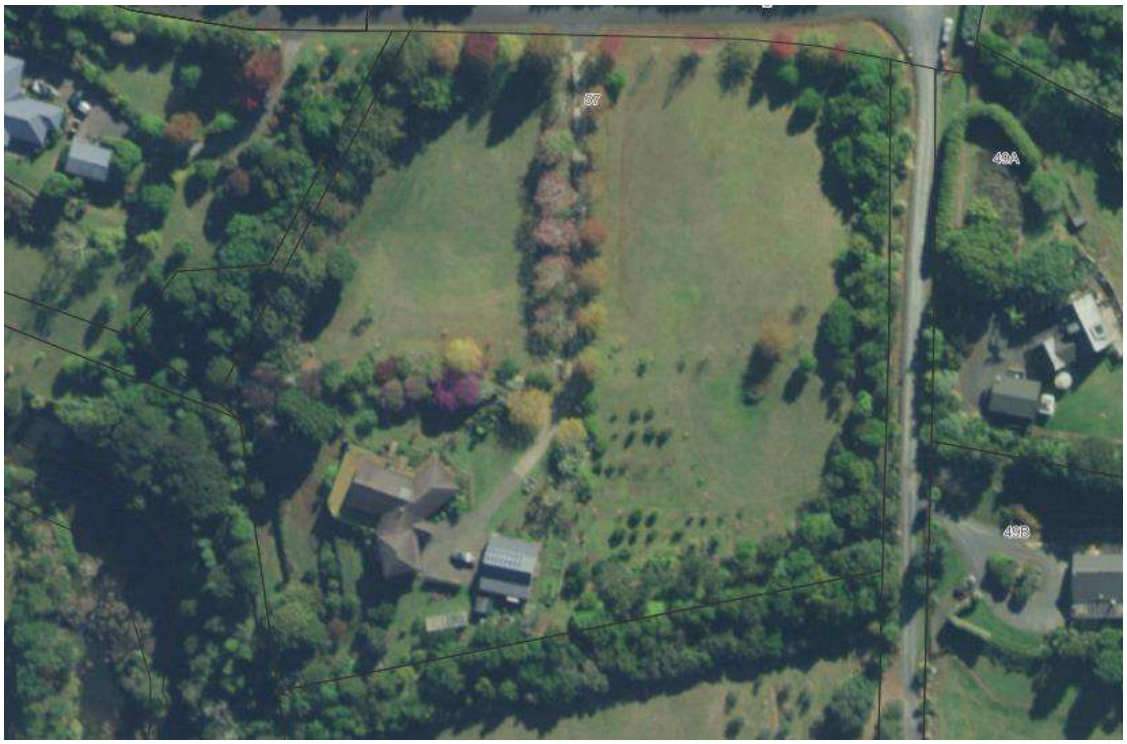

Figure 5: Aerial (Source: Proposed District Plan Maps)

Figure 6: Site access (Source: Google Earth)

The site is located within a Kiwi Present Area. The site currently has no consent notice applied restricting the keeping of cats and dogs.

Figure 7: Topography (Source: NRC Maps)

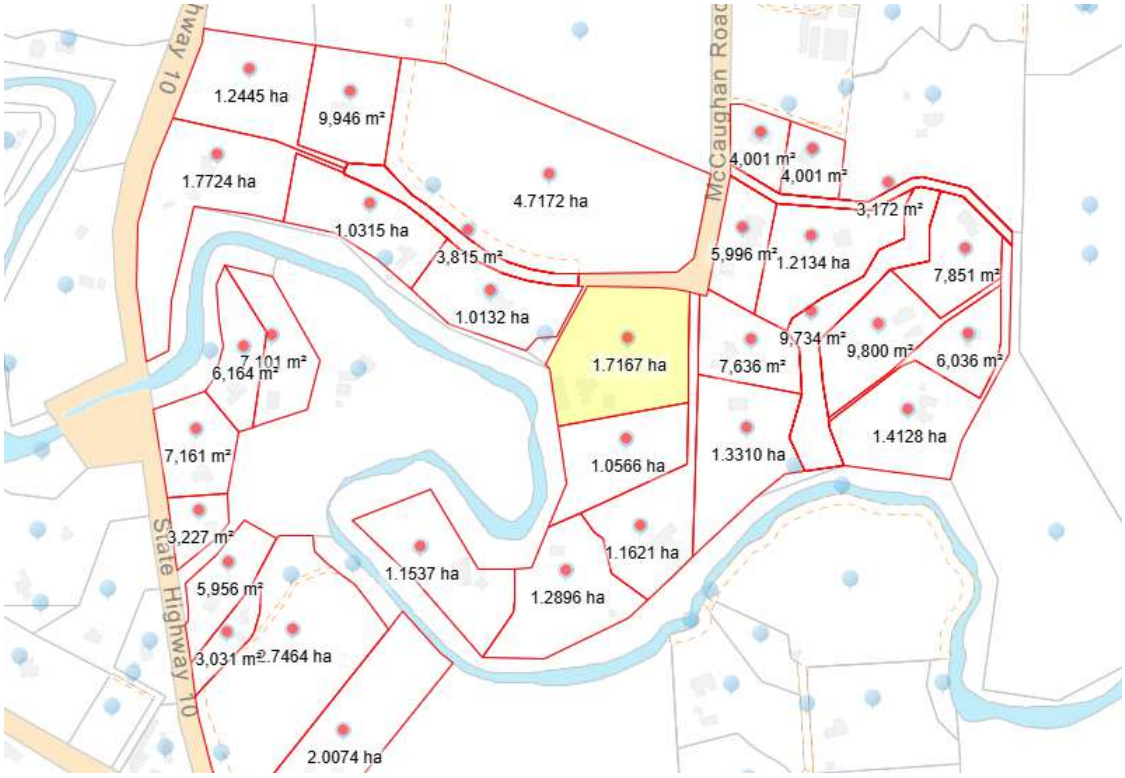

Figure 8: Land fragmentation (Source: Prover)

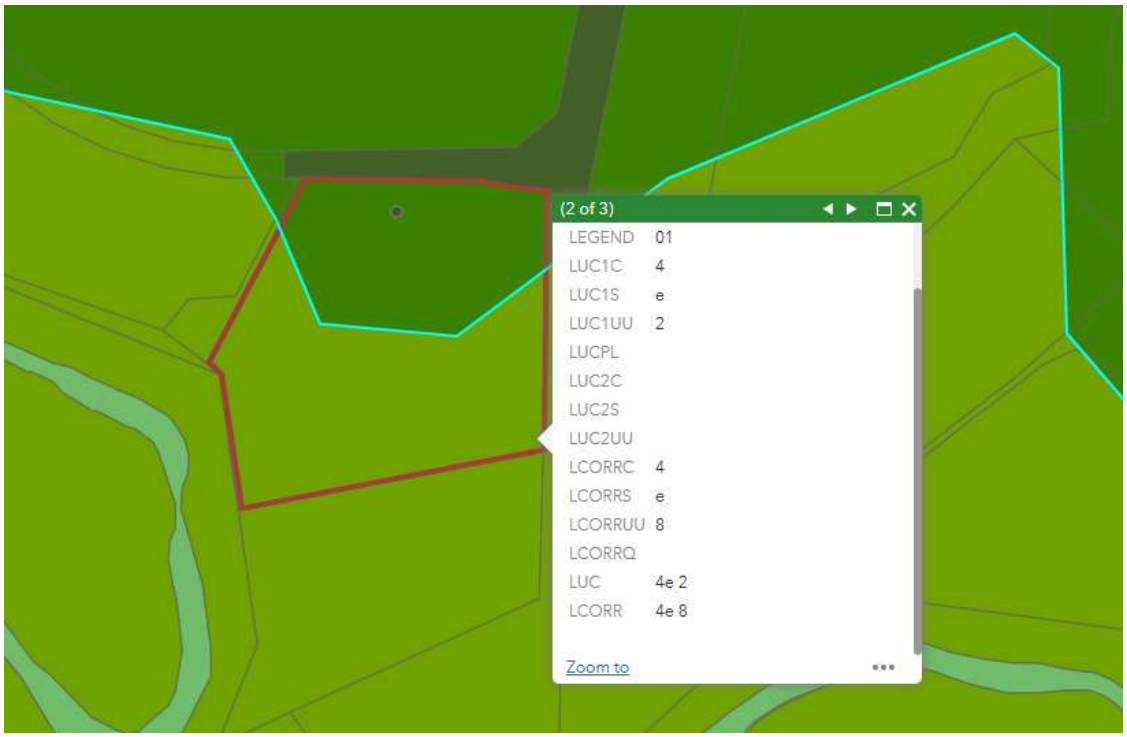

Figure 9: Land Use Classification (Source: Far North Maps)

5.0 RECORD OF TITLE, CONSENT NOTICES AND LAND COVENANTS

The Record of Title is attached at Appendix A. The following consent notices apply to the

site:

D390811.3

- The subject property is not affected by this consent notice.

D446353.1

- The operation of agricultural and horticultural equipment including sprays and chemicals (subject to compliance with any relevant legislation) may be a permitted activity. Accordingly, where rainwater is collected from exposed services for human consumption in connection with any residential development on the site, the occupiers of any such dwelling shall install an approved water filtration the system.

This consent notice can be applied to any future titles created.

There are a number of private land covenant on the title. Council is not party to the covenant so it will be addressed, if necessary, by the landowner. However, it is noted that existing covenants applied to the property require areas to planting to be provided and maintained. An additional covenant is proposed along the boundary of McCaughan Road as a result of consultation with neighbours, which will also have the ancillary benefit of providing and maintaining rural amenity for the site (refer Figure 10).

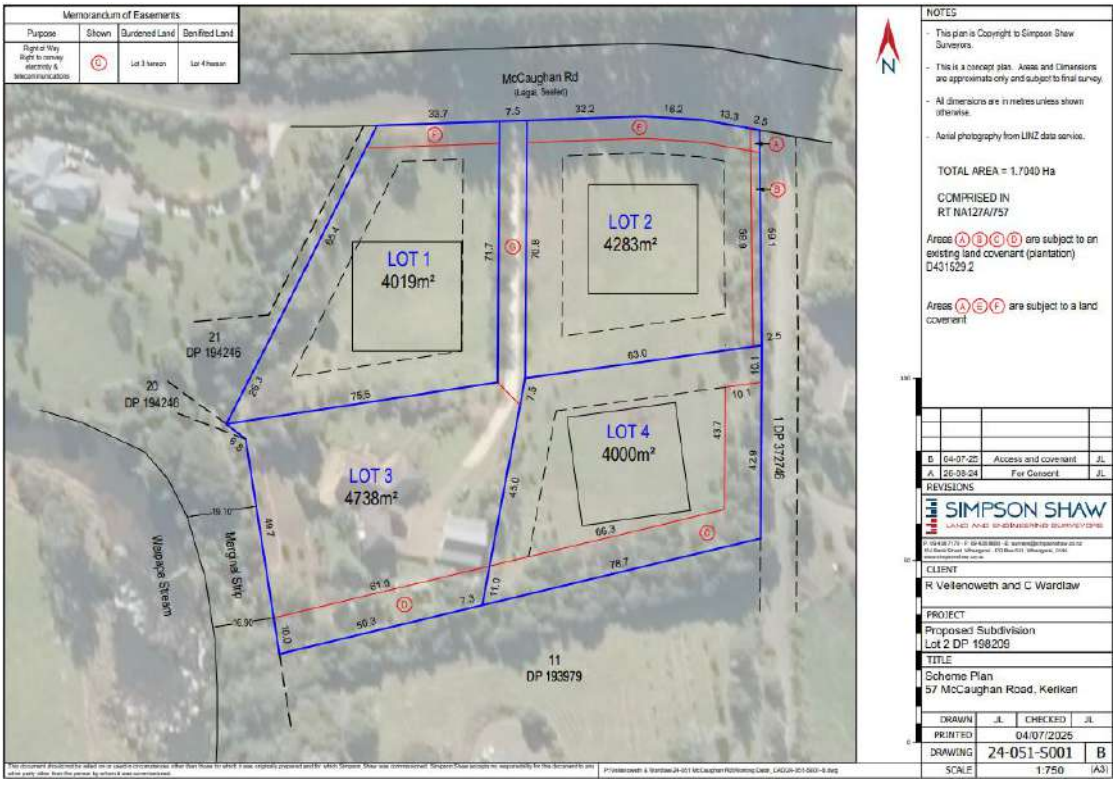

Figure 10: Scheme Plan

6.0 DESCRIPTION OF PROPOSAL

The proposal seeks to subdivide a 1.7040ha site creating four lots as a non-complying activity in the Rural Production zone within the ODP.

The proposed subdivision will create the following lots:

- Lot 1 – 4,019m^2
- Lot 2 – 4,283m^2
- Lot 3 – 4,738m^2
- Lot 4 – 4,000m^2

The proposal will be in accordance with the scheme plan provided in **Appendix B**.

Access and power are currently provided to proposed Lot 3. Provision for access, electricity and communications has been provided by way of an easement (easement 'G').

Wastewater and potable water supply are already provided to proposed Lot 3. Services for the remaining lots can be provided on-site.

No development is proposed at this juncture, as such it is considered that formalising access, power, telecommunications, wastewater and potable water to the new sites can be addressed at the time when development is proposed.

Based on the assessment of environmental effects provided below, it is concluded than any potential adverse effects arising from the subdivision would be less than minor and can be mitigated through appropriate conditions.

7.0 DISTRICT PLAN ASSESSMENT [OPERATIVE AND PROPOSED]

The Far North District Council (**FNDC**) zones the sites Rural Production in the ODP and Horticulture in the PDP (refer Figures 2 and 3 above). There are no other identified Resource Features apart from being within a 'Kiwi Present' area.

The subdivision is subject to performance standards as set out in Table 1 below:

Table 1 - Subdivision Performance Standards

Subdivision Performance Standard	**Comment**
Rule 13.6.1 Definition of Subdivision of Land	The application meets the definition of subdivision as defined in the RMA.
Rule 13.6.2 Relevant Sections of Act	These are applied to the application.

Subdivision Performance Standard	Comment
Rule 13.6.3 Relevant Sections of the District Plan	These are applied to the application.
Rule 13.6.4 Other Legislation	There are no other pieces of legislation which are triggered by the proposal.
Rule 13.6.5 Legal Road Frontage	The site is currently accessed via McCaughan Road.
Rule 13.6.6 Bonds	Not applicable
Rule 13.6.7 Consent Notices	The consent notice can be applied to any future sites.
Rule 13.6.8 Subdivision consent before work commences	Minimal physical works will be required to complete the subdivision (if any).
Rule 13.6.9 Assessing Resource Consents	The application is non-complying so Council may impose conditions to address effects of the proposal.
Rule 13.6.10 Joint Applications	Not applicable
Rule 13.6.11 Joint Hearings	Not applicable
Rule 13.6.12 Suitability for Proposed Land Use	The application does not create significant risk form natural hazards and has made sufficient provision for legal and physical access to each of the allotments proposed.
Rule 13.7.2 Allotment Sizes, Dimensions and Other Standards	
Performance Standard	**Comment**
Rule 13.7.2.1 – Minimum Lot Sizes	The proposed 4-lot subdivision creates lots that are all a minimum 4,000m^2 in size. Minimum lot size for a discretionary activity is 4ha. ***Non-complying***
Rule 13.7.2.2 – Allotment dimensions	No allotment provided for the existing dwelling on proposed Lot 3. The remaining three allotments can generally contain a 30m x 30m allotment dimension, with proposed Lot 1 marginally infringing the 10m setback control Refer scheme plan in **Appendix B)**.
Rule 13.7.2.3 - Amalgamation of land in a rural zone with land in an urban or coastal zone	Not applicable.

Subdivision Performance Standard	Comment
Rule 13.7.2.4 – Lots divided by zone boundaries	Not applicable.
Rule 13.7.2.5 - Sites divided by an outstanding landscape, outstanding landscape feature or outstanding natural feature	Not applicable
Rule 13.7.2.6 – Activities, Utilities, Roads and Reserves	Not applicable
Rule 13.7.2.7 – Savings as to previous approvals	Not applicable
Rule 13.7.2.8 – Proximity to Top Energy transmission lines	Not applicable
Rule 13.7.2.9 – Proximity to National Grid	Not applicable

Table 2 - Natural and Physical Resources - Performance Standards

Chapter 12 – Natural and Physical Resources	
12.1 Landscapes and Natural Features	Not applicable
12.2 Indigenous Flora and Fauna	The sites do not contain any significant areas of indigenous vegetation. No vegetation clearance is proposed. The site is located in a kiwi present area, however no consent notice applies restricting the keeping of cats and dogs.
12.3 Soils and Minerals	No earthworks are required as part of the subdivision.
12.4 Natural Hazards	The sites are not affected by natural hazards.
12.5 Heritage	Not applicable
12.6 Air	Not applicable
12.7 Lakes, Rivers Wetlands and the Coastline	No development is proposed, further no building allotment is proposed within over 30 metres of the Waipapa Stream.
12.8 Hazardous Substances	Not applicable
12.9 Renewable Energy and Energy Efficiency	Not applicable

Table 3 - Transportation Performance Standards

Chapter 15 - Transportation

15.1.6A.2 Traffic Intensity	The proposed subdivision will generate three additional lots. While no development is proposed at this juncture, standard residential units generate 10 one-way vehicle movements per unit in accordance with Appendix 3A – Traffic Intensity Factors. One dwelling can be reasonably expected per site and would be exempt. 60 traffic movements are permitted. **Complies**
15.1.6B.1 Parking	No development is proposed at this juncture, however the proposed sites are of sufficient size to provide parking and manoeuvring for two vehicles. **Complies**
15.1.6C Access	As shown on the scheme plan, a ROW easement will be created providing access to Proposed Lots 3 and 4. The Site Suitability report in **Appendix C** confirms that the access is in general accordance with Councils engineering standards. The existing concrete driveway will become a Right of Way serving Lots 3 and 4 and is deemed adequate. New Type 1A vehicle crossings will be constructed for Lots 1 and 2 at the time of development. The Engineering Report (refer **Appendix C**) confirms that while the road has a 60kph speed limit, actual operating speeds are lower, and adequate sight distances can be safely achieved for all lots. **Complies**
15.1.6C.1.8 Frontage to Existing Roads	The sites are all accessed via McCaughan Road. **Complies**

An assessment of the proposal against the relevant land-use rules of the ODP is provided where it relates to existing built development:

Table 4 – Land-Use Performance Standards

Rural Production Zone	
Rule 8.6.5.1.1 Residential Intensity	No development is proposed at this juncture, however there is an existing dwelling on proposed Lot 3.

Rural Production Zone	
	Complies
Rule 8.6.5.1.2 Sunlight	No development is proposed at this juncture on the vacant sites. The existing garage on proposed Lot 3 likely infringes the sunlight standard in relation to the new internal boundary with proposed Lot 4. This is a technical breach with no effect on any party other than the applicant. ***Discretionary***
Rule 8.6.5.1.3 Stormwater Management	15% is permitted on each site. No development is proposed at this juncture on proposed Lots 1, 2 and 4. Proposed lot 3 has in impermeable surface coverage of 23.6%. ***Discretionary***
Rule 8.6.5.1.4 Setback from Boundaries	No development is proposed at this juncture on the vacant sites. The existing garage on proposed Lot 3 likely infringes the setback from boundaries standard in relation to the new internal boundary with proposed Lot 4. This is a technical breach with no effect on any party other than the applicant. ***Discretionary***
Rule 8.6.5.1.5 Transportation	Refer to Chapter 15 – Transportation for Traffic, Parking and Access above.
Rule 8.6.5.1.8 Building Height	No development is proposed at this juncture. The existing buildings are well below 12m **Complies**
Rule 8.6.5.1.10 Building Coverage	No development or new building is proposed at this juncture. While the building coverage is above 12.5% on proposed Lot 3, the standard is only concerned with 'new buildings or alterations/additions to an existing building. **Complies**
Rule 8.6.5.1.11 Scale of Activities	Not applicable at this stage as no land use is proposed for the vacant site. It is envisaged that the sites will be used in a residential capacity. **Complies**

Overall, this subdivision application falls to be considered as a **Non-complying** due to the activity status for subdivision in Part 3 of the Plan – District Wide provisions and multiple standard breaches.

In terms of the PDP, the following rules are assessed in Table 4 below.

Table 5 – PDP Standards

Proposed District Plan				
Matter	**Rule/Std Ref**	**Relevance**	**Compliance**	**Evidence**
Hazardous Substances Majority of rules relates to development within a site that has heritage or cultural items scheduled and mapped however Rule HS-R6 applies to any development within an SNA – which is not mapped	Rule HS-R2 has immediate legal effect but only for a new significant hazardous facility located within a scheduled site and area of significance to Māori, significant natural area or a scheduled heritage resource HS-R5, HS-R6, HS-R9	N/A	Yes	Not proposed **Permitted Activity**
Heritage Area Overlays (Property specific) This chapter applies only to properties within identified heritage area overlays (e.g. in the operative plan they are called precincts for example)	All rules have immediate legal effect (HA-R1 to HA-R14) All standards have immediate legal effect (HA-S1 to HA-S3)	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Historic Heritage (Property specific and applies to adjoining sites (if the boundary is within 20m of an identified heritage item)). Rule HH-R5 Earthworks within 20m of a scheduled heritage resource. Heritage resources are shown as a historic item on the maps) This chapter applies to scheduled heritage resources – which are called heritage items in the map legend	All rules have immediate legal effect (HH-R1 to HH-R10) Schedule 2 has immediate legal effect	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Notable Trees (Property specific) Applied when a property is showing a scheduled notable tree in the map	All rules have immediate legal effect (NT-R1 to NT-R9) All standards have legal effect (NT-S1 to NT-S2) Schedule 1 has immediate legal effect	N/A		Not indicated on Far North Proposed District Plan **Permitted Activity**

Sites and Areas of Significance to Māori (Property specific) Applied when a property is showing a site / area of significance to Maori in the map or within the Te Oneroa-a Tohe Beach Management Area (in the operative plan they are called site of cultural significance to Maori)	All rules have immediate legal effect (SASM-R1 to SASM-R7) Schedule 3 has immediate legal effect	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Ecosystems and Indigenous Biodiversity SNA are not mapped – will need to determine if indigenous vegetation on the site for example	All rules have immediate legal effect (IB-R1 to IB-R5)	N/A	Yes	No proposed vegetation clearance. **Permitted Activity**
Activities on the Surface of Water	All rules have immediate legal effect (ASW-R1 to ASW-R4)	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Earthworks all earthworks (refer to new definition) need to comply with this	The following rules have immediate legal effect: EW-R12, EW-R13 The following standards have immediate legal effect: EW-S3, EW-S5	Yes	Complies	With respect of EW-R12, this requires that the proposed earthworks comply with EW-S3. In effect, EW-S3 triggers the need for an ADP to be applied. It is confirmed that the proposed earthworks will comply with an ADP and this is volunteered as a condition of consent. EW-R13 links to EW-S5. EW-S5 requires earthworks to be controlled in accordance with GD-05.

				No earthworks are required for the subdivision. **Permitted Activity**
Signs (Property specific) as rules only relate to situations where a sign is on a scheduled heritage resource (heritage item), or within the Kororareka Russell or Kerikeri Heritage Areas	The following rules have immediate legal effect: SIGN-R9, SIGN-R10 All standards have immediate legal effect but only for signs on or attached to a scheduled heritage resource or heritage area	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Orongo Bay Zone (Property specific as rule relates to a zone only)	Rule OBZ-R14 has partial immediate legal effect because RD-1(5) relates to water	N/A	Yes	Not indicated on Far North Proposed District Plan **Permitted Activity**
Subdivision	SUB-R6, R13-R15, and R17	Yes	Yes	Whilst subdivision is proposed the rules with legal effect are not relevant. **Permitted Activity**
Comments:				
No consents are required under the PDP.				

8.0 STATUTORY CONSIDERATIONS

Section 104B of the RMA governs the determination of applications for Non-complying activities:

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.

With respect to Non-complying activities, a consent authority may grant or refuse the application, and may impose conditions under section 108 of the RMA.

Section 104 of the RMA states that when considering an application for a resource consent, "the consent authority must, subject to Part II, have regard to –

(i) any actual and potential effects on the environment of allowing the activity; and
(ii) any relevant provisions of –
(iii) a national environment standard:
(iv) other regulations:
(v) a national policy statement: and
(vi) a New Zealand Coastal Policy Statement:
(vii) a regional policy statement or proposed regional policy statement:
(viii) a plan or proposed plan; and
(ix) any other matter the consent authority considers relevant and reasonably necessary to determine the application."

2. The matters to be addressed under s104 are discussed below which has been guided, where relevant, by the assessment criteria in section 13.10 of the ODP.

No Regional Plan matter is considered to be pertinent to the considerations as no consents are required in this respect.

Those relevant s104 considerations are addressed and followed by an assessment of Part II matters as they apply to the application.

Section 104 (1)(a) Assessment of Effects on the Environment

Visual character and amenity effects

The proposed lots are smaller than the minimum area required for controlled or discretionary activity subdivision in the Rural Production zone, therefore regard should be had to the effects of the development upon visual character and amenity of the wider environment.

The landholding is located in a Rural Production environment, surrounded by large lot residential development. While the lot sizes proposed are smaller than that provided for in the ODP, they are commensurate with large lot residential properties in the surrounding environs and ordinarily found in the Rural Living zone.

The PDP proposes zoning the properties on the southern side of Waipapa Stream Rural Residential, which enables lots sizes proposed through this application.

The site is extensively surrounded by boundary planting on boundaries other than the McCaughan Road boundary on the northern aspect. In consultation with neighbours the applicant is offering a covenant for buffer planting on the northern aspect as well. This will ensure that the development within the larger site will be limited in terms of what can be viewed outside of the property.

The adjacent neighbours have also provided their approval.

It is therefore considered that the proposal will result in a limited localised change in the character of the area and the effects will be less than minor.

Geotechnical Suitability

The Geotechnical Assessment (**Appendix D**) confirms the land is stable and suitable for the proposed subdivision and subsequent residential development. In respect of the ground conditions, the site is underlain by very stiff natural soils of the Kerikeri Volcanic Group, which are suitable for supporting foundations.

The primary geotechnical constraint identified for the site is the presence of Class H highly expansive soils, meaning the ground does not meet the definition of 'good ground' under NZS 3604, and all future dwellings will require specific engineering design for their foundations.

This is considered to be a manageable constraint that will be addressed via a condition of consent requiring site-specific geotechnical investigations at the building consent stage for each new lot.

Natural and other Hazards

Regard has been had to the hazard information held by both FNDC and the Regional Council, which revealed there are no identified natural hazards, contaminated sites or other hazards associated with the landholding.

Water Supply

No reticulated supply is available in the location at this juncture. The sites are of sufficient size to provide on-site water supply, which can be detailed at the time a dwelling is proposed.

Potable water solutions for the proposed new Lots are addressed in the Engineering Assessment in **Appendix C**. The report concludes that domestic water supply may be provided by roof runoff collected in storage tanks. In terms of water for fire fighting supply the report notes that the New Zealand Fire Service (NZFS) Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 recommends a minimum firefighting water storage capacity of 45 m^3 within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank. This can applied as a consent notice condition for all lots.

Stormwater Disposal

A comprehensive analysis of stormwater options has been undertaken within section 7 the Engineering Report (**Appendix C**). Section 7.6 of the Engineering Report undertakes a comprehensive assessment of the matters in 11.3, as such there is no need to repeat the

assessment in this report.

It is considered that the effects of the proposal in terms of stormwater disposal will be less than minor provided that the solutions are designed in general accordance with the Engineering Report.

Sanitary sewage disposal

An assessment of wastewater for proposed Lots 1, 2 and 4 has been undertaken within section 9 the Engineering Report (**Appendix C**). In terms of proposed Lot 3, the existing dwelling is currently serviced by an on-site wastewater treatment system that is functioning as intended and continues to operate. This application does not affect the status quo.

As no development is proposed on Lots 1, 2 and 4 at this time it is appropriate that any new site-specific wastewater management system is designed in accordance with the ASNZS: 1547:2012.

The onsite wastewater disposal for the proposed development of the Lots 1, 2 and 4 has been assessed within the report and it concludes that any future on-site wastewater disposal on the three vacant lots can comply with both the Operative District Plan and Regional Plan for Northland wastewater discharge rules. A consent noticed condition can be applied to any new site. As such it is considered that any effects will be less than minor.

Energy supply and transmission lines

Services are currently supplies to Proposed Lot 3. Easements are in place to accommodate any future lots. Pre-approval is not required in the Rural Production zone.

Telecommunications

Services are currently supplies to Proposed Lot 3. Easements are in place to accommodate any future lots. Pre-approval is not required in the Rural Production zone.

Easements

The Scheme Plan in **Appendix B** identifies a memorandum of easements for the proposal. Area 'G' provides for a right of way and the right to convey electricity and telecommunications. Areas 'A - D' are subject to an existing land covenant in respect of planting along the eastern and southern boundaries of the site. Proposed covenants 'E' and 'F' provide a planation buffer along the McCaughan Road boundary.

Provision of access

Provision of access for all of the proposed Lots has been addressed in the Engineering

Report in **Appendix C. T**he existing site is accessed off McCaughan Road via an existing crossing and concreted driveway leading to the dwelling on proposed Lot 3. Following subdivision the existing driveway will become a Right of Way (RoW) serving Lots 3 and 4, while Lots 1 and 2 will have new crossings directly off McCaughan Road.

In summary the existing crossing providing access to proposed Lots 3 and 4 is sealed with a 3m width and meets the Type 1A requirements in accordance with the Engineering Standards. As such no modification or upgrades are required. Proposed Lots 1 and 2 Lots will require similar sized Type 1A crossings.

It is considered that these can be constructed at time of building consent and crossing permits be obtained to ensure Council standards are followed.

The Engineering report also considers site distances and notes that McCaughan Road has a posted speed limit of 60kph, however the operating speeds can be expected to be lower. The right hand 90-degree bend on the eastern approach slows traffic to 35kph, whilst the sweeping left-hand bend on the western approach can only be comfortable taken at a speed not exceeding 50 to 55kph. There is a minor crest at the eastern end which coincides with the right-hand bend, otherwise the road has a near flat constant grade.

Effect of Earthworks and Utilities

There are no earthworks required to give effect to the proposed subdivision. Utilities to service Lot 3 are identified through easements identified in the Scheme Plan in **Appendix B**. It is considered that the subdivision will incur less than minor effects on the environment in respect of earthworks and utilities.

Building locations

While no development is proposed at this juncture the Engineering Report in **Appendix C** has demonstrated that an indicative future dwelling on proposed Lots 1,2 and 4, as well as demonstrating that on site services can be accommodated.

Heritage resources, vegetation, fauna and landscape

The site is not located within any identified heritage overlays. The site is not within the coastal environment, as such a landscape assessment has not been considered necessary. There are no known cultural values or areas of significance affected by the proposal.

There are no identified vegetation or habitats of indigenous fauna affected by the proposed subdivision.

It is considered that there will be less than minor effects on heritage and landscape

character.

Soil

A portion of the landholding has been identified as containing Class 3 soils and is considered to be highly productive, in accordance with the National Policy Statement for Highly Productive Land. The applicant engaged Haigh Workman to undertake a Soil Report (refer **Appendix G**) to ascertain the accuracy of the LUC Maps.

The site-specific assessment concludes the soils are characteristic of Class 4 and are not highly productive. Furthermore, the site's size and the fragmented nature of the surrounding area mean it is not viable for substantive rural production activities.

It is therefore considered that the proposal will not result in the loss of productive capacity and is therefore not contrary to the objectives of the NPS-HPL.

Access to waterbodies

The landholding does not directly abut any waterbodies, however a marginal strip exists between the landholding and the Waipapa Stream. The application does not prevent public access to and along the coastal marine area or to and along the banks of lakes or rivers.

Land use incompatibility

The proposed subdivision is considered to be compatible with the surrounding land use, which can be best described as large lot residential properties.

Proximity to airports

The site is over 7km north of the Kerikeri Airport, as such there is not considered to be any adverse effects from being in proximity to the airport.

Natural character of the coastal environment

The site is not located within a coastal zone in the ODP, nor is it identified as being within the coastal environment within the Regional Policy Statement for Northland. As such there are not considered to be any effects on the natural character of the coastal environment.

Energy efficiency and renewable energy

No further development is proposed at this juncture. The subdivision is not of a scale where the consideration of energy efficiency and renewable energy are relevant to the application.

National grid corridor

The national grid does not apply in Kerikeri. Transpower New Zealand Limited assets are confined to Kaikohe south.

Contaminated Land (HAIL)

A Preliminary Site Investigation Report (**Appendix E**) was completed to assess potential contamination from historical horticultural land use on an adjacent property. Soil sampling was undertaken along the northern boundary of the site.

The Report concludes that all contaminant concentrations were below the applicable human health criteria for rural-residential land use, and that it is "highly unlikely that there is a risk to Human Health" from soil contamination.

Therefore, the proposal is a permitted activity under the National Environmental Standard for Contaminated Soils (**NES-CS**), and there are no adverse effects relating to land contamination.

Sunlight and Setback from Boundaries

The existing garage, which will be located within proposed Lot 3, is setback ~2m from the internal boundary of proposed Lot 4. This is a technical breach within the proposed subdivision under the same landowner.

There is no effect on any other person aside from the landowner/applicant. No further consideration of this breach is required.

Section 104 (1)(ab) Any measures to achieve positive effects

Positive effects arising from the subdivision includes the creation of new sections, which eventually will address much needed housing options around Kerikeri. Development at a later juncture will have knock on economic benefits associated with construction.

Section 104 (b)(i) and (ii) National Environmental Standards & Other Regulations

While a review of Council records revealed no evidence to suggest that a HAIL activity has previously been undertaken on site a preliminary site investigation was undertaken to confirm this. The assessment in **Appendix E** concludes that the proposal is a permitted activity under the NES-CS, and there are no adverse effects relating to land contamination.

The National Environment Standard for Freshwater (**NES-FW**). A review of aerial images, including NRC's wetland maps, reveal no evidence to suggest that there are any wet areas that may be subject to the NES-FW provisions. Therefore, no further assessment is

required under the NES-FW.

Section 104 (b)(iii) National Policy Statement(s)

The NPS for Highly Productive Land (NPSHPL) is considered to be relevant insofar as the Class 3 soils are present on the site as per Figure 9 above. While the NPSHPL is relevant, a soil test has been undertaken and has deemed the entire site to be Class 4 (refer **Appendix G**).

Section 104 (b)(iv) New Zealand Coastal Policy Statement

The New Zealand Coastal Policy Statement is not relevant to this application.

Section 104 (b)(v) Regional Policy Statement or Proposed Regional Policy Statement

The Northland Regional Policy Statement is the applicable regional statutory document that applies to the Northland region. Jurisdiction for subdivision is governed by the FNDC and the policy framework for establishing an appropriate land use pattern across the district is set out in the ODP. This Plan is subject to the governing regional policy framework set out in the Northland Regional Policy Statement.

Table 6 – NRC Regional Policy Statement Review Assessment

Regional Policy Statement for Northland	
Objective / Policy	**Assessment**
Integrated Catchment Management	Not relevant.
Region Wide Water Quality	Not relevant.
Ecological Flows and Water Quality	Not relevant.
Enabling Economic Wellbeing	The proposal will increase economic wellbeing for the applicants, local building and construction suppliers.
Economic Activities – Reverse Sensitivity and Sterilisation.	The purpose of the subdivision is to provide large lot residential sections, which is commensurate with the surrounding land use pattern. There are not considered to be any reverse sensitivity or sterilisation effects from the proposal as the landholding, and surrounding landholdings, are not of sufficient size to undertake traditional rural production activities.
Regionally Significant Infrastructure	Not relevant.

Efficient and Effective Infrastructure	The proposal largely relies on on-site services and the use of McCaughan Road.
Security of Energy Supply	Proposed Lot 3, which contains the existing dwelling already has a connection. The new lots are contained within the Rural Production zone and it is considered that the vacant lots can be serviced at time of development.
Use and Allocation of Common Resources	Not relevant.
Regional Form	It is not considered that the proposal results in any change in reverse sensitivity or change in character. The proposal in effect only introduces three residential lifestyle lots that can accommodate a dwelling at a later juncture.
Tangata Whenua Role in Decision Making	Council may seek relevant input through the consent process.
Natural Hazard Risk	Natural Hazards are not considered to be a factor.
Natural Character, Outstanding Natural Features, Outstanding Natural Landscapes and Historic Heritage	Not relevant.

Section 104 (b)(vi) Plans or Proposed Plans

This subdivision application is subject to the provisions of the ODP and is subject to consideration (limited weight) of the PDP objectives and policies. The site is zoned Rural Production and to be assessed in terms of the objectives and policies for the Rural Environment and Rural Production Zones and the district-wide subdivision provisions.

The following objectives and policies are relevant to the assessment of this application and are considered in the context of the stage subdivision:

Rural Environment

Table 7 – ODP - Rural Environment Objectives and Policies

OBJECTIVE OR POLICY	Assessment
OBJECTIVES	

OBJECTIVE OR POLICY		Assessment
8.3.1	To promote the sustainable management of natural and physical resources of the rural environment while enabling activities to establish in the rural environment.	The rural environment includes provision for both rural production and rural-lifestyle activities where reverse sensitivity effects are managed. Sustainable management of the rural environment would include both forms of rural activity where adverse effects can be avoided, remedied or mitigated.
8.3.2	To ensure that the life supporting capacity of soils is not compromised by inappropriate subdivision, use or development.	The site and surrounding sites are not of sufficient size to support rural production activities, not are they currently used in that capacity. The soil assessment has concluded that the site is considered to be Class 4.
8.3.3	To avoid, remedy or mitigate adverse effects of activities on the rural environment.	The assessment of effects concludes that any effects would be less than minor on the rural environment.
8.3.4	To protect areas of significant indigenous vegetation and significant habitats of indigenous fauna.	The sites do not contain any areas of significant indigenous vegetation. The sites are within a kiwi present area, however no conditions currently apply to the titles.
8.3.5	To protect outstanding natural features and landscapes.	The area does not contain any outstanding landscapes or outstanding natural features.
8.3.6	To avoid actual and potential conflicts between land use activities in the rural environment.	The proposed subdivision is considered to be compatible with the surrounding land use, which can be best described as large lot residential properties.
8.3.7	To promote the amenity values of the rural environment.	The landholdings are situated within a land use environment that has rural lifestyle characteristics in the sounding environs along with rural production activities further to the north. The proposed lot sizes in their locations are commensurate with those in the general vicinity.
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.	This objective is not relevant to the size and scale of this proposed subdivision.
POLICIES		

OBJECTIVE OR POLICY		Assessment
8.4.1	That activities which will contribute to the sustainable management of the natural and physical resources of the rural environment are enabled to locate in that environment.	Refer to 8.3.1 above.
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.	The proposed subdivision will not generate adverse effects on local productive soil or ecosystem values. While the sites do contain Class 3 soils, it has been established through soils testing that the entire site is in fact Class 4. There are no highly valued eco-systems as mapped by FNDC.
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.	All necessary infrastructure is existing as no development is proposed at this juncture. The proposal does not include any new infrastructure aside from access to proposed Lots 1 and 2.
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.	There are no outstanding landscapes or outstanding natural features present on the sites or in the vicinity. The amenity values of the local environment will not be affected by the proposal.
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 effects from the existing use – i.e., reverse sensitivity).	The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. The rural lifestyle sections are considered compatible with the surrounding land use pattern and would not generate adverse reverse sensitivity effects.

OBJECTIVE OR POLICY		Assessment
8.4.6	That areas of significant indigenous vegetation and significant habitats of indigenous fauna habitat be protected as an integral part of managing the use, development and protection of the natural and physical resources of the rural environment.	The sites do not contain any areas of significant indigenous vegetation. While the sites are located within a kiwi present area, currently no consent notices currently apply to the property controlling the keeping of cats and dogs.
8.4.7	That Plan provisions encourage the efficient use and development of natural and physical resources.	The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. The rural lifestyle sections are compatible with the surrounding land use pattern and considered to be an efficient use of the land.
8.4.8	That, when considering subdivision, use and development in the rural environment, the Council will have particular regard to ensuring that its intensity, scale and type is controlled to ensure that adverse effects on habitats (including freshwater habitats), outstanding natural features and landscapes, on the amenity value of the rural environment, and where appropriate on natural character of the coastal environment, are avoided, remedied or mitigated.	The proposed subdivision is appropriate in this location and would avoid or mitigate adverse effects on the amenity of the local rural environment. There are no outstanding landscapes, outstanding natural features or habitats that would be affected by the proposal.

Rural Production Zone

The Rural Production zone applies to most of the district's rural land other than those areas defined as Coastal, Rural Living or set aside for Recreation, Conservation or Minerals. The zone provides for a wide range of activities that are compatible with normal farming and forestry activities, including rural lifestyle and residential uses. The sustainable management of natural and physical resources is promoted in this zone.

The relevant expected outcomes listed within the ODP for the Rural Production zone are:

8.2.1 A rural environment where natural and physical resources are managed sustainably.

8.2.2 A rural environment in which a wide variety of activities is enabled, consistent with safeguarding the life supporting capacity of air, water, soil and ecosystems.

8.2.3 A dynamic rural environment which is constantly changing to meet the social and economic needs of the district's communities through the sustainable management of natural and physical resources.

8.2.4 The maintenance of areas of significant indigenous vegetation and significant habitats of indigenous fauna including aquatic habitats, and an increase in such areas that are formally protected.

8.2.5 Adverse effects arising from potentially incompatible activities are avoided, remedied or mitigated.

8.2.7 A rural environment where change is acknowledged whilst amenity values are maintained and enhanced to a level that is consistent with the productive intent of the zone.

The ODP recognises the varied character of land zoned Rural Production and the different characteristics and values which occur throughout the zone. The relevant objectives and policies for the Rural Production Zone are discussed in Table 8 below:

Table 8 - Rural Production Zone Objectives and Policies

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
OBJECTIVES		
8.6.3.1	To promote the sustainable management of natural and physical resources in the Rural Production Zone.	The sustainable management of natural and physical resources is discussed in the context of Rural Environment Objective 8.3.1 in Table 7 above. The site and surrounding sites are not of sufficient size to support rural production activities, not are they currently used in that capacity.
8.6.3.2	To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well-being and for their health and safety.	Efficient use and development in the context of the rural environment has been considered under Policy 8.4.7 above.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
8.6.3.3	To promote the maintenance and enhancement of the amenity values of the Rural Production Zone.	The immediate surrounding environment consists of similarly sized landholdings along the McCaughan Road. Therefore, the proposed subdivision will be undertaken in a manner that is commensurate with existing land use patterns. It is therefore considered that any adverse effects on rural amenity will be less than minor.
8.6.3.4	To promote the protection of significant natural values of the Rural Production Zone.	The site does not contain any significant natural values that require protection.
8.6.3.5	To protect and enhance the special amenity values of the frontage to Kerikeri Road between its intersection with SH10 and the urban edge of Kerikeri	The site does not have frontage to Kerikeri Road.
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.	The proposed subdivision is compatible with the surrounding land use and would not generate any adverse reverse sensitivity effects on existing activities.
8.6.3.7	To avoided, remedy or mitigate the adverse effects of incompatible use or development on natural or physical resources.	As above.
8.6.3.8	To enable the efficient establishment and operation of activities and services that have a functional need to be located in the rural environments.	The Rural Production zone provides for a wide range of activities provided reverse sensitivity effects can be appropriately managed. As previously stated, the proposed use of the land is consistent with the character and use of land in the surrounding area and represents an efficient use of rural land.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
8.6.3.9	To enable rural production activities to be undertaken in the zone	The land is currently used in a rural lifestyle capacity. This application does not change the status quo in this respect, only adding the potential for an additional 3 dwellings at a later juncture. The site and surrounding sites are not of sufficient size to support rural production activities, Fr are they currently used in that capacity.
POLICIES		
8.6.4.1	That a wide range of activities be allowed in the Rural Production Zone, subject to the need to ensure that any adverse effects, including any reverse sensitivity effects, on the environment resulting from these activities are avoided, remedied or mitigated.	As discussed above, the subdivision is considered appropriate and would not generate adverse effects of any note, including any reverse sensitivity effects.
8.6.4.2	That standards be imposed to ensure that the off-site effects of activities in the Rural Production Zone are avoided, remedied or mitigated.	There are not considered to be any off-site effects would be generated by the proposal. Neighbours have provided their approval (refer **Appendix F**)
8.6.4.3	That land management practices that avoid, remedy or mitigate adverse effects on natural and physical resources be encouraged.	The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. The proposed rural lifestyle sections are considered compatible with the surrounding land use pattern.
8.6.4.4	That the intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone.	No development is proposed. Lifestyle subdivision is provided for in the ODP. The proposed land use pattern is commensurate with the surrounding area, as such it is considered that the subdivision is compatible with the amenity of the locality and would not adversely affect the amenity values of the Rural Production 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.	Efficient use and development are considered under Policy 8.4.7 in Table 7 above.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
8.6.4.6	That the built form of development allowed on sites with frontage to Kerikeri Road between its intersection with SH10 and Cannon Drive be maintained as small in scale, set back from the road, relatively inconspicuous and in harmony with landscape plantings and shelter belts	The application site does not have frontage to Kerikeri Road.
8.6.4.7	That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.	The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. The rural lifestyle sections are considered compatible with the surrounding land use pattern.
8.6.4.8	That activities whose adverse effects, including reverse sensitivity effects, cannot be avoided remedied or mitigated are given separation from other activities.	No development is proposed at this stage. The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. The rural lifestyle sections are considered compatible with the surrounding land use pattern. Further, neighbours approval has been provided and mitigation proposed through a covenant supporting a planting buffer along McCaughan Road.
8.6.4.9	That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural Production zone and in neighbouring zones.	The use of the sites will largely remain unchanged and will not give rise to any reverse sensitivity effects. Noting that Rural Residential zone has been supported through the PDP process on the other side of Waipapa Stream.

In summary, it is considered that the proposal would achieve the outcomes sought by the objectives and policies for the Rural Production Zone given the extensive nature of the zone and its varied character. The proposal conforms with the characteristics of the particular area in which it is located, and it is considered that it would create no adverse effects on amenity or visual aspects.

Subdivision

The objectives and policies for subdivision are assessed in **Table 9** below.

Table 9 – Subdivision Objectives and Policies

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
OBJECTIVES		
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 the social, economic and cultural wellbeing of people and communities.	The assessments above demonstrate that sustainable management of the physical land resource would be achieved. The existing and proposed activities are consistent with a variety of land uses that are appropriate within the zone and will not generate adverse effects on this local rural location.
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 or indirectly from subdivision, including reverse sensitivity effects, are avoided, remedied or mitigated.	As per the assessment of effects, the proposed subdivision will not result in adverse effects on the life-supporting capacity of air, water, soil or ecosystems, nor will the proposal give rise to reverse sensitivity effects.
13.3.3	To ensure that the subdivision of land does not jeopardise the protection of outstanding landscapes or natural features in the coastal environment.	The sites do not possess such values or features and is not part of the coastal environment.
13.3.4	To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.	There are no heritage resources on the property.
13.3.5	To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage sufficient to meet the needs of the activities that will establish all year round.	This can be provided at time of development for vacant lots.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
13.3.6	To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features which have particular value or may have been compromised by past land management practices.	As the sites do not possess any significant values or characteristics, special forms of subdivision are not necessary.
13.3.7	To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.	No sites of significance to Māori have been identified in the District Plan on the land or in the vicinity of the properties.
POLICIES		
13.4.1	That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on: (a) natural character, particularly of the coastal environment; (b) ecological values; (c) landscape values; (d) amenity values; (e) cultural values; (f) heritage values; and (g) existing land uses.	The relevant items are the amenity of the locality and the surrounding land uses. The AEE did not identify any adverse effects on these identified values.
13.4.2	That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties.	Current access to the properties remains. Appropriate access arrangements can be attained to achieve both safe and effective vehicular movement.
13.4.3	That natural and other hazards be taken into account in the design and location of any subdivision.	Natural hazards are not a consideration for this application.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
13.4.4	That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.	This is not a requirement within the Rural Production zone.
13.4.5	That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads, and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.	Any works (if any) on the sites can be managed to avoid effects of this nature however it considered that these would be minimal as all necessary infrastructure is existing. No development is proposed at this juncture.
13.4.6	That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.	The sites have been identified as a 'Kiwi Present' area. No consent notices currently apply to the titles in respect of kiwi protection.
13.4.7	That the need for a financial contribution be considered only where the subdivision would: (a) result in increased demands on car parking associated with non-residential activities; or (b) result in increased demand for esplanade areas; or (c) involve adverse effects on riparian areas; or (d) depend on the assimilative capacity of the environment external to the site.	Not applicable
13.4.8	That the provision of water storage be taken into account in the design of any subdivision.	See Objective 13.3.5 above.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
13.4.9	That bonus development donor and recipient areas be provided for so as to minimise the adverse effects of subdivision on Outstanding Landscapes and areas of significant indigenous flora and significant habitats of fauna.	N/A
13.4.10	The Council will recognise that subdivision within the Conservation Zone that results in a net conservation gain is generally appropriate.	N/A
13.4.11	That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.	See Objective 13.3.7 above.
13.4.12	That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.	N/A
13.4.13	Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regard to s6 matters, and 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	The proposal does not generate any adverse effects that are more than minor. The techniques described in the policies are not necessary as the land does not possess the values or characteristics the techniques aim to protect.

OBJECTIVE OR POLICY		PERFORMANCE OF PROPOSAL
	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.	
13.4.14	That the objectives and policies of the applicable environment and zone and relevant parts of ***Part 3*** of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.	These have been taken into account as described in the assessments above**.**

Overall, it is considered that the proposal would not be contrary to any ODP objective or policy.

Table 10 – PDP Rural Production Zone

OBJECTIVES	
RPROZ-O1	The Rural Production zone is managed to ensure its availability for primary production activities and its long-term protection for current and future generations.
RPROZ-O2	The Rural Production zone is used for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be in a rural environment.
RPROZ-O3	Land use and subdivision in the Rural Production zone: a. protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production; b. protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation; c. does not compromise the use of land for farming activities, particularly on highly productive land; d. does not exacerbate any natural hazards; and e. is able to be serviced by on-site infrastructure.
RPROZ-O4	The rural character and amenity associated with a rural working environment is maintained.
POLICIES	
RPROZ-P1	Enable primary production activities, provided they internalise adverse effects onsite where practicable, while recognising that typical adverse effects associated with primary production should be anticipated and accepted within the Rural Production zone.
RPROZ-P2	Ensure the Rural Production zone provides for activities that require a rural location by: a. enabling primary production activities as the predominant land use; b. enabling a range of compatible activities that support primary production activities, including ancillary activities, rural produce manufacturing, rural produce retail, visitor accommodation and home businesses.
RPROZ-P3	Manage the establishment, design and location of new sensitive activities and other non-productive activities in the Rural Production Zone to avoid where possible, or otherwise mitigate, reverse sensitivity effects on primary production activities.
RPROZ-P4	Land use and subdivision activities are undertaken in a manner that maintains or enhances the rural character and amenity of the Rural Production zone, which includes: a. a predominance of primary production activities; b. low density development with generally low site coverage of buildings or structures; c. typical adverse effects such as odour, noise and dust associated with a rural working environment; and d. a diverse range of rural environments, rural character and amenity values throughout the District.

RPROZ-P5	Avoid land use that: a. is incompatible with the purpose, character and amenity of the Rural Production zone; b. does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone; c. would result in the loss of productive capacity of highly productive land; d. would exacerbate natural hazards; and e. cannot provide appropriate on-site infrastructure.
RPROZ-P6	Avoid subdivision that: a. results in the loss of highly productive land for use by farming activities; b. fragments land into parcel sizes that are no longer able to support farming activities, taking into account: i. the type of farming proposed; and ii. whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land. c. provides for rural lifestyle living unless there is an environmental benefit.
RPROZ-P7	Manage land use and subdivision to address the effects of the activity requiring resource consent, including (but not limited to) consideration of the following matters where relevant to the application: a. whether the proposal will increase production potential in the zone; b. whether the activity relies on the productive nature of the soil; c. consistency with the scale and character of the rural environment; d. location, scale and design of buildings or structures; e. for subdivision or non-primary production activities: i. scale and compatibility with rural activities; ii. potential reverse sensitivity effects on primary production activities and existing infrastructure; iii. the potential for loss of highly productive land, land sterilisation or fragmentation f. at zone interfaces: i. any setbacks, fencing, screening or landscaping required to address potential conflicts; ii. the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable; g. the capacity of the site to cater for on-site infrastructure associated with the proposed activity, including whether the site has access to a water source such as an irrigation network supply, dam or aquifer; h. the adequacy of roading infrastructure to service the proposed activity; i. Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity; j. Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

The soils and underlying conditions associated with a portion of the site have been identified as versatile, however more refined soil testing of the site has been undertaken and it has been determined that the entire site is classified as Class 4.

The site and surrounding sites are not of sufficient size to support rural production activities, nor are they currently used in that capacity. Residential lifestyle sections are

considered compatible with the surrounding land use pattern.

Natural hazards have no discernible effect on the land. This application does not exacerbate any hazard.

There is no rural working character and amenity present on this site or surrounding sites. The surrounding sites are small in nature and more commensurate with residential lifestyle. Extensive boundary planting will ensure that a rural amenity is maintained.

As above, there is not considered to be reverse sensitivity or land use incompatibility effects resulting from the proposal.

The proposal is consistent in scale and character of the surrounds which can be considered residential lifestyle.

All sites can be serviced by on-site infrastructure. There are no known historical, cultural or spiritual associations with the sites

Overall, it is considered that the proposal would not be contrary to the PDP Rural Production objective and policy framework.

Table 11 – PDP Subdivision Chapter

OBJECTIVES	
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; an 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-O3	Infrastructure is planned to service the proposed subdivision and development where: a. there is existing infrastructure connection, infrastructure should provided in an integrated, efficient, coordinated and future-proofed manner at the time of subdivision; and b. where no existing connection is available infrastructure should be planned and consideration be given to connections with the wider infrastructure network.
SUB-O4	Subdivision is accessible, connected, and integrated with the surrounding environment and provides for: a. public open spaces; b. esplanade where land adjoins the coastal marine area; and c. esplanade where land adjoins other qualifying waterbodies.
POLICIES	
SUB-P1	Enable boundary adjustments that: a. do not alter: b. the degree of non compliance with District Plan rules and standards; c. the number and location of any access; and d. the number of certificates of title; and e. are in accordance with the minimum lot sizes of the zone and comply with access, infrastructure and esplanade provisions.
SUB-P2	Enable subdivision for the purpose of public works, infrastructure, reserves or access.
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-P4	Manage subdivision of land as detailed in the district wide, natural environment values, historical an cultural values and hazard and risks sections of the plan.
SUB-P5	Manage subdivision design and layout in the General Residential, Mixed Use and Settlement zone to provide for safe, connected and accessible environments by a. minimising vehicle crossings that could affect the safety and efficiency of the current and future transport network; b. avoid cul-de-sac development unless the site or the topography prevents future public access and connections; c. providing for development that encourages social interaction, neighbourhood cohesion, a sense of place and is well connected to public spaces; d. contributing to a well connected transport network that safeguards future roading connections; and e. maximising accessibility, connectivity by creating walkways, cycleways and an interconnected transport network.

SUB-P6	Require infrastructure to be provided in an integrated and comprehensive manner by: a. demonstrating that the subdivision will be appropriately serviced and integrated with existing and planned infrastructure if available; and b. ensuring that the infrastructure is provided is in accordance the purpose, characteristics and qualities of the zone.
SUB- P7	Require the vesting of esplanade reserves when subdividing land adjoining the coast or other qualifying waterbodies.
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.
SUB-P9	Avoid subdivision rural lifestyle subdivision in the Rural Production zone and Rural residential subdivision in the Rural Lifestyle zone unless the development achieves the environmental outcomes required in the management plan subdivision rule.
SUB-P10	To protect amenity and character by avoiding the subdivision of minor residential units from principal residential units where resultant allotments do not comply with minimum allotment size and residential density.
SUB-P11	Manage subdivision to address the effects of the activity requiring resource consent including (but not limited to) consideration of the following matters where relevant to the application: a. consistency with the scale, density, design and character of the environment and purpose of the zone; b. the location, scale and design of buildings and structures; c. the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity; d. managing natural hazards; e. Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and f. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

For the various reasons already provided, the proposal is considered consistent with the policies for Subdivision under the PDP.

Overall, the proposal is consistent with higher order documents.

Section 104 (c) Other Matters

There are no other matters that are considered relevant.

9.0 NOTIFICATION (S95A-95D)

S95A of the RMA determines circumstances when public or limited notification of an application may be appropriate. Section 95A sets out a series of steps for determining public notification. These include:

- *Step 1* – Mandatory public notification in certain circumstances. In respect of this application, the applicant is not seeking public notification, nor is it subject to a mandatory notification requirement.

- *Step 2* – Public notification precluded in certain circumstances. The staged subdivision does not qualify.

- *Step 3* – Public notification required in certain circumstances. In respect of clause 8(a) the application is not subject to a rule or national environmental standard that requires public notification. In respect of clause 8(b), this assessment of effects on the environment concludes that any adverse effects would be less than minor. For these reasons, it is considered that the application can be processed without public notification.

- *Step 4* – Public notification in special circumstances. 'Special circumstances' are those that are unusual or exceptional, but they may be less than extraordinary or unique. (Peninsula Watchdog Group Inc v Minister of Energy [1996] 2NZLR 5290). It is considered that there are no unusual or exceptional circumstances that would warrant notification of this application.

Section 95b sets out a series of steps for determining limited notification. These include:

- *Step 1* – certain affected groups and affected persons must be notified. These include affected customary rights groups or marine title groups (of which there are none relating to this application). Affected groups and persons may also include owners of adjacent land subject to statutory acknowledgement if that person is affected in accordance with s95E. There are no groups or affected persons that must be notified with this application.

- *Step 2* – limited notification precluded in certain circumstances. These include any rule or national environmental standard that precludes limited notification, or the activity is solely for a controlled activity or a prescribed activity. These circumstances do not apply to this application.

- *Step 3* – certain other persons must be notified. An affected person is determined in accordance with s95E. A person is affected if the consent authority decides that the activity's adverse effects on the person are minor or more than minor (but are

not less than minor). Adverse effects on a person may be disregarded if a rule or a national environmental standard permits an activity with that effect or is a controlled or RDA with an adverse effect that does not relate to a matter over which a rule or standard reserves control or discretion. Those circumstances do not apply to this application. S95E(3) states that a person is not affected if the person has given, and not withdrawn their written approval for a proposed activity or a consent authority is satisfied that it is unreasonable in the circumstances for an applicant to seek a person's written approval.

In respect of this application, an assessment of effects on the environment has concluded that adverse effects are less than minor.

Written approval has been provided by adjacent neighbours (refer **Appendix F**). Therefore, there are considered to be no adversely affected persons.

Section 95C relates to the public notification after a request for further information which does not apply to this application. Section 95D provides the basis for determining notification under Section 95A(8)(b) if adverse effects are likely to be more than minor. This assessment concludes that potential adverse effects arising from this subdivision proposal would be less than minor.

10.0PART II – RMA

Purpose of the RMA

The proposal can promote the sustainable management of natural and physical resources on site, as current and future owners and users of the land are able to provide for their social, cultural and economic wellbeing and their health and safety. The proposed subdivision will support the provision of housing in the Kerikeri area.

Matters of National Importance

The site is mapped as being within a Kiwi 'present' area however as there is little existing vegetation on the site and it is not anticipated to adversely affect Kiwi habitat. Māori are not considered to be adversely affected by this proposal, nor is any historic heritage likely to be impacted.

Other Matters

The development will enable the landowner to subdivide their property, releasing land for large lot residential development zoned for that purpose.

11.0'GATEWAY' ASSESSMENT

Section 104D – Particular Restrictions for Non-Complying Activities

When dealing with non-complying activities, before granting an application Council must be satisfied that either the adverse effects of the activity on the environment will be minor (s104D(1)(a)), or the proposed activity will not be contrary to the objectives and policies of a proposed plan and/or plan (s104D(1)(b)).

This consideration for non-complying activities is commonly known as the 'threshold test' or the 'gateway test '. If either of the limbs of the test can be passed, then the application is eligible for approval, but the proposed activity must still be considered under s104. There is no primacy given to either of the two limbs, so if one limb can be passed then the 'test ' can be considered to be passed.

In this instance it has been demonstrated that both the effects of the proposal are less than minor and that there is positive consistency with all objective and policies of relevance to the proposal. Therefore, FNDC in this instance has both ‘limbs’ to appropriately decide in favour of this application.

12.0 OVERALL CONCLUSION

This application seeks consent for a four-lot non-complying subdivision. A thorough assessment of the proposal against the matters in the RMA has been undertaken, supported by detailed technical reports.

It has been demonstrated that:

- The proposal is consistent with the established character and amenity of the surrounding rural-lifestyle environment.
- The land is geotechnically suitable for development, with manageable constraints.
- There is no risk to human health from land contamination.
- All lots can be adequately and safely serviced with on-site solutions that mitigate environmental effects.
- The proposal is not contrary to the relevant objectives and policies of the Operative or Proposed District Plans.
- Adverse effects on the environment will be less than minor.

The application comfortably passes both gateway tests under s104D of the RMA. It is therefore recommended that the application be granted, subject to appropriate conditions of consent.

Kind regards,

Andrew McPhee
Consultant Planner

D 446353.1 CONO

THE RESOURCE MANAGEMENT ACT 1991
SECTION 221 CONSENT NOTICE

Regarding

The subdivision of Lot 2 Deposited Plan 195961 and Lots 19 and 12 Deposited Plan 193979 North Auckland Land Registry

Pursuant to Section 221 and for the purpose of Section 224 of the Resource Management Act 1991, this Consent Notice is issued by **THE FAR NORTH DISTRICT COUNCIL** to the effect that the condition described in the Schedule below is to be complied with on a continuing basis by the subdividing owner and subsequent owners after the deposit of the survey plan, and is to be registered on the Title to Lot 2 Deposited Plan 198209.

SCHEDULE

The operation of agricultural and horticultural equipment including sprays and chemicals (subject to compliance with any relevant legislation) may be a permitted activity. Accordingly, where rainwater is collected from exposed surfaces for human consumption in connection with any residential development on the site, the occupiers of any such dwelling shall install an approved water filtration system.

Signed for **THE FAR NORTH DISTRICT COUNCIL** under delegated authority

15/09/99
Date

LINZ Cu.

PRODUCED 5.19 01.NOV 99 D 446353.1
ENTERED 9.00 10.Nov 99
PATRICULARS ENTERED IN REGISTER BOOK
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REGISTRAR-GENERAL OF LAND NEW ZEALAND

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FAR NORTH DISTRICT COUNCIL

CONSENT NOTICE UNDER SECTION 221
RESOURCE MANAGEMENT ACT 1991

FAR NORTH DISTRICT COUNCIL PLAN No. RC 1970077

MCCAUGHAN ROAD, KERIKERI

TOTARA GREEN ESTATE LIMITED at Auckland (hereinafter called "the Owner") being the registered proprietor of an estate in fee-simple in the Auckland Land Registry Office being Lot 4 on Deposited Plan 179464 containing 18.4250 hectares more or less and being all of the land in Certificate of Title 110C/916.

The Far North District Council hereby gives notice pursuant to Section 221 of the Resource Management Act 1991 that the subdivision consent in respect of Plan No. RC 1970077 being a subdivision of Lot 4 on Deposited Plan 179464 was granted subject to the following conditions being complied with on a continuing basis:

(i) In respect of Lots 11-17:

Any building on these lots will require engineer-designed waste water treatment and disposal system, the details of which are to be submitted in conjunction with the Building Consent application.

(ii) In respect of Lots 11 and 13-17:

(a) The operation of agricultural and horticultural equipment including sprays and chemicals (subject to compliance with any relevant legislation) may be a permitted activity. Accordingly, where rainwater is collected from exposed surfaces for human consumption in connection with any residential development on the site, the occupiers of any such dwelling shall install an approved water filtration system.

(b) That all buildings on the site hereon be limited to those areas identified on the plan of subdivision.

(iii) In respect of Lots 11-13 and 19:

The landowners of the above allotments shall preserve the trees and bush on areas W, X, Y and Z and shall not without the prior written consent of the Council and then in strict compliance with any conditions imposed by the Council cut down, damage or destroy any vegetation required to be planted as part of the landscape plan (showing new lot reconfiguration). The landowners shall not be deemed to be in breach of this prohibition if any such

11 – 17, 19

vegetation shall die from natural causes not attributable to any act or default by or on behalf of the landowners or for which the landowner is responsible.

(iv) In respect of Lots 12 and 19 (which are held in one Certificate of Title):

That for the purposes of building development of the site that all buildings be limited to Lot 12 for the purposes of horticultural soil preservation on Lot 19. Any building proposed for Lot 19 shall require the express permission of the Council and may only be built if directly related to horticultural activities and is considered essential to the operation of the activity on that Lot 19.

(v) In respect of the area marked V on the plan of subdivision, not to take any action which could detrimentally affect the land as an area of undisturbed native flora and fauna and in particular:

(a) not to permit stock on the land;

(b) not to allow boundary fences to fall into disrepair;

(c) not to plant any exotic tree species;

(d) not to carry out any planting or clearing without the prior written approval of the Department of Conservation;

(e) not to carry out any other activity which harms or has a detrimental effect on the existing regenerating native vegetation.

Dated at Kaikohe this day of 9th FEBRUARY 1999.

SIGNED by an Authorised Officer
of the Far North District Council
under delegated authority given
pursuant to Section 716 of the
Local Government Act 1974:

SIGNED by the Owner
Totara Green Estate Limited
by its Directors
in the presence of:

Directors

LINZ COPY

3.26 20.MAY99 D 390811.3

PARTICULARS ENTERED IN REGISTER
LAND REGISTRY NORTH AUCKLAND
FOR REGISTRAR - GENERAL OF LAND

916

Approved by the District Land Registrar, South Auckland No. 351560
Approved by the District Land Registrar, North Auckland, No. 4380/81
Approved by the Registrar-General of Land, Wellington, No. 436748.1/81

D127397.5 EC

EASEMENT CERTIFICATE

(**IMPORTANT**: Registration of this certificate does not of itself create any of the easements specified herein).

I/We **ALEC JAMES McCAUGHAN** of Kerikeri, Farmer, and **GWENDOLYN MARGARET McCAUGHAN** of Auckland, Married Woman, as tenants in common in equal shares

being the registered proprietor(s) of the land described in the Schedule hereto hereby certify that the easements specified in that Schedule, the servient tenements in relation to which are shown on a plan of survey deposited in the Land Registry Office at Auckland on the day of 1997 under No. 179464 are the easements which it is intended shall be created by the operation of section 90A of the Land Transfer Act 1952.

SCHEDULE

DEPOSITED PLAN NO.

Nature of Easement (e.g., Right of Way, etc.)	Servient Tenement		Dominant Tenement Lot No.(s) or other Legal Description	Title Reference
	Lot No.(s) or other Legal Description	Colour, or Other Means of Identification, of Part Subject to Easement		
Right of Way	Lot 4 Deposited Plan 179464	A	Lots 8, 9 and 10 Deposited Plan 179464	110C/916 110C/920 110C/921 110C/922
Right to transmit electricity and telecommunications	Lot 4 Deposited Plan 179464	A	Lots 8, 9 and 10 Deposited Plan 179464	110C/916 110C/920 110C/921 110C/922
Right to convey water	Lot 4 Deposited Plan 179464	A	Lots 8, 9 and 10 Deposited Plan 179464	110C/916 110C/920 110C/921 110C/922
Right of Way	Lot 10 Deposited Plan 179464	C	Lots 4 and 9 Deposited Plan 179464	110C/922 110C/916 110C/921
Right to transmit electricity and telecommunications	Lot 10 Deposited Plan 179464	C	Lots 4 and 9 Deposited Plan 179464	110C/922 110C/916 110C/921
Right to convey water	Lot 10 Deposited Plan 179464	C	Lots 4 and 9 Deposited Plan 179464	110C/922 110C/916 110C/921
Right of Way	Lot 5 Deposited Plan 179464	D	Lot 1 Deposited Plan 179464	110C/917 110C/913
Right to transmit electricity and telecommunications	Lot 5 Deposited Plan 179464	D	Lot 1 Deposited Plan 179464	110C/917 110C/913
Right to convey water	Lot 5 Deposited Plan 179464	D	Lot 1 Deposited Plan 179464	110C/917 110C/913

State whether any rights or powers set out here are in addition to or in substitution for those set out in the Seventh Schedule to the Land Transfer Act 1952.

1. Rights and powers:

1. Telecommunications

The full free uninterrupted and unrestricted right liberty and privilege for the Grantee in common with the Grantor and any other person lawfully entitled to do so from time to time and at all times to convey and lead telephone wires cables conduits or other means of conveyance below the ground from the source of supply or point of entry as the case may be across the land over which the easement is granted or created together with the full free uninterrupted and unrestricted right liberty and privilege for the Grantee in common with the Grantor and any other person lawfully entitled so to do for the purpose of the easement concerned:

(a) To transmit electrical current through and to use any telephone wires cables conduits or other means of conveyance already laid across the land over which the easement is granted or created or any telephone wires cables conduits or other means of conveyance and replacement or in substitution therefor;

(b) Where no such line of telephone wires cables conduits or other means of conveyance exists to have laid placed and maintained a line of telephone wires cables conduits or other means of conveyance of sufficient size and of suitable material for the purpose under the surface of the land over which the easement is granted or created;

2. Power

The full free uninterrupted and unrestricted right liberty and privilege for the Grantee in common with the Grantor and any other person lawfully entitled so to do from time to time and at all times to take convey and lead wires cables conduits or other means of conveyance below the ground for the purpose of conveying electricity from the source of supply or point of entry as the case may be across the land over which the easement is granted or created together with the full free uninterrupted and unrestricted right liberty and privilege for the Grantee in common with the Grantor and any other person lawfully entitled so to do for the purpose of the easement concerned

3. Rights and Powers in relation to Telecommunications and Power Easements

In order to construct and maintain the efficiency of any telephone and power wires cables conduits or other means of conveyance the full free uninterrupted and unrestricted right liberty and privilege for the Grantee his servants agents and workmen with any tools implements machinery vehicles or equipment of whatsoever nature necessary for the purpose to enter upon the land over which the easement is created or granted and to remain there for any reasonable time for the purpose of laying inspecting cleaning repairing maintaining and renewing the telephone and power wiring or cabling conduits or other means of conveyance or any part thereof or opening up the soil of that land to such extent as may be necessary and reasonable in that regard subject to the condition that as little disturbance as possible is caused to the surface of the land of the Grantor and that the surface is restored as nearly as possible to its original condition and

2. Terms, conditions, covenants, or restrictions in respect of any of the above easements:

any other damage done by reason of the aforesaid operations is properly and completely repaired to the reasonable satisfaction of the registered proprietors for the time being of the servient tenement.

4. Right of Way

The rights and powers set out in the "Right of Way" provisions of the Seventh Schedule of the Land Transfer Act 1952 and the Ninth Schedule of the Property Law Act 1952.

5. Water Supply

The rights and powers set out in the "Right to Convey Water" provisions of the Seventh Schedule of the Land Transfer Act 1962.

Dated this 25 day of March 1997

Signed by the above-named
ALEC JAMES McCAUGHAN and
GWENDOLYN MARGARET McCAUGHAN

in the presence of

Witness MCOMER

Occupation SOLICTOR

Address AUCKLAND

EASEMENT CERTIFICATE

IMPORTANT: Registration of this certificate does not of itself create any of the easements specified herein.

Correct for the purposes of the Land Transfer Act

Solicitor for the registered proprietor

The ~~above~~/within easements when created will be~~re~~ subject to Section 243(a) Resource Management Act 1991

A.L.R.

BENNETT VOLLEMAERE & CO
SOLICITORS
AUCKLAND

PARTICULARS ENTERED IN REGISTER
LAND DISTRICT
ASST. LAND REGISTRAR

DISTRICT LAND REGISTRAR
NORTH AUCKLAND NEW ZEALAND

2.34 07 APR 87 D 127397.5

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Guaranteed Search Copy issued under Section 60 of the Land Transfer Act 2017

R.W. Muir
Registrar-General of Land

Identifier	**NA127A/757**
Land Registration District	**North Auckland**
Date Issued	10 November 1999

Prior References
NA123A/455

Estate	Fee Simple
Area	1.7040 hectares more or less
Legal Description	Lot 2 Deposited Plan 198209

Registered Owners

Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft

Interests

Excepting all minerals within the meaning of the Land Act 1924 on or under the land

Appurtenant hereto is a right of way and rights to convey water, transmit electricity and telecommunications specified in Easement Certificate D127397.5 - 7.4.1997 at 2.34 pm

The easements specified in Easement Certificate D127397.5 are subject to Section 243 (a) Resource Management Act 1991

Fencing Covenant in Transfer D150307.1 - 30.5.1997 at 11.19 am

D390811.3 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - 20.5.1999 at 3.26 pm

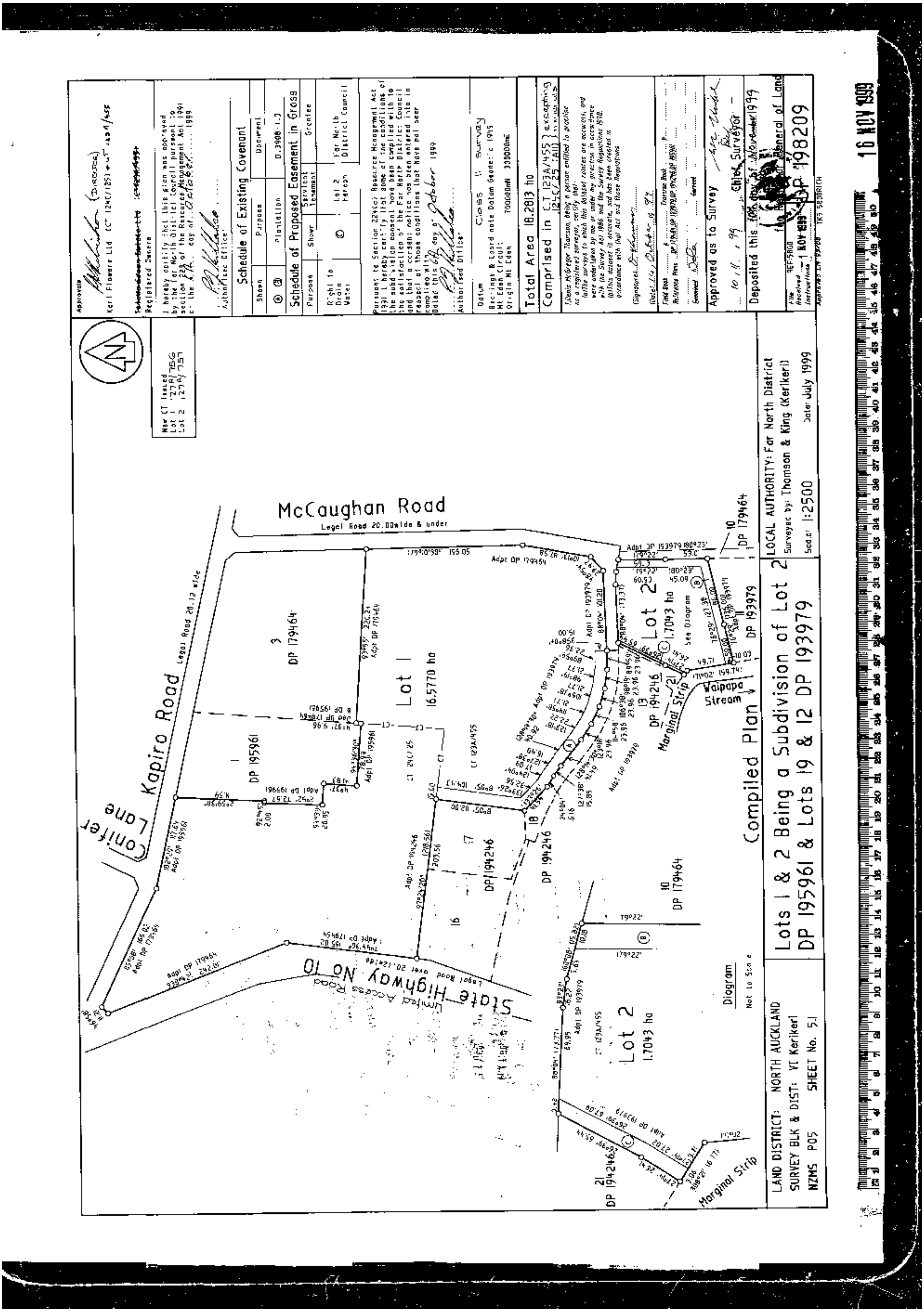
Appurtenant hereto is a right to drain water specified in Easement Certificate D390811.10 - 20.5.1999 at 3.26 pm

The easements specified in Easement Certificate D390811.10 are subject to Section 243 (a) Resource Management Act 1991

Fencing Covenant in Transfer D431529.2 - 17.9.1999 at 1.42 pm

Land Covenant in Transfer D431529.2 - 17.9.1999 at 1.42 pm

D446353.1 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - produced 1.11.1999 at 3.19 and entered 10.11.1999 at 9.00 am


McCaughan Road
Kapiro Road
Conifer Lane
State Highway No 10
Limited Access Road
Lot 1
16.5770 ha
Lot 2
1.7043 ha
Waipapa Stream
Marginal Strip
Diagram
Not to Scale
Schedule of Existing Covenant
Schedule of Proposed Easement in Gross
Total Area 18.2813 ha
Approved as to Survey
Deposited this 16th day of November 1999
DP 198209
Compiled Plan
Lots 1 & 2 Being a Subdivision of Lot 2
DP 195961 & Lots 19 & 12 DP 193979
LOCAL AUTHORITY: Far North District
Surveyed by: Thomson & King (Kerikeri)
Date: July 1999
Scale: 1:2500
LAND DISTRICT: NORTH AUCKLAND
SURVEY BLK & DIST: VI Kerikeri
NZMS P05 SHEET No. 5.1
16 NOV 1999

Memorandum of Easements			
Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	G	Lot 3 hereon	Lot 4 hereon

NOTES

- This plan is Copyright to Simpson Shaw Surveyors.
- This is a concept plan. Areas and Dimensions are approximate only and subject to final survey.
- All dimensions are in metres unless shown otherwise.
- Aerial photography from LINZ data service.

TOTAL AREA = 1.7040 Ha

COMPRISED IN
RT NA127A/757

Areas (A) (B) (C) (D) are subject to an existing land covenant (plantation) D431529.2

Areas (A) (E) (F) are subject to a land covenant

100
50
0

B	04-07-25	Access and covenant	JL
A	26-08-24	For Consent	JL

REVISIONS

SIMPSON SHAW
LAND AND ENGINEERING SURVEYORS
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CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	04/07/2025		
DRAWING	24-051-S001		B
SCALE	1:750		(A3)

P:\Vellenoweth & Wardlaw\24-051 McCaughan Rd\Working Data_CAD\24-051-S001-B.dwg

Engineering Assessment for Proposed Subdivision

57 McCaughan Road, Waipapa
(Lot 2 DP 198209)

Robert G Vellenoweth

Supporting report for RC Applications to Far North District Council

Haigh Workman Reference: 24 095

Rev A

17 September 2025

Revision History

Revision №	Issued By	Description	Date
A	Aaron Thorburn	For Resource Consent	17 September 2025

Prepared by	Reviewed by	Approved by
Aaron Thorburn Senior Environmental Advisor BAppSc (Env), CEnvP	**Tom Adcock** Senior Civil Engineer BEng (Civil Engineering), MEngNZ	**John Papesch** Senior Civil Engineer BE (Civil Engineering), CPEng, CMEngNZ

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APPENDICES

Appendix A – Site Drawings

Appendix B – Borehole Logs

Executive Summary

Haigh Workman Limited were engaged by Robert G Vellenoweth to undertake an engineering assessment of land at 57 McCaughan Road, Waipapa. It is proposed to subdivide Lot 2 DP 198209 (17,040m2) into a four Lots between 4,000m2 and 4738m2. Proposed Lot 3 contains a dwelling, driveway and associated buildings with the balance of the site is vegetated with gardens, grass and native and exotic trees.

This report assesses earthworks, access, stormwater, wastewater, water supply and firefighting, with specific regard to the local authority plans and subdivision rules. A proposed subdivision plan prepared by Simpson and Shaw was made available at the time of writing this report.

The site is zoned *'Rural Production'* under the Far North District Council District Plan.

Natural Hazards
The current site (Lot 2 DP 198209) is not subject to natural hazards.

Access
The site has an existing crossing off McCaughan Road, consisting of a single width, splayed concrete driveway servicing the existing dwelling and associated buildings in the southwest corner of the site (proposed Lot 3). This existing crossing is considered acceptable as the crossing is close to the end of the legal road and minimal vehicle movements are expected from the east. The existing crossing is not culverted as water tables are not formed.

It is proposed that this existing crossing remain for right of way driveway access to service proposed Lot 3 and an additional access driveway be added to the right of way to at the northwest corner of proposed Lot 4 to allow access to the proposed Lot. New crossings are proposed to be constructed off McCaughan Road to the west and east of the existing crossing to service the proposed Lot 1 and 2 sites.

Lots 1 and 2 crossings are to be built at time of development. No further work is required to the existing vehicle crossing to serve proposed Lot 3 right of way.

We consider that the existing crossing and proposed new vehicle crossings are adequate to provide safe access to the proposed Lots.

Earthworks
Earthworks are minor to form an entrance into Lot 4 from the Lot 3 right of way and will be well below the permitted activity threshold.

Geotechnical
Natural ground conditions are considered to be suitable for supporting foundations subject to site specific investigations at the time of development.

Stormwater Management
Following subdivision, the expected impermeable surfaces for proposed Lots 1, 2 and 4 are expected to comply with Far North District Council Permitted Activity criteria, whereas proposed Lot 3 the existing development result in a technical breach making the activity Restricted Discretionary. As part of the proposed subdivision, land-use consent is sought for proposed Lot 3.

Proposed Lot 3 results in an increase of 1.6 litres per second over the existing consented impermeable surfaces. Stormwater attenuation has been designed with a target of no more than 80% of the 10% AEP runoff of pre-development, as per Far North District Council Engineering Standards.

For proposed Lot 3 a twin orifice 25,000 litre stormwater detention tank installed at the time of subdivision will provide attenuation back to 80% of the Permitted Activity criteria. Retention is also provided by the two existing 25,000 litre collection tanks which will contribute to a reduce in site runoff.

The existing stormwater controls were inspected and no shortfalls or defects were identified that might otherwise require improvement, with the exception of attenuation tank dispersal via a spreader bar device taking advantage of the natural fall towards the Waipapa Stream.

For proposed Lots 1, 2 and 4 it is recommended that stormwater run-off for future development be attenuated back to 80% of pre-development (i.e. vacant section) by way of a consent notice requiring a Stormwater Management Plan at Building Consent stage.

Water Supply

Domestic water supply may be provided using roof runoff collected in storage tanks.

Wastewater

All proposed Lots contain ample suitable area for effluent disposal including reserve area. The soils were categorised under AS/NZS 1547 as Category 4 soils, we recommend an irrigation rate of 3.5 mm/d which will require a disposal area of 250m^2 for an indicative 4-bedroom dwelling and an additional 75m^2 for a 30% reserve area (assuming secondary treatment as standard).

Fire Fighting

Council Engineering Standards and Fire and Emergency NZ require a water supply that is adequate for firefighting purposes. There is no reticulated water supply, so each lot will be responsible for providing an on-site firefighting supply.

1 Introduction

1.1. Project Brief and Scope

Haigh Workman Limited (Haigh Workman) was commissioned by the Robert G Vellenoweth (the client) to undertake an engineering assessment of land at 57 McCaughan Road, Waipapa (the site). It is proposed to subdivide Lot 2 DP 198209 (17,040m2) into four Lots ranging from 4,000m^2 to 4,738m^2. Lot 3 contains an existing dwelling, driveway and associated buildings.

The scope of the report includes the following assessment items:

- Natural hazards,
- Vehicle access and parking,
- Earthworks to complete the subdivision,
- Stormwater and wastewater, and
- Water supply and firefighting.

The site is zoned '*Rural Production'* under the Far North District Council (FNDC) Operative District Plan.

1.2. Limitations

This report has been prepared by Haigh Workman for the sole benefit of Robert G Vellenoweth (the client) with respect to the brief outlined to us. This report is to be used by our client and consultants and may be relied upon by the FNDC when considering the application for the proposed subdivision and development. The information and opinions contained within this report shall not be used in any other context for any other purpose without prior review and agreement by Haigh Workman.

It has been assumed in the production of this report that the site is to be subdivided and subsequently developed at the potential house site identified. At the time of writing there was no information available for proposed future developments on either lot following subdivision. If any of these assumptions are incorrect, then amendments to the recommendations made in this report may be required.

The comments and opinions presented in this report are based on the findings of the desk study and ground conditions encountered during an intrusive site visit performed by Haigh Workman. There may be other conditions prevailing on the site which have not been revealed by this investigation and which have not been taken into account by this report. Responsibility cannot be accepted for any conditions not revealed by this investigation. Any diagram or opinion on the possible configuration of strata or other spatially variable features between or beyond investigation positions is conjectural and given for guidance only.

2 Site Description

2.1. Site Identification

Site Address:	57 McCaughan Road, Waipapa
Legal Description:	Lot 2 DP 198209
Area:	17,040 m^2 (1.704 ha)
FNDC Zoning:	Rural Production

The site is legally described as Lot 2 DP 198209 with a total land area of 17,040 m^2 and is a pentagon shape (more or less), the site is located approximately 900 m north of Waipapa, the surrounding properties are rural lifestyle and

horticultural land-use. There is an existing dwelling, driveway and associated buildings in the southwest corner of the site, the balance of the site is vegetated with grass and trees.

The Waipapa Stream is located on the western boundary of the site. The created lots will have slopes that are slight to moderate (under 10˚). The site is shown below in Figure 1 and provided in **Appendix A**.

Figure 1 - Site Location Plan (Source: Far North District Council GeoMaps)

2.2. Proposed Subdivision

The proposed subdivision plan identifies an easement (the driveway), as well as proposed covenants (indigenous bush protection) areas.

A proposed subdivision plan prepared by Simpson Shaw Surveyors Limited (drawing 24-051-S001 dated 4 July 2025) was made available at the time of writing this report and is provided in **Appendix A**.

Proposed Lots are described below in Table 1.

Table 1 - Proposed Lots

Lots	Proposed Area (m^2)	End-use
Lot 1	4,019	Rural residential
Lot 2	4,283	Rural residential
Lot 3	4,738	Rural residential (contains existing dwelling and associated structures, to be retained by the client)
Lot 4	4,000	Rural residential
Total	**17,040**	

2.3. District Plan Zoning

The site is zoned as *'Rural Production'* under the FNDC Operative District Plan.

It is our understanding that the proposed subdivision is a *'Restricted Discretionary'* Activity based on the impermeable surfaces for proposed Lot 3.

Proposed Lot 3 contains an existing dwelling and associated structures, and no further development is planned for this Lot at the writing of this report. Proposed Lots 1, 2 and 4 are currently undeveloped. As per 13.7.2.2 for Allotment Dimensions for the *'Rural Production'* zone, the minimum dimensions are 30 m x 30 m. This can be achieved within Lots 1, 2 and 4.

3 Environmental Setting

3.1. Published Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences (GNS), 1:250,000 scale, Geological Map 2, 2009: '*Geology of the Whangarei Area'*,
- NZMS 290 Sheet P 04/05, 1: 100,000 scale, 1982: *'Rock types map of Whangaroa-Kaikohe area'*, and
- NZMS 290 Sheet P 04/05, 1: 100,000 scale, 1980: *'Soil map of Whangaroa-Kaikohe'.*

3.1.1. Weathered Geology (Soils)

The site is underlain by Pungaere gravelly friable clay (PG) which is categorised as *'moderately well drained'*. The NZMS Sheet 'Whangaroa – Kaikohe' map of the site and surrounding area is provided below in Figure 2.

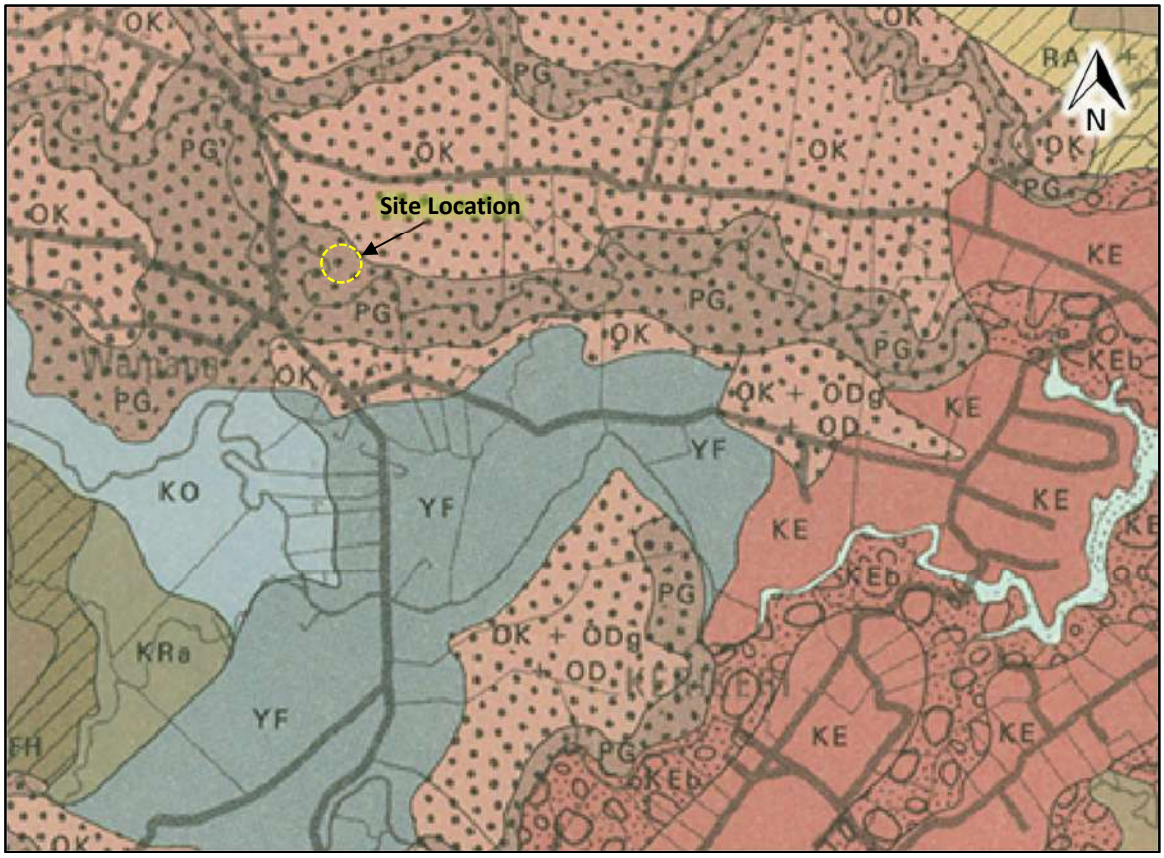


Figure 2 - NZMS 290 Sheet P04/05 Soil Map

3.1.2. Bedrock Geology

The soils on the site are indicated to be underlain by bedrock comprising of basalt (IMil, Pl) of the Kerikeri Volcanic Group of late Miocene to Pliocene. The Kerikeri Volcanic are described by the GNS map as '*Basalt lava, volcanic plugs and minor tuff'.* The GNS geologic map of the site and surrounding area is provided below in Figure 3.

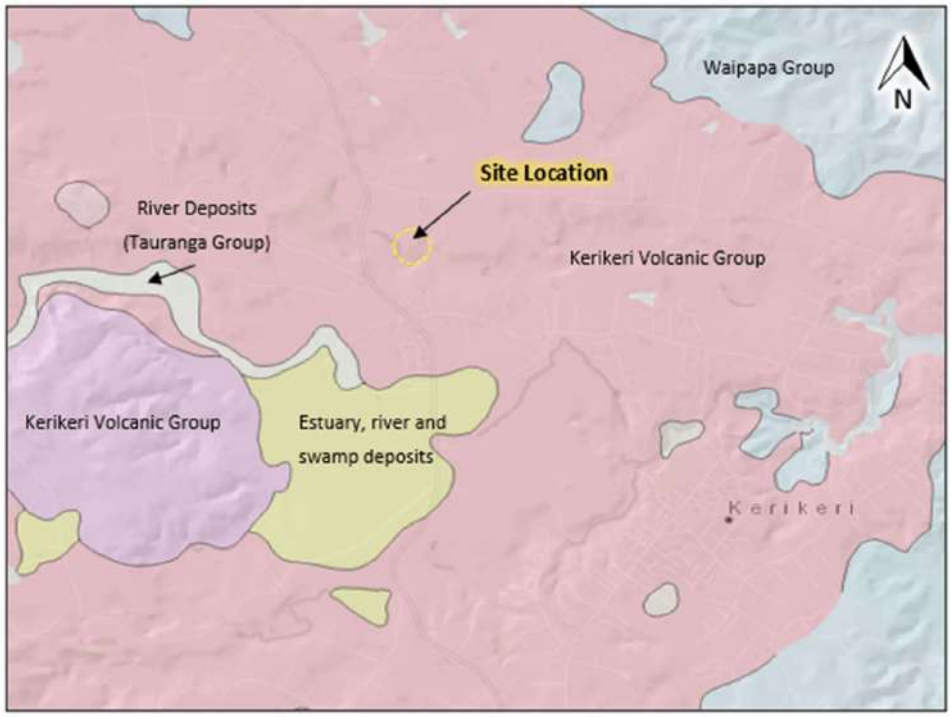


Figure 3 - Geological Map (Source: GNS Sciences Geology Website)

3.2. Hydrology and Flooding

An examination of published environmental data relating to the site from FNDC and NRC online GIS databases is presented below.

The site does not lie within any mapped river or coastal flood hazard areas, as shown below in Figure 4. A summary of available information pertaining to hydrology and hydrogeology is presented below in Table 2.

Table 2 – Surface Water Features and Flooding

	Presence / Location	**Comments**
Watercourses and Water Features within 500 m (Ponds, lakes, etc.)	The Waipapa Stream to the west of the site boundary.	The Waipapa Stream flows in a general eastern direction, discharging into the Kerikeri Inlet.
Surface Water Features (Ponds, Lakes, etc.)	None	-
Natural Flowpaths	A natural flowpath is visible on proposed Lot 1 (*see Figure 4 below*)	A house platform is available upslope so this does not pose a hazard.
Flood Risk	None	See Figure 4 below – Mapped Flood Zones.
Private bores within 200 m	None	Not applicable.

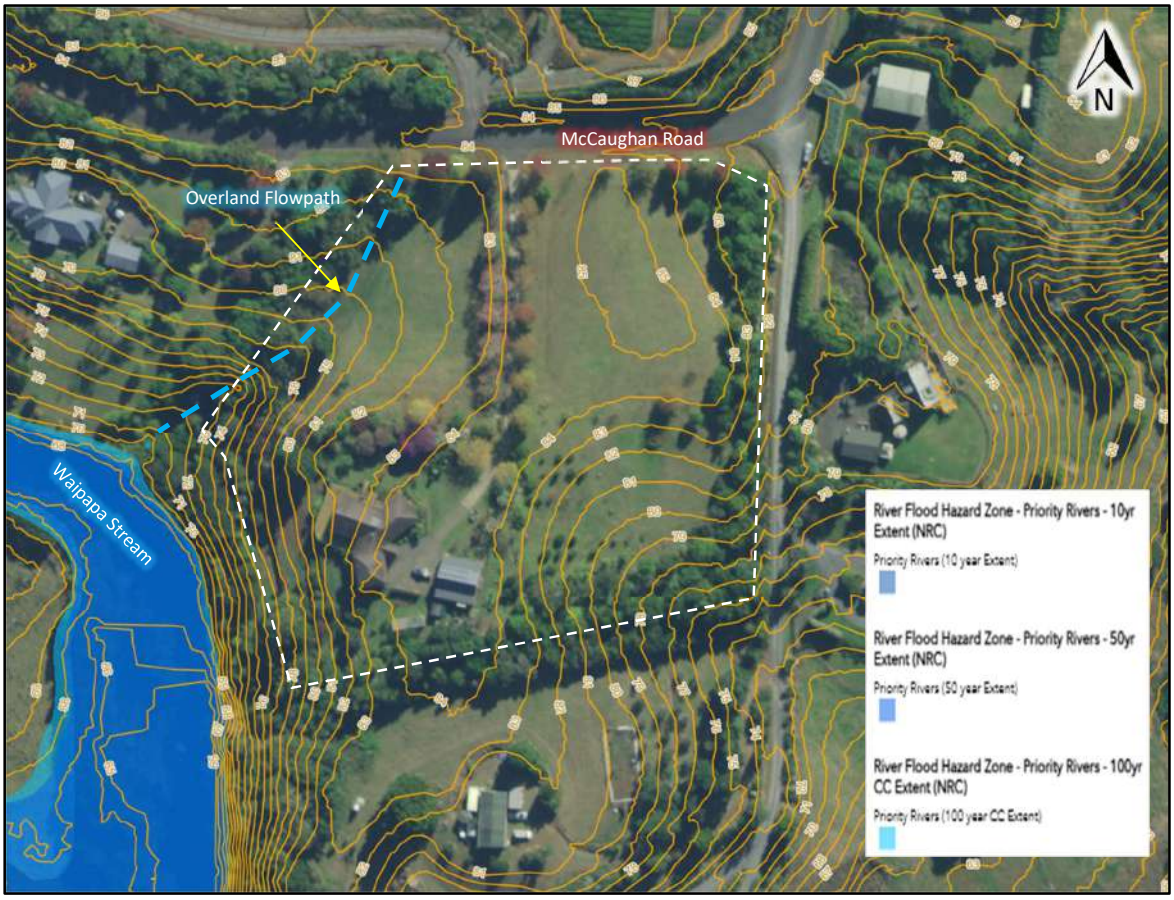


Figure 4 – Mapped River Flood Hazard Zones *(Source: NRC GIS Website)*

3.3. Natural Hazards

Reference to Section 2 of the Resource Management Act 1991, natural hazard means any atmospheric or earth or water related occurrence (including earthquake, tsunami, erosion, volcanic and geothermal activity, landslip, subsidence, sedimentation, wind, drought, fire, or flooding) the action of which adversely affects or may adversely affect human life, property, or other aspects of the environment.

Natural hazards listed in Section 71(3) of the Building Act 2004 include: erosion, falling debris, subsidence, inundation and slippage. We assess the susceptibility of the land associated with the nominated building platforms to these potential hazards in Table 3 below.

Table 3 - Natural Hazards

Natural Hazard	Risk
Erosion (including coastal erosion, bank erosion, and sheet erosion)	No, subject to maintaining vegetation cover
Falling debris (including soil, rock, snow, and ice)	No
Subsidence (vertical settlement)	Low risk, to be addressed at building consent stage.
Inundation (including flooding, overland flow, storm surge, tidal effects, and ponding)	No. On review of NRC flood mapping the site is not subject to flooding. All proposed building platforms are elevated well above the Waipapa stream by at least 10m, including the existing dwelling on proposed Lot 3.

Slippage	Low risk, to be addressed at building consent stage.

The site does not contain any natural hazards that would warrant action under Section 71(1) of the Building Act 2004. There is no significant risk from natural hazards that would cause Section 106 of the Resource Management Act to apply.

4 Site Investigations

4.1. Site Walkover

A walkover of the site was undertaken on 17 July 2025 and comprised checking sightlines for the existing entrance of the existing driveway and vehicle crossing onto McCaughan Road, stormwater flowpaths and the location of the existing wastewater disposal field for the existing dwelling on proposed Lot 3.

4.2. Subsurface Investigation

Haigh Workman undertook an investigation on 17 July 2025 for the purpose of assessing soils for effluent disposal. This included the drilling of three hand augered boreholes, at least one borehole per lot. Boreholes were advanced to 1.0 m bgl with stiff silt to clayey silt soils with some gravel content underlain by a veneer of topsoil (approx. 0.2m). Groundwater was not encountered.

Based on the referenced soil maps (Section 3) and in-situ soil observations, we consider the soils across the site to be classified as soil category 3 (loams – moderately drained)in accordance with AS/NZS1547:2012. This soil category can sustain a daily irrigation rate (DIR) of 4 mm / day for disposal to surface for secondary treated effluent.

A site plan showing the location of the boreholes is provided in **Appendix A** and borehole logs are provided in **Appendix B**.

4.3. Geotechnical Investigation

Haigh Workman undertook a geotechnical assessment as part of the subdivision assessment in July 2025 (Ref. 24 095, *Geotechnical Assessment Report, 57 McCaughan Road, Kerikeri (Lot 2 DP 198209),* August 2025). The investigation found the soils directly underlying the proposed subdivision development site comprises very stiff natural soils of the Kerikeri Volcanic Group, below a veneer of topsoil and organic matter. The soils were generally described as being very stiff silt and clayey silt with variable fine gravel content.

The investigation included the drilling of three hand augers located in each of the proposed Lots, being Lot 1 (BH01), Lot 2 (BH02) and Lot 4 (BH3) to a maximum depth of 3.0m below ground level (bgl). Our investigation found very stiff silt and clayey silt soils with variable fine gravel content underlain by a veneer of topsoil (between 0.0 m to 0.2 m bgl) comprising firm to stiff silt, described as brown to dark brown in colour. Groundwater was not encountered in any of the hand auger locations, all locations were considered as moist.

Natural ground conditions are considered to be suitable for supporting foundations subject to site specific investigations at the time of development.

5 Access

The existing site is accessed off McCaughan Road via an existing crossing and concreted driveway leading to the dwelling on proposed Lot 3. Following subdivision the driveway will become a Right of Way (RoW) serving Lots 3 and 4, while Lots 1 and 2 will have new crossings directly off McCaughan Road. Refer to Figure 5 below.

5.1. Right of Way

Proposed Lot 3 will share access with Lot 4 using the existing 3.0 m wide concrete driveway which will become RoW G. No modification or upgrades are required.

5.2. Vehicle Crossings

The existing Lot 3 crossing off McCaughan Road site is sealed with a 3.0 m width and well-formed splays. The crossing meets the Type 1A requirements for a two-lot crossing given in the FNDC Engineering Standards 2023. No modification or upgrades are required. Refer to Figure 5 below.

Figure 5 – Existing Vehicle Crossing (Lot 3)

Lots 1 and 2 will require similar sized Type 1A crossings. We recommend that these be constructed at time of building consent and crossing permits be obtained to ensure Council standards are followed. If the crossings are constructed at time of subdivision, then crossing permits will not be required. Both crossings shall be sealed or concreted. Lot 1 frontage has a water table drain so a culvert will be required. Lot 2 will not require a culvert as the ground slopes in the section with no formed water table. Traversable headwalls are not considered necessary, given the shallow water table and low speed environment.

Sight distances along the road frontage with McCaughan Road were checked and are tabulated below. The road is sealed and has a posted speed limit of 60kph, however operating speeds can be expected to be lower. The right-hand 90-degree bend on the eastern approach slows traffic to 35kph, whilst the sweeping left-hand bend on the western approach can only be comfortable taken at a speed not exceeding 50 to 55kph. There is a minor crest at the eastern end which coincides with the right-hand bend, otherwise the road has a near flat constant grade. Operating speeds were assessed by several ‘drive throughs’ in both directions.

McCaughan Road is classified as ‘Access’. FNDC Engineering Standards 2023 Sheet 4 provided below gives the following minimum sight distances from vehicle entrances:

	Frontage Transport Corridor Classification		
Posted Speed Limit (km/hr)	Access (incl. Low Volume)	Primary & Secondary Collector	Arterial & Regional
40	45	50	90
50	60	70	120
60	85	90	150
70	105	120	185
80	135	145	220
90	160	175	265
100	195	210	305

Sight distance looking east from Lot 1 frontage comfortably exceeds 100 m and from Lot 2 looking west comfortably exceeds 70m meaning that crossings can be safely constructed anywhere along the frontage of both lots. Refer photographs given below in Figures 6 – 8.

Figure 6 – Lot 1 sight distances looking east

Figure 7 – Lot 1 sight distances looking west

Figure 8 – Lot 2 sight distances looking east and west respectively

5.3. Parking and Manoeuvring

Proposed Lot 3 contains an existing dwelling, driveway and associated buildings with more than two vehicle parking spaces. Future proposed Lots 1, 2 and 4 concept designs will require allowance for two vehicle parking spaces, as required in the FNDC District Plan.

6 Earthworks

6.1. Proposed Earthworks

As per the FNDC Operative District Plan Rule 12.3.6.1.1 excavation and / or filling in the Rural Production Zone is permitted, provided it does not exceed 5,000 m^3 in any 12-month period per site and does not involve a continuous cut or filled face exceeding an average of 1.5 m in height over the length of the face i.e. the maximum permitted average cut and fill height may be 3 m.

Under the FNDC Operative District Plan, earthworks cut and fill are added together whilst drainage is not included. The proposed earthworks at the time of subdivision are associated with the new vehicle crossings and driveways, proposed dwellings and onsite stormwater and wastewater.

No earthworks are anticipated and being required at the time of subdivision. However, should this not be the case then the following rules and standards have legal effect and will be complied with:

- Earthworks Rule EW-R12 (Earthworks and the discovery of suspected sensitive material)
- Earthworks Rule EW-R13 (Earthworks and erosion and sediment control
- Standard EW-S3 Accidental Discovery Protocol
- Standard EW-S5 Erosion and sediment control

Construction of vehicle crossings for Lot 1 and Lot 2 and extend ROW G to the western boundary of proposed Lot 4.

6.2. Earthworks Construction

Any earthworks should be carried out in accordance with NZS 4404 and Council's Engineering Standards and Guidelines.

Erosion and sediment control for earthworks will be carried out in accordance with Council's Engineering Standards and Guidelines and Auckland Council GD05.

6.3. National Environmental Standards

A Preliminary Site Investigation with Limited Soil Sampling has been completed by Haigh Workman (Ref. 24 095, *Preliminary Site Investigation with Limited Soil Sampling for Proposed Subdivision at 57 McCaughan Road, Waipapa*, August 2025).

It is considered that the proposed subdivision and future development are covered under the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS) Regulations. Future development plans will need to be reviewed by a Suitably Qualified and Experienced Practitioner to confirm the Preliminary Site Investigation report findings.

7 Stormwater Management

7.1. Existing Site Drainage

Proposed Lot 3 has existing dwelling, driveway and associated buildings. Roof runoff is connected to downpipes which flow into two 25,000 litre aboveground plastic water tanks to the southwest of the dwelling, the overflow from these tanks is discharged to ground and flows via downhill into the Waipapa Stream located to the west of the site. Proposed Lots 1, 2 and 4 have no existing stormwater network. Excess stormwater runoff not soaking into the ground

will shed as sheet flow via the natural contours, with Lot 1 towards the southwest, Lot 4 towards the southeast and Lot 2 with a central knoll will shed in all directions.

7.2. Regulatory Framework

7.2.1. FNDC Operative District Plan

The site is zoned as *'Rural Production'*. The relevant activity rules for stormwater management are as follows:

Permitted Activity

> **8.6.5.1.3 STORMWATER MANAGEMENT**
> *The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.*

Controlled Activity

> **8.6.5.2.1 STORMWATER MANAGEMENT**
> *The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 20%*

Discretionary Activity
Exceeds the controlled activity maximum of 20%

> **8.6.5.4 DISCRETIONARY ACTIVITIES**
> *Does not comply with one or more of the other standards for permitted, controlled or restricted discretionary activities in this zone as set out under Rules 8.6.5.1; 8.6.5.2 and 8.6.5.3.*

Subdivision Rule relating to stormwater disposal is 13.7.3.4. The pertinent sections relating to this site are:

> **13.7.3.4 STORMWATER DISPOSAL**
> (a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).
>
> (d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.

7.2.2. Regional Plan for Northland

The Regional Plan for Northland (operative in part, dated February 2024) Rule C.6.4.2 provides for the diversion and discharge of stormwater from outside a public stormwater network provided (amongst other conditions):

> *2) the diversion and discharge does not cause or increase flooding of land on another property in a storm event of up to and including a 10% Annual Exceedance Probability (AEP) or flooding of buildings on another property in a storm event of up to and including a 1% AEP.*

Stormwater from the site is proposed to be disposed of within the boundaries of each respective Lot.

The proposed stormwater management will comply with Proposed Regional Plan Rule C.6.4.2.

7.2.3. FNDC Engineering Standards 2023

The pertinent sections relating to stormwater management in the FNDC Engineering Standards 2003 are as follows:

Chapter 4: Stormwater and Drainage

4.1.3 Performance Standards

e. The primary stormwater system shall be capable of conveying 10% AEP design storm events without surcharge (see Section 4.3.9 Hydrological Design Criteria).

4.1.6. Managing Effects of Land Use on Receiving Environments

Hydrological balance can be partly maintained by limiting the maximum rate of discharge and peak flood levels for post-development to that at pre-development levels and enabling infiltration to minimise impacts on base flow and ground water recharge.

Peak flow management can be achieved using detention storage, utilising extended duration, for the duration of a limited peak flow event. Therefore, in the absence of more detailed assessment of stream stability, the discharges from detention devices into a stormwater network shall be constrained to 80% of pre-development peak flow rate. These constraints may be relaxed, subject to detailed assessments and hydrological/hydraulic modelling of the catchment being provided.

4.2.1. Discharge into a Stream or Watercourse

All new and existing discharges to an existing FNDC owned and / or maintained watercourse(s) located within approximately 500m require specific approval from the Stormwater Manager before proceeding with design details and, if approved, FNDC shall apply appropriate conditions to the discharge.

4.3.8. System Design

Table 4-1: Minimum Design Summary

Current rainfall (i.e. not climate change adjusted) shall be used for the following:

• Determining pre-development stormwater runoff flows and volumes for use in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for the following:

• Determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

Flood Control (1% AEP event). Detention required, limiting the post-development 1% AEP event flow rates to 80% of the pre-development 1% AEP event flow rates.

Flow attenuation (Attenuation of the 50% and 20% AEP events). Limit the post-development 50% and 20% AEP event flow rates to 80% of the pre-development flows through controlled attenuation and release. Typically, always required in the upper catchment and sometimes not required where development site is located in proximity to the catchment outlet, discharging to a watercourse with sufficient network capacity, and where flow attenuation may worsen flooding hazards due to relative timing of peak flows. This is subject to assessment demonstrating no negative impacts would occur. If the proposed stormwater discharge is into a tidal zone, then no attenuation is required.

Design rainfall – Current rainfall (i.e. not climate change adjusted) shall be used for determining pre-development stormwater runoff flows and volumes for us in combination with calculated post development flows to determine stormwater treatment (quantity and quality) requirements.

Climate change adjusted rainfall shall be used for determining post-development stormwater runoff flows and volumes for stormwater infrastructure design.

7.3. Impermeable Surfaces

The existing impermeable surfaces on site are as follows:

Table 4 – Existing Impermeable Surfaces

Lot	Area (m^2)	Driveway & Parking (m^2)	Roof Area (m^2)	Miscellaneous (m^2)	Total (m^2)	Percentage	Activity Status
Lot 2 DP 198209	17,040	570	450	66	1,116	6.5%	Permitted

The proposed subdivision provides for but does not include rural-residential / lifestyle development. It is anticipated that houses when they are built will be of a similar scale to the existing residential / lifestyle development in other rural-residential land in the area.

Typical impermeable surfaces on the Lots when they are developed are estimated as follows:

Table 5 – Future Impermeable Surfaces (estimated)

Proposed Lot	Area (m^2)	Driveway & Parking (m^2)	Roof Area (m^2)	Estimated Impermeable Surface Area (m^2)	Estimated Coverage	Activity Status
1	4,019	300	300	600	14.9%	Permitted
2	4,283	300	300	600	14.0%	Permitted
3	4,738	570 (existing)	480 (roof area) + 66 (other structures)	1,116	23.6%	Restricted Discretionary
4	4,000	300	300	600	15.0%	Permitted

As detailed above, proposed Lot 3, as a result of the reduction in Lot area, the percentage of impermeable surfaces will increase from 6.5% to 23.6% and become a restricted discretionary activity under Rule 8.6.5.4. The estimated impermeable surfaces calculation for proposed Lots 1, 2 and 4 are expected to comply with FNDC permitted activity criteria.

Council may impose conditions of consent on a discretionary activity or it may refuse consent to the application. When considering a discretionary activity application, the Council will have regard to the assessment criteria set out under Chapter 11. See Section 7.6 for assessment criteria.

As part of the proposed subdivision, a land-use consent is sought for 23.6% impermeable surfaces on proposed Lot 3.

For proposed Lot 3 runoff will be attenuated to that allowed by the Permitted Activity rule, plus a further reduction to 80% in accordance with Council Engineering Standards.

For proposed Lots 1, 2 and 3 it is recommended that stormwater runoff for future development be attenuated back to 80% of pre-development (i.e. vacant section) by way of a consent notice requiring a stormwater management plan at Building Consent stage.

To comply with the FNDC District Plan and Regional Plan for Northland, the appropriate return event for stormwater attenuation design is the 10% AEP event.

When applying the 80% of pre-development, we take this to apply to that area of the site occupied by impermeable surfaces.

Residential development is not generally considered to create a long-term impact on water quality. For this development, the nominated building platforms will be surrounded by grass surfaces providing a buffer to run-off, trapping contaminants and sediments. Stormwater overflow (from existing and future rainwater collection tanks) will be disposed of onto ground within the proposed Lots.

7.4. Lot 3 Effects on Runoff

Stormwater runoff and attenuation design for proposed lot 3 was modelled using HydroCAD. A summary of programme input and results is appended. Table 6 provides a summary of the component surfaces.

Current rainfall was based on High Intensity Rainfall Design System (HIRDS) from the National Institute of Water and Atmospheric Research Weather and Atmosphere (NIWA). Runoff coefficients were taken from the FNDC Engineering Standards 2023.

Table 6 – Lot 3 Post development runoff (historical rainfall using HydroCAD)

Component	Area (m^2)	(CN)	I_{10} (24 hour rainfall) (mm/hr)	Q (L/s)
House roof area	340	98	8.40	4.00
Shed roof area	140	98	8.40	1.60
Driveway	240	98	8.40	2.80
Parking area	330	98	8.40	3.90
Water tanks	22	98	8.40	0.30
Glasshouse	23	98	8.40	0.30
Tool sheds	21	98	8.40	0.20
Grass and bush	3,652	65	8.40	17.7
TOTAL	**4,768**			**30.8**

Table 7 – Lot 3 Permitted Activity development runoff (historical rainfall using HydroCAD)

Component	Area (m^2)	(CN)	I_{10} (24 hour rainfall) (mm/hr)	Q (L/s)
Permitted Impermeable surfaces (15%)	715.2	98	8.40	6.7 (80%)
Grass and bush	4,052.8	65	8.40	19.7
TOTAL	**4,768**			**26.4**
Additional Run-off				**4.4**

Stormwater attenuation of 4.4 L/s is required to limit the 10% AEP runoff to no more than 80% of the predevelopment impermeable surfaces (26.4 L/s) being Permitted Activity Impermeable surfaces (15%).

7.5. Proposed Stormwater Management

For proposed Lot 3, existing stormwater controls will be retained. Following the site walkover (17 July 2025), no defects or issues were identified that might otherwise require enhancement.

Using a standard 25,000 L cylindrical tank with a diameter of 3.5 m fitted with a 30 mm outlet orifice at the base achieves 4.0 L/s attenuation. Stormwater attenuation using roof water collection is limited by the roof area maximum runoff, which for this site is 4.0 + 1.6 = 5.6 L/s. Hence 4.0 L/s attenuation is the maximum that can be achieved and sufficiently close to the 4.4 L/s target. Furthermore, the retention provided by the two existing 25,000L collection tanks also assists to reduce site runoff. See typical tank details provided in **Appendix A**.

The hydrograph (see Figure 9 below) shows inflow reaching a maximum rate (5.6 L/s) at 7.94 hours and a maximum release rate of 1.6 L/s. Runoff will be to ground surface in a dispersive manner using a spreader bar taking advantage of the natural fall towards the Waipapa Stream and will continue over an extended period until the attenuation tank empties. Examples of spreader bars taken from GD01 are provided in **Appendix A**.

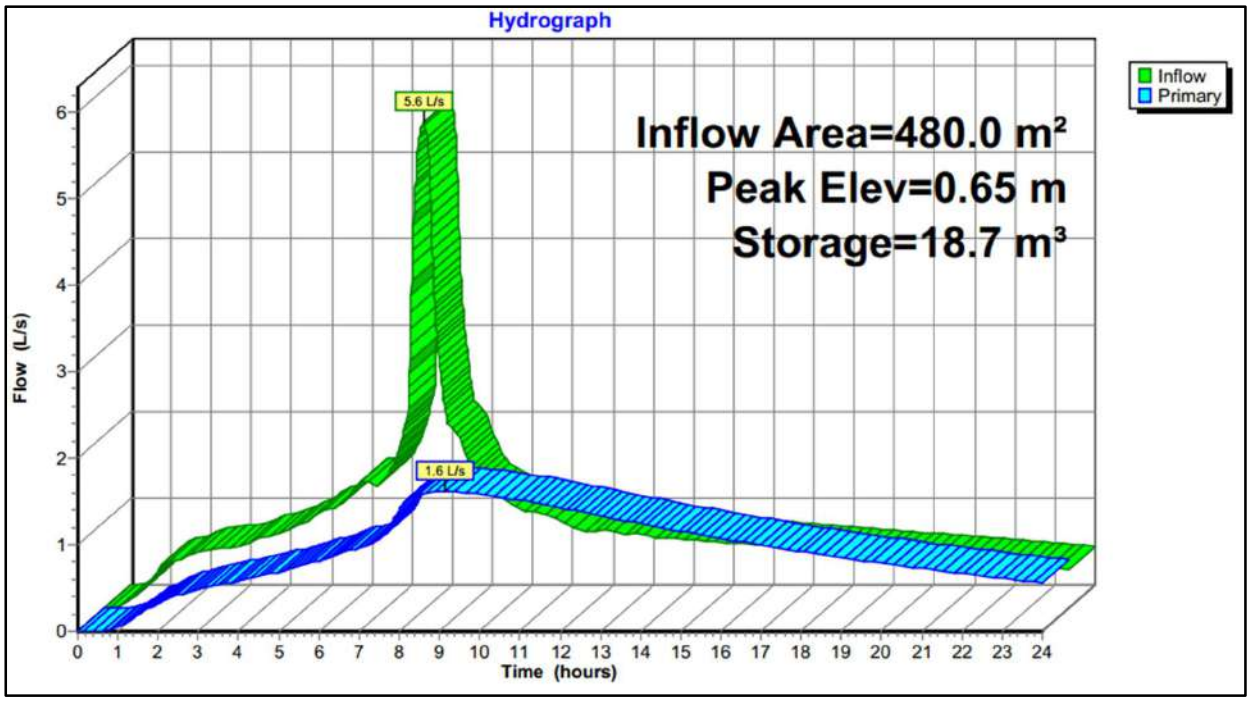


Figure 9 – Tank Attenuation Hydrograph

For proposed Lots 1, 2 and 4 it is recommended that stormwater run-off for future development be attenuated back to 80% of pre-development (i.e. vacant section) by way of a consent notice requiring a Stormwater Management Plan at Building Consent stage.

7.6. Assessment Criteria

In assessing an application under rule 8.6.5.4 the Council will exercise discretion on the following from Chapter 11.3:

Table 8 - Far North District Plan Section 11.3 matters of discretion

Stormwater Disposal Assessment Criteria	Comment
(a) the extent to which building site coverage and Impermeable Surfaces contribute to total catchment impermeability and the provisions of any catchment or drainage plan for that catchment.	Attenuation back to 80% of permitted activity criteria for proposed Lot 3 has been provided. For proposed Lots 1, 2 and 4 it is recommended that stormwater run-off for future development be attenuated back to 80% of pre-development (i.e. vacant section) by way of a consent notice requiring a

	Stormwater Management Plan at Building Consent stage.
(b) the extent to which Low Impact Design principles have been used to reduce site impermeability.	Use of SW attenuation tanks and concentrated overflow disposed of to land in a dispersive manner to avoid erosion and nuisance.
(c) any cumulative effects on total catchment impermeability.	The proposed subdivision and development that it will enable is relatively small in relation to the total catchment. The catchment is largely rural production land. Stormwater runoff from the subdivision will be attenuated.
(d) the extent to which building site coverage and Impermeable Surfaces will alter the natural contour or drainage patterns of the site or disturb the ground and alter its ability to absorb water.	Drainage patterns will not be altered by the proposed subdivision.
(e) the physical qualities of the soil type.	The soils present onsite are moderately well drained.
(f) any adverse effects on the life supporting capacity of soils.	None.
(g) the availability of land for the disposal of effluent and stormwater on the site without adverse effects on the water quantity and water quality of water bodies (including groundwater and aquifers) or on adjacent sites.	There is sufficient suitable land available for the disposal of effluent including reserve areas including required setbacks from boundaries and flowpaths.
(h) the extent to which paved, Impermeable Surfaces are necessary for the proposed activity.	Future residential development on Lots 1, 2 & 4 will result in impermeable surfaces which will be attenuated.
(i) the extent to which landscaping and vegetation may reduce adverse effects of run-off.	The site is currently grassed. Additional landscaping likely to be planted with future dwellings will further reduce adverse effects of runoff.
(j) any recognised standards promulgated by industry groups.	The stormwater management for the proposed development is considered in line with recognised standards for sites less than 2ha.
(k) the means and effectiveness of mitigating stormwater runoff to that expected by permitted activity threshold.	Stormwater attenuation to permitted levels has been designed for existing impermeable surfaces on lot 3. Lots 1, 2 & 4 will be attenuated back to pre-development i.e. vacant.
(l) the extent to which the proposal has considered and provided for climate change.	Stormwater attenuation design for Lot 3 is in accordance with FNDC Engineering Standards 2023.
(m) The extent to which stormwater detention ponds and other engineering solutions are used to mitigate any adverse effects.	Attenuation tank(s) have been detailed for proposed Lot 3. Detention ponds are unlikely to be required for future development on Lots 1, 2 & 4 but remain a consideration.

Table 9 - Far North District Plan clause 13.10.4

Subdivision Stormwater Disposal Assessment Criteria	Comment
(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.	The application complies with the proposed regional plan. The site does not drain into any urban drainage areas.
(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).	The application complies with FNDC Engineering Standards & Guidelines 2004 - Revised March 2009 and Section 4.1.6 of the FNDC Engineering Standards 2023.
(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.	Complies.
(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.	Use of SW attenuation tanks and concentrated overflow disposed of to land in a dispersive manner to avoid erosion and nuisance.
(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.	Collected stormwater from the roofs and all impervious surfaces will be disposed of to land in a dispersive manner to encourage absorption, avoid erosion and nuisance.
(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.	Screening out litter and capture of chemical spillages is not necessary for residential development. Runoff from yarding and driveways shall be directed to grassed areas where silt and gravels will settle out and be captured.
(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.	Stormwater will be discharged to ground and in large events flowing as sheet flow into natural flow paths. No reliance placed on piped or canal systems.
(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.	Runoff will not be directed into the council stormwater system.
(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.	N/A
(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of	Attenuation tank(s) have been detailed for proposed Lot 3. Detention ponds are unlikely to be required for future development on lots 1, 2 & 4 but remain a consideration.

discharge that existed on the land before the subdivision takes place.	
(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.	None. Use of SW attenuation tanks and concentrated overflow disposed of to land in a dispersive manner to avoid adverse effects.
(l) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipelines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.	Stormwater will be disposed of by way of gravity.
(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.	Existing ground contours will be maintained.
(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.	No stormwater easements are proposed
(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.	No stormwater easements are proposed
(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.	N/A
(q) The need for and extent of any financial contributions to achieve the above matters.	N/A
(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.	N/A

8 Potable Water

8.1. Potable Water Supply

There is no public water supply available at the site. Domestic water supply may be provided by roof runoff collected in storage tanks.

8.2. Fire Fighting

Council Engineering Standards and Fire and Emergency NZ require a water supply that is adequate for firefighting purposes. Where there is no reticulated water supply, then each residential lot will be responsible for providing adequate on-site firefighting supply.

For a single-family home without a sprinkler system in a non-reticulated supply area, the New Zealand Fire Service (NZFS) Fire Fighting Water Supplies Code of Practice SNZ PAS 4509:2008 recommends a minimum firefighting water storage capacity of 45 m^3 within 90 m of the dwelling, fitted with an adequate means for extracting the water from the tank.

8.3. Alternative to Fire Fighting Supply

The Code (SNZ PAS 4509:2008) specifically allows for alternative methods to be used in meeting the Code requirements, as long as there is approval from an appropriate person nominated by the NZFS National Commander. Clause 4.4 of the Code states that:

- Fire engineers or similar competent persons may use alternative methods to determine firefighting water supplies. To comply with this code of practice, such alternatives must be submitted for approval to the person(s) nominated by the National Commander. The person(s) so nominated will approve these cases on confirmation that the method and calculations used are correctly applied.
- Alternative methods will need to show that the calculated firefighting water supply makes allowances for tactical flow rates (that is, the amount needed above a theoretical amount to absorb the released heat for operational effectiveness).

The procedure to be followed in the case of an alternative fire-fighting supply is as follows:

- The competent person should submit a firefighting facilities checklist (FFFC), with a scale site map showing contours and proposed alternatives to Table 2 with rationale for assessment to NZFS.

If the proposed supply is approved by a nominated NZFS person, Council will accept the FFFC and compliance with the Code will be achieved.

NZFS considers that a 'one size fits all' volume is not appropriate in all circumstances. There are alternatives to firefighting couplings but firefighters are not expected to lift pumps or hoses onto the top of water tanks.

9 On-site Effluent Disposal

9.1. Regulatory Framework

9.1.1. Regional Plan

The discharge of wastewater effluent to land is regulated by the permitted activity Rule C.6.1.3 of the Regional Plan for Northland. Table 9 of the plan specifies exclusion areas and set-back distances as follows:

Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems

Feature	Primary treated domestic type wastewater	Secondary and tertiary treated domestic type wastewater	Greywater
Exclusion areas			
Floodplain	5% annual exceedance probability	5% annual exceedance probability	5% annual exceedance probability
Horizontal setback distances			
Identified stormwater flow path (including a formed road with kerb and channel, and water-table drain) that is down-slope of the disposal area	5 metres	5 metres	5 metres
River, lake, stream, pond, dam or natural wetland	20 metres	15 metres	15 metres
Coastal marine area	20 metres	15 metres	15 metres
Existing water supply bore	20 metres	20 metres	20 metres
Property boundary	1.5 metres	1.5 metres	1.5 metres
Vertical setback distances			
Winter groundwater table	1.2 metres	0.6 metres	0.6 metres

Additional requirements under the Rule also state:

1) The on-site system is designed and constructed in accordance with the Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012), and

2) The volume of wastewater discharged does not exceed two cubic metres per day, and

5) For wastewater that has received secondary treatment or tertiary treatment, it is discharged via:

a) a trench or bed system in soil categories 3 to 5 that is designed in accordance with Appendix L of AS/NZS 1547:2012; or

b) an irrigation line system that is dose loaded and covered by a minimum of 100 mm of topsoil, mulch, or bark.

The proposed disposal areas are not steeper than 10 degrees. We recommend that when using surface laid irrigation, lines be firmly pinned to the ground surface and the disposal area be planted with native species suitable for evaporation. where there is an up-slope catchment that generates stormwater runoff, a stormwater interception drain be installed and maintained to divert surface runoff away from the disposal area.

FNDC requires at time of subdivision a suitable reserve area equal to one hundred percent of the effluent disposal area.

The following analysis ensures that future on-site wastewater disposal on each of the three vacant lots can comply with both the Operative District Plan and Regional Plan for Northland wastewater discharge rules.

9.1.2. Design Occupancy Rating

The onsite wastewater disposal for the proposed development of the Lots (1, 2 and 4) has been assessed.

It has been assumed for the purpose of this Engineering Assessment Report that the Lots will contain four-bedroom residential dwellings. In reference to Table J1 in AS/NZS1547:2012, it is recommended that the design occupancy of six people is adopted for this report.

9.1.3. Design Flow Volumes

It is assumed that the proposed residential units will be designed with standard water reduction fixtures. AS/NZS1547:2012 estimates wastewater generation for roof water collection supply properties with standard water reduction fixtures of 145 litres/person/day.

Total daily wastewater generation of the proposed development is calculated as follows:

$$Total\ daily\ wastewater\ generation\ = Daily\ occupancy\ number\ \times design\ flow\ allowances$$

$$= 6\ persons\ \times (145\ litres/person/day)$$

$$= \mathbf{870\ litres/day}$$

Design flows of 870 litres per day for a four-bedroom household has been adopted for the purpose of this assessment.

9.1.4. Effluent Disposal

Effluent disposal systems will need to be situated to avoid surface runoff or protected by using interception drains. In addition, setbacks listed in Section 8.1.1 of this report will need to be adhered to, to ensure a suitable setback from the identified overland flow paths, boundaries and buildings.

Standard separation distances can be applied with regard to site slope, which is less than 10° on the three lots assessed.

9.1.5. Land Disposal System Sizing and Design

Suitable potential building areas are available on elevated ground. With allowances for the required setback distances associated with the Regional Plan, there are various suitable effluent disposal locations.

Three boreholes were advanced onsite to establish the category of soil present. The soils onsite were found to be AS/NZS1547:2012 Category 4: Clay loam – moderately drained. For these soils we consider that surface or subsurface dripper lines are suitable. Dripper lines require secondary treated effluent to operate effectively. For Category 4 soils AS/NZS1547:2012 recommends a design irrigation rate of 3.5mm/d. Example disposal field locations are shown in **Appendix A**.

The total length of the dripper system required (UniBioline or similar) is calculated as follows;

$$Total\ area\ of\ dripper\ irrigation\ field = \frac{Total\ daily\ wastewater\ generation}{Design\ irrigation\ rate}$$

$$= 870 / 3.5$$

$$= \mathbf{250\ m^2}$$

The appended drawing indicates there is space available for this dripper field area and a 100% reserve area.

9.1.6. Treatment Plant Design Sizing

The naming of a proprietary secondary treatment plant will be decided by the new owner at the building consent stage, when the position and scale of the building are known.

The system is to meet the quality output of AS/NZS 1546.3:2003, producing effluent of less than 20 g/m^3 of 5-day biochemical oxygen demand (BOD_5) and no greater than 30 g/m^3 total suspended solids (TSS) at the estimated wastewater generation rate for the proposed development.

9.1.7. Effects on Environment

It is not likely that any detectable environmental effects will arise from utilising dripper irrigation greater than 3.0 m from the disposal field. Use of the secondary treated effluent for dripper irrigation would enhance landscape vegetation growth particularly during the drier summer months. Considering the size of the assessed lots and the vegetation coverage, there is a negligible risk of off-site effects and cumulative effects. This includes the Waipapa Stream to the west and south of the property, as all disposal fields will be located at a greater distance from overland flow paths than the minimum required.

To minimise any potential issues, regular inspections and servicing of the treatment plant and disposal field should be completed. Along with the appropriate inspections and approvals prior to plant commissioning.

The disposal field locations indicated by the appended drawings have taken into account the appropriate separation distances.

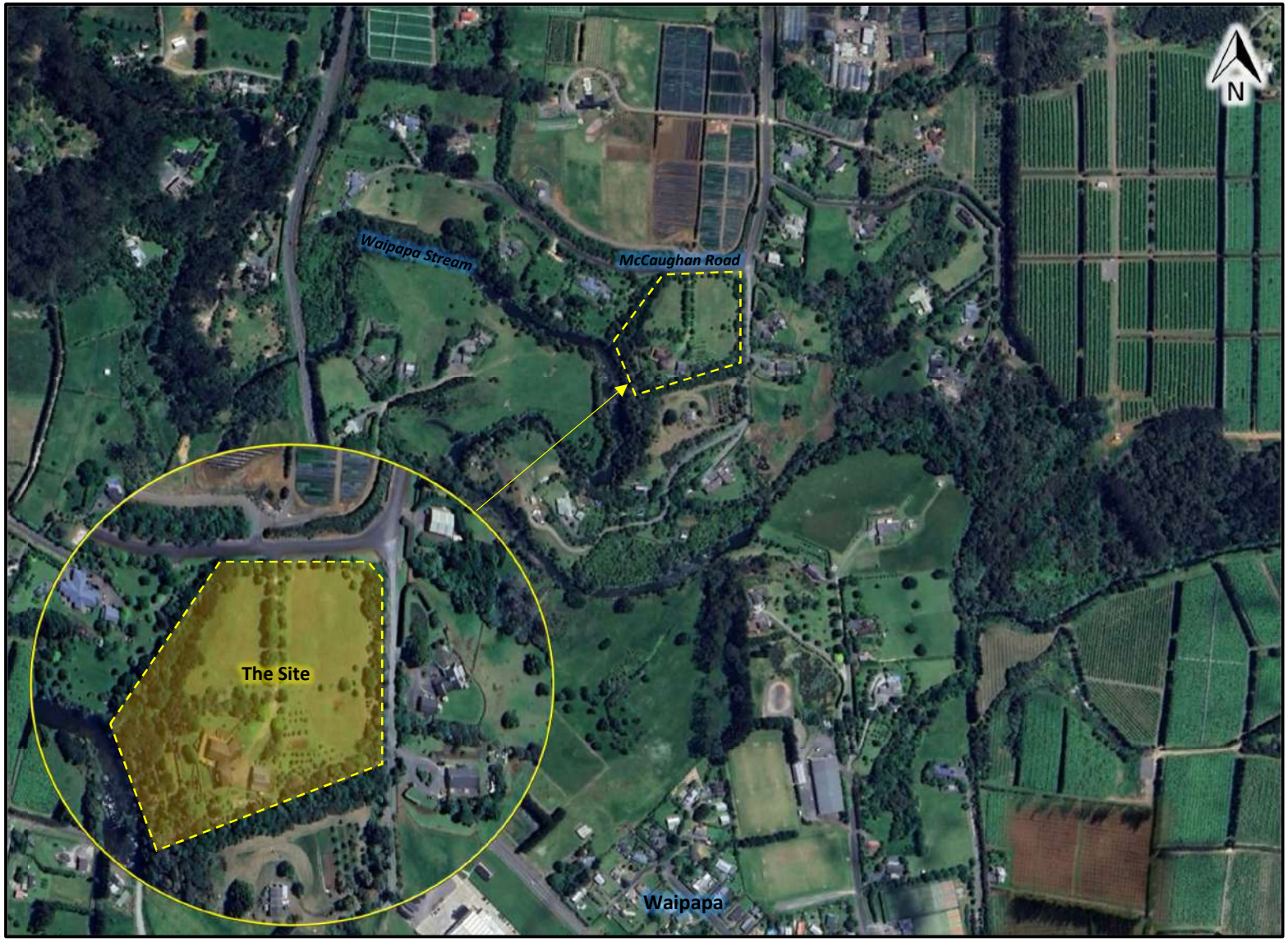
9.2. Existing Wastewater System on Proposed Lot 3

The proposed Lot 3 existing wastewater treatment and disposal system was found to be in good working order with no olfaction smells or visible signs of surface breakout. The wastewater system onsite consists of a secondary treatment plant and shallow subsurface dripper field and is consented (BC-2005-1037). The existing disposal field (approximate location provided below in Figure 10 following site walkover with Client) achieves setback from proposed Lot boundaries and space available for reserve field also with setbacks.

Figure 10 – Current Proposed Lot 3 Wastewater treatment and disposal location (approximate)

Appendix A – Site Drawings

Drawing No.	Title
25 095 / 1	Site Location Plan
25 095 / 2	Investigation Location Plan
24-051-S001	Simpson Shaw Surveyors – Proposed Subdivision Plan (Lot 2 DP 198209)
25 095 / SW01	Stormwater Detention Details
25 095 / SW02	Level Spreader Details



24 095 / 1 – Site Location Plan

24 095 / 2 – Investigation Location Plan

Memorandum of Easements			
Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	G	Lot 3 hereon	Lot 4 hereon

NOTES

- This plan is Copyright to Simpson Shaw Surveyors.
- This is a concept plan. Areas and Dimensions are approximate only and subject to final survey.
- All dimensions are in metres unless shown otherwise.
- Aerial photography from LINZ data service.

TOTAL AREA = 1.7040 Ha

COMPRISED IN
RT NA127A/757

Areas (A) (B) (C) (D) are subject to an existing land covenant (plantation) D431529.2

Areas (A) (E) (F) are subject to a land covenant

100
50
0

B	04-07-25	Access and covenant	JL
A	26-08-24	For Consent	JL

REVISIONS

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CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	04/07/2025		
DRAWING	24-051-S001		B
SCALE	1:750		(A3)

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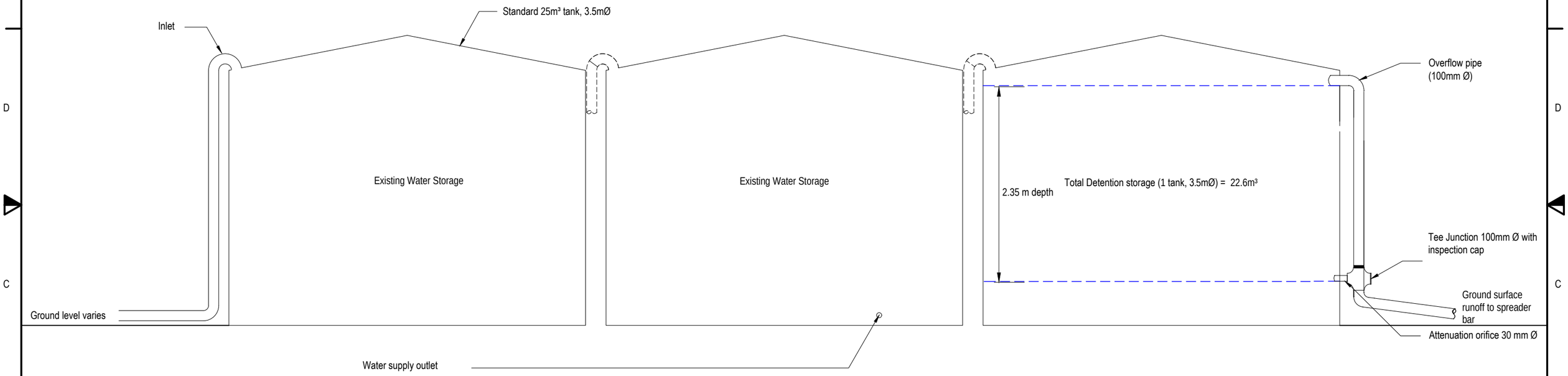

NOTE

- Maximun orifice pipe length is 150mm. Allow 75mm clearance from end of pipe to outside tank wall
- Fix orifice pipe to tee junction using reducer fittings

Rev	Date	Description	By	Checked
A	16/09/2025	FOR CONSENT	AT	TMA

DWG STORMWATER DETENTION TANKS DETAILS

A3 SCALE NTS | Date 16/09/2025

Drawn AT | Checked TMA | Approved TMA

File T:\CLIENTS\ROBERT G VELLENOWETH\JOBS\24 095 -57 MCCCAUGHAN ROAD, KERIKERI\ENGINEERING\SUBDIV ASSMT\ATTENUATION TANK DETAILS

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Project PROPOSED SUBDIVISION
57 MCCAUGAN ROAD, KERIKERI (Lot 2 DP 198209)

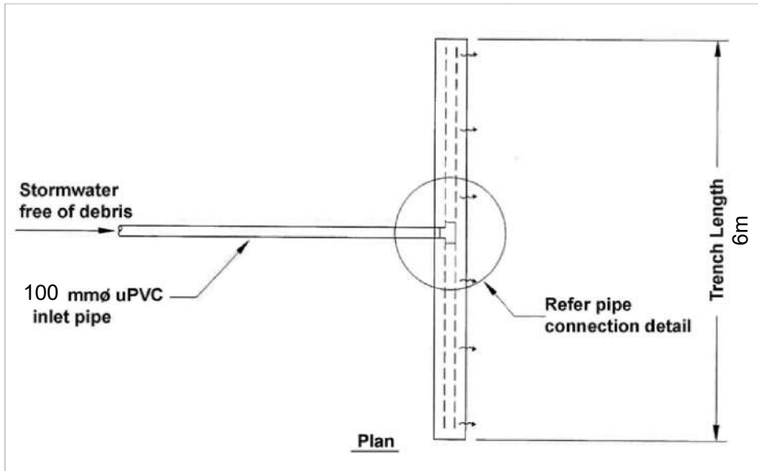
Client ROBERT G VELLENOWETH

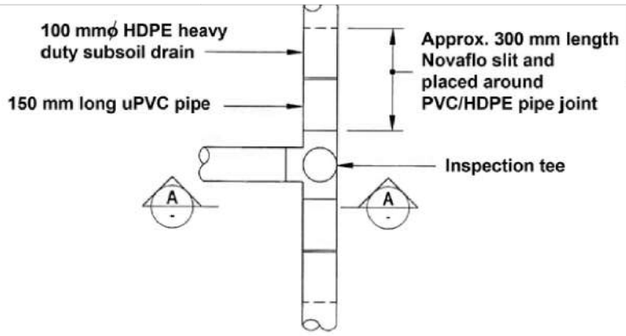
Project No. 24 095 | RC no.

Stage

Dwg No. SW01

Sheet No. 1 of 2





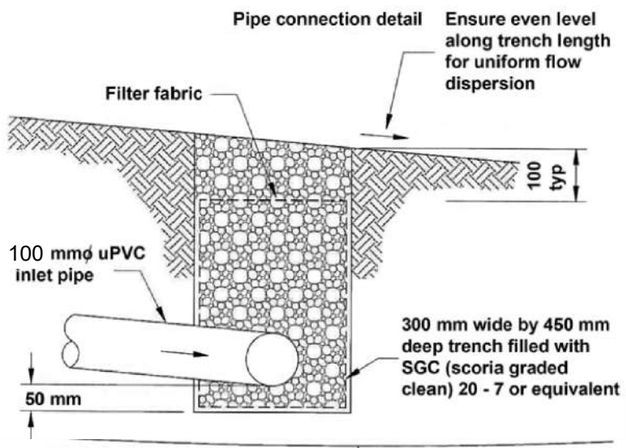
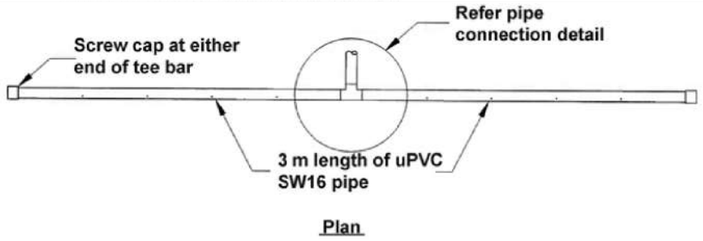
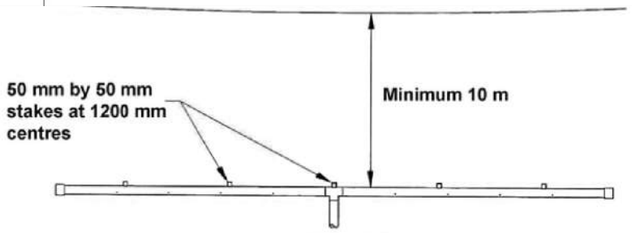


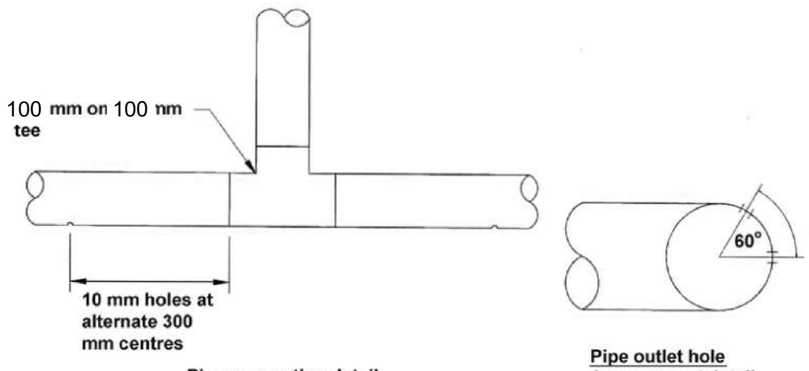
Figure C21
Conceptual Layout of Flow Dispersal Trench



Plan

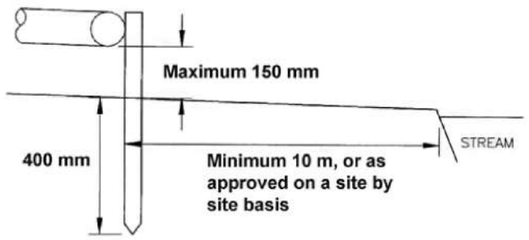


Layout Detail



Pipe connection detail

Pipe outlet hole
Arrangement detail



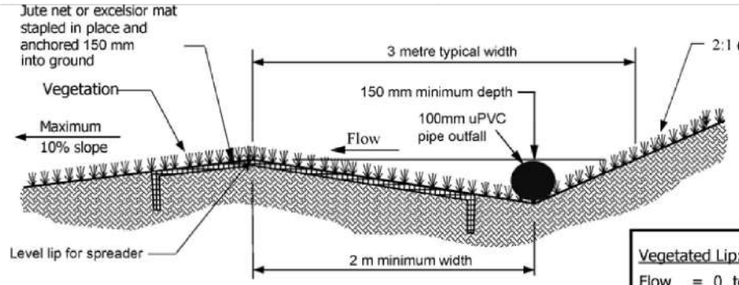
Stake Detail

Notes

1. Pin pipe and tee bar using 50x50 mm 114 treated stakes at 1200 mm centres. Level pipe and fix to stakes using down pipe clips.
2. Stakes to be driven 400 mm into ground. Tee bar to be no more than 150 mm above ground level at any point and to be constructed dead level across length of tee bar.

Figure C22
Above Ground Flow Dispersal

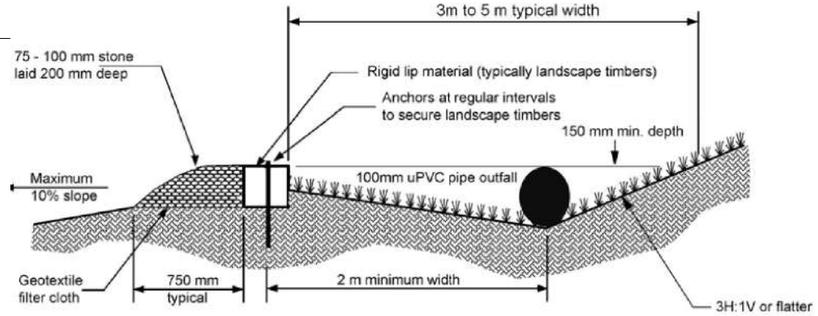
Figure C23
Rigid Boundary Flow Dispersal



Level Spreader — Vegetated Lip

Vegetated Lip:
Flow = 0 to 0.15 cfs
Length = 3 metres
Width = 3 metres

Rigid Lip:
Flow = 0.15 to 0.4 m/s
Length = 3 to 10 metres
Width = 3m to 5 m



Level Spreader — Rigid Lip

Issue	Date	Revision
A	15/09/2025	FOR CONSENT

DWG LEVEL SPREADER DETAILS

Scale NTS | Date 15/09/2025

Drawn AT | Checked TMA | Approved TMA

File T:\CLIENTS\ROBERT G VELLENOWETH\JOBS\24 095-57 MCCCAUGHAN ROAD, KERIKERI\ENGINEERING\SUBDIV ASSMT

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Project: PROPOSED SUBDIVISION
57 McCaughan Road, Kerikeri

Client: ROBERT G VELLENOWETH

Project No. 24 095 | RC no.

DWG No. SW02

Sheet No 2 OF 2.

Plotted By Aaron Thorburn at 15/09/2025 9:23:21 PM

Appendix B – Borehole Logs

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Borehole Log - BH01 (Lot 1)

Borehole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert.G.Vellenoweth	**SITE:**	57.McCaughan.Road,.Kerikeri.(Lot.2..Deposited.Plan.198209)		
Date Started:	17/07/2025	**DRILLING METHOD:**	Hand.Auger	**LOGGED BY:**	AT
Date Completed:	17/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	TMA

Soil Description

Based on NZGS Logging Guidelines 2005

SILT,.brown.to.dark.brown,.firm,.moist..(Topsoil)

Clayey.**SILT**,.orange.brown,.firm,.moderately.plastic,.moist.

Clayey **SILT**,.light.orange.with.dark.orange.mottling,.firm,.low.plasticity,.moist.....

From.0.7m,.trace.fine.gravel,.orange.to.red.w/.dark.brown.streaks,.firm,.moist.

End of Hole at 1.1m (Target Depth)

Depth (m): 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

Geology: TS; KERIKERI VOLCANIC

Graphic Log

Water Level: Groundwater Not Encountered.

Sensitivity

Vane Shear and Remoulded Vane Shear Strengths (kPa)

Scala Penetrometer (blows/100mm): 0 5 10 15 20

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater not encountered.

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Borehole Log - BH02 (Lot 2)

Borehole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert.G.Vellenoweth	**SITE:**	57.McCaughan.Road,.Kerikeri.(Lot.2..Deposited.Plan.198209)		
Date Started:	17/07/2025	**DRILLING METHOD:**	Hand.Auger	**LOGGED BY:**	AT
Date Completed:	17/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	TMA

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
SILT, brown.to.dark.brown,.firm,.moist..(Topsoil)	0.0	TS		Groundwater Not Encountered.			0 5 10 15 20
Clayey.**SILT**,.orange.with.light.brown.streaks,.firm,.moderately.plastic,.moist.		KERIKERI VOLCANIC					
Clayey.**SILT** w/.trace.fine.gravel,.orange.brown.w/.dark.orange.mottling,.firm,.moist..	0.5						
Clayey.**SILT**,.dark.orange.w/.light.orange.streaks,.firm,.moist.....							
From.0.8m,.trace.fine.gravel,.orange.to.red.w/.dark.brown.streaks,.firm,.moist.	1.0						
End of Hole at 1.1m (Target Depth)	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						
	5.0						

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater not encountered.

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Borehole Log - BH03 (Lot 4)

Borehole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert.G.Vellenoweth	**SITE:**	57.McCaughan.Road,.Kerikeri.(Lot.2..Deposited.Plan.198209)		
Date Started:	17/07/2025	**DRILLING METHOD:**	Hand.Auger	**LOGGED BY:**	AT
Date Completed:	17/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	TMA

Soil Description

Based on NZGS Logging Guidelines 2005

SILT,.brown.to.dark.brown,.firm,.moist..(Topsoil)

Clayey.**SILT**, orange.brown,.firm,.moderately.plastic,.moist.

From.0.5m,.change.to.dark.orange.with.brown.streaks.

End of Hole at 1.1m (Target Depth)

Depth (m): 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

Geology: TS; KERIKERI VOLCANIC

Graphic Log

Water Level: Groundwater Not Encountered.

Sensitivity

Vane Shear and Remoulded Vane Shear Strengths (kPa)

Scala Penetrometer (blows/100mm): 0 5 10 15 20

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater not encountered.

Geotechnical Assessment Report

57 McCaughan Road, Kerikeri

Lot 2, Deposited Plan 198209

For

Robert G Vellenoweth

Haigh Workman reference 24 095

August 2025

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PO Box 89 • 6 Fairway Drive • Kerikeri 0245 • New Zealand

Revision History

Revision №	Issued By	Description	Date
A	John Power	First Issue	August 2025

Prepared By

John Power

Geologist
Member NZGS

Reviewed & Approved By

Wayne Thorburn

Senior Geotechnical Engineer
CPEng, CMEngNZ

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Executive Summary

Haigh Workman Limited (Haigh Workman) were engaged by Robert G Vellenoweth (the Client) to undertake a geotechnical investigation for and prepare a geotechnical assessment report for use in support of a Resource Consent application for a proposed four (4) Lot subdivision at 57 McCaughan Road, Kerikeri (Lot 2 DP 198209).

This report contains information required for subdivisional earthworks, as well as outlining geotechnical design issues that need to be considered for subsequent building design and construction on proposed Lot 1, Lot 2 and Lot 4. This report addresses the suitability of the site for subdivision and subsequent development for proposed Lot 1, Lot 2 and Lot 4 only, with proposed Lot 3 being already developed with an existing dwelling onsite.

This report is not intended to support building consent and further investigations may be required when concept plans are developed.

Based on the results of the geotechnical investigation conducted by Haigh Workman and review of published geological maps, it is considered that the soils directly underlying the site comprise natural soils of the Kerikeri Volcanic Group. The soils directly underlying each of the proposed Lots comprises very stiff natural soils of the Kerikeri Volcanic Group below a thin veneer of topsoil. The soils were generally described as being very stiff silt and clayey silt with variable fine gravel content.

Based on our site investigations and laboratory test results, subdivisional soil types are considered expansive and do not meet the definition of 'good ground' as contained within NZS3604:2011. Based on the subsoils encountered, we anticipate the ultimate bearing capacity will be 300kPa for shallow foundations and a geotechnical strength reduction factor of 0.5. All sites will be subject to site specific geotechnical investigations and reporting being undertaken at the Building Consent stage.

Subject to design issues outlined in Sections 5, 6 and 7, proposed Lot 1, Lot 2 and Lot 4 are considered to have suitable development areas for residential development. Lot 1, Lot 2 and Lot 4 will be subject to specific geotechnical assessment and foundation design due to the presence of expansive soils and are subject to the recommendations within this report.

This report is not intended to be used for foundation design, other than provide general framework for building platform suitability. A summary of the Lot specific geotechnical recommendations is given in Table 4, Section 7.

1 Introduction

1.1 Project Brief and Scope

Haigh Workman Limited (Haigh Workman) were engaged by Robert G Vellenoweth (the Client) to undertake a geotechnical investigation for and prepare a geotechnical assessment report for use in support of a Resource Consent application for a proposed four (4) Lot subdivision at 57 McCaughan Road, Kerikeri (Lot 2 DP 198209). A proposed subdivision plan prepared by Simpson Shaw (drawing 24-051-S001, dated 4 July 2025) was made available at the time of writing this report.

This report addresses the suitability of the site for subdivision and subsequent development for proposed Lot 1, Lot 2 and Lot 4 only with Lot 1 being already developed with an existing dwelling onsite and therefore does not form part of our scope of work. The scope of this report encompasses the geotechnical suitability in the context of the proposed end use as defined in the Short Form Agreement dated 11 July 2025. This appraisal has been designed to assess the subsoil conditions for foundation design and identify geotechnical constraints for the proposed subdivision.

As part of this assessment, the following work has been undertaken:

- A site walkover inspection of the proposed Lots.
- A summary of the published geology with reference to the geotechnical investigations undertaken.
- Analysis of the data obtained from site investigations and a geological ground model.
- Provide comment on ground stability and;
- Identification of any additional geotechnical risks and/or hazards.

This report presents the information gathered during the site investigation, interpretation of data obtained and site-specific geotechnical recommendations relevant to the site.

The principal objectives of the investigation are to develop geotechnical models of the site so that geotechnical constraints to the proposed end use can be identified and to provide assurance to Council that a suitable and stable building platform is available or can be made available for each proposed Lot, being proposed Lot 1, Lot 2 and Lot 4. No geotechnical assessments or investigations were undertaken at proposed Lot 1, being an established site with an existing dwelling within the boundaries for the proposed Lot 3.

1.2 Site Description

The site is legally described as Lot 2 DP 198209 with a total land area of 17,043m^2 and is irregular in shape. The subject property is located approximately 900m north of the Waipapa township and 500m east of State Highway 10, with Kapiro Road some 600m to the north. The property is bordered to the north by McCaughan Road and to the southwest by the Waipapa Stream with the surrounding properties comprising rural lifestyle blocks. To the north, an existing horticultural block extends from McCaughan Road to Kapiro Road.

An existing dwelling and shed are located within proposed Lot 3 with access provided via a sealed driveway that extends northwards through the centre of the site to McCaughan Road. The remainder of the property comprises mown lawns with a mixture of mature native and exotic trees located around the perimeter of each of the proposed Lots.

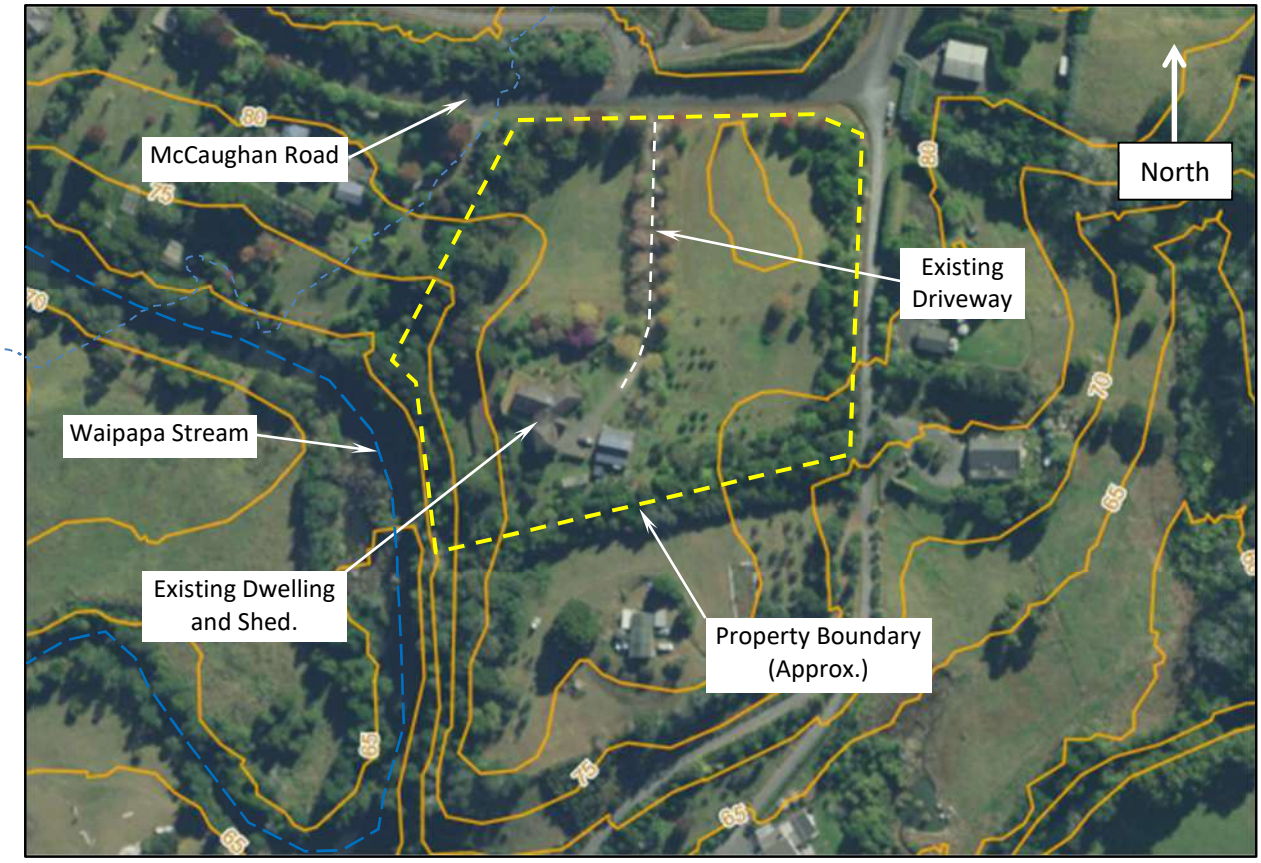


Figure 1 - Site Location

2 Geology

2.1 Published Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences, 1:250,000 Scale, Geological Map 2, 2009: "*Geology of the Whangarei Area*".
- NZMS 290 Sheet P 04/05, 1: 100,000 scale, 1982: "Rock types map of Whangaroa-Kaikohe area".
- NZMS 290 Sheet P 04/05, 1: 100,000 scale, 1980: "Soil map of Whangaroa-Kaikohe".

The site is within the bounds of the GNS Geological Map 2 "Geology of the Whangarei area", 1:250,000 scale*. The published geological map indicates the site is underlain by soils of the Kerikeri Volcanic Group (Pvb), comprising older basalt flows and flow remnants of Late Miocene to Pliocene age. An extract from the geological map is shown below in Figure 2, with geological units presented in Table 1 below.

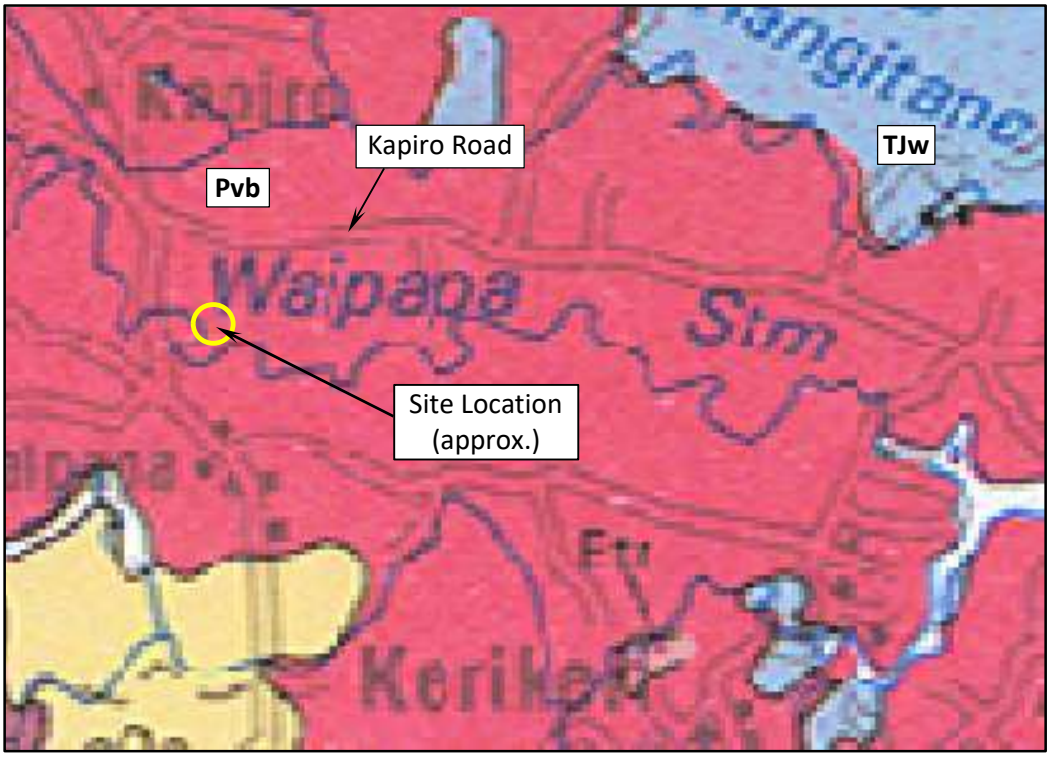


Figure 2 - Geological Map (Whangarei area, 1:250,000)

* Edbrooke, S.W; Brook, F.J. (compilers) 2009. Geology of the Whangarei area. Institute of Geological and Nuclear Sciences 1:250 000 geological Map 2. 1 sheet + 68 p. Lower Hutt, New Zealand: Institute of GNS Science.

Table 1 - Geological Legend

Symbol	Unit Name	Description
Pvb	Kerikeri Volcanic Group (Basalt flows)	Older flows and flow remnants. Late Miocene to Pliocene age.
TJw	Waipapa Group	Massive to thin bedded, lithic volcaniclastic sandstone and argillite (TJw). Permian to Jurassic age.

Further reference to the published New Zealand land inventory maps (Whangaroa-Kaikohe), indicates the property is underlain by *'soils of the rolling hill land, well to moderately well drained, Okaihau gravelly friable clay (OK)'* across the northern of the site and '*Pungaere gravelly friable clay (PG)',* across the southern part of the site. The underlying material weathers to *'soft red brown or dark grey brown clay to depths of 20m with many rounded corestones.*

3 Ground Investigations

3.1 Subsurface Investigations

Haigh Workman undertook subsurface investigations on 18 July 2025. The investigations comprised the drilling of three hand augers in total (BH01, BH02 & BH03) with a single hand auger drilled centrally for each of the proposed Lots, being Lot 1 (BH01), Lot 2 (BH02) and Lot 4 (BH03).

The hand auger boreholes were undertaken to a maximum depth of 3.0 metres below ground level (mbgl). Vane shear tests were undertaken within cohesive soils at regular intervals during the advancement of the hand auger boreholes. Unsuccessful tests where soils were too stiff to penetrate with the shear vane are recorded as unable to penetrate (UTP) and are inferred to represent soils with vane shear strengths in excess of 100kPa. All shear strengths shown on the appended logs are Vane Shear Strengths in accordance with NZGS; "Test Method for Determining the Vane Shear Strength of a Cohesive Soil using a Handheld Shear Vane", 2001.

Investigations were logged in accordance with The New Zealand Geotechnical Society, "Guidelines for the Field Classification and Description of Soil and Rock for Engineering Purposes" (2005). Investigation locations are shown on the appended drawings within Appendix A with hand auger borehole logs included within Appendix B.

3.1.1 *Laboratory Testing*

A single disturbed bag sample was collected for Atterberg limit testing from BH01 (0.5m to 1.0m). Laboratory test results are presented within Appendix C and are further discussed in Section 5 of this report.

3.2 Ground Conditions

Based on the results of the geotechnical investigation conducted by Haigh Workman and review of published geological maps, it is considered that the soils directly underlying each of the proposed Lots comprises very stiff natural soils of the Kerikeri Volcanic Group (Pvb), below a thin (0.1m to 0.2m) veneer of topsoil.

Although not encountered during our investigations, the presence of weathered basalt boulders within the Kerikeri Volcanic Group soils are not considered uncommon and may be encountered during future site

development and earthworks. Evidence of weathered boulders were observed to the south of our investigation locations with some boulders at the surface scattered across the slopes to the south of the proposed Lots.

For the purposes of this report, subsoil conditions on the site have been interpolated between the boreholes and some variation between borehole positions are likely. Table 2 summarises the materials encountered, with depth to base of each unit provided.

Table 2 - Summary of Borehole Results

Borehole Number	Topsoil (mbgl)	Kerikeri Volcanic Soils (mbgl)	Groundwater Observations
BH01 (Lot 1)	0.0 to 0.2	0.2 to >3.0	Groundwater not encountered.
BH02 (Lot 2)	0.0 to 0.1	0.1 to >2.5	Groundwater not encountered.
BH03 (Lot 4)	0.0 to 0.1	0.1 to >2.0	Groundwater not encountered.

Note - Depths measured from existing ground surface level.

3.2.1 *Topsoil*

A thin veneer of topsoil was encountered within all boreholes to a maximum depth of 0.2mbgl. The topsoil typically comprised a firm to stiff, brown to dark brown silt that was generally moist with no plasticity. Immediately below the topsoil, natural soils of the Kerikeri Volcanic Group were encountered.

3.2.2 *Kerikeri Volcanic Group*

Kerikeri Volcanic Group soils were encountered within all three boreholes (BH01, BH02 & BH04). The natural soils of the Kerikeri Volcanic Group typically comprised very stiff silt and clayey silt soils with variable fine gravel content. Laboratory testing shows the site soils to have a high plasticity index, indicative of clayey soils, i.e., soils that behave as a clay. Recovered soils were light orange to orange, reddish orange and light grey to purplish grey in colour. The soils were further described as being moist and of having low to high plasticity. Soils within BH01 became wet to saturated from 1.9m to 2.6mbgl.

Vane shear strength test results within the Kerikeri Volcanic Group soils were in excess of 100kPa, with results ranging from 114Pa to greater than 204kPa, indicative of very stiff soils. Unsuccessful tests where soils were too difficult to penetrate with the shear vane were recorded as ‘unable to penetrate’ (UTP) and are generally inferred to represent soils with vane shear strengths in excess of 100kPa, i.e., very stiff. The influence of fine gravel content within the soils may void some shear vane results. However, where granular content is encountered, the soil strengths are still considered to be very stiff. Recorded vane shear strengths are shown on the appended borehole logs within Appendix B.

3.2.3 *Groundwater*

Groundwater was encountered within borehole BH01 at a depth of 2.0mbgl. Borehole BH01 is located on a lower lying part of Lot 1. Anecdotal evidence suggests that during periods of prolonged and heavy rainfall, stormwater overflow from McCaughan Road can flow across the western, lower lying part of proposed Lot 1. Groundwater was not encountered within BH02 or BH03. Soil moisture observations were recorded during the advancement of BH02 and BH03 with soil moisture conditions generally being moist. Groundwater levels can and do fluctuate and higher groundwater levels may be encountered following periods of prolonged or heavy rainfall.

4 Geotechnical Assessment

4.1 Slope Stability - Visual Assessment

The ground surface across the bulk of the property is generally flat to gently sloping with localised slopes to the west, south and east towards the respective property boundaries. No ground instability or soil creep was observed across the proposed Lots (Lot 1, Lot 2 and Lot 4) during the walkover survey. It is considered that at present, the existing site and the proposed Lots 1, 2 and 4 are currently stable and suitable for development.

4.1.1 *Proposed Lot 1*

The contour across the area investigated comprised generally gentle west to southwest sloping ground in the order of 4° that becomes gentle to moderate sloping with slopes of up to 12° towards the southwest corner of proposed Lot 1. No signs of instability were observed across the investigation area of Lot 1. We envisage that any future building platform within proposed Lot 1 will be located centrally on the gentle west to southwest facing slopes of proposed Lot 1, refer Appendix A. It is considered that at present, the existing proposed development area (30m x 30m) is currently stable and suitable for development, subject to site specific investigations being undertaken at Building Consent stage. Specific engineering design of foundations will be required if founding on sloping ground.

4.1.2 *Proposed Lot 2*

Proposed Lot 2 comprises a generally rectangular parcel of land located immediately south of McCaughan Road and east of proposed Lot 1. The contour through Lot 2 is typically flat to gentle sloping across the central and western part of the Lot with gentle east facing slopes in the order of 4° to 6° descending towards the eastern property boundary. Across the southern part of proposed Lot 2, the contour slopes gentle to the south with slopes of up to 5°. No signs of instability were observed across the investigation area of Lot 2. We envisage that any future building platform within proposed Lot 2 will be located centrally on the flat to gentle slopes of proposed Lot 1, refer Appendix A. It is considered that at present, the existing proposed development area (30m x 30m) is currently stable and suitable for development, subject to site specific investigations being undertaken at Building Consent stage. Specific engineering design of foundations will be required if founding on sloping ground.

4.1.3 *Proposed Lot 4*

Proposed Lot 4 is located to the south of proposed Lot 2 and comprises a generally southeast facing parcel of land with slopes of between 6° to 10°. Localised steeper slopes along the eastern property boundary of up to 16° were observed. No signs of instability were observed across proposed Lot 4. We envisage that any future building platform within proposed Lot 4 will be located within the proposed development area (30m x 30m) away from the steeper slopes observed along the eastern property boundary, refer Appendix A.

Based on our site observations and the presence of sloping ground across the proposed Lot of more than 14°, further site-specific investigation and stability analysis will be required. It is considered that at present, a suitable development area can be found on Lot 4, subject to site specific investigations and stability analysis being undertaken at Building Consent stage. Specific engineering design of foundations will be required if founding on sloping ground.

5 Building Design Considerations

5.1 Shrink Swell Soil Characteristics

The New Zealand building code outlines expansive soils as those with a liquid limit greater than 50% and a linear shrinkage greater than 15%. Case histories of shrink-swell cases indicate soils with a liquid limit (LL) greater than 50% and plasticity index (PI) greater than 30% are considerably more susceptible to shrinkage and therefore considered as expansive soils. Atterberg limit test results on the sample collected during the site investigation are presented in Table 3 below.

Table 3 – Atterberg Limits and Linear Shrinkage Test Results

Sample ID	Depth (m)	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Linear Shrinkage (%)
BH01	0.5 to 1.0	47.1	119	43	76	28

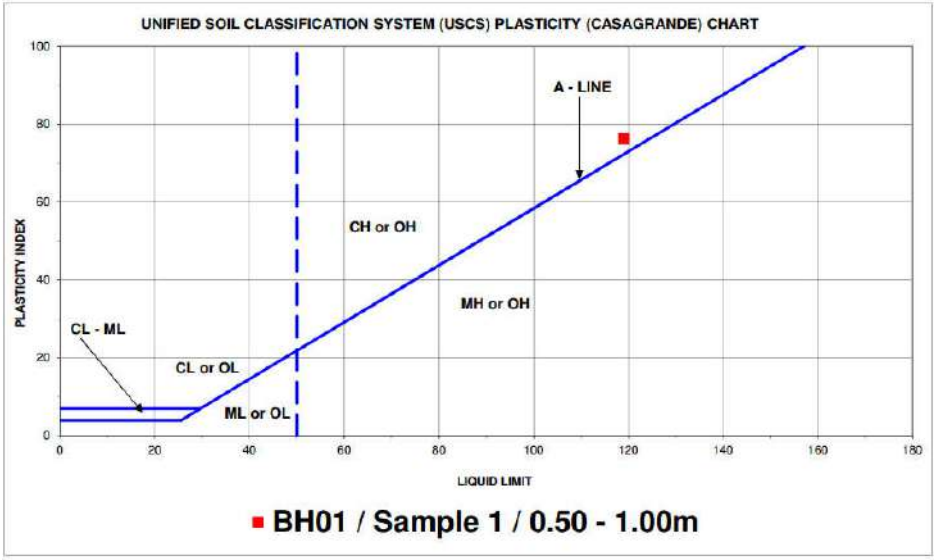
The results indicate that the natural soils of the Kerikeri Volcanic Group underlying the site are expansive and subject to seasonal volume change, predominantly shrinkage during summer which can result in surface settlements due to volume change.

Results are plotted on the Casagrande Chart in Figure 3 below, with the sample plotting above the A-Line, which further reinforces the expansive nature of the soil, (Wesley, 2010[†]).

[†] Geotechnical Engineering in Residual Soils, Laurence, D. Wesley (2010).

Based on the laboratory results, it is our opinion that the site can be classified as Class H, highly expansive (in accordance with the New Zealand Building Code) and deepened foundations will be necessary to mitigate the effects of seasonal volume change.

Figure 3 – Casagrande Chart



5.2 Seismic Site Subsoil Category

The site comprises fine grained cohesive soils of the Kerikeri Volcanic Group. The site conditions have been assessed to be consistent with seismic subsoil Class C (shallow soil site) in accordance with NZS1170.5.

5.3 Liquefaction Potential

Liquefaction potential has been assessed using MBIE guidance: *planning and engineering guidance for potentially liquefaction prone ground*. The published geology and investigation data indicates the site is underlain by residual Kerikeri Volcanic Group soils of Late Miocene to Pliocene age (1.8-11.2 million years) and is not part of a landform that is commonly susceptible to liquefaction. The results of our investigation show the proposed development locations are underlain by cohesive soils with a generally deep groundwater level (>2.0m) and high plasticity index (PI) of 76. The site soils are considered too plastic to liquify under seismic conditions. Based on the laboratory results and the low seismic hazard, we do not consider the proposed development locations to be at risk of liquefaction during a seismic event.

5.4 Shallow Foundations

Ground investigations across the proposed development area identified that the subsoils are suitable for supporting shallow foundations, provided any unsuitable material is removed (i.e., vegetation, topsoil and boulders if encountered) and that any founding subsoils are subject to ground verification.

We recommend the foundations be designed in accordance with AS2870 and B1/AS1 with an allowance for class 'H', 'highly expansive' soil.

Based on the in-situ vane shear testing, an ultimate bearing capacity of 300kPa can be adopted for limit state design for shallow foundations with a geotechnical strength reduction factor of 0.5 for limit state design. All sites will be subject to site specific geotechnical investigations and reporting being undertaken at the Building Consent stage.

Slab-on-grade foundations shall be founded a minimum of 600mm (light weight claddings only) below the finished ground level (bfgl) into very stiff natural soils. Alternative foundations, e.g., waffle or raft type foundations, can be designed by a CPEng (structural) in accordance with AS2870, under the following conditions:

- Ultimate bearing capacity of 300kPa.
- Geotechnical strength reduction factor – 0.5.
- Soil expansivity class – Site Class H (highly expansive soils).
- Seismic class – Site Class C (Shallow soil site).
- Minimum embedment depth for all spread footings shall be 600mm below cleared ground level (level building platform).

Bearing capacity values included in this report are for vertical loads only and do not take into account horizontal shear or moment.

5.5 Filling and Settlement

Residential dwellings should be designed to tolerate angular distortion as a result of consolidation settlement of up to 1:240 (approximately 25mm over a 6.0m length) as required by the New Zealand Building Code (B1/VM4). Should filling across any proposed development sites be considered, then this can result in consolidation settlement of the underlying soils and should be avoided if possible.

Should filling be proposed, then we recommend that a site-specific settlement and stability analyses be undertaken, prior to the placement of any proposed fill, to validate the stability of the site. Any earthworks undertaken shall remove all grass coverings, topsoil and unsuitable material and be approved by a Chartered Professional Engineer.

6 Development Recommendations

6.1 Earthworks

At the time of writing, no earthworks plans were available for the proposed Lots. Any earthworks required as part of site developments will be subject to approval by a Chartered Professional Engineer familiar with the contents of this report.

All earthworks should be carried out to the requirements of NZS 4404:2010 'Land Development and Subdivision Infrastructure' and NZS 4431:2022, 'Engineered Fill Construction of Lightweight Structures'. It is recommended that any unsuitable material identified during excavation be removed and replaced with granular hardfill or cohesive fill compacted to an engineered standard, under supervision by a Chartered Professional Engineer (CPEng, Geotechnical).

If filling is proposed as a part of site formation works (i.e., a level building platform is to be constructed for shallow foundations), it will be subject to specific design and approval by a Chartered Professional Engineer. Any fill placed beneath or within 1.0 m of any proposed dwelling or proposed structures, will need verification of compaction and confirmation by the Engineer that filling will not have a negative impact on stability and confirmation that settlement caused by filling will not cause adverse effects to the structure.

6.2 Site Trimming

Any topsoil, roots and surface boulders should be removed from any proposed dwelling or structure footprint. Stripped topsoil may be stockpiled away from proposed development areas, to be used for future landscaping. Topsoil may be used as part of any proposed wastewater disposal field to aid in soakage and evapotranspiration.

6.3 Erosion and Sediment Control

Prior to commencing earthworks, a sediment control system needs to be constructed to ensure the Territorial and Regional Authority requirements are met. Typical details can be found in the Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, GD05, 2016. Erosion and sediment control should be undertaken as early as possible before soil particles become dislodged and mobilised. The use of contour drains, mulching and earth bunds to control erosion during the construction phase is recommended, as is maintaining vegetation cover where possible to reduce erosion potential.

6.4 Onsite Stormwater Disposal

Control of the stormwater runoff from the proposed subdivision will be required as part of the development of the site. It is anticipated that all stormwater runoff from the proposed developments will be channelled to the southwest from proposed Lot 1 and to the east and southeast for proposed Lots 2 and Lot 4 respectively.

Concentrated stormwater flows from all impermeable areas must be collected, carried in sealed pipes and discharged in a manner that will not affect the stability of the ground. Concentrated stormwater flows must not be allowed to saturate the ground so as to adversely affect foundation conditions.

Design of devices to collect, transport and discharge concentrated flows should be engineered. Devices associated with subdivision development (paved access etc.) should be designed as part of the Subdivision Consent works. However, design for future house construction can only be carried out as part of Building Consent activities as the design is pertinent to the house and site coverage proposal. Further details on stormwater management are contained within the Haigh Workman Site Suitability Report, reference 24 095.

6.5 Retaining Walls

At the time of writing, no known retaining walls were intended as part of the property development. However, it is considered that future retaining walls may be included at the detailed design stage. Should future retaining walls be intended, then, all retaining walls should be designed by a Chartered Professional Engineer familiar with the contents of this report.

Loading from any adjacent structures, traffic, slope surcharges above and/or below retaining wall cuts and fills shall be taken into account during wall design. Battering of cut slopes may be considered as an alternative to retaining walls. Cut slopes may become unstable if left exposed for extended periods of time. Cut sloes should either be battered back to a safe angle of 1V:2H with a maximum height of 2.0m or be retained by a retaining wall designed by a Chartered Professional Engineer with relevant experience in soil mechanics.

6.6 Services

All external service connections (power, water supply, stormwater, sewer, telecom and others) should be detailed for seasonal movement such as the use of rubber ring joints for stormwater and wastewater or looped power and water connections. Building foundations within a 45-degree zone of influence from the invert level of any service pipe shall adopt the standard engineering details within the Far North District Council plan and NZS4404:2010.

At the time of writing, no known underground services cross beneath the proposed development area. We recommend that any new services are accurately located on site and the depth to invert be determined prior to the commencement of foundation excavations.

6.7 Planned Vegetation

The foundation designer and architect must take into account the proximity of trees when preparing designs as trees can exacerbate the normal seasonal variation of soil moisture levels and associated with that, the vertical and horizontal movement of the founding soils. Further, mechanical interference with foundations by tree roots should be considered.

6.8 Unexpected Ground Conditions

Areas of unsuitable ground could be encountered anywhere on the site during site excavations. If unsuitable material is encountered, the Engineer responsible for providing certification of the earthworks and Geotechnical Completion Report should be contacted immediately to provide advice.

7 Conclusion

Geotechnical investigations indicate that the proposed subdivision and build locations for Lot 1, Lot 2 and Lot 4 are generally stable and the and the subsoil properties are appropriate for residential development subject to site specific geotechnical investigations and reporting being undertaken at Building Consent stage. A suitable build location for proposed Lots 4 may require site stability analyses to be undertaken at Building Consent stage, to demonstrate the presence of a safe building platform. The extent of the geotechnical investigations is outlined within this report.

The development will need to be undertaken in accordance with current best engineering practice and the following guidelines are applicable to all Lots being Lot 1, Lot 2 and Lot 4:

The natural ground within the existing lot boundary is considered generally suitable for residential development of residential buildings not requiring specific design in terms of NZS3604:2011, subject to the following conditions:

- All Lots (Lot 1, Lot 2 and Lot 4) will be subject site-specific geotechnical investigations.
- Foundation conditions fall outside the definition of ‘good ground’ as contained in NZS3604:2011 due to the presence of expansive soils. Soils are considered to lie in Site Class H (highly expansive) as defined in B1/AS1.
- Shallow foundation design should limit the geotechnical ultimate bearing capacity to 300kPa, with a geotechnical strength reduction factor of 0.5 for limit state design.
- Due to sloping ground across proposed Lot 4, slab on grade construction will require earthworks, with recommendations outlined in Section 6. Problems can occur with slab construction on shrink/swell sensitive soils. In soils which become desiccated in summer, subsequent capillary moisture rise may cause dry soils to wet up and swell, causing slab uplift and building distress. Conversely, construction during winter may result in subgrade soils with high moisture contents drying out through summer, with subsequent soil shrinkage and possible building deformation. The structural engineer should take likely construction timeframes into account and confirm that their design, or construction methodologies, will accommodate the soil shrinkage or swelling that may occur.
- No earthworks involving fills or unsupported cuts in excess of 600mm should take place unless endorsed by a suitable design undertaken by a Chartered Professional Engineer with suitable geotechnical experience who is familiar with the contents of this report.
- Any earthworks conducted at the site should be undertaken and tested in accordance with NZS4431:2022. Any unsuitable material identified during excavation shall be removed and replaced

with granular hardfill in accordance with NZS4431:2022. Granular hardfill is recommended to be GAP40 or GAP65, compacted to 95% MDD.

- Where building envelopes lie adjacent to or across service lines, all foundations should extend and be founded below the 45-degree zone of influence line extending from pipe inverts. This requirement is to avoid excessive pipe surcharges and to allow for future maintenance of the system without detrimentally affecting adjacent structures.
- Our assessment is based on interpolation between borehole positions and site observations. Local variations in ground conditions may occur. Site specific geotechnical investigations are required for individual Lots. Unfavourable ground conditions may be encountered during earthworks. It is important that we are contacted in this eventuality or in the event that any variation in subsoil conditions from this described in this report are found. Design assistance is available as required to accommodate any unforeseen ground conditions present.

Provided the recommendations within this report are followed, the subject site is capable of being developed across proposed Lot 1, Lot 2 and Lot 4. All works should be carried under the guidance of a Chartered Professional Engineer familiar with the contents of this report.

This report is not intended to be used for foundation design, other than provide general framework for building platform suitability. Specific geotechnical investigations are recommended to confirm the subsoil conditions, confirm the soil expansivity and provide site specific geotechnical recommendations for foundation design.

Table 4 - Summary of Specific Site Investigation and Foundation Design Requirements

Lot No.	Comments on Nominated Building Platform	Shallow Bearing Capacity / Expansive Class	Anticipated scope of additional works following specific investigation and design. [Comments are given as a guide only – specific engineering to be undertaken by a Chartered Professional Engineer
Lot 1	Detailed within the report. Building platform can be located within the proposed development area (30m x 30m) as shown on the appended drawings.	300kPa / Class H	Detailed within this report. Site specific geotechnical investigations and reporting required at the Building Consent stage.
Lot 2	Detailed within the report. Building platform can be located within the proposed development area (30m x 30m) as shown on the appended drawings.	300kPa / Class H	Detailed within this report. Site specific geotechnical investigations and reporting required at the Building Consent stage.
Lot 3	Proposed Lot 3 is an established site with an existing dwelling onsite. No further assessment required.	300kPa / Class H	No geotechnical assessments or investigations were undertaken at proposed Lot 3, being an established site with an existing dwelling within the boundaries of the proposed Lot 3.
Lot 4	Detailed within the report. Building platform can be located within the proposed development area (30m x 30m) as shown on the appended drawings.	300kPa / Class H	Detailed within this report. Site specific geotechnical investigations and reporting required at the Building Consent stage.
All Lots (Lot 2 to Lot 5)	Earthworks		All earthworks to be under the supervision of a Chartered Professional Engineer (CPEng, Geotechnical).

8 Limitations

This report has been prepared for the use of Robert G Vellenoweth with respect to the particular brief outlined to us. This report is to be used by our Client and their Consultants and may be relied upon when considering geotechnical advice.

Furthermore, this report may be utilised in the preparation of building and/or resource consent applications with local authorities. The information and opinions contained within this report shall not be used in other context for any other purpose without prior review and agreement by Haigh Workman Ltd. The recommendations given in this report are based on site data from discrete locations. Inferences about the subsoil conditions away from the test locations have been made but cannot be guaranteed.

We have inferred an appropriate geotechnical model that can be applied for our analyses. However, variations in ground conditions from those described in this report could exist across the site. Should conditions encountered differ to those outlined in this report we ask that we be given the opportunity to review the continued applicability of our recommendations. Furthermore, should any changes be made, we must be allowed to review the new development proposal to ensure that the recommendations of this report remain valid.

Location Appendix A – Drawings

Drawing No.	Title
25 098/G01	Site Features and Investigation Location Plan
25 098/G02	Geological Cross Section A-A’

NOTES:

1. LOT BOUNDARIES AND AERIAL PHOTO INFORMATION TAKEN FROM LAND INFORMATION NEW ZEALAND (LINZ).

Issue	Date	Revision
A	06/08/2025	FIRST ISSUE

DWG: INVESTIGATION LOCATION PLAN

Scale 1:750 @A3 | Date 06/08/2024

Drawn JP | Checked WT | Approved JP

File T:\CLIENTS\ROBERT G VELLENOWETH\JOBS\24 095 - 57 MCCAUGHAN ROAD, KERIKERI (LOT 2 DP 198209)\ENGINEERING\GEOTECH\DRAWINGS\24 095 - DRAWINGS 02.DWG

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Project: GEOTECHNICAL ASSESSMENT REPORT
57 McCaughan Road, Kerikeri (Lot 2, DP 198209)

Client: ROBERT G VELLENOWETH

Project No. 24 095 | RC no. N/A

DWG No. **G01**

Sheet No. **1** of **1**

Plotted By John Power at 14/08/2025 3:27:43 pm

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Kerikeri · Bream Bay · Warkworth

Job Title
57 McGeoghan Rd, Kerikeri
Robert G. Vellenoweth

Page

Job No.
24 095

Designer
L. Power

Date
13/08/2025

Geological Cross Section A-A'

Proposed Lot 4

Proposed Development Area (30m x 30m)

Northwest

Southeast

Scale: 1:250

Drawing No. 24 095/G02

Appendix B – Hand Auger Logs

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New Zealand

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Borehole Log - BH01 (Lot 1)

Hole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert G Vellenoweth	**SITE:**	57 McCaughan Road, Kerikeri (Lot 2 Deposited Plan 198209)		
Date Started:	18/07/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	JP
Date Completed:	18/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	WT

Soil Description
Based on NZGS Logging Guidelines 2005

SILT; brown to dark brown. Firm, moist, no plasticity. [Topsoil]

Clayey **SILT**; light orange to orange, streaked brownish grey. Very stiff, moist, low to medium plasticity. [Kerikeri Volcanic Group]

From 0.6m: Trace fine gravel. Becomes light orange, mottled dark orange and light yellow.

SILT, some clay; light orange to orange, streaked orangish red, speckled yellow. Very stiff, moist, low plasticity.

From 1.2m: Becomes orangish red and orange.

SILT, minor clay, trace fine gravel; orange and purplish grey. Very stiff, wet, no plasticity.

From 2.1m: Becomes wet to saturated.

Clayey **SILT**; light orange and light grey, streaked orangish red. Very stiff, moist to wet, medium plasticity.

Silty **CLAY**; light purplish grey and reddish orange, streaked light grey. Very stiff, moist, medium to high plasticity.

End of Hole at 3.0m (Target Depth)

Depth (m)	Geology	Graphic Log	Water Level	Sensitivity	Vane Shear and Remoulded Vane Shear Strengths (kPa)	Scala Penetrometer (blows/100mm)
0.0	T.S.					0 5 10 15 20
0.5	KERIKERI VOLCANIC GROUP		Groundwater encountered at 2.0mbgl.	3	163 / 50	
1.0					UTP	
1.5					204	
2.0				7	172 / 26	
2.5				2	114 / 55	
3.0					204	
3.5						
4.0						
4.5						
5.0						

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater encountered at 2.0mbgl.
Hand Held Shear Vane S/N: DR2220

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Borehole Log - BH02 (Lot 2)

Hole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert G Vellenoweth	**SITE:**	57 McCaughan Road, Kerikeri (Lot 2 Deposited Plan 198209)		
Date Started:	18/07/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	JP
Date Completed:	18/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	WT

Soil Description
Based on NZGS Logging Guidelines 2005

SILT; dark brown, speckled dark orange. Stiff, moist, no plasticity. [Topsoil]

Clayey **SILT**; orange to light orange, streaked light brown. Very stiff, moist, low to medium plasticity. [Kerikeri Volcanic Group]

Clayey **SILT**, trace fine gravel; light orange to orange, mottled dark orange and yellow. Very stiff, moist, low plasticity.

Clayey **SILT**; reddish orange, streaked orange and light yellow. Very stiff, moist, medium plasticity.

From 0.8m: Trace fine gravel. Becomes orange to reddish orange, streaked black.

From 1.4m: No gravel. Becomes brownish orange to orangish brown, mottled orange.

SILT, some clay, trace fine gravel; grey to purplish grey and orange, speckled white. Very stiff, moist, low plasticity.

From 2.1m: Becomes orange to brownish orange, mottled grey, speckled white.

SILT, minor clay, trace fine gravel; light orange and brownish grey, speckled black and white. Very stiff, moist, no to low plasticity.

End of Hole at 2.5m (Target Depth)

Depth (m): 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

Geology: TS; KERIKERI VOLCANIC GROUP

Graphic Log

Water Level: Groundwater Not Encountered.

Sensitivity: 7

Vane Shear and Remoulded Vane Shear Strengths (kPa): 204; UTP; 204; 157; 23; UTP

Scala Penetrometer (blows/100mm): 0 5 10 15 20

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater not encountered.
Hand Held Shear Vane S/N: DR2220

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Borehole Log - BH03 (Lot 4)

Hole Location: Refer to Site Plan

JOB No. 24 095

CLIENT:	Robert G Vellenoweth	**SITE:**	57 McCaughan Road, Kerikeri (Lot 2 Deposited Plan 198209)		
Date Started:	18/07/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	JP
Date Completed:	18/07/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	WT

Soil Description
Based on NZGS Logging Guidelines 2005

SILT; brown, speckled black. Stiff, moist, no plasticity. [Topsoil]

Clayey **SILT**; light orange to orange, streaked light brown. Very stiff, moist, medium plasticity.

From 0.4m: Becomes orange to reddish orange, streaked red. Low to medium plasticity.

From 0.7m: Becomes orange to brownish orange.

From 1.3m: Trace fine gravel. Becomes brownish orange to orange, streaked red, black and yellow.

From 1.6m: Becomes orangish red to orange, mottled light orange, streaked black.

End of Hole at 2.0m (Target Depth)

Depth (m): 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0

Geology: TS; KERIKERI VOLCANIC GROUP

Water Level: Groundwater Not Encountered.

Vane Shear and Remoulded Vane Shear Strengths (kPa): 204; UTP; UTP; UTP

Scala Penetrometer (blows/100mm): 0 5 10 15 20

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL | FILL

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

Note: UTP = Unable to penetrate. T.S. = Topsoil. Groundwater not encountered.
Hand Held Shear Vane S/N: DR2220

Appendix C – Laboratory Test Results

Babbage Geotechnical Laboratory
Level 4
68 Beach Road
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P O Box 2027
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64-9-367 4954
wec@babbage.co.nz

Please reply to: W.E. Campton

Haigh Workman Ltd.
PO Box 89
Kerikeri 0245

Job Number: 63632#L
BGL Registration Number: 2828
Checked by: WEC

Attention: **JOHN POWER**

31st July 2025

ATTERBERG LIMITS & LINEAR SHRINKAGE TESTING

Dear John

Re: 57 McCAUGHAN ROAD, KERIKERI

Your Reference: 24 095
Report Number: 63632#L/AL 57 McCaughan Road

The following report presents the results of Atterberg Limits & Linear Shrinkage testing at BGL of a soil sample delivered to this laboratory on the 23rd of July 2025. Test results are summarised below, with page 3 showing where the sample plots on the Unified Soil Classification System (Casagrande) Chart.

Test standards used were:

Water Content:	NZS4402: 1986: Test 2.1
Liquid Limit:	NZS4402: 1986: Test 2.2
Plastic Limit:	NZS4402: 1986: Test 2.3
Plasticity Index:	NZS4402: 1986: Test 2.4
Linear Shrinkage:	NZS4402: 1986: Test 2.6

Borehole Number	Sample Number	Depth (m)	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	Linear Shrinkage (%)*
BH01	**Sample 1**	**0.50 – 1.00**	**47.1**	**119 ◆**	**43 ◆**	**76 ◆**	**28 ◆**

**The amount of shrinkage of the sample as a percentage of the original sample length.*

◆ = *The soil fraction passing a 0.425mm sieve was used for the liquid limit, plastic limit & linear shrinkage tests.*

The whole soil was used for the water content test (the soil was in an unknown state), and the soil fraction passing a 0.425mm sieve was used for the liquid limit, plastic limit & linear shrinkage tests. The soil was wet up and dried where required for the liquid limit, plastic limit & linear shrinkage tests.

As per the reporting requirements of NZS4402: 1986: Test 2.1: water content is reported to two significant figures for values below 10%, and to three significant figures for values of 10% or greater. Test 2.2: liquid limit, test 2.3: plastic limit, and test 2.6: linear shrinkage are reported to the nearest whole number.

Please note that the test results relate only to the sample as-received, and relate only to the sample under test.

Thank you for the opportunity to carry out this testing. If you have any queries regarding the content of this report please contact the person authorising this report below at your convenience.

Yours faithfully,

Justin Franklin
Key Technical Person
Assistant Laboratory Manager
Babbage Geotechnical Laboratory

ACCREDITED
IANZ
TESTING LABORATORY
Nº 126

BGL Babbage Geotechnical Laboratory	Job Number:	63632#L	Sheet 1 of 1	Page 3 of 3	
	Registration Number:	2828			
	Report Number:	63632#L/AL 57 McCaughan Road			
	Project:	57 McCAUGHAN ROAD, KERIKERI			

DETERMINATION OF THE LIQUID LIMIT, PLASTIC LIMIT & THE PLASTICITY INDEX

Test Methods: NZS4402: 1986: Test 2.2, Test 2.3 and Test 2.4

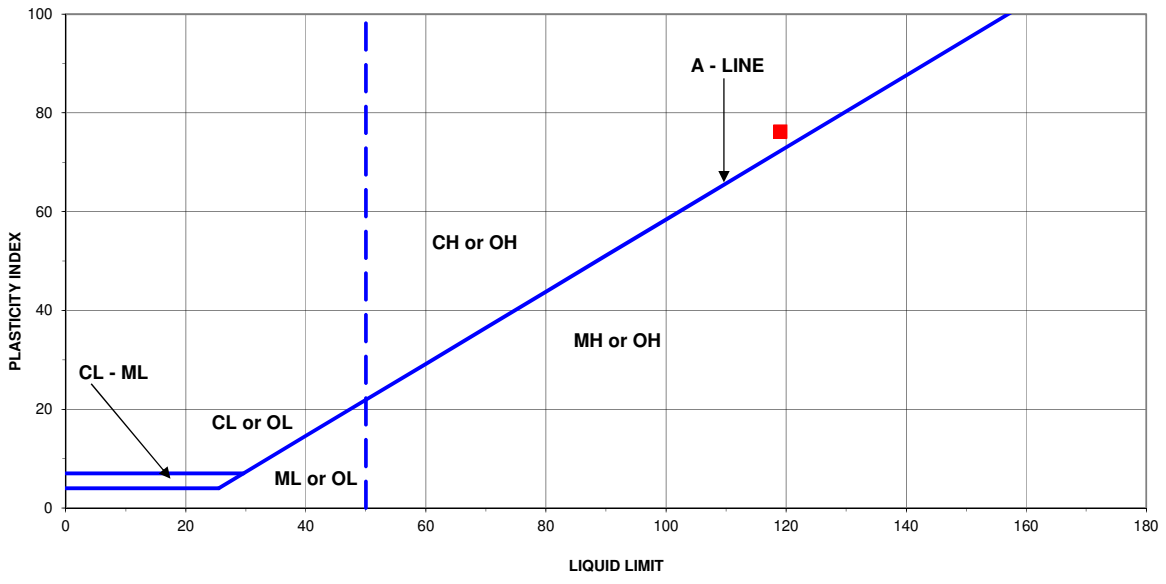
Tested By:	SG / JL	July 2025			
Compiled By:	SG	31/07/2025			
Checked By:	JF	31/07/2025			
Version Number:	7	Version Date:	July 2022	Authorised By:	Wayne Campton

SUMMARY OF TESTING

Borehole Number	Sample Number	Depth (m)	Liquid Limit	Plastic Limit	Plasticity Index	Soil Classification Based on USCS Chart Below
BH01	**Sample 1**	**0.50 - 1.00**	119	43	**76**	CH

The chart below & soil classification terminology is taken from ASTM D2487-17^{e1} "Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)", April 2020, & is based on the classification scheme developed by A. Casagrande in the 1940's (Casagrande, A., 1948: Classification and identification of soil. Transactions of the American Society of Civil Engineers, v. 113, p. 901-930). The chart below & the soil classification given in the table above are included for your information only, and are not included in the IANZ endorsement for this report.

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS) PLASTICITY (CASAGRANDE) CHART



■ **BH01 / Sample 1 / 0.50 - 1.00m**

CHART LEGEND

CL = CLAY, low plasticity ('lean' clay)
OL = ORGANIC CLAY or ORGANIC SILT, low liquid limit
ML = SILT, low liquid limit
CL - ML = SILTY CLAY
CH = CLAY, high plasticity ('fat' clay)
OH = ORGANIC CLAY or ORGANIC SILT, high liquid limit
MH = SILT, high liquid limit ('elastic silt')

Appendix D – Provided Development Plans

Memorandum of Easements			
Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	G	Lot 3 hereon	Lot 4 hereon

NOTES

- This plan is Copyright to Simpson Shaw Surveyors.
- This is a concept plan. Areas and Dimensions are approximate only and subject to final survey.
- All dimensions are in metres unless shown otherwise.
- Aerial photography from LINZ data service.

TOTAL AREA = 1.7040 Ha

COMPRISED IN
RT NA127A/757

Areas (A) (B) (C) (D) are subject to an existing land covenant (plantation) D431529.2

Areas (A) (E) (F) are subject to a land covenant

100
50
0

B	04-07-25	Access and covenant	JL
A	26-08-24	For Consent	JL

REVISIONS

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LAND AND ENGINEERING SURVEYORS
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www.simpsonshaw.co.nz

CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	04/07/2025		
DRAWING	24-051-S001		B
SCALE	1:750		(A3)

P:\Vellenoweth & Wardlaw\24-051 McCaughan Rd\Working Data_CAD\24-051-S001-B.dwg

Appendix E – Producer Statement Advisory Note

IMPORTANT ADVISORY NOTE

PRODUCER STATEMENT – CONSTRUCTION REVIEW (PS4)

The Building Consent Authority (BCA) frequently requires Producer Statements–Construction Review (PS4) to be submitted to the BCA in order for a Code of Compliance Certificate (CCC) to be issued. A PS4 is usually required for each specialist area. The requirement for a consultant to issue a PS4 related to their area of work will appear as a condition in the Building Consent documents.

It is the consent holder's responsibility to notify Haigh Workman Limited for geotechnical construction monitoring and testing required for subsequent issue of a PS4. An initial inspection of stripped or excavated ground must take place before any fill or blinding concrete is placed. Retrospective site monitoring of completed or partially completed geotechnical work is not possible and a PS4 will not be issued without all the required observations.

In order to secure our construction monitoring services and avoid delays on site, Haigh Workman Limited require at least 24 hours' notice prior to the time the site visit is required. Construction monitoring is limited to items that have been recommended, designed and detailed by Haigh Workman Limited. We are unable to inspect non-consented or unauthorised work. Haigh Workman Limited do not carry out construction monitoring or issue PS4's for work that has been recommended, designed or detailed by other consultants without prior approval from Haigh Workman Limited. Haigh Workman Limited will not issue a PS4 where construction monitoring and/or testing have been carried out by any other consultant. The PS4 must be sought from the consultant who carried out those inspections.

The full Building Consent, with stamped plans with consent numbers (or a legible copy of the same) including all amendments, shall be made available to us during inspections. We will not commence construction monitoring until the documentation is available or provided to us prior to our site visit.

Unless stated otherwise in our terms of engagement, the fees associated with construction monitoring and the issue of PS4's are separate from any work carried out prior to commencement of construction. We are able to provide a fee estimate for this work if required. We cannot provide a fixed quote because the quantum of work required frequently depends on the construction program and the performance of others. These things are not known to us in advance of construction. Our normal terms of trade require payment of fees monthly during the inspection period and full settlement prior to release of any PS4.

Preliminary Site Investigation with Limited Soil Sampling for Proposed Subdivision

57 McCaughan Road, Waipapa
(Lot 2 DP 198209)

Vellward Family Trust

Haigh Workman Reference: 24 095

Rev A

5 August 2025

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Kerikeri • Whangarei • Warkworth

Document History and Status

Revision Nº	Date	Description	Issued By
A	28 July 2024	Preliminary Site Investigation w/ Limited Soil Sampling	Aaron Thorburn

Prepared / Certified by	Reviewed by	Approved by
Aaron Thorburn **Senior Environmental Advisor** BAppSc (Env), CEnvP	Joshua Cuming **Environmental Geologist** BSc (Env. Stu., Geol) MEIANZ, CEnvP	John Papesch **Senior Civil Engineer / Director** BE (Civil Eng.), NZCE, CMEngNZ, CPEng

Executive Summary

Haigh Workman Limited (Haigh Workman) completed a desktop assessment and field investigation for the preparation of a Preliminary Site Investigation with Limited Soil Sampling for the proposed subdivision at 57 McCaughan Road, Waipapa.

Proposed development will comprise the existing property being subdivided into four individual Lots with rural residential development likely proposed in the future.

Assessment of available information and observations from our site walkover indicate that Hazardous Activities and Industries List activities have, or potentially have, or have occurred near the piece of land.

Soil samples were collected from selected locations within the piece of land and analysed for Contaminants of Concern, including Metals and Organochlorine Pesticides. Laboratory analytical results reported:

- All Contaminants of Concern concentrations were below applicable Human Health criteria,
- Metals concentrations were above Background Soil Concentrations in some soil samples, and
- Organochlorine Pesticide concentrations were below laboratory Method Detection Limits in all soil samples.

Based on these findings:

- Soil sampling has confirmed that there are no significant contaminated land related constraint on redevelopment of the land for residential purposes and that it is highly unlikely that there is a risk to Human Health if the activity is done to the piece of land,
- Soil / fill material with Metals concentrations above Background Levels is not considered as 'Cleanfill' for disposal purposes:
    - If material exceeding Background Level criteria must be removed from site, it is to be disposed of at a facility licensed to accept such materials,
    - Material exceeding Background Level criteria could be retained and re-used on-site as a sustainability option and to reduce disposal costs if suitable.
- Apart from fill material / soils with Metals concentrations above Background Level criteria, fill material / soils that are required to be removed from site could be disposed of as 'Cleanfill', with approval from the receiving fill operator, and
- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a Suitably Qualified and Experienced Practitioner prior to disposal.

Our findings, conclusions and recommendations are detailed in the following report and appendices.

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1 Introduction

Haigh Workman Limited (Haigh Workman) were engaged by the Vellward Family Trust (the client) to undertake a Preliminary Site Investigation with Limited Soil Sampling (PSI w/ LSS) in association with the proposed subdivision of 57 McCaughan Road, Waipapa, the 'piece of land' is shown below in Figure 1 and provided in **Appendix A**.

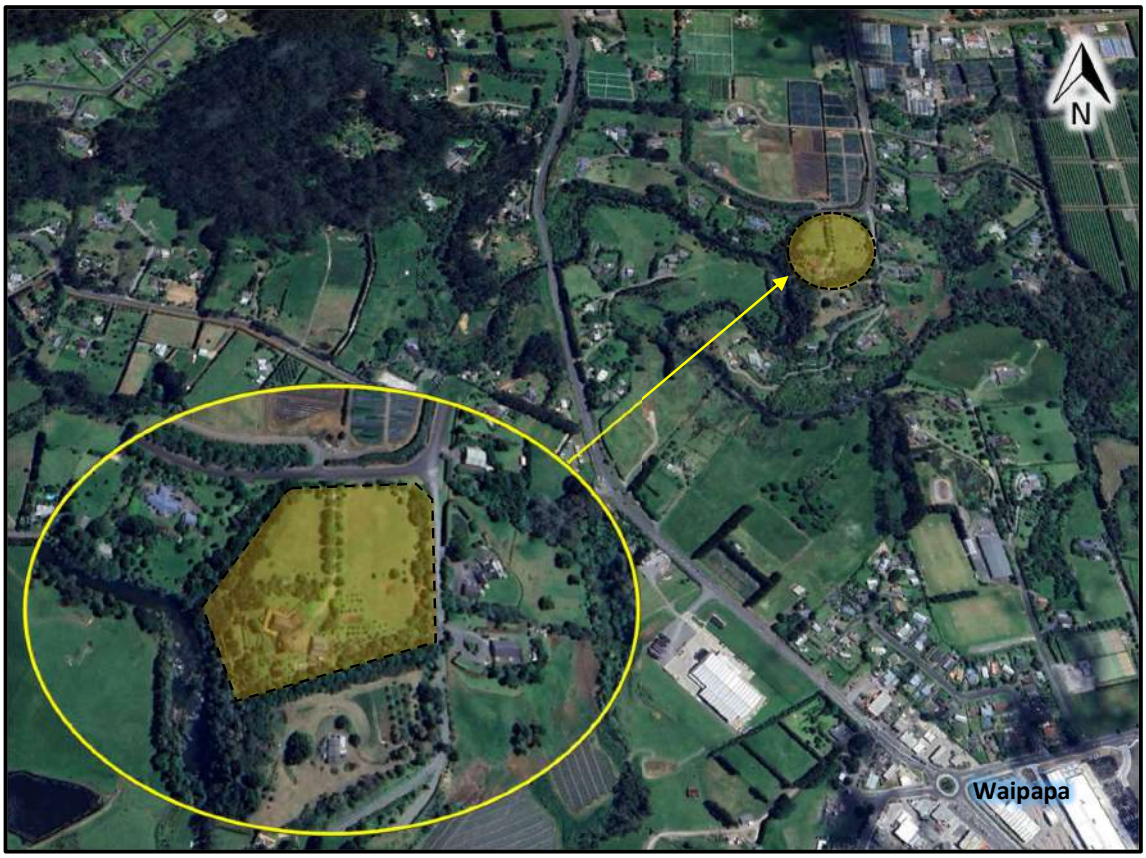


Figure 1: Site Location Plan *(Source: Far North District Council GeoMaps.)*

1.1 Legislative Requirements

This report comprises a PSI prepared by Haigh Workman in general accordance with Ministry for the Environment's (MfE) guidelines for contaminated site investigations, National Environmental Standard for Assessing Contaminants in Soil to Protect Human Health (NES-CS)[1], the Hazardous Activities and Industries List (HAIL)[2] and the Resource Management (MfE) Contaminated Land Management Guidelines[3] (CLMG), *Methodology for Deriving Contaminants for the Protection of Human Health*[4] (*Methodology*) and Far North District Council (FNDC) requirements.

[1] Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011
[2] Ministry for Environment, *Hazardous Activities and Industries List (HAIL),* 2023.
[3] Ministry for Environment, *Contaminated Land Management Guidelines Nos. 1 to 5*, 2011 *(Guidelines Nos. 1 & 5, Revised 2021)*,
[4] Ministry for Environment, *Methodology for Deriving Contaminants for Protection of Human Health,* 2011

This investigation and reporting have been prepared, reviewed and authorised by Suitably Qualified and Experienced Practitioner (SQEP), as required under the NES-CS regulations.

1.2 Purpose and Scope

The purpose of the PSI w/LSS investigation, under the NES-CS, is required:

- To comply with Regulation 3 of the NES-CS,
- To establish whether or not the site is HAIL or has been HAIL (it is more likely than not that an activity or industry described in the HAIL is being or has been undertaken on it) (NES-CS Regulation 5(7) or 6(3)), and
- If the site is HAIL and the activity is a change of use or subdivision, to show the activity is permitted by demonstrating that it is highly unlikely that there will be a risk to human health in the particular circumstances of the site and proposed use or subdivision (NES-CS Regulation 8(4)).

This investigation comprises a PSI, which includes the following:

- Site walkover,
- Interview with site representative (current and previous owners, if applicable),
- Review of available environmental investigation reports previously prepared for the site (or parts of the site),
- Review of environmental setting including topography, geology and hydrology,
- Review of historical aerial photographs, historical titles, Northland Regional Council (NRC) Contamination Enquiry and FNDC Property Files,
- PSI w/ LSS reporting (this report).

1.3 Limitations

This report has been prepared by Haigh Workman for the sole benefit of the Vellward Family Trust (the client), with respect to the brief outlined to us. This report is to be used by the client and their consultants and may be relied upon when considering geo-environmental advice. Furthermore, this report may be utilised in the preparation of building and / or resource consent applications with local authorities.

The information and opinions contained within this report shall not be used in other context for any other purpose without prior review and agreement by Haigh Workman.

The comments and opinions presented in this report are based on the findings of a desktop study and subsurface conditions encountered. Responsibility cannot be accepted for any conditions not revealed by this investigation.

Should conditions encountered differ to those outlined in this report we should be notified. Allowance for a review of the design should be made should ground conditions vary from these assumed.

2 Site Description

The site is located at 57 McCaughan Road, Waipapa in a rural-residential area approximately 900m north of Waipapa. The majority of surrounding land is used for rural lifestyle purposes, with the exception of the land directly north of the piece of land, utilised for horticultural / market garden land-use.

The FNDC GeoMaps zoning overlay identifies the site as: **Rural Production**.

The proposed development comes under the adopted exposure scenario in the *Methodology*: **Rural Residential**.

Further site details are provided below in Table 1. The Site Location plan is shown above in Figure 1 and is provided in **Appendix A**.

Table 1 – Site Details

Street Address	57 McCaughan Road, Waipapa
Legal Description	Lot 2 DP 198209
Certificate of Title(s)	NA127A/757 (10 November 1999)
FNDC District Plan Zoning	Rural – Countryside Living
Grid Reference NZ Map Grid	N 6666531 E 2594339
Approx. Site Area (m^2)	17,040 m^2 (1.704 ha)
'Piece of land' under investigation (m^2)	4,140 m^2 Proposed Lot 1 – 2,000 m^2, and Proposed Lot 2 – 2,140 m^2.

2.1 Proposed Development

Based on the information provided to Haigh Workman and proposed subdivision plan drawings prepared by Simpson Shaw Surveyors, it is understood that the existing property is proposed to be subdivided into four individual Lots (Lots 1 – 4). No earthworks or development is proposed at the writing of this report. The client intends to retain the proposed Lots 3 and 4 and sell proposed Lots 1 and 2.

The proposed Subdivision Plan is shown below in Figure 2 and is provided in **Appendix A**.

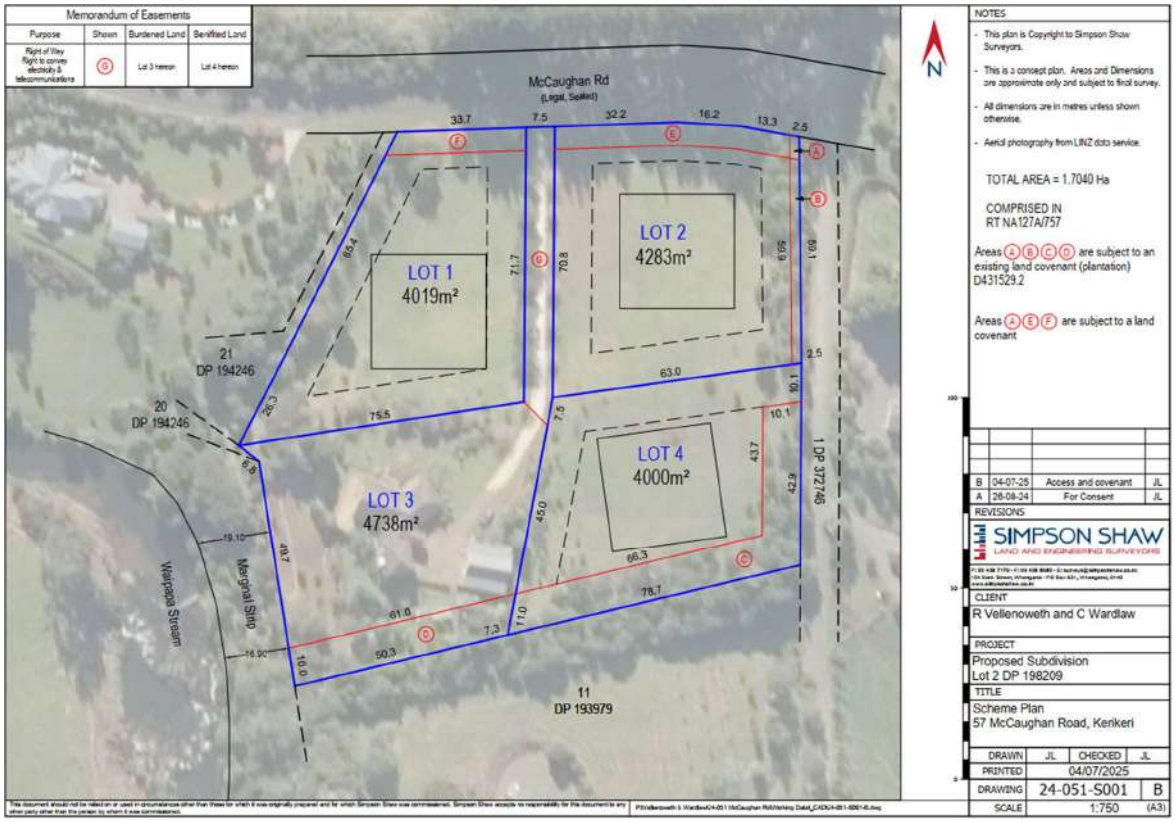


Figure 2: Proposed Subdivision Plan *(Source: Simpson Shaw Surveyors, dated 4 July 2025)*

2.2 Site Interview

During the 17 July 2025 site walkover the history of the site was briefly discussed with the client. The client has owned the property since 2000 and built the dwelling and associated structures in 2004 and to the best of their knowledge the site had never been used for horticultural land-use. The client mentioned that they would like to retain proposed Lot 3 and Lot 4.

3 Environmental Setting

3.1 Site Layout and Surrounds

A site walkover was undertaken on 17 July 2025. Photographs from the 17 July 2025 site walkover are provided in **Appendix B**. The following was observed on the site:

- The piece of land is located in a rural setting approximately 900m north of Waipapa,
- Access to the property is from the north via McCaughan Road,
- The piece of land contains a dwelling with associated structures located in the southwest corner of the property,
- The piece of land surface is predominantly grass, with established treelines along the driveway located in the middle of the property, along the property boundaries. Landscaping plants have been planted around the dwelling and associated structures,
- The nearest surface waterbody is the Waipapa Stream located on the western boundary of the property,

- The property was accessible to Haigh Workman and was suitable for investigation requirements, site conditions were overcast with showers on 17 July 2025, minor surface water ponding was observed near the western boundary of the piece of land, and
- The site is well maintained and tidy.

3.2 Geology, Hydrology and Hydrogeology

According to the GNS Science New Zealand Geology Web Map, 1:250,000 Scale, the site is underlain by the Kerikeri Volcanic Group, consisting of basalt lava, volcanic plugs and minor tuff.

A geological map of the site and surrounding area is provided below in Figure 3.

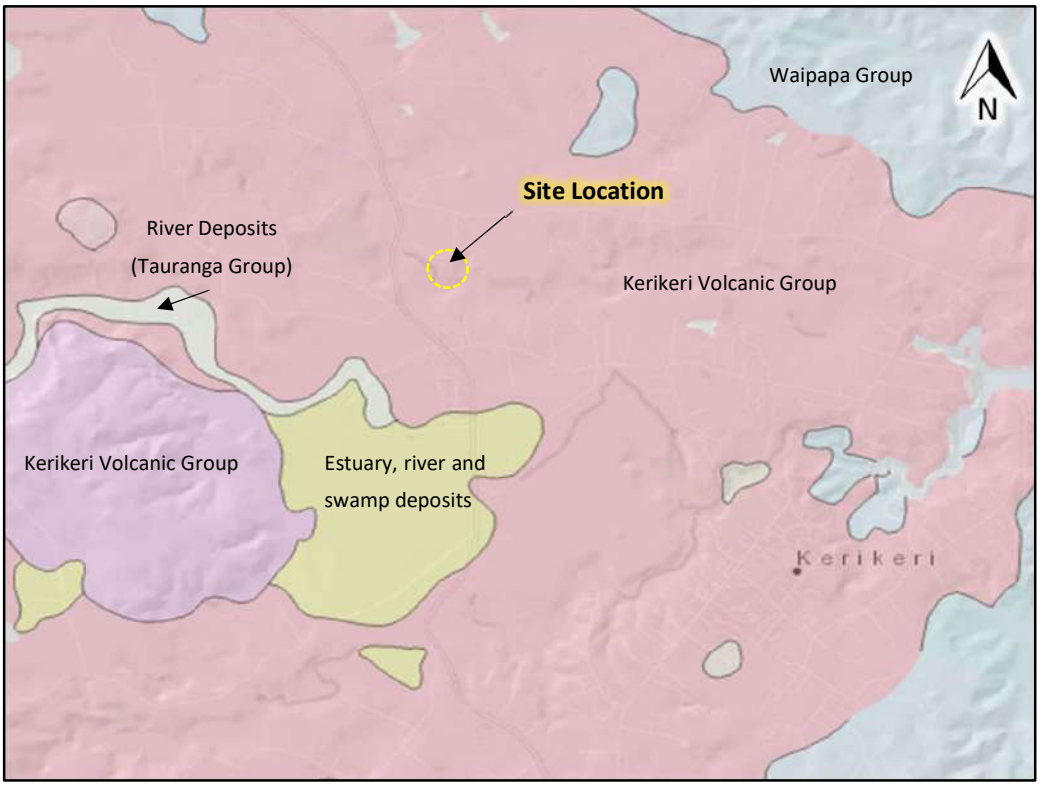


Figure 3: Geological Map *(Source: GNS Sciences Geology Website)*

The nearest surface water to the site is the Waipapa Stream located at the western boundary of the site. The Waipapa Stream flows east discharging into the Kerikeri Inlet.

The piece of land gently slopes from the middle of the site towards the towards the east and the west. Surface water runoff is anticipated to dissipate naturally through the vegetated area. Local groundwater flow is anticipated to be towards the Waipapa Stream.

Relevant information relating to nearby hydrological sources and potential flood risks are provided below in Table 2 and flood modelled areas are provided in below in Figures 4 and 5.

Table 2 - Hydrology and Flooding *(Source: NRC GIS WebMaps)*

	Presence / Location	Comments
Watercourses & Water Features within 500 m (Ponds, lakes etc)	The Waipapa Stream is located on the western boundary of the piece of land.	-
Flood Risk	The piece of land is shown on the NRC natural hazards map as land that is not subjected to flooding.	A flood hazard zone map is provided below in Figure 4. The piece of land is not subject to flooding.
Private wells within 200 m	None recorded.	Not applicable.
Source Protection Zones within 200 m	The piece of land is located above the Kerikeri aquifer.	-

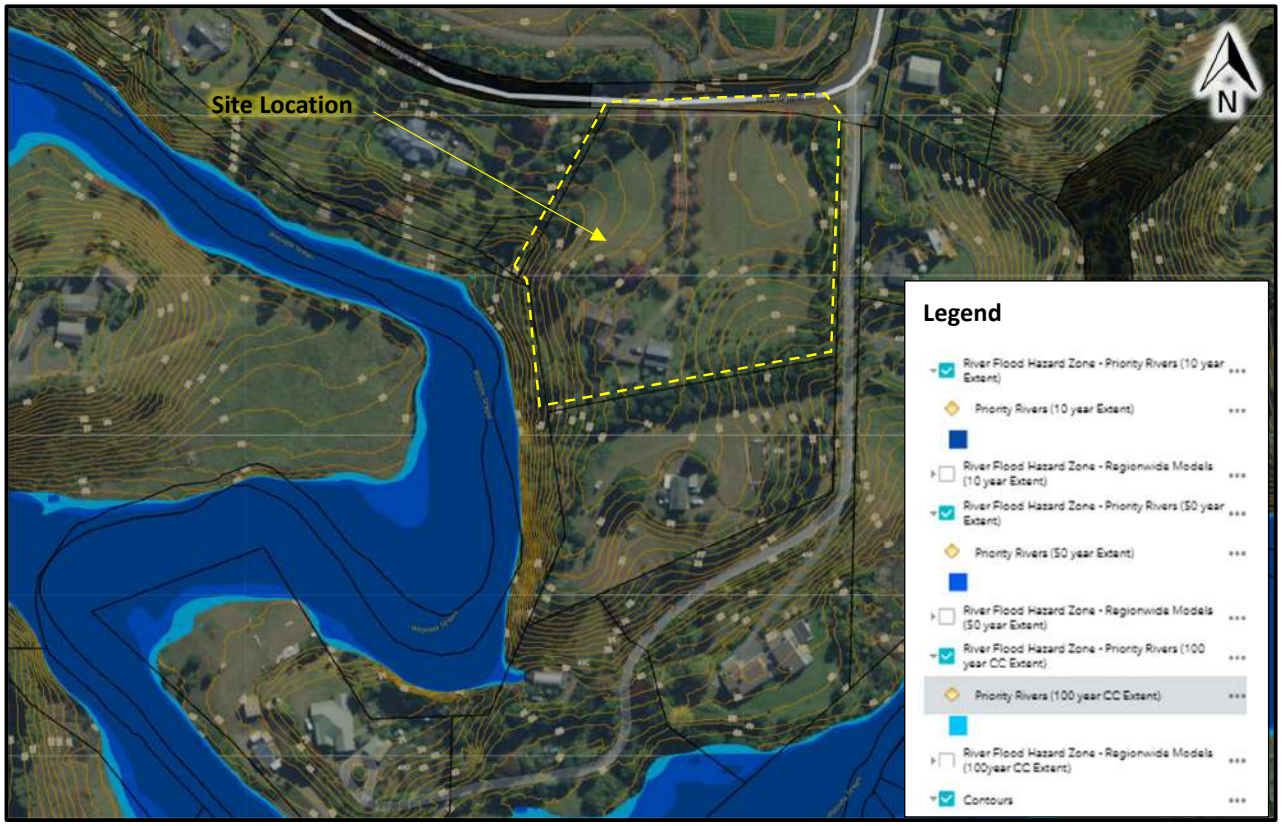


Figure 4: Flood Modelled Areas *(Source: NRC GIS Website)*

4 Historical Information

The history of the site was established through a review of historical aerial photography, Land Information New Zealand (LINZ) Certificates of Title, NRC Contamination Enquiry, and the FNDC Property Files.

4.1 Historical Aerial Photography

Historical aerial photography of the site was obtained from the Retrolens website (http://retrolens.nz/map) and Google Earth Pro. Photographs available for the subject area are dated from 1968 to 2023. A review of the historical aerial photography is provided below in Table 3 and historical aerial photographs are included in **Appendix C**.

Table 3 - Historical Aerial Photography review

Date	Source	Review
1968	Retrolens	• The piece of land and immediate surroundings are pastureland, • A large area of dense scrubland is visible approximately 150m east of the property, and • The nearest structure is located 340m to the northwest of the property.
1977	Retrolens	• The piece of land is similar to the 1968 aerial photograph, and • Horticultural land-use is visible to the west beyond the Waipapa Stream (approximately 50m from the closest point).
1982	Retrolens	• The piece of land and immediate surroundings are similar to the 1977 aerial photography (poor quality image).
2003	Google Earth Pro	• McCaughan Road is visible on the northern boundary of the piece of land, running from east to west and a gravel driveway is located on the eastern boundary of the piece of land running north to south, • Boundary and riparian planting is visible on the piece of land with the exception of the northern road frontage, • Horticultural land-use to west (beyond the Waipapa Stream) is no longer visible, • Horticultural land-use is visible to the north beyond McCaughan Road, a setback of approximately 20m is visible from the horticultural site to McCaughan Road, and • Rural residential development is visible immediately east and south of the piece of land.
2007	Google Earth Pro	• A dwelling and associated structures are visible on the piece of land, • Horticultural land-use to the north (beyond McCaughan Road) is no longer visible, and • Further rural residential development is visible immediately east and west of the piece of land.
2013	Google Earth Pro	• The piece of land is similar to the 2007 aerial photograph, and • Further rural residential development is visible immediately east of the piece of land.
2019	Google Earth Pro	• The piece of land is similar to the 2007 and 2013 aerial photography, and • The surrounding area is similar to the 2013 aerial photography.
2023	Google Earth Pro	• The site is similar to the 2007 through 2019 aerial photography,

		• Horticultural land-use (market gardens) is visible to the north (beyond McCaughan Road), setbacks of approximately 20m are visible from the horticultural site to McCaughan Road, and • Further rural residential development is visible approximately 120m west of the piece of land (at its closest point).

The most recent aerial photograph was sourced from Google Earth Pro and is dated November 2023. Site conditions observed in the November 2023 aerial photograph are similar to those observed during the 17 July 2025 site walkover.

4.2 Certificates of Title

A review of Certificates of Title held by LINZ was completed for the site. No additional potential HAIL activities were identified through the title review.

Copies of the Certificates of Title are provided in **Appendix D**.

4.3 Contamination Enquiry

A site contamination enquiry was requested from the NRC Contaminated Land Management Team.

The Contamination Enquiry did not identify any current of historical HAIL activities for the site. It is noted, however, that historical aerial photography of the site shows the presence of horticultural land-use immediately north of the site, therefore, HAIL category A.10. (Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glasshouses or spray sheds) may apply.

The Contamination Enquiry also reports records of contaminated sites, closed landfills, pollution incidents, bores, industrial trade process consents and air discharges and air quality permitted activities within approximately 200m of the site.

Based on information in the Contamination Enquiry, there are no permitted bores within 200m of the site.

A copy of the Contamination Enquiry is attached in **Appendix E**.

4.4 Property File

A Property File request was lodged with FNDC. Relevant information including Resource Consents and Building Consents / Permits issued for developments that have occurred on-site is summarised below in Table 4. Due to the large size of the documents summarised below in Table 4, documents will be made available on request.

Table 4 – Relevant Property Files

Date	Details	Owner / Applicant	Description
February 1999	Subdivision Consent (RC 1970077)	Totara Green Estate Limited	Subdivision Consent for development of multiple Lots.
June 1999	Subdivision Consent (RC1990864)	R Richardson	Subdivision Consent for development of multiple Lots.

December 2004	Building Consent (ABA 20051037)	Robert Vellenoweth & Colleen Wardlaw	Building Consent for the construction of a dwelling and associated shed.

5 HAIL Assessment

Based on previous land-use and development information for the property, Table 5 below summarises the potential for contamination associated with historical and current activities offsite with the potential to cause contamination to the piece of land that were identified to the north of the site, where horticultural land-use has been undertaken historically and today.

Table 5 – Site Activities / Land Uses and Potential HAIL categories

Date	HAIL Activity	Primary Source	Potential Contaminants	Investigation Locations
Between 1982 – c. 2007 and c.2019 - present	A.10 / H – Potential bulk storage and use of pesticides / potential overspray of pesticides from nearby properties.	Site walkover and Historical Aerial Photography	Metals & OCP	Northern boundary of piece of land in proximity to former and current horticultural land-use area

6 Soil Contamination Investigation

6.1 Identified Contaminants of Concern

The site was identified for potential soil contamination during the review of historical documents and the 17 July 2025 site walkover. Relevant to the HAIL assessment and site history, the potential CoC for the piece of land included:

- Metals, and
- Organochlorine Pesticides (OCP).

6.2 Soil Investigation

Soil sampling from the site piece of land was undertaken on 17 July 2025 and comprised soil sampling by a SQEP from Haigh Workman. Sampling locations are provided in **Appendix A**. Photographic documentation from the investigation is provided in **Appendix B**.

Minor ground disturbance for sampling activities was conducted as a permitted activity under the NES-CS regulation 8(2), where soil sampling is defined within regulation 5(3).

Soil sampling consisted of targeted sampling of the northern boundary of the piece of land within proposed Lots 1 and 2 to the north of the property.

No further sampling was undertaken, proposed Lots 3 and 4 have no history of HAIL activities and are considered to not be within the proximity of a HAIL activity and are therefore not covered under the NES-CS.

Nine shallow soil samples were collected and analysed as two composite samples (consisting between three and four samples), as well two soil samples analysed as individual samples, including one duplicate soil

sample for Quality Assurance / Quality Control (QA/QC) purposes. A total of four soil samples were submitted to the laboratory (Hills) for the analysis of Metals and OCP.

The exposure scenarios for the priority contaminants listed in Section 6.1 include soil ingestion, dermal exposure and inhalation. Soil samples were retrieved from below the surface between 0 – 0.075m bgl.

Soil sample descriptions are provided in **Appendix F**.

During the fieldwork, access was made available to Haigh Workman across the whole investigation area.

6.3 Soil Sampling Protocol

Shallow soil samples were collected from a spade or hand trowel (0 – 0.075m bgl) from across the site investigation area. Soil sampling equipment was decontaminated between sampling locations and disposable nitrile gloves were used and replaced between sampling locations in order to prevent cross-contamination. All samples were collected in accordance with strict environmental sampling protocols to ensure reliable and representative results.

All sample containers and preservatives, where applicable, were supplied by the subcontract laboratory and were consistent with the specifications provided in Section 6.4 – Sample Handling, of the Contaminated Land Management Guidelines No. 5 – Site Investigation and Analysis of Soils (MfE, Revised 2021). All samples were labelled with unique identifiers indicating the sampling location. Samples were couriered directly to the laboratory (Hills) under continuous Chain of Custody (COC) documentation. Each COC form had a unique laboratory number.

6.3.1 Composite Testing

Composite sampling involves collecting individual samples from different locations, typically between two and four samples, and mixing an equal mass of each of the samples (subsamples) together to form one composite sample (undertaken at the laboratory). A composite sample can then be analysed, and the results will represent the average of the constituent sub-samples.

Composite sampling was appropriate for this investigation because:

- The investigation was focussed on non-volatile contaminants,
- Sub-samples were the same soil type, same exposure to contaminants and similar depth
- The maximum number of sub-samples composited together was four, and
- The composite was assembled in the laboratory and not in the field.

When the average concentration represented by the composite sample exceeds the adopted guideline criteria, analysis of individual samples should be undertaken to clarify the contaminant distribution.

6.3.2 Duplicate samples

A duplicate sample involves collecting two separate samples from a single sample location, storing these in separate containers, and submitting them for analysis to the laboratory as two separate samples. Samples are given separate sample numbers, so the laboratory does not know the sample is a duplicate.

A duplicate sample measures the contaminant concentration difference between the two samples because of soil heterogeneity, the variability or error within the laboratory analysis and the variability or error

related to field sampling technique. The results of duplicate variance analysis are presented in Section 9.1. One duplicate for every 20 results was adopted.

7 Regulations

Within the Northland Region, investigations of contaminated and potentially contaminated sites are directed by rules under the following regulations:

- MfE NES-CS and Petroleum Hydrocarbon Guidelines (PHG) – National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (MfE, Revised 2021) and Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand (MfE, revised 2011), and
- New Zealand Guidelines for Assessing and Managing Asbestos in Soil (2017).

7.1 Soil Investigation

The Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS) 2011 Regulations, came into force on 1 January 2012, with Contaminated Land Management Guidelines revised in 2011 (No.2) and 2021 (No. 1 and 5). The NES-CS for contaminants in soil incorporates by reference MfE contaminated land documents, including MfE Contaminated Land Management Guidelines for the investigation, assessment and reporting of contaminated land within New Zealand. These documents aim to provide national consistency in the reporting of contaminated site information. These documents are:

- Contaminated Land Management Guidelines (No. 1, 2 and 5),
- HAIL,
- Methodology of Deriving Soil Guideline Values Protective of Human Health,
- Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand, and

Copies of the above guideline documents are available at www.mfe.govt.nz.

7.2 Background Concentrations Assessment

Background levels are particularly relevant when considering whether soils can be considered as 'Cleanfill'. Results have been assessed against the following criteria:

- Maanaki Whenua Landcare Research, Predicted Background Soil Concentrations.

Guideline assessment criteria is included with the Soil Analytical Results summarized below in Table 6.

7.3 New Zealand Guidelines for Assessing and Managing Asbestos in Soil

The New Zealand Guidelines for Assessing and Managing Asbestos in Soil were published in 2017. The guidelines provide direction around identifying, assessing and managing Asbestos in soil in New Zealand and establish Human Health Soil Guideline Values (SGV) for Asbestos in soil.

Soil samples collected were not analysed for Asbestos as part of this investigation.

8 Assessment Criteria

For this assessment, soil analytical results were compared against:

- NES-CS Human Health criteria for Rural-Residential (10% produce) land-use, and
- Upper 95% Predicted Background Soil Concentrations for Soils LRIS.

8.1 Analytical Results

Nine shallow soil samples were collected and analysed as two composite samples (consisting between three and four samples), as well two soil samples analysed as individual samples, including one duplicate soil sample for QA/QC purposes. A total of four soil samples were submitted to the laboratory (Hills) for the analysis of Metals and OCP.

Laboratory analytical results reported:

- All CoC concentrations were below applicable MfE Rural Residential (10% produce) Human Health criteria,
- Metals concentrations were above Background Soil Concentrations in two of the four soil samples analysed, and
- OCP concentrations were below laboratory MDL in all soil samples analysed.

Laboratory analytical results are summarised below in Table 6. Soil sampling locations are provided in Haigh Workman Drawing 24 095 / 2 provided in **Appendix A**. Laboratory analytical results and COC documentation is provided in **Appendix G**.

Table 6 – Soil Analytical Results

		Test Analysis Levels (mg/kg)				MfE	
Sample Reference		Composite # 1 (SS01-SS04)	Composite # 2 (SS07-SS09)	SS05	SS06 *(duplicate of SS05)*	NES [1]	Background Soil Concentrations [2]
Sample Soil Type		SILT (Topsoil)					
Sample Date		17 July 2025					
Sample Depth (m)		0-0.075					
Metals	As	2	2	< MDL	3	20	4.1
	Cd	0.32	0.21	0.16	0.16	3	0.2
	Cr	152	193	188	200	460	765
	Cu	25	24	21	21	10,000	27.9
	Pb	5.7	4.5	3.7	4.4	210	11.4
	Ni	15	15	10	10	400 [3]	590
	Zn	17	24	23	27	7,400 [3]	47.5
OCP	∑DDT	< MDL	< MDL	< MDL	< MDL	45	-
	Aldrin	< MDL	< MDL	< MDL	< MDL	1.1	-
	Dieldrin	< MDL	< MDL	< MDL	< MDL	1.1	-
	Lindane	< MDL	< MDL	< MDL	< MDL	33 [4]	-

Notes: Concentration: Values below accepted Background Levels (Metals) and / or laboratory Method Detection Limit (MDL)
Concentration: Values above accepted Background Levels and / or laboratory MDL but in compliance with relevant criteria
Concentration: Values above relevant acceptance criteria

[1] NES – MfE NES Human Health Criteria for Rural Residential (10% produce) use (MfE, 2012).
[2] Manaaki Whenua Landcare Research – Trace element background concentration explorer (Landcare Research, 2023) (https://experience.arcgis.com/experience/4e6e25842cc6427ca850bdf644010922/page/Explorer/).
[3] NEPM – Guideline on Investigation Levels for Soil and Groundwater (Schedule B1) for Residential (A) (Table 1A(1)) sites (NEPM, revised 2013).
[4] MfE Soil Guidelines for former sheep-dip sites for Rural / Lifestyle sites (MfE, 2006).

9 Quality Assurance / Quality Control

Quality assurance (QA) and quality control (QC) are essential elements for site investigation. QA relates to the planned activities implemented so that quality requirements will be met, and QC relates to the observation techniques and activities used to demonstrate the quality requirements have been met. Soils were inspected for visual and olfactory indicators of contamination and logged and are attached in **Appendix F**.

Between samples equipment was decontaminated by brushing, spraying with clean potable water and rinsing with high purity de-ionised water. To reduce the potential for cross-contamination, each sample was taken using disposable nitrile gloves that were discarded following the collection of each sample.

Appropriate Personal Protective Equipment (PPE) was used by Haigh Workman staff including disposable nitrile gloves, highly visible vest and steel toe capped boots. All disposable PPE was treated as contaminated and disposed of appropriately.

Soil samples were placed in sample containers supplied by Hill Laboratories, which were then capped, labelled with a unique identifier and placed in a chilly bin prior to transport by Courier. Standard chain of custody documentation is enclosed in **Appendix G**.

Any laboratory analysing samples of contaminated media must be able to show it has in-house quality assurance procedures and quality control checks (QA / QC) to ensure accurate testing and reporting of analyses. IANZ, or equivalent overseas accreditation, provides confidence that the receiving laboratory has appropriate QA / QC procedures in place. Eurofins Environmental Testing NZ Limited[5] is IANZ and NZS/ISO/IEC 17025:2018 accredited, and was the laboratory elected for testing.

Following receipt of the samples by Hill Laboratories, the samples were scheduled for analysis of the identified contaminants of concern. Records of laboratory QA / QC and the results of chemical testing including methodologies as received from the laboratory and Chain of Custody documentation, are presented in **Appendix G**.

9.1 QA / QC Relative Percentage Difference

One duplicate soil sample set (SS06 as a duplicate of SS05) was collected for QA / QC purposes. The duplicate soil samples were collected using the same soil sampling procedures and analysed at the laboratory (Hills) using the same sample preparation and analysis procedures as the original soil samples. One QA / QC sample was collected for every 20 soil samples collected.

Relative Percentage Difference (RPD) calculations for analytes reported above the laboratory MDL ranged from 0 to 17.3%. RPD values for the duplicate pairs met Haigh Workman QA / QC acceptance criteria of less than 50%.

QA / QC results are presented below in Table 7. Laboratory analytical results are provided in **Appendix G**.

[5] Eurofins Environmental Testing NZ Limited, an IANZ[5] and NZS/ISO/IEC 17025:2018[5] accredited laboratory incorporating the aspects of ISO 9000:2015[5] relevant to testing laboratories. International Accreditation New Zealand which represents New Zealand in the International Laboratory Accreditation Cooperation (ILAC). New Zealand Standard, General Requirements for the Competence of Testing and Calibration Laboratories, 2018. ISO9000: Quality Management Systems.

Table 7 – Quality Assurance / Quality Control Results

Contaminants of Concern		Results (mg/kg)		RPD (%)
		SS05	SS06	
Metals	As	< MDL	3	-
	Cd	0.16	0.16	0.0
	Cr	188	200	6.2
	Cu	21	21	0.0
	Pb	3.7	4.4	17.3
	Ni	10	10	0.0
	Zn	23	27	16.0
OCP	∑DDT	< MDL	< MDL	-
	Aldrin	< MDL	< MDL	-
	Dieldrin	< MDL	< MDL	-
	Lindane	< MDL	< MDL	-

MDL – Method Detection Limit mg/kg – milligrams per kilogram

RPD – Relative Percentage Difference

10 Discussion

10.1 Conceptual Site Model

The assessment provided below in Table 8 expands on the potential sources of contamination identified within the area of the proposed subdivision and future rural residential development and the exposure pathways. It is based on the potential effects of the proposed land-use and soil disturbance activities on human health and the environment associated with Rural Residential (10% produce) land-use.

Soil sampling has confirmed that there are no significant contaminated land related constraint on subdivision and future development of the land for rural residential purposes and that it is highly unlikely that there is a risk to human health or the environment if the activity is done to the piece of land.

Table 8 – Conceptual Site Model

Potential Source	Potential Receptors	Potential Pathways	Assessment
Contaminated Soils (Metals [Cd]).	Construction, maintenance / excavation workers / future site user(s).	Inhalation of dust / ingestion and dermal contact with exposed soils.	Incomplete Pathway Contaminant concentrations are below applicable Human Health criteria.
CoC across remainder of the site (below Background Criteria and / or laboratory MDL)	Construction, maintenance / excavation workers / future site user(s).	Inhalation of dust / ingestion and dermal contact with exposed soils.	Incomplete Pathway: Contaminant concentrations are below applicable Human Health criteria.

11 Regulatory Requirements

11.1 NES-CS

It is considered that the proposed subdivision and possible future rural residential development is covered under the NES-CS regulations.

The NES-CS describes a 'piece of land' as the piece of land that has had, currently has, or most likely has had activities listed on the HAIL and soil disturbance is proposed.

11.1.1 Subdivision and Future Development

Based on the findings from this investigation, this proposal is a Permitted Activity (8) under the NES-CS as this PSI with Limited Soil Sampling states the soil contamination does not exceed the applicable standard in regulation 7.

Table 9 below presents potential Resource Consent requirements for the proposed activity under the provisions of the NES-CS. This investigation presents factual information for the site. Matters of control and discretion, however, rest with the consenting authority (FNDC) based on their assessment of this report. It would be appropriate to seek clarification of FNDC or an Environmental Planning Specialist for further information on resource consenting requirements.

Table 9 – Potential Resource Consent Requirements

Potential Source	Potential Applicable Planning Rules
NES-CS	PERMITTED ACTIVITY (subject to requirements under Rule 8) • A PSI report (this investigation) has been prepared, • The consent authority must have the report, • Contamination concentrations are below NES-CS Rural-Residential (10% Produce) Human Health criteria, and • Conditions of Rule 8 must be complied with.

11.1.2 Subdivision and Future Development

The NES-CS describes a 'piece of land' as the area that has had, currently has, or has most likely has had activities listed on the HAIL:

8(3) Disturbing Soil

- *8(3)(c) The volume of the disturbance of soil of the piece of land must be no more than 25m3 per 500m2.*
- *8(3)(d)(ii) Soil must not be taken away in the course of the activity, except that for all other purposes combined, a maximum of 5m3 per 500m2 of soil may be taken away per year.*
- *8(3)(f) The duration of the activity is likely to be longer than two months.*

The *'piece of land'* for this investigation is the sampled area within proposed Lot 1 and Lot 2 (the northern half of proposed Lot 1 and Lot 2, the southern half of proposed Lot 1 and Lot 2 is outside of the sampling area and soil disturbance volumes do not apply):

- The sampled area within proposed Lot 1 is an area of 2,000m^2, this allows for 100m^3 soil disturbance and 20m^3 soil removal (per year) as a Permitted Activity under the NES-CS, and

- The sampled area within proposed Lot 2 is an area of 2,140m^2, this allows for 107m^3 soil disturbance and 22m^3 soil removal (per year) as a Permitted Activity under the NES-CS.

No development plans are available at the time of the preparation of this investigation. As future development plans are not available, a SQEP familiar with this report should review future proposed plans as they are developed to ensure that this report is applicable for the re-development being proposed.

11.2 Northland Regional Council

As per Rule C.6.8.1 of the Proposed Regional Plan for Northland, copies of site investigation reports must be provided to the regional council within three months of completion of the investigation (reports can be sent to: contamination@nrc.govt.nz).

12 Conclusion & Recommendations

This PSI w/LSS was carried out for the site in accordance with the scope of work and current applicable regulations. This report has been prepared in accordance with the NES-CS, MfE Contaminated Land Management Guidelines and FNDC requirements to determine the extent of current and / or historical HAIL activities on and near to the piece of land and the potential for soil contamination, and the associated risk to human health and the environment. The investigation and reporting have been prepared, reviewed and authorised by a SQEP, as required under the NES-CS.

Historical information available for the site and observations from the 17 July 2025 site walkover indicate that the following HAIL activities have, or potentially have, or occurred near the piece of land:

- Potential bulk storage and use of pesticides / potential overspray of pesticides from nearby properties (HAIL Cat. A. 10 / H).

Nine shallow soil samples were collected and analysed as two composite samples (consisting between three and four samples), as well two soil samples analysed as individual samples, including one duplicate soil sample for QA/QC purposes. A total of four soil samples were submitted to the laboratory (Hills) for the analysis of Metals and OCP.

Laboratory analytical results reported:

- All CoC concentrations were below applicable MfE Rural Residential (10% produce) Human Health criteria,
- Metals concentrations were above Background Soil Concentrations in two of the four soil samples analysed, and
- OCP concentrations were below laboratory MDL in all soil samples analysed.

Based on these findings :

- Soil sampling has confirmed that there are no significant contaminated land related constraint on redevelopment of the land for residential purposes and that it is highly unlikely that there is a risk to human health if the activity is done to the piece of land,
- Soil / fill material with Metals concentrations above Background Levels is not considered as 'Cleanfill' for disposal purposes:
    - If material exceeding Background Level criteria must be removed from site, it is to be disposed of at a facility licensed to accept such materials,

  - Material exceeding Background Level criteria could be retained and re-used on-site as a sustainability option and to reduce disposal costs if suitable.
- Apart from fill material / soils with Metals concentrations above Background Level criteria, fill material / soils that are required to be removed from site could be disposed of as 'Cleanfill', with approval from the receiving fill operator, and
- Any visual / olfactory evidence of contamination discovered during site works must be segregated and analysed by a Suitably Qualified and Experienced Practitioner prior to disposal.

It is considered that proposed subdivision and future proposed development is covered under the National Environmental Standard for Contaminants in Soils regulations. The National Environmental Standard for Contaminants in Soils describes a 'piece of land' as the piece of land that has had, or currently has, or most likely has had, activities listed on the Hazardous Activities and Industries List and soil disturbance is proposed.

The proposed subdivision and future proposed development will be a Permitted Activity (Rule 8) under the National Environmental Standard for Contaminants in Soils as this Preliminary Site Investigation with Limited Soil Sampling Report states the soil contamination does not exceed the applicable standard in regulation 7.

As future development plans are not available, a SQEP familiar with this report should review the proposed plans as they are developed to ensure that this report is applicable for the future development being proposed.

13 Unverified Material Discovery

Should visual and / or olfactory evidence of gross contamination be identified during excavation works. It is recommended that works cease in that area and a SQEP familiar with the site attends to inspect the impacted soils. If required, the SQEP will undertake sampling to confirm the level and scope of contamination. The area should also be physically isolated using high visibility fencing if practicable.

Indications that uncontrolled filling with waste and / or unverified material may have occurred on site include:

- Buried rubbish,
- Buried construction or demolition waste,
- Unanticipated soil colours or odours,
- Buried tanks or drums, and
- Encountering materials that may contain asbestos, including fibrous building materials and fibre cement construction products.

Site management should brief operatives onsite of the above signs during site induction.

14 Practitioner Certifying Statement

I, Aaron Thorburn of Haigh Workman Limited certify that:

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:

- Undertaken by a Suitably Qualified and Experienced Practitioner,
- Reported on in accordance with the current edition of the Contaminated Land Management Guidelines No. 1 – Reporting on contaminated sites in New Zealand, and
- The report has been certified by a Suitably Qualified and Experienced Practitioner.

For activities under s.8(4) of the NES-CS the 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 s.5(5) and s.5(6) is described as:

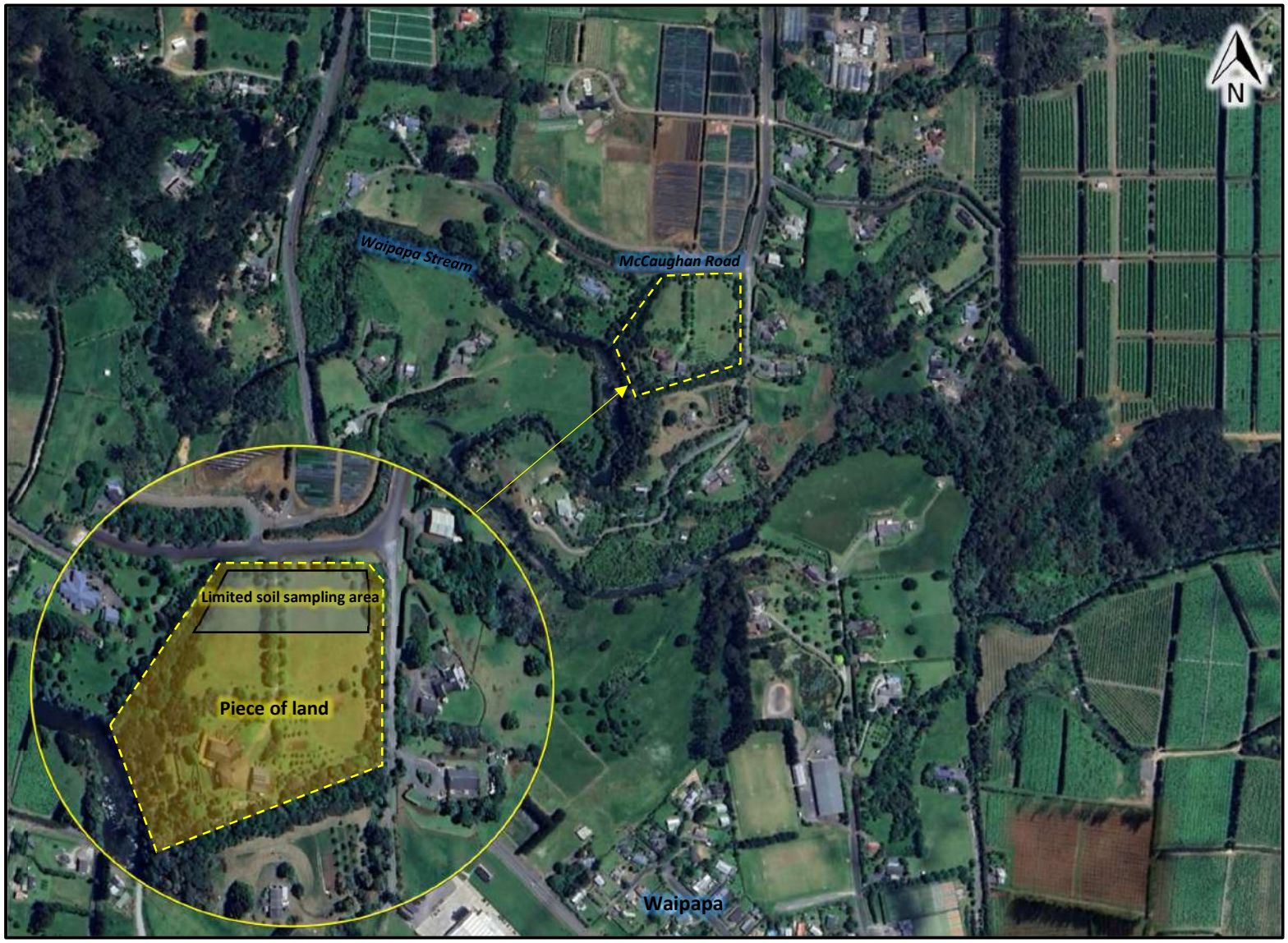
- Subdividing land, and
- Changing the use of the piece of land.

I have completed a Bachelor of Applied Science (Environmental). I have over 10 years' experience in contaminated land management across New Zealand

End of Report – Appendices to follow

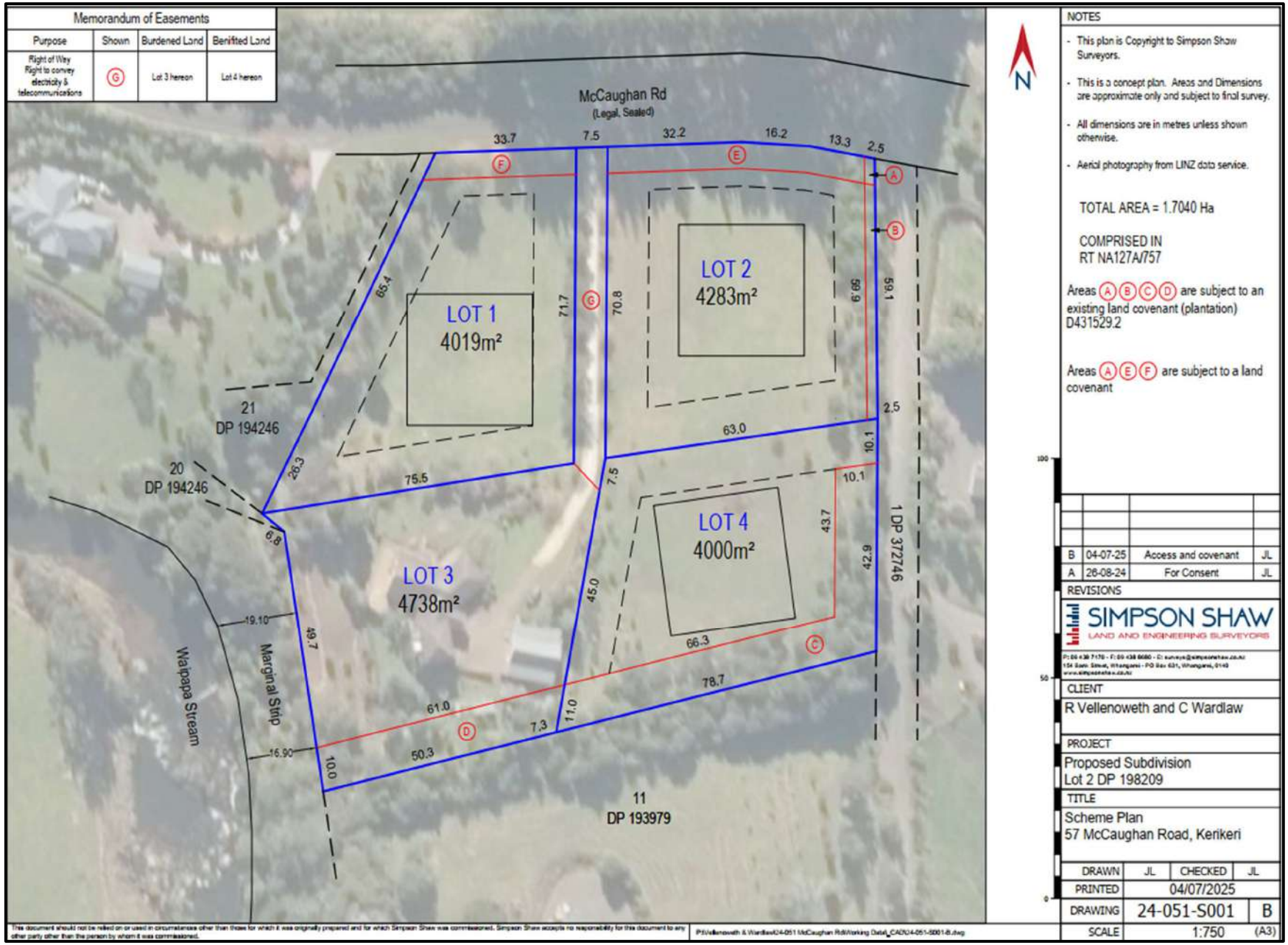
Appendix A – Site Investigation Plans

Drawing No.	Title
24 095 / 1	Site Location Plan
24 095 / 2	Sample Location Plan
24 095 / 3	Proposed Subdivision Plan (Simpson Shaw Surveyors)



24 095 / 1 – Site Location Plan

24 095 / 2 – Sample Location Plan



24 095 / 3 – Proposed Subdivision Plan

Appendix B – Photographic Documentation

HAIGH WORKMAN LTD
Civil & Structural Engineers

Photograph 1: View from near the northeast corner of the piece of land looking across towards the west. The driveway running north / south runs through the middle of the piece of land, McCaughan Road is visible at the top left of the photograph.

Photograph 2: View from north of the existing dwelling in the southwest corner of the site looking north towards McCaughan Road over the proposed Lot 1 area. Soil sample Composite # 1 collected in this area (SS01-SS04).

<u>Photograph 3</u>: View of the northwest corner of the piece of land or proposed Lot 2, McCaughan Road is visible along the northern boundary of the piece of land. Soil sample Composite # 2 (SS07-SS09) and individual samples SS05 and SS06 collected in this area.

<u>Photograph 4</u>: View from the eastern boundary of the piece of land looking southwest towards the existing dwelling and associated structures (proposed Lot 3), a small area of proposed Lot 4 is visible to the left of the photograph.

Appendix C - Historical Aerial Photography

NOTE: Site boundaries indicative only

HAIGH WORKMAN LTD
Civil & Structural Engineers

Retrolens

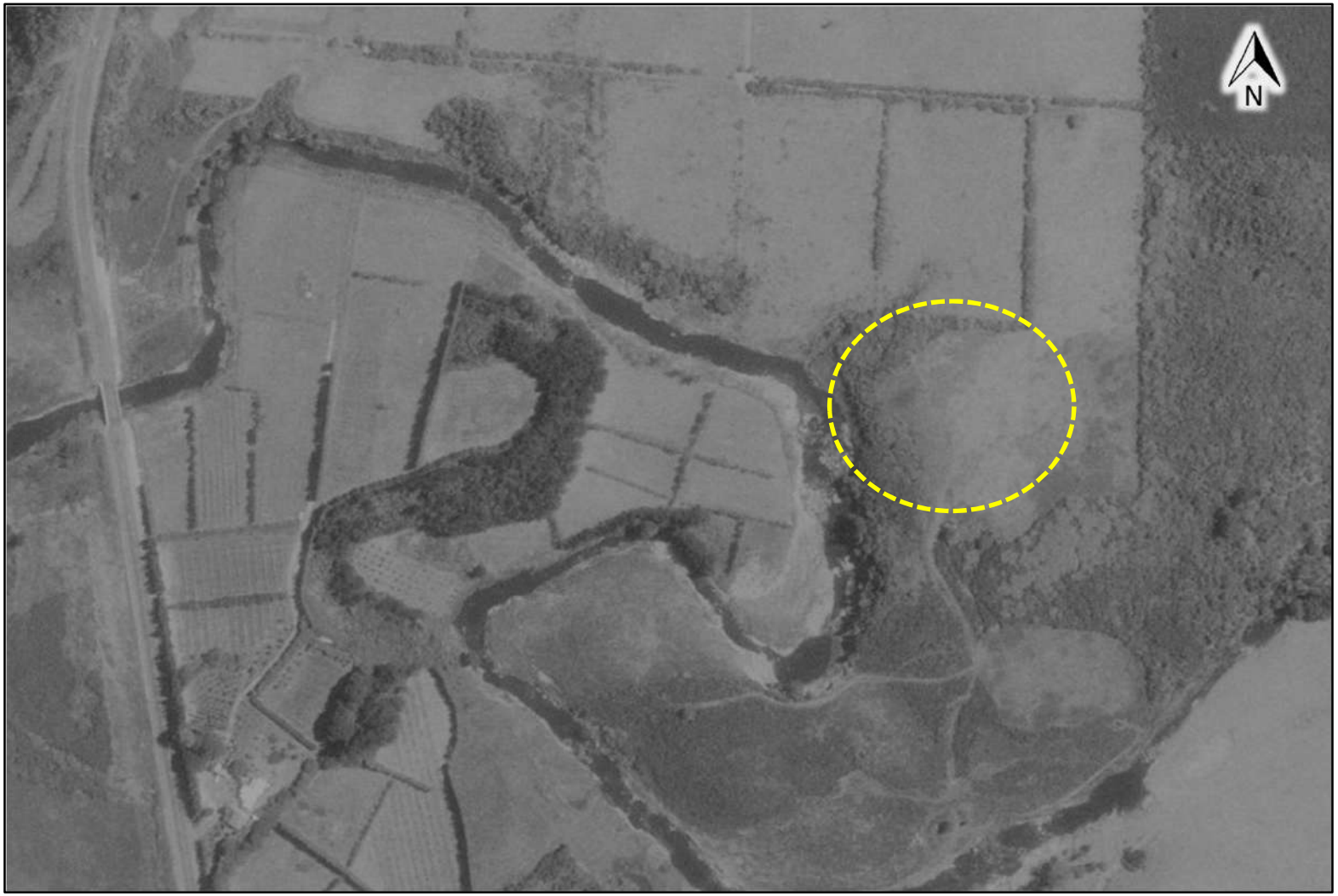
1968

HAIGH WORKMAN LTD
Civil & Structural Engineers

Retrolens

1977

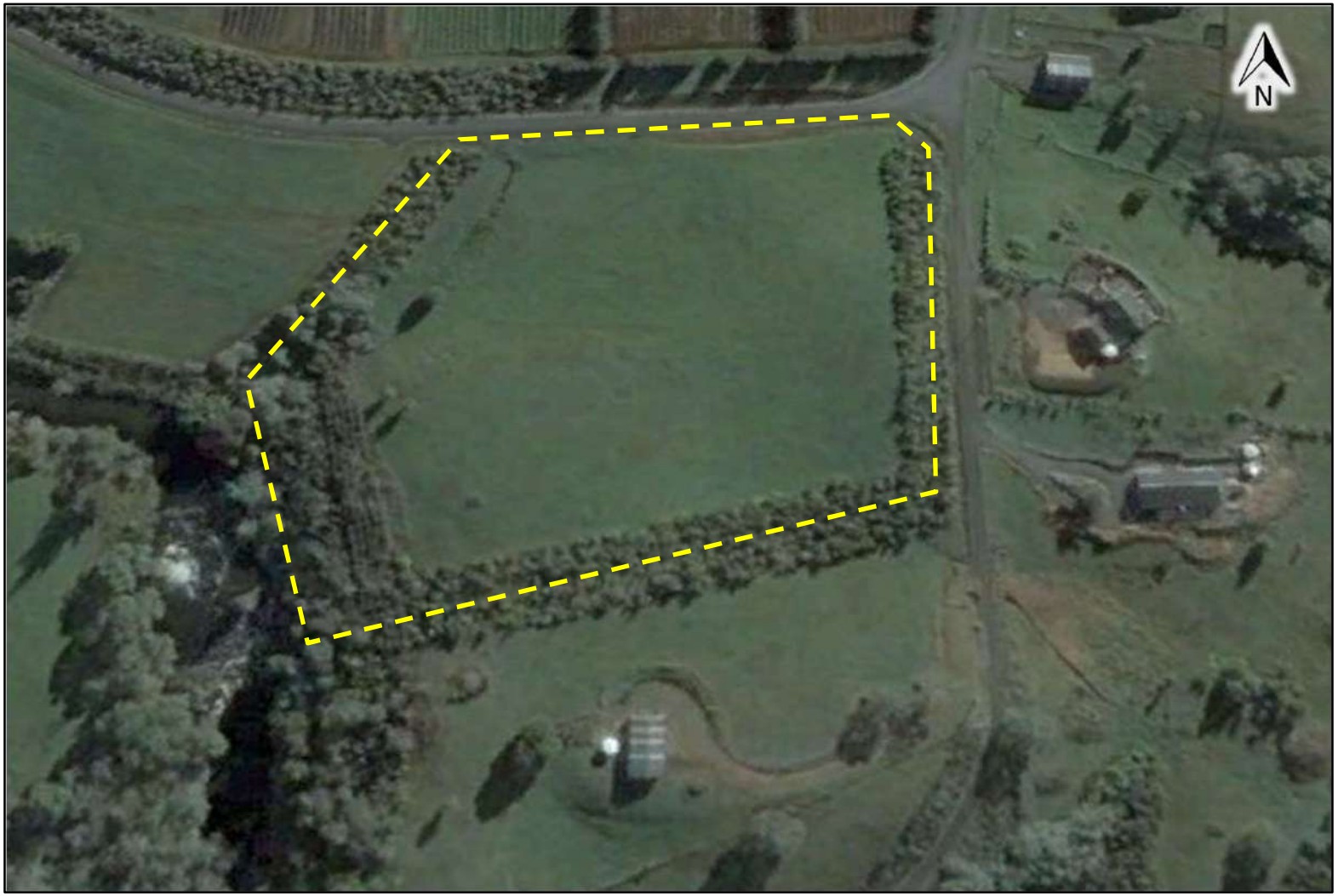
HAIGH WORKMAN LTD
Civil & Structural Engineers



Retrolens

1982

HAIGH WORKMAN LTD
Civil & Structural Engineers



Google Earth Pro

2003

HAIGH WORKMAN LTD
Civil & Structural Engineers

Google Earth Pro

2007

HAIGH WORKMAN LTD
Civil & Structural Engineers

Google Earth Pro

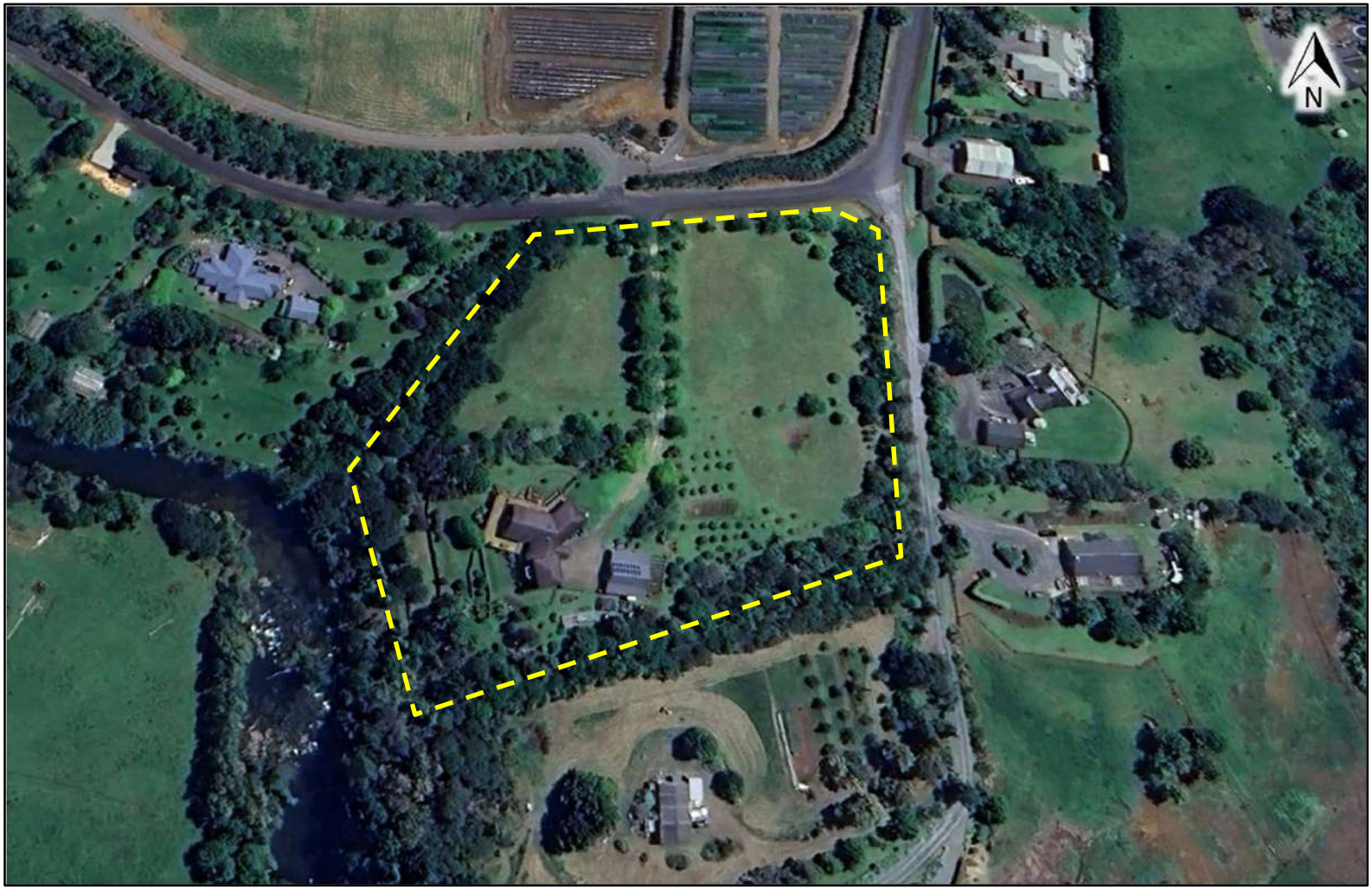
2013

HAIGH WORKMAN LTD
Civil & Structural Engineers

Google Earth Pro

2019

HAIGH WORKMAN LTD
Civil & Structural Engineers



Google Earth Pro

November 2023

Appendix D – Certificate of Title

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Historical Search Copy

R.W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier **NA127A/757**

Land Registration District **North Auckland**

Date Issued 10 November 1999

Prior References
NA123A/455

Estate Fee Simple

Area 1.7040 hectares more or less

Legal Description Lot 2 Deposited Plan 198209

Original Registered Owners

Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft

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Interests

Excepting all minerals within the meaning of the Land Act 1924 on or under the land

Appurtenant hereto is a right of way and rights to convey water, transmit electricity and telecommunications specified in Easement Certificate D127397.5 - 7.4.1997 at 2.34 pm

The easements specified in Easement Certificate D127397.5 are subject to Section 243 (a) Resource Management Act 1991

Fencing Covenant in Transfer D150307.1 - 30.5.1997 at 11.19 am

D390811.3 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - 20.5.1999 at 3.26 pm

Appurtenant hereto is a right to drain water specified in Easement Certificate D390811.10 - 20.5.1999 at 3.26 pm

The easements specified in Easement Certificate D390811.10 are subject to Section 243 (a) Resource Management Act 1991

Fencing Covenant in Transfer D431529.2 - 17.9.1999 at 1.42 pm

Land Covenant in Transfer D431529.2 - 17.9.1999 at 1.42 pm

D446353.1 Consent Notice pursuant to Section 221(1) Resource Management Act 1991 - produced 1.11.1999 at 3.19 and entered 10.11.1999 at 9.00 am

Reference:
Prior CT: 123A/455
Document No.: D446353.2

LT69

MINERALS EXCEPTED

127A/757

REGISTER

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT 1952

This Certificate dated the 10th day of November One Thousand Nine Hundred and Ninety Nine under the seal of the Registrar-General of Land, New Zealand, for the Land Registration District of NORTH AUCKLAND
WITNESSETH that **KERI FLOWERS LIMITED**
is seised of an estate in **fee simple** (subject to such reservations, restrictions, encumbrances and interests as are notified by memorial endorsed hereon) in the land hereinafter described, delineated on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 1.704 hectares, more or less being **LOT 2 DEPOSITED PLAN 198209 excepting all minerals within the meaning of the Land Act 1924 on or under the land**

NEW ZEALAND REGISTRAR-GENERAL OF LAND

for Registrar-General of Land

Appurtenant hereto are a right of way and rights to transmit electricity & telecommunications & convey water over part Lot 10 marked C DP 179464 CT110C/922 as specified in Easement Certificate D127397.5

The above easements are subject to Section 243 (a) Resource Management Act 1991- 07.04.1997 at 2.34

Fencing covenant in Transfer D150307.1 – 30.05.1997 at 11.19

D390811.3 Consent Notice under Section 221(1) Resource Management Act 1991 by Far North District Council – 20.05.1999 at 3.26

Appurtenant hereto is a right to drain water over part Lot 14 marked C DP 194246 CT123A/748 as specified in Easement Certificate D390811.10

The above easement is subject to Section 243 (a) Resource Management Act 1991 - 20.05.1999 at 3.26

Fencing covenant in Transfer D431529.2

Land covenant in Transfer D431529.2

D431529.3 Mortgage to Mortgage Financier Nominees Limited
DISCHARGED 30.1.2001
D575623
All 17.09.1999 at 1.42

D446353.1 Consent Notice under Section 221(1) Resource Management Act 1991 by Far North District Council.

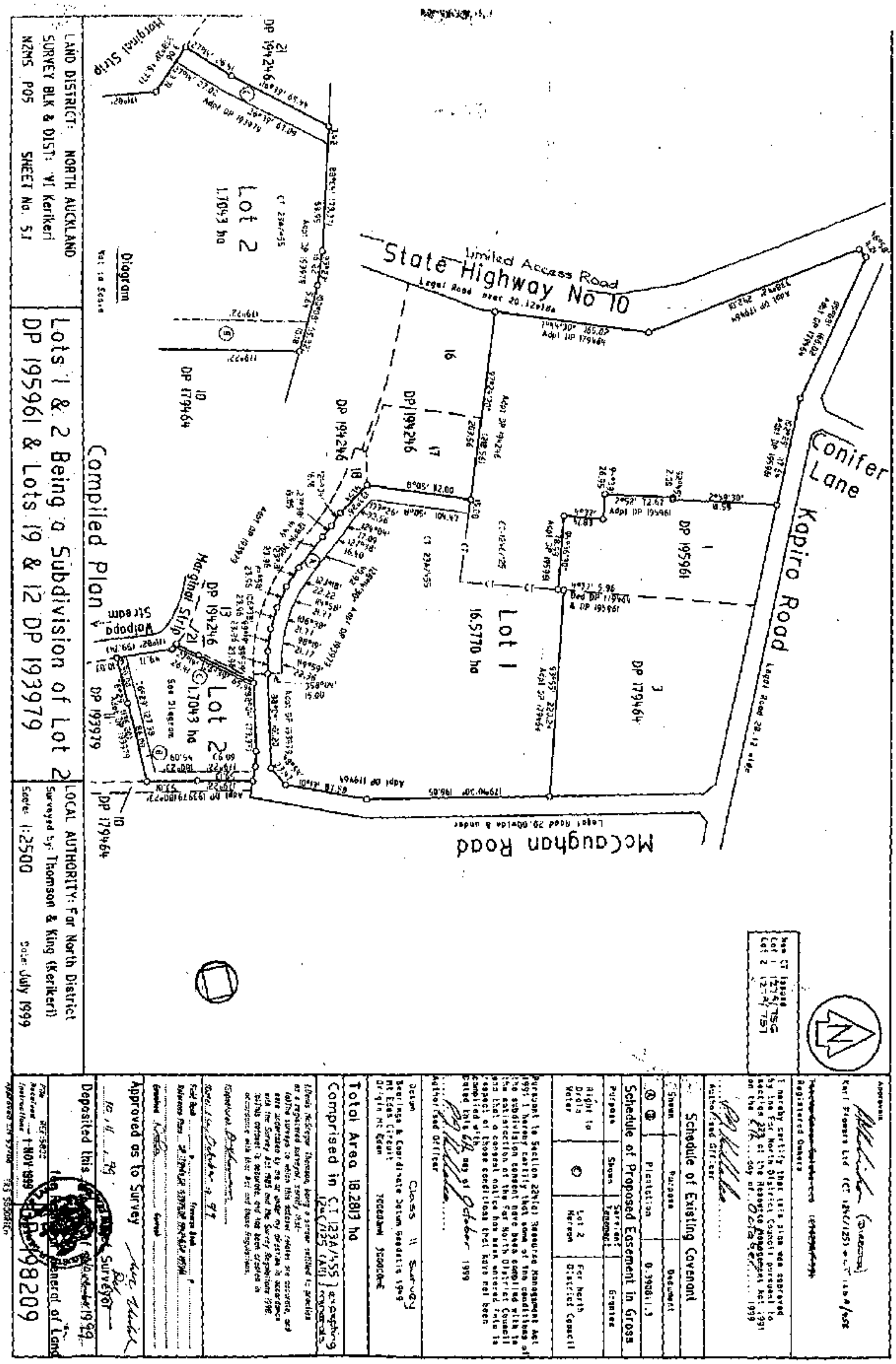
Produced 01.11.1999 at 3.19 and entered 10.11.1999 at 9.00

For RGL

D658689.1 Transfer to Robert George Vellenoweth, Colleen Wendy Wardlaw and Michael Francis Toft
21.11.2001 at 12.34

for RGL

127A/757



LAND DISTRICT: NORTH AUCKLAND
SURVEY BLK & DIST: VI Kerikeri
NZMS P05 SHEET No. 5.1
Lots 1 & 2 Being a Subdivision of Lot 2 DP 195961 & Lots 19 & 12 DP 193979
Compiled Plan
LOCAL AUTHORITY: Far North District
Surveyed by: Thomson & King (Kerikeri)
Scale: 1:2500
Date: July 1999
State Highway No 10
Limited Access Road
Conifer Lane
Kapiro Road
McCaughan Road
Lot 1
16.5770 ha
Lot 2
1.7043 ha
Diagram
Marginal Strip
Waipapa Stream
Schedule of Existing Covenant
Schedule of Proposed Easement in Gross
Total Area 18.2813 ha
Approved as to Survey
Deposited this
DP 198209

Appendix E – Contamination Enquiry

Aaron Thorburn

Subject: FW: Contam Enquiry - 57 McCaughan Road, Kerikeri (Lot 2 DP 198209) (NRC REQ.627039)

Hi Aaron

Regarding your site query for 57 McCaughan Road, Kerikeri (Lot 2 DP 198209):

The property that you have enquired about is not listed on the NRC Selected Land-use Register (SLR) for any current or historical Hazardous Activities and Industries List (HAIL) activities. Please note that the SLR is not a comprehensive list of all sites that have a HAIL land use history. It is a live record and therefore continually being updated.

There is one environmental incident recorded on the property as detailed below. If you require any further information on any of these please let me know quoting the reference number.

Reference number	Date	Subject	Description	Further information from file
REQ.402157	12/08/1996	Earthworks and vegetation clearance	Subdivision earthworks on reserve.	Vegetation clearance in SMA on DOC land by a developer.

There are three environmental incidents recorded within 200m of the property as detailed below. If you require any further information on any of these please let me know quoting the reference number.

Reference number	Date	Subject	Description	Further information from file
REQ.615995	03/05/2023	Other water incident	Watercourse concerns @ McCaughan Rd, Kerikeri	A spring was allegedly altered and discharging into the stream. Not enough information was provided to investigate, and no further complaints were made.
REQ.615621	04/04/2023	Burning and smoke nuisance	Smoke nuisance @ SH10, Kerikeri	Burning rubbish (paper, pallets, and some other non-permitted materials) causing a smoke nuisance to neighbours.
REQ.419992	04/03/2010	Other water incident	Leachate from rubbish dump/fill area leaking into stream.	Site visit showed no evidence of leachate. Pollution in the stream was from natural causes after long dry period and low flows.

There are no current resource consents recorded on the property.

NRC has aerial images of the site for the following years that can be provided upon request: 2000, 2008, 2010, 2014, 2017 and 2023.

Please note, as per Rule C.6.8.1 of the Proposed Regional Plan for Northland, copies of site investigation reports, where land disturbance has occurred, must be provided to the regional council within three months of completion of the investigation.

Reports can be sent to contamination@nrc.govt.nz

If I can be of any further assistance, please do not hesitate to contact me.

Ngā mihi

Alida Spencer
Environmental Monitoring Officer – Waste Management
Northland Regional Council » Te Kaunihera ā rohe o Te Taitokerau

M 027 210 7395

Northland REGIONAL COUNCIL
Te Kaunihera ā rohe o Te Taitokerau

P 0800 002 004 **» W** www.nrc.govt.nz

From: Aaron Thorburn <aaron@haighworkman.co.nz>
Sent: Monday, 14 July 2025 2:12 pm
To: Contaminated Land Management Team <contamination@nrc.govt.nz>
Subject: Contam Enquiry - 57 McCaughan Road, Kerikeri (Lot 2 DP 198209)

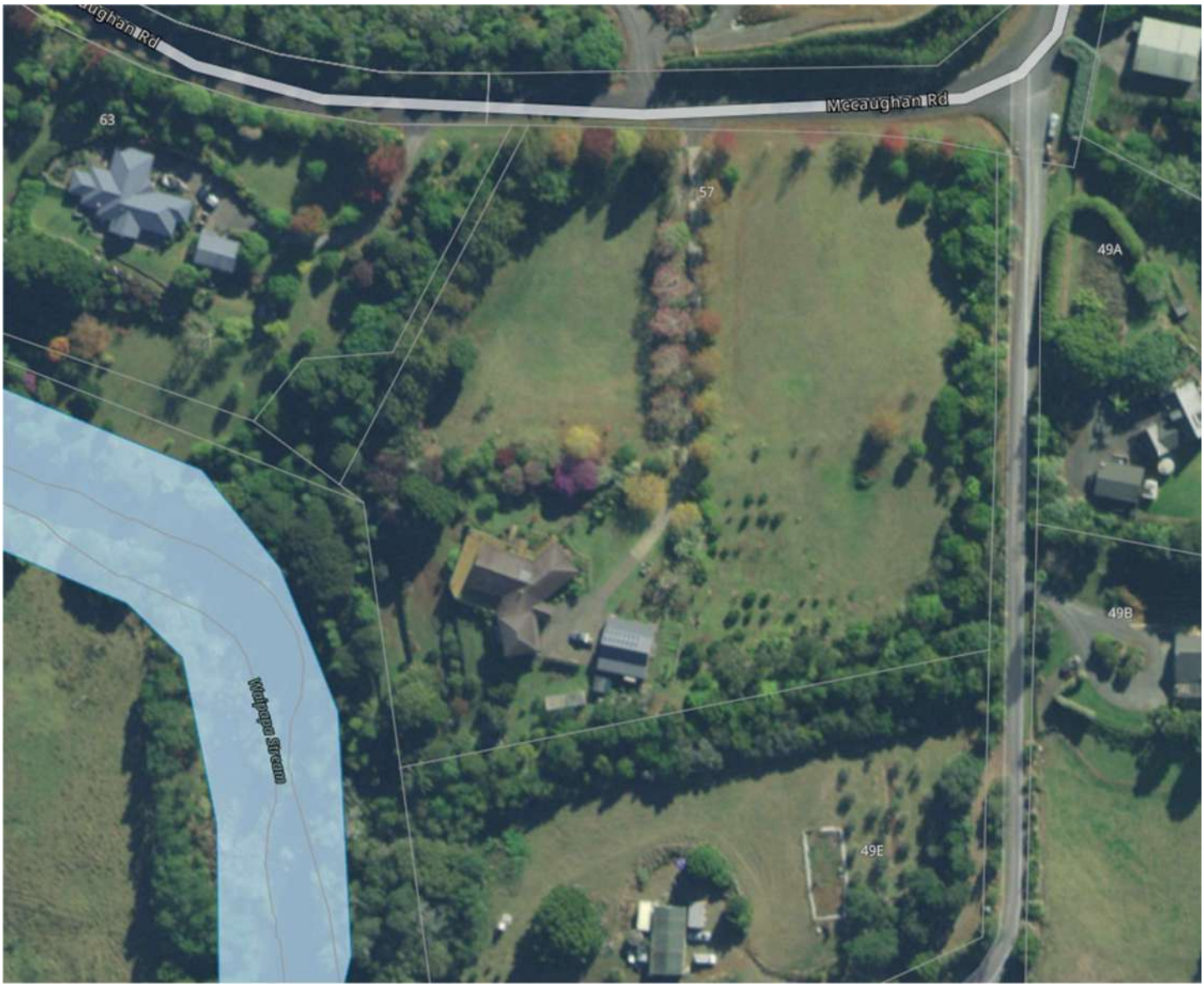
Hi Heather and Kyle,

Can I please request a contaminated land enquiry (environmental incidents, consents, bores and the SLU record) for:

57 McCaughan Road, Kerikeri (Lot 2 DP 198209)

Specifically, anything within a 200m radius of the location provided below.

If you have any historical aerials, specifically between 1983 – 2003 would be really good as well.



Kind Regards,

Aaron Thorburn
Senior Environmental Advisor

Haigh Workman Limited
P: 09 407 8327 | M: 027 331 2728
aaron@haighworkman.co.nz

Civil • Structural • Geotechnical • Environmental • Project Management

Appendix F – Soil Sample Descriptions

Date	Sample #	Depth (m bgl)	Soil Description	Analysis
17 July 2025	SS01	0-0.075	SILT, brown, moist (Topsoil)	Metals and OCP
	SS02	0-0.075	SILT, brown, moist (Topsoil)	
	SS03	0-0.075	SILT, brown, moist (Topsoil)	
	SS04	0-0.075	SILT, brown, moist (Topsoil)	
	SS05	0-0.075	SILT, brown w/ orange speckles, moist (Topsoil)	
	SS06 *(dup of SS05)*	0-0.075	SILT, brown w/ orange speckles, moist (Topsoil)	
	SS07	0-0.075	SILT, dark brown, moist (Topsoil)	
	SS08	0-0.075	SILT, dark brown, moist (Topsoil)	
	SS09	0-0.075	SILT, dark brown, moist (Topsoil)	

SS – Soil Sample
dup – Duplicate sample
m bgl – meters below ground level
OCP – Organochlorine Pesticides

Appendix G – Laboratory Analytical Results and Chain of Custody Documentation

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

0508 HILL LAB (44 555 22)
+64 7 858 2000
mail@hill-labs.co.nz
www.hill-labs.co.nz

Certificate of Analysis

Client:	Haigh Workman Limited	**Lab No:**	3942362 SPv1
Contact:	Aaron Thorburn	**Date Received:**	22-Jul-2025
	C/- Haigh Workman Limited	**Date Reported:**	25-Jul-2025
	PO Box 89	**Quote No:**	135990
	Kerikeri 0245	**Order No:**	24098
		Client Reference:	McCaughan Road
		Submitted By:	Aaron Thorburn

Sample Type: Soil

Sample Name:		SS05 17-Jul-2025	SS06 17-Jul-2025	Composite of SS01, SS02, SS03 & SS04	Composite of SS07, SS08 & SS09
Lab Number:		3942362.5	3942362.6	3942362.10	3942362.11
Individual Tests					
Dry Matter	g/100g as rcvd	61	60	61	63
Heavy Metals, Screen Level					
Total Recoverable Arsenic	mg/kg dry wt	< 2	3	2	2
Total Recoverable Cadmium	mg/kg dry wt	0.16	0.16	0.32	0.21
Total Recoverable Chromium	mg/kg dry wt	188	200	152	193
Total Recoverable Copper	mg/kg dry wt	21	21	25	24
Total Recoverable Lead	mg/kg dry wt	3.7	4.4	5.7	4.5
Total Recoverable Nickel	mg/kg dry wt	10	10	15	15
Total Recoverable Zinc	mg/kg dry wt	23	27	17	24
Organochlorine Pesticides Screening in Soil					
Aldrin	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
alpha-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
beta-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
delta-BHC	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
gamma-BHC (Lindane)	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
cis-Chlordane	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
trans-Chlordane	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
2,4'-DDD	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
4,4'-DDD	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
2,4'-DDE	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
4,4'-DDE	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
2,4'-DDT	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
4,4'-DDT	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Total DDT Isomers	mg/kg dry wt	< 0.10	< 0.10	< 0.10	< 0.10
Dieldrin	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endosulfan I	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endosulfan II	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endosulfan sulphate	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endrin	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endrin aldehyde	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Endrin ketone	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Heptachlor	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Heptachlor epoxide	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Hexachlorobenzene	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016
Methoxychlor	mg/kg dry wt	< 0.016	< 0.016	< 0.016	< 0.016

Summary of Methods

The following table(s) gives a brief description of the methods used to conduct the analyses for this job. The detection limits given below are those attainable in a relatively simple matrix. Detection limits may be higher for individual samples should insufficient sample be available, or if the matrix requires that dilutions be performed during analysis. A detection limit range indicates the lowest and highest detection limits in the associated suite of analytes. A full listing of compounds and detection limits are available from the laboratory upon request.
Unless otherwise indicated, analyses were performed at Hill Labs, 28 Duke Street, Frankton, Hamilton 3204.

Sample Type: Soil

Test	Method Description	Default Detection Limit	Sample No
Environmental Solids Sample Drying*	Air dried at 35°C Used for sample preparation. May contain a residual moisture content of 2-5%. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed).	-	5-6, 10-11
Heavy Metals, Screen Level	Dried sample, < 2mm fraction. Nitric/Hydrochloric acid digestion US EPA 200.2. Complies with NES Regulations. ICP-MS screen level, interference removal by Kinetic Energy Discrimination if required.	0.10 - 4 mg/kg dry wt	5-6, 10-11
Organochlorine Pesticides Screening in Soil	Sonication extraction, GC-ECD analysis. Tested on as received sample. In-house based on US EPA 8081.	0.010 - 0.06 mg/kg dry wt	5-6, 10-11
Dry Matter	Dried at 103°C for 4-22hr (removes 3-5% more water than air dry) , gravimetry. (Free water removed before analysis, non-soil objects such as sticks, leaves, grass and stones also removed). US EPA 3550.	0.10 g/100g as rcvd	5-6, 10-11
Composite Environmental Solid Samples*	Individual sample fractions mixed together to form a composite fraction.	-	1-4, 7-9

These samples were collected by yourselves (or your agent) and analysed as received at the laboratory.

Testing was completed between 22-Jul-2025 and 25-Jul-2025. For completion dates of individual analyses please contact the laboratory.

Samples are held at the laboratory after reporting for a length of time based on the stability of the samples and analytes being tested (considering any preservation used), and the storage space available. Once the storage period is completed, the samples are discarded unless otherwise agreed with the customer. Extended storage times may incur additional charges.

Ara Heron BSc (Tech)
Client Services Manager - Environmental

Hill Labs

ANALYSIS REQUEST

R J Hill Laboratories Limited
28 Duke Street Frankton 3204
Private Bag 3205
Hamilton 3240 New Zealand

0508 HILL LAB (44 555 22)
+64 7 858 2000
mail@hill-labs.co.nz
www.hill-labs.co.nz

Office use only
(Job No)

Quote No 135990

Primary Contact Aaron Thorburn 312803

Submitted By Aaron Thorburn 312803

Client Name Haigh Workman Limited 217580

Address PO Box 89, Kerikeri 0245

Phone 09 407 8327 *Mobile* 027 331 2728

Email aaron@haighworkman.co.nz

Charge To Haigh Workman Limited 217580

Client Reference McCaughan Road

Order No 24 095

Results To *Reports will be emailed to Primary Contact by default. Additional Reports will be sent as specified below.*

☑ Email Primary Contact ☑ Email Submitter ☐ Email Client
☐ Email Other
☐ Other

Dates of testing are not routinely included in the Certificates of Analysis. Please inform the laboratory if you would like this information reported.

ADDITIONAL INFORMATION / KNOWN HAZARDS

CHAIN OF CUSTODY RECORD

Sent to Hill Labs
Date & Time: 21/7/25
Name: Aaron Thorburn
☑ *Tick if you require COC to be emailed back*
Signature:

Received at Hill Labs
Date & Time:
Name:
Signature:

Condition ☐ *Room Temp* ☐ *Chilled* ☐ *Frozen* *Temp:*

☐ Sample & Analysis details checked
Signature:

Priority ☐ Low ☐ Normal ☑ High
☐ **Urgent** (ASAP, extra charge applies, please contact lab first)

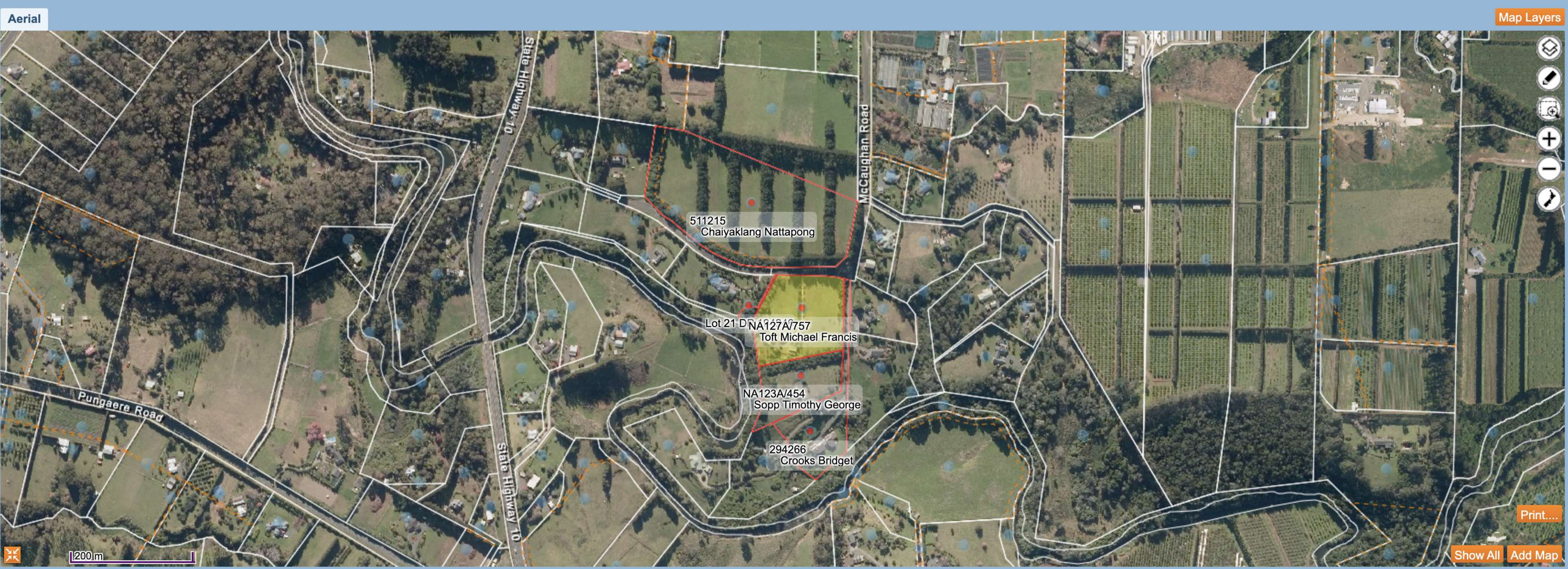
NOTE: The estimated turnaround time for the types and number of samples and analyses specified on this quote is by 4:30 pm, 2 working days following the day of receipt of the samples at the laboratory.

Requested Reporting Date: 25 July 2025

Quoted Sample Types

Soil (Soil)

No.	Sample Name	Sample Date/Time	Sample Type	Tests Required
1	Composite #1 (SS01 - SS04)	17/7/25	Soil	(Ar, Cd, Cr, Cu, Ni, Pb & Zn) HMs Soil and OCPsc
2	Composite #2 (SS07 - SS09)	17/7/25	Soil	HMs Soil and OCPsc
3	SS05	17/7/25	Soil	HMs Soil and OCPsc
4	SS06	17/7/25	Soil	HMs Soil and OCPsc
5				
6				
7				
8				
9				
10				


Aerial
Map Layers
State Highway 10
McCaughan Road
511215
Chaiyaklang Nattapong
Lot 21 D
NA127A/757
Toft Michael Francis
NA123A/454
Sopp Timothy George
294266
Crooks Bridget
Pungaere Road
State Highway 10
200 m
Print....
Show All
Add Map

Hamish Crooks.
8-4-25

Far North District Council

NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Rob Vellenoweth
Address of proposed activity:	57 McCaughan Road, Kerikeri
Legal description:	Lot 2 DP 198209
Description of the proposal (including why you need resource consent):	Proposed subdivision in the Rural prod
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1. Scheme Plan dated 26.08.2024 2. 3. 4. 5. 6.

Notes to Applicant:

1. Written approval must be obtained from all registered owners and occupiers.
2. The **original copy** of this signed form and **signed plans and accompanying documents** must be supplied to the Far North District Council.
3. The amount and type of information provided to the party from whom you seek written approval should be sufficient to give them a full understanding of your proposal, its effects and why resource consent is needed.

PART B – To be completed by Parties giving approval

Notes to the party giving written approval:

1. If the owner and the occupier of your property are different people then separate written approvals are required from each.
2. You should only sign in the place provided on this form and accompanying plans and documents if you **fully understand** the proposal and if you **support** or have **no opposition** to the proposal. Council will not accept conditional approvals. If you have conditions on your approval, these should be discussed and resolved with the applicant directly.
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4. Please sign and date all associated plans and documentation as referenced overleaf and return with this form.
5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Full name/s of party giving approval:	Bridget Crooks, Hamish Duncan Crooks, Bernice Janet Long, Graham Roberts
Address of affected property including legal description	49F McCaughan Road. Lot 1 DP 372746
Contact Phone Number/s and email address	Daytime: email:

I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

*Please note: in most instances the approval of **all** the legal owners and the occupiers of the affected property will be necessary.*

1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.
2. I/We have signed each page of the plans and documentation in respect of this proposal (these need to accompany this form).
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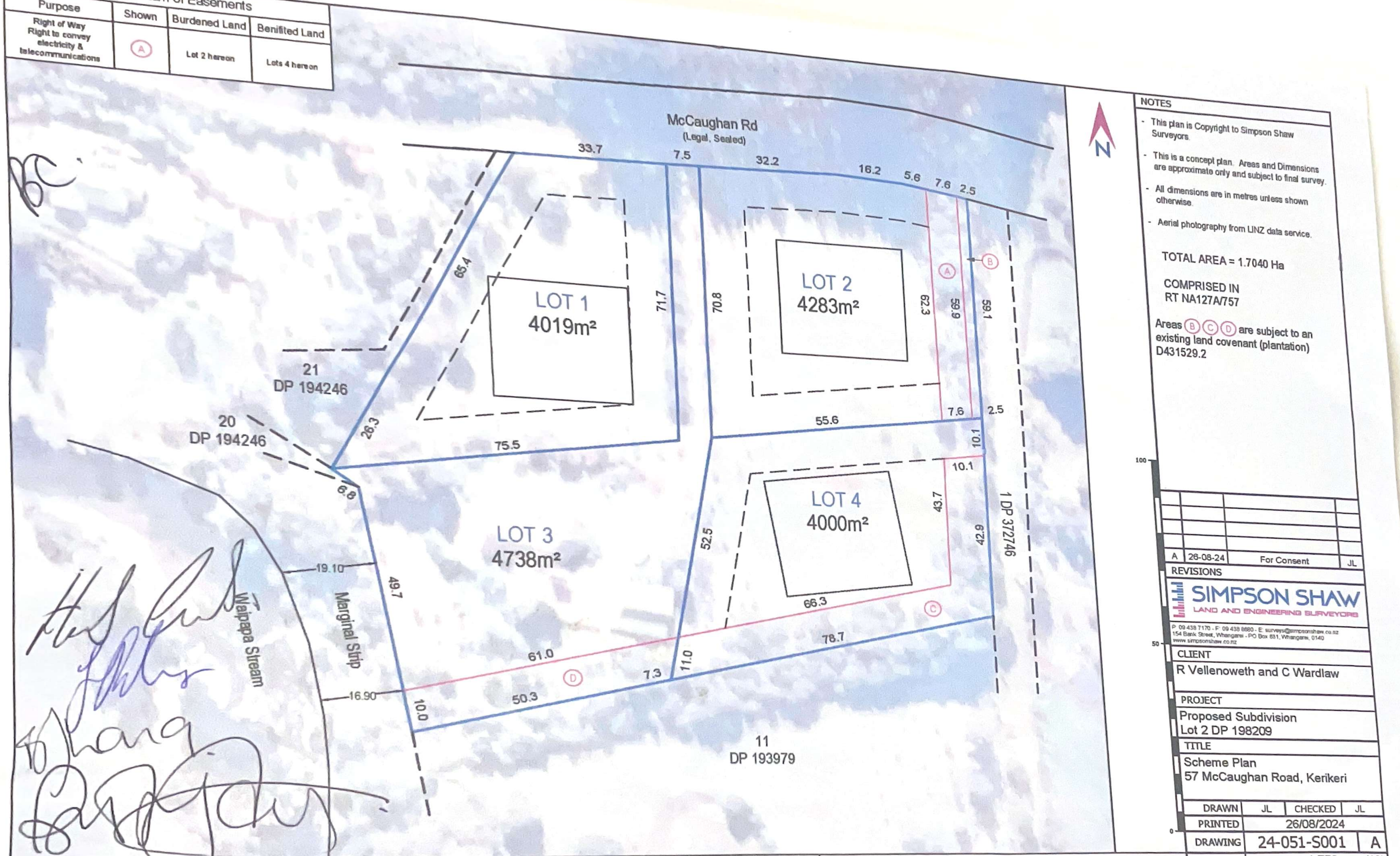
4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.

Signature		Date	2/11/24.
Signature		Date	2/11/24
Signature		Date	2/11/24.
Signature		Date	30/11/24

Memorandum of Easements

Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	(A)	Lot 2 hereon	Lots 4 hereon



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- All dimensions are in metres unless shown otherwise.
- Aerial photography from LINZ data service.

TOTAL AREA = 1.7040 Ha

COMPRISED IN
RT NA127A/757

Areas (B) (C) (D) are subject to an existing land covenant (plantation) D431529.2

A	26-08-24	For Consent	JL

REVISIONS

SIMPSON SHAW
LAND AND ENGINEERING SURVEYORS
P 09 438 7170 - F 09 438 8680 - E surveys@simpsonshaw.co.nz
154 Bank Street, Whangarei - PO Box 831, Whangarei, 0140
www.simpsonshaw.co.nz

CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	26/08/2024		
DRAWING	24-051-S001		A
SCALE	1:750		(A3)

P:\Wellenoweth & Wardlaw\24-051 McCaughan Rd\Working Data_CAD\24-051-S001-A.dwg

TIM Edgecombe.

Far North District Council

NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Rob Vellenoweth
Address of proposed activity:	57 McCaughan Road, Kerikeri
Legal description:	Lot 2 DP 198209
Description of the proposal (including why you need resource consent):	Proposed subdivision in the Rural prod
Details of the application are given in the attached documents & plans (list what documents & plans have been provided to the party being asked to provide written approval):	1. Scheme Plan dated 26.08.2024 2. 3. 4. 5. 6.

Notes to Applicant:

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5. If you have any concerns about giving your written approval or need help understanding this process, please feel free to contact the duty planner on 0800 920 029 or (09) 401 5200.

Full name/s of party giving approval:	Nattapong Chaiyakiang, Hongyuan Edgecombe, Timothy Prowse Edgecombe, Trustee Services (2012) Limited
Address of affected property including legal description	58 McCaughan Road. Lot 5 DP 428179
Contact Phone Number/s and email address	Daytime: 0274588081 email: tim@tuidawns.co.nz

I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

Please note: in most instances the approval of all the legal owners and the occupiers of the affected property will be necessary.

1. I/We have been provided with the details concerning the application submitted to Council and understand the proposal and aspects of non-compliance with the Operative District Plan.
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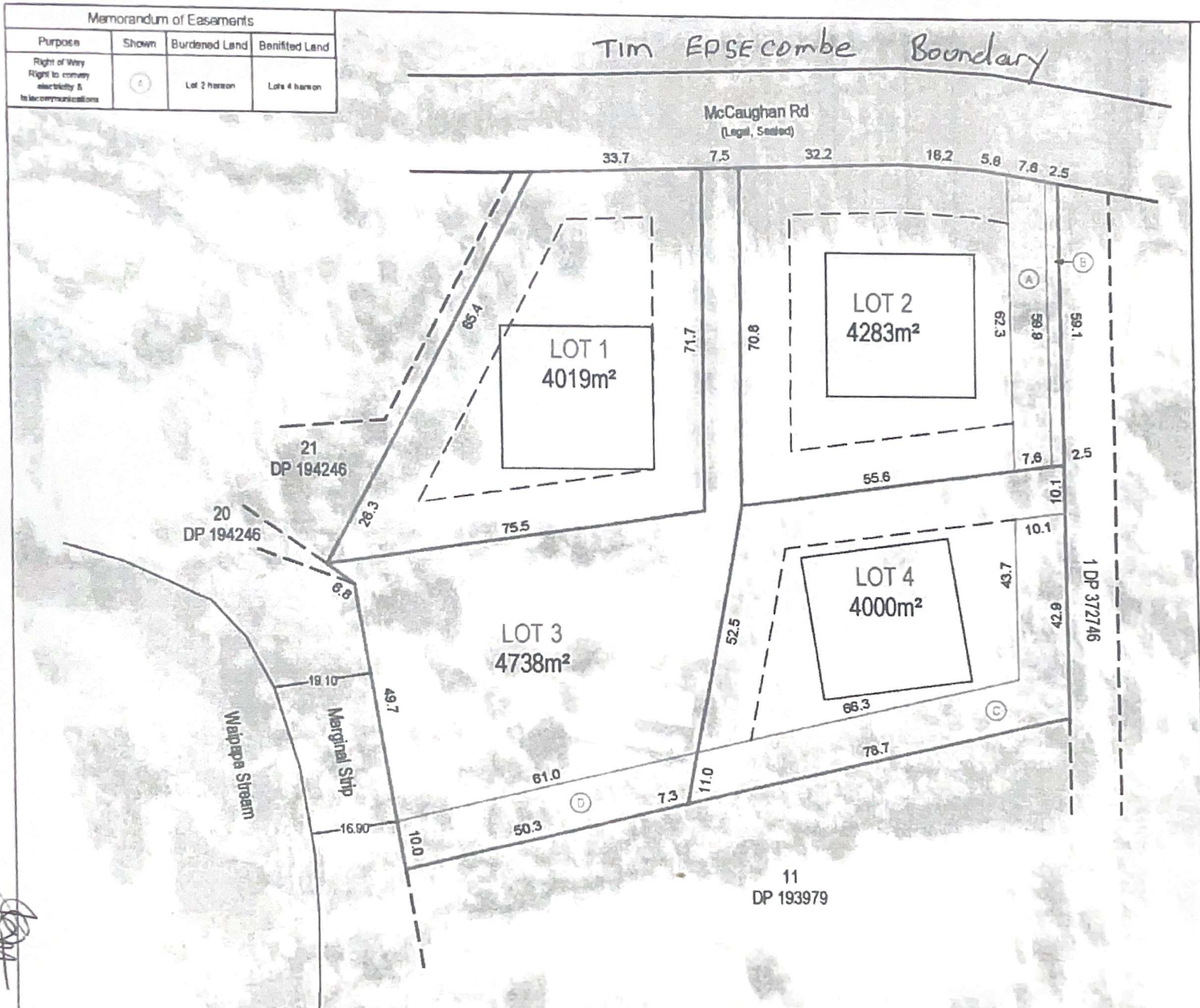
4. I/We understand that at any time before the notification decision is made on the application, I/we may give notice in writing to Council that this approval is withdrawn.

Signature	Director of Trustee Services (2012) Limited	Date	04/04/2025
Signature	Tim Edgecombe.	Date	4/4/25
Signature	Nattapong Chaiyakiang	Date	04/04/25
Signature		Date	7/4/25

Memorandum of Easements

Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	A	Lot 2 hereon	Lots 4 hereon



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- All dimensions are in metres unless shown otherwise
- Aerial photography from LINZ data service

TOTAL AREA = 1.7040 Ha

COMPRISED IN
RT NA127A/757

Areas (B) (C) (D) are subject to an existing land covenant (plantation) D431529.2

A	26-08-24	For Consent	JL

REVISIONS

SIMPSON SHAW
LAND AND ENGINEERING SURVEYORS

CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	26/08/2024		
DRAWING	24-051-S001		A
SCALE	1:750		(A3)

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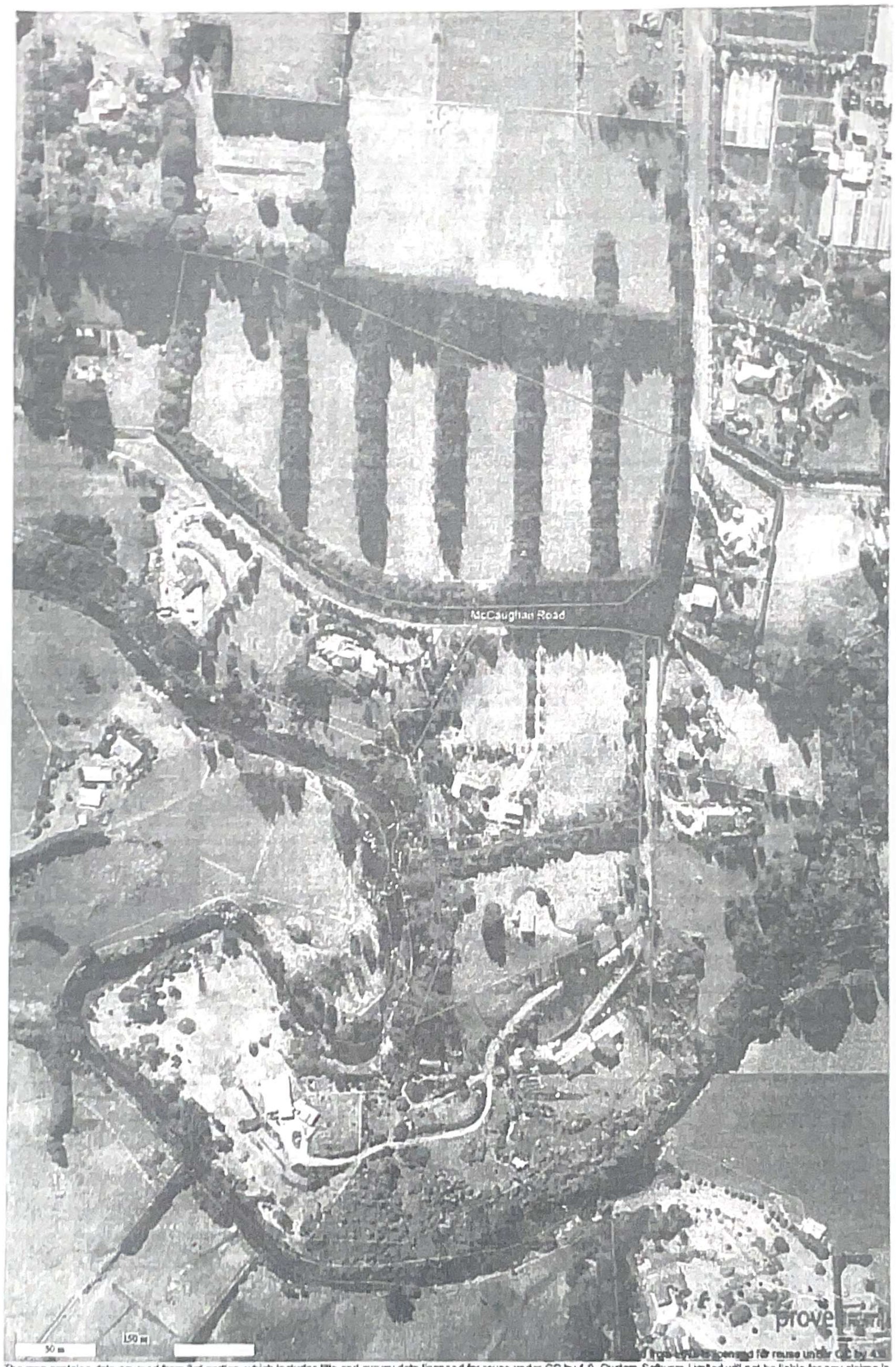
Y.C



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Tim Sopp. 8-4-25

Far North District Council

NOTICE OF WRITTEN APPROVAL

Written Approval of Affected Parties in accordance with Section 95E of the Resource Management Act

PART A – To be completed by Applicant

Applicant/s Name:	Rob Vellenoweth
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Full name/s of party giving approval:	Timothy George Sopp
Address of affected property including legal description	49E McCaughan Road. Lot 11 DP 193979
Contact Phone Number/s and email address	Daytime: 027 44 77 825 email: timothysopp@yahoo.co.nz

I am/we are the OWNER(S) / OCCUPIER(S) of the property (circle which is applicable)

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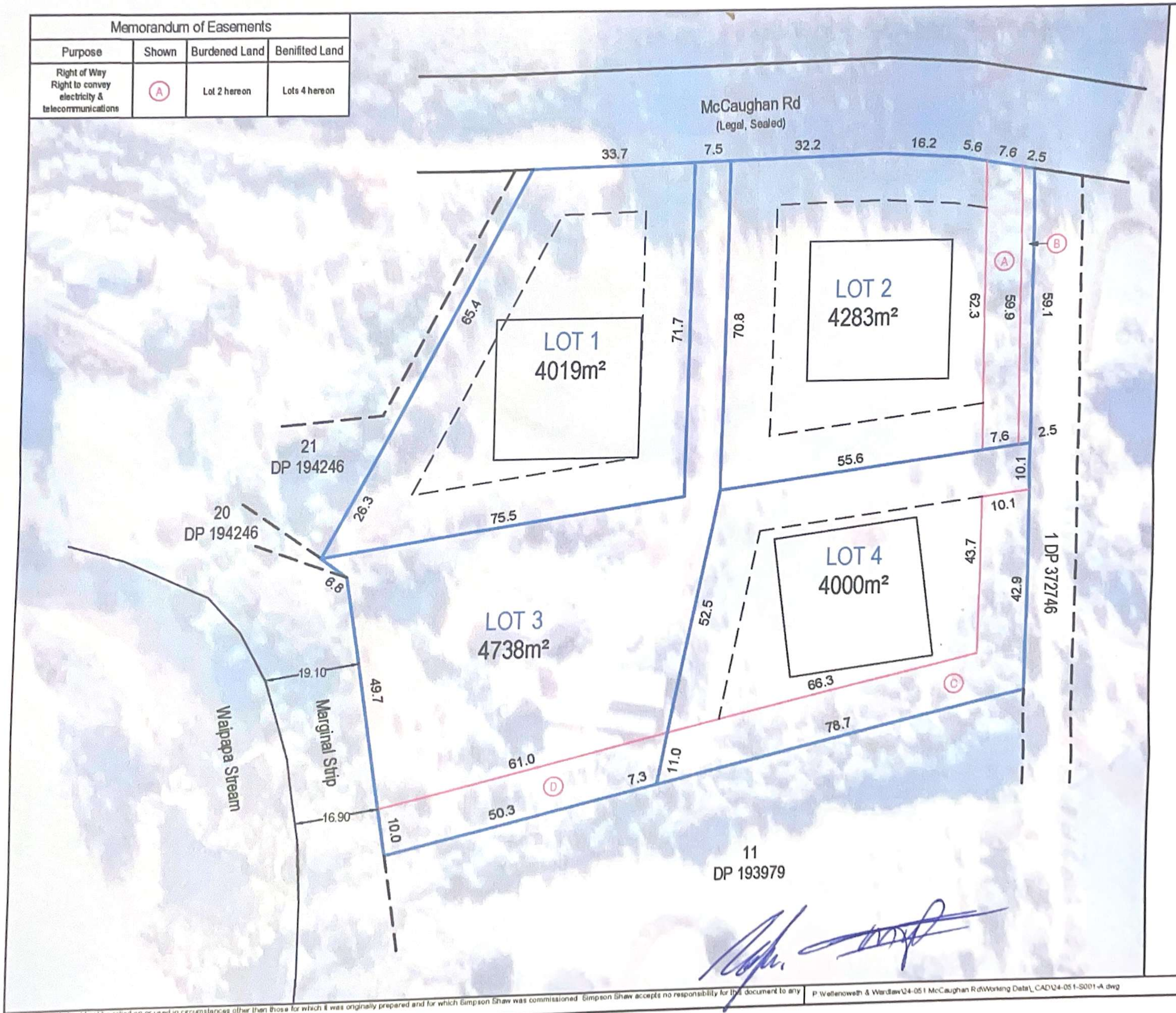
Signature		Date	15 Sept 2024
Signature		Date	15th Sept 2024
Signature		Date	
Signature		Date	

Memorandum of Easements			
Purpose	Shown	Burdened Land	Benifited Land
Right of Way Right to convey electricity & telecommunications	(A)	Lot 2 hereon	Lots 4 hereon



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COMPRISED IN
RT NA127A/757

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100
50
0

A	26-08-24	For Consent	JL

REVISIONS

SIMPSON SHAW
LAND AND ENGINEERING SURVEYORS
P: 09 438 7170 - F: 09 438 8680 - E: surveys@simpsonshaw.co.nz
154 Bank Street, Whangarei - PO Box 631, Whangarei, 0140
www.simpsonshaw.co.nz

CLIENT
R Vellenoweth and C Wardlaw

PROJECT
Proposed Subdivision
Lot 2 DP 198209

TITLE
Scheme Plan
57 McCaughan Road, Kerikeri

DRAWN	JL	CHECKED	JL
PRINTED	26/08/2024		
DRAWING	24-051-S001		A
SCALE	1:750		(A3)

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57 McCaughan Road, Kerikeri

C/O Robert E Vellenoweth

19 June 2024

Re: 57 McCaughan Road – LUC (Land Use Capability) – Job no. 24 095

Introduction

Haigh Workman Limited have been engaged to determine the land use capability for 57 McCaughan Road, Lot 2 Deposited Plan 198209 for a proposed subdivision, in consideration to the National Policy Statement (NPS) for highly productive land.

Site Description

The property is approximately 1.7043 ha. The majority of the property is flat to moderately sloping with steep slopes present along the western boundary. The site is irregular in shape.

Proposed development

The subdivision plan was not available at the time of completing this report.

Background

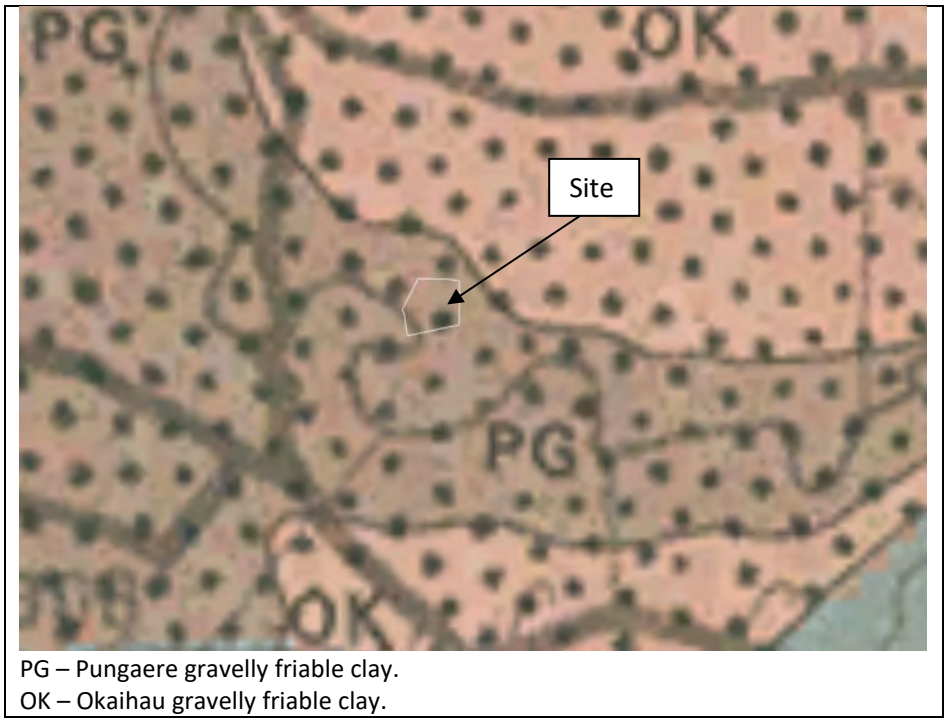
The National Policy Statement for Highly Productive Land 2022 (NPS-HPL), took effect in October 2022. Its primary objective is to safeguard New Zealand's most fertile and potentially productive land for the cultivation of food and fibre crops. Until a more detailed database can be collated, and Northland Regional Council has more precisely defined and identified 'highly productive land', land falling within Land Use Capability classes 1 – 3 will be categorised as 'highly productive'. Land on the property is mapped on the NZLRI-LUC database as NZ3s-1 and it is subject to the NPS-HPL.

Published Geology and Soil Mapping

Published geology maps indicate the site is underlain by the Kerikeri Volcanic Group (Pvb). The Kerikeri Volcanic Group comprises basalt lava, volcanic plugs, and minor tuff.

Further reference to the New Zealand land inventory maps (1:100,000) indicate the soils on the site comprise well to moderately well drained Pungaere gravelly friable clay. The Pungaere series is described as moderately to strongly leached soils.

Figure 1 - GNS Geology Map



PG – Pungaere gravelly friable clay.
OK – Okaihau gravelly friable clay.

Figure 2 - New Zealand Land Inventory (1:100,000), Sheet P04/05

The New Zealand Soil Classification (Landcare Research - Manaaki Whenua) soils mapviewer further describes the soils mapped onsite as 'Orthic Oxidic' and 'Nodular Oxidic'.

Mapped Land Use Capability

The New Zealand Land Resource Inventory GIS database and Far North Maps indicates 3s1 soil in the north of the site and 4e8 (FNDC) / 4e9 (NZLRI) in the south of the site.

The soil classes mapped onsite are typically described below:

- 3s1– *'Flat to undulating slopes on deeply weathered basalt and ash below 200 m asl with well structured, moderately fertile and well drained Granular (red and brown loam) soils in mild moderate (1200-1600 mm) rainfall areas with a seasonal moisture deficit.'*
- 4e8 / 4e9 – *'Rolling to strongly rolling slopes on young basaltic rock and ash below 400 m asl with leached Allophanic and Oxidic (red and brown loam) soils in moderate (1200-1600 mm) rainfall areas with a summer moisture deficit and a potential for moderate to severe sheet, rill and gully erosion when cultivated.'*

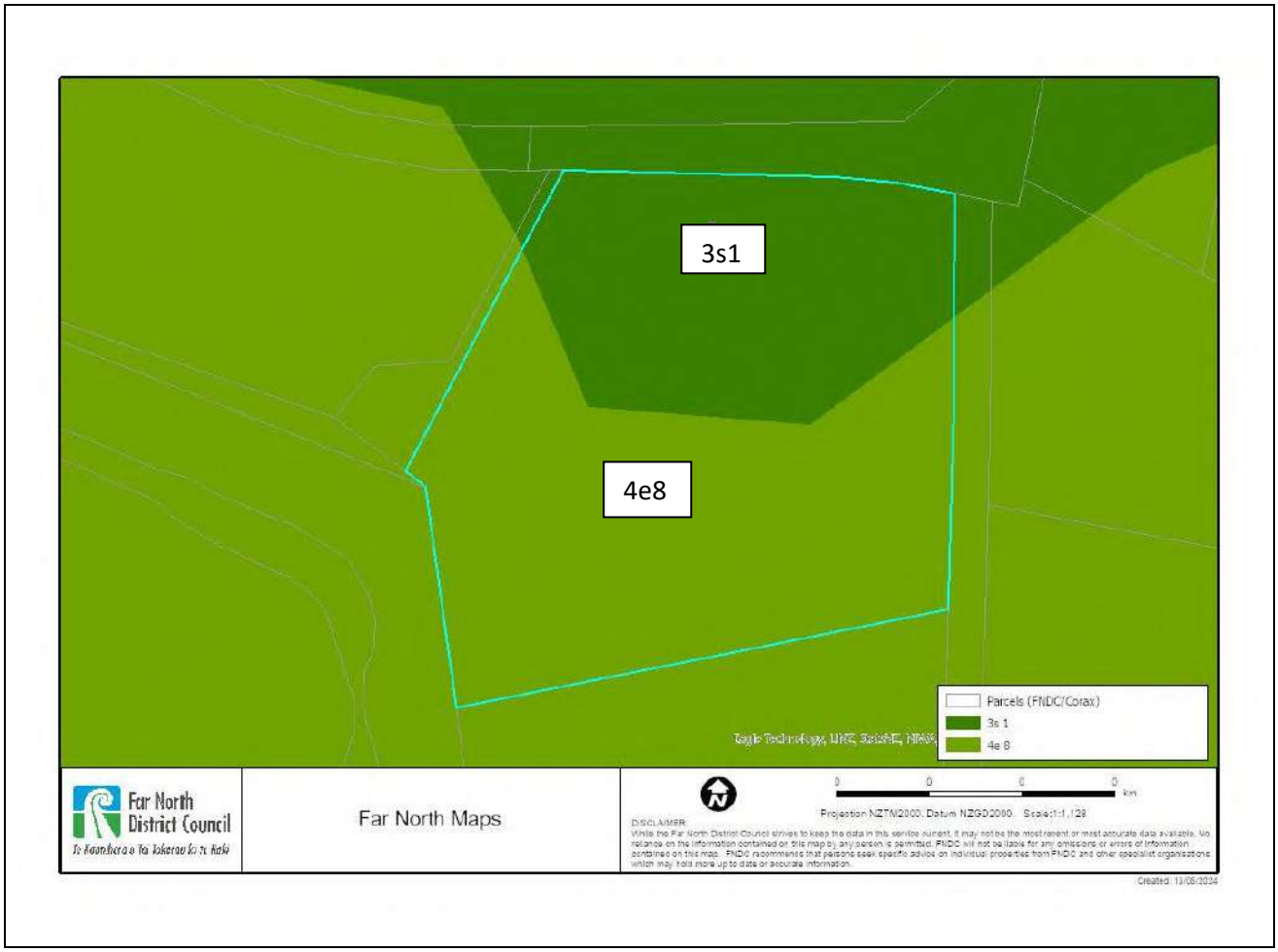


Figure 3 - Land use classification, FNDC Maps

Site investigation

A site investigation was undertaken on 28 of May 2024 to assess the land use classification of the soils onsite. The investigation consisted of six hand dug trial pits to a depth of approximately 0.2. The trial pits were then extended to a depth of 0.6mbgl with a hand auger. The site investigation plan is included in Appendix A. Topsoil thickness onsite was observed as 0.15 – 0.2m in thickness.

Subsoils encountered were typically red brown or brown silty clay with minor fine gravel. The encountered soils were consistent with the mapped Pungaere gravelly clay.

Interview with owner

The current owner of the site, Robert G Vellenoweth, was interviewed during the site inspection. He said that significant amendments and mulching are required to sustain the home garden and fruit trees present. Mulching around fruit trees is shown in photo 16 in the appended photo log.

Discussion

Based on observations made during the site investigation the land use capability mapping of the north of the site is not accurate. Drawing 2 showing the updated land use inventory is included in Appendix A.

South of site (4e8 / 4e9)

The mapping of the southern area of the site is considered to be accurate. The slopes are rolling to strongly rolling and are susceptible to erosion if cultivated. The land use classification of this land remains 4e8 / 4e9.

The location boundary between the land classified 4e8 / 4e9 and the land to the north has been adjusted in consideration of the encountered soils and topography.

North of site (4s2)

The encountered subsoil in the northwest of site has gravel present. This gravel are iron and aluminium nodules. Due to the iron and aluminium concentrations of these nodules, the potential for successful growth of most plants on this terrain is restricted. Iron and aluminium at low PH are free ions that effectively immobilize or strongly bind the majority of nutrients, rendering them insoluble and inaccessible to plants. This results in nutrient deprivation for plants, with phosphate being notably affected. In addition, aluminium is toxic to plant roots inhibiting root penetration, thus restricting water access during the summer and causing larger plants to become less stable in windy conditions. While specific patches within this area may support the growth of crops like citrus to some extent, it is generally unsuitable for horticultural or arable purposes. Furthermore, beneath the aluminium and iron rich gravel inclusions a very stiff to hard clay is present which additionally constrains root penetration. During wet periods, the very stiff to hard layer leads to waterlogging of the soil due to its low permeability, resulting in an increased risk of fungal root diseases and a decrease in the stability of trees.

This land is suited for pastoral purposes, allowing for the occasional cultivation of fodder crops. However, it is not suitable for horticultural or arable uses. Therefore, the north portion of the site has been assessed as being Class 4s2, rather than 3s1 mapped in the nzlri-luc database.

Conclusion

The National Policy Statement for Highly Productive Land (NPS-HPL) identifies land with LUC classifications in classes 1, 2 and 3 as highly productive land. Under this definition 57 McCaughan Road is not classified as highly productive land. Based on site observations and the underlying geology, the land should be categorised as class 4.

Limitations

This letter has been prepared for the sole use of our client, Robert G Vellenoweth, for the particular brief and on the terms and conditions agreed with our client. It may not be used or relied on (in whole or part) by anyone else, or for any other purpose or in any other contexts, without our prior written agreement. This report may not be read or reproduced except in its entirety.

Prepared by:

Joshua Cuming

Environmental Geologist
CEnvP

Reviewed and approved by:

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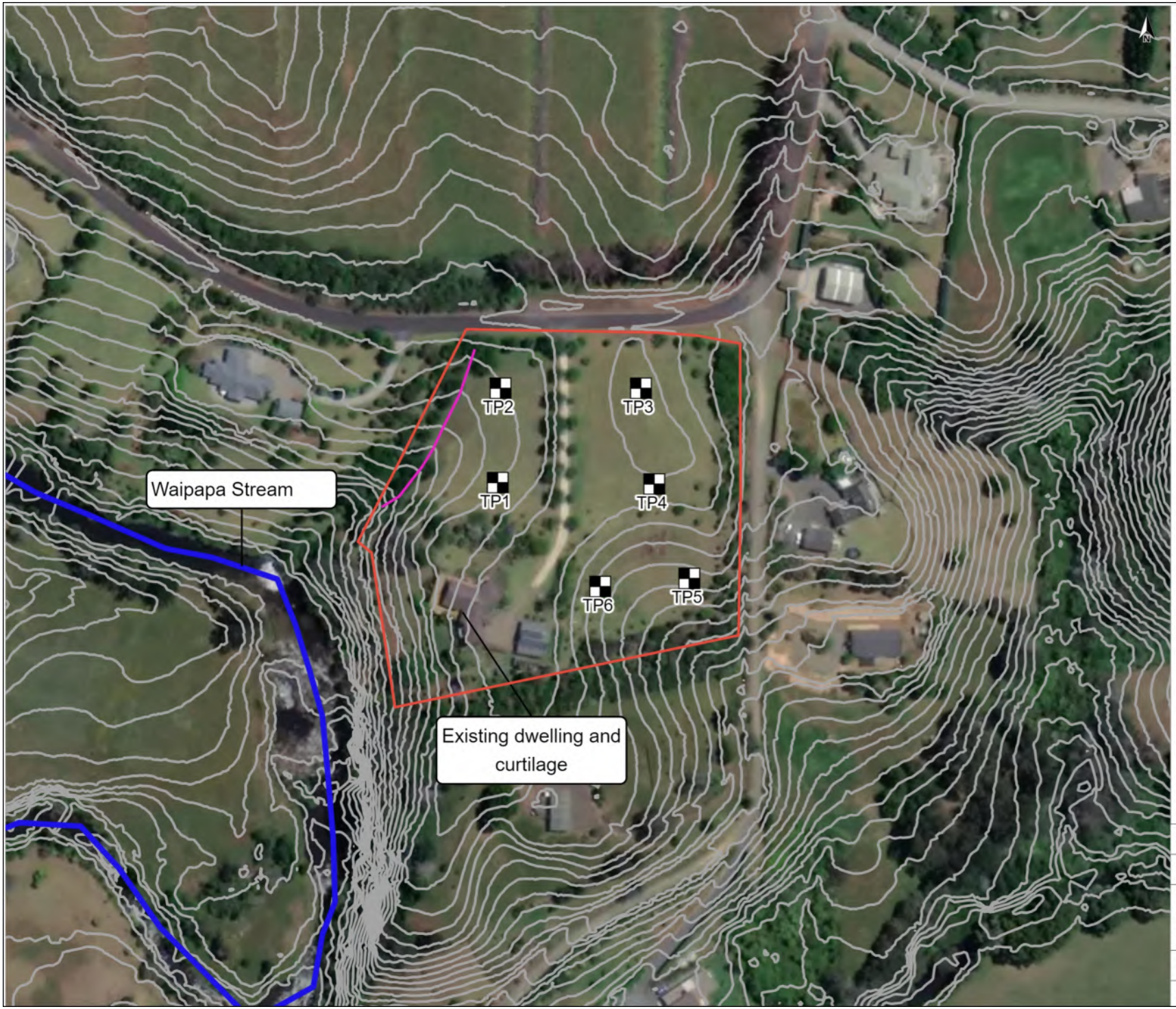
Appendix A – Drawings



Legend

- Site Boundary
- Overground Flowpath
- Waipapa Stream
- Trial pit locations
- 1m Contours (LINZ)

0 25 m 50 m
© Mapbox

HAIGH WORKMAN Civil & Structural Engineers

Produced by **Datanest.earth**

Title: Site Investigation Plan		
Client: Robert G Vellenoweth		Size: A4
Project: 57 McCaughan Road	Drawn: JCum	Drawing No.: 1
Date: 17-06-2024	Checked: WT	
Proj No: 24 095	Scale: 1:2000	Version: REV1

Legend

- Site Boundary
- Residential
- 4e8 / 4e9
- 4s2
- 1m Contours (LINZ)

0 10 m 20 m

© Mapbox

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Produced by **Datanest.earth**

Title: Land Use Inventory		
Client: Robert G Vellenoweth		Size: A4
Project: 57 McCaughan Road	Drawn: JCum	Drawing No.: 2
Date: 17-06-2024	Checked: WT	
Proj No: 24 095	Scale: 1:1000	Version: REV1

Appendix B – Photolog

Photolog

Photo 1. TP1 Topsoil

Photo 2. TP1 soils

Photo 3. TP2 Topsoil

Photo 4. TP2 Soils

Photo 5. TP3 Topsoil

Photo 6. TP3 Soils

Photo 7. TP4

Photo 8. TP4

Photo 9. TP5 topsoil

Photo 10. TP5 Soils

Photo 11. TP6

Photo 12. TP6

Photo 13. Overground flow path in north of site.

Photo 14. North of the site.

Photo 15. View from centre of site looking to south.

Photo 16. Domestic orchard in south of site with