THOMSON SURVEY LIMITED

SURVEYORS AND RESOURCE PLANNERS

Our Reference: 10803.1 (FNDC)

7 August 2025

Resource Consents Department
Far North District Council
JB Centre
KERIKERI

Dear Sir/Madam

RE: Proposed residential dwelling at 114B Hauparua Lane, Kerikeri – Joke Van Audenaerde

I am pleased to submit application on behalf of Joke Van Audenaerde, for a proposed residential dwelling to be established on land at Hauparua Lane, Kerikeri, zoned Coastal Living. The application is a restricted discretionary activity.

The application fee of $2,625 has been paid separately via direct credit.

Regards

Lynley Newport
Senior Planner
THOMSON SURVEY LTD

315 Kerikeri Road, Kerikeri
P.O. Box 372, Kerikeri 0245, New Zealand.
Email: Kerikeri@tsurvey.co.nz
denis@tsurvey.co.nz, sam@tsurvey.co.nz

Telephone: **09 4077360**
Facsimile: **09 4077322**
After Hours: Director: Denis Thomson 09 4071372
After Hours: Office Manager: Sam Lee 021 1370060

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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

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

✔ **Yes** ◯ **No**

4. Consultation

Have you consulted with Iwi/Hapū? ◯ **Yes** ✔ **No**

If yes, which groups have you consulted with?	
Who else have you consulted with?	

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

5. Applicant Details

Name/s: Joke Van Audenaerde

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: Lynley Newport

Email: [redacted]

Phone number:

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

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

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

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

Name/s: Joke Van Audenaerde

Property Address/ Location: 36 Tui Glen Road
Haruru

Postcode 0204

8. Application Site Details

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

Name/s: as per item 5

Site Address/ Location: 114B Hauparua Lane
KERIKERI

Postcode 0230

Legal Description: Lot 4 DP 605001 **Val Number:**

Certificate of title: 1190274

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

Site visit requirements:

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

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

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

Please contact the applicant(s) prior to any site 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.

Land use consent for residential dwelling to be established on a site zoned Coastal Living, Consent is required for a breach of the zone's Visual Amenity rule.

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):

- [x] **Building Consent** EBC-2025-1056 (issued)
- [ ] **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) Joke Van Audenaerde

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) Joke Van Audenaerde

Signature:
(signature of bill payer [redacted]

Date 05-Aug-2025

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) Joke Van Audenaerde

Signature:

Date 05-Aug-2025

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

Checklist (please tick if information is provided)

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

Jo van Audenaerde

CONSTRUCTION OF A DWELLING IN THE COASTAL LIVING ZONE

114B Hauparua Lane, Kerikeri

PLANNING REPORT & ASSESSMENT OF ENVIRONMENTAL EFFECTS

Thomson Survey Ltd
Kerikeri

1.0 INTRODUCTION

1.1 The Proposal

The applicant seeks to construct foundations for, and to re-locate a dwelling to their property at 114B Hauparua Lane, Kerikeri. The building consent has been issued, subject to a Form 4 (EBC-2025-1056). The EBC includes a free-standing fireplace and on-site wastewater disposal system. A copy of the EBC Certificate and associated Stamped Approved Architectural Plans for EBC-2025-1056 are attached in Appendix 1.

The Form 4 identified the need to apply for land use consent because of a breach of Rule 10.7.5.1.1 Visual Amenity, hence this application. The Form 4 also identified a breach of Rule 10.7.5.1.6 Stormwater Management because the development would bring the total impermeable surface coverage to more than 600m^2. However, this is in error because the site already has consent through RC 2240190-RMACOM which included land use consent for breaches of 10.7.5.1.6 Stormwater Management for the application site as well as Lot 1 on the stamped approved plan. RC 2240190-RMACOM consented a higher /greater future m^2 of impermeable surface coverage than now proposed.

A copy of the Form 4 is attached in Appendix 4. A copy of RC 2240190-RMACOM is attached in Appendix 5. The approved scheme plan was later amended to change right of way arrangements, but the land use consent was unchanged. Excerpts from the s95 notification report for RC 2240190 (pg 12 & 13) are attached in Appendix 6, clearly showing that consent for impermeable surface coverage for the application site was included in the RMACOM.

I do not consider, therefore, that another land use consent is required for a breach of the Stormwater Management rule. Notwithstanding this, the current application is supported by a Stormwater and Wastewater Design report prepared by Haigh Workman – refer Appendix 7. Such a report is required by the Consent Notice clauses relevant to the application site in any event.

1.2 Scope of this Report

This assessment and report accompanies the Resource Consent Application, and is provided in accordance with Section 88 and Schedule 4 of the Resource Management Act 1991. The application seeks consent for a relocatable dwelling to be established on land in the Coastal Living Zone, as a restricted discretionary activity. The information provided in this assessment and report is considered commensurate with the scale and intensity of the activity for which consent is being sought.

The name and address of the owner of the property is contained in the Form 9 Application form. There are no other activities that are part of the proposal to which the application relates, and no other resource consents required other than those addressed in this application.

2.0 PROPERTY DETAILS

Location:	114B Hauparua Lane, Kerikeri. A Location Map is attached in Appendix 2.
Legal description:	Lot 4 DP 605001, contained in Record of Title 1190274 1.8989ha in area. Refer to Appendix 3.

3.0 SITE DESCRIPTION

3.1 Physical characteristics

The site is accessed off Hauparua Lane, private road not maintained by Council, and then via internal right of way to the property boundary. The site is currently vacant land and predominantly in grass cover with some isolated trees.

Looking over house site in a westerly direction towards the remainder of the application site

The site is irregular in shape and is undulating in topography, with naturally occurring mounds that peak and dip across the site. Refer to Stormwater and Wastewater Report in Appendix 7 for more site details.

The property is zoned Coastal Living under the Operative District Plan (ODP) and Rural Lifestyle under the Proposed District Plan (PDP) with no coastal environment overlay applying, despite its ODP zoning, the site is not within the coastal environment.

The site is not identified as being subject to any coastal erosion or flooding hazards, or any river flooding hazards. The site is not erosion prone. There are no areas of significant indigenous vegetation within the site and no areas of wetland in the vicinity of the proposed development. The site is not within a kiwi present or high density kiwi area.

The site is mapped as having an archaeological site either within or near its boundaries – P05/96. However, the map co-ordinates on the site record locate this site south of the application site.

Soils on the site are LUC class 6s, not suitable for productive use.

3.2 Legal Interests

The property is subject to Consent Notice 13079483.2 – copy forming part of Appendix 3. This was imposed as part of RC 2240190-RMACOM and included what have become standard consent notice clauses for subdivisions creating new vacant lots. The clauses affecting the lot include:

- Need to provide a stormwater management design at time of building consent;
- Need to ensure sufficient potable and fire fighting water supply;
- Need to include a wastewater treatment and disposal design at time of building consent;
- Acknowledgement that power and telecommunications were not a requirement of the subdivision;
- Requirement to maintain approved landscaping established as part of the subdivision;
- Requirement for a final landscaping/amenity plan at time of building consent;

All components are being complied with in terms of this proposed relocatable.

3.3 Consent History

The site was created by RC 2240190-RMACOM and subsequent 2240190-RMAVAR/A.

4.0 SCHEDULE 4 – INFORMATION REQUIRED IN AN APPLICATION

Clauses 2 & 3: Information required in all applications

(1) An application for a resource consent for an activity must include the following:	
(a) a description of the activity: .	Refer Section 1.0 of this Planning Report.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6.0 of this Planning Report.
(b) a description of the site at which the activity is to occur:	Refer to Section 3.0 of this Planning Report.
(c) the full name and address of each owner or occupier of the site:	This information is contained in the Form 9 attached to the application.
(d) a description of any other activities that are part of the proposal to which the application relates:	Refer to Sections 3.0 & 5.0 of this Planning Report.
(e) a description of any other resource consents required for the proposal to which the application relates:	None required.

(f) an assessment of the activity against the matters set out in Part 2:	Refer to Section 7.0 of this Planning Report.
(g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b), including matters in Clause (2): *(a) any relevant objectives, policies, or rules in a document; and* *(b) any relevant requirements, conditions, or permissions in any rules in a document; and* *(c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).*	Refer to Sections 6.0 & 7.0 of this Planning Report.
(3) An application must also include any of the following that apply:	
(a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):	The site is vacant.
(b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):	There is no existing resource consent. Not applicable.
(c) if the activity is to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, an assessment of the activity against any resource management matters set out in that planning document (for the purposes of section 104(2B)).	The site is not within an area subject to a customary marine title group. Not applicable.

Clause 6: Information required in assessment of environmental effects

(1) An assessment of the activity's effects on the environment must include the following information:	
(a) if it is likely that the activity will	Refer to Section 6.0 of this planning report. The activity will not

result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:	result in any significant adverse effect on the environment.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6.0 of this planning report.
(c) if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use:	Not applicable as the application does not involve hazardous installations.
(d) if the activity includes the discharge of any contaminant, a description of— *(i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and* *(ii) any possible alternative methods of discharge, including discharge into any other receiving environment:*	The proposal does not involve any discharge of contaminant.
(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:	Refer to Section 6.0 of this planning report.
(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:	Refer to Section 8.0 of this planning report. No affected persons have been identified.
g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:	No monitoring is required as the scale and significance of the effects do not warrant it.
(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).	No protected customary right is affected.

Clause 7: Matters that must be addressed by assessment of environmental effects (RMA)

(1) An assessment of the activity's effects on the environment must address the following matters:

(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:	Refer to Sections 6.0 and 8.0 of this planning report and also to the assessment of objectives and policies in Section 7.0.
(b) any physical effect on the locality, including any landscape and visual effects:	Refer to Section 6.0.
(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:	Refer to Section 6.0. The proposal has no effect on ecosystems or habitat.
(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:	Refer to Section 6.0.
(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal of contaminants:	The proposal will not result in the discharge of contaminants, nor any unreasonable emission of noise.
(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.	The application site is not subject to natural hazards and does not involve hazardous installations.

5.0 COMPLIANCE ASSESSMENT

5.1 Operative District Plan (ODP)

The property is zoned Coastal Living in the ODP. There is no outstanding landscape or natural feature overlay in the Operative District Plan. A brief assessment of the proposal against relevant rules in Chapter 10.7 Coastal Living Zone and any relevant District Wide rules, is contained in the following Table:

Table 1:
Far North Operative District Plan:

COASTAL LIVING ZONE RULES:		
Permitted Standards	**Comment**	**Compliance Assessment**
10.7.5.1.1 VISUAL AMENITY The following are permitted activities in the Coastal Living Zone: (a) any new building(s), provided that the gross floor	The dwelling is greater than 50m^2 in area so cannot comply with part (a).	**Cannot comply.**

area of any new building(s) permitted under this rule does not exceed 50m²; or (b) any alteration/addition to an existing building which does not exceed 30% of the gross floor area of the building which is being altered or added to, provided that any alteration/addition does not exceed the height of the existing building and that any alteration/addition is to a building that existed at 28 April 2000. (c) replacement of any building so long as the replacement does not exceed the building envelope occupied by the previous building; or (d) renovation or maintenance of any building.		
10.7.5.1.2 RESIDENTIAL INTENSITY	The proposed residential unit is the only one on site.	Permitted.
10.7.5.1.3 SCALE OF ACTIVITIES	N/A	N/A
10.7.5.1.4 BUILDING HEIGHT The maximum height of any building shall be 8m.	The dwelling is single storey and less than 4.5m in height.	Permitted.
10.7.5.1.5 SUNLIGHT No part of any building shall project beyond a 45 degree recession plane as measured inwards from any point 2m vertically above ground level on any site boundary ….	The dwelling is 14m from nearest boundary and only 4.5m in height.	Permitted.
10.7.5.1.6 STORMWATER MANAGEMENT The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m2 whichever is the lesser.	The post development impermeable coverage is estimated at more than the 600m² permitted. However, RC 2240190-RMACOM grants consent for a breach of Rule 10.7.5.1.6 – up to 950m² coverage.	**Already consented. No further consent required.**
10.7.5.1.7 SETBACK FROM BOUNDARIES Buildings shall be set back a minimum 10m from any site	The dwelling is more than 14m from nearest boundary.	Permitted.

boundary, except that on any site with an area less than 5,000m² this set back shall be 3m from any site boundary.		
10.7.5.1.8 SCREENING FOR NEIGHBOURS NON-RESIDENTIAL ACTIVITIES Except along boundaries adjoining a Commercial or Industrial zone, outdoor areas providing for activities such as parking, loading, outdoor storage and other outdoor activities associated with non-residential activities on the site shall be screened from adjoining sites by landscaping, wall/s, close boarded fence/s or trellis/es or a combination thereof.....	N/A.	N/A.
10.7.5.1.10 HOURS OF OPERATION NON-RESIDENTIAL ACTIVITIES	Part of a residential activity	N/A
10.7.5.1.11 KEEPING OF ANIMALS	N/A – the proposal does not involve the keeping of animals.	N/A
10.7.5.1.12 NOISE All activities shall be so conducted as to ensure that noise from the site shall not exceed the following noise limits as measured at or within the boundary of any other site in this zone, or at any site in the Residential, Russell Township or Coastal Residential Zones, or at or within the notional boundary at any dwelling in any other rural or coastal zone: 0700 to 2200 hours 55 dBA L10 2200 to 0700 hours 45 dBA L10 and 70 dBA Lmax	A residential activity is unlikely to breach the noise rule.	Permitted
10.7.5.1.13 HELICOPTER LANDING AREA	No helicopter landing area proposed.	N/A
Controlled Activity Standards		

10.7.5.2.2 VISUAL AMENITY Any new building(s) or alteration/additions to an existing building that does not meet the permitted activity standards in ***Rule 10.7.5.1.1*** are a controlled activity where the new building or building alteration/addition is located entirely within a building envelope that has been approved under a resource consent.	There is no building envelope that has been approved under a resource consent.	**Does not meet controlled activity standard.**
Restricted Discretionary Activity Standards		
10.7.5.3.1 VISUAL AMENITY The following are restricted discretionary activities in the Coastal Living Zone: (a) any new building(s); or (b) any alteration/addition to an existing building that do not meet the permitted activity standards in ***Rule 10.7.5.1.1*** where the new building or building alteration/addition is located partially or entirely outside a building envelope that has been approved under a resource consent.	The dwelling is entirely outside of any pre approved building envelopes.	**Meets restricted discretionary activity rule.**
DISTRICT WIDE RULES		
12.3 SOILS AND MINERALS 12.3.6.1.2 EXCAVATION AND/OR FILLING, INCLUDING OBTAINING ROADING MATERIAL BUT EXCLUDING MINING AND QUARRYING, IN THE ..... COASTAL LIVING..... ZONES Excavation and/or filling, excluding mining and quarrying, on any site in the ...., Coastal Living..... Zones is permitted, provided that: (a) it does not exceed 300m³ in any 12 month period per site; and (b) it does not involve a cut or filled face exceeding 1.5m in height i.e. the maximum permitted cut and fill height may be 3m.	In issuing Building Consent the Council did not identify any breach of excavation/filling thresholds.	Permitted.

12.4 NATURAL HAZARDS 12.4.6.1.2 FIRE RISK TO RESIDENTIAL UNITS	The building is not near the dripline of any area of trees.	Permitted.
15.1 TRAFFIC, PARKING and ACCESS	The site supports no other activity and as far as I am aware will not be associated with any commercial activity. The permitted TIF in the zone is 20 daily one way movements with the first residential unit on a site exempt in any event.	Permitted.

In summary, in terms of Part 2 Zone rules, and Part 3 District Wide rules, the proposal breaches permitted and controlled activity standards for Visual Amenity. It is therefore a **restricted discretionary** activity. I have not identified any other rule breaches and no consent is required under any Regional Plan.

5.2 Proposed District Plan

The FNDC publicly notified its PDP on 27th July 2022. Decisions on submissions have yet to be notified so only specific rules identified as such have legal effect at the time of this application being lodged.

Rules identified by the Council as having legal effect include:

Rules HS-R2, R5, R6 and R9 in regard to hazardous substances on scheduled sites or areas of significance to Maori, significant natural areas or a scheduled heritage resource.
The property does not contain a scheduled site or area of significance to Maori, a scheduled heritage resource, or any significant natural area.
Not Applicable.

Heritage Area Overlays – the property is not within any Heritage Area overlay
Not applicable.

Historic Heritage rules and Schedule 2 – the property is not listed in Schedule 2 (Historic sites, buildings and objects)
Not applicable.

Notable Trees – none
Not applicable

Sites and Areas of Significance to Maori – none
Not applicable.

Ecosystems and Indigenous Biodiversity – Rules IB-R1 to R5 inclusive.
The proposal does not involve any clearance of vegetation or habitat, and no breach of these rules has been identified.

Subdivision (specific parts) –
Not applicable.

Activities on the surface of water –
Not applicable.

Earthworks – Only some rules and standards have legal effect. These are Rules EW-R12 and R13 and related standards EW-S3 and ES-S5 respectively. EW-R12 and associated EW-S3 relate to the requirement to abide by Accidental Discovery Protocol (ADP) if carrying out earthworks and any artefacts are discovered. EW-R13 and associated EW-S5 relate to earthworks being done in accordance with industry standard Erosion and Sediment Control measures. Both aspects can be adhered to.

Signs –
Not applicable.

Orongo Bay Zone –
Not applicable.

6.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

The application is a restricted discretionary activity for breaches of the Visual Amenity rule. The Operative District Plan sets out the matters to which the Council will restrict its discretion for each breach.

6.1 Visual Amenity Assessment

(i) the location of the building;

Refer to the Plans attached as part of Appendix 1 & 1A (architectural, stamped approved; and landscape plan). The dwelling is to be located near the eastern boundary of the site. It is not on a ridgeline and situated well back from that eastern boundary. The subdivider established boundary landscaping/planting as a condition of consent. The location of the dwelling is such that there will be very little visual impact when viewed from any adjacent site. The building is not located within the coastal environment.

(ii) the size, bulk, and height of the building or utility services in relation to ridgelines and natural features;

The dwelling is modest in footprint, being only 110m^2. The building is single storey. It is not located on a ridgeline and is not near any natural features. The building will not be a dominant feature within its environs.

The site has no views of the inlet, and therefore the inlet has no views of the site.

View from building site, looking east towards the inlet, which is not visible from the site at all.

(iii) the colour and reflectivity of the building;

The proposed colour scheme is not specified on the stamped approved building plans, other than noting that the dwelling is an existing house to be re-located. The building report states the cladding is timber weatherboard. At time of my site visit, the building had been delivered to site, albeit not located yet in its specified location. See below.

Relocated dwelling as delivered to site. Final location is near the white utility vehicle seen beyond the house.

There is no maximum LRV applying in the Coastal Living Zone, nor any requirement for the use of recessive colours. Those more stringent requirements are reserved for land zoned General Coastal, which this is not. In addition, the more recent (and higher order) planning instruments applying to the site, have placed the landward boundary of the coastal environment much nearer the coastal marine boundary of the inlet, meaning the site is not within the coastal environment in the first instance. In addition, the 'white' outline at right of the above photograph is a large two storey dwelling, with bright white cladding. The built development in this area is many and varied, depending on location and viewpoints. Given the above factors, along with the modest size, small scale, location within the site, and landscaping, lead me to the opinion that there need not be any restriction on colour scheme or reflectivity.

(iv) the extent to which planting can mitigate visual effects;

There is boundary planting as required by the original subdivision consent that created the site. As part of the building consent, the applicants have submitted their own landscaping plan, refer Appendix 1A. This requires some additional plantings, focused on two areas, to the west of the building. The combination of existing and proposed plantings will contribute to the mitigation of visual impact of the building.

Newly established plantings.

(v) any earthworks and/or vegetation clearance associated with the building;

The proposal involves a foundation structure of piles as opposed to concrete slab. A level platform is has been scraped and cleared of vegetation. A gravel driveway has been formed to the build site, culminating in a turning circle near the proposed building platform. The land over which the access has been formed, as well as the house site, is reasonably level such that any exposed / bare earth is not overly visible from any off-site viewing point. No vegetation clearance was required other than grass cover.

(vi) the location and design of associated vehicle access, manoeuvring and parking areas;

See above comment.

(vii) the extent to which the building will be visually obtrusive;

See earlier comments. The relocated dwelling is modest in size and scale and will not be visually obtrusive.

(viii) the cumulative visual effects of all the buildings on the site;

The dwelling will be the first building on the site and as such there are no cumulative visual effects.

(ix) the degree to which the landscape will retain the qualities that give it its naturalness, visual and amenity values;

The site does not support any areas of indigenous bush, being mostly in grass cover. The proposed building will occupy only a very small portion of the site.

(x) the extent to which private open space can be provided for future uses;

See above. There will be an abundance of private open space around the proposed dwelling site.

(xi) the extent to which the siting, setback and design of building(s) avoid visual dominance on landscapes, adjacent sites and the surrounding environment; and (xii) the extent to which non-compliance affects the privacy, outlook and enjoyment of private open spaces on adjacent sites.

See earlier comments. The building will not be visually dominant on landscapes, adjacent sites or the surrounding environment. The privacy, outlook and enjoyment of private open spaces on adjacent sites will not be adversely affected by the proposal.

In summary, I am of the opinion that the adverse effects on visual amenity, are less than minor on both the wider environment and on adjacent sites.

6.2 Effects of Stormwater & wastewater

Although there is no additional breach of the Stormwater Management rule over and above what has already been consented, the Building Consent included a Stormwater and Waste Management Design Report. This has been accepted by the Council and stamped approved. The proposal has no off-site effects in regard to stormwater management, or on-site wastewater treatment and disposal.

6.3 Ground stability and foundation design

Similarly the building consent was supported by Geotechnical Assessment and Ground Condition reporting, all of which were stamped approved by the Council as part of the EBC. The site can readily support the proposed relocated dwelling with no adverse effects.

6.4 Archaeological Sites

As stated earlier, recorded archaeological site P05/96 is mapped as being within or near the property. Heritage New Zealand Pouhere Taonga was informed and provided comments to the original subdivision consent. They recommended an advice note be added should consent be granted that would advise the consent holder / landowners that before physical works commence an archaeological assessment should be prepared. This was duly incorporated as an Advice Note on the subdivision consent. It is not a condition of consent or consent notice requirement. Building Consent has been issued with no further reference to archaeological sites. Rules in the PDP, referred to earlier in this report, require any earthworks to be carried out in compliance with the requirements of the Accidental Discovery Protocol (ADP).

A point to note is that P05/96 is described as a pit on a sloping ridge. The build site is not on a sloping ridge. In addition, The co-ordinates given for the site actually place it well south of the building area, in fact outside the application site altogether.

7.0 STATUTORY ASSESSMENT

7.1 District Plan Objectives and Policies

Objectives and policies relevant to this proposal are predominantly those listed in Chapter 10.7 Coastal Living Zone.

The zone is stated as applying to areas already developed, but which maintain a high level of amenity associated with the coast. In the case of this site, it is outside of the coastal environment, and within an area already developed (Hauparua Lane). It has amenity values because of vegetative cover and landscaping, but not "associated with the coast". There is a very limited viewing audience into the site.

The zoning applies to areas believed to have the 'ability to absorb further low density [development]....' The proposed development does not extend the use of the site beyond that of a single residential unit. I believe the site is capable of visually absorbing the proposed level of development. The proposed development is in keeping with the surrounding area's character. Relevant objectives and policies are discussed below. I regard the proposal as being consistent with the zone's objectives and policies.

10.7.3.1 To provide for the well being of people by enabling low density residential development to locate in coastal areas where any adverse effects on the environment of such development are able to be avoided, remedied or mitigated.

10.7.3.2 To preserve the overall natural character of the coastal environment by providing for an appropriate level of subdivision and development in this zone.

I believe the proposal to be consistent with both the above objectives. It enables the owners of the property to develop the site for their enjoyment and well being. Effects of the proposed development can be adequately remedied or mitigated through building location, orientation, size, bulk, and design. Commentary on the overall character of the vicinity has been provided earlier in this report.

10.7.4.1 That the adverse effects of subdivision, use, and development on the coastal environment are avoided, remedied or mitigated.

10.7.4.2 That standards be set to ensure that subdivision, use or development provides adequate infrastructure and services and maintains and enhances amenity values and the quality of the environment.

10.7.4.3 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the zone in regards 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 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.

The relocated dwelling is to be the first building on the site. It will not be visually obtrusive. It is modest in size and scale and there will be landscaping on boundaries and internal to the site to assist in mitigation of effects.

Stormwater management from increased roof runoff and metalled areas is achievable without offsite effects. The site has no known cultural sites of significance and research shows the one archaeological site that is mapped as being on or near the property has North and East coordinates that place it outside of the application site to the south.

7.2 Proposed District Plan Objectives and Policies

The property is proposed to be zoned Rural Lifestyle in the PDP.

Objectives:

RLZ-O1
The Rural Lifestyle zone is used predominantly for low density residential activities and small scale farming activities that are compatible with the rural character and amenity of the zone.

RLZ-O2
The predominant character and amenity of the Rural Lifestyle Zone is characterised by:
a. low density residential activities;
b. small-scale farming activities with limited buildings and structures;
c. smaller lot sizes than anticipated in the Rural Production Zone;
d. a general absence of urban infrastructure;
e. rural roads with low traffic volumes;
f. areas of vegetation, natural features and open space.

RLZ-O3 *The role, function and predominant character and amenity of the Rural Lifestyle zone is not compromised by incompatible activities.*

RLZ-O4
Land use and subdivision in the Rural Lifestyle zone does not compromise the effective and efficient operation of primary production activities in the adjacent Rural Production Zone.

The site is low density residential and compatible with the rural character and amenity of the zone (RLZ-O1 & RLZ-O2). The site and the proposal are consistent with the characteristics outlined in RLZ-O2. The proposal is not incompatible with role, function and predominant character and amenity of the zone (RLZ-O3). There is no land zoned Rural Production adjacent to the site (RLZ-O4).

RLZ-P1 *Enable activities that will not compromise the role, function and predominant character and amenity of the Rural Lifestyle Zone, while ensuring their design, scale and intensity is appropriate to manage adverse effect in the zone, including:*
a. low density residential activities;
b. small-scale farming activities;
c. home business activities;
d. visitor accommodation; and
e. small-scale education facilities.

RLZ-P2 *Avoid activities that are incompatible with the role, function and predominant character and amenity of the Rural Lifestyle Zone because they are:*
a. contrary to the density anticipated for the Rural Lifestyle Zone;
b. predominantly of an urban form or character;
c. primary production activities, such as intensive indoor primary production, that generate adverse amenity effects that are incompatible with rural lifestyle living; and
c. commercial , rural industry or industrial activities that are more appropriately located in a Settlement zone or an urban zone.

RLZ-P3 *Avoid where possible, or otherwise mitigate, reverse sensitivity effects from sensitive and other non-productive activities on primary production activities in the adjacent Rural Production Zone.*

RLZ-P4 *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. consistency with the scale and character of the rural lifestyle environment;
b. location, scale and design of buildings or structures;
c. 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;
d. the capacity of the site to cater for on-site infrastructure associated with the proposed activity;
e. the adequacy of roading infrastructure to service the proposed activity;
f. managing natural hazards;
g. any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity; and
h. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

The land use on the site will be residential. This is an activity expected in the zone (RLZ-P1). The existing and future land use is/will be compatible with the role, function and predominant character and amenity of the zone (RLZ-P2). Reverse sensitivity effects are not an issue (RLZ-P3). All of the matters in RLZ-P4, where relevant, have been considered and the proposal is considered consistent with the policy, albeit this policy is of limited relevance given that no consent is required pursuant to the PDP.

The property is outside of the coastal environment as mapped in the PDP. The property is not subject to any hazards. No indigenous vegetation clearance will occur. The site has no mapped or scheduled heritage/cultural resources. No other objectives and policies in the PDP are therefore relevant to the proposal.

7.3 Part 2 Matters

5 Purpose

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

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

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

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

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

The proposal provides for peoples' social and economic well being, and for their health and safety, while sustaining the potential of natural and physical resources, safeguarding the life-supporting capacity of air, water, soil and the ecosystems; and avoiding, remedying or mitigating adverse effects on the environment.

6 Matters of national importance

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall recognise and provide for the following matters of national importance:

(a) the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development:

(b) the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development:

(c) the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna:

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:

(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:

(f) the protection of historic heritage from inappropriate subdivision, use, and development:

(g) the protection of protected customary rights:

(h) the management of significant risks from natural hazards.

The application site is in an area zoned (and developed) for low density housing. It is not within the coastal environment. The proposal is appropriate for the site. There is no requirement for public access and I do not believe the proposal affects the relationship of Maori with their culture and traditions with water. Heritage values are not adversely affected. There is no significant risk of hazard.

7 Other matters

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—

(a) kaitiakitanga:

(aa) the ethic of stewardship:

(b) the efficient use and development of natural and physical resources:

(ba) the efficiency of the end use of energy:

(c) the maintenance and enhancement of amenity values:

(d) intrinsic values of ecosystems:

(e) [Repealed]

(f) maintenance and enhancement of the quality of the environment:

(g) any finite characteristics of natural and physical resources:

(h) the protection of the habitat of trout and salmon:

(i) the effects of climate change:

(j) the benefits to be derived from the use and development of renewable energy.

Regard has been had to any relevant parts of Section 7 of the RMA, "Other Matters". These include 7(b), (c), (d) and (f). It is considered that the proposal represents efficient use and

development of a site. Amenity values will be maintained as will the quality of the environment. The proposal has had regard to the values of ecosystems.

8 Treaty of Waitangi

In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

The principles of the Treaty of Waitangi have been considered and it is believed that this proposed subdivision does not offend any of those principles.

In summary, it is considered that all matters under s5-8 inclusive have been adequately taken into account.

7.4 National Policy Statements and Environmental Standards

The proposal is a residential development. I have not identified any NPS or NES relevant to the proposal.

7.5 Regional Policy Statement for Northland

As part of residential use of a property, presenting no intensification of use as to what is provided for on a vacant site, I consider the proposal to be consistent with the RPS for Northland. The site is not at risk of sea level rise and not mapped as being subject to any coastal flood hazard or erosion hazard.

7.6 Regional Plans

The proposal does not require any consent under any Regional Plan.

8.0 CONSULTATION & s95A-E ASSESSMENT

8.1 S95A Public Notification Assessment

A consent authority must follow the steps set out in s95A to determine whether to publicly notify an application for a resource consent. Step 1 specifies when public notification is mandatory in certain circumstances. No such circumstances exist. Step 2 of s95A specifies the circumstances that preclude public notification. No such circumstance exists and Step 3 of s95A must be considered. This specifies that public notification is required in certain circumstances. No such circumstances exist. Public notification is not required pursuant to Step 3 of s95A.

8.2 S95B Limited Notification Assessment

A consent authority must follow the steps set out in s95B to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified pursuant to s95A. Step 1 identifies certain affected groups and affected persons that must be notified. None exist in this instance. Step 2 of s95B specifies the circumstances that preclude limited notification. No such circumstance exists and Step 3 of s95B must be considered. This specifies that certain other affected persons must be notified. I have not identified any affected persons. Refer to section 8.4 below.

8.3 S95D Level of Adverse Effects

The AEE in this report assesses effects on the environment and concludes that these will be no more than minor.

8.4 S95E Affected Persons

A person is an 'affected person' 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). A person is not an affected person if they have provided written approval for the proposed activity. No written approvals have been considered necessary as in this instance effects of a single residential dwelling on a consented vacant site, are less than minor, for the reasons outlined in section 6 of this report.

9.0 CONCLUSION

The site is considered suitable for the proposal, and effects on the wider environment are less than minor. The proposal is consistent with the relevant objectives and policies of the Operative and Proposed District Plans, and the Regional Policy Statement, as well as Part 2 of the Resource Management Act. There is no District Plan rule or national environmental standard that requires the proposal to be publicly notified and no persons have been identified as adversely affected by the proposal. No special circumstances have been identified that would suggest notification is required.

It is therefore requested that the Council grant approval on a non-notified basis, subject to appropriate conditions.

Lynley Newport Date 7th August 2025
Senior Planner
Thomson Survey Ltd

10.0 APPENDICES

Appendix 1 EBC Certificate and stamped approved plans

Appendix 1A Landscape Plan

Appendix 2 Location Map

Appendix 3 Record of Title & Easement Instruments

Appendix 4 Form 4

Appendix 5 RC 2240190-RMACOM

Appendix 6 Excerpts from s95 Report

Appendix 7 Stormwater & Wastewater Design Report

Appendix 1

EBC Certificate and stamped approved plans

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

Property ID: 3366034

FORM 5
BUILDING CONSENT
Section 51, Building Act 2004
Building Consent Number: EBC-2025-1056/0

THE BUILDING

Street Address of Building
114B Hauparua Lane,
Kerikeri 0230

Legal description of land where building is located:
Lot 4 DP 605001

Building Name:

Location of Building within site / block number:

Level/unit number:

THE OWNER

Name of Owner:
Shaun Ganantchian-Kingston and
Joke Van Audenaerde

Contact Person Name:

Mailing Address:
PO Box 163
Paihia 0247

Street Address / Registered Office:

Phone Number:

Landline:

Mobile:

Daytime:

After Hours:

Facsimile Number:

Email Address:
j.va@outlook.co.nz

Website

First point of contact for communications with the building consent authority:

R & J Architecture
Rhys Coutts
71N Cameron Street,
Whangarei, 0110
Email: rhys@randjarchitecture.co.nz
Ph:027 204 0415; 09 393 0000

BUILDING WORK

The following building work is authorised by this building consent:

Foundations for a Second-Hand Relocatable Dwelling Install a Free-Standing Fireplace and On-Site Wastewater Disposal System

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building). This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

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

Property ID: 3366034

THIS BUILDING CONSENT IS SUBJECT TO THE FOLLOWING CONDITION(S)

Section 90 Inspections by the Building Consent Authority (BCA) and Third Parties
Agents authorised by the BCA (Council) are entitled to inspect, at all times during normal working hours or while building work is being done. Inspection means the taking of all reasonable steps to ensure that building work is being carried out in accordance with this building consent.

Attached to this document are a list of the inspections that Council will undertake (refer attachments for details) and a list of inspections and supporting documentation required by third parties e.g. your engineer or accredited inspection body (refer attachments for details)

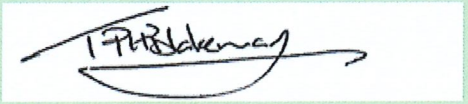
COMPLIANCE SCHEDULE

- A compliance schedule is not required for the building.

ATTACHMENTS

Copies of the following documents are attached to this building consent:

- ☐ Project information memorandum
- ☐ Development contribution notice
- ☑ Notification of requirement to obtain Resource Consent (Form 4)
- ☑ Schedule of Inspections required by the BCA and 3rd Parties. These schedules identify certificates and producer statements required during construction. Please ensure you read these documents carefully.



Trent Blakeman
Position: Manager – Building Services
On behalf of: Far North District Council (Building Consent Authority)
Date: 18-Jul-2025

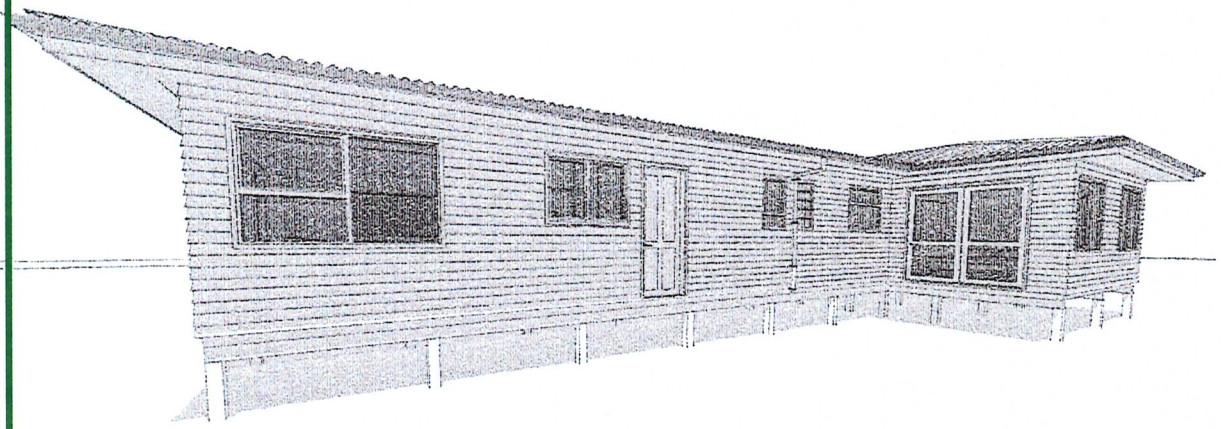
R & J ARCHITECTURE

As of 27 July 2022 The Proposed District Plan requires that this consent complies with The Auckland Council Guidance Document GD005 for Erosion and Silt Control and Rule EW-S3 Accidental Discovery Protocol

PROPOSED RELOCATION

FOR JO VAN AUDENAERDE

14 HAUPARUA LANE, KERIKERI



JOB NO: 7566
DATE : 26 JUNE 2025
STATUS: DETAILED DESIGN

Sheet Index	
Layout ID	**Layout Name**
A101	LOCALITY PLAN
A102	SITE PLAN
A103	EXISTING FLOOR PLAN
A104	PROPOSED FLOOR PLAN
A105	ELEVATION 1 & 2
A106	ELEVATION 3 & 4
A107	SECTIONS A & B
A108	FOUNDATION SETOUT
A109	ROOF PLAN
A110	DRAINAGE PLAN
A111	JOINERY SETOUT
A112	JOINERY SCHEDULES
A113	BRACING PLAN
A201	ROOFING DETAILS
A202	ROOFING DETAILS
A203	ROOFING DETAILS
A204	ROOF & TIMBER WEATHERBOARD DETAILS
A205	TIMBER WEATHERBOARD DETAILS
A206	TIMBER WEATHERBOARD DETAILS
A207	BATHROOM DETAILS
A208	BATH DETAILS
A209	PILE DETAILS
A210	SILT FENCE DETAIL
A211	TYPICAL LINTEL FIXING DETAIL
A212	STUDLOK LINTEL FIXING
A213	DRAINAGE DETAILS

NOTES:
- ALL DIMENSIONS SHOWN ON DRAWINGS, COUNCIL (PUBLIC) DRAIN POSITIONS AND INVERTS SHALL BE CONFIRMED BY CONTRACTOR ON SITE PRIOR TO ANY WORKS STARTING.
- ALL CONSTRUCTION WORK SHALL COMPLY WITH THE CURRENT NZ BUILDING CODE AND TERRITORIAL AUTHORITY REQUIREMENTS. ALL PLUMBING AND DRAINAGE SIZES TO BE AS PER NZBC, SECTION G13 TABLE 1: DISCHARGE PIPE SIZES, AND P & D CODE AS/NZS 3500.
- PLUMBING ROUTE, WASTE SIZES AND FIXTURE POSITIONS TO BE CONFIRMED BY PLUMBER PRIOR TO ANY SLAB/FOUNDATION WORK COMMENCING.
- ALL WORKS TO COMPLY WITH ALL RELEVANT HEALTH AND SAFETY REQUIREMENTS - INCLUDING BUT NOT LIMITED TOO SITE FENCING AND HOARDINGS, SCAFFOLDING AND SAFETY NETS WHERE REQUIRED. ALL SITE PERSONNEL TO MAKE THEMSELVES FAMILIAR WITH ALL SITE HAZARDS AND HEALTH AND SAFETY REQUIREMENTS BEFORE ENTERING THE SITE -AS PER F5 AS1 REQUIREMENTS.

R & J ARCHITECTURE LTD
71N Cameron Street, Whangarei
- E: admin@randjarchitecture
- T: 09 430 0931
- W: www.randjarchitecture.co.nz

SITE NOTES:

LEGAL DESCRIPTION:	
LOT 4	
DP 605001	
AREA: 1.8989HA	18,989m²
WIND ZONE:	HIGH
EXPOSURE ZONE:	ZONE D
EARTHQUAKE ZONE:	ZONE 1

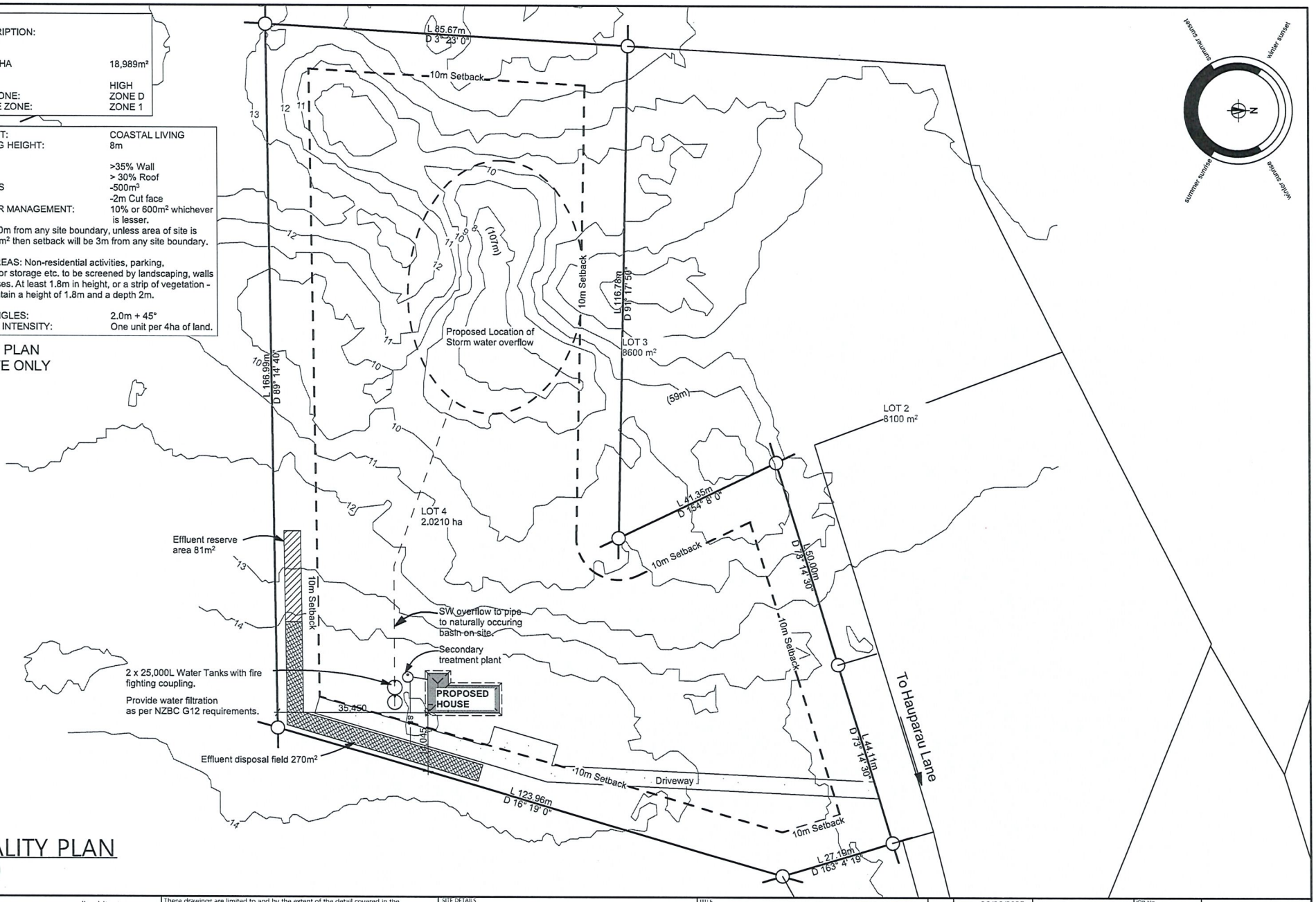
ENVIRONMENT:	COASTAL LIVING
MAX BUILDING HEIGHT:	8m
COLOURS	>35% Wall > 30% Roof
EARTHWORKS	-500m³ -2m Cut face
STORMWATER MANAGEMENT:	10% or 600m² whichever is lesser.

SETBACKS: 10m from any site boundary, unless area of site is less than 5000m² then setback will be 3m from any site boundary.

OUTDOOR AREAS: Non-residential activities, parking, loading, outdoor storage etc. to be screened by landscaping, walls fences or trellises. At least 1.8m in height, or a strip of vegetation - which will maintain a height of 1.8m and a depth 2m.

DAYLIGHT ANGLES:	2.0m + 45°
RESIDENTIAL INTENSITY:	One unit per 4ha of land.

LOCALITY PLAN
INDICATIVE ONLY



LOCALITY PLAN
1:800

R & J ARCHITECTURE www.randjarchitecture.co.nz	These drawings are limited to and by the extent of the detail covered in the drawings to meet the current New Zealand Building Code (NZBC). Where detail is required for construction and to demonstrate compliance with the current NZBC, a specific request should be made for the required detail to be supplied. No liability will be accepted for any detail or construction not covered in these drawings and/or carried out by persons other than the designer producing these documents.	SITE DETAILS: PROPOSED RELOCATION FOR JO VAN AUDENAERDE 114 HAUPARUA LANE, KERIKERI	TITLE: LOCALITY PLAN Scale: 1:800 @ A3 · Drawn: LW · Plot Date: 26/06/2025	REV: -	DATE: 26/06/2025 AMENDMENT	JOB No: 7566 DWG NAME: A101	STATUS: DETAILED DESIGN SHEET No: 2 OF 27

INDICATIVE SITE PLAN

SITE NOTES:

LEGAL DESCRIPTION:	
LOT 4	
DP 605001	
AREA: 2.02HA	20,210m²
WIND ZONE:	HIGH
EXPOSURE ZONE:	ZONE D
EARTHQUAKE ZONE:	ZONE 1
ENVIRONMENT:	COASTAL LIVING
MAX BUILDING HEIGHT:	8m
COLOURS	>35% Wall > 30% Roof
EARTHWORKS	-500m³ -2m Cut face
STORMWATER MANAGEMENT:	10% or 600m² whichever is lesser.

SETBACKS: 10m from any site boundary, unless area of site is less than 5000m² then setback will be 3m from any site boundary.
OUTDOOR AREAS: Non-residential activities, parking, loading, outdoor storage etc. to be screened by landscaping, walls fences or trellises. At least 1.8m in height, or a strip of vegetation - which will maintain a height of 1.8m and a depth 2m.

DAYLIGHT ANGLES:	2.0m + 45°
RESIDENTIAL INTENSITY:	One unit per 4ha of land.

NOTE:
•All site cut and fill volumes are approx. only and don't allow for topsoil depths.

•All dimensions shown on drawings, council (public) drain positions and inverts shall be confirmed by contractor on site prior to any works starting. Contractor to confirm that adequate falls can be achieved for all services.

•Check the Building Consent conditions for any inspections that are required by the Building Consent Authority (BCA).

•All construction work shall comply with the current NZ Building Code and Territorial Authority requirements.

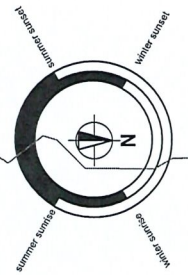
•All works to comply with all relevant health and safety requirements - including but not limited to site fencing and hoardings, scaffolding and safety nets where required. All site personnel to make themselves familiar with all site hazards and health and safety requirements before entering the site - as per F5 AS1 requirements.

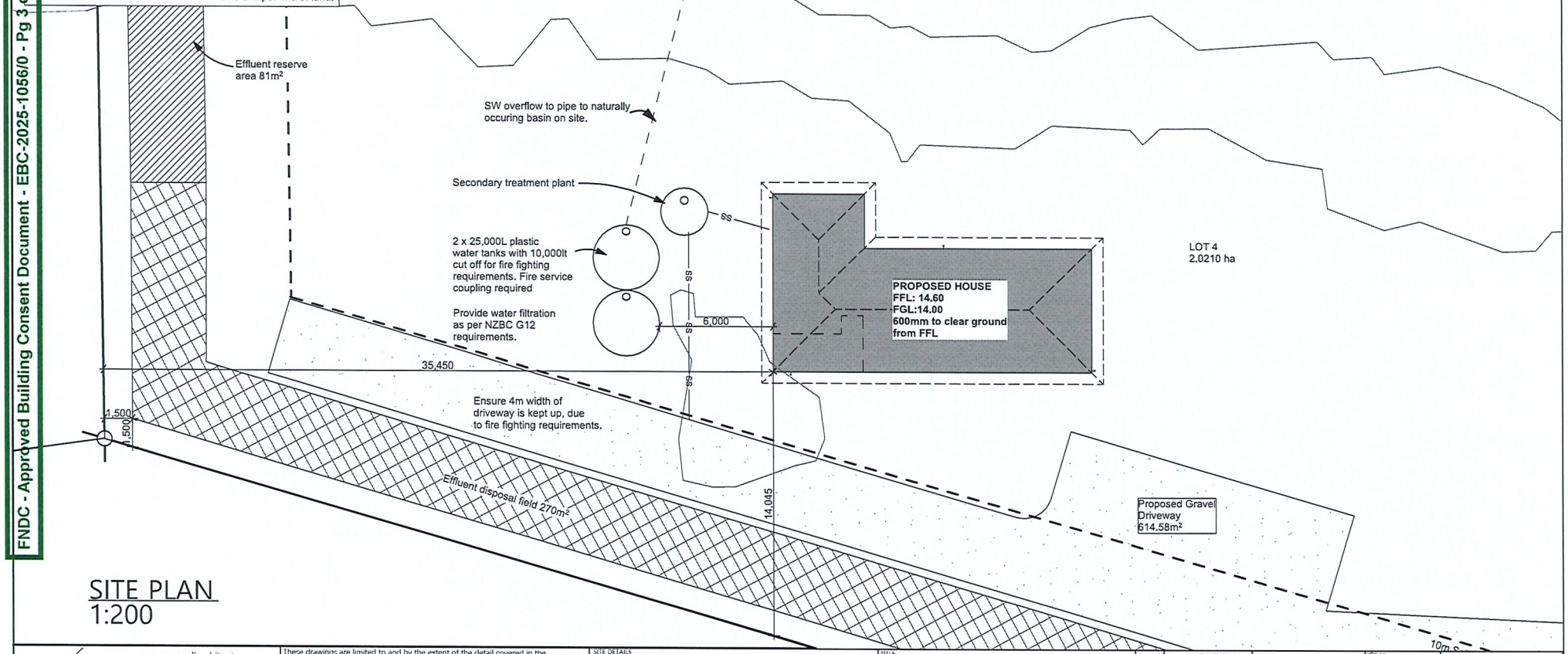
SITE WORKS:
The proposed earthworks are minimal and include road and drainage upgrades.

STORMWATER MANAGEMENT:
Stormwater overflow to be directed or piped to naturally occuring basin on site.

NOTE:
• Refer to Ground Condition Report by Gumboots Consulting Engineers
Ref # 1338
Date: 04/05/2025

• Refer to Stormwater & Wastewater Design by Haigh Workman Civil & Structural Engineers
Ref #25 054
Date: May 2025 Rev A





SITE PLAN
1:200

R & J ARCHITECTURE
www.randjarchitecture.co.nz

SITE DETAILS: PROPOSED RELOCATION FOR JO VAN AUDENAERDE, 114 HAUPARUA LANE, KERIKERI

TITLE: SITE PLAN

Scale: 1:200 @ A3 | Drawn: LW | Plot Date: 15/07/2025

REV	DATE	AMENDMENT
-	15/07/2025	

JOB No. 7566 | STATUS: DETAILED DESIGN
DWG NAME: A102 | SHEET No.: 3 OF 29

LEGEND

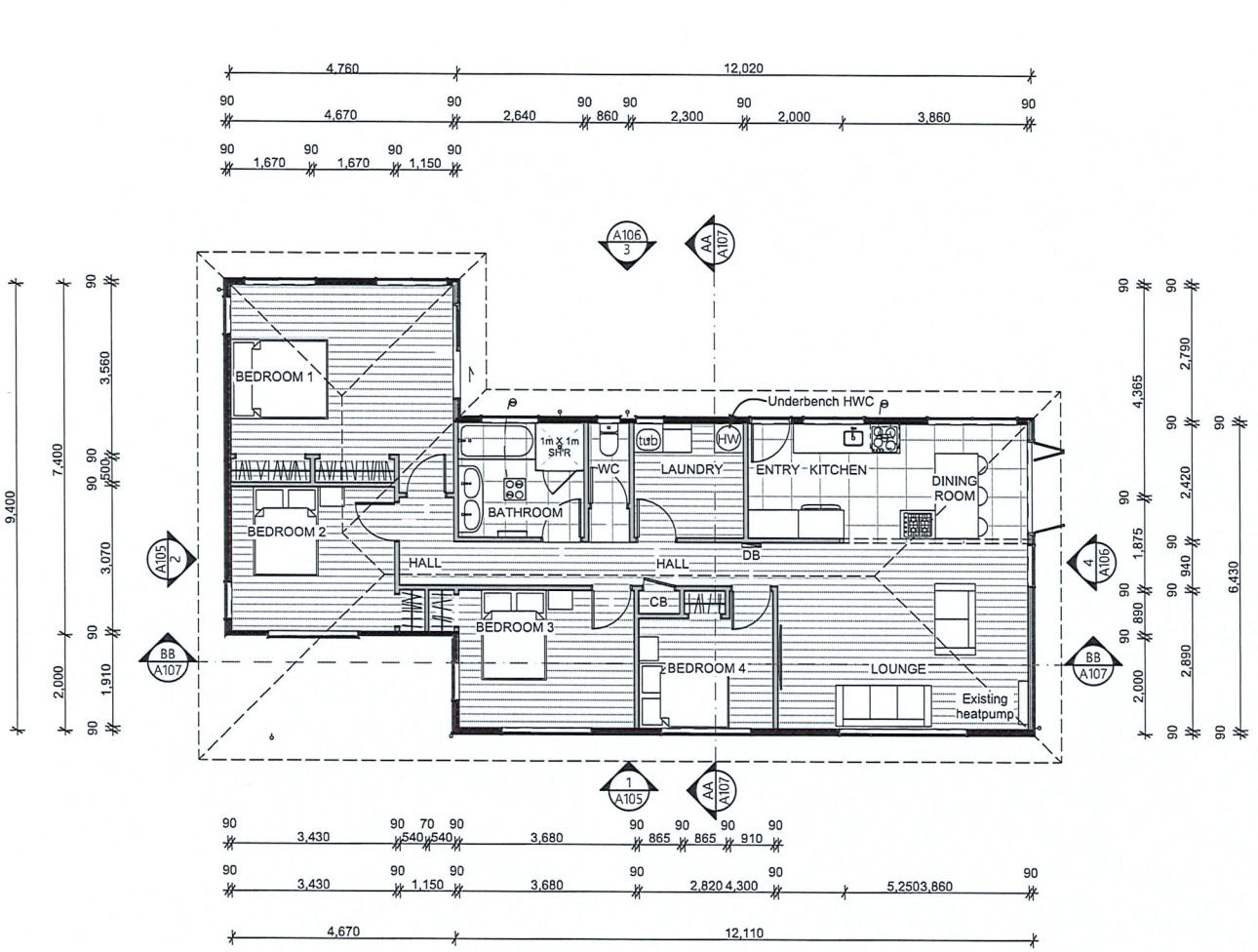
SD — SMOKE DETECTOR
-Interconnected smoke alarms to be installed near or on ceilings and located in all bedrooms, living spaces, hallways, landings & scullery

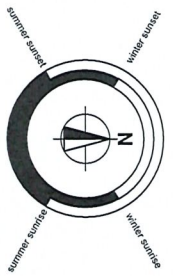
MB — Meter box

HW — Low Pressure hot water cylinder

Extractor fan

FLOOR AREAS:
EXISTING HOUSE: 115.96m²





EXISTING FLOOR PLAN
1:100

R & J ARCHITECTURE
www.randjarchitecture.co.nz

SITE DETAILS
PROPOSED RELOCATION FOR
JO VAN AUDENAERDE
114 HAUPARUA LANE, KERIKERI

TITLE
EXISTING FLOOR PLAN
Scale: 1:100 @ A3 | Drawn: LW | Plot Date: 26/06/2025

REV	DATE	AMENDMENT
-	26/06/2025	

JOB No. 7566
STATUS DETAILED DESIGN
DWG NAME A103
SHEET No. 4 OF 27

LEGEND

SD◎ SMOKE DETECTOR
-Interconnected smoke alarms to be installed near or on ceilings and located in all bedrooms, living spaces, hallways, landings & scullery

MB Meter box

HW Low Pressure hot water cylinder

Extractor fan

FLOOR AREAS:

EXISTING HOUSE:	115.96m²
NEW AREA:	9.34m²
TOTAL:	**125.3m²**

NOTE:
1. Bathroom, and laundry to have extractor fan out letting to soffit. Extractor fan to be 25L/S.
2. All timber is SG8 grade unless specified otherwise.
3. All internal timber framing to be H1.2 treated
4. All exposed timber framing above ground to be H3.2 treated.
5. All timber member and piles on ground to be H5 treated.
6. Ceilings 2.4m height.

GENERAL NOTES:
1. Contractor to confirm all dimensions on site.
2. Do not scale from drawings.
3. If any discrepancies are found contact the designer.

FRAMING SCHEDULE - HIGH

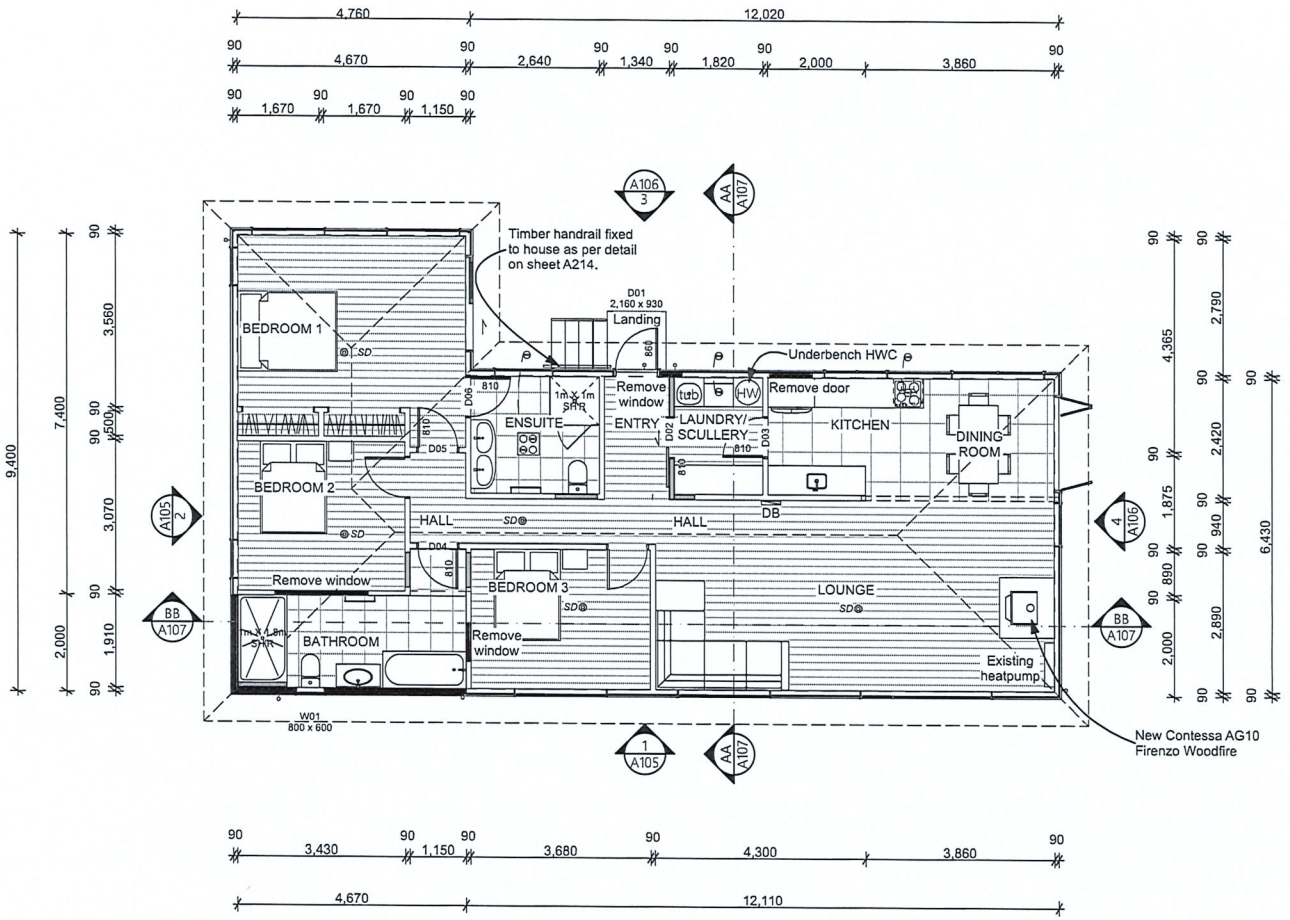
External load bearing
2.4m stud - 90x45 timber framing, studs @ 600crs, nogs @ 800crs.

Internal non-load bearing
2.4m stud - 90x45 @ 600crs, two rows of nogs.

KEY:

Selected Tiles

Selected Flooring



PROPOSED FLOOR PLAN
1:100

R & J ARCHITECTURE
www.randjarchitecture.co.nz

SITE DETAILS
PROPOSED RELOCATION FOR
JO VAN AUDENAERDE
114 HAUPARUA LANE, KERIKERI

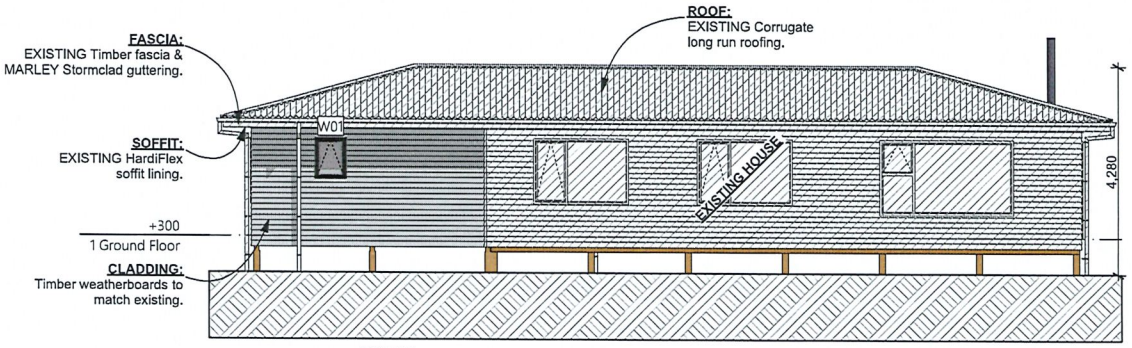
TITLE
PROPOSED FLOOR PLAN

Scale: 1:100 @ A3 | Drawn: LW | Plot Date: 15/07/2025

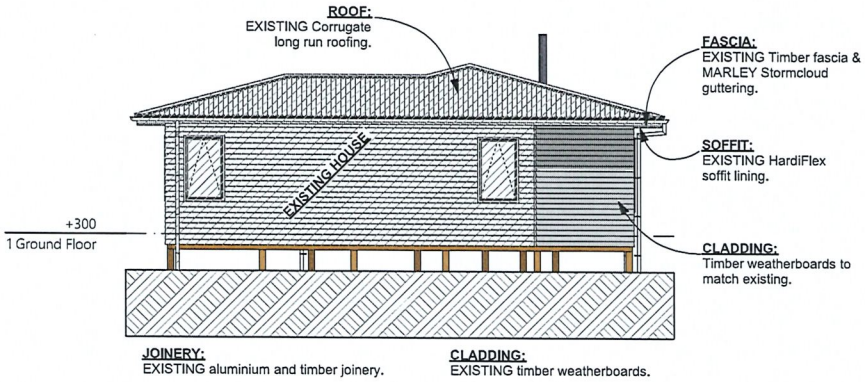
REV	DATE	AMENDMENT
-	15/07/2025	

JOB No. 7566
STATUS DETAILED DESIGN
DWG NAME A104
SHEET No. 5 OF 29

BUILDING ENVELOPE RISK MATRIX		
Worst Case Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	Medium risk	1
Envelope complexity	Low risk	0
Deck design	Low risk	0
Total Risk Score:		2



1 A104 **Elevation**
Scale 1:100



2 A104 **Elevation**
Scale 1:100

R & J ARCHITECTURE
www.randjarchitecture.co.nz

SITE DETAILS
PROPOSED RELOCATION FOR
JO VAN AUDENAERDE
114 HAUPARUA LANE, KERIKERI

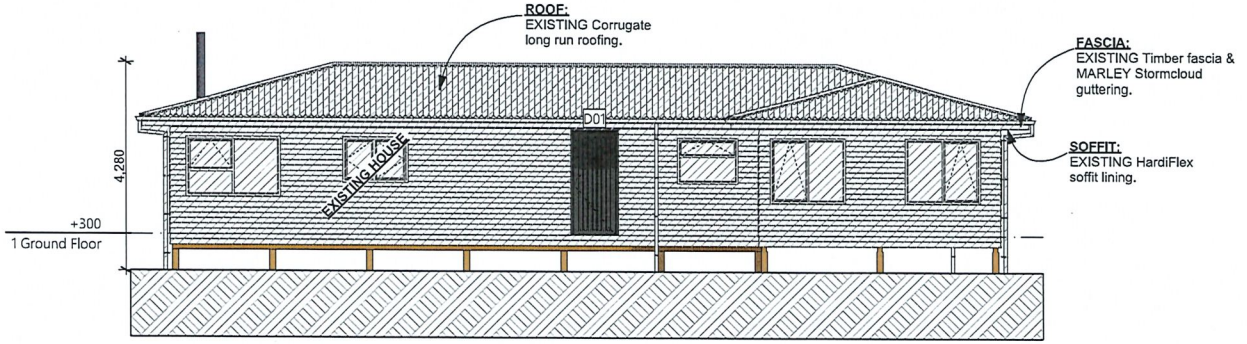
TITLE
ELEVATION 1 & 2

Scale: 1:100 @ A3 | Drawn: LW | Plot Date: 26/06/2025

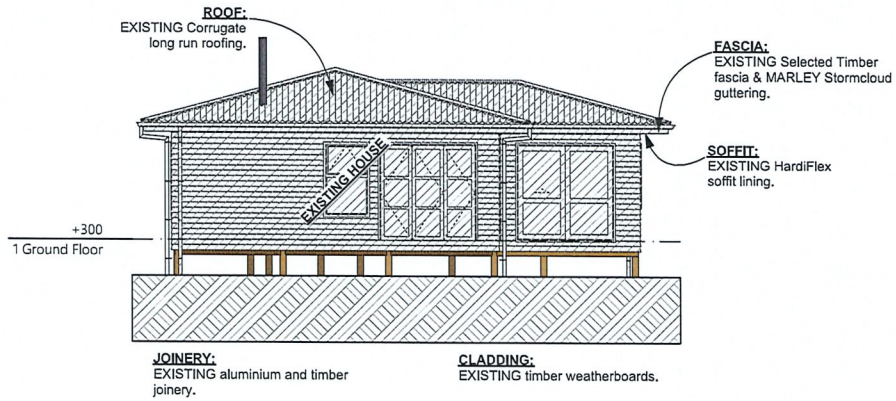
REV	DATE	AMENDMENT
-	26/06/2025	

JOB No. 7566
STATUS DETAILED DESIGN
DWG NAME A105
SHEET No. 6 OF 27

BUILDING ENVELOPE RISK MATRIX		
Worst Case Elevation		
Risk Factor	**Risk Severity**	**Risk Score**
Wind zone (per NZS 3604)	High risk	1
Number of storeys	Low risk	0
Roof/wall intersection design	Low risk	0
Eaves width	Medium risk	1
Envelope complexity	Low risk	0
Deck design	Low risk	0
Total Risk Score:		**2**



3 Elevation (A104) Scale 1:100



4 Elevation (A104) Scale 1:100

R & J ARCHITECTURE
www.randjarchitecture.co.nz

SITE DETAILS: PROPOSED RELOCATION FOR JO VAN AUDENAERDE, 114 HAUPARUA LANE, KERIKERI

TITLE: ELEVATION 3 & 4

Scale: 1:100 @ A3 | Drawn: LW | Plot Date: 26/06/2025

REV: - | DATE: 26/06/2025 | AMENDMENT:

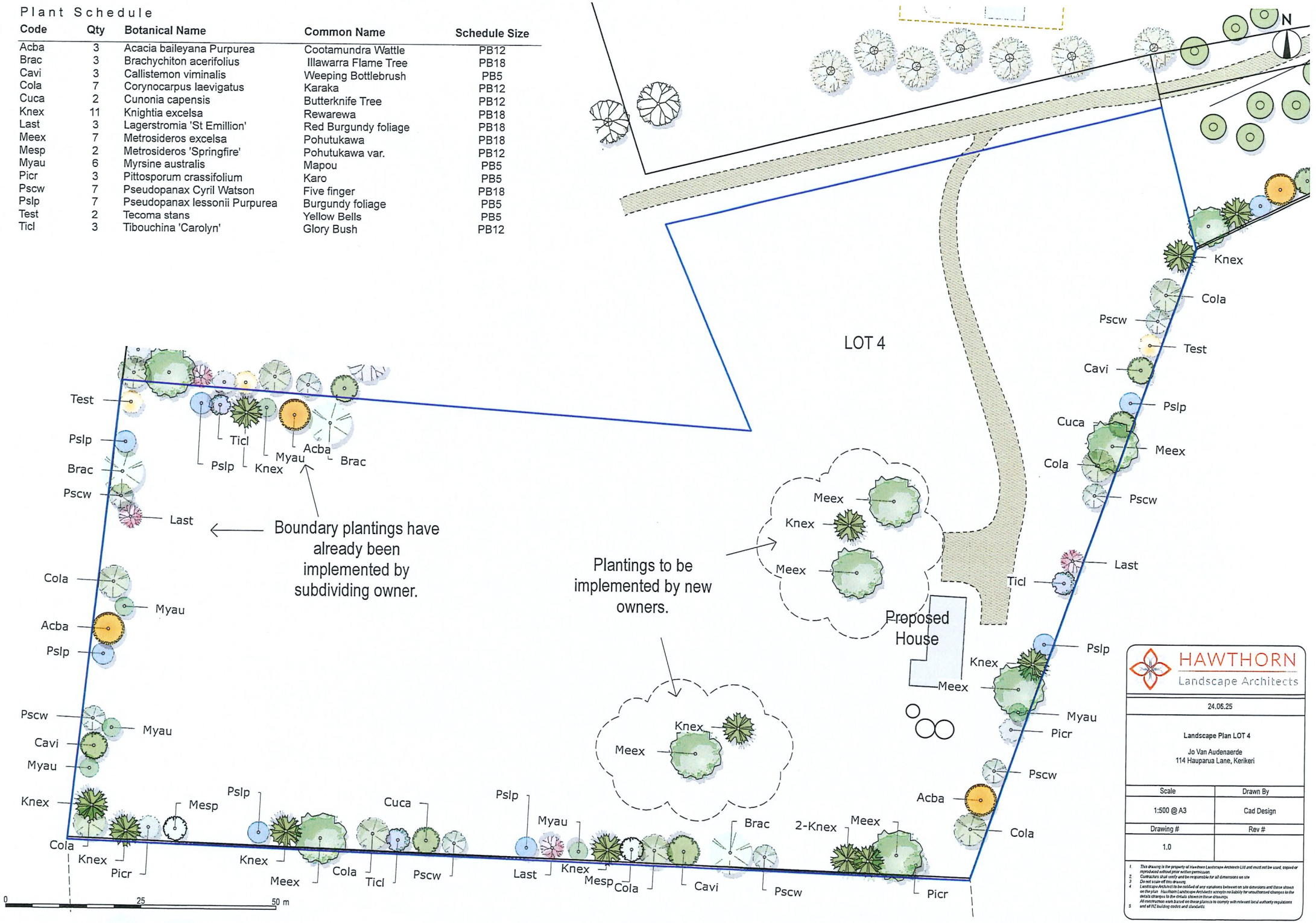
JOB No.: 7566 | STATUS: DETAILED DESIGN

DWG NAME: A106 | SHEET No.: 7 OF 27

Appendix 1A
Landscape Plan

Plant Schedule

Code	Qty	Botanical Name	Common Name	Schedule Size
Acba	3	Acacia baileyana Purpurea	Cootamundra Wattle	PB12
Brac	3	Brachychiton acerifolius	Illawarra Flame Tree	PB18
Cavi	3	Callistemon viminalis	Weeping Bottlebrush	PB5
Cola	7	Corynocarpus laevigatus	Karaka	PB12
Cuca	2	Cunonia capensis	Butterknife Tree	PB12
Knex	11	Knightia excelsa	Rewarewa	PB18
Last	3	Lagerstromia 'St Emillion'	Red Burgundy foliage	PB18
Meex	7	Metrosideros excelsa	Pohutukawa	PB18
Mesp	2	Metrosideros 'Springfire'	Pohutukawa var.	PB12
Myau	6	Myrsine australis	Mapou	PB5
Picr	3	Pittosporum crassifolium	Karo	PB5
Pscw	7	Pseudopanax Cyril Watson	Five finger	PB18
Pslp	7	Pseudopanax lessonii Purpurea	Burgundy foliage	PB5
Test	2	Tecoma stans	Yellow Bells	PB5
Ticl	3	Tibouchina 'Carolyn'	Glory Bush	PB12



HAWTHORN
Landscape Architects

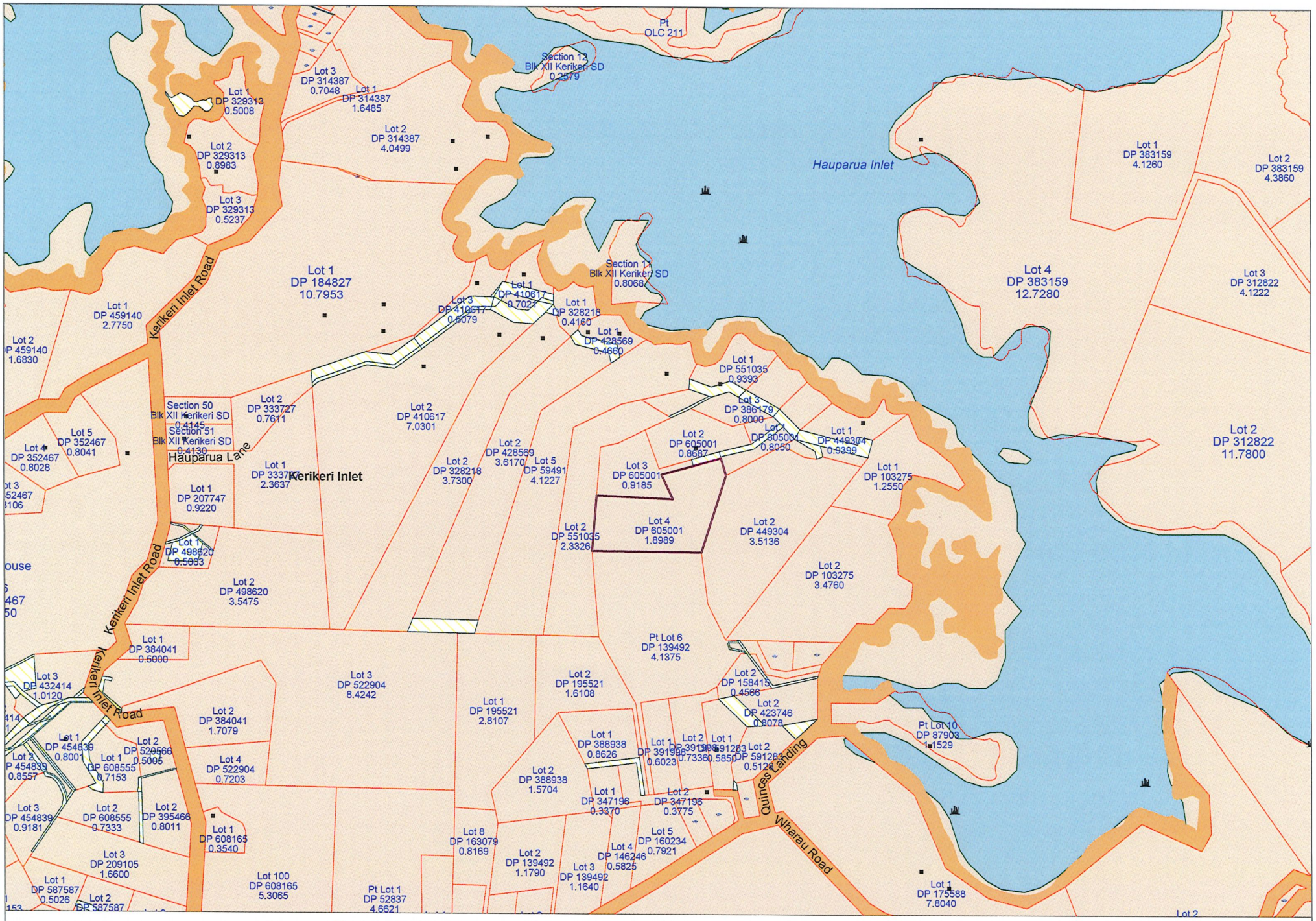
24.06.25

Landscape Plan LOT 4

Jo Van Audenaerde
114 Hauparua Lane, Kerikeri

Scale	Drawn By
1:500 @ A3	Cad Design
Drawing #	Rev #
1.0	

Appendix 2
Location Map



QuickMap
Custom Software Ltd

Any person wishing to rely on the information shown on this map must independently verify the information

Scale 1:7500 Topographical and Cadastral map derived from LINZ data. Printed: 05-Aug-2025 02:19.

Appendix 3
Record of Title & Easement Instruments

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**1190274**
Land Registration District	**North Auckland**
Date Issued	17 January 2025

Prior References
NA26B/50

Estate	Fee Simple
Area	1.8989 hectares more or less
Legal Description	Lot 4 Deposited Plan 605001

Registered Owners
Shaun Ganantchian-Kingston as to a 1/2 share
Joke Van Audenaerde as to a 1/2 share

Interests

Appurtenant hereto are rights of way specified in Easement Certificate 172788.1 - 17.12.1974 at 1.58 pm

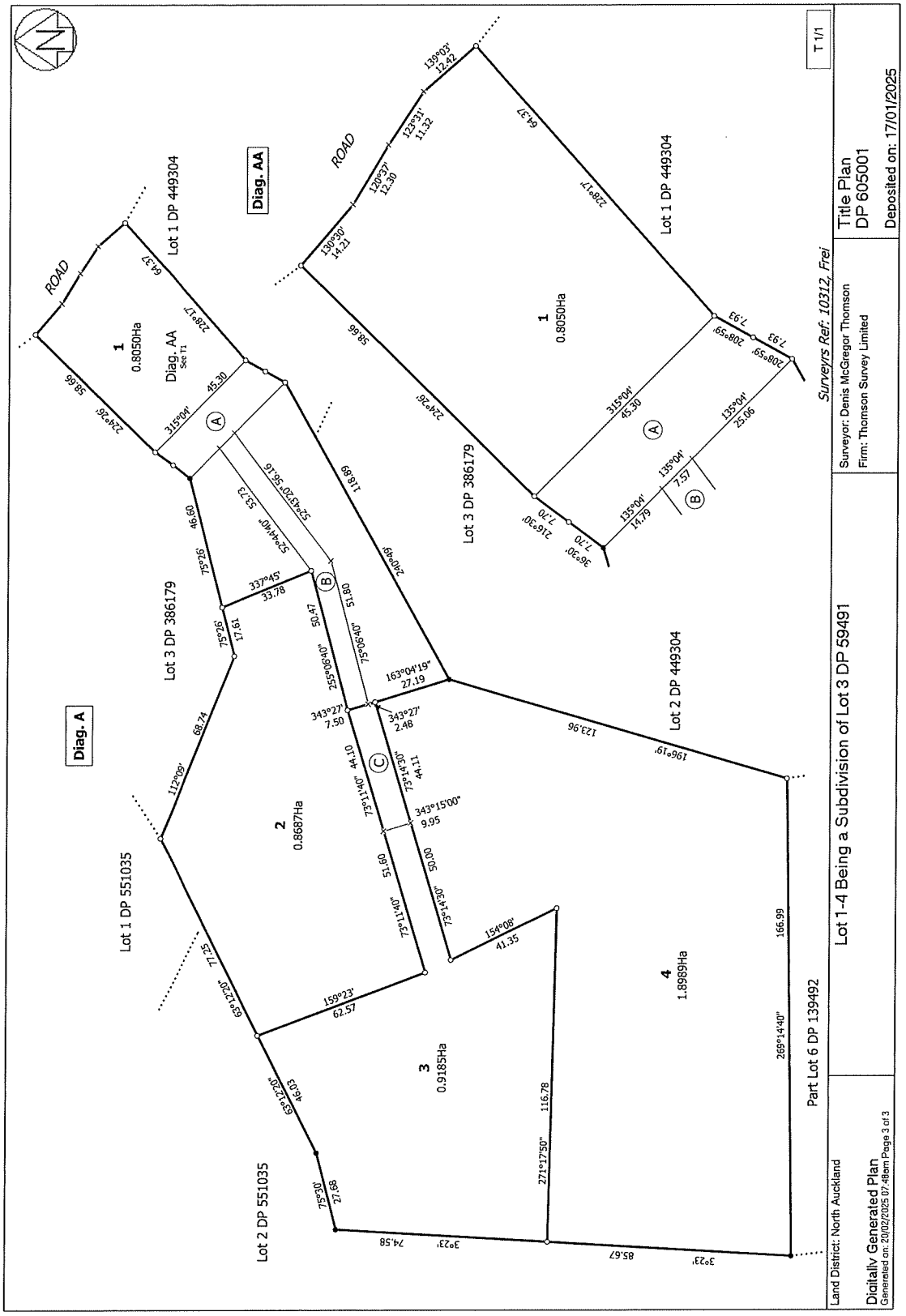
8965260.2 Surrender of the right of way marked I and J on DP 410617 created by Easement Certificate 172788.1 - 1.2.2012 at 1:48 pm

Appurtenant hereto is a right of way created by Easement Instrument 8965260.5 - 1.2.2012 at 1:48 pm

13079483.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 17.1.2025 at 3:16 pm

Appurtenant hereto is a right of way, a right to convey electricity and telecommunications and a right to drain water created by Easement Instrument 13079483.3 - 17.1.2025 at 3:16 pm

Some of the easements created by Easement Instrument 13079483.3 are subject to Section 243 (a) Resource Management Act 1991 (see DP 605001)


Lot 1-4 Being a Subdivision of Lot 3 DP 59491
Title Plan DP 605001
Deposited on: 17/01/2025
Surveyor: Denis McGregor Thomson
Firm: Thomson Survey Limited
Surveys Ref: 10312, Frei
T 1/1
Land District: North Auckland
Digitally Generated Plan
Generated on: 20/02/2025 07:48am Page 3 of 3
Diag. A
Diag. AA
Diag. AA See T1
ROAD
Lot 1 DP 449304
Lot 3 DP 386179
Lot 2 DP 449304
Lot 1 DP 551035
Lot 2 DP 551035
Part Lot 6 DP 139492
1 0.8050Ha
2 0.8687Ha
3 0.9185Ha
4 1.8989Ha

View Instrument Details

Instrument No	13079483.2
Status	Registered
Date & Time Lodged	17 Jan 2025 15:16
Lodged By	Peacock, Shaun Gavin
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Records of Title	**Land District**
1190271	North Auckland
1190272	North Auckland
1190273	North Auckland
1190274	North Auckland

Annexure Schedule	Contains 3 Pages

Signature

Signed by Campbell McGill as Territorial Authority Representative on 17/01/2025 03:10 PM

***** End of Report *****

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

HE ARA TĀMATA
CREATING GREAT PLACES
Supporting our people

Private Bag 752, Kaikohe 0440, New Zealand
ask.us@fndc.govt.nz
0800 920 029
fndc.govt.nz

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING **RC2240190-RMAVAR/A**
Being the subdivision of Lot 3 DP 59491
North Auckland Registry

PURSUANT to section 221 and for the purpose of section 224 (c) (ii) of the Resource Management Act 1991, this consent notice is issued by the **FAR NORTH DISTRICT COUNCIL** to the effect that conditions described in the schedule below are to be complied with on a continuing basis by the subdividing owner and the subsequent owners after the deposit of the survey plan, and these are to be registered on the titles of the allotments specified below.

SCHEDULE

Lots 1-4 DP 605001

a) In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install a stormwater retention tank/s with a flow-attenuated outlet/s.

The system shall be designed such that the total stormwater discharged from the site after development is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus an allowance for climate change, with overland/secondary flow paths able to accommodate a 1% AEP event.

b) In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of a tank or other means and to be positioned so that it is safely accessible for this purpose.

These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

c) In conjunction with the construction of any building which includes a wastewater treatment and effluent disposal system, the landowner shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer.

The report shall identify a suitable method of wastewater treatment for the proposed development, along with an identified effluent disposal area plus a suitable reserve disposal area.

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

HE ARA TĀMATA
CREATING GREAT PLACES
Supporting our people

Private Bag 752, Kaikohe 0440, New Zealand
ask.us@fndc.govt.nz
0800 920 029
fndc.govt.nz

The report shall confirm that all treatment and disposal systems are fully contained within the lot boundary and comply with the Regional Plan permitted activity standards.

d) Reticulated power supply and telecommunications services were not a requirement of the subdivision consent creating the lot, being resource consent RC2240190. The property owner has the responsibility for providing both power supply and telecommunications services.

e) Ensure the perimeter landscaping implemented as per conditions 3(h) and (i) of resource consent RC2240190 is maintained for a period of five years and retained thereafter.

Any plants that are removed or damaged are to be replaced as soon as possible, or within the next planting season (1st May to 30th September).

f) In conjunction with any building consent, the lot owner shall provide for the approval of the Council's duly delegated officer, a final landscaping/amenity plan for any future residential unit.

This plan is to be prepared by a suitably qualified and experienced person. The plan shall be prepared in general accordance with the recommendations set out in the report '*Landscape and Visual Effects Assessment*' prepared by Hawthorn Landscape Architects submitted to Council in support of resource consent RC2240190.

On approval of this plan, the landscaping specified is to be implemented and then maintained for a period of five years and retained for the duration of this consent.

Plants requiring removal due to damage, disease or other cause shall be replaced with a similar specimen before the end of the next following planting season.

Lot 1 DP 605001

g) The lot owner shall provide evidence to Council's resource consents monitoring team of vegetation trimming on Hauparua Lane at chainages CH760, CH800 and CH870 for the purposes of increasing sight visibility and to be kept clear of the road carriageway allowing for some additional margin.

The vegetation trimming is to be undertaken annually on an ongoing basis for five years from the date of title being issued. All maintenance costs shall be met by the landowner.

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

HE ARA TĀMATA
CREATING GREAT PLACES
Supporting our people

Private Bag 752, Kaikohe 0440, New Zealand
ask.us@fndc.govt.nz
0800 920 029
fndc.govt.nz

SIGNED:

Ms Nicola Cowley - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE CONSENTS

DATED at **KERIKERI** this 19th day of December 2024

Appendix 4
Form 4

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

7 July 2025

Shaun Ganantchian-Kingston and Joke Van Audenaerde
PO Box 163
Paihia 0247

Dear Sir / Madam,

Building consent number:	EBC-2025-1056/0
Property ID:	3366034
Address:	114B Hauparua Lane, Kerikeri 0230
Description:	Foundations for a Second-Hand Relocatable Dwelling Install a Free-Standing Fireplace and On-Site Wastewater Disposal System

Requirement for Resource Consent

PIM Assessment of your application has highlighted the need for Resource Consent that must be granted prior to any building works or earthworks commencing.

NB: As of 27th July 2022, some rules and standards in the Far North District Council Proposed District Plan took legal effect and compliance with these rules applies to your building consent. Please visit our website to see these rules
Far North Proposed District Plan (isoplan.co.nz)

The site is zoned **Coastal Living** under the Operative District Plan and Resource Consent is required for breach of the following:

Rule:	10.7.5.1.1 VISUAL AMENITY (a) any new building(s), provided that the gross floor area of any new building(s) permitted under this rule does not exceed 50m²
Reason:	Plans state the proposed house floor area as 125.3m2 which exceeds the permitted 50m2 threshold.

Rule:	10.7.5.1.6 STORMWATER MANAGEMENT The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m2 whichever is the lesser.
Reason:	600m2 is the lesser for this site. Plans demonstrate the total impermeable surfaces area as 739.58m2 which exceeds the permitted 600m2 threshold.

Please note there may be other rule breaches found during the Resource Consent process. It is your responsibility to ensure the Resource Consent approved plans match the Consented approved plans.

The application form can be downloaded from www.fndc.govt.nz and submitted to Council's (Planning Department) with the appropriate documentation and instalment fee.

If you have any queries, please contact the Duty Planner on Duty.Planner@fndc.govt.nz or 0800 920 029.

Yours faithfully

L Mare

Lysigna Mare
PIM Officer
Delivery and Operations

Emailed to: rhys@randjarchitecture.co.nz

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

FORM 4
Certificate attached to
PROJECT INFORMATION MEMORANDUM

Section 37, Building Act 2004

Building Consent Number: EBC-2025-1056/0

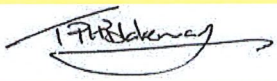
RESTRICTIONS ON COMMENCING BUILDING WORK UNDER RESOURCE MANAGEMENT ACT 1991

The building work referred to in the attached Project Information Memorandum is also required to have the following **Resource Consent**(s) under the Resource Management Act 1991:

- **Resource Consent – REQUIRED**

As the above Resource Consent(s) will affect the building work to which the Project Information Memorandum relates, until this has been granted no building work may proceed.

Failure to comply with the requirements of this notice may result in legal action being taken against you under the Resource Management Act 1991.

Signature:	
	Trent Blakeman
Position:	Manager - Building Services – Delivery and Operations
On behalf of:	Far North District Council (Building Consent Authority)
Date:	7 July 2025

Appendix 5
RC 2240190-RMACOM

Far North District Council

DECISION ON COMBINED RESOURCE CONSENT APPLICATION UNDER THE RESOURCE MANAGEMENT ACT 1991

Decision

Pursuant to section 34(1) and sections 104, 104B, 106 and Part 2 of the Resource Management Act 1991 (the Act), the Far North District Council **grants** land use and subdivision resource consent for a Discretionary activity, subject to the conditions listed below, to:

Applicant: MTF Developers 2022 Limited

Council Reference: 2240190-RMACOM

Property Address: 115 Hauparua Lane, Kerikeri 0230

Legal Description: LOT 3 DP 59491 BLK XII KERIKERI SD

The activities to which this decision relates are listed below:

Activity A – Subdivision:

To subdivide to create an additional three additional lots in the Coastal Living Zone.

Activity B – Land Use:

To breach private access ways in all zones, passing bays on private accessways in all zones, stormwater, and excavation and filling.

Subdivision Conditions

Pursuant to sections 108 and 220 of the Act, this subdivision consent is granted subject to the following conditions:

1. The activity shall be carried out in accordance with the approved Subdivision Scheme Plan – "Proposed Subdivision of Lot 3 DP 59491" by Thomson Survey Ltd. (Ref. No.: 10312 Rev. KY 09/05/2023) attached to this consent with Councils "Approved Stamp" affixed to it.

Survey plan approval (s223) conditions

2. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:
   a. All easements in the memorandum to be duly granted or reserved.

   b. Provide to Council written confirmation from a Licenced Cadastral Surveyor that the access carriageway is fully contained within the easements provided for access.

Section 224(c) compliance conditions

3. Prior to the issuing of a certificate pursuant to section 224(c) of the Act, the consent holder shall:

   a. Vehicle crossing ROW B from Hauparua Lane to be upgraded to a FNDC/S/6B, double width and sealed to at least 5.0m from the road seal to prevent gravel mitigation.

   b. The private access ROW B shall be upgraded in accordance with Appendix 3B-1 Standards for a 3 H.E access with legal width of 7.5m and a carriageway width of 3.0m.

   c. The private access ROW C shall be upgraded in accordance with Appendix 3B-1 for a 2 H.E access with a legal width of 5.0m and a carriageway width of 3.0m

   d. Construct one passing bay at the junction of ROW B & C for the purposes of ensuring safety of vehicle movements.

   e. Construct two passing bays on Hauparua Lane at chainages CH220 and CH320 to be sealed and comply with Rule 15.1.6C.1.3(a).

   f. Undertake vegetation trimming at the entrance of Hauparua Lane for the purposes of increasing sightlines / visibility of crossing onto Kerikeri Inlet Road and vegetation trimming at chainages CH760, CH800 and CH870 for the purposes of increasing sight visibility.

   g. Provide evidence by way of a Producer Statement from a suitably qualified engineering professional, an independent qualified person, or written confirmation from Council's Development Engineer, that the works in accordance with condition 3 (a) – (f) have been completed.

   h. Implementation of the Landscaped Plan by Hawthorn Landscape Architects Ltd, dated 13/05/2023 is to be undertaken prior to issue of a section 224 (c) certificate.

4. Secure the conditions below by way of a Consent Notice issued under section 221 of the Act, to be registered against the titles of the affected allotment. The costs of preparing, checking and executing the Notice shall be met by the consent holder:

   a. In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install a stormwater retention tank/s with a flow-attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus an allowance for climate change, with overland/secondary flow paths able to accommodate a 1% AEP event.

   [Lots 1 - 4]

   b. In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of a tank or other means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.

   [Lots 1 - 4]

c. In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal plus a suitable reserve disposal area. The report shall confirm that all treatment & disposal systems be fully contained within the lot boundary and comply with the Regional Plan Permitted Activity Standards.

[Lots 1 - 4]

d. Reticulated power supply or telecommunications services are not a requirement of the subdivision consent creating the lot. The responsibility for providing both power supply and telecommunications services will remain the responsibility of the property owner.

[Lots 1 - 4]

e. Provide evidence to Council's RC monitoring team of vegetation trimming on Hauparua Lane at chainages CH760, CH800 and CH870 for the purposes of increasing sight visibility and to be kept clear of the road carriageway allowing for some additional margin. The vegetation trimming is to be undertaken annually on an ongoing basis for 5 years from the title being issued.

Subdivision Advice Notes

Lapsing of Consent

1. *Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;*
   a) A survey plan is submitted to Council for approval under section 223 of the RMA before the lapse date, and that plan is deposited within three years of the date of approval of the survey plan in accordance with section 224(h) of the RMA; or
   b) An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Act.

General

2. *This consent has been granted on the basis of all the documents and information provided by the consent holder, demonstrating that the new lot(s) can be appropriately serviced (infrastructure and access).*
3. *It is recommended that all culverts within the subdivision are constructed with a 375mm minimum diameter RCP culvert to provide improvements from the current published FNDC Engineering Standards.*
4. *The consent holder will be responsible for the repair and reinstatement of public and private roads and carriageway to the satisfaction of the Council Roading Manager, if damaged as a result of the works and building operations.*
5. *The consent holder is responsible for arranging for buried services to be located and marked prior to the commencing earthworks and is also responsible for the repair and reinstatement of any underground services damaged as a result of the earthworks.*
6. *Any debris deposited on the public and private road as a result of the earthworks shall be removed by or at the expense of the application. All debris is to be cleaned off the road at the end of each working day.*
7. *All earthworks referred to under section 3 of the subdivision are to be carried out in periods of fine weather within the typical October to April earthwork season.*

8. *All earthworks are required to be completed in accordance Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region, Guideline Document 2016/005. The site is identified as being within 100m of an identified natural inland wetland. This natural inland wetland is protected through the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 and any subsequent amendments, administrated by Regional Councils and consent may be required from the Regional Council if certain activities are proposed to be carried out within, or in proximity to natural inland wetlands identified.*
9. *Heritage New Zealand Pouhere Taonga (HNZPT) has advised there are two recorded archaeological sites on the property (NZAA P05/95 and P05/96). Prior to the commencement of physical works, an archaeological assessment should be prepared. the assessment should ensure the landowner(s) have sufficient information to meet their obligations under the HNZPTA.*

Land Use Conditions

Pursuant to sections 108 of the Act, this land use consent is granted subject to the following conditions:

1. The activity shall be carried out in accordance with the approved Subdivision Scheme Plan – "Proposed Subdivision of Lot 3 DP 59491" by Thomson Survey Ltd. (Ref. No.: 10312 Rev. KY 09/05/2023) attached to this consent with Councils "Approved Stamp" affixed to it.

Land Use Advice Notes

Lapsing of Consent

1. *Pursuant to section 125 of the Act, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses;*
   a) *The consent is given effect to; or*
   b) *An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Act.*

General Advice Notes

Right of Objection

1. *If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Act) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.*

Archaeological Sites

2. *Heritage New Zealand Pouhere Taonga (HNZPT) have advised there are two recorded archaeological sites on the property (NZAA P05/95 and P05/96). Prior to the commencement of physical works, an archaeological assessment should be prepared. The assessment should ensure the landowner(s) have sufficient information to meet their obligations under the NZPTA.*
3. *Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should*

any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.

Reasons for the Decision

1. By way of an earlier report that is contained within the electronic file of this consent, it was determined that pursuant to sections 95A and 95B of the Act the proposed activity will not have, and is not likely to have, adverse effects on the environment that are more than minor, there are no affected persons and no special circumstances exist. Therefore, under delegated authority, it was determined that the application be processed without notification.
2. The application is for a Discretionary activity resource consent as such under section 104 the Council can consider all relevant matters. In particular the matters listed in Chapter 13.10 are of particular relevance.

3. In regard to section 104(1)(a) of the Act the actual and potential effects of the proposal will be acceptable as:
   a. The proposal is considered to be generally consistent with the immediate area beyond as anticipated for by the zone.
   b. The creation of two additional lots will provide an opportunity for two new dwellings in addition to the two existing dwellings already established. The creation of the lots will contribute to the new lot owners social and economic well being.
   c. It will not create any reverse sensitivity concerns as the area is primarily coastal lifestyle area with limited rural activities.

4. In regard to section 104(1)(ab) of the Act there are no offsetting or environmental compensation measures proposed or agreed to by the applicant for the activity.

5. In regard to section 104(1)(b) of the Act the following statutory documents are considered to be relevant to the application:
   a. Operative Far North District Plan 2009,
   b. Proposed Far North District Plan 2022

   Far North District Council Operative Plan

   The proposal is consistent with the objectives and policies of the Far North District Council Operative District Plan (ODP). The proposal achieves an additional two lots that are consistent with that anticipated for by the zone and that of adjacent lots. The Site Suitability Report addresses all onsite requirements as well as Hauparua Lane. The use of Hauparua Lane has been assessed thoroughly by the applicant as well as Council to ensure that it continue to remain operational whilst not comprising safety. This is further supported by mitigation measures proposed by the applicant and enforced as conditions of consent. The landscape assessment conclude that the visual effects and the amenity and character values of the site are retained by the proposal.

   Proposed Far North District Council Proposed Plan

The activity is consistent with the relevant objectives, policies and assessment criteria of the Proposed District Plan (PDP) because for this resource consent the relevant provisions of both an operative and any proposed plan must be considered. Weighting is relevant if different outcomes arise from assessments of objectives and policies under both the operative and proposed plans.

As outcomes sought are the same under the operative and proposed plan frameworks, no weighting is necessary.

6. In regard to section 104(1)(c) of the Act there are no other matters relevant and reasonably necessary to determine the application.

7. In terms of s106 of the RMA the proposal is not considered to give rise to a significant risk from natural hazards, and sufficient provision has been made for legal and physical access to the proposed allotments. Accordingly, council is able to grant this subdivision consent subject to the conditions above.

8. Based on the assessment above the activity will be consistent with Part 2 of the Act.

   The activity will avoid, remedy or mitigate any potential adverse effects on the environment while providing for the sustainable management of natural and physical resources and is therefore in keeping with the Purpose and Principles of the Act. There are no matters under section 6 that are relevant to the application. The proposal is an efficient use and development of the site that will maintain existing amenity values without compromising the quality of the environment. The activity is not considered to raise any issues in regard to Te Tiriti o Waitangi.

9. Overall, for the reasons above it is appropriate for consent to be granted subject to the imposed conditions.

Approval

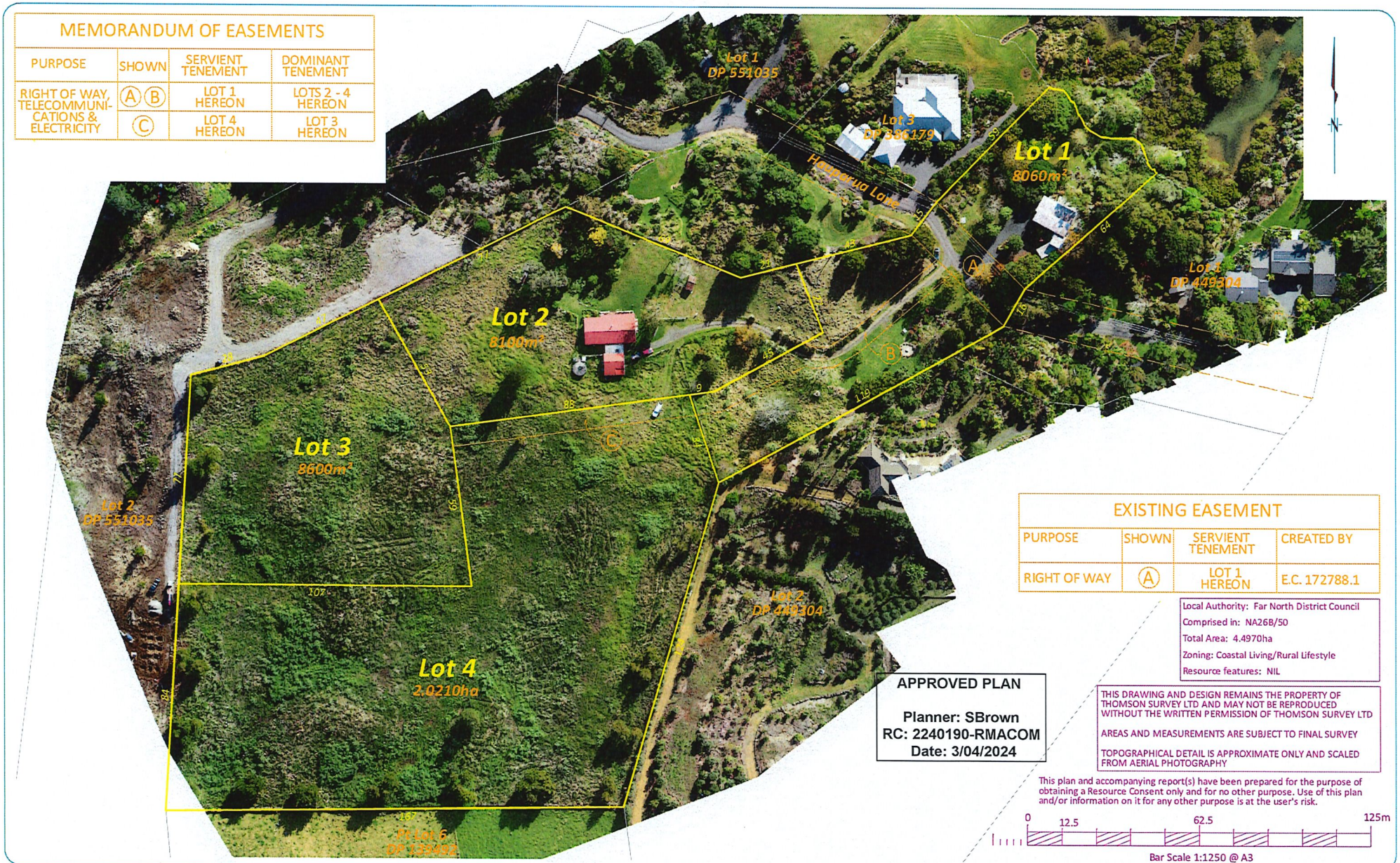
This resource consent has been prepared by Salamasina Brown, Intermediate Planner. I have reviewed this and the associated information (including the application and electronic file material) and for the reasons and subject to the conditions above, and under delegated authority, grant this resource consent.

P.J. Killalea

Name: Pat Killalea Date: 3rd April 2024

Title: Independent Commissioner

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY	(A) (B)	LOT 1 HEREON	LOTS 2 - 4 HEREON
	(C)	LOT 4 HEREON	LOT 3 HEREON



EXISTING EASEMENT			
PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 1 HEREON	E.C. 172788.1

Local Authority: Far North District Council
Comprised in: NA26B/50
Total Area: 4.4970ha
Zoning: Coastal Living/Rural Lifestyle
Resource features: NIL

APPROVED PLAN

Planner: SBrown
RC: 2240190-RMACOM
Date: 3/04/2024

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

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

0 12.5 62.5 125m

Bar Scale 1:1250 @ A3

THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360
www.tsurvey.co.nz
Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOT 3 DP 59491

114-115 HAUPARUA LANE, KERIKERI

PREPARED FOR: MTF NZ LTD

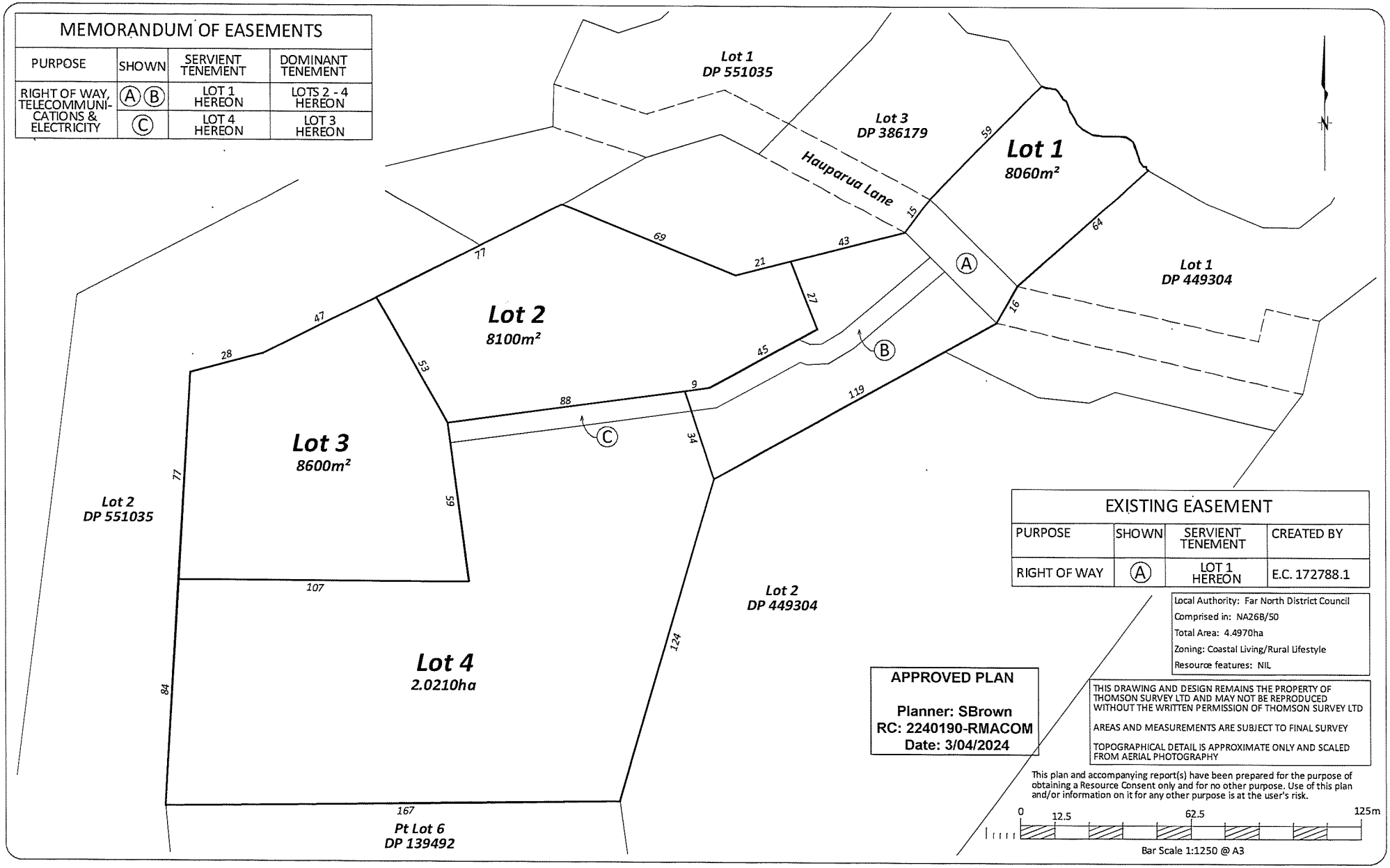
	Name	Date
Survey		
Design		
Drawn	KY	11.08.22
Approved		
Rev	KY	09.05.23

10312 Scheme 20230509

ORIGINAL
SCALE 1:1250
SHEET SIZE A3

Surveyors Ref. No: 10312

Sheet 1 of 1



MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY	(A) (B)	LOT 1 HEREON	LOTS 2 - 4 HEREON
	(C)	LOT 4 HEREON	LOT 3 HEREON

EXISTING EASEMENT

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY	(A)	LOT 1 HEREON	E.C. 172788.1

Local Authority: Far North District Council
Comprised in: NA26B/50
Total Area: 4.4970ha
Zoning: Coastal Living/Rural Lifestyle
Resource features: NIL

APPROVED PLAN

Planner: SBrown
RC: 2240190-RMACOM
Date: 3/04/2024

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

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

0 12.5 62.5 125m

Bar Scale 1:1250 @ A3

THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
Email: kerikeri@tsurvey.co.nz
Ph: (09) 4077360
www.tsurvey.co.nz
Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOT 3 DP 59491

114-115 HAUPARUA LANE, KERIKERI

PREPARED FOR: MTF NZ LTD

	Name	Date
Survey		
Design		
Drawn	KY	11.08.22
Approved		
Rev	KY	09.05.23

10312 Scheme 20230509

ORIGINAL
SCALE 1:1250
SHEET SIZE A3

Surveyors Ref. No: 10312

Sheet 1 of 1

Appendix 6
Excerpts from s95 Report

Far North District Council

NOTIFICATION DETERMINATION UNDER SECTIONS 95A TO 95G OF THE RESOURCE MANAGEMENT ACT 1991

1 Application Details

Council Reference:	2240190-RMACOM
Applicant:	MTF Developers 2022 Limited
Property Address:	115 Hauparua Lane, Kerikeri 0230
Legal Description:	LOT 3 DP 59491
Description of Application:	Activity 1: Subdivision to create four additional lots in the Coastal Living Zone as a restricted discretionary activity. Activity 2: Land use consent to breach private access ways in all zones, passing bays on private accessways in all zones, stormwater (impermeable surfaces), and excavation and filling rules as a discretionary activity.
Reporting Planner:	Salamasina Brown
Operative District Plan Zoning:	Coastal Living Zone
Operative District Plan Notations:	Coastal Flood Hazard Zone 1, 2 and 3
Other Notations of Relevance:	N/A
Proposed District Plan Zoning:	Rural Lifestyle Zone
Proposed District Plan Overlays:	Coastal Environment Coastal Flood (Zone 3: 100 year + Rapid Sea Level Rise Scenario) Coastal Flood (Zone 2: 100 year Scenario)
Proposed District Plan Designations:	N/A

2 Procedural Details

Date Received:	31-Oct-2023
Date of Site Visit:	15 November 2023

Iwi	31/10/2023	No comments received.
Heritage New Zealand Pouhere Taonga	7/12/2023	22/12/2023

6 Reasons for the Application

Rule Assessment

The proposal requires resource consent for the following reasons:

Operative Far North District Plan

section 9(3) – Land use

Rule Number and Name	Non Compliance Aspect	Activity Status
15.1.6C.1.1 Private accessways in all zones	Access to the lots is not provided by legal road and the number of lots on the ROW access exceeds the allowable allowance	Discretionary activity
15.1.6C.1.3 Passing Bays on Private Accessways in all zones	Passing bays required along Hauparua Lane.	Discretionary activity
12.3.6.1.2 Excavation and/or filling in the Coastal Living Zone	Excavation and filling associated with internal ROW upgrading exceeding the 300m^3 allowed for the zone	Restricted Discretionary activity
10.7.5.1.6 Stormwater Management	Impermeable surfaces exceed the permitted threshold by 19%.	Discretionary activity

section 11 – Subdivision

Rule Number and Name	Non Compliance Aspect	Activity Status
13.7.2.1 Minimum Lot Sizes	The proposed lots are all greater than the 8000m^2 minimum lot size	Restricted Discretionary activity

Proposed Far North District Plan

The Proposed Far North District Plan (PDP) was notified on 27 July 2022. Rules in a Proposed Plan have legal effect once the council makes a decision on submissions relating to that rule and publicly notified this decision, unless the rule has immediate legal effect in accordance with section 86B(3) of the Resource Management Act 1991 (the Act).

A summary of submissions was released on the 7 August 2023. The further submission period has closed and due to the breadth of submissions, no rules are considered operative under s86F. Rules in the PDP that have immediate legal effect are still relevant. These

existing house on proposed Lot 2. From there an additional section of driveway will provide access to the building sites on Lots 3 and 4. Lot 1 will be accessed directly off Hauparua Lane, as it currently is.

The quantity of earthworks required to form the access to the individual lots is demonstrated to be minimal and will further minimise any potential adverse landscape and visual effects of the formation of these roadways. The Landscape and Visual Effects Assessment has considered the potential effects with respect to the subdivision and future placement of dwellings on the lots and proposed landscape integration plantings. A landscape mitigation plan has been prepared that details:

- The location and extent of proposed landscape mitigation and enhancement plantings that will assist with visually absorbing the development into the landscape and retaining natural character and visual amenity values; and
- Plant schedule, numbers, sizes and planting specifications and maintenance schedule.

The matters listed in 17.7.3

Property Access

Property Access is addressed further below in the report.

Natural and Other Hazards

The seaward facing shoreline on Lot 1 is modelled as being subject to flood in the 50 and 100 year + CC Coastal flooding events (refer to Figure X below). The affected zone is narrow and approximately 12m wide. The existing house platform is elevated some 6m above the coastal flood hazard and the sheltered nature of the inlet means that wave run up is not a concern. The site is not mapped as being subject to river flooding hazards. An Engineer Report has been prepared by Haigh Workman dated August 2023 and has assessed the application site stating it is not subject to erosion, falling debris, subsidence, inundation or slippage. The effects of natural and other hazards are considered less than minor.

Water Supply

The Engineer Report states all lots will be dependent on roof runoff collected in water tanks. The AEE advises that at building consent stage if a source of water dedicated for fire-fighting purposes is required this can be provided for. The expected demand for this aspect can be managed by the provision of a dedicated water tank for each dwelling. Councils Engineer has reviewed HW's Engineering Report and is satisfied with the assessment with regards to water supply and the recommendations of the report. Councils Engineer has recommended the below condition should consent be granted. The effects are considered less than minor.

1 *In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of a tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509.* ***[Lots 1 - 4]***

Stormwater Disposal

In addition to stormwater disposal, this sub section will address the additional stormwater breach within the land use component of this application. With regards to impermeable surfaces Lots 2 and 3 are able to comply with the permitted standards, Lot 4 will exceed the standard of 600m^2. Lot 1 contains an existing dwelling and Right of Way as a result of the reduction in lot area, the percentage impermeable surfaces are estimate to

An Engineering Report prepared by Haigh Workman Civil & Structural Engineers (HW) is provided as part of this application. The report details that existing drainage on site with respect to the impervious surfaces for the existing dwellings in Proposed Lots 1 and 2 is disposed of via natural ground soakage near the respective water tanks. It is advised that future building platforms will be surrounded by grass surfaces providing a buffer to runoff, trapping contaminants and sediments. Stormwater runoff from future dwellings should be attenuated to pre-development flows for a 10 year ARI rainfall event.

The report states the most appropriate time for designing a stormwater attenuation system for the dwellings is at the time of building consent when impermeable surfaces will be known. On lot stormwater management will be via roof water collected into storage tanks within the proposed residential lots. It is proposed that roof tank overflow, and yard and driveway runoff will be directed to be discharged in a dispersive manner into ground soakage or onto grassed surfaces. Impermeable surfaces on-site should be suitable graded to ensure stormwater is directed to appropriate areas of the site away from building platforms, access ways and wastewater disposal fields.

With regards to stormwater management and impermeable surfaces of the ROW access, the report indicates that stormwater from the ROW shall be attenuated to predevelopment levels at the time of subdivision. The report details that as there are good soakage soils present the surfaces attenuation can be readily achieved using swale drains constructed as part of the roadside drainage system. Any excess stormwater flow can be directed to the low point near ROW B extension in Lot 1 where it can drain away to ground.

Councils Engineer has reviewed the application documents and is satisfied with the proposed arrangements and recommendations of the HW Engineer Report. The following conditions have been recommended should consent be granted:

2 *In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install a stormwater retention tank/s with a flow-attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus an allowance for climate change, with overland/secondary flow paths able to accommodate a 1% AEP event.* ***[Lots 1 - 4].***

Sanitary Sewage Disposal

There is no reticulated wastewater on site and it is advised within the AEE that the applicant is required to provide their own provision. The existing house on Lot 1 has a secondary treatment tank west of the dwelling which disposes to the southern side of Hauparua Lane. The existing house on Lot 2 has a septic tank and discharges to a soakage trench. The system for Lot 1 is understood to be operating satisfactorily. The dwelling on Lot 2 has been vacant for some time so it is understood by the good ground soakage that the performance of the soakage trench is satisfactory. The existing treatment plans and effluent files are entirely within each respective lot.

Appendix 7
Stormwater & Wastewater Design Report

Reference Number: EBC-2025-1056/0

Property Address: 114B Hauparua Lane, Kerikeri 0230

Property ID # 3366034

Description: Foundations for a Second-Hand Relocatable Dwelling Install a Free-Standing Fireplace and On-Site Wastewater Disposal System

Further Information Request - Building

1. The Stormwater and Wastewater Design report by prepared by Haigh Workman Ltd, section 6.4 Dispersal System, recommends the dripper lines be Surface laid. However, in the Executive Summary, and Appendix B part B, 8 (pdf page 28) Subsurface disposal field is stated. Please clarify.

Please see below email from Haigh Workman Limited regarding terminology.

Good morning Lisa,

Thank you for your question,

I can clarify that the language should indeed be surface laid drippers i.e. drippers that are pegged to the ground.

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

HAIGH WORKMAN LTD
Civil & Structural Engineers

Stormwater and Wastewater Design

114 Hauparua Lane, Kerikeri (Lot 4 DP 605001)

Joke Van Audenaerde

Haigh Workman reference 25 054

Rev A

May 2025

Document History and Status

Revision Nº	Date	Description	Issued By
A	13 May 2025	First Issue	Aaron Thorburn

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

Executive Summary

Haigh Workman Limited were engaged by Joke Van Audenaerde (the client) to undertake a stormwater and wastewater design for a proposed relocatable four bedroom dwelling at 114 Hauparua Lane, Kerikeri.

The stormwater design has been completed to address the requirements of a consent notice to provide for stormwater retention, neutrality and overland flow path requirements. The wastewater design has been completed in general accordance with AS/NZS1547:2012 *On-site domestic wastewater management.*

Based on the results of the geotechnical investigation conducted by Haigh Workman Limited and review of published geological maps it is considered that the soils directly underlying the site comprise a thin veneer of topsoil and residual soils overlying rugged basalt flows of the Kerikeri Volcanic Group.

The following recommendations have been reached in this report,

Stormwater:

- Stormwater retention is achieved via collection of roof water within standard 25,000 litre water tanks,
- Stormwater attenuation for the 10% Annual Exceedance Probability is achieved via discharging into a natural basin located on-site. We calculate a storage volume of 8.7m^3 for the proposed development is required to achieve attenuation objectives, the basin provides for an estimated stormwater volume of 450m^3,
- Total impermeable areas after development equate to 2.9% of site coverage,
- There are no discernible existing flow paths on the site. The soils are naturally well-draining with soakage to the underlying fractured volcanic geology. Surface run-off if this were to occur in a 1% Annual Exceedance Probability event, would naturally drain to the large basin area, and
- Downstream effects of runoff will be negligible.

Wastewater:

- Wastewater treatment system to treat effluent to a secondary level,
- Wastewater treatment system installation into rock close to the surface will require mechanical breaking. We recommend a treatment plant which requires minimal depth for excavation is selected. If it becomes impractical to remove the rock, a specifically engineered pump chamber may be required.
- Effluent will be pumped to sub-surface dripper lines, and
- 270m^2 disposal area and 81m^2 reserve area (30%) required.

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

Table of Contents

Executive Summary ..... *ii*
1 Introduction *1*
1.1 Objective and Scope 1
1.2 Applicability 1
2 Site Description *2*
2.1 Site Location 2
2.2 Proposed Development 3
3 Environmental Setting *3*
3.1 Geology 3
3.2 Hydrology and Flooding 4
4 Site Investigations *5*
4.1 Stormwater 5
4.2 Wastewater 6
5 Stormwater Management *6*
5.1 Regulatory Framework 6
5.2 Impermeable Surfaces 8
5.3 Site Drainage 8
5.4 Proposed Stormwater System 8
6 Wastewater Design *12*
6.1 General 12
6.2 Wastewater Generation 12
6.3 Treatment Plant 12
6.4 Dispersal System 13
6.5 Installation and Maintenance 14

Appendices

Appendix A – Site Plans
Appendix B – Typical Disposal Field Layout Drawing
Appendix C – Onsite Wastewater Disposal Checklist
Appendix D – Summary of Regulatory Requirements
Appendix E – Hand Auger Logs
Appendix F – Onsite Wastewater Systems Maintenance Guidelines
Appendix G – Soils Factsheet
Appendix H – Suitable Plants for Evapo-Transpiration Systems
Appendix I – Producer Statement (PS1)

1 Introduction

Haigh Workman Limited (Haigh Workman) were commissioned by Joke Van Audenaerde (the client) to undertake a stormwater and wastewater design for a proposed residential development at 114 Hauparua Lane, Kerikeri (the 'site').

The client is proposing to place a relocatable dwelling on the property. It is understood the dwelling is a four bedroom dwelling on timber pile foundations with an associated water tank, future plans include a pole shed structure. This report is to investigate and provide recommendations for stormwater management and on-site wastewater disposal.

1.1 Objective and Scope

The objectives of this assessment are to provide onsite stormwater management and onsite wastewater design against local and regional rules and regulations.

To achieve this, the scope of works conducted by Haigh Workman included:

- Review of published environmental data relating to the site, including geology, hydrology and flooding and natural hazards,
- Physical site investigation of the specific ground conditions,
- Stormwater and wastewater assessment against local and regional rules and regulations,
- Wastewater system design using applicable guidance (Australian / New Zealand Standard, On-Site domestic wastewater management [AS/NZS:1547]), and
- Address the following subdivision consent notice:

  Subdivision RC 2240190-RMACOM

  Condition 4.

  In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install a stormwater retention tank/s with a flow attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus an allowance for climate change, with overland/secondary flow paths able to accommodate a 1% AEP event. [Lots 1 - 4].

1.2 Applicability

This report has been prepared for our Client with respect to the particular brief given to us. This report is to be used by our Client and Consultants and may be relied upon by the Far North District Council (FNDC) when considering the application for the proposed 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 Limited.

This report assesses stormwater management and wastewater disposal design for the proposed development of the site only. If any assumptions made in this report 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 desktop study and ground conditions encountered during an intrusive site visit undertaken by Haigh Workman Limited. There may be other conditions on the site which have not been revealed by this investigation and which have not been taken into consideration 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 Location

Site Address: 114 Hauparua Lane, Kerikeri
Legal Description: Lot 4 DP 605001
Area: 20,210 m^2 (2.02ha)

The site is irregular in shape and is undulating with naturally occurring mounds that peak and dip erratically across the ground surface. The eastern side in the area of the proposed development is generally level whilst the central area is characterised by a large depression that naturally collects stormwater which then drains out via soakage into the underlying fractured volcanic geology. The depression is 2m deep onsite, increasing to 4m when the neighbouring topography is considered.

Under the Far North District Council (FNDC) Operational District Plan, the property is zoned 'Coastal Living'.

The site is shown in Figure 1 below and provided in **Appendix A**.

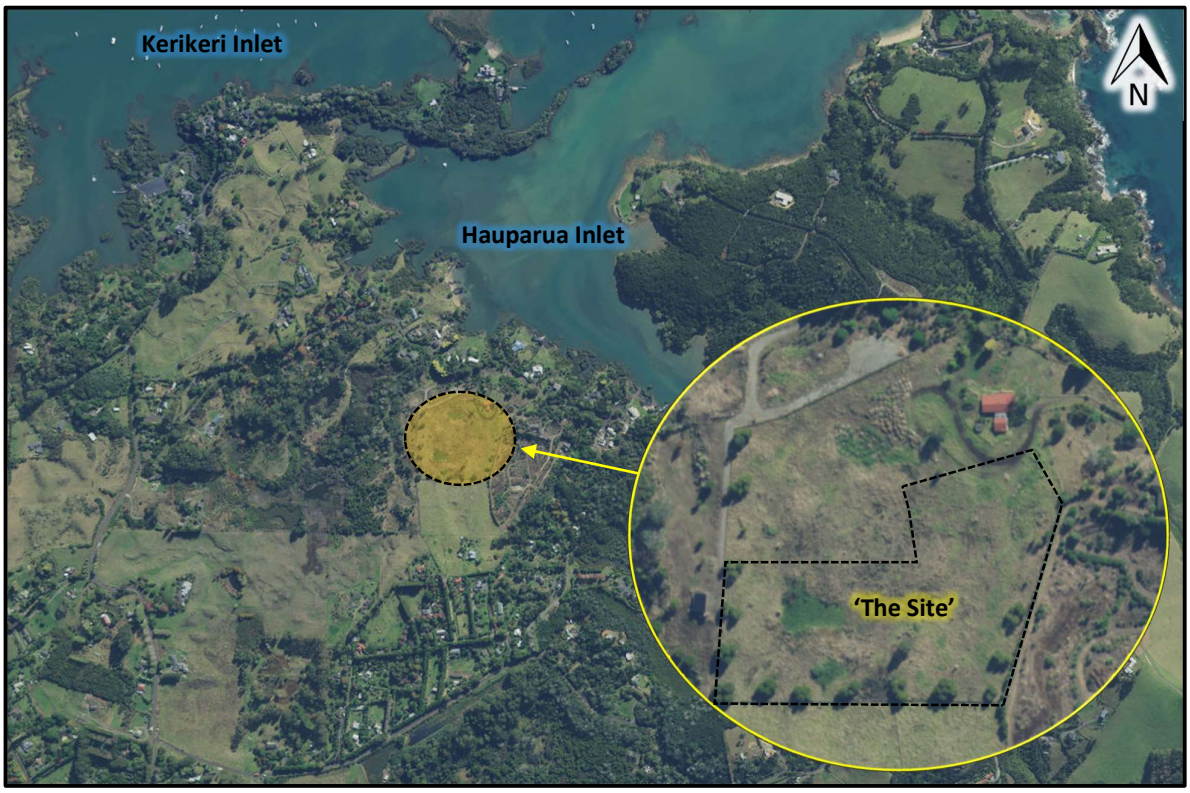


Figure 1: Site Location (Source: Far North District Council GeoMaps)

2.2 Proposed Development

Based on the information provided to Haigh Workman and drawings provided by the client, it is understood that the proposed development on the site will include a single level, four bedroom dwelling and associated pole shed and infrastructure including rainwater tanks and an onsite wastewater disposal system.

Proposed dwelling floor plan is provided in **Appendix A**.

3 Environmental Setting

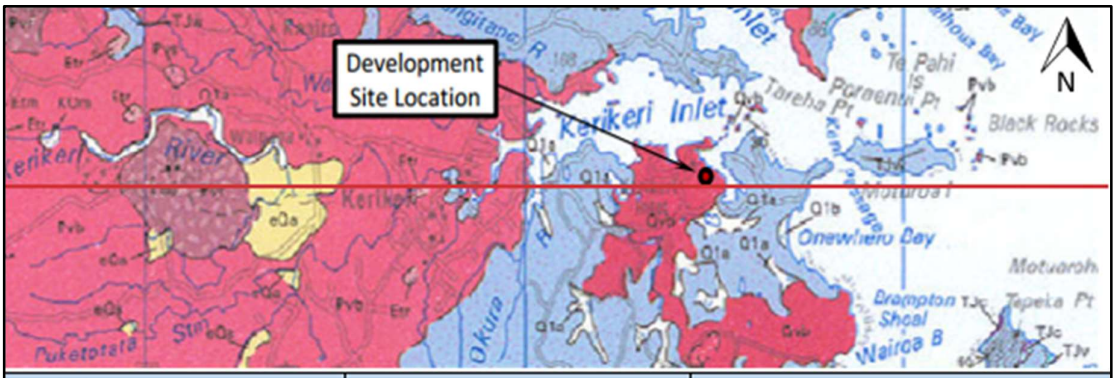
Published environmental data relating to the site has been reviewed. A summary of relevant information is provided below.

3.1 Geology

Sources of Information:

- Institute of Geological & Nuclear Sciences, 1:250,000 Scale, 2009: "*Geology of the Whangarei area*",
- NZMS Sheet 290 P04/05, 1:100,000 scale map, Edition 1, 1981: "*Whangaroa-Kaikohe*" (Rocks), and
- NZMS Sheet 290 P04/05, 1:100,000 scale map, Edition 1, 1980: *"Whangaroa-Kaikohe*" (Soils).

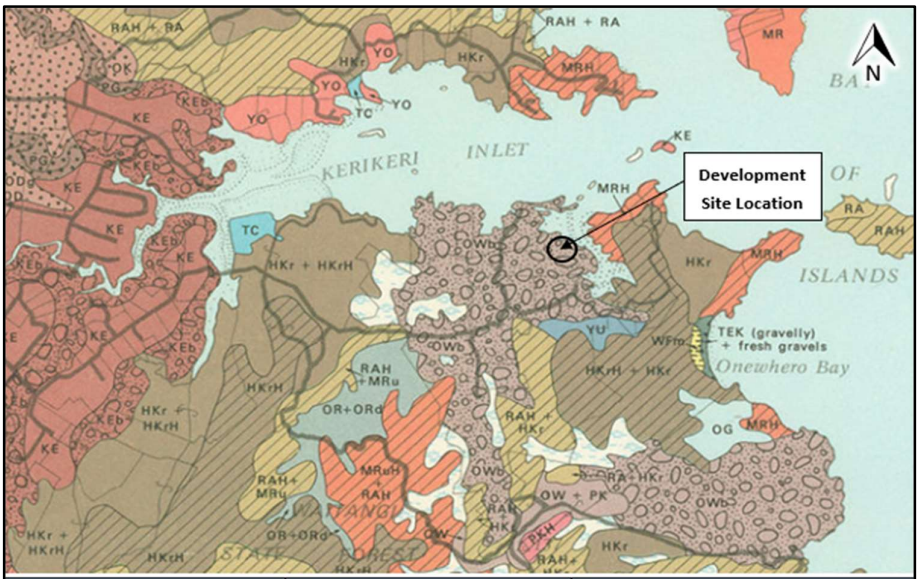
An exert of the geological map with geological units is shown below in Figure 2.



Symbol	Unit Name	Description
Qvb	Kerikeri Volcanic Group	Basalt lava flows. Pleistocene age.

Figure 2: Geotechnical Map Extract

Further reference is made to New Zealand Land Inventory maps NZMS 290 Sheet P04/05 Soil map of the Whangaroa – Kaikohe area. Indicating that the site is underlain by *'soils of the rolling and hilly land; well to moderately well drained' Ohaeawai shallow bouldery silt loams (OWb)'*. An exert of the soil map with geological units is shown below in Figure 3.



Symbol	Unit Name	Description
OWb	Ohaeawai shallow bouldery silt loam.	Well to moderately well drained soils of Rolling and Hilly land.

Figure 3: NZMS 290 Sheet P04/05 Soil Map (Whangaroa – Kaikohe)

3.2 Hydrology and Flooding

The site is not located in either coastal or river flood hazard zone areas. It is also not identified in the flood susceptibility zone on the Northland Regional Council GIS databases.

A summary of available information pertaining to hydrology and hydrogeology is presented below in Table 1.

Table 1 – Surface Water Features and Flooding

	Presence / Location	Comments
Groundwater sources including springs / wells within 200m	There are two groundwater bores on the NRC GIS webmaps to the east and southeast of the site within 200m.	- 100m to the east is labelled is inactive, and - 130m to the southeast is labelled as utilised for domestic purposes.
Surface water features within 250m (Ponds, lakes etc)	There are two ponds located approximately 200m west and northwest of the site.	The site does not drain to these features.
Watercourses within 200m	The Hauparua Inlet is located 150m north of the site.	-
Flood Risk	No mapped flood risk	Site not identified in the flood susceptibility zone on NRC GIS.

4 Site Investigations

Haigh Workman undertook a geotechnical assessment as part the subdivision assessment undertaken in August 2023 (Ref. 23 104, *Geotechnical Investigation Report, 114-115 Hauparua Lane, Kerikeri (Lot 3 DP 59491)*, August 2024). The investigation found the soils directly underlying the proposed development site comprises natural cobble and boulder soils of the Kerikeri Volcanic Group.

4.1 Stormwater

Haigh Workman visited the site for a geotechnical investigation on 26 July 2023 (Ref. 23 104, *Geotechnical Investigation Report for 114-115 Hauparua Lane, Kerikeri*, August 2023). The investigation included the excavation of nine test-pits located around the general area of the proposed development locations, four of these test-pits (TP1 – TP4) were excavated within the proposed development site in the area of the proposed building footprint and proposed wastewater dispersal field area. TP1 was excavated to 1.0m below ground level (bgl), TP2 and TP3 to 0.7m bgl and TP4 to 1.1m bgl (end of test pits due to unable to penetrate deeper). Our investigation found cobbles and boulders within a silt matrix with minor clays underlain by a thin veneer of topsoil (between 0.2m to 0.3m bgl) comprising firm to stiff silt, described as dark brown to black in colour. Groundwater was encountered in one test pit (TP4) at 0.9m bgl seeping into the side of the excavation, all other locations soils were described as moist.

Haigh Workman visited the site for a site walkover on 2 April 2025, the site walkover included the drilling of three hand auger boreholes (BH1 – BH3) located in the general area of the proposed wastewater dispersal field. BH1 was unable to penetrate from the surface (0.0m) and BH2 and BH3 were advanced to 0.5m bgl before being unable to penetrate underlying geology. Our investigation found cobbles and

boulders to borehole refusal (0.5m bgl) underlain by a thin veneer of topsoil (0.2m bgl at BH2 and BH3) comprising firm silt, described as black in colour. Groundwater was not encountered.

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 drawings in **Appendix A** and investigation hand auger logs from the July 2023 and April 2025 investigations are provided in **Appendix E**.

4.2 Wastewater

Our investigation found cobbles and boulders within a silt matrix with minor clays underlain by a thin veneer of topsoil (between 0.2m to 0.3m bgl) comprising firm to stiff silt, described as dark brown to black in colour. Groundwater was encountered in one test pit (TP4) at 0.9m bgl seeping into the side of the excavation, all other locations soils were described as moist. The investigation was undertaken during a dry summer. In conjunction with the referenced soil maps (Section 3) and in-situ soil moisture observations, soils across the site are classed as soil category 3 (loams – moderately well drained) in accordance with AS/NZS 1547: 2012. This soil category can sustain a daily loading rate (DLR) of 4mm / day for disposal to surface for secondary treated effluent.

5 Stormwater Management

5.1 Regulatory Framework

5.1.1 Far North District Council District Plan

The site is zoned as 'Coastal Living'. Under the FNDC Operative District Plan (2009), the relevant permitted activity rule for stormwater management / impermeable surfaces is as follows:

> **10.7.5.1.6 STORMWATER MANAGEMENT**
>
> The maximum proportion or amount of the gross site area which may be covered by buildings and other impermeable surfaces shall be 10% or 600m^2 whichever is the lesser.

The site comprises an area of 20,210m^2. As detailed below in Section 4.2, the total impermeable area following development within the site is estimated as 2.9%

5.1.2 Regional Plan for Northland

Under Rule C.6.4.2 of the Regional Plan for Northland 2023 (Operative in Part), provision for the diversion and discharge of stormwater onto or into land where it may enter water from an impervious area is a permitted activity, provided (amongst other conditions):

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

The Regional Plan Permitted Activity rule does not specifically require attenuation to pre-development levels, provided there is no increase in downstream flooding for the 10% AEP event.

5.1.3 FNDC Engineering Standards 2023

Reference is made to the FNDC Engineering Standards for design guidance.

Section 4.2.5 – Discharge to Land:

Subject to the requirements of the Regional Plan for Northland, discharge of stormwater from the development onto land is permitted provided that:

a. Flooding levels shall not be increased due to the development,

b. New outlets to any low-lying areas shall be provided or existing outlets retained,

c. Dispersal of concentrated flow from the development shall be designed to occur at the shortest practicable distance and before a concentrated overland discharge to a neighbouring property occurs, and

d. An acceptable rate of dispersed discharge from stormwater runoff at the boundary is < 2 litres / sec / m (e.g. flow can be managed via dispersal swale or trench).

Section 4.3.2 – Increases to Impervious Surface:

Where any development increases impervious surface, the development shall be assessed in accordance with Section 4.1.2 Objectives and Section 4.1.3 Performance Standards to determine the requirements, if any, for water quality and quantity controls.

Design of new development or alteration to existing development, resulting in increased impervious surface shall also comply with the Regional Plan for Northland.

Section 4.1.3 – Performance Standards:

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

h. Development shall not increase peak discharge rates to receiving environment. An increase may be acceptable for large events where it is demonstrated that there are no adverse effects (including potential, future, or cumulative effects) on the environment or downstream properties as a result of the increase, and

i. The stormwater system shall provide the required amount of treatment through the use of low impact design and sustainable solutions (See Sections 4.3.20 Soakage Devices and 4.3.21 Stormwater Treatment and Detention Devices.

Table 4.1 Minimum Design Summary:

Design rainfall – Current rainfall (i.e. not climate change adjusted) shall be used for 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 determining post-development stormwater runoff flows and volumes for on-site soakage via natural depression.

5.2 Impermeable Surfaces

Total impermeable services in relation to the proposed development are estimated below in Table 2.

Table 2 – Impermeable Surfaces

Component	Coverage (m^2)
House roof area	164
Pole shed roof area (indicative)	80
Proposed Gravel driveway (80m x 3m)	240
Gravel parking area	50
Shed parking area (gravel)	50
Total Impermeable Surfaces	584
Site Area	20,210
% Coverage	**2.9**

Note - FNDC District Plan definition for impermeable surfaces does not include water tanks up to 20m^2 area

The proposed development meets the criteria for a Permitted Activity (< 10% and < 600m^2) as per Rule 10.7.5.1.6 in the FNDC Operative District Plan (2009).

5.3 Site Drainage

The property contours generally comprise rolling hill country slopes with naturally occurring mounds that peak and dip erratically across the ground surface. The eastern side in the area of the proposed development is generally level whilst the central area contains a large depression that naturally collects stormwater which then drains out via soakage into the underlying fractured volcanic geology.

5.4 Proposed Stormwater System

(Subdivision consent) Consent condition 4(a) requires:

In conjunction with the construction of any buildings and other impermeable surfaces, the lot owner shall install a stormwater retention tank/s with a flow attenuated outlet/s. The system shall be designed such that the total stormwater discharged from the site, after development is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus an allowance for climate change, with overland/secondary flow paths able to accommodate a 1% AEP event. [Lots 1 - 4].

The requirement for retention will be satisfied by the provision of a 25,000L roof water collection tank used for domestic supply. Stormwater run-off from impermeable surfaces will be directed into the large basin into which the majority of the site drains and has been observed not to hold water, instead naturally draining out into the underlying fractured volcanic rock geology. Stormwater discharge from the site, after development will be no greater than the predevelopment.

Stormwater run-off and overland / secondary flow paths able to accommodate a 1% AEP event are discussed below in sections 4.4.2 and 4.4.3.

5.4.1 Run-off Calculations

Pre- and post-run-off was calculated using the Rational Method. Run-off coefficients (provided below in Table 4) were sourced from FNDC Engineering Standards 2023 – Table 4.3.

Table 4 – Run-off coefficient (C) (Source: FNDC Engineering Standards 2023)

Surface Type	Adopted C
Roofs	0.96
Gravel	0.80
Grass / Landscape	0.59
Pasture / Grassland	0.59

For design rainfall intensities we have adopted HIRDS V4 rainfall estimates as per FNDC Engineering Standards Table 4.1. The minimum time of concentration for surface run-off will be 10 minutes.

Post development and pre-development run-off calculations are provided below for the 10% AEP rainfall event in below in Tables 5 and 6.

Adopting rational formula:

$$Q = \frac{C\ I\ A}{3600}$$

Where:

Q = run-off (litres / second)
C = run-off coefficient (unitless)
I = rainfall intensity (mm / hour)
A = catchment area (m^2)

We calculate the following runoff for the proposed development that includes existing dwelling and structures, using the rational method.

Table 5 – Post-development run-off

Post-development run-off (proposed)	Area (m^2)	C	I10 (mm/hr)	Q (L/s)
House roof	164	0.96	99.7	4.4
Shed roof	80	0.96	99.7	2.1
Proposed Gravel driveway (90m x 3m)	270	0.80	99.7	6.0
Gravel parking area	50	0.80	99.7	1.1
Shed parking area (gravel)	50	0.80	99.7	1.1
Pasture / Grassland	19,655	0.59	99.7	321.2
Total	**20,210**			**335.8**

Table 6 – Pre-development run-off

Pre-development run-off	Area (m^2)	C	I10 (mm/hr)	Q (L/s)
Pasture / Grassland	20,210	0.59	99.7	330.2
Total				330.2
Increased run-off				**5.62**

5.4.2 Stormwater Run-off

Concentrated flows from the proposed development including driveway swales, yarding runoff, roof downpipes and the retention tank overflow shall be directed or piped to discharge away from structures and the effluent disposal field and into the large naturally draining depression located in the centre of the site.

We can calculate the additional runoff for the new development for a 10% AEP 1-hour rainfall event using climate change adjusted rainfall data as per New Zealand Building Code Clause E1 soak pit calculator (cl.9.0.3). The required volume is $8.7m^3$ as shown below in Table 7.

Table 7 – Storage Basin total run-off calculations

Component	Area (m^2)	Post-development C	Pre-development C	Post-development increase in C	I10 - 1 hr (mm/hr)	Post-development increase in Total run-off (m^3)
House roof	164	0.96	0.59	0.37	51.6	3.1
Shed roof	80	0.96	0.59	0.37	51.6	1.5
Proposed driveway (90m x 3m)	270	0.8	0.59	0.21	51.6	2.9
Gravel parking area	50	0.8	0.59	0.21	51.6	0.5
Shed parking area (gravel)	50	0.8	0.59	0.21	51.6	0.5
Total	**614**					**8.7**

The lowest point of the natural depression in the centre of the site covers an area of $450m^2$, with an conservatively estimated general 1.0m storage capacity the area would provide $450m^3$ of stormwater attenuation, this figure is orders of magnitude higher than $8.7m^3$ as presented above, ensuring that stormwater attenuation compliance can be achieved.

5.4.3 Overland / Secondary Flow Paths

With regard to the requirement to provide overland / secondary flow paths able to accommodate a 1% AEP event, there are no discernible existing flow paths on the site. The soils are naturally well-draining with soakage to the underlying fractured volcanic geology. Surface run-off if this were to occur in a 1% AEP event, would naturally drain to the large natural basin area.

As discussed above, the natural basin has a very large capacity and drains out via soakage into the underlying fractured volcanic geology. Overspilling, even during an extreme event is not anticipated. However, should the natural basin fill and overspill then the following can be expected,

- The bottom of the basin is at RL 8.0m. If the water level rises 2.0m to RL 10m then ponding will extend 9.0m beyond the southern boundary onto neighbouring Part Lot 6 DP 139492, but still some 170m from the neighbouring dwelling,
- Should the water level continue to rise to RL 11m, then the extent of ponding beyond the southern boundary is 30m, and
- At RL 11m the water will reach its maximum depth and start to drain northwards via a natural depression on neighbouring Lot 3 DP 605001 and then onto Hauparua Lane.

The geology and ground conditions throughout the length of the flowpath are the same shallow volcanic rock with a strong cobble dominated soil, erosion should secondary flow occur is expected to be less than minor.

Taking a highly conservative approach, the total site run-off for a 1% AEP 1-hour event is calculated as 944m^3 (provided below in Table 8). Assuming this flow drains to the basin then there is ample capacity to hold this volume of water without any overflow leaving the site. Further, given the underlying soils and geology, forming and armouring secondary flowpaths is not considered necessary.

Table 8 – Overland flow path calculations

Component	Area (m^2)	Post-development C	I10 - 1 hr (mm/hr)	Post-development increase in Total runoff (m^3)
House roof	164	0.96	78.1	12.3
Shed roof	80	0.96	78.1	6.0
Proposed driveway (90m x 3m)	270	0.8	78.1	16.9
Gravel parking area	50	0.8	78.1	3.1
Shed parking area (gravel)	50	0.8	78.1	3.1
Remaining grass	19,596	0.59	78.1	903.0
Total	**20,210**			**944.4**

By allowing the water depth in the storage basin to rise to 2.0m then by inspection the avail storage volume will exceed 944m^3 (1% AEP 1-hour event) by a good margin. No additional stormwater will leave the site.

6 Wastewater Design

6.1 General

A proposed new wastewater dispersal field has been allocated approximately 20m to the northeast of the proposed dwelling, the proposed wastewater dispersal field drawing is provided in **Appendix A**. The area currently comprises grassland. The ground surface across the proposed dispersal field is near level with a gentle slope towards the west at an angle of approximately <1°.

6.2 Wastewater Generation

Design wastewater flows can be calculated using the guidelines in AS/NZS1547:2012. On review of proposed development plans from the client (provided in **Appendix A**), the proposed dwelling (relocatable) contains four bedrooms for which we have adopted a design occupancy of six persons.

Proposed water supply to the dwelling is from rainwater tanks. The proposed new dwelling has been assessed against Table H3 of AS/NZS1547:2012 (typical Domestic Wastewater flow allowance for *'Households with standard water reduction features'*). The associated wastewater design flow allowance shall be 180 litres per person per day (l/p/d).

The total daily wastewater generation of the proposed development is calculated below:

Total daily wastewater generation = Daily design occupancy x Design flow allowance

= 6 x 180 litres / person / day

= 1,080 litres / day

6.3 Treatment Plant

A secondary treatment plant is recommended to cope with the design flows above. The treatment plant is to meet the quality output of Section M2.1 (covered surface drippers) in AS/NZS1547:2012 and be capable of producing effluent having less than 20 g/m3 of Biochemical Oxygen Demand (BOD) and 30 g/m3 Total Suspended Solids (TSS).

The treatment plant needs to be located at a lower elevation than the proposed dwelling, in order to allow for gravity drainage to the system from wastewater fixtures.

The treatment plant will require installation into underlying cobble and rock geology that is close to the surface at the site, this material will require mechanical breaking (rock breakers, jackhammers or blasting). If excavation becomes impractical, a specifically engineered pump station may be required.

The proposed treatment plant location provides accessibility for regular maintenance and servicing and is set back more than 3m from proposed dwellings and 1.5m from site boundaries. A summary of regulatory requirements is provided in **Appendix D**.

The treatment system is to be specified as part of the building consent application. It is recommended that the owner selects a treatment system that has been on-site effluent tested (OEST). An OSET accreditation

provides benchmarking and performance certification for on-site domestic wastewater treatment units, The treatment system is to be installed to the manufacturers specification and a commissioning certificate is to be provided as is standard practice, a maintenance agreement shall also be agreed upon as part of the Code Compliance application.

6.4 Dispersal System

In accordance with Table 5.2 of AS/NZS1547:2012 a DLR of up to 4mm / day for soil category 3 'loam' soils has been applied for the average daily flow for sizing the disposal field.

The size of the disposal field is calculated below:

$$\text{Disposal area} = \frac{\text{Consistent flow (litres / day)}}{\text{Loading rate (mm / day)}}$$

$$= 1{,}080 / 4 = 270\text{m}^2$$

The proposed disposal field is to be situated in a grassed area to the north of the proposed dwelling close to the eastern boundary of the site with minimum dimensions of 68m long by 4m wide with a setback of 1.5m from the eastern site boundary.

A minimum reserve area of 30% (81m^2) to the disposal area is required and is to remain undeveloped for use in the event of a system failure or an increase of daily wastewater production. This reserve area has been allocated directly north of the proposed disposal area. The proposed disposal bed drawing including reserve area is provided in **Appendix A**.

Four pressure compensating drip lines are to be laid across the site with a maximum line-spacing of 1.0m as shown on the typical disposal field layout drawing provided in **Appendix B**.

The proposed disposal field is situated well outside the nearest mapped flood extents up to and including the 1% AEP flooding zone (100-year event). It is recommended that dripper lines be surface land, firmly attached to the ground surface and covered with a minimum 100mm covering of mulch. The dripper field has a gentle longitudinal fall to prevent effluent ponding at the lowest point, Dripline Non-Leakage (DNL) valves shall be fitted along each lateral at spacings not greater than 8m. We further recommend that dripper irrigation adopts a lone-spacing of 0.5m to ensure even distribution.

One flush valve is required per lateral for maintenance flushing of the field. DNL valves are to be installed at the start of the laterals to present effluent flowing to the lowest drip line.

Allowing for a standard Davey D42A/B pump and 20mm ID delivery pipe, the expected flow rate is 4.2 L/min. For 200 L dosing volume, the pump run time is 4.8 minutes.

We recommend the disposal area be fenced off to livestock, planted with evapotranspiration plant species outlined in **Appendix H**.

Design parameters for the wastewater disposal bed are summarised below in Table 7.

Table 7 – Summary of design parameters

Item	Description
Number of bedrooms / design occupancy	4 bedrooms / 6 persons
Water Fixtures	Standard water reduction fixtures
Wastewater design flow	180 litres / person / day
Average daily loading rate	1,080 litres / day
Treatment Plant	Secondary
Effluent Disposal System	Discharge field (dripper)
Irrigation Pump	Davey 42A/B or equivalent
Disposal field soil category – AS/NZS1547:2012	3
Design irrigation rate (for average daily flow)	4 mm / day
Disposal area	270m^2 (68m x 4m)
Reserve area (30%)	81m^2
Total area	351m^2
Maximum slope of land application area	<1°

6.5 Installation and Maintenance

6.5.1 Installation and Commissioning Requirements

The secondary treatment plant shall be installed and commissioned strictly in accordance with the respective manufacturers specifications and installation requirements.

The disposal bed is a specifically engineered disposal bed. Reference should be made to construction and commissioning advice including construction hold points for inspection. In particular, the design engineer Haigh Workman shall approve the sand, gravel, filter cloth and topsoil and witness the commissioning. The typical disposal bed layout drawing is provided in **Appendix B**.

6.5.2 Installation and Commissioning Requirements

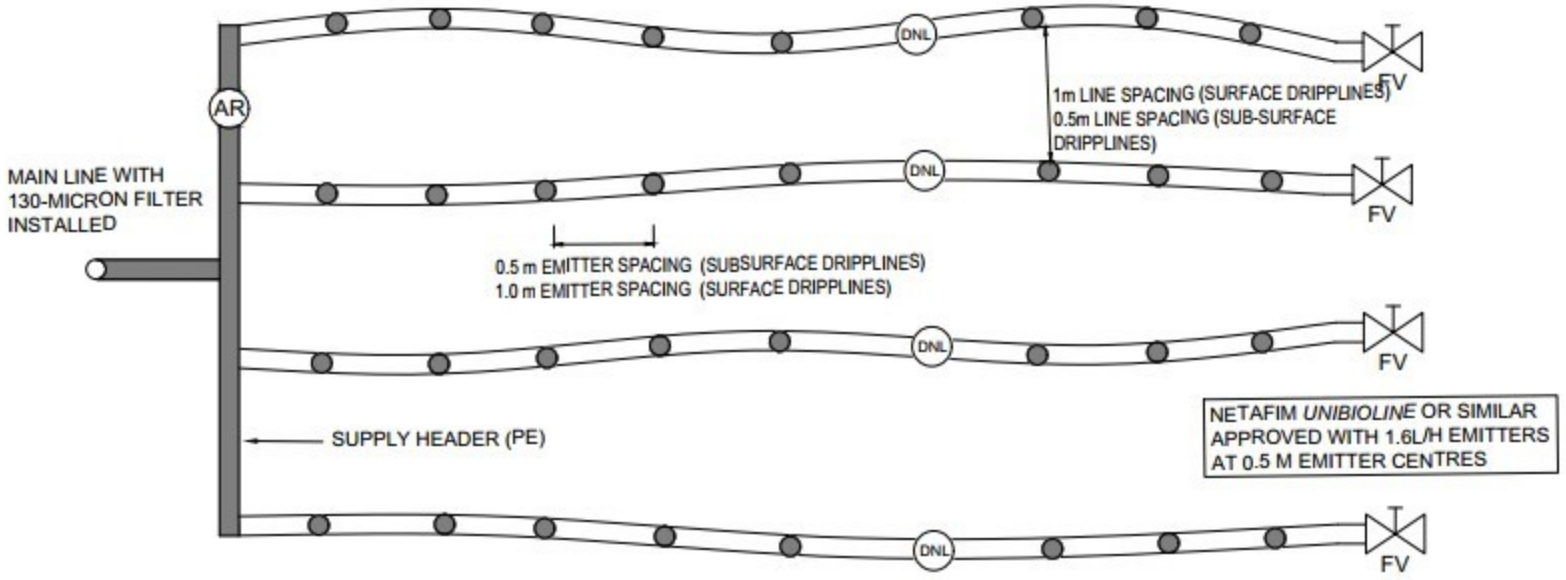
It is recommended that a maintenance agreement be undertaken to ensure continued functionality of the wastewater system. Once commissioned, the treatment plant and pump chambers will operate automatically with visible / audible alarms to advise users in the event of emergency failure. Onsite wastewater systems maintenance guidelines are provided in **Appendix F**.

End of Report – Appendices to follow.

Appendix A – Site Plans

Drawing No.	Title
25 054 / 1	Site Location Plan
25 054 / 2	Proposed Relocatable Dwelling Layout Plan
25 054 / 3	Geotechnical and Civil Investigation Plan
25 054 / 4	Stormwater Outfall and Wastewater Dispersal Field Design

Appendix B – Typical Disposal Field Layout Drawing



TYPICAL DISPOSAL FIELD LAYOUT

LEGEND:

- AR — AIR / VACUUM RELEASE VALVE
- FV — FLUSHING VALVE
- DNL — DNL NON-LEAKAGE VALVE

NOTES:

1. THE DRIPPER FIELD HAS A GENTLE LONGITUDINAL FALL, DRIPLINE NON-LEAKAGE VALVES(DNL) SHALL BE FITTED ALONG EACH LATERAL AT SPACINGS NOT GREATER THAN 8m.
2. SURFACE DRIPPERLINES ARE TO HAVE LINE AND EMITTER SPACING AS PER THE DETAILING ABOVE, SECURELY PINNED TO THE GROUND SURFACE AND COVERED IN A MINIMUM OF 100mm OF LEAF LITTER OR MULCH (WHERE APPLICABLE).
3. SUBSURFACE DRIPPERLINES ARE TO BE BURIED A MINIMUM 100mm INTO THE TOPSOIL, AND:
   - 3.1. HAVE 0.5m LINE SPACING AND 0.5m EMITTER SPACING, AND PLANTED IN LAWN, OR:
   - 3.2. HAVE LINE AND EMITTER SPACING AS PER THE DETAILING ABOVE AND PLANTED WITH SUITABLE EVAPOTRANSPIRATION PLANTS.

Appendix C – Onsite Wastewater Disposal Checklist

Appendix B: Onsite Wastewater Disposal Investigation (FNDC Engineering Standards 2023)

This form is to be read in conjunction with AS/NZS 1547:2012 (or any amendments as applicable), and, in particular with Part 4: Means of Compliance

Part A – Contact Details

1 - Applicant

Name: *Joke Van Audenaerde*

Property Address: *114 Hauparua Lane, Kerikeri*

Lot/DP Number: *Lot 4 DP 605001*

2 – Consultant / Site Evaluator

Site Evaluator Name: *Aaron Thorburn*

Company Name: *Haigh Workman Limited*

Postal Address: *PO Box 89, Kerikeri*

Business Phone: *09 407 8327* Mobile:

Email: *info@haighworkman.co.nz*

SQEP Registered[1]: ☑ Yes ❑ No If no, details of suitably registered SQEP who will countersign the report are to be supplied below.

Name of SQEP: *John Papesch*

Company Name: *Haigh Workman Ltd*

Postal Address: *PO Box 89, Kerikeri*

[1] It is a requirement that the Evaluator be SQEP registered to carry out on-site effluent investigations/designs. If not, then evaluation/design will need to be counter-signed by a suitably registered SQEP

Business Phone: *09 407 8327* Mobile:

Email: *johnp@haighworkman.co.nz*

Part B - Site and Soil Evaluation

1: Desk Study

Requirements (ü appropriate box) Please complete **all** options. (*If more than one option applies to land under consideration, please clarify with supporting information)*

ü	*FNDC REQUIREMENT*	*APPLIES TO LOT(S)*	*COMMENTS*
1	**Hazard maps/GIS Hazard layer - stability**		
ü	Low instability risk		*Gentle ground*
	Medium instability risk		
	High instability risk		
2	**GIS Hazard layer - effluent on slope stability**		
ü	Low disposal potential		*Gentle / Flat ground (disposal field area)*
	Moderate disposal potential		
	High disposal potential		
3	**GIS Hazard Layer - effluent suitability**		
ü	Medium unsuitability		*Cat 3 soils, groundwater table ~ 0.8m below current ground level)*
	High unsuitability		
4	**GIS Hazard Layer - Flood susceptibility**		
	Is flood susceptible		
	Is partially flood susceptible		
ü	Is not flood susceptible		*The site is not located in either coastal or river flood hazard zone areas.*
5	**GIS land resources layer - Streams**		
	Yes		

Are there streams on or adjacent to land under investigation?		ü	No		
6	**GIS land resources layer – aquifers at risk**				
Is land situated over or adjacent to aquifer?			Yes		
		ü	No		
7	**Annual Rainfall (HIRDS)**			*1500 mm*	

Note: It is to be noted that all information obtained from FNDC GIS/Hazard Maps is to be taken as a guide only.

Note: All information obtained from the above sites is to be confirmed by a specific site investigation as localised conditions could vary substantially. However, should the above data checks indicate the potential for a hazard/non-complying activity etc., this must be further investigated to confirm/deny the indicated situation.

2: On-Site Evaluation

a. Determination of Soil Category *(refer table 4.1.1* AS/NZS 1547:2012*)* (ü appropriate box)

Soil Category	Structure		Applies to lot(s)	Comments
1 Gravels & Sands		Structureless (massive)		
2 Sandy loams		Weakly Structured		
		Massive		
3 Loams	ü	High/Moderate structured		*Based on site observations*
		Weakly structured or Massive		
4 Clay loams		High/moderate structured		
		Weakly structured		
		Massive		
5 Light clays		Strongly structured		
		Moderately structured		
		Weakly structured or massive		
6 Medium to heavy clays		Strongly structured		
		Moderately structured		
		Weakly structured or massive		

Note: Refer 4.1 A4 – Soil Assessment AS/NZS 1547:2012 for assessment criteria.

Note: Details of the method used to determine soil type etc. are to be clearly stated, along with positions of boreholes/test pits etc. clearly marked on a site plan. Bore logs are to be provided. Photos should be included.

Note: The site plan should also clearly show the intended area for effluent disposal, along with any site features such as drains, water bores, overland flows etc., along with separation distance achieved.

HAIGH WORKMAN Ltd
Civil & Structural Engineers

On-Site Evaluation Continued

b. Site Characteristics for Proposed Disposal Area: (if there is a marked difference between sites, please fill in a separate form for each site and clearly note which site the assessment applies to) (ü appropriate box)

ü	***DETAILS***	***APPLIES TO SITE(S)***
1	**Flooding potential to proposed field and reserve field (refer note 1 below)**	
ü	Fields will not flood, or	*Fields have been located outside of any mapped flood extent and outside of any depressions where previous ponding has / may have occurred.*
	Fields will flood in	
	20% AEP event	n/a
	5% AEP event	n/a
	1% AEP event	n/a
2	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
ü	*Main/reserve disposal field comply with NRC rules*	*Main / reserve disposal fields are outside 20% AEP event in compliance with NRC offset requirements.*
	Main/reserve disposal field do not comply with NRC rules	
3	**Surface water separation to proposed field and reserve field (refer note 2 below)**	
	Main/reserve disposal field comply with NRC rules	*As above*
	Main/reserve disposal field do not comply with NRC rules	
4	**Winter ground water separation to proposed field and reserve field (refer note 3 below)**	
ü	*Main and reserve disposal field comply with NRC rules*	*Subsoil drainage will ensure separation from groundwater as per NRC requirements.*
	Main and reserve disposal field do NOT comply with NRC rules	
5	**Slope of ground of proposed field and reserve field (refer note 4)**	
Description	*Near level, slopes likely to be < 1°*	
6	**Shape of ground of proposed field and reserve field (Refer note 5 below)**	

	Waxing divergent		*Linear divergent*		*Waning divergent*
	Waxing planar	ü	*Linear planar*		*Waning planar*
	Waxing convergent		*Linear convergent*		*Waning convergent*

HAIGH WORKMAN Ltd
Civil & Structural Engineers

Comments	Flat	
ü	***DETAILS***	***APPLIES TO SITE(S)***
7	**Intended water supply source**	
	Public supply	
ü	*Rainwater*	*1 x 25,000 L rainwater tank.*
	Bore	
8	**Proposed method of disposal and recommended Daily Loading rate (DLR) (refer note 6 below)**	
Description		
Subsurface disposal field. DIR 4mm/day		
Peak loading factored in (refer note 6 below)		Yes / *ü* No
Comments	*n/a*	

9	**Site exposure (refer note 7 below)**	***Description***	***Applies to Site(s)***
Site(s) aspect		*Open*	
Pre-dominant wind direction		*South-west*	
Presence of shelter belts		*nil*	
Presence of topographical features or structures		*Hauparua Inlet (part of the Kerikeri Inlet) located 220m to the north of the site.*	

10	**Proximity of water bores (include adjacent to properties) (refer note 9 below)**
Two bores are located within 200m of the site, a bore is located approx. 100m east of the property and is inactive, and a bore is located approx. 130m to the southeast and is utilised for domestic purposes. .	
11	**Visible evidence of slips / instability (refer note 8 below)**
Nil	
12	**Total suitable area available for type of effluent disposal proposed (including reserve area)**
270m^2 for disposal area and 81m^2 (30%) for reserve area.	
13	**Setback areas proposed (if any) (refer note 10 below)**

Exclusion areas and setback distances are provided in Table 9 of the Regional Plan and presented herein

Notes

1. *If the FNDC hazard maps/GIS indicate a flooding susceptibility on the site being evaluated, an on -site evaluation is to be carried out to determine the effects from 20%, 5% and 1% AEP storm events. This evaluation is to include all calculations to substantiate conclusions drawn. If necessary, include a detailed contour plan and photos.*
2. *NRC Water & Soil plan defines surface water as 'All water, flowing or not, above the ground. It includes water in continually or intermittently flowing rivers, artificial watercourses, lakes and wetlands, and water impounded by structures such as dams or weirs but does not include water while in pipes, tanks, cisterns, nor water within the Coastal Marine Area'. By this definition, separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from any overland flowpaths and/or swale drains etc. or R/C will be required from NRC. Surface water is to be clearly marked on each site plan, showing the extent of a 1% AEP storm event, and detailing separation distances to main/reserve disposal areas.*
3. *Positions of test borehole/s to be shown and bore logs to be provided. Separation (complying with NRC rules) is to be maintained by both the proposed disposal and reserve areas from winter ground water level or R/C will be required from NRC. If the investigation is done outside of the winter period, allowance is to be made in determining the likely winter level.*
4. *Slopes of ground are to be compared with those recommended maximums for type of system proposed (refer Appendix 4.2B AS/NZS 1547:2012). Designs exceeding those maximums will require specific design to justify the proposal and may also need Resource Consent from NRC.*
5. *Shape of ground is important as it will determine whether there is potential for concentrated overland flows from the upper slopes and also if effluent might be concentrated at base of slope if leeching occurs. Refer Figure 4.1B2 AS/NZS 1547:2012.*
6. *The proposed system (for residential developments) should be sized to accommodate an average 3-bedroom house with 5 people. Sites in holiday areas need to take peak loading into effect in determining daily volumes. The design must state what DLR was used to determine area necessary (including reserve area). If ground conditions are marginal for type of disposal proposed, then a soil permeability test utilising the constant head method is to be carried out across the proposed disposal area. Refer Appendix 4.1F AS/NZS 1547:2012.*
7. *The site aspect is important as a north-facing site that is not sheltered from wind and sun by shelterbelts or other topographical features or structures will perform far better than a south-facing site on the lee of a hill that is shaded from wind and sun etc.*
8. *If any effluent disposal area (including any reserve area) proposed has or is adjacent to areas that show signs of instability, then a full report from a CPEng (Geotech) will be required to justify the viability of the area for effluent disposal.*
9. *If there are any water bores on the subject property or adjacent properties then a site plan will be required showing bore positions in relation to any proposed effluent field(s).*
10. *If setback areas are proposed to mitigate effects, the extent and position/s need to be shown on a site plan.*

Appendix D – Summary of Regulatory Requirements

Proposed Regional Plan

C.6.1.3 – Other on-site treated domestic wastewater discharge – permitted activity

Assessment	Comments
1) the on-site system is designed and constructed in accordance with the *Australian / New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS1547:2012)*, and	Complies *(disposal field, with design parameters undertaken in accordance with AS / NZS1547:2012).*
2) the volume of wastewater discharged does not exceed two cubic metres per day, and	Complies.
3) the discharge is not via a spray irrigation system or deep soakage system, and	Complies.
4) the slope of the disposal area is not greater than 25 degrees, and	Complies.
5) the wastewater has received secondary or tertiary treatment and is discharged via a trench or bed in soil categories 3 to 5 that is designed in accordance with *Appendix L of Australian/New Zealand Standard. On-site Domestic Wastewater Management (AS/NZS 1547:2012)*; or is via an irrigation line system that is: a) dose loaded, and b) covered by a minimum of 50 millimetres of topsoil, mulch, or bark, and	Complies.
6) for the discharge of wastewater onto the surface of slopes greater than 10 degrees: a) the wastewater, excluding greywater, has received at least secondary treatment, and b) the irrigation lines are firmly attached to the disposal area, and c) where there is an up-slope catchment that generates stormwater runoff, a diversion system is installed and maintained to divert surface water runoff from the up-slope catchment away from the disposal area, and d) a minimum 10 metre buffer area down-slope of the lowest irrigation line is included as part of the disposal area, and e) the disposal area is located within existing established vegetation that has at least 80 percent canopy cover, or	Not applicable, discharge field slope not greater than 10 degrees.

f) the irrigation lines are covered by a minimum of 100 millimetres of topsoil, mulch, or bark, and	
7) the disposal area and reserve disposal area are situated outside the relevant exclusion areas and setbacks in *Table 9: Exclusion areas and setback distances for on-site domestic wastewater systems*, and	Complies.
8) for septic tank treatment systems, a filter that retains solids greater than 3.5 millimetres in size is fitted on the outlet, and	Complies.
9) the following reserve disposal areas are available at all times: b. 30 percent of the existing effluent disposal area where the wastewater has received secondary treatment or tertiary treatment, and	Complies.
10) the on-site system is maintained so that it operates effectively at all times and maintenance is undertaken in accordance with the manufacturer's specifications, and	Proposed per maintenance recommendations included.
11) the discharge does not contaminate any groundwater water supply or surface water, and	Will comply given provided design parameters.
12) there is no surface runoff or ponding of wastewater, and	Will comply given provided design parameters.
13) there is no offensive or objectionable odour beyond the property boundary.	Will comply given provided design parameters.

Appendix E – Hand Auger Logs

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Test Pit Log - TP1

Hole Location: Refer to Site Plan

JOB No. 23 104

CLIENT:	MTF Developers 2022 Ltd.	**SITE:**	114-115 Hauparua Lane, Kerikeri (Lot 3, Deposited Plan 59491)		
Date Started:	26/07/2023	**EXCAVATION METHOD:**	13 Tonne Excavator	**LOGGED BY:**	OT
Date Completed:	26/07/2023	**BUCKET TYPE**	650mm Rock Bucket	**CHECKED BY:**	WT

Soil Description (Based on NZGS Logging Guidelines 2005)	Depth (m)	Geology	Graphic Log	Water Level	Sensitivity
SILT, dark brown to black. Firm to stiff, moist, no plasticity. Rootlets. [Topsoil]	0.0	T.S.		Groundwater Not Encountered	
SILT, trace clay; reddish brown. Stiff to very stiff, moist, no to low plasticity. Some cobble sized gravel (basalt) throughout. [Kerikeri Volcanic Group]		KERIKERI VOLCANIC GROUP			
COBBLES and **BOULDERS** in silt matrix, minor clay; Reddish brown. Dense to very dense / stiff (silt), moist, no to low plasticity.	0.5				
End of Test Pit at 1.0m (Unable To Penetrate)	1.0				
	1.5				
	2.0				

Vane Shear and Remoulded Vane Shear Strengths (kPa)

Vane shear tests not undertaken due to granular nature soils.

Scala Penetrometer (blows/100mm)

0 5 10 15 20 25

FNDC - Approved Building Consent Document - EBC-2025-1056/0 - Pg 35 of 62 - 18/07/2025 - WH

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL, COBBLES & BOULDERS | FILL | BASALT | SILTSTONE

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

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Test Pit Log - TP2

Hole Location: Refer to Site Plan

JOB No. 23 104

CLIENT:	MTF Developers 2022 Ltd.	**SITE:**	114-115 Hauparua Lane, Kerikeri (Lot 3, Deposited Plan 59491)		
Date Started:	26/07/2023	**EXCAVATION METHOD:**	13 Tonne Excavator	**LOGGED BY:**	OT
Date Completed:	26/07/2023	**BUCKET TYPE**	650mm Rock Bucket	**CHECKED BY:**	WT

Soil Description

Based on NZGS Logging Guidelines 2005

SILT, dark brown to black. Firm to stiff, moist, no plasticity. Rootlets. [Topsoil] Boulders on ground surface.

SILT, trace clay; reddish brown. Stiff to very stiff, moist, no to low plasticity. Some cobble sized gravel (basalt) throughout. [Kerikeri Volcanic Group]

COBBLES and **BOULDERS** in silt matrix, minor clay; Reddish brown. Dense to very dense / stiff (silt), moist, no to low plasticity.

End of Test Pit at 0.8m (Unable To Penetrate)

Depth (m): 0.0, 0.5, 1.0, 1.5, 2.0

Geology: T.S. / KERIKERI VOLCANIC GROUP

Graphic Log

Water Level: Groundwater Not Encountered

Sensitivity

Vane Shear and Remoulded Vane Shear Strengths (kPa)

Vane shear tests not undertaken due to granular nature soils.

Scala Penetrometer (blows/100mm)

0 5 10 15 20 25

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL, COBBLES & BOULDERS | FILL | BASALT | SILTSTONE

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

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Test Pit Log - TP3

Hole Location: Refer to Site Plan

JOB No. 23 104

CLIENT:	MTF Developers 2022 Ltd.	**SITE:**	114-115 Hauparua Lane, Kerikeri (Lot 3, Deposited Plan 59491)		
Date Started:	26/07/2023	**EXCAVATION METHOD:**	13 Tonne Excavator	**LOGGED BY:**	OT
Date Completed:	26/07/2023	**BUCKET TYPE**	650mm Rock Bucket	**CHECKED BY:**	WT

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, dark brown to black. Firm to stiff, moist, no plasticity. Rootlets. [Topsoil]	0.0	T.S.		Groundwater Not Encountered		Vane shear tests not undertaken due to granular nature soils.	0 5 10 15 20 25
COBBLES and **BOULDERS** in silt matrix, minor clay; Reddish brown. Dense to very dense / stiff (silt), moist, no to low plasticity. [Kerikeri Volcanic Group]	0.5	KERIKERI VOLCANIC GROUP					
End of Test Pit at 0.7m (Unable To Penetrate)	1.0						
	1.5						
	2.0						

LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL, COBBLES & BOULDERS | FILL | BASALT | SILTSTONE

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

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Test Pit Log - TP4

Hole Location: Refer to Site Plan

JOB No. 23 104

CLIENT:	MTF Developers 2022 Ltd.	**SITE:**	114-115 Hauparua Lane, Kerikeri (Lot 3, Deposited Plan 59491)		
Date Started:	26/07/2023	**EXCAVATION METHOD:**	13 Tonne Excavator	**LOGGED BY:**	OT
Date Completed:	26/07/2023	**BUCKET TYPE**	650mm Rock Bucket	**CHECKED BY:**	WT

Soil Description

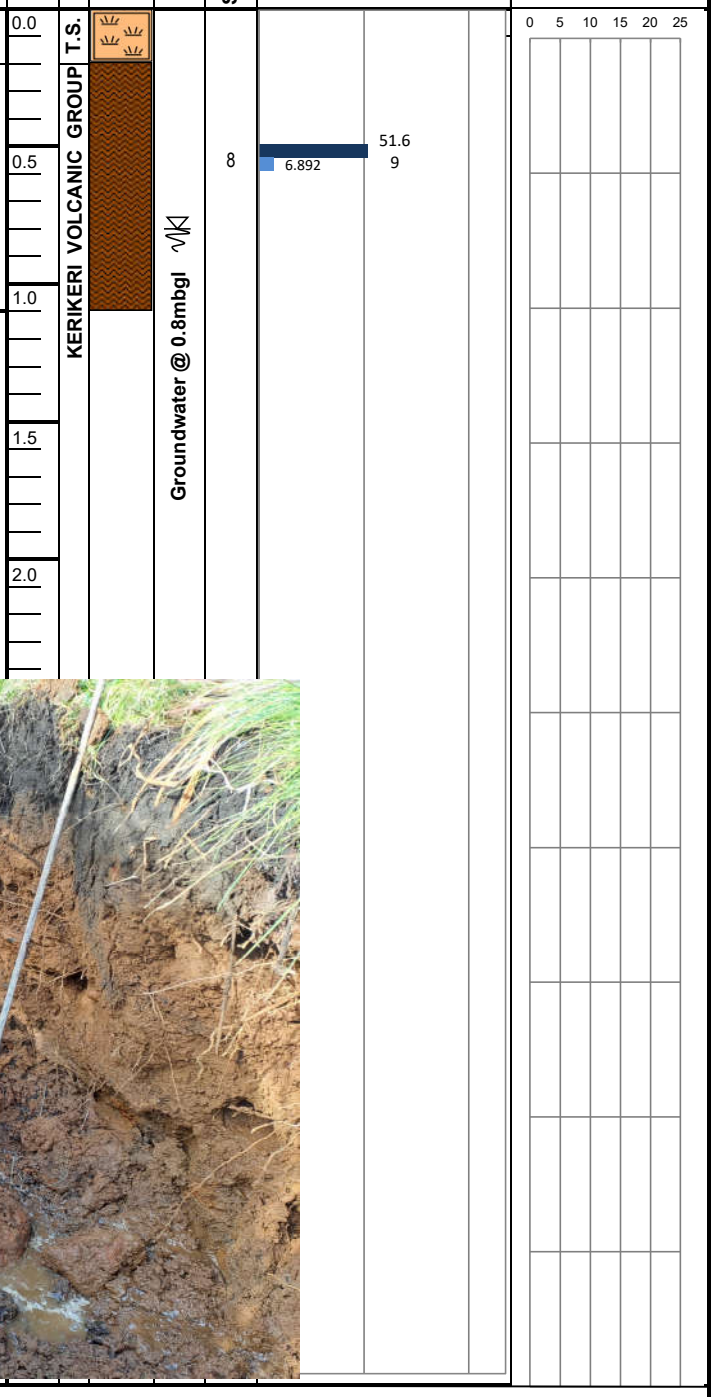
Based on NZGS Logging Guidelines 2005

SILT, dark brown to black. Firm to stiff, moist, no plasticity. Rootlets. [Topsoil]

COBBLES and **BOULDERS** in silt matrix, minor clay; Reddish brown. Dense to very dense / firm to stiff (silt), moist to wet, no to low plasticity. [Kerikeri Volcanic Group]

0.9m: becomes moist to wet. Water/spring in side of pit.

End of Test Pit at 1.1m (Unable To Penetrate)



LEGEND

TOPSOIL | CLAY | SILT | SAND | GRAVEL, COBBLES & BOULDERS | FILL | BASALT | SILTSTONE

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

Corrected shear vane reading
Remoulded shear vane reading
Scala Penetrometer

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH1

Hole Location: Refer to Site Plan

JOB No. 25 054

CLIENT:	Joke Van Audenaerde	**SITE:**	114-115 Hauparua Lane, Kerikeri		
Date Started:	02/04/2025	**DRILLING METHOD:**	Hand Auger	**LOGGED BY:**	TMA
Date Completed:	02/04/2025	**HOLE DIAMETER (mm)**	50mm	**CHECKED BY:**	AT

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)
Topsoil, black, dry	0.0	TS		Groundwater Not Encountered			0 5 10 15 20
Rock, boulder UTP	0.5						
	1.0						
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

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.
Scala penetrometer testing not undertaken.
Hand Held Shear Vane S/N:

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH2

Hole Location: Refer to Site Plan

JOB No. 25 054

CLIENT: Joke Van Audenaerde
Date Started: 02/04/2025
Date Completed: 02/04/2025
SITE: 114-115 Hauparua Lane, Kerikeri
DRILLING METHOD: Hand Auger
HOLE DIAMETER (mm) 50mm
LOGGED BY: TMA
CHECKED BY: AT

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)
Topsoil, black, dry	0.0						0 5 10 15 20
CLAY, silty, pale orange, dry							
Rock, boulder UTP	0.5						
	1.0						
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

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.
Scala penetrometer testing not undertaken.
Hand Held Shear Vane S/N:

PO Box 89, 0245
6 Fairway Drive
Kerikeri, 0230
New Zealand

HAIGH WORKMAN LTD
Civil & Structural Engineers

Phone 09 407 8327
Fax 09 407 8378
www.haighworkman.co.nz
info@haighworkman.co.nz

Borehole Log - BH3

Hole Location: Refer to Site Plan

JOB No. 25 054

CLIENT: Joke Van Audenaerde
Date Started: 02/04/2025
Date Completed: 02/04/2025
SITE: 114-115 Hauparua Lane, Kerikeri
DRILLING METHOD: Hand Auger
HOLE DIAMETER (mm) 50mm
LOGGED BY: TMA
CHECKED BY: AT

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)
Topsoil, black, dry	0.0						0 5 10 15 20
CLAY, silty, pale orange, dry							
Rock, boulder UTP	0.5						
	1.0						
	1.5						
	2.0						
	2.5						
	3.0						
	3.5						
	4.0						
	4.5						

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.
Scala penetrometer testing not undertaken.
Hand Held Shear Vane S/N:

Appendix F – Onsite Wastewater Systems Maintenance Guidelines

ON-SITE WASTEWATER SYSTEMS

Maintenance Guidelines For Homeowners

PROTECTING YOUR HEALTH, YOUR ENVIRONMENT, YOUR INVESTMENT

PRODUCED BY: SWANS-SIG
The Small Wastewater And Natural Systems Special Interest Group of Water New Zealand

Contact Details: SWANS-SIG
Water NZ
PO Box 1316
WELLINGTON 6140

Telephone: 64-4-472 8925
Fax: 64-4-472 8926

Web-site: www.waternz.org.nz/swans.html

WHY MAINTENANCE OF YOUR ON-SITE WASTEWATER SYSTEM IS IMPORTANT

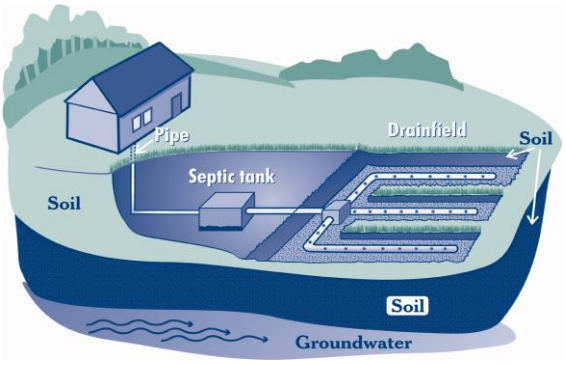
Whether you have a new "high-tech" treatment unit and drip irrigation system or an older "low-tech" septic tank and soakage trench system, regular attention to system inspection and maintenance is important. Effective regular maintenance of the wastewater servicing system on your property is essential for:

(a) protecting family health by ensuring a high level of sanitary performance;
(b) maintaining environmental values both within and beyond your property
(c) protecting the investment in your wastewater system; and
(d) enhancing amenity values in your neighbourhood through contributing to a high level of environmental performance for local on-site wastewater systems.

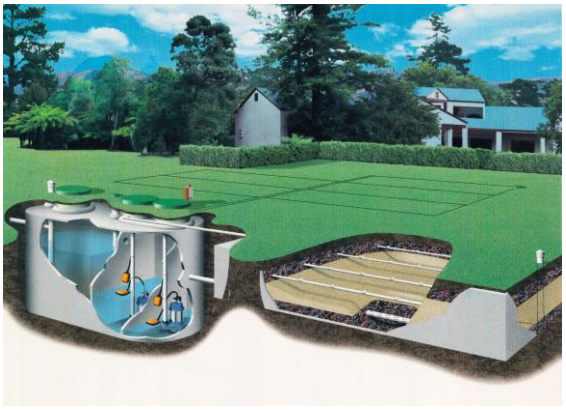
WHAT TYPE OF SYSTEM IS INSTALLED ON YOUR PROPERTY?

You are likely to have one of four types of system on your property:

- an old unknown system about which you have no information;
- an older style septic tank and soakage trench or soak hole system;
- a new modern septic tank and land application system (such as dosed trenches, or shallow planted evapo-transpiration beds, or a mound, or a low pressure dosed irrigation area);
- a new advanced treatment unit (such as an aerobic treatment plant, sand filter, or packed bed reactor) plus drip irrigation land application system.



Older style septic tank and soakage trench system



Modern septic tank, sand filter and drip irrigation field

Before you can attend to the maintenance requirements for your system you will have to establish the system type and capacity. This will require a detailed site inspection and/or a check of building records held by council. You may be able to do some of this yourself, but if a site investigation is needed, it is best to engage a drainage contractor or on-site wastewater servicing professional to investigate as follows:

(a) For an older unknown system

- Carry out a field inspection to locate and identify the treatment unit and soakage field area.
- Excavate or probe as appropriate to identify system components, their size and condition.
- Prepare a loading certificate based on an assessment of system capacity and its performance potential.
- Identify a suitable reserve area for extending the system if need be.

(b) For an older style septic tank and soakage trench or soak hole system	• If necessary, carry out a field inspection to locate the septic tank and soakage field area. • Check the maintenance record for the tank, and/or pumpout and inspect tank condition. • Evaluate the capacity and current performance of the soakage system. • Prepare a loading certificate based on an assessment of system capacity and its performance potential. • Identify a suitable reserve area for extending the system if need be.
(c) For a new modern septic tank and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate (see box below). • Check availability of operation and maintenance instructions as provided by the designer. • Confirm the availability of a suitable reserve area for extending the system if need be.
(d) For a new advanced treatment unit and land application system	• Check council building consent records. • Check designer/installer reports and as-built records. • Obtain the designer's loading certificate. • Check availability of operation and maintenance instructions as provided by the designer. • Check if a maintenance contract is in place, and if not investigate options for and commission such a contract. • Ensure the maintenance contract is renewed annually.

Checking scum and sludge levels in a septic tank

Servicing an advanced wastewater treatment unit

Whatever system is installed on your property, it is important that you understand the capabilities of the system. These are best identified and summarised in the preparation of a loading certificate. The loading certificate will enable you to understand the limitations or constraints of your system; however, the most important thing is to know your system type so that the right sort and frequency of maintenance can be carried out. This can simply be done through an inspection by a wastewater servicing specialist who will prepare the loading certificate.

LOADING CERTIFICATE

This should set out the following information:

(a) System type (obtained from the as-built details provided by the designer/installer};
(b) System capacity (number of persons and daily flow volume);
(c) Summary of design criteria;
(d) The location of and use of the 'reserve area';
(e) Use of water efficient fittings, fixtures and appliances;
(f) Allowable variation from design flows (peak loading events);
(g) Consequences of changes in loading (due to varying wastewater characteristics);
(h) Consequences of overloading the system;
(i) Consequences of underloading the system;
(j) Consequences of lack of operation, maintenance and monitoring attention; and
(k) Any other relevant considerations related to use of the system.

It is also essential that if you have an advanced treatment and land application system subject to a maintenance contract, this contract is renewed annually.

DO YOU HAVE A SET OF USER GUIDELINES?

Your Regional, City or District Council is likely to have available a set of user guidelines for owner/occupiers of dwellings serviced by on-site wastewater systems. Such guidelines may be based on the provisions of the joint Australia New Zealand Standard AS/NZS 1547:2012 "On-site Domestic Wastewater Management", and will typically set out 'dos' and 'don'ts' related to household activities which generate wastewater flows (see box below).

USER ADVICE for a PROPERTY OWNER/OCCUPIER (from AS/NZS 1547:2012)

For the on-site system to work well, there are some good habits to encourage and some bad habits to avoid:

(a) To reduce sludge building up in the tank:
- (i) Scrape all dishes to remove fats, grease, and so on before washing
- (ii) Keep all possible solids out of the system
- (iii) Don't use a food waste disposal unit unless the wastewater system has been specifically designed to carry the extra load, and
- (iv) Don't put sanitary napkins and other hygiene products into the system;

(b) To keep the bacteria working in the tank and to maintain soil condition in the land application area:
- (i) Use biodegradable soaps
- (ii) Use a low-phosphorus detergent (less than 1 gram per wash – very good; "no phosphorus" labelled product – best)
- (iii) Use a low-sodium detergent in erosive or clayey soil areas (less than 20 grams per wash – OK; less than 10 grams per wash – best)
- (iv) Use detergents in the recommended quantities
- (v) Don't use powerful bleaches, whiteners, nappy soakers, spot removers and disinfectants
- (vi) Don't put chemicals or paint down the drain, and
- (vii) Check potential for effects from antibiotic and other medication use.

(c) Conservation of water will reduce the volume of effluent requiring disposal to the land application area, make it last longer and improve its performance. Conservation measures include:
- (i) Installation of water conservation fittings
- (ii) Taking showers instead of baths
- (iii) Washing clothes only when there is a full load, and
- (iv) Using the dishwasher only when there is a full load;

(d) Avoid overloading the system by spacing out water use as evenly as possible. For example:
- (i) Do not do all the washing on one day, and
- (ii) Do not run the washing machine and dishwasher at the same time.

MAINTENANCE INSPECTION REQUIREMENTS

Once you know the details and operating capacity of your on-site wastewater system then you can check out the maintenance inspection and servicing requirements from the table below. Note that your system will include a distribution device to convey the treated effluent to each element of your land application system so as to provide uniform use of the soil in further treating the wastewater flow.

Treatment System Type	Inspection and Maintenance Requirements
Older style septic tank	• Pumpout at 3-year intervals • Alternatively, check scum and sludge levels and pumpout on demand (around half full of scum and sludge)
Modern septic tank with effluent outlet filter	• Check scum and sludge levels (2-yearly) and pumpout on demand (around 6 to 8 years) • Check and hose down effluent outlet filter during pumpout
Aerobic treatment unit (aerated system)	• Periodic effluent quality “sniff and look” inspection (6-months) • Check power consumption (3-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Septic tank/sand filter system	• Periodic effluent quality “sniff and look” inspection (6-months) • Confirm sand is draining satisfactorily and not clogging (12-months) • Replace upper sand layer if draining slowly (as required) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Packed bed reactor unit	• Periodic effluent quality “sniff and look” inspection (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Distribution System	Inspection and Maintenance Requirements
Gravity distribution box	• Check distribution evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of box (12-months)
Flood load gravity dosing system	• Check distribution is evenly balanced to all outlets (12-months) • Remove any accumulated solids in base of dose chamber (12-months)
Siphon dosing system	• Check siphon operation (ensure system not dribbling following ‘shut-off’) (6-months) • Remove any accumulated solids in base of siphon chamber (6-months)
Pump chamber and manifold distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)
Pump chamber and automatic sequencing valve distribution to dosing lines	• Check pump start and stop level controllers (clean off grease and solids) (6-months) • Check pump power use (6-months) • Check sequencing valve operation (6-months) • Carryout equipment service check at 6-months (as specified in the supplier/installer maintenance contract)

Land Application System Type	Inspection and Maintenance Requirements
Soakage trenches (or beds)	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Check level of standing effluent in trenches using vent pipes for liquid depth observation (6-months) • Add extra trenches in reserve area if overload (wetness or flooded system) becomes apparent
ETS (evapo-transpiration seepage) beds (or trenches)	• Inspect space between ETS beds/trenches for signs of wetness, surface seepage and/or excess grass growth (12-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in beds/trenches using vent pipes for liquid depth observation (12-months) • Add extra beds/trenches in reserve area if overload (wetness or flooded system) becomes apparent
Mounds (for septic tank effluent)	• Inspect edges (toe) of mound for signs of wetness, surface seepage and/or excess grass growth (6-months) • Install and plant a 1 metre wide by 400mm deep topsoil layer around mound perimeter if toe seepage becomes apparent • Install extra mound in reserve area if toe seepage not managed by supplementary soil and ET plantings.
LPED (low pressure effluent distribution) irrigation field	• Inspect soakage field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check level of standing effluent in LPED trenches using vent pipes (6-months) • Add extra LPED trenches in reserve area if overload (wetness or flooded system) becomes apparent
Drip irrigation field	• Inspect irrigation field area for signs of wetness, surface seepage and/or excess grass growth (6-months) • Trim grass and/or ET plantings to avoid rank overgrowth • Check air release valves are operating effectively (6-months) • Operate irrigation line flush valves (6-months) • Add extra drip lines in reserve area if overload (wetness or flooded system) becomes apparent • Carryout service check at 6-months (as specified in the supplier/installer maintenance contract)
NOTE: Where your wastewater system is subject to a resource consent from your Regional Council, you should note and follow the maintenance conditions imposed by the consent.	

DIY MAINTENANCE TASKS

As homeowner (or occupier) there are several inspection and maintenance tasks which you can carry out yourself. However, your must remember at all times that you are dealing with unsanitary waste material which may potentially be infectious, and hence in handling equipment and effluent samples you must take adequate precautions to prevent contamination of yourself and your equipment.

The following simple tasks involve a commonsense approach to on-site wastewater system homeowner/occupier DIY inspection and maintenance requirements (see tables above).

- Check septic tank scum and sludge levels (organise pumpout if required).
- Check drainage lines for evidence of 'backup' (slow draining).
- If backup due to outlet filter blockage, lift and hose down filter into septic tank.
- Check distribution box for even distribution of flow to trenches.

- Inspect land application system (trenches, beds, mounds, LPED and drip irrigation fields) for signs of wetness, seepage, excess grass growth.
- Carry out “sniff and look” assessment of advanced treatment plant effluent quality (if a glass container full of effluent does not appear cloudy, and smells only slightly musty and not offensive, effluent quality is good).
- Check treatment unit and pumping system power consumption (if increases over time, need system check by servicing personnel).
- Check operation of irrigation line flush valves.
- If need be, call in drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Healthy worm activity in septic tank scum layer

Septic tank pumpout

Backup to gully trap from clogged tank

Lifting and hosing down effluent outlet filter

Distribution box

Automatic sequencing valve

SERVICING AGENT MAINTENANCE TASKS

If you as owner/occupier wish to have no role in maintaining your system, this is fine, but you will need to engage a drainage contractor, servicing specialist or maintenance contract service provider to undertake servicing and/or remedial works.

Even if you do carry out DIY maintenance tasks as outlined above engaging servicing personnel will be essential to carrying out mechanical and electrical servicing as well as specialist servicing tasks such as effluent quality sampling and testing. In addition, servicing specialists are best fitted to undertake tasks such as:

- Checking scum and sludge levels in tanks.
- Lifting and hosing down effluent outlet filters.
- Checking distribution effectiveness from distribution boxes and automatic sequencing valves.
- Checking power consumption and adjusting treatment plant controls and pumping cycles to achieve better efficiency.
- Checking distribution effectiveness and flushing drip irrigation lines.
- Undertaking remedial works and system extensions.

MAINTENANCE CERTIFICATE

Where a specialist servicing check is undertaken, including servicing under a maintenance contract, you should be provided with a maintenance certificate (see box below). This certificate should be filed away and provided as required to your District or Regional Council as proof of maintenance. This requirement may be a consent condition.

A maintenance certificate shall include (from AS/NZS 1547:2012)
(a) Certification by a qualified and experienced person that the on-site system is operating and performing effectively;
(b) A note of any specific operation and maintenance attention which is due;
(c) Identification of any operation and maintenance problems, their likely cause and recommended remedial action;
(d) Any evidence of system capacity being exceeded or likely to be exceeded (for example, by extra residents, or by holiday period occupiers);
(e) Results of effluent quality testing where advanced or disinfection treatment is being used;
(f) Note of actions taken and results achieved following recommendations for remedial work after the previous routine inspection;
(g) A recommendation on when next desludge/pumpout should be undertaken; and
(h) Any other relevant matters.

CONTACT DETAILS FOR ADVICE AND SERVICE

To find a wastewater servicing specialist, contact your local council, septic tank pumpout contractor, treatment plant supplier or plumbing/drainlaying company. Enter contact details/phone numbers in the boxes below of those persons whom you may need to call on at some stage to gain advice on issues related to operation, inspection and maintenance of your on-site wastewater system

System Designer	
Council On-site Wastewater Officer	
Maintenance Contract Servicing Agent	
Local Drainage Contractor	

Acknowledgements – Illustrations:

- Marlborough District Council
- US EPA Educational Materials
- Reflection Treatment Systems Ltd
- Ministry for the Environment
- Super-Treat NZ Ltd
- On-Site NewZ
- North Dakota State University
- InspectAPedia
- Southeast Septic, USA
- Dola Transport, USA

Appendix G – Soils Factsheet

Young basalt volcanic soils

Soil types in this group

- Kiripaka bouldery silt loam – KB, KBH*
- Kiripaka bouldery silt loam with compact subsoil –KBe
- Kiripaka bouldery silt loam with compact subsoil and large boulders – KBeb
- Kiripaka bouldery silt loam with large boulders – KBb
- Ōhaeawai shallow bouldery silt loam – OWb
- Ōhaeawai silt loam – OW
- Whakapai clay loam - WP
- Whakapai friable clay - WPe
- Whatitiri clay loam – WG

This fact sheet uses NZ Soil Bureau map series soil type names and abbreviations.

The H* denotes the hill variant of this soil type, which occurs on slopes over 20° and has a shallower profile.

Kiripaka bouldery silt loam (KB) soil profile

Features of young basalt volcanic soils

- These soils formed on basalt lava flows that are generally low in silica and rich in iron and aluminium
- They are part of the Kiripaka soil suite
- Topsoils are dark brown to dark grey-brown, subsoils are red to brown; both are very friable and break down to a very fine (powdery) granular structure
- They are otherwise known as brown loams and are classic volcanic soils suitable for both orchards and cropping and are some of Northland's most versatile soils
- All young basalt volcanic soils are generally free draining, requiring few drainage structure improvements
- These soils display only moderate weathering, and are weakly to moderately leached
- They have varying amounts of boulders, especially on the edges of ancient lava flows where molten rock cooled quickly
- Historic dry-stone walls can be a good indication of the presence of these soils

Structure and drainage management

Issues	Management tips
These soils are friable and granular (nutty) on top (horizon A) with an accumulation of clay at depth. They have a clay texture, but have only low plasticity, making them 'brittle' and easily destroyed by over-cultivation or compaction when dry	To avoid compaction, soils should be allowed to dry after rain for a few days before running heavy equipment over them
Cultivation pans and surface compaction are common problems	Shallow ripping shatters cultivation pans/surface compaction and aerates soils, maintaining structure and reducing fungal root diseases
Topsoils can become a fine powdery surface layer known as a 'dust mulch' that seals the surface, repelling water and increasing runoff	Careful crop-pasture-crop rotations retain topsoil structure
Because they are generally free draining, they are drought prone	Maintaining good crop or pasture covers helps build soil organic matter and improve drought resilience

Erosion control

Erosion risks	Soil type	Specific problems	Possible solutions
Sheet erosion	All young basalt volcanic soils	Friable or granular topsoil can be washed away in sheets, losing organic matter and damaging crops Runoff from higher ground increases the problem, as does the formation of water-repellent 'dust mulch' surface sealing from compaction or over-cultivation	Manage water discharge and flow from higher elevations Plant and cultivate on the contour
Rill erosion	All young basalt volcanic soils	Water runoff from compacted land above runs downslope, gouging channels or rills into topsoils Rills become deeper with successive rainstorms Bare, cropped soils are especially susceptible to rill erosion	For longer slopes use shallow grassed water diversion channels at intervals down the slope Using sediment traps in frequently or continuously cropped areas is recommended

Kiripaka bouldery silt loam (KB, KBH) at Three Mile Bush

Nutrient management

Soil type	Nutrient status	Management strategies
All young basalt volcanic soils	Because these soils are well drained and warm up early in spring, organic matter can be quickly lost	Cropping and grazing rotations should be aimed at building organic matter
All young basalt volcanic soils	Soils are naturally fertile except for potassium, which is low in parent rock and is leached quickly through free-draining profiles Applied nitrogen also leaches out of soils rapidly; leaching is less of a problem where soils are deeper and/or with clay in the subsoil, or where there is a sheet of basalt rock below	Effluent and/or fertiliser should be applied little and often in order to reduce risk of leaching losses

Drainage classes

Soil symbol	Full name	Drainage class
KIRIPAKA SUITE Basement rock: volcanic basalt lava flows		
KB,KBH	Kiripaka bouldery silt loam	4 - Well drained
KBb	Kiripaka bouldery silt loam with large boulders	4 - Well drained
OW	Ōhaeawai silt loam	4 - Well drained
OWb	Ōhaeawai shallow bouldery silt loam	4 - Well drained
WG	Whatitiri clay loam	4 - Well drained
WP	Whakapai clay loam	4 - Well drained
WPe	Whakapai friable clay	4⇌3 - Well to moderately drained
KBe	Kiripaka bouldery silt loam with compact subsoil	3 - Moderately drained
KBeb	Kiripaka bouldery silt loam, with compact subsoil, and large boulders	3 - Moderately drained

Northland soil factsheet series

- Northland's climate, topography, historic vegetation and mixed geology have combined to form a complex pattern of soils across the region. There are over 320 soil types in Northland. Other regions in New Zealand average only 20 soil types per region.
- The information in this fact sheet is based on a 1:50,000 mapping scale. Therefore, it is not specific to individual farms or properties. However, it may help you to understand general features and management options for recent alluvial soils.
- Knowing your soils' capabilities and limitations is the key to sustainable production in Northland. Northland Regional Council (NRC) land management advisors are available to work with landowners to provide free soil conservation advice, plans and maps specific to your property.
- Regular soil tests are recommended. If you are concerned about your soil structure or health, the Visual Soil Assessment test could be useful. Contact the land management advisors at Northland Regional Council for more information.
- Further background information about the processes that have formed these soils can be found here: **www.nrc.govt.nz/soilfactsheets**

Appendix H – Suitable Plants for Evapo-Transpiration Systems

SUITABLE PLANTS FOR EVAPO-TRANSPIRATION SYSTEMS

Native Shrubs and Trees

Coprosma	*Coprosma propinqua*
Hebe	*Hebe*
Manuka	*Leptospermum Scoparium*
Weeping Mapou	*Myrsine Divaricata*
Flax (fast)	*Phormium Tenax*
Pokaka (slow)	*Elaeocarpus Hookerianus*
Cabbage Tree (fast)	*Cordyline Australias*
Rangiora (fast)	*Brachyglottis Repanda*
Lacebark (fast)	*Hoheria Populnea*
Ribbonwood (fast)	*Plagianthus Regius*
Poataniwha	*Melicope Simplex*
Heketara	*Olearia Rani*
Poataniweta	*Carpodetus Serratus*
Kohuhu (fast)	*Pittosporum Tenufolium*

Grasses

Jointed Twig Sedge	*Baumea Articulata*
Longwood Tussock	*Carex Comans*
Pukio	*Carex Secta*
Toetoe (use native species- not invasive Pampas Grass)	*Cortaderia Fulvida*
Umbrella Sedge	*Cyperus Ustulatus*
Oioi	*Leptocarpus Similis*
Hooksedge	*Uncinia Unciniata*

Introduced Species

Canna Lilies, Taro, Aralia, Fuschia, Philodendrons, and Begonias

NORTHLAND REGIONAL COUNCIL

CARING FOR NORTHLAND AND ITS ENVIRONMENT

WHANGAREI: 36 Water Street, Private Bag 9021, Whangarei; Phone 09 438 4639, Fax 09 438 0012.

OPUA: Unit 10, Industrial Marine Park, Opua; Phone 09 402 7516, Fax 09 402 7510.

DARGAVILLE: 61B Victoria Street, Dargaville; Phone 09 439 3300, Fax 09 439 3301.

KAITAIA: 192 Commerce Street, Kaitaia; Phone 09 408 6600, Fax 09 408 6601.

Freephone: 0800 002 004 Environmental Hotline: 0800 504 639 Website: www.nrc.govt.nz

Appendix I – Producer Statement (PS1)

PRODUCER STATEMENT – PS1
DESIGN

Building Code Clause(s):	G13	Job number: 25 054
ISSUED BY: *(Engineering Design Firm)*	Haigh Workman Limited	
TO: *(Client)*	Joke Van Audenaerde	
TO BE SUPPLIED TO: *(Building Consent Authority)*	Far North District Council	
IN RESPECT OF: *(Description of building work))*	New wastewater treatment system	
AT: *(Address)*	114 Hauparua Lane, Kerikeri	
LEGAL DESCRIPTION	Lot 4 DP 605001	

We have been engaged by Joke Van Audenaerde to provide:

New wastewater treatment system and disposal field design

in respect of the requirements of the Clause(s) of the Building Code specified above for part only, as specified in the attached Schedule, of the proposed building work.

The design carried out by Haigh Workman Limited has been prepared in accordance with:

✓ alternative solutions as per the attached schedule.

The proposed building work covered by this producer statement is described in the drawings specified in the attached Schedule, together with the specification, and other documents set out in the attached Schedule.

On behalf of Haigh Workman Limited, and subject to:

- all proprietary products meeting their performance specification requirements;

I believe on reasonable grounds that:

- the building, if constructed in accordance with the drawings, specifications, and other documents provided or listed in the attached Schedule, will comply with the relevant provisions of the Building Code specified above; and that
- the persons who have undertaken the design have the necessary competence to do so.

I recommend the Nil level of construction monitoring.

I, John Francis Papesch, am:

- CPEng number 224301
- and hold the following qualifications: B.E.

Haigh Workman Limited holds a current policy of Professional Indemnity Insurance no less than $200,000

Haigh Workman Limited are not members of ACE New Zealand.

SIGNED BY: John Francis Papesch

(Signature):  Date: 14/5/2025

ON BEHALF OF: Haigh Workman Limited

Note: This statement has been prepared solely for Far North District Council and shall not be relied upon by any other person or entity. Any liability in relation to this statement accrues to Haigh Workman Limited only. As a condition of reliance on this statement, Far North District Council accepts that the total maximum amount of liability of any kind arising from this statement and all other statements provided to Far North District Council in relation to this building work, whether in tort or otherwise, is limited to the sum of $200,000.

This form is to accompany **Form 2 of the Building (Forms) Regulations 2004** for the application of a Building Consent.

SCHEDULE TO PS1

Please include an itemised list of all referenced documents, drawings, or other supporting materials in relation to this producer statement below:

- 25 054 Onsite Wastewater System Report

Limited Scope of Engagement

We have been engaged by Joke Van Audenaerde to provide services in respect of the requirements of the Clause(s) of the Building Code specified above for the following parts of the proposed building work:

New wastewater disposal field

Alternative Solution

The design carried out by Haigh Workman Limited has been prepared in accordance with:

AS / NZS:1547

GUIDANCE ON USE OF PRODUCER STATEMENTS

Information on the use of Producer Statements and Construction Monitoring Guidelines can be found on either the **ACE New Zealand** or **Engineering New Zealand** websites.

Producer statements were first introduced with the Building Act 1991. The producer statements were developed by a combined task committee consisting of members of the New Zealand Institute of Architects (NZIA), Institution of Professional Engineers New Zealand (now Engineering New Zealand), Association of Consulting and Engineering New Zealand (ACE NZ) in consultation with the Building Officials Institute of New Zealand (BOINZ). The original suite of producer statements has been revised at the date of this form to ensure standard use within the industry.

The producer statement system is intended to provide Building Consent Authorities (BCAs) with part of the reasonable grounds necessary for the issue of a Building Consent or a Code Compliance Certificate, without necessarily having to duplicate review of design or construction monitoring undertaken by others.

PS1 DESIGN: Intended for use by a suitably qualified independent engineering design professional in circumstances where the BCA accepts a producer statement for establishing reasonable grounds to issue a Building Consent;
PS2 DESIGN REVIEW: Intended for use by a suitably qualified independent engineering design review professional where the BCA accepts an independent design professional's review as the basis for establishing reasonable grounds to issue a Building Consent;
PS3 CONSTRUCTION: Forms commonly used as a certificate of completion of building work are Schedule 6 of NZS 3910:2013 or Schedules E1/E2 of NZIA's SCC 20112
PS4 CONSTRUCTION REVIEW: Intended for use by a suitably qualified independent engineering construction monitoring professional who either undertakes or supervises construction monitoring of the building works where the BCA requests a producer statement prior to issuing a Code Compliance Certificate.
This must be accompanied by a statement of completion of building work (Schedule 6).
The following guidelines are provided by ACE New Zealand and Engineering New Zealand to interpret the Producer Statement.

Competence of Engineering Professional

This statement is made by an engineering firm that has undertaken a contract of services for the services named, and is signed by a person authorised by that firm to verify the processes within the firm and competence of its personnel.
The person signing the Producer Statement on behalf of the engineering firm will have a professional qualification and proven current competence through registration on a national competence-based register such as a Chartered Professional Engineer (CPEng).
Membership of a professional body, such as Engineering New Zealand provides additional assurance of the designer's standing within the profession. If the engineering firm is a member of ACE New Zealand, this provides additional assurance about the standing of the firm.
Persons or firms meeting these criteria satisfy the term "suitably qualified independent engineering professional".

Professional Indemnity Insurance

As part of membership requirements, ACE New Zealand requires all member firms to hold Professional Indemnity Insurance to a minimum level.
The PI Insurance minimum stated on the front of this form reflects standard practice for the relationship between the BCA and the engineering firm.

Professional Services during Construction Phase

There are several levels of service that an engineering firm may provide during the construction phase of a project (CM1-CM5 for engineers3).
The BCA is encouraged to require that the service to be provided by the engineering firm is appropriate for the project concerned.

Requirement to provide Producer Statement PS4

BCAs should ensure that the applicant is aware of any requirement for producer statements for the construction phase of building work at the time the building consent is issued. No design professional should be expected to provide a producer statement unless such a requirement forms part of Haigh Workman Ltd's engagement.

Refer Also:

1. Conditions of Contract for Building & Civil Engineering Construction NZS 3910: 2013
2. NZIA Standard Conditions of Contract SCC 2011
3. Guideline on the Briefing & Engagement for Consulting Engineering Services (ACE New Zealand/Engineering New Zealand 2004)
4. PN01 Guidelines on Producer Statements

www.acenz.org.nz
www.engineeringnz.org