Donaldson's Surveyors Limited

90 Kerikeri Road - PO Box 211
Kerikeri 0245 - Northland - New Zealand

P 09 407 9182
F 09 407 7366
E info@donaldsons.net.nz
W www.donaldsons.net.nz

DONALDSONS
REGISTERED LAND SURVEYORS

8638

5 December 2025

Planning Division
Far North District Council
Private Bag 752
Kaikohe

Dear Sir/Madam

PROPOSED SUBDIVISION
P. W. COOK, 21 OKOKAKO ROAD, WAIMATE NORTH

We submit herewith a Resource Consent application to subdivide together with the following:

- Application Form & Deposit $3044
- Planning Report
- Record of Title
- Top Energy Ltd comments
- Wastewater & Geotechnical assessment – Vision Engineering
- Stormwater Management assessment – Donaldsons Surveyors
- Scheme Plan – Subdivision

Yours faithfully

Micah Donaldson
Assoc.NZPI - RPSURV

DONALDSONS
Registered Land / Engineering Surveyors and Development Planners

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: P. W. Cook

Email:

Phone number: Work | Home

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

Postcode

6. Address for Correspondence

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

Name/s: Donaldsons Surveyors

Email:

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: P. W. Cook

Property Address/ Location: 21 Okokako Road
Waimate North

Postcode

8. Application Site Details

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

Name/s: P. W. Cook

Site Address/ Location:

Postcode

Legal Description: **Val Number:**

Certificate of title:

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.

Phone the applicant prior to 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.

Proposed subdivision to create two lifestyle allotment

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

10. Would you like to request Public Notification?

◯ **Yes** ✔ **No**

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

(more than one circle can be ticked):

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

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

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

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

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

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

13. Assessment of Environmental Effects:

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

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

13. Draft Conditions:

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

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

14. Billing Details:

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

Name/s: (please write in full) Donaldsons Surveyors Ltd

Email:

Phone number: Home

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

Postcode 0245

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) Micah Donaldson

Signature:
(signature of bill payer

Date 05-Dec-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) Micah Donaldson

Signature:

Date 05-Dec-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)
- [ ] Copies of other relevant consents associated with this application
- [ ] Location and Site plans (land use) AND/OR
- [x] Location and Scheme Plan (subdivision)
- [ ] Elevations / Floor plans
- [x] 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.

Quickmap Title Details

Information last updated as at 05 Oct 2025

RECORD OF TITLE
DERIVED FROM LAND INFORMATION NEW ZEALAND
FREEHOLD

Identifier **NA121C/845**

Land Registration District **North Auckland**

Date Issued 04 March 1999

Prior References

NA628/91

Type Fee Simple

Area 8.8221 hectares more or less

Legal Description Lot 1 Deposited Plan 195275

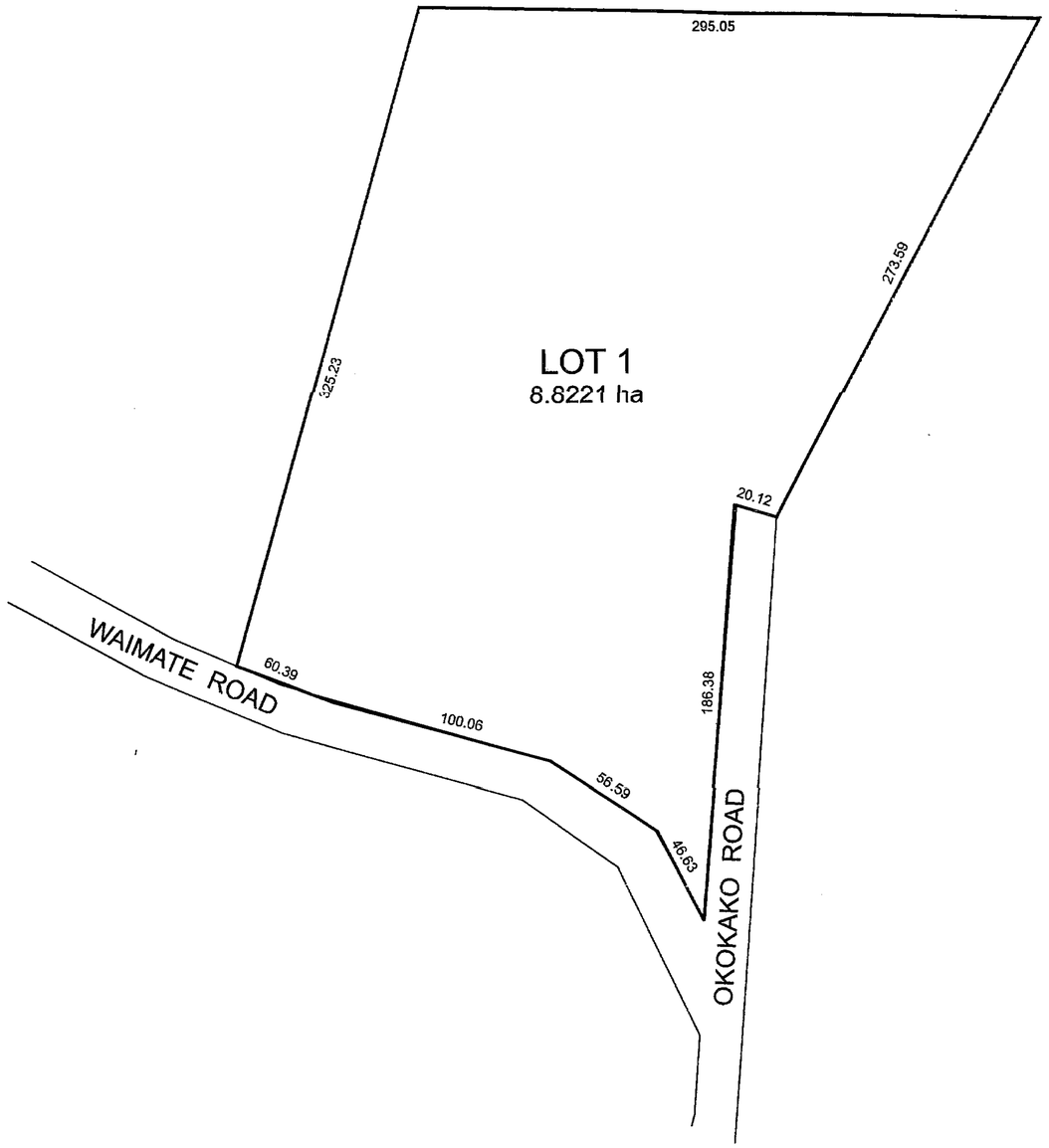
Registered Owners

Peter William Cook

Appurtenant hereto is a right to take and convey water supply created by Transfer D414754.3 - 29.7.1999 at 1.37 pm

The easements created by Transfer D414754.3 are subject to Section 243 (a) Resource Management Act 1991

11762537.3 Mortgage to Patricia Anne Cook - 19.6.2020 at 4:54 pm



New Cs'T Allocated:

Lot 1:

- 121C/845

Parcel	Formerly	CT Ref
LOT 1	Part Rangaunu 6A	628/91

Total Area: (Lot 1)

8.8221 ha

Approved for CT Diagram Purposes

23/3/99 Chief Surveyor

Deposited for CT Diagram Purposes

24/3/99 Registrar-General of Land

23112

18 MAR 1999

DP 195275

Land District: NORTH AUCKLAND

Survey District: V KAWAKAWA

PLAN OF LOT 1
FOR CT DIAGRAM PURPOSES

Local Authority: FAR NORTH DISTRICT

Prepared by: TERRALINK NZ LTD

Drawn By .NK...
Checked By ..AC...

Scale: Proportional

26 MAR 1999

Donaldson's Surveyors Limited

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DONALDSONS
REGISTERED LAND SURVEYORS

PLANNING REPORT

PROPOSED SUBDIVISION

P. COOK, 21 OKOKAKO ROAD, WAIMATE NORTH

DATE: 5 DECEMBER 2025 REFERENCE: 8638

CONTENTS

INTRODUCTION

The applicant is seeking resource consent to undertake a subdivision of their property located at 21 Okokako Road, Waimate North. The proposal involves the creation of two additional allotments from the existing landholding, with the following proposed site areas:

- Lot 1 = 8.0 ha
- Lot 2 = 4000m^2
- Lot 3 = 4200m^2

The subject site is located within the Rural Production Zone under the Operative Far North District Plan. In accordance with the relevant provisions, the subdivision is classified as a restricted discretionary activity, and this application has been prepared and assessed on that basis.

This proposal is not subject to the provisions having legal effect under the Proposed District Plan.

SITE DESCRIPTION

The property is accessible at 21 Okokako Road, Waimate North, approximately 20km from Kerikeri. The location of proposed Lot 1 is just north of the intersection of Waimate North Road.

Estate	Title	Appellation	Area	Owner
Fee Simple	RT NA121C/845	Lot 1 DP 195275	8.8221 ha	Peter Cook

There is an existing residence situated on the balance area shown proposed Lot 1. This lot is 8ha, with all existing impermeable surfaces upholding existing use rights.

Lots 2 & 3 are vacant sites, having a mixed contour where the upper half provides an easy grade of approximately 7% leading to steeper grades of 30 – 50% all in scrub and pines.

The soil type within Lots 2 & 3 is Waiotu friable clay (OK) (NZMS 290 Sheet P04/05). All mature basalt volcanic soils are generally free draining, requiring few drainage structure improvements.
Some soils have boulders created as a result of long periods of erosion on the edges of old basalt flows.
The soil land use capability is recorded as 3e1, indicating it is representative of versatile soil quality.

There is one main established stormwater discharge points from the water tanks on Lot 1 that cuts through Lots 2 & 3, accordingly an easement is proposed as identified on the scheme plan as area ‘A’.

OPERATIVE DISTRICT PLAN

The property is located in the Rural Production zone and is not affected by any Resource Overlays under the Far North Operative District Plan.

Under Chapter 13 TABLE 13.7.2.1: MINIMUM LOT SIZES the proposal is configured as a standard discretionary activity with proposed Lot 2 over 4000m² and the balance area over 4.0ha.

TABLE 13.7.2.1: MINIMUM LOT SIZES	**Restricted Discretionary**
Rural Production	*3. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 4,000m2 and there is at least 1 lot in the subdivision with a minimum lot size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000.*

Lot 1 = 8.0ha, Lot 2 = 4000m² and Lot 3 = 4200m²
Both proposed Lots 2 & 3 are over 4000m², and the balance area of Lot 1 is over 4ha.
The subject title date was issued prior to 28 April 2000. Title date = 4 March 1999.

The proposal therefore is presented as a restricted discretionary activity.

ALLOTMENT DIMENSIONS
(Buildable Area)

Zone	**Minimum Dimension**
Rural Production	30m x 30m

The lots are able to uphold the 30m x 30m allotment shape parameter in accordance with 10-metre setbacks from boundaries.

Assessment

Allotment Sizes and Dimensions
The allotment sizes have appropriate dimensions capable of providing for the main necessities; building, parking, outdoor areas disposal of effluent and control of stormwater compliant with permitted activity standards.

Hazards
There are no known natural hazards.
Lots 2 & 3 are not considered to be a HAIL sites.
A geotechnical investigation has been undertaken to gage subsurface soil properties, and recommendations include that further investigation occur at the building consent stage, administered under Section 221RMA consent notice.
This is described in the consent notice provisions below.

Water Supply
Potable supplies on Lot 1 exist through use of onsite roof surface collection and storage in water tanks.

Lots 2 & 3 would adopt the same roof surface collection method.

Firefighting water supply requirements should be included as a consent notice for Lots 2 & 3, but exclude Lot 1 as this is an existing use situation.

Stormwater
The attached stormwater assessment addresses the site constraints, stormwater flowpaths and requirements for stormwater detention on Lot 2 & 3.

A private easement is proposed over a stormwater drainage route on Lot 2 to manage existing stormwater discharge from Lot 1. The easement does not capture the exact natural flowpath of the lay of the land, but because a future swale drain will be required to manage the access stormwater, this can then connect with the stormwater off Lot 1, providing a more controlled flowpath and disposal route. Accordingly, the easement provides additional width to allow for improved disposal opportunities.

Lower catchment infrastructure was identified alongside Waimate North Road, and accordingly recommendations have been made to maintain stormwater discharge rates from Lots 2 & 3 to meet pre-development levels. The impacts from stormwater discharge are therefore considered less than minor.

For further analysis of the stormwater situation, refer to the stormwater assessment attached.

Sewage
Wastewater disposal has been addressed in the attached assessment, without any concerns.
100% back areas are available on each lot.

Energy Supplies & Telecommunications
Comments from Top Energy are attached. Electricity requirements are nil.

For telecommunications Chorus NZ is not interested in developments where there are no new lead-ins and on that basis were not consulted.

It is suggested that council include a consent notice that states provision for electricity and telecommunications were not a requirement of the consent for Lots 2 & 3.

Easements & Covenants
<u>Easements</u>
There is one proposed easement shown ‘A’ on the scheme plan in favour of Lot 1 for purpose of stormwater drainage.

Proposed Land Covenants *Section 221 RMA*

(i)
In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for fire fighting purposes is to be provided by way of 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.

LOT 2 & 3

(ii)
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 area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.

LOT 2 & 3

(iii)
All buildings will require foundations specifically designed by a Chartered Professional Engineer in accordance with design parameters specified by a suitably qualified Geotechnical engineer. The foundation design details shall be submitted in conjunction with the Building Consent application.

LOTS 2 & 3

(iv)
Provision of electricity and telecommunication connections to the lots was not a requirement of this resource consent. Any future connection to electricity and telecommunications networks shall be the responsibility of the landowner and subject to separate arrangements with the relevant network service providers.

LOTS 2 & 3

(v)
A stormwater detention design be prepared by a Suitably Qualified and Experienced Professional (SQEP) in accordance with the Far North District Council Engineering Standards (May 2023). The design must demonstrate that post-development discharge rates do not exceed 80 percent of pre-development flow rates for the 1%, 10%, and 50% Annual Exceedance Probability (AEP) storm events, while also accounting for climate change effects. The design shall include supporting calculations for gutter capacity and downpipe (dropper) sizing to ensure compliance with best-practice hydraulic design standards.

Maintenance

i) Stormwater infrastructure is governed by Schedule 5 Land Transfer Regulation.
Where applicable, maintenance for detention devices within site boundaries shall at a minimum include:

- *removal of debris at gutters, pipe inlet or outlet orifices, removal of sediment build-up greater than 50mm in the base of detention tank.*

- *Any damaged pipework, headwalls or any other related component within the site boundaries shall be repaired by a certified drainlayer.*
- *Planting, weed infestation, building, or excavation onsite must not impede the function of overland flowpaths, swale drains or detention devices.*

ii) All detention devices, inground or tank systems are to have easily accessible inspection points at all detention outlet orifices.

- *Landowners ongoing responsibilities for detention devices includes installation and maintenance of gutter guard, removal of debris at gutter downpipes, tank inlets and outlets, removal of sediment build-up greater than 100mm in the base of the detention device.*
- *Any repairs shall be completed by a certified drainlayer at cost to the landowner.*
- *Councils monitoring officer may at any time conduct audits and where detention devices are neglected, enforce infringement penalties.*

[**LOTS 2 & 3**]

The property is identified as being within a high density kiwi zone. On all lots no occupier of, or visitor to the site, shall keep or introduce to the site carnivorous or omnivorous animals (such as cats, dogs or mustelids), which have the potential to be kiwi predators. *Note: This Consent Notice does not relate to the any dogs on Lot 1, and the consent notice will only be put into effect once Lot 1 is no longer owned or occupied by the consent holder of RC _____.*

All lots.

Amalgamation Conditions
There are no proposed amalgamation conditions.

Property Access
TRANSPORTATION
15.1 TRAFFIC, PARKING AND ACCESS

15.1.6A.2 PERMITTED ACTIVITIES

15.1.6A.2.1 TRAFFIC INTENSITY
This rule only applies when establishing a new activity or changing an activity on a site.

The Traffic Intensity Factor for a site in this zone is 60 daily one way movements. The Traffic Intensity Factor shall be determined by reference to Appendix 3A in Part 4.
This rule only applies when establishing a new activity on a site. It does not apply to existing activities, however, the Traffic Intensity Factor for the existing uses (apart from those exempted below) on site need to be taken into account when assessing new activities in order to address cumulative effects.
Exemptions: The first residential unit on a site, farming, forestry and construction traffic (associated with the establishment of an activity) are exempt from this rule.

Traffic occurs from single residential units and farming based use, and therefore all are exempt.

15.1.6B PARKING
15.1.6B.1 PERMITTED ACTIVITIES
15.1.6B.1.1 ON-SITE CAR PARKING SPACES

Where:
(i) an activity establishes; or
(ii) the nature of an activity changes; or
(ii) buildings are altered to increase the number of persons provided for on the site;

A rural lot intended for a single residential unit (dwelling) requires 2 parks, and this is achievable on the lots having adequate tracking curves and manoeuvring areas without concern.

15.1.6B.1.2 - 15.1.6B.1.4 (being access onto Williams Road, Kerikeri Road & Accessible car parks)
Not applicable.

15.1.6B.1.5 CAR PARKING SPACE STANDARDS
All lots are able to create onsite carparks and achieve safe manoeuvring compliant with dimension standards of Appendix 3D.

15.1.6B.1.6 LOADING SPACES
Not applicable.

15.1.6C ACCESS
15.1.6C.1 PERMITTED ACTIVITIES

15.1.6C.1.1 Private accessways in all zones
(a) The construction of private accessway, in addition to the specifics also covered within this rule, is to be undertaken in accordance with Appendix 3B-1 in Part 4 of this Plan.

Appendix 3B-1
Standards for private access
Access is off Okokako Road, which has a legal width of 20m and a metalled carriageway 6.0m wide.

The existing entrance to Lot 1 has a large metalled formation suitable for heavy ridged vehicles, this is positioned at a bend along Okokako Road providing good sight visibility in either direction. No upgrades are required.

Two independent single entrances would be provided to Lots 2 & 3, approximately as shown on the scheme plan, and the applicant offers conditions of consent that they be formed to Council Engineering Standards May 2023.

Lots 2 & 3 can readily construct independent 3m wide access formation along an easy grade with provision for stormwater controls without concern.
Appendix 3B-2
Standards for Roads to vest.

Not applicable.

Appendix 3C
Parking spaces required.

No concern.

Appendix 3D
Manoeuvring and parking space dimensions
(90° regular user = width 2.5m (total depth one row 11.6m)

No concern.

Appendix 3E
Tracking curves would be compliant without concern.

15.1.6C.1.1
(a)
The access complies with Appendix 3B1.
(b)
Applicable only to urban & commercial zones.
(c)
A private accessway may serve a maximum of 8 household equivalents.

There is no shared access.

(d) Where a subdivision serves 9 or more sites, access shall be by public road.

Not applicable.

(e) Access shall not be permitted:
(i) onto a State Highway or a Limited Access Road;
Not applicable.

(ii) onto an arterial or collector road within 90m of its intersection with an arterial road or a collector road;
Not applicable.

(iii) onto an arterial or collector road within 30m of its intersection with a local road;
Not applicable.

(iv) onto a local road within 30m of its intersection with an arterial or collector road;
Entrance exceed 30m from Waimate North Road.

(v) onto Kerikeri Road (both sides of the road along the portion between Maraenui Drive and Cannon Drive). This rule does not apply to sites with lawfully established access

points (as at 6 September 2001) onto Kerikeri Road.
Not applicable.

(vi) *onto Kerikeri Inlet Road from Lot 1 DP 404507 or Lot 1 DP 181291 (and any sites created as result of a subdivision of these lots), except from a single vehicle crossing or intersection at least 30m from the adjoining boundary with Lot 2 DP 103531 and with at least 115m visibility in each direction.*
Not applicable.

15.1.6C.1.2 Private Accessways in urban zones
Not applicable.

(b)
Commercial zones.
Not applicable.

(c) All private accessways in all urban zones which serve two or more activities are to be sealed or concreted
Not applicable.

15.1.6C.1.3 Passing bays on private accessways in all zones
Not applicable.

15.1.6C.1.4 ACCESS OVER FOOTPATHS
Not applicable.

15.1.6C.1.5 VEHICLE CROSSING STANDARDS IN RURAL AND COASTAL ZONES
(a) Private access off roads in the rural and coastal zones the vehicle crossing is to be constructed in accordance with Council's "Engineering Standards and Guidelines" (June 2004 – Revised 2009).

Conditions of consent may include that the entrances to Lots 1 & 2 be formed in accordance with council engineering standards May 2023.

15.1.6C.1.6 Vehicle Crossing Standards in Urban zones
Not applicable.

15.1.6C.1.7 General Access Standards

(a) Provision shall be made such that there is no need for vehicles to reverse off a site except where there are less than 4 parking spaces gaining access from a local road.

The lots are able to safely manoeuvre vehicles onsite without having to revere onto legal road.

(b) All bends and corners on the private accessway are to be constructed to allow for the passage of a Heavy Rigid Vehicle.

No concerns.

(c) Any access where legal width exceeds formation requirements shall have surplus areas (where legal width is wider than the formation) grassed.

Berms would be grassed.

(*d) Runoff from impermeable surfaces shall, wherever practicable, be directed to grass swales and/or shall be managed in such a way as will reduce the volume and rate of stormwater runoff and contaminant loads.*

No concerns.

15.1.6C.1.8 Frontage to existing roads
(a) Where any proposed subdivision has frontage to a road or roads that do not meet the legal road width standards specified by the Council in its "Engineering Standards and Guidelines" (June 2004 – Revised 2009), road widening shall be vested in the name of the Council.

Okokako Road frontage is in good condition with wide mown berms with the formation being well within the legal road reserve. Table drains exist and the metalled formation is in good condition with compliant width and gradients.

(b) Where any proposed subdivision has frontage to a road or roads that are not constructed to the standards specified by the Council in its "Engineering Standards and Guidelines" (June 2004 – Revised 2009), then the applicant shall complete the required improvements.

The road as a metalled formation appears to have good depth to the basecourse and does not show signs of slumping due to a weak subgrade. The road formation is considered to comply with council engineering standards.

(c) Where a site has more than one road frontage or frontage to a service lane or right-of-way (ROW) in addition to a road frontage, access to the site shall be in a place that:
(i) facilitates passing traffic, entering and exiting traffic, pedestrian traffic and the intended use of the site;

Not applicable.

(ii) is from the road or service lane or ROW that carries the lesser volume of traffic.

Not applicable.

(d) Where any proposed subdivision has frontage to a road on which the carriageway encroaches, or is close to the subject lot or lots, the encroachment or land shall vest in Council such that either the

minimum berm width between the kerb or road edge and the boundary is 2m or the boundary is at least 6m from the centreline of the road whichever is the greater.

No concern; the road boundary is well away from the edge of formation.

15.1.6C.1.9 New Roads

Not applicable.

15.1.6C.1.10 Service lanes, cycle and pedestrian accessways

Not applicable.

15.1.6C.1.11 Road designations

Not applicable.

The proposal complies with all transportation standards.

EFFECT OF EARTHWORKS AND UTILITIES

The subdivision activity only requires earthwork forming the two entrances and because there are no steep grades, the works would be well within permitted criteria.
The future access construction into Lot 1 follows an easy grade not to require any extensive earthworks. All cut and fill would be less than 1.5m.

Soil

The property is reportedly mapped to be underlain by Class 3 soils (This is of course indicative until a site specific assessment is undertaken). Such soils are recognised as moderately versatile and capable of supporting a wide range of land uses, including horticulture, grazing, and home-scale food production.
These soils are well-structured and friable, providing strong potential for sustainable land management within a rural lifestyle context.

The proposed subdivision does not unreasonably deplete or fragment the productive soil resource for the following reasons:

1. Limited Extent of Land Disturbance
   Between the two sites there is approximately 5,000 m^2 of the more usable land, the rest is too steep. Of that area only part is subject to direct influence by building platforms, driveways, and domestic curtilage. The balance of each lot remains undeveloped and available for productive use, such as home food produce gardens and orchards.

2. Sustainable Land Use Outcomes
   The scale of development is consistent with rural lifestyle expectations as a restricted discretionary activity. Each lot retains sufficient land area to support self-sufficiency activities, including household vegetable production and water retention systems, aligning with the life-supporting capacity principle of the RMA.

The subdivision does not unreasonably deplete versatile soils. It retains the productive capacity of the land for small-scale use, minimises physical disturbance without compromise to the health and life-supporting capacity of the soil resource.

Access to water bodies
There are none to consider.

Land Use Incompatibility
Rural activity is part and parcel of this environment, and with the two proposed lots located near the existing residence this proves more fitting without cause to direct reverse sensitivity that might otherwise be present from common rural activity particularly near the working farm hub where maintenance, storage, and heavy machinery are present.
The proposal is in keeping with the immediate environment not to require mitigation measures.
There are no other known land use incompatibles.

Proximity to Airports
No concern.

Natural Character of the coastal environment
The property does not have a coastal influence.

Energy Efficiency
The proposal is considered to adopt an acceptable level of energy efficiency with the natural grade allowing future building activity to be orientated such that north sun angles are achievable.

NATURAL AND PHYSICAL RESOURCES

There are no obvious adverse impacts on any vulnerable natural and physical resources.

Earthworks is minimal and vegetation clearance is nil.

Department of Conservation were not considered affected parties as there is no impact on vulnerable vegetation.

The property is within a high-density Kiwi zone.
The applicant has 10+ working dogs used for mustering and because of ongoing work commitments in this field is required to maintain all of them. Additionally, there is no set number, where at times more dogs is possible as a consequence of breading.

To respect the kiwi zone guidelines for improved management of kiwi predators the applicant offers the following condition.

1)
The lot is identified as being within a high density kiwi zone. On all lots no occupier of, or visitor to the site, shall keep or introduce to the site carnivorous or omnivorous animals (such as cats, dogs or mustelids), which have the potential to be kiwi predators.
Note: This Consent Notice does not relate to the existing dogs on Lot 1, and the consent notice will be put into effect once Lot 1 is no longer owned or occupied by the consent holder.

OBJECTIVES (*Subdivision*)

13.3.2 *To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly or indirectly from subdivision, including reverse sensitivity effects, are avoided, remedied or mitigated.*
The proposal includes mitigation measures where applicable (namely stormwater management).
There are no vulnerable ecosystems present.
The subdivision impacts must be assessed relative to the existing permitted baseline, and it is clear that the proposal does not introduce effects greater than those that might already occur through other planning avenues.

Under the current planning framework there is no significant environmental degradation necessitating further avoidance, remediation, or mitigation measures beyond those already proposed under Section 221 consent notice covenants.

13.3.4 *To ensure that subdivision does not adversely affect scheduled heritage resources through alienation of the resource from its immediate setting/context.*

The property has been significantly modified over decades of farming. The parent title permits a range of routine activities and is not considered to cause any form of alienation or contravene the intent of the Rural Production zone. Moreover, the property is not known to contain any scheduled heritage resources.

13.3.5 *To ensure that all new subdivisions provide a reticulated water supply and/or on-site water storage sufficient to meet the needs of the activities that will establish all year round.*

The proposal satisfies these requirements without concern.

13.3.6 *To encourage innovative development and integrated management of effects between subdivision and land use which results in superior outcomes to more traditional forms of subdivision, use and development, for example the protection, enhancement and restoration of areas and features which have particular value or may have been compromised by past land management practices.*

Overall, the proposal meets the subdivision objectives, and the low environmental impact of the activity makes further policy considerations unnecessary.

In outline of the Rural Production zone Environmental Provisions the following provides emphasis on the zones capacity to support a variety of land use activities.

Rural Environment

8.6.2 ENVIRONMENTAL OUTCOMES EXPECTED

8.6.2.1 *A Rural Production Zone where a wide variety of activities take place in a manner that is consistent with the sustainable management of natural and physical resources.*

8.6.2.2 *A Rural Production Zone which enables the social, economic and cultural well-being of people and communities, and their health and safety, while safeguarding the life supporting capacity of the environment and avoiding, remedying or mitigating adverse effects on it.*

The zone is designed to support a variety of land uses, with a particular focus on sustainability in relation to natural and physical resources. It aims to enhance the social, economic, and cultural well-being of communities by promoting rural lifestyles. In this context, the applicants propose utilising an area of land that has limited potential for productive use, repurposing it for rural lifestyle activities. This approach defines a sustainable outcome while maintaining the environmental integrity respective to the activities restricted discretionary status.

8.6.3 OBJECTIVES

8.6.3.1 To promote the sustainable management of natural and physical resources in the Rural Production Zone.

8.6.3.2 To enable the efficient use and development of the Rural Production Zone in a way that enables people and communities to provide for their social, economic, and cultural well being and for their health and safety.

8.6.3.4 To promote the protection of significant natural values of the Rural Production Zone.

8.6.4 POLICIES

8.6.4.1 That a wide range of activities be allowed in the Rural Production Zone, subject to the need to ensure that any adverse effects, including any reverse sensitivity effects, on the environment resulting from these activities are avoided, remedied or mitigated.

8.6.4.2 That standards be imposed to ensure that the off site effects of activities in the Rural Production Zone are avoided, remedied or mitigated.

8.6.4.3 That land management practices that avoid, remedy or mitigate adverse effects on natural and physical resources be encouraged.

The subdivision does not present any measurable adverse effects on significant natural values.

PROPOSED DISTRICT PLAN

The property is zoned Rural Production under the provisions of the Proposed District Plan and is not influenced by any overlays.

The proposal does not employ any of the rules and standards relating to ecosystem protection, and the site is not influenced by any heritage overlays, therefore the proposed district plan has limited legal effect.

Overview

The Rural Production zone is the largest zone in the district and accounts for approximately 65% of all land. The Rural Production zone is a dynamic environment, influenced by changing farming and forestry practices and by a wide range of productive activities.

Rural land is an important resource as it underpins the social, economic and cultural well-being of the Far North District. The historic fragmentation of rural land has undermined the integrity of the rural environment and its ability to function for its intended purpose. It is important to protect this finite resource from inappropriate land use and subdivision to ensure it can be used for its primary purpose. In particular, primary production activities should be able to operate without experiencing reverse sensitivity effects based on complaints about noise, dust, heavy traffic and light spill (which may be temporary or seasonal in nature) that should be anticipated and tolerated in a rural environment.

The context of the Rural Production Zone emphasises the need to protect the rural environment, and highly productive land from further fragmentation. There is an inherent urgency to preserve natural habitats and prevent degradation, which is central to maintaining the integrity of rural production areas.

However, the zone is also recognised as dynamic, allowing for rural lifestyle lots, provided these align with the permanent protection of natural habitats.

Additionally, rural land must provide economic returns, and if agricultural or horticultural activities are not feasible, alternative land uses should be explored to maintain the viability of the land while supporting broader community goals, particularly when the subject area is naturally segregated from the main farm.

Objectives

RPROZ-O2 *The Rural Production zone is used for primary production activities, ancillary activities that support primary production and other compatible activities that have a functional need to be in a rural environment.*

There is no likely change to the production use given the property is already lifestyle based and the subject area of Lots 2 & 3 is only small.

RPROZO3 *Land use and subdivision in the Rural Production zone:*
a. protects highly productive land from sterilisation and enables it to be used for more productive forms of primary production;

No concern.

b. protects primary production activities from reverse sensitivity effects that may constrain their effective and efficient operation;

The immediate environment presents no unreasonable reverse sensitivity effects to suggest the need for mitigation.

c. does not compromise the use of land for farming activities, particularly on highly productive land;

The existing mix of lifestyle and rural production within the wider environment is testament that rural activities and lifestyle living are compatible under the right conditions. The subdivision expands on this theme without cause to incompatibility issues.

d. does not exacerbate any natural hazards;

Firefighting controls are proposed to better manage effects from fire hazards on Lots 2 & 3.
Building controls are proposed for future building activity on Lot 1, regarding geotechnical investigation.

e. is able to be serviced by on-site infrastructure.

Typical rural infrastructure and services are accessible.

RPROZO4 *The rural character and amenity associated with a rural working environment is maintained.*
The rural character and amenity of this environment is undoubtedly supportive of lifestyle-based activity, and the subdivision accordingly promotes this existing theme.

Policies

RPROZP5
Avoid land use that:
a. *is incompatible with the purpose, character and amenity of the Rural Production zone;*
b. does not have a functional need to locate in the Rural Production zone and is more appropriately located in another zone;
c. would result in the loss of productive capacity of highly productive land;
d. would exacerbate natural hazards; and
e. cannot provide appropriate on-site infrastructure.

The proposal is considered to uphold (a – e).

RPROZP6
Avoid subdivision that:
a. results in the loss of highly productive land for use by farming activities;

The proposal does not result in the loss of highly productive land beyond what is anticipated under the operative district plan provisions.

b. *fragments land into parcel sizes that are no longer able to support farming activities, taking into account:*
1. the type of farming proposed; and

Lots 2 & 3 are segregated from the farm by the existing residence, making this area less attractive for normal farm operations.

2. *whether smaller land parcels can support more productive forms of farming due to the presence of highly productive land.*

This is unlikely due to limited area.

SUBDIVISION

Objectives

SUB-O1 Subdivision results in the efficient use of land, which:
a. achieves the objectives of each relevant zone, overlays and district wide provisions;
The sites unique environment is considered to adequately uphold relevant zone objectives.

b. contributes to the local character and sense of place;

The character and sense of place is set, and the proposal is consistent with this theme.

c. avoids reverse sensitivity issues that would prevent or adversely affect activities already established on land from continuing to operate;

As described the rural character defines an absolute lifestyle base and the proposal is consistent with this theme, without introducing any reverse sensitivity effects.

d. avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located;

In this particular case, the property and surrounding land use activities do not align with highly productive land operations.

e. does not increase risk from natural hazards or risks are mitigated and existing risks reduced; and

Mitigation of fire risk is proposed.
There are no other known hazards.

f. manages adverse effects on the environment.

The proposal offers management techniques though implementation of consent notice.

SUB-P3 Provide for subdivision where it results in allotments that:
a. are consistent with the purpose, characteristics and qualities of the zone;
b. comply with the minimum allotment sizes for each zone;
c. have an adequate size and appropriate shape to contain a building platform; and
d. have legal and physical access.

The proposal is considered to accord with these parameters.

SUB-R3 Subdivision of land to create a new allotment.

Activity status where compliance not achieved with CON-2:

Discretionary

Where:
DIS-1
1. compliance with SUB-S1 Minimum allotment sizes - controlled activity is not achieved, but discretionary activity achieved.
Activity status where compliance not achieved with DIS-1: Non-complying

SUB-S1 Minimum allotment sizes
Rural Production 40ha (Controlled) or 8ha (discretionary)

SUB-R6 Environmental benefit subdivision

Restricted Discretionary Activity
Table 1

Total area of significant indigenous vegetation or significant indigenous habitat to be legally protected on an individual Record of Title	Maximum Number of additional lots that can be created on an individual Record of Title
Greater than 4ha - less than 10ha	1
Greater than 10ha - less than 20ha	**2**
Greater than 20ha	3

Total area of natural wetland to be legally protected on an individual Record of Title
Table 2

Total area of natural wetland to be legally protected on an individual Record of Title	Maximum Number of additional lots that can be created on an individual Record of Title
Greater than 0.5ha - less than 1ha	1
Greater than 1ha - less than 2ha	2
Greater than 2ha	3

The applicant does not present the application on the basis of subdividing under the environmental benefit rule, and therefore the proposal aligns under the proposed district plan as a non-complying activity that upholds the objectives and policies of rural production environment and subdivision chapter.

In this instance the proposal is not subject to the Proposed District Plan.
The legal effect is currently negligible and therefore the resource consent decision should be founded on the provisions according to the operative district plan.

RESOURCE MANAGEMENT ACT 1991

The subdivision of land falls under the Resource Management Act 1991 and is required to demonstrate compliance with provisions applicable to the activity and its status under the District Plan.

SCHEDULE 4

An application for Resource Consent for an activity must include the following, outlining aspects of relevance to the proposed activity and zone expectations:

ASSESSMENT OF THE ACTIVITY AGAINST THE MATTERS UNDER PART 2 RMA

Part 2 Purpose and Principles

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 application seeks to demonstrate that the proposed subdivision will enable the sustainable use of the land through diversification.

The smaller allotment layout is intended to minimise the impact on natural resources (farming) and meet the needs of future generations through supporting land utilisation for rural housing.

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:

The property is able to carry out the subdivision without any direct disturbance of wetlands, lakes or rivers. The impact on the coast is nil.
There are no known wetlands within Lots 2 & 3 or within 100m of future building sites.

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

There are no known outstanding natural features or landscapes on the site, as defined in the district plan.

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

There are none.

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

Not applicable.

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

The proposal has no adverse impacts on culture or traditions.

There is absolutely no vegetation clearance or earthworks, other than constructing one entrance.

There is no influence on Fisheries.

The proposal is considered sufficiently in keeping with the Rural Production zone intent as a restricted discretionary activity.

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

There are no known historic heritage sites.

(g) the protection of protected customary rights.

There are no known customary rights to consider.

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.

By supporting diversified land use and expanding lifestyle living opportunities, smaller allotments empower landowners to take on a more effective and manageable stewardship role and support the wider farming economy through providing place of residence for rural workers, and typically sees positive environmental outcomes through the sites landscape planting.

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

The proposal is not considered to contradict the Treaty of Waitangi's interpretations.

ASSESSMENT OF THE ACTIVITY AGAINST SECTION 104(1)(B)

Section 104(1)(b)
any relevant provisions of—

(i) a national environmental standard:
(ii) other regulations:
(iii) a national policy statement:
(iv) a New Zealand coastal policy statement:
(v) a regional policy statement or proposed regional policy statement:
(vi) a plan or proposed plan;

Under various headings, the application covers all relevant provisions including, the Far North District Plan, National Policy Statement, National Environmental Standards, and Regional Policy Statements. There are no other relevant provisions. These are discussed under their respective headings.

An application must also include an assessment of the activity's effects on the environment that –

(a) *includes the information required by clause 6*
(b) *address the matters specified in clause 7; and*
(c) *includes such detail as corresponds with the scale and significance of the effects that the activity may have on the environment.*

CLAUSE 6

(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 result in any significant adverse effects on the environment, a description of any possible alternative locations or methods for undertaking the activity:*

The proposal is not considered to result in any 'significant' adverse effects to require reconsideration of location or methods of subdividing, being well connected to legal road.

The proposed lots contribute on an ongoing basis to the social and economic wellbeing of the community through promoting greater housing opportunities, particularly for those working in the rural sector.

(b) *an assessment of the actual or potential effects on the environment of the activity.*

The current title has various development opportunities that could see considerable change to the immediate landscape without need for resource consent, defining the 'permitted baseline.'

The potential effects therefore need to be considered alongside the district plans permitted activity threshold, and there is no significant change occurring because of subdividing.

Points of merit include the applicant's contribution to increasing rural lifestyle opportunities which in turn adds further economic stimulus to the community through ongoing expenditure.

The level of effects are considered adequately understood and deemed less than minor.

(c) *if the activity includes the use of hazardous substances and installations, an assessment of any risk to the environment that are likely to arise from such use.*

Not applicable.

(d) *if the activity includes the discharge of any contaminants, 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:

No concerns.

(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 effects:*

No concerns the subdivision does not introduce any effects to require management other than those outlined under existing and proposed consent notices relating to site management requirements; stormwater management, firefighting, onsite effluent, and geotechnical matters.

(f) *identification of the persons affected by the activity and consultation undertaken, and any response to the views of any person consulted:*

Any adverse effects on the environment remain less than minor and given the proposal is compliant with the restricted discretionary provisions of the operative district plan, there is no need for consultation.

(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 required.

(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 concern the subdivision outcome is consistent with the plan provision and a raft of management directives are being implemented.

(2)
A requirement to include information in the assessment of environmental effects is subject to the provisions of any policy statement or plan.

This is covered under the heading 'Northland Regional Policy Statement' following.

CLAUSE 7

7 Matters that must be addressed by assessment of environmental effects

(1) An assessment of an 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:

The subject environment has evident rural lifestyle activity to which the subdivision promotes.

Considerable positive effects arise through greater diversity of lifestyle lots on the residential market.

(b) any physical effects on the locality, including any landscape, and visual effects.

The vicinity forms a well occupied rural setting with many lifestyle blocks now setting a definite precedent. The locality is considered suitable to absorb further effects of development in accordance with the evident development trends. The proposal defines gradual rural expansion, and not seen to deplete the environment or cause adverse cumulative effects.

The reverse sensitivity effects are considered low impact and manageable by future landowners onsite, by way of landscaping and planting.

(c) Any effects on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity.

There is no physical damage to ecosystems.
The subdivision does not result in any habitat disturbance.

(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural values, or other special value, for present and future generations:

No concern.
The property has no recorded archaeological sites (Archsite NZ) or listed sites of cultural significance under the district plan.

(e) any discharge of contaminants in to the environment, including any unreasonable emissions of noise, and options for the treatment and disposal of contaminants:

No concerns.
The proposal does not introduce any contaminants of concern.

(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or the use of hazardous substances or hazardous installations.

No known concerns.

In summary, the proposal supports both community and landowner economic well-being by diversifying land use and expanding rural housing opportunities for independent ownership. Importantly, this is achieved without causing significant adverse effects, aligning with the purpose and principles of the Resource Management Act 1991.

CONSULTATION

95E Consent authority decides if person is affected person
(2)
The consent authority, in assessing an activity's adverse effects on a person for the purpose of this section,—
(a) may disregard an adverse effect of the activity on the person if a rule or a national environmental standard permits an activity with that effect;

The subdivision aligns with restricted discretionary activity standards, ensuring that any effects remain consistent with those anticipated under alternative land uses. As it does not introduce out-of-character effects or exceed expected impact levels, consultation is not considered necessary for decision-making under Section 95 of the Resource Management Act 1991.

NORTHLAND REGIONAL POLICY STATEMENT

The Northland Regional Policy Statement presents development guidelines for the northland region.

PART 3: OBJECTIVES

3.4 Indigenous ecosystems and biodiversity
Safeguard Northland's ecological integrity by:
a) Protecting areas of significant indigenous vegetation and significant habitats of indigenous fauna;
b) Maintaining the extent and diversity of indigenous ecosystems and habitats in the region; and
c) Where practicable, enhancing indigenous ecosystems and habitats, particularly where this contributes to the reduction in the overall threat status of regionally and nationally threatened species.

There is no immediate risk to or adverse impact on ecosystems.

3.5 Enabling economic wellbeing
Northland's natural and physical resources are sustainably managed in a way that is attractive for business and investment that will improve the economic wellbeing of Northland and its communities.

Lifestyle allotments contribute to the community providing much needed housing opportunities.

6.1.1 Policy – Regional and district plans
Regional and district plans shall:
(a) Only contain regulation if it is the most effective and efficient way of achieving resource management objective(s), taking into account the costs, benefits and risks;
(b) Be as consistent as possible;
(c) Be as simple as possible;
(d) Use or support good management practices;
(e) Minimise compliance costs and enable audited self-management where it is efficient and effective;
(f) Enable subdivision, use and development that accords with the Regional Policy Statement; and
(g) Focus on effects and where suitable use performance standards.

REGIONAL DEVELOPMENT AND DESIGN GUIDELINES

Subdivision, use and development should be located, designed and built in a planned and coordinated manner which:

(a) *Is guided by the 'Regional Form and Development Guidelines' in Appendix 2;*

5.1.1 Policy – Planned and coordinated development

Part A) Regional form and development guidelines
New subdivision, use and development should:
(a) Demonstrate access to a secure supply of water;

Lifestyle blocks utilise roof surface collection and storage in water tanks for potable supplies. These are generally a reliable source of water that meet the guideline intent.

(b) Demonstrate presence or capacity or feasibility for effective wastewater treatment;

On site effluent disposal presents no concern with 100% backup readily available.

(c) If of an urban or residential nature connect well with existing development and make use of opportunities for urban intensification and redevelopment to minimise the need for urban development in greenfield (undeveloped) areas;

Not applicable.

(d) If of an urban or residential nature provide, where possible, opportunities to access a range of transport modes;

Not applicable.

(e) If of a community-scale, encourage flexible, affordable and adaptable social infrastructure that is well located and accessible in relation to residential development, public transport services and other development;

Not applicable.

(f) Recognise the importance of and provide for parks, in regards to medium and large-scale residential and residential / mixed use development.

Not applicable.

(g) If of a residential nature be, wherever possible, located close to or sited in a manner that is accessible to a broad range of social infrastructure;

Not applicable.

(h) Be directed away from regionally significant mineral resources and setback from their access routes to avoid reverse sensitivity effects;

There are no known nearby regionally significant mineral resources.

(i) Be designed, located and sited to avoid adverse effects on energy transmission corridors and consented or designated renewable energy generation sites (refer to 'Regional form and infrastructure' for more details and guidance);

There are no subject energy transmission corridors, or renewable energy sites. Top Energy Ltd has no concerns.

(j) Be designed, located and cited to avoid significant adverse effects on transportation corridors and consented or designated transport corridors;

No concerns.

(k) Be directed away from 10-year and 100-year flood areas and high-risk coastal hazard areas (refer to 'Natural hazards' for more details and guidance);

There are no severe flooding concerns within the site or any applicable high-risk coastal hazards.

(l) Seek to maintain or improve outstanding landscape and natural character values and provide for the protection of significant historic and cultural heritage from inappropriate subdivision, use and development (refer to 'Land, Water and Common Resources' for more details and guidance);

The proposal has no impact on listed outstanding landscapes, natural character, historic or aspects of known cultural significance.

(m)Protect significant ecological areas and species, and where possible enhance indigenous biological diversity (refer to 'Maintaining and enhancing indigenous ecosystems and species' for more details and guidance);

Not applicable.

(n) Maintain and improve public access to and along the coastal marine area, lakes and rivers;

Not applicable.

(o) Avoid or mitigate adverse effects on natural hydrological characteristics and processes (including aquifer recharge), soil stability, water quality and aquatic ecosystems, including through low impact design methods where appropriate;

No concern.

(p) Adopt, where appropriate, sustainable design technologies such as the incorporation of energy-efficient (including passive solar) design, low-energy street lighting, rain gardens, renewable energy technologies, rainwater storage and grey water recycling techniques;

Typically, rural lifestyle lots provide sufficient land to lead a partially sustainable lifestyle.

(q) Be designed to allow adaptation to the projected effects;

The effects of lifestyle sites are low impact and can often see vast improvements through personal acts of landscaping, weed and pest control. This is evident on surrounding lifestyle lots in this vicinity.

(r) Consider effects on the unique tangata whenua relationships, values, aspirations, roles and responsibilities with respect to the site of development;

Tangata whenua are protective of ecosystems and waterway, however the proposal does not result in adverse effects to cause any concerns in that regard.

(s) Encourage waste minimisation and efficient use of resources (such as through resource-efficient design and construction methods);

No concerns.

(t) Take into account adopted regional / sub-regional growth strategies;

No concern.

(u) Where appropriate, encourage housing choice and business opportunities, particularly within urban areas.

Lifestyle allotments provide a place of residence and for work and home style business activity proving an important component of the rural community.

(b) *Is guided by the 'Regional Urban Design Guidelines' in Appendix 2 when it is urban in nature;*

Not applicable.

(c) *Recognises and addresses potential cumulative effects of subdivision, use, and development, and is based on sufficient information to allow assessment of the potential long-term effects;*

Rural lifestyle lots in a rural environment are not seen to present cumulative adversity, as they provide diversity in their ability to undertake a semi sustainable lifestyle.

(d) Is integrated with the development, funding, implementation, and operation of transport, energy, water, waste, and other infrastructure;

The lots are designed with consideration to these components.

(e) Should not result in incompatible land uses in close proximity and avoids the potential for reverse sensitivity;

No concerns.

(f) Ensures that plan changes and subdivision to / in a primary production zone, do not materially reduce the potential for soil-based primary production on land with highly versatile soils, or if they do, the net public benefit exceeds the reduced potential for soil-based primary production activities; and

The subdivision is not considered to significantly reduce the lands potential for soil based primary production.

(g) Maintains or enhances the sense of place and character of the surrounding environment except where changes are anticipated by approved regional or district council growth strategies and / or district or regional plan provisions.

The proposal will maintain the established sense of place, reflecting the existing pattern of mixed rural and lifestyle development within the locality. The current zoning framework already enables land uses and densities consistent with the scale of the proposed subdivision.
Okokako Road functions as a collector route servicing a range of rural and lifestyle properties, providing practical and safe access for current and future residents.
There is a recognised demand for smaller rural lifestyle allotments in this area, particularly among those engaged in nearby rural production activities who seek smaller, more manageable, and affordable landholdings.
Accordingly, the subdivision will reinforce the area's established rural–residential character, maintaining its sense of place while responding to evolving community needs and district growth trends anticipated by the planning framework.

(h) Is or will be serviced by necessary infrastructure.

The sites are adequately served by necessary infrastructure.

In summary of the RPS we find adequate correlation with its intent for development to undertake a sustainable approach whilst securing long term benefits for future generations by avoiding versatile soils.

NATIONAL POLICY STATEMENT

FOR FRESHWATER MANAGEMENT 2020

Part 1
1.3 Fundamental concept – Te Mana o te Wai
(1) Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.

Objectives and Policies
2.1
The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that priorities:
(a) first, the health and wellbeing of water bodies and freshwater ecosystems
(b) second, the health needs of people (such as drinking water)
(c) third, the ability of people and communities to provide for their social, economic and cultural wellbeing, now and in the future.

2.2
Policy 3
Freshwater is managed in an integrated way that considers the effects of the use and development of land on a whole-of-catchment basis, including the effects on receiving environments.

Policy 4
Freshwater is managed as part of New Zealand's integrated response to climate change.

Policy 6
There is no further loss of extent of natural inland wetlands, their values are protected, and their restoration promoted.

Policy 9
The habitats of indigenous freshwater species are protected.

3.5 Integrated management
(1) Adopting an integrated approach ki uta ki tai, as required by Te Mana o te Wai, requires that local authorities must:
(a) recognise the interconnectedness of the whole environment, from the mountains and lakes, down the rivers to lagoons, estuaries and to the sea.
(b) recognise interactions between freshwater, land, water bodies, ecosystems, and receiving environments.
(c) manage freshwater, and land use and development, in catchments in an integrated and sustainable way to avoid, remedy, or mitigate adverse effects, including cumulative effect on the health and well-being of water bodies, freshwater ecosystems, and receiving environments.
(d) Encourage the co-ordination and sequencing of regional or urban growth.

The National Policy Statement for Freshwater Management (NPS-FM) provides clear direction to ensure that land use and development do not compromise the integrity of natural water systems, including wetlands and associated ecological functions.
The proposed stormwater management system aligns with this intent by incorporating low-impact design measures, including vegetated swales and on-site detention. These measures will attenuate flow rates, promote infiltration and filtration, and significantly reduce the risk of erosion and sediment inputs downstream. In doing so, the proposal contributes positively to maintaining resilience of freshwater systems and supports the integrated management principles set out under the NPS-FM.

NATIONAL ENVIRONMENTAL STANDARDS

The National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES-CS) is not considered applicable to this proposal, as the site has no history of horticultural or other potentially contaminating land uses. Accordingly, a Preliminary Site Investigation (PSI) is not required.
While the existing farm implement shed area may be associated with historical farming operations that would likely fall under HAIL (Hazardous Activities and Industries List) classifications, this activity is to remain in use within Lot 1. As such, it is not subject to any change of use, subdivision, or soil disturbance that would trigger the NES-CS regulations, and is therefore exempt under Regulation 5(8)(d).

The historic aerial images following show no commercial scale orchard activity or storage style use.

Contact with NRC did not reveal any reported HAIL activity, and their more recent aerial imagery does not indicate any HAIL site concerns.

CONCLUSION

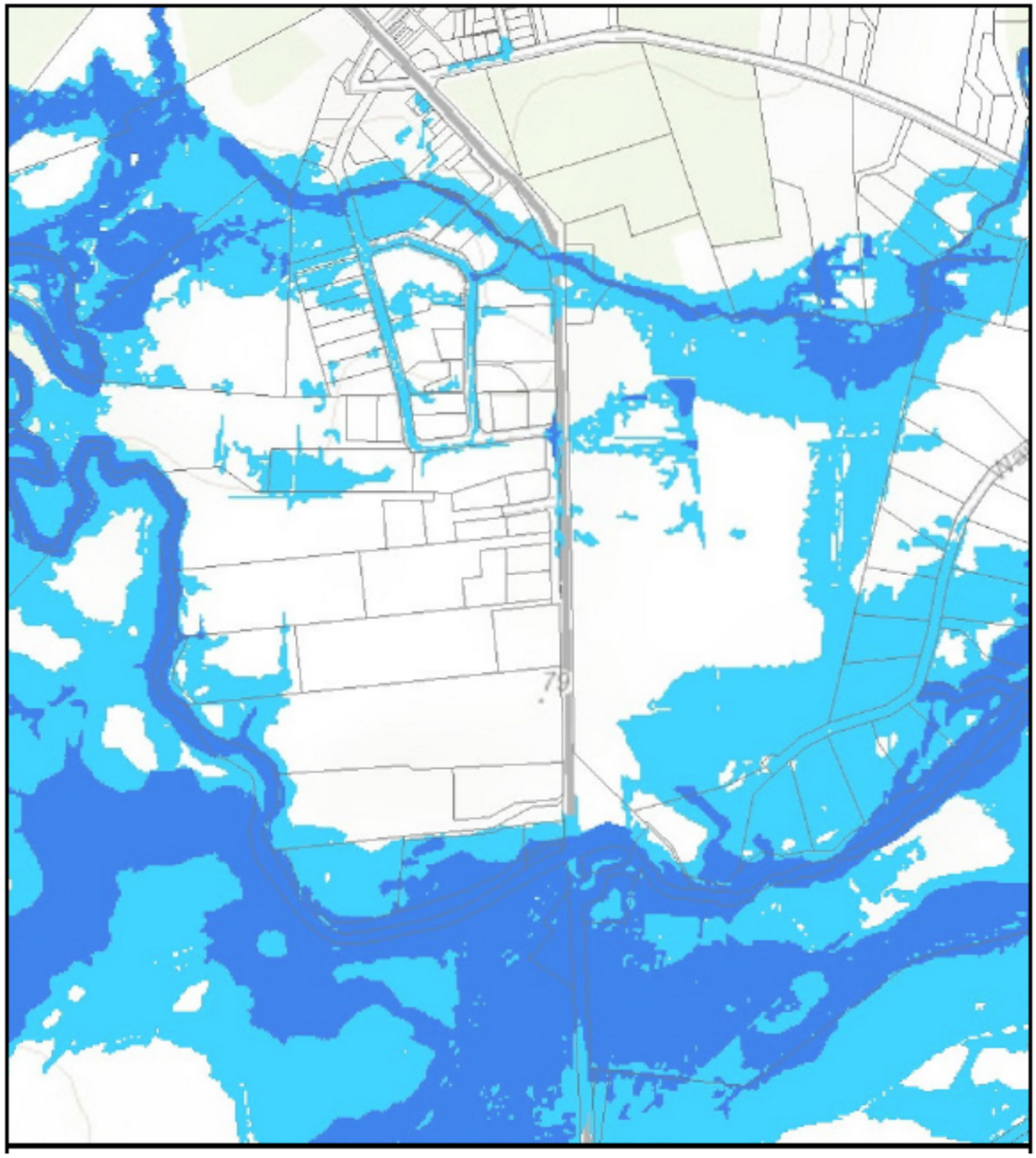
The applicant proposes the subdivision of two additional lifestyle allotment, while ensuring the rural production base remains intact.

This subdivision aligns with the objectives and policies of the Rural Production zone, as outlined in both the operative and proposed district plans. The effects of the proposal are less than minor and fully comply with the intent of the zoning, which means the gateway tests are met. As a result, no affected parties require consultation.
The proposal is also consistent with higher-level planning documents, including the Northland Regional Policy Statement and the National Policy Statement, reinforcing its alignment with the overall policy framework.
Additionally, the subdivision supports the principles of the Resource Management Act 1991, providing sufficient information to meet the requirements of Clause 6 and 7 regarding the assessment of environmental effects.

Given the alignment with the planning framework, it is recommended that the application be approved by the local authority, subject to standard conditions of consent.

Micah Donaldson
MNZIS - Assoc.NZPI

NZIS
REGISTERED PROFESSIONAL SURVEYOR



8635
October 2025

STORMWATER MANAGEMENT ASSESSMENT
P. COOK, 21 OKOKAKO ROAD, WAIMATE NORTH

Introduction

A subdivision is proposed for RT NA121C/845 to create Lots 2 & 3 at approximately 4000m² each, necessitating a stormwater management assessment.

Proposed Lots 2 & 3 are currently vacant sites and form the basis of the assessment to manage future impermeable surfaces and catchment influences.

The property is zoned Rural Production under the provisions of the Far North District Plan.

Site, Soil & Situation Evaluation

The site is located at 21 Okokako Road, Waimate North.

The soil type within Lots 2 & 3 is Waiotu friable clay (OK) (NZMS 290 Sheet P04/05). All mature basalt volcanic soils are generally free draining, requiring few drainage structure improvements.
Some soils have boulders created as a result of long periods of erosion on the edges of old basalt flows.
The soil land use capability is recorded as 3e1, indicating it is representative of versatile soil quality.

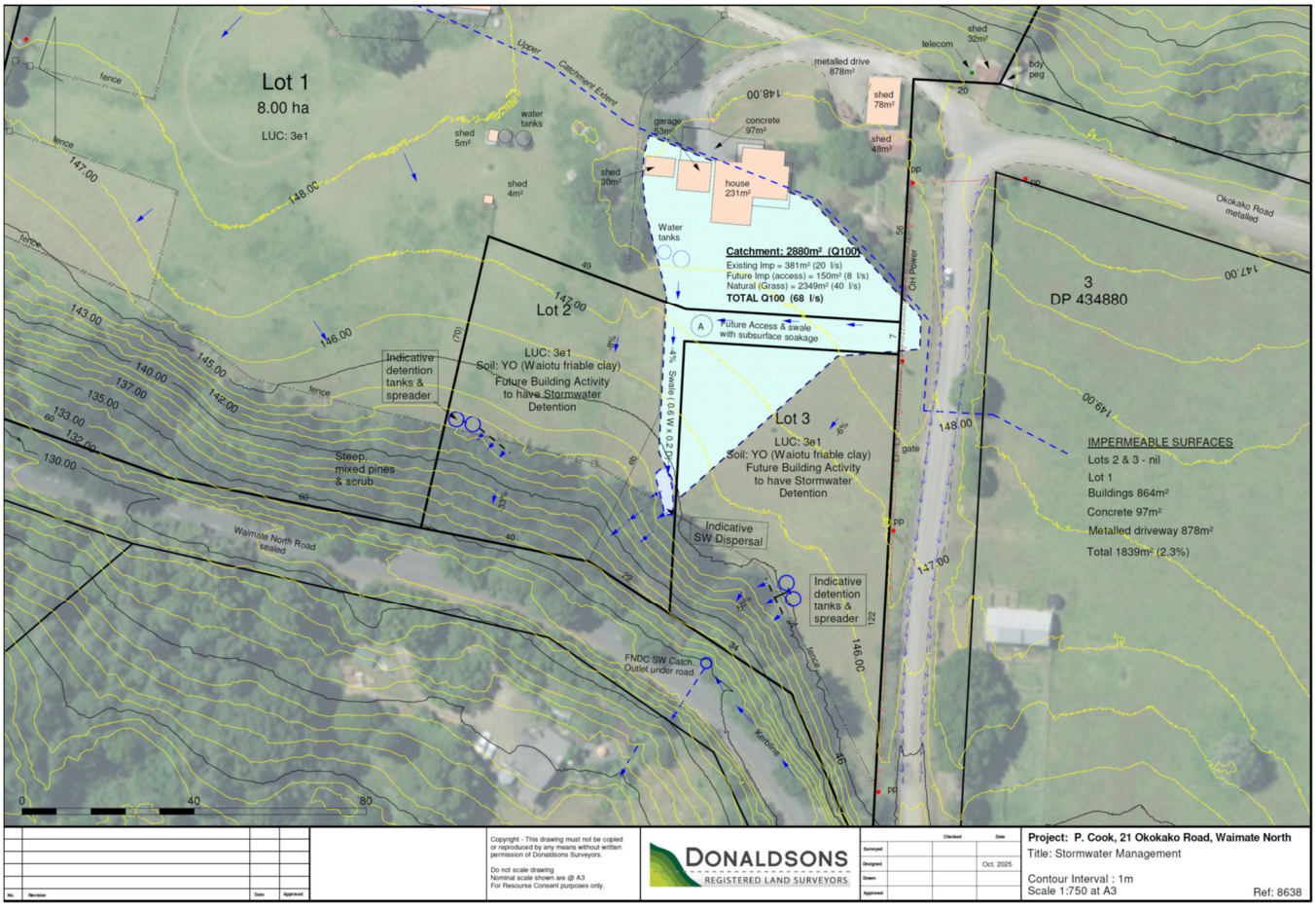
There is an existing residence situated on the balance area shown proposed Lot 1. This lot is 8ha, with all existing impermeable surfaces upholding existing use rights. The site complies with the permitted standards being under 15% impermeable surface coverage; 1839m² (2.3%).

Lots 2 & 3 are vacant sites, having a mixed contour where the upper half provides an easy grade of approximately -7% leading to steeper grades of -30 – -50% all in scrub and pines.

The stormwater management assessment addresses sheet flow from the future driveway serving Lot 2, and the existing roof discharge from buildings on Lot 1, where the roof catchment area discharges from the water tanks and displaces to ground, sheet flowing towards Lots 2 & 3.

Stormwater detention on Lots 2 & 3 is considered necessary during the future development due to the increased impermeable surface area creating runoff pressures on the lower catchment infrastructure.

The lower catchment is defined by steeper grades extending southwards to Waimate North Road formation, which is sealed and has a kerb/channel controlling all stormwater displaced. The road formation creates a stormwater diversion and notably debris does wash down from the steeper grade. The kerb leads to a catchpit that extends under the road formation and discharge into a defined gully on private property.



Stormwater Management

The existing hydrological system across the site is characterised by shallow overland flow paths that discharge toward Waimate North Road.
Lots 2 and 3 are situated downslope of Lot 1 and are therefore influenced by stormwater generated from the existing developed area, including the roof catchments / water tank overflows serving the dwelling on Lot 1.

At the time of constructing the vehicle access to Lot 2 (*during the future building phase*), it will be necessary to integrate the upstream discharge from Lot 1 into a swale drain network. The swale should be designed to convey both the access runoff and the intercepted discharge from Lot 1 (total Q100 = 68 lt/sec) in a controlled manner, ensuring that peak velocities and flow depths remain within acceptable parameters defined by Council's Engineering Standards (May 2023). A stormwater easement in favour of Lot 1 over Lot 2 is necessary to formalise this conveyance path, as shown 'A' on the proposed scheme plan.

Downstream of the site, stormwater will continue to follow the existing natural topography through a well-vegetated embankment containing mature trees before discharging to the Waimate North Road corridor. Within the road reserve, Council's reticulated network comprises kerb and channel, catchpit inlets, and an underground pipeline that provides the primary drainage infrastructure for this wider sub-catchment.

The proposed subdivision and subsequent development of Lots 2 and 3 will increase the total impervious area due to future building platforms, driveways, and hardstand surfaces. To ensure that post-development discharge does not exceed pre-development conditions, on-site detention and flow control systems are recommended for each new allotment. These systems may include water tanks with control orifice outlets, soakage trenches, or small detention basins, designed to accommodate the critical storm events (Q1 – Q50) in accordance with FNDC's Engineering Standards (2023) and the principles of GD01 Low Impact Design.

Overall stormwater can be appropriately managed and maintain hydraulic neutrality, thereby mitigating lower catchment effects, and ensuring compliance with accepted engineering practice. Accordingly, the residual environmental effects associated with stormwater runoff are assessed as less than minor.

DISTRICT PLAN

Subdivision Assessment Criteria

Although the lands existing use upholds the permitted activity criteria, the subdivision activity is presented as a restricted discretionary activity where stormwater management is applicable for allotments sized less than 2 ha.

13.10.4 STORMWATER DISPOSAL

(a) Whether the application complies with any regional rules relating to any water or discharge permits required under the Act, and with any resource consent issued to the District Council in relation to any urban drainage area stormwater management plan or similar plan.

The proposed stormwater management does not require discharge permits under the Act.
Generally, where stormwater detention is provided the regional rules are satisfied as a permitted activity.

(b) Whether the application complies with the provisions of the Council's "Engineering Standards and Guidelines" (2004) - Revised March 2009 (to be used in conjunction with NZS 4404:2004).

Although the Operative District Plan refers to compliance with the Far North District Council *Engineering Standards and Guidelines (2004, revised 2009)*, Council has since adopted the updated *Engineering Standards and Guidelines, May 2023*, which supersede earlier editions.
The subdivision design has been prepared in general accordance with the May 2023 standards (used in conjunction with NZS 4404:2010) and achieves outcomes consistent with or superior to the requirements of the Operative District Plan.

(c) Whether the application complies with the Far North District Council Strategic Plan - Drainage.

Not applicable.

(d) The degree to which Low Impact Design principles have been used to reduce site impermeability and to retain natural permeable areas.

The proposal recommends low impact design techniques during the building stage utilising open swales, detention and spreader devices. A working example of how this is achievable is described following.

(e) The adequacy of the proposed means of disposing of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces.

Stormwater from existing roof areas on Lot 1 are captured in on-site water storage tanks, with overflow discharge to ground.
A stormwater easement is proposed, enabling diverted or intercepted sheet flow from Lot 1 to be directed across Lot 2 in accordance with the designed overland flowpath.

Driveway surfaces associated with each lot, while classified as *impermeable* under the District Plan, are recognised to have an effective runoff coefficient of 0.5, reflecting partial absorption and infiltration. Runoff from these surfaces will be managed through grass-lined swales that should incorporate subsurface soakage to promote infiltration and reduce concentrated discharge.

Future building roofs will be required to capture and attenuate runoff in water tanks fitted with detention outlets, ensuring post-development discharge rates are comparable with 80% pre-development 'current' conditions. All roof drainage systems are to be sized for a 1 % AEP storm event plus allowance for climate change, and designed by a Suitably Qualified and Experienced Person (SQEP).
Where practicable, roof detention capacity may compensate for a limited area of ground impervious surface, consistent with accepted industry practice (*typically not exceeding 266 m² of compensated area*), provided overall

stormwater performance remains compliant with the FNDC Engineering Standards (May 2023). The example following adopts a figure of 44m² to demonstrate this option.

(f) The adequacy of any proposed means for screening out litter, the capture of chemical spillages, the containment of contamination from roads and paved areas, and of siltation.

Not applicable.

(g) The practicality of retaining open natural waterway systems for stormwater disposal in preference to piped or canal systems and adverse effects on existing waterways.

There are no recommended piped systems.

(h) Whether there is sufficient capacity available in the Council's outfall stormwater system to cater for increased run-off from the proposed allotments.

Detention systems recommended for Lots 2 and 3 are designed to ensure post-development discharge rates do not exceed 80% pre-development conditions, thereby preventing increased loading on the downstream catchment infrastructure.

(i) Where an existing outfall is not capable of accepting increased run-off, the adequacy of proposals and solutions for disposing of run-off.

Not applicable. There is no increase in outflow rates.

(j) The necessity to provide on-site retention basins to contain surface run-off where the capacity of the outfall is incapable of accepting flows, and where the outfall has limited capacity, any need to restrict the rate of discharge from the subdivision to the same rate of discharge that existed on the land before the subdivision takes place.

Stormwater attenuation is recommended. Ground basins and soakage devices are options to be considered at the building stage.

(k) Any adverse effects of the proposed subdivision on drainage to, or from, adjoining properties and mitigation measures proposed to control any adverse effects.

No concerns given the site upholds permitted activity standards.

(l) In accordance with sustainable management practices, the importance of disposing of stormwater by way of gravity pipe lines. However, where topography dictates that this is not possible, the adequacy of proposed pumping stations put forward as a satisfactory alternative.

Not applicable.

(m) The extent to which it is proposed to fill contrary to the natural fall of the country to obtain gravity outfall; the practicality of obtaining easements through adjoining owners' land to other outfall systems; and whether filling or pumping may constitute a satisfactory alternative.

Not applicable.

(n) For stormwater pipes and open waterway systems, the provision of appropriate easements in favour of either the registered user or in the case of the Council, easements in gross, to be shown on the survey plan for the subdivision, including private connections passing over other land protected by easements in favour of the user.

Easements are necessary as shown area 'A'.

(o) Where an easement is defined as a line, being the centre line of a pipe already laid, the effect of any alteration of its size and the need to create a new easement.

Not applicable.

(p) For any stormwater outfall pipeline through a reserve, the prior consent of the Council, and the need for an appropriate easement.

Not applicable.

(q) The need for and extent of any financial contributions to achieve the above matters.

Not applicable.

(r) The need for a local purpose reserve to be set aside and vested in the Council as a site for any public utility required to be provided.

Not applicable.

In outlining the principal stormwater management frameworks, Auckland Council Technical Publication 10 (TP10) and Guideline Document GD01 – Stormwater Management Devices: Design Guideline Manual, the following key principles are referenced in support of the proposed approach and the existing site conditions:

TP-10
Chapter 1
1.1 Objectives of these guidelines
The primary objective of these guidelines is to outline and demonstrate the ARC's preferred design approach for structural stormwater management devices. Specifically this includes design guidance for water quality and water quantity ponds, wetlands, filtration practices, infiltration practices, biofiltration practices and other practices that may be used.

1.3 Managing stormwater
Stormwater management aims to protect human and ecological values by preventing or mitigating the adverse effects of stormwater quality and quantity on the human and aquatic environment.

Chapter 8
8.3.2 Pre-treatment
The use of vegetative filters as a pre-treatment BMP to improve long term performance of infiltration practices cannot be stressed enough.

Stormwater Management Devices GD01
A1.2
The scope of this guideline document is confined to the management of stormwater, which is defined as:
"Rainfall runoff from land, including constructed impervious areas such as roads, pavement, roofs and urban areas which may contain dissolved or entrained contaminants, and which is diverted and discharged to land and water."

A4.2 Designing to reflect mana whenua values (GD01)
Mauri is a concept recognised by mana whenua as the connection between spiritual, physical and temporal realms. Loosely translated as the life force or life essence which exists within all matter, mauri sits at the very core of sustainable design for mana whenua and Te Ao Māori – the Māori worldview.
A key concern to mana whenua is the effect on the mauri of water caused by pollution of a stream, river, estuary, catchment or harbour. This can be due to sediment entering waterways, loss of riparian margins and the loss of native habitat to support native flora and fauna.

B1.0 Design process for stormwater management devices
Stormwater management must be considered early in the overall design process to ensure the site meets the hydrologic needs of the post-development catchment. It is important that a comprehensive land planning assessment is done, taking into consideration the proposed development land use and the effects on the wider catchment, both upstream and downstream. This will ensure stormwater management is designed for, alongside all other aspects of the development.

In summary the recommended control mechanism upholds the guideline intent.

Stormwater flow rate and storage analysis

The following provides an example of how the future site development can manage stormwater so that the post-development flow rates do not exceed 80% of predevelopment flowrates for critical storm events 1%, 10% & 50% AEP plus an allowance for climate change *(RCP6.0 2081-2100)*.

This example uses a roof area of 266m² and a ground parking area of 44m².

HIRDS HISTORIC DATA AND CLIMATE CHANGE IDF VALUES (RCP6.0 2081-2100)

Current Historic

Intensity

Rainfall intensities (mm/hr) :: Historical Data

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h
1.58	0.633	59.1	42.8	35.4	25.4	18.0	9.88	6.49	4.10
2	0.500	64.7	46.9	38.8	27.8	19.7	10.8	7.14	4.50
5	0.200	83.8	60.8	50.3	36.2	25.7	14.2	9.34	5.91
10	0.100	97.7	71.0	58.8	42.4	30.1	16.7	11.0	6.95
20	0.050	112	81.4	67.5	48.7	34.6	19.2	12.7	8.03
30	0.033	120	87.6	72.7	52.5	37.3	20.7	13.7	8.68
40	0.025	126	92.0	76.4	55.2	39.2	21.8	14.4	9.14
50	0.020	131	95.5	79.2	57.2	40.7	22.6	15.0	9.51
60	0.017	135	98.3	81.6	59.0	42.0	23.3	15.4	9.81
80	0.013	141	103	85.3	61.7	43.9	24.4	16.2	10.3
100	0.010	146	106	88.1	63.8	45.4	25.3	16.7	10.6

Depth

Rainfall depths (mm) :: Historical Data

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h
1.58	0.633	9.85	14.3	17.7	25.4	35.9	59.3	78.0	98.4
2	0.500	10.8	15.6	19.4	27.9	39.4	65.1	85.7	108
5	0.200	14.0	20.3	25.2	36.2	51.4	85.1	112	142
10	0.100	16.3	23.7	29.4	42.4	60.2	100	132	167
20	0.050	18.7	27.1	33.8	48.7	69.3	115	152	193
30	0.033	20.1	29.2	36.3	52.5	74.6	124	164	208
40	0.025	21.1	30.7	38.2	55.2	78.5	131	173	220
50	0.020	21.8	31.8	39.6	57.3	81.5	136	180	228
60	0.017	22.5	32.8	40.8	59.0	84.0	140	185	235
80	0.013	23.5	34.2	42.6	61.7	87.9	147	194	247
100	0.010	24.2	35.4	44.1	63.8	90.9	152	201	256

Climate Change

RCP6.0 (2081-2100)

Intensity

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h
1.58	0.633	71.0	51.2	42.3	30.2	21.1	11.3	7.23	4.48
2	0.500	78.0	56.3	46.5	33.3	23.3	12.4	8.00	4.94
5	0.200	102	73.7	60.9	43.7	30.6	16.4	10.6	6.54
10	0.100	119	86.4	71.5	51.3	36.0	19.3	12.5	7.73
20	0.050	137	99.4	82.2	59.1	41.6	22.4	14.5	8.94
30	0.033	148	107	88.7	63.8	44.9	24.2	15.6	9.68
40	0.025	155	112	93.2	67.0	47.2	25.5	16.5	10.2
50	0.020	161	117	96.8	69.7	49.1	26.5	17.1	10.6
60	0.017	166	120	99.7	71.8	50.6	27.3	17.7	11.0
80	0.013	173	126	104	75.1	53.0	28.6	18.5	11.5
100	0.010	179	130	108	77.7	54.8	29.7	19.2	11.9

Depth

ARI	AEP	10m	20m	30m	1h	2h	6h	12h	24h
1.58	0.633	11.8	17.1	21.1	30.2	42.2	67.5	86.7	108
2	0.500	13.0	18.8	23.3	33.3	46.6	74.6	96.0	119
5	0.200	17.0	24.6	30.4	43.7	61.3	98.4	127	157
10	0.100	19.9	28.8	35.7	51.3	72.1	116	150	186
20	0.050	22.8	33.1	41.1	59.1	83.1	134	173	215
30	0.033	24.6	35.7	44.3	63.8	89.7	145	188	232
40	0.025	25.8	37.5	46.6	67.0	94.4	153	198	245
50	0.020	26.8	38.9	48.4	69.7	98.1	159	206	255
60	0.017	27.6	40.1	49.8	71.8	101	164	212	263
80	0.013	28.9	42.0	52.2	75.1	106	172	222	276
100	0.010	29.8	43.4	53.9	77.7	110	178	231	286

Target pre development natural (Current climate conditions)
Pre-development conditions adopts CN value for compacted soil based on the sites current farming activity and permitted entailment to undertake orchard activity where soil compaction is inevitable.
The 266m² roof surface example for predevelopment conditions excludes 44m² to compensate for that area of ground impermeable surface. This area is accordingly introduced back into the post development calculations to get the adjusted detention volume and control outlet orifice sizing.

Target outflow rates are 80% of historic predevelopment levels:
Q2 (**0.0010** x 0.8 = **0.0008**)
Q10 (**0.002** x 0.8 = **0.0016**)
Q100 (**0.0036** x 0.8 = **0.0029**)

50% AEP calculations

Historic Predevelopment

Note that 44m² has been excluded to restrict outflow rates as compensation for ground impermeable surface

Pre Pre Nat Assumes Crop **Hyd. No. 1**

Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0010 cms
Storm Frequency	= 2-yr	Time to Peak	= 8.00 hrs
Time Interval	= 1 min	Runoff Volume	= 15.2 cum
Drainage Area	= 0.026 ha	Curve Number	= 80
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 109 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

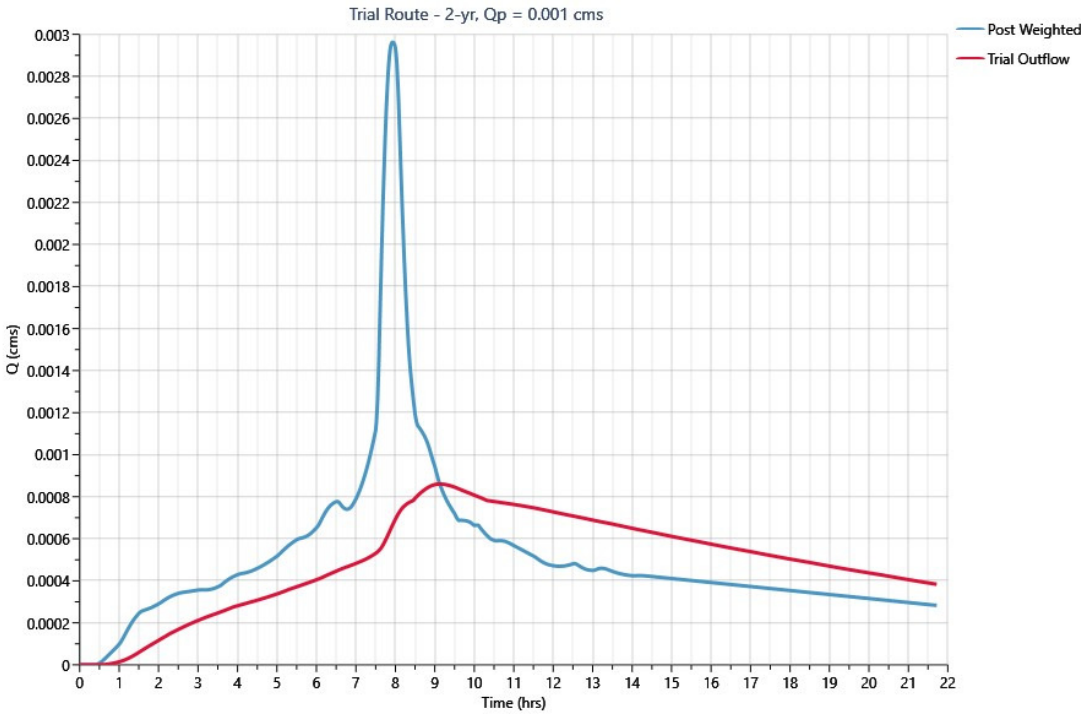
Note that 44m² has been included to account for the impermeable ground surface as compensation

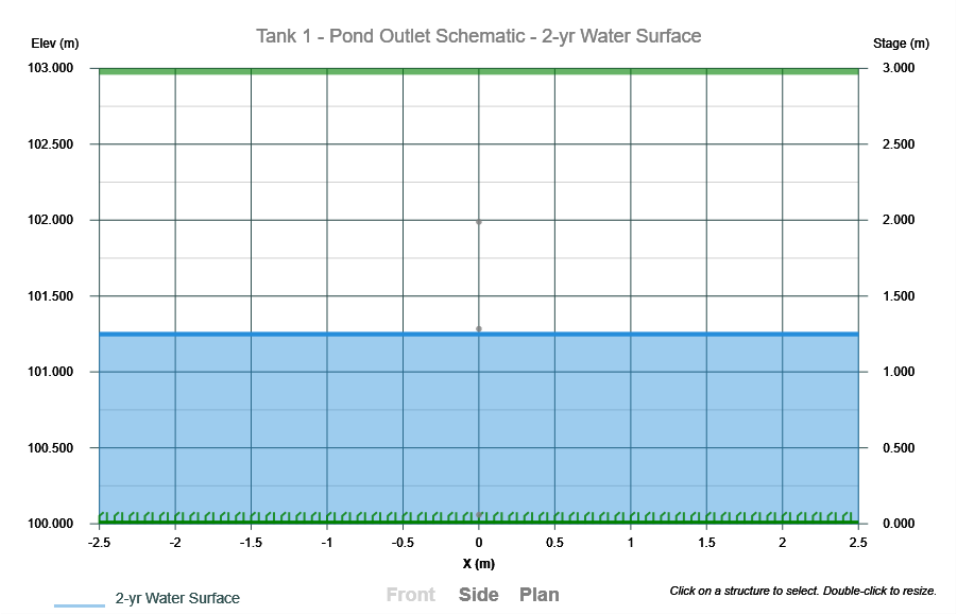
Post Impermeable **Hyd. No. 3**

Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0030 cms
Storm Frequency	= 2-yr	Time to Peak	= 7.93 hrs
Time Interval	= 1 min	Runoff Volume	= 43.3 cum
Drainage Area	= 0.031 ha	Curve Number	= 98
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 146 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

Post Detention **Hyd. No. 5**

Hydrograph Type	= Pond Route	Peak Flow	= 0.0009 cms
Storm Frequency	= 2-yr	Time to Peak	= 9.12 hrs
Time Interval	= 1 min	Hydrograph Volume	= 43.2 cum
Inflow Hydrograph	= 4 - Weighted	Max. Elevation	= 101.262 m
Pond Name	= Tank 1	Max. Storage	= 10.6 cum





10% AEP calculations

Pre Pre Nat Assumes Crop — Hyd. No. 1

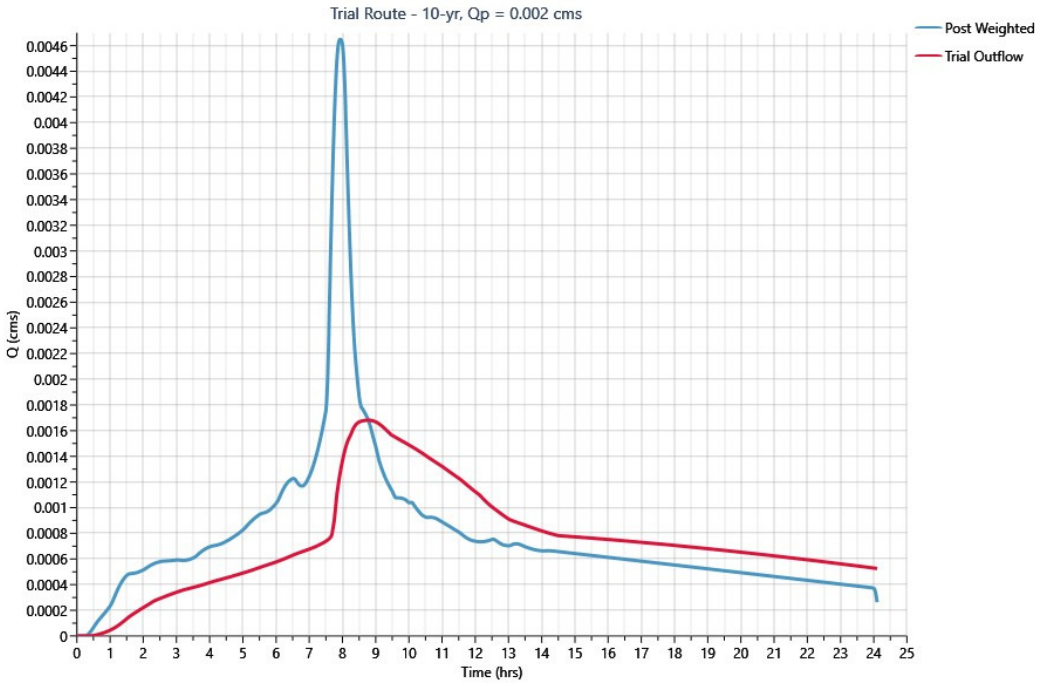
Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0020 cms
Storm Frequency	= 10-yr	Time to Peak	= 8.00 hrs
Time Interval	= 1 min	Runoff Volume	= 28.9 cum
Drainage Area	= 0.026 ha	Curve Number	= 80
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 168 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

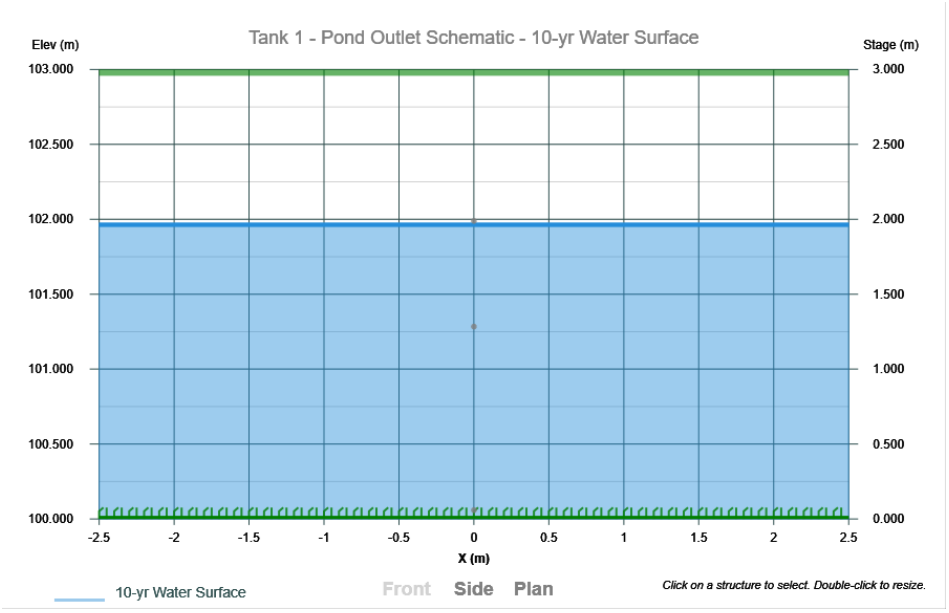
Post Impermeable — Hyd. No. 3

Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0046 cms
Storm Frequency	= 10-yr	Time to Peak	= 7.93 hrs
Time Interval	= 1 min	Runoff Volume	= 68.7 cum
Drainage Area	= 0.031 ha	Curve Number	= 98
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 228 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

Post Detention — Hyd. No. 5

Hydrograph Type	= Pond Route	Peak Flow	= 0.0017 cms
Storm Frequency	= 10-yr	Time to Peak	= 8.78 hrs
Time Interval	= 1 min	Hydrograph Volume	= 68.7 cum
Inflow Hydrograph	= 4 - Weighted	Max. Elevation	= 101.977 m
Pond Name	= Tank 1	Max. Storage	= 16.6 cum





1% AEP calculations

Pre Pre Nat Assumes Crop **Hyd. No. 1**

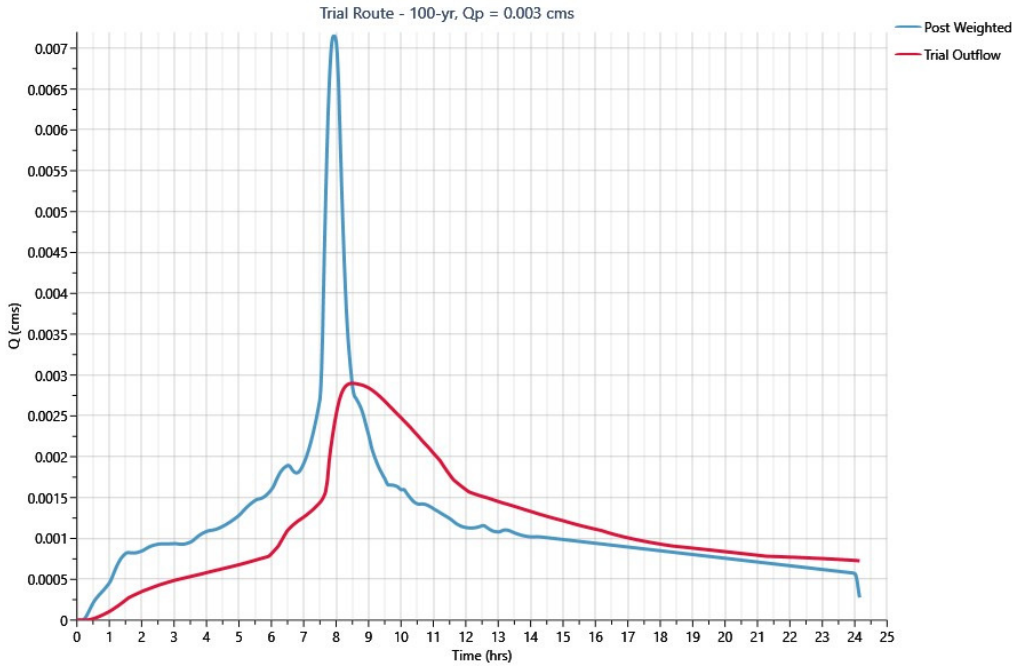
Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0036 cms
Storm Frequency	= 100-yr	Time to Peak	= 7.97 hrs
Time Interval	= 1 min	Runoff Volume	= 50.6 cum
Drainage Area	= 0.026 ha	Curve Number	= 80
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 256 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

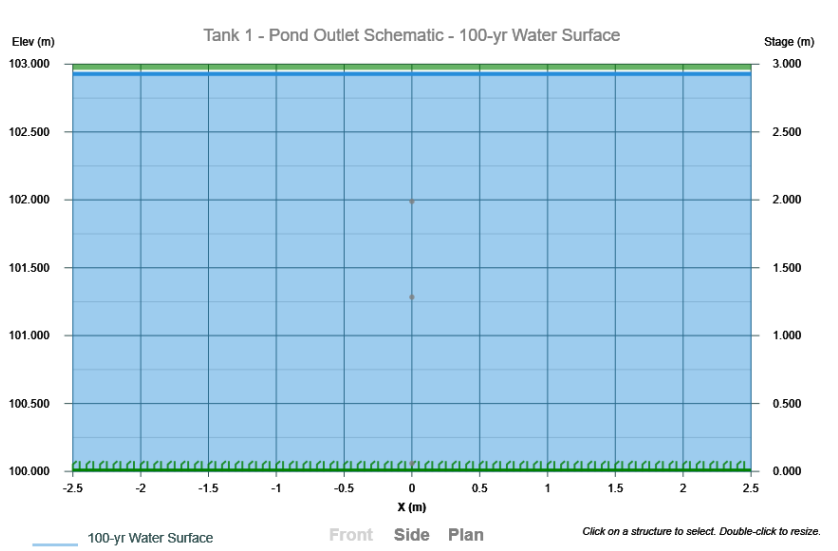
Post Impermeable — Hyd. No. 3

Hydrograph Type	= NRCS Runoff	Peak Flow	= 0.0071 cms
Storm Frequency	= 100-yr	Time to Peak	= 7.93 hrs
Time Interval	= 1 min	Runoff Volume	= 106 cum
Drainage Area	= 0.031 ha	Curve Number	= 98
Tc Method	= User	Time of Conc. (Tc)	= 10.0 min
Total Rainfall	= 350 mm	Design Storm	= Type IA
Storm Duration	= 24 hrs	Shape Factor	= 0.14

Post Detention — Hyd. No. 5

Hydrograph Type	= Pond Route	Peak Flow	= 0.0029 cms
Storm Frequency	= 100-yr	Time to Peak	= 8.50 hrs
Time Interval	= 1 min	Hydrograph Volume	= 107 cum
Inflow Hydrograph	= 4 - Weighted	Max. Elevation	= 102.941 m
Pond Name	= Tank 1	Max. Storage	= 24.7 cum



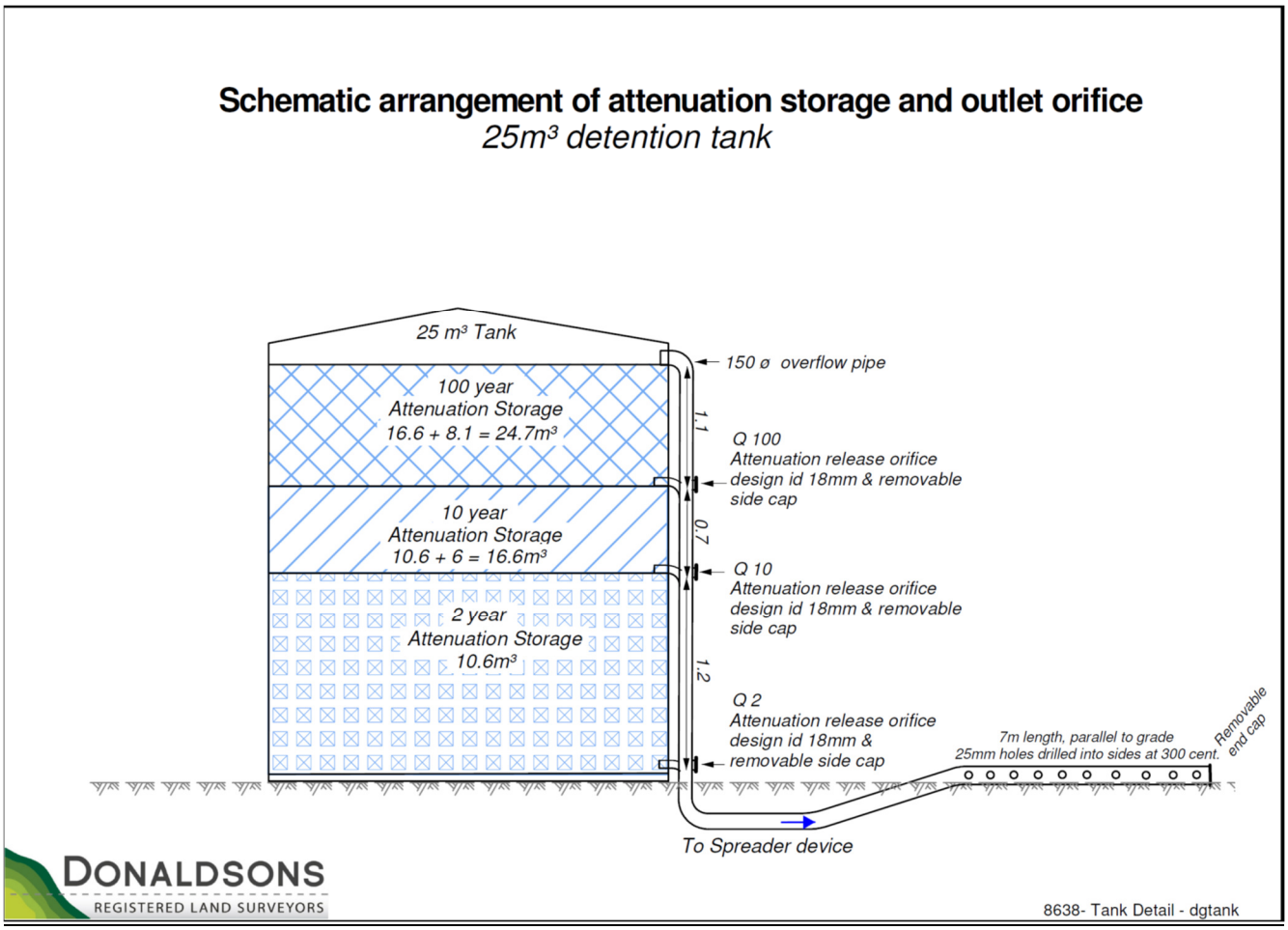


Tank 1

Culvert / Orifices	Culvert	Orifice		
		1 (i)	2 (i)	3 (i)
Rise, mm		18	18	18
Span, mm		18	18	18
No. Barrels		1	1	1
Invert Elevation, m		100.050	101.275	101.980
Orifice Coefficient, Co		0.650	0.650	0.650

Tank 1 — Stage-Storage-Discharge Summary

Stage (m)	Elev. (m)	Storage (cum)	Culvert (cms)	Orifices, cms			Riser (cms)	Weirs, cms			Pf Riser (cms)	Exfil (cms)	User (cms)	Total (cms)
				1	2	3		1	2	3				
0.000	100.000	0.0000		0.000	0.000	0.000								0.000
1.000	101.000	8.400		0.0007	0.000	0.000								0.0007
2.000	102.000	16.8		0.0010	0.0006	0.0001								0.0017
3.000	103.000	25.2		0.0013	0.0010	0.0007								0.0030



Target	Design
Q2 (0.0010 x 0.8 = **0.0008 m³/s**)	Post-detention 0.0009 m³/s
Q10 (0.002 x 0.8 = **0.0016 m³/s**)	Post-detention 0.0017 m³/s
Q100 (0.0036 x 0.8 = **0.0029 m³/s**)	Post-detention 0.0029 m³/s

The calculations concluded a near perfect match for the target values replicating the sites permitted farm use where soils are typically compacted.

Given this context, the recommended detention measures for future development on Lots 2 & 3 would result in a net positive outcome thereby supporting the subdivisions restricted discretionary status.

Summary

Stormwater attenuation requirements for a generic example with a building roof area of 266m² and a ground parking area of 44m² confirms that it is feasible to implement onsite stormwater controls that reduce peak flowrates within a standard 25m³ water tank.

It is recommended that a condition of resource consent include a consent notice pursuant to Section 221 of the Resource Management Act 1991 (RMA) requiring that:

A stormwater detention design be prepared by a Suitably Qualified and Experienced Professional (SQEP) in accordance with the Far North District Council Engineering Standards (May 2023). The design must demonstrate that post-development discharge rates do not exceed 80 percent of pre-development flow rates for the 1%, 10%, and 50% Annual Exceedance Probability (AEP) storm events, while also accounting for climate change effects. The design shall include supporting calculations for gutter capacity and downpipe (dropper) sizing to ensure compliance with best-practice hydraulic design standards.

RECOMMENDATIONS

A stormwater detention design be prepared by a Suitably Qualified and Experienced Professional (SQEP) in accordance with the Far North District Council Engineering Standards (May 2023). The design must demonstrate that post-development discharge rates do not exceed 80 percent of pre-development flow rates for the 1%, 10%, and 50% Annual Exceedance Probability (AEP) storm events, while also accounting for climate change effects. The design shall include supporting calculations for gutter capacity and downpipe (dropper) sizing to ensure compliance with best-practice hydraulic design standards.

Maintenance

i) Stormwater infrastructure is governed by Schedule 5 Land Transfer Regulation.
Where applicable, maintenance for detention devices within site boundaries shall at a minimum include:

- *removal of debris at gutters, pipe inlet or outlet orifices, removal of sediment build-up greater than 50mm in the base of detention tank.*
- *Any damaged pipework, headwalls or any other related component within the site boundaries shall be repaired by a certified drainlayer.*
- *Planting, weed infestation, building, or excavation onsite must not impede the function of overland flowpaths, swale drains or detention devices.*

ii) All detention devices, inground or tank systems are to have easily accessible inspection points at all detention outlet orifices.

- *Landowners ongoing responsibilities for detention devices includes installation and maintenance of gutter guard, removal of debris at gutter downpipes, tank inlets and outlets, removal of sediment build-up greater than 100mm in the base of the detention device.*
- *Any repairs shall be completed by a certified drainlayer at cost to the landowner.*
- *Councils monitoring officer may at any time conduct audits and where detention devices are neglected, enforce infringement penalties.*

[**LOTS 2 & 3**]

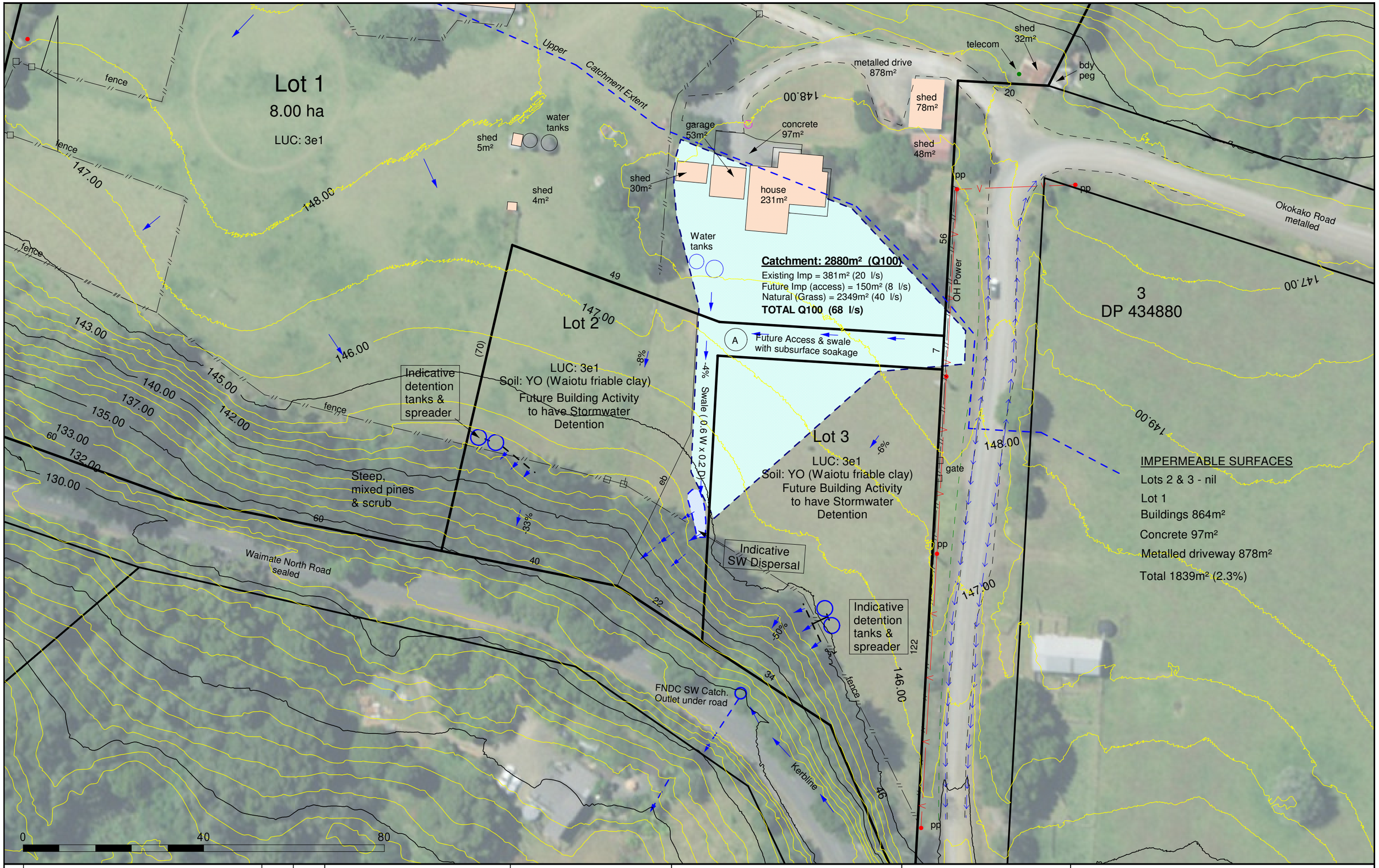
CONCLUSION

The stormwater management assessment finds that provided mitigation measures are implemented to reduce the peak post development flowrates occurring from the site to be equivalent to 80% predevelopment levels for 1%, 10% & 50% AEP storm events (*including climate change predictions*), the development overall is acceptable in terms of the management of effects on the environment thereby upholding the Council Engineering Standards and Guidelines May 20223.

The attenuation method, overland flowpath drainage, spreader devices achieve the intention of low impact design by encouraging onsite absorption whilst reducing discharge rates, with less than minor stormwater effects.

Micah Donaldson (***MNZIS***)
Registered Professional Surveyor

DONALDSONS
Land engineering surveyors & development planners



No.	Revision	Date	Approved

Do not scale drawing
Nominal scale shown are @ A3
For Resourse Consent purposes only.

DONALDSONS
REGISTERED LAND SURVEYORS

	Checked	Date
Surveyed		
Designed		Oct. 2025
Drawn		
Approved		

Project: P. Cook, 21 Okokako Road, Waimate North

Title: Stormwater Management

Contour Interval : 1m
Scale 1:750 at A3

Ref: 8638

VISION CONSULTING ENGINEERS

PRELIMINARY GEOTECHNICAL REPORT

Proposed Lots 2 and 3, 21 Okokako Road, Waimate North

Prepared for

Donaldsons Surveyors

20/11/2025

Report Information Summary

Job no.	J15954
Report Author	Siddhesh Wagh
Report Reviewer	Dan Simmonds
Version No.	1
Status	Final
Date	20/11/2025

Version No.	Date	Description
1	20/11/2025	Issued to client.

Document Acceptance

Action	Name	Signed	Date
Author	Siddhesh Wagh	 Graduate Engineer, M.Constr.(QS) (Dist.), BE(Hons) (Civil)	20/11/2025
Reviewer	Dan Simmonds	 Senior Geotechnical Engineer, MIEAust CPEng, CMEngNZ	20/11/2025

Limitations

This report has been prepared by Vision Consulting Engineers Limited (VISION) based on the scope of our engagement. It is solely for our Client's use for the purpose for which it is intended in accordance with the agreed scope of work. VISION does not accept any liability or responsibility in relation to the use of this report contrary to the above, or to any person other than the Client. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate, without independent verification, unless otherwise indicated. No liability or responsibility is accepted by VISION for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

It should be appreciated that this assessment was based on a visual assessment only.

VISION CONSULTING ENGINEERS

Vision Consulting Engineers Ltd
Level 1, 62 Kerikeri Road, Kerikeri 230
P: 09 401 6287 E: info@vce.co.nz

Contents

1 Introduction

Vision Consulting Engineers Ltd (VISION) was engaged to prepare a preliminary geotechnical report to support a Resource Consent application for the proposed subdivision of 21 Okokako Road, Waimate North.

It is understood that the client wishes to demonstrate that possible building areas are present for proposed Lots 2 and 3 within the building areas identified on the Donaldsons Subdivision Scheme plan, reference 8638, dated October 2025.

The project objective is to provide a preliminary geotechnical report to support a Resource Consent Application, demonstrating that possible building areas are present.

1.1 Scope and Exclusions

The following scope of work is proposed:

- Familiarisation with information provided by the client
- Desk Study: Review published and unpublished information about the site
- Geomorphologic assessment of the property, including a review of historic aerial images and LiDAR data.
- Site walkover over Lot 2 and 3, visual inspection of the site and surrounding environs to assess geomorphology and any geotechnical hazards that may exist or have potential to exist.
- Provide a preliminary geotechnical report providing the findings of our visual assessment, including site observations, anticipated subsurface conditions and preliminary geotechnical recommendations.

2 Site Description

The proposed subdivision is located at 21 Okokako Road, Waimate North, being Lot 1 Deposited Plan 195275, and is 88,221 m^2 in area.

The property is bounded by Waimate North Road to the south, Okokako Road to the east, and rural production lots in all other directions. An existing dwelling and associated outbuildings are located on the eastern side and the central portion of the property, which will be retained on the proposed Lot 1. The location of the property is presented in Figure 1.

The northern portion of the property slopes to the north, and the southern portion of the property slopes south towards Waimate North Road.

For the purpose of this report, the 'site' is limited to the proposed building areas on Lot 2 and Lot 3 identified on the subdivision scheme plan as shown in Figure 2.

Proposed Lots 2 and 3 are generally flat to gently sloping to the south, south-west and are covered in grass, with some trees present in the southern portion. To the south of the proposed building areas a fence is present, below this the land slopes moderately down towards Waimate North Road.

Basic details of the site are provided in Table 1.

Table 1. Property data

Data relating to this property

Item	Details
Territorial Authority	Far North District
Site Address	21 Okokako Road, Waimate North
Legal Description	Fee Simple, 1/1, Lot 1 Deposited Plan 195275
Area	88,221 m2
Zoning[a]	Rural Production

[a]Table Notes - As zoned at the time of this report

Figure 1. Property location

The property is highlighted red, north to top of page, boundary approximate only, image from LINZ.

3 Proposed Subdivision

The subdivision scheme plan supplied to VISION (Donaldsons Surveyors, Ref. 8638, dated October 2025) shows that a 3-lot subdivision is proposed.The subdivision scheme plan is included in Appendix A, and an extract is presented in Figure 2.

4 Proposed Building Areas

The proposed building areas for the proposed Lot 2 and Lot 3 depicted on the subdivision scheme plan are shown in Figure 2.

For the purpose of this report, it has been assumed that future dwellings are single storey light timber framed building, with light weight cladding and roofing and founded on timber pile foundations or a concrete slab on grade.

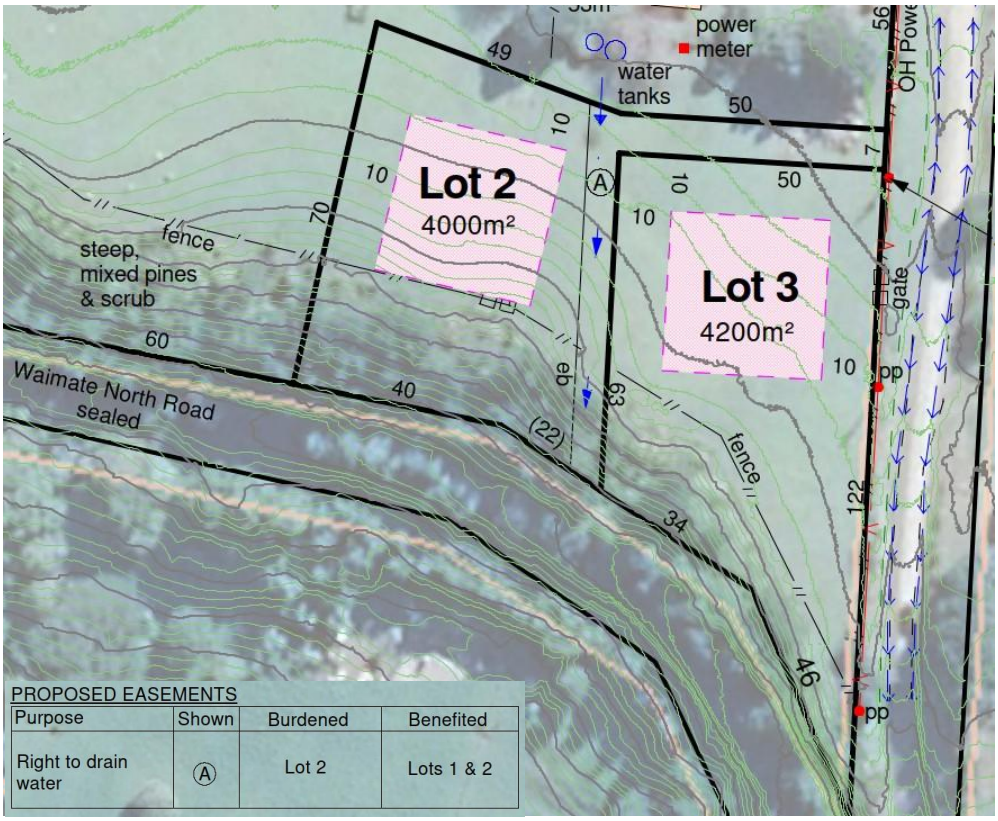


Figure 2. Site location

Extract from Donaldson scheme plan, not to scale, north to top of page.

5 Geology

The 1:250,000 geological map, Geology of the Whangarei Area (Edbrooke and Brook et al, 2009), indicates that the property is underlain by the Kerikeri Volcanic Group, comprising basalt lava, volcanic plugs, and minor tuff.

Landcare Research have mapped the property as being underlain by a complex of Waiotu friable clay (YO), being soils of the rolling and hilly land, well to moderately well drained, and Waimate North friable clay (WM), being soils of the rolling and hilly land, well to moderately well drained.

6 Historic Aerial Photographs

A selection of historic aerial photographs sourced from Retrolens, the VISION archives and Google Earth, taken between 1953 and 2024, were reviewed.

The review of the aerial photographs indicates that the geomorphology of the property has generally remained unchanged. The property has been historically farmed as pasture, with the existing dwelling present in the 1953 image (Figure 3, left). By 1981 (Figure 3, right), some internal paddock fencing or horticultural shelterbelts are visible in the northern portion of the site, which are no longer present in the current aerial (Figure 1)

An extract from the 1953 and 1981 aerial photographs is provided below in Figure 3.

Figure 3. Historic Aerial Image, 1953 (left) and 1981 (right)
Image courtesy of Retrolens

7 Geomorphology

The southern portion of the property, where Lots 2 & 3 are located, is generally flat to gently sloping to the south, south-west.

A moderately sloping bank is present running approximately parallel to the southern property boundary, where the land slopes down towards Waimate North Road and then down to the Waihirore Stream approximately 70m from the property.

The geomorphology of the area is shown in Figure 4 (Aerial Overlay) below using a digital elevation model derived from the 2018 Northland Regional Council (NRC) Light Detection and Ranging (LiDAR) dataset and 1m contours.

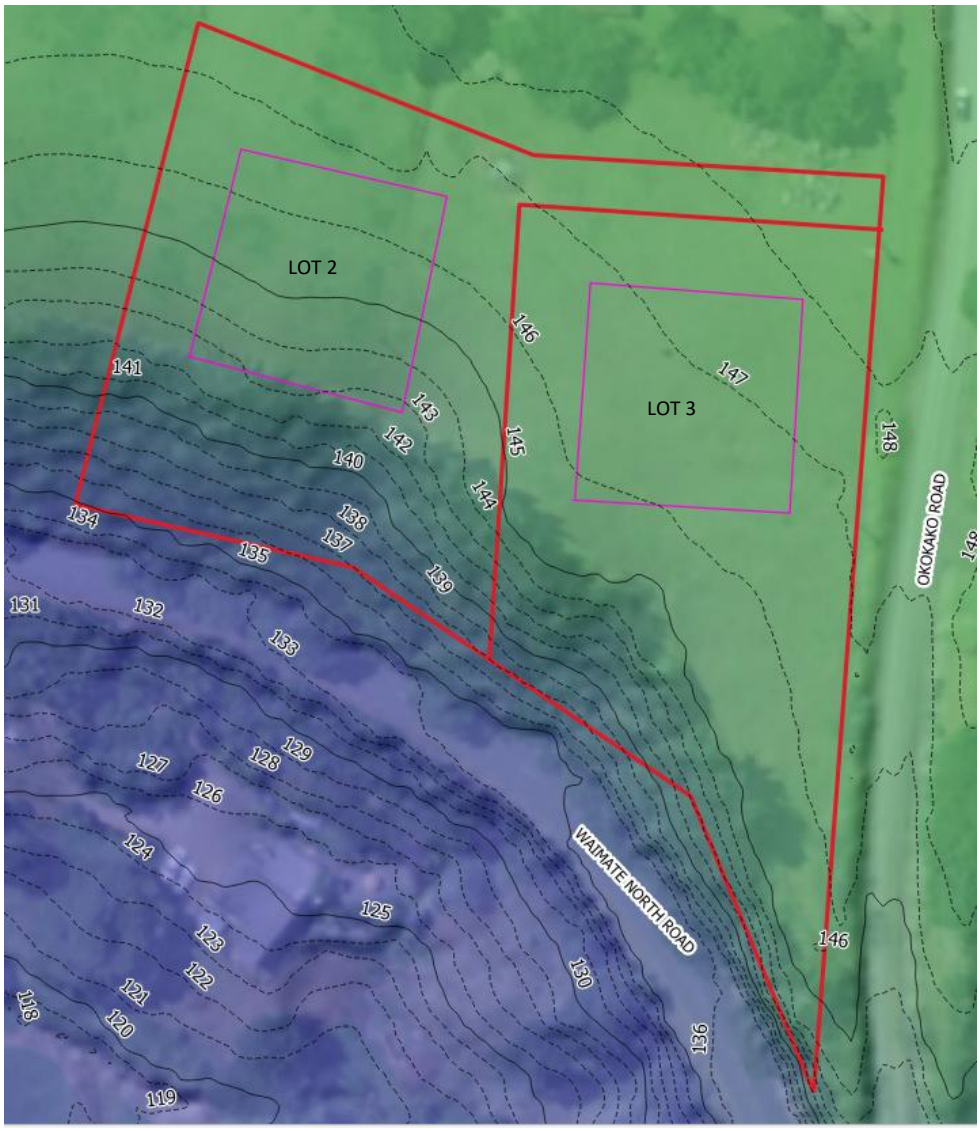


Figure 4. Possible Building Areas (Aerial Overlay)

Proposed Lot 2 & 3 boundaries (red) and possible building areas (Pink) overlaid on 1m contours with blue shadings lower elevations and green shading higher elevations and LINZ aerial, north is up the page. DEM courtesy of NRC

8 Site Observations and Desktop Study Findings

The following observations were made during the desktop study and site visit on 7th November 2025:

- **Topography**: The proposed building areas for Lots 2 and 3 are located on flat to gently sloping land, which has a gentle overall fall to the south, consistent with the desktop assessment. A moderately sloping bank is present to the south that is fenced from the crest of the slope and covered with vegetation.
- **Road Boundary**: Along Waimate North Road, the bank adjacent to the southern boundary of Lot 3 consists of an open soil cut. Further west, along the boundary of Lot 2, a rock retaining wall is present at the toe of the slope.
- **Overhead Services**: Overhead power lines were observed running through the southern side of the proposed lots.
- **Drainage**: A concrete kerb and channel is present adjacent to the sealed Waimate North Road. An open drain is present adjacent to the Okokako Road. An overland flow path was observed in the LOT 2 area designated for the 'Right to Drain Water' easement. Additionally, several smaller overland flow paths and signs of ponding were observed on Lot 3. Overall, surface water will sheet flow south towards the Waihirore Stream, located approximately 70m south of the property boundary.
- **Ground Surface Conditions**: The ground surface within the proposed building areas was mostly covered in grass. No springs, ponding, or signs of instability were observed on or in the immediate vicinity of the proposed building areas. The moderately sloping bank on the southern side of the property is covered in dense vegetation.
- **Subsurface Conditions**: Two hand auger boreholes were undertaken for the feasibility onsite wastewater assessment. The investigations indicate that the site is underlain by Clayey SILT (Topsoil) to a depth of approximately 0.2m below ground level (bgl). Underlying the soil, silty CLAY and clayey SILT was encountered to a depth of 1.2m bgl.
- **Groundwater**: Groundwater was not encountered up to 1.2m during the onsite wastewater investigation and was not observed in the road site cuts or open drains.
- **Slope Stability**: The proposed building areas appear to be stable in its current form. No obvious signs of instability were observed on the moderately sloping bank to the south of the proposed building areas.

9 Geotechnical Assessment

This preliminary geotechnical assessment is based on a desktop study and site visit observations conducted on 7th November 2025. The site is classified as a Low to Medium Stability Hazard according to the FNDC Engineering Standards (May 2023).

Based on our desktop study and site observations, the following preliminary geotechnical assessment is provided for the site.

9.1 Stability Assessment

Based on the observed topography and desktop study, the site is categorised as having a Low to Medium Stability Hazard.

- **Low Hazard**: The relatively flat to gently sloping areas in the northern portion of the site are considered to have a low risk of instability.
- **Medium Hazard**: The moderately sloping bank along the southern boundary is classified as having a medium hazard risk.

To manage the risk on the moderate slopes, a geotechnical setback line has been established 10m from the crest of the moderately sloping land, as shown in Figure 5 and Appendix B. This Setback line helps define zones with different stability levels and guides appropriate development within those zones.

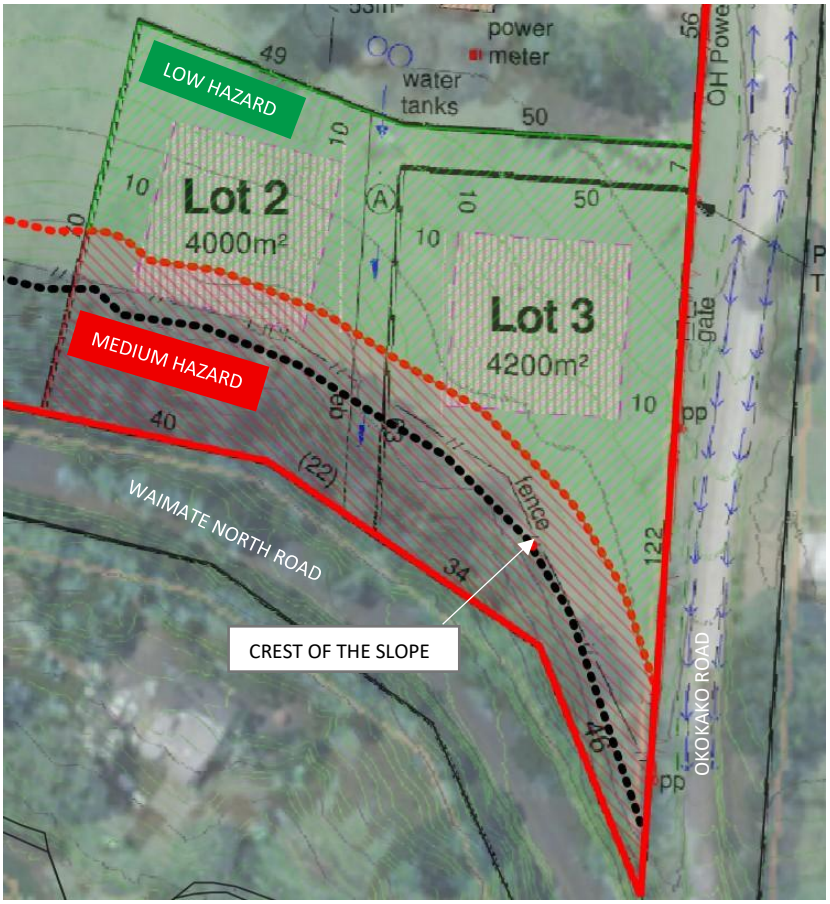


Figure 5. Stability Assessment

Site boundary indicative only, contours are shown at 0.5m intervals with green shading of 'Low Hazard' area and red shading of 'Medium Hazard' area on proposed Lots 2 and 3. Note the dashed black line represents the crest of the slope while dashed red line is 10m geotechnical setback, north is up the page. Scheme plan courtesy of Donaldsons Surveyors.

9.2 Key Geotechnical Considerations

The following geotechnical considerations are relevant to the proposed development:

- **Expansive Soils**:
  - **Observation**: The site is underlain by clay-rich soils derived from the Kerikeri Volcanic Group. These soils are known to have the potential to expand and shrink with changes in moisture content.
  - **Risk**: Expansive soil movement can exert significant pressure on foundations, leading to cracking, distortion, and potential instability of structures.
  - **Mitigation Recommendation**:
    - An assessment of the soil's expansivity is to be conducted at the building consent stage. This assessment will determine the degree of potential movement and inform appropriate foundation design.
    - Foundation design accounts for the expansive nature of the soil by using appropriate foundation types, depths, and construction techniques. This may include deepened foundations, stiffened raft foundations, or other suitable foundation types.
- **Slope Stability**:
  - **Observation**: The southern portion of proposed Lots 2 and 3 slopes moderately towards Waimate North Road and is classified as a 'Medium Hazard' zone.
  - **Risk**: Steeper slopes are inherently less stable and more susceptible to landslides or slippage, especially when there's evidence of previous ground movement. Building on or near such slopes increases the risk of structural damage or instability.
  - **Mitigation Recommendation**:
    - Any filling or construction of structures downslope of the 10m geotechnical setback line shown as red shading in Figure 5 (Appendix B) is to be assessed by a Chartered Professional Engineer experienced in geotechnical engineering.
    - This assessment will determine if specific measures are needed to ensure stability, such as deepened foundations, leading-edge piles, or in-ground retaining structures.
- **Earthworks in Areas with Cobbles/Boulders**:
  - **Observation**: The site's geology suggests the presence of basalt cobbles and boulders within the soil.
  - **Risk**: These cobbles/boulders can pose challenges during excavation and construction, potentially hindering excavation, damaging equipment, and complicating foundation and service installation.
  - **Mitigation Recommendation**:
    - Anticipate the presence of cobbles/boulders during earthworks and foundation construction.
    - Consider the use of specialised equipment, such as rock breakers or excavators with specialised buckets, to handle these conditions.

This assessment highlights the key geotechnical considerations that need to be addressed during the detailed design and construction phases of future development at the site.

10 Conclusion and Recommendations

This preliminary geotechnical assessment has identified several key geotechnical constraints and potential risks associated with the proposed subdivision and development at 21 Okokako Road, Waimate North. These include:

- **Expansive Soils**: The presence of clay-rich soils with the potential to expand and shrink with changes in moisture content. This can lead to foundation movement and damage to structures if not properly addressed.
- **Slope Stability**: The moderately sloping areas of the site, pose a potential risk of instability.
- **Cobbles/Boulders**: The presence of basalt cobbles and boulders within the soil can complicate earthworks and foundation construction.
- .

To mitigate these risks at the site, the following recommendations are made:

- **Further Geotechnical Investigation**: A site-specific geotechnical investigation and assessment should be undertaken at the time of building consent. This investigation should include (but not be limited to):
  - Low Hazard Area:
    - Subsurface testing (e.g., test pits, boreholes) to assess soil profiles and evaluate ground conditions.
    - Assessment of soil samples to determine expansivity, bearing capacity, and other relevant properties.
    - Assessment of the presence of cobbles/boulders to inform earthworks and foundation design.
  - Medium Hazard Area:
    - All investigations listed for 'Low Hazard Area', additionally.
    - Stability analysis of slopes to assess the risk of slippage and recommend appropriate mitigation measures (If required).
- **Foundation Design**:
  - Foundation design is to be informed by the geotechnical investigation and account for the expansive nature of the soil and the potential presence of cobbles/boulders.
  - Appropriate foundation types and depths should be considered given the specific site constraints and soil conditions.
- **Earthworks**:
  - Earthworks should be carefully planned and managed, with consideration for the site's topography and soil conditions.
  - Appropriate retaining structures should be employed on sloping areas to maintain stability and prevent erosion.
  - Fill and cut slopes should adhere to the recommended limitations (1.0m maximum height and 1V:2.5H maximum slope) unless otherwise specified by the geotechnical engineer.
- Slope Stability:
  - Any development downslope of the 10m geotechnical setback line (within the medium stability hazard zone) will need to be subject to specific geotechnical assessment by a Chartered Professional Engineer experienced in geotechnical engineering.

Appendix A
Proposed Subdivision Scheme Plan

Lot 1
8.00 ha

Lot 2
4000m²

Lot 3
4200m²

2
DP 516974

3
DP 434880

OLC 158

haybarn 34m²
yards
water tank
shed 63²
shed 286m²
PP Transformer
fence
shed 5m²
water tanks
shed 4m²
shed 30m²
garage 53m²
septic tank concrete 97m²
house 231m²
power meter
water tanks
metalled drive 878m²
shed 32m²
telecom
sheds 126m²
pp
OH Power
Okokako Road metalled
PP Transformer
gate
steep, mixed pines & scrub
Waimate North Road sealed
eb
fence
325.23
273.59
84
70
60
40
(22)
63
122
34
46
56
49
50
10
7
20

IMPERMEABLE SURFACES

Lots 1 & 2- nil

Lot 3
Buildings 864m²
Concrete 97m²
Metalled driveway 878m²
Total 1839m² (2.3%)

PROPOSED EASEMENTS

Purpose	Shown	Burdened	Benefited
Right to drain water	Ⓐ	Lot 2	Lots 1 & 2

Applicant : PW Cook

Title : NA121C/845

Total Area : 8.8221ha

Zone : Rural Production

Notes:
Areas and measurements are subject to survey
For resource consent purposes only.

0 15 30 45 60 75 150

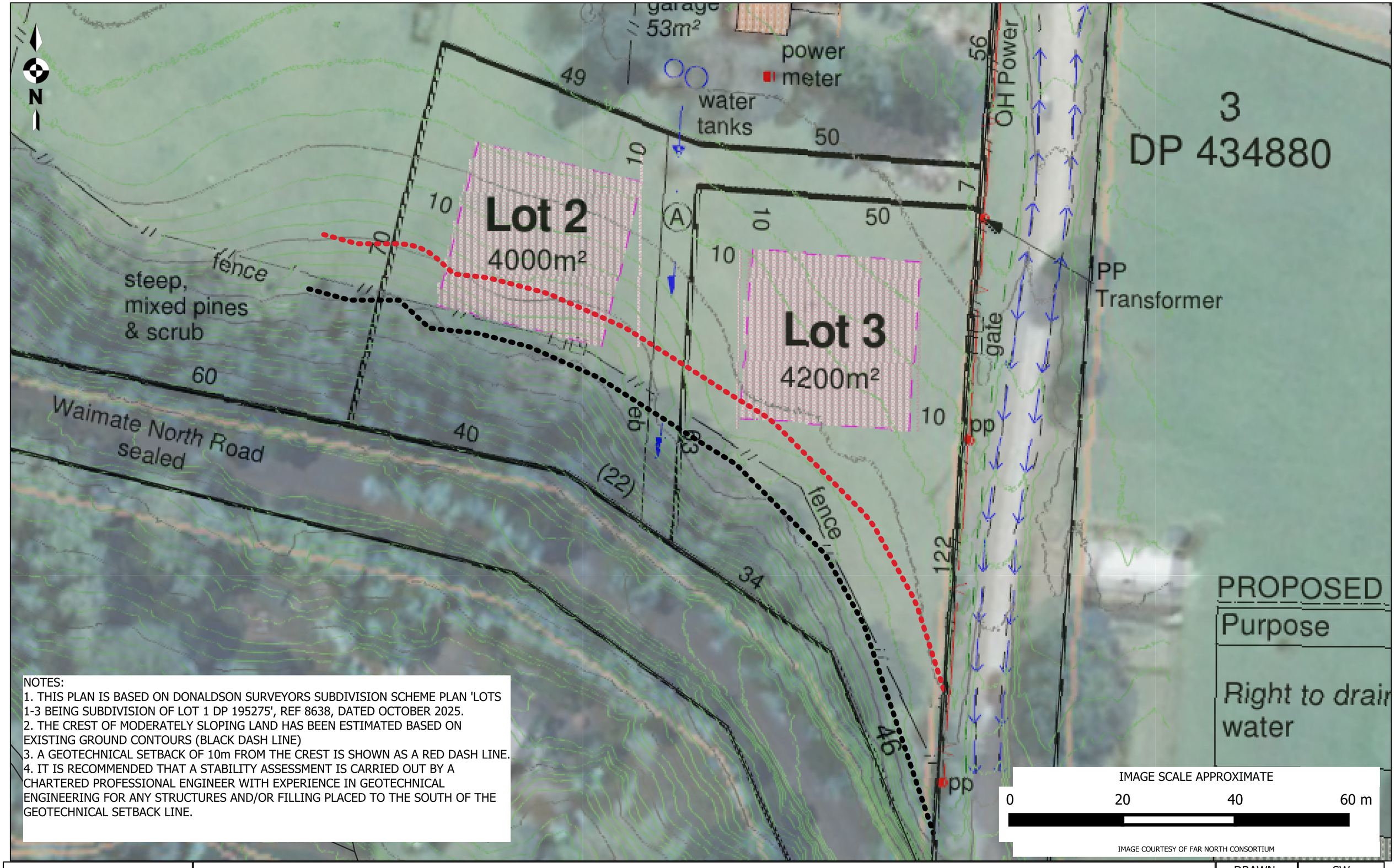
DONALDSONS
REGISTERED LAND SURVEYORS

LOTS 1-3 BEING A SUBDIVISION OF LOT 1 DP 195275

Contour interval : 0.5m
Scale @ A3 : 1:1000

Date :October 2025 REF : 8638

Appendix B
Geotechnical Setback Plan



NOTES:
1. THIS PLAN IS BASED ON DONALDSON SURVEYORS SUBDIVISION SCHEME PLAN 'LOTS 1-3 BEING SUBDIVISION OF LOT 1 DP 195275', REF 8638, DATED OCTOBER 2025.
2. THE CREST OF MODERATELY SLOPING LAND HAS BEEN ESTIMATED BASED ON EXISTING GROUND CONTOURS (BLACK DASH LINE)
3. A GEOTECHNICAL SETBACK OF 10m FROM THE CREST IS SHOWN AS A RED DASH LINE.
4. IT IS RECOMMENDED THAT A STABILITY ASSESSMENT IS CARRIED OUT BY A CHARTERED PROFESSIONAL ENGINEER WITH EXPERIENCE IN GEOTECHNICAL ENGINEERING FOR ANY STRUCTURES AND/OR FILLING PLACED TO THE SOUTH OF THE GEOTECHNICAL SETBACK LINE.

VISION CONSULTING ENGINEERS

DONALDSON SURVEYORS
PROPOSED LOTS 2 AND 3, 21 OKOKAKO ROAD, WAIMATE NORTH
GEOTECHNICAL SETBACK PLAN

DRAWN:	SW
CHECKED:	DS
DATE:	5/11/2025
PROJECT:	J15954
SHEET:	1 of 1
SCALE A3:	1:600

VISION CONSULTING ENGINEERS

ONSITE WASTEWATER FEASIBILITY REPORT

Proposed Lots 2 and 3, 21 Okokako Road, Waimate North

Prepared for

Donaldsons Surveyors

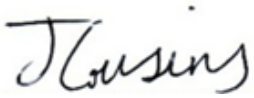
10/11/2025

Report Information Summary

Job no.	J15954
Report Author	Siddhesh Wagh
Report Reviewer	Jonathan Cousins
Version No.	1
Status	Final
Date	10/11/2025

Version No.	Date	Description
1	10/11/2025	Final issued to client.

Document Acceptance

Action	Name	Signed	Date
Author	Siddhesh Wagh	 Graduate Engineer, M.Constr.(QS) (Dist.), BE(Hons) (Civil)	10/11/2025
Reviewer	Jonathan Cousins	 Meng (Civil) Senior Hydrological Engineer	10/11/2025

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VISION CONSULTING ENGINEERS

Vision Consulting Engineers Ltd
Level 1, 62 Kerikeri Road, Kerikeri 0230
P: 09 401 6287 E: info@vce.co.nz

Contents

Appendices

Tables

Figures

1 Introduction

Vision Consulting Engineers Ltd (VISION) was requested by Donaldsons Surveyors on behalf of Peter Cook, to conduct an onsite wastewater feasibility evaluation for the proposed Lots 2 and 3 as part of the subdivision of 21 Okokako Road, Waimate North. It is proposed to subdivide the property to create 3 lots (Lots 1-3).

The property is bounded (Figure 1) by Waimate North Road to the south, Okokako Road to the east, and rural production lots in all other directions. This report was based on Donaldsons surveyors scheme plan, reference 8638, dated October 2025, as presented in Figure 2 and in Appendix A.

This report provides specific information about the site, soil conditions, setback features and overall area available for wastewater disposal for the new proposed Lots 2 and 3. It provides a detailed assessment for these lots, including a concept design for a suitable onsite wastewater management system and 50% reserve area, including recommendations for monitoring and management requirements.

Feasibility for Proposed Lot 1 is not required as part of this report and is excluded from this assessment.

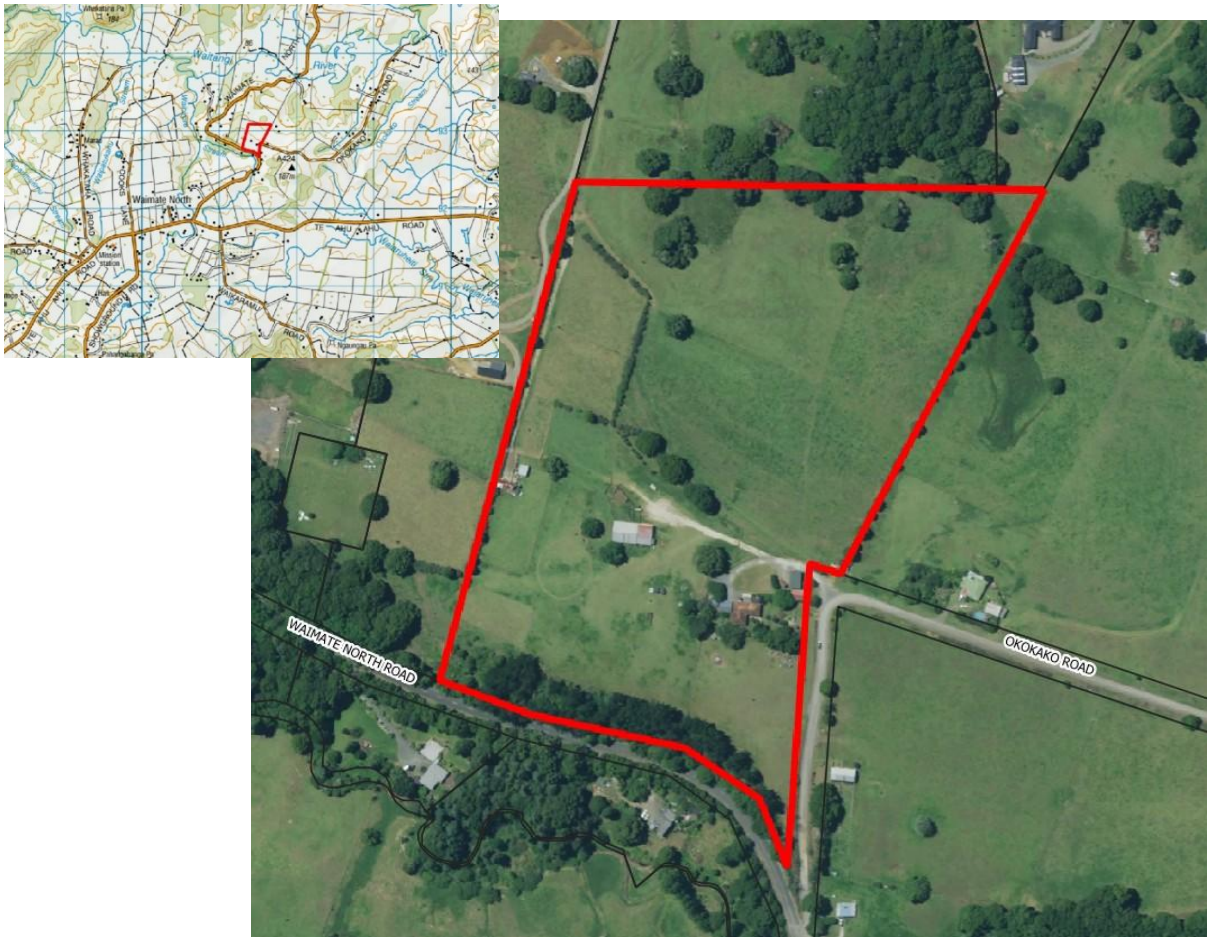


Figure 1. Locality Map

Locality map showing the site is outlined in red, north is up the page, image courtesy of LINZ.

Figure 2. Proposed Subdivision Scheme Plan

Proposed Subdivision Scheme Plan, extract from Donaldsons Surveyors scheme plan

2 Site Details

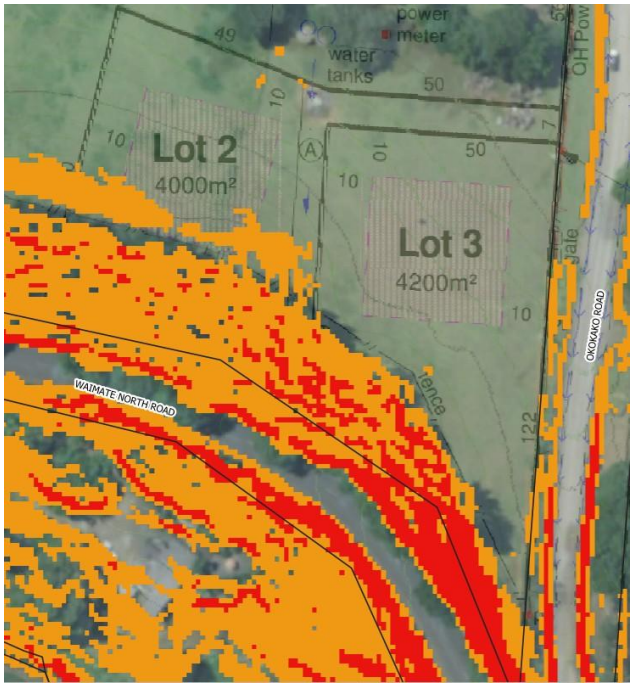
Table 1. Summary of Site Details

Item	Details
Site Address	21 Okokako Road, Waimate North
Owner	Peter Cook
Legal Description	Lot 1 Deposited Plan 195275
Council Area	FNDC
Zoning	Rural Production
Engaged By	Donaldsons Surveyors
Lot Size	88, 221 m²
Proposed Lot sizes	Proposed Lot 1 = 8.00 ha (Not Included in this assessment) Proposed Lot 2 = 4000 m² Proposed Lot 3 = 4200 m²
Domestic Water Supply	Roof collection
Anticipated Wastewater Load from future dwellings:	Assume 4-bedroom dwelling (6 people maximum design occupancy). Design flow allowance is 180 L/person/day; therefore, total design load = 1080 L/day. This design load is sourced from ARC TP58:2004, given comments in Section 6.3.2 and is considered conservative.
Availability of Sewer	The area is not sewered. Onsite wastewater treatment and disposal is required.

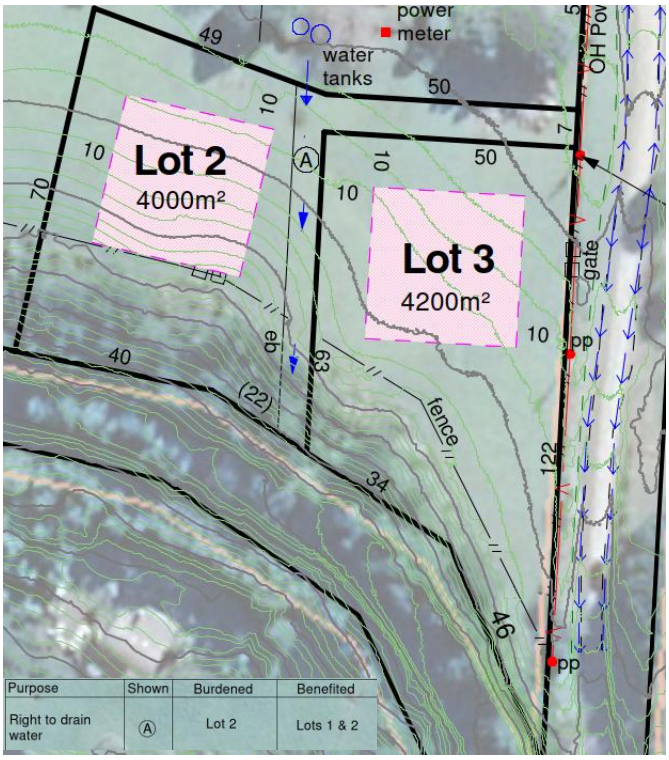
3 Site Evaluation

VISION undertook site investigations on 7th November 2025. The weather was overcast at the time of the investigation. A summary of the site features influencing onsite wastewater management is provided in Table 2.

Table 2. Site Evaluation

Feature	Description
Site Area	Lot 1 Deposited Plan 195275 = 88,221 m²
Lot Size	Proposed Lot 1 = 8.00 ha (Not Included in this assessment) Proposed Lot 2 = 4000 m² Proposed Lot 3 = 4200 m²
Climate	Northland is a sub-tropical climate zone, with warm humid summers and mild winters. Typical summer temperatures range from 22°C to 26°C (maximum daytime) but seldom exceed 30°C. In winter, high temperatures are between 14°C to 17°C. Annual sunshine hours average about 2000 in many areas. Mean annual rainfall is 1400mm for the site location.
Exposure	The proposed lots 2 and 3 are on a broad, open plateau, providing medium to high sun and wind exposure. Established pine trees along the south boundary offer partial shelter.
Vegetation	Proposed Lots 2 and 3 are generally grassed with pine trees and scrubs on the southern boundary.
Slope	Proposed Lots 2 and 3 are located on a broad, flat to gently sloping plateau, with an overall gentle fall to the south. A moderately sloping bank runs parallel to the southern boundary, where land slopes moderately towards Waimate North Road  Slope angles between 10 and 26 degrees shown as orange, slopes greater than 26 degrees shown in red, based on NRC LiDAR.
Fill	No fill material was identified on the proposed lots after comparing historical images, current aerial images, and site contours.
Erosion Potential	No obvious signs of erosion were noted on proposed Lots 2 and 3 during the site walkover assessment.

Surface Water	The proposed 'Right to drain water' easement is located along the western boundary. A concrete kerb and channel is present adjacent to sealed Waimate North Road. An open drain is present adjacent to the metalled Okokako Road along the eastern boundary. <u>Lot 2</u> • Surface water currently drains to the south by sheet flow (Figure 3). <u>Lot 3</u> • Surface water currently drains to the south by sheet (Figure 4).



Flood Potential	Proposed Lots 2 and 3 are not mapped by the FNDC or the NRC as being subject to flooding.
Stormwater run-on and upslope seepage	The proposed systems should include surface water cut-off drains and re-grading where appropriate to direct runoff away from the treatment system and application area.
Groundwater	Subsurface conditions were logged from the boreholes drilled. Groundwater was not observed to be present in the boreholes completed to depths of up to 1.2m. The NRC groundwater borehole database indicates that there are no water bores within 900m of the property.
Site Drainage and Subsurface Drainage	Site drainage will need to be addressed at the time of Building Consent. At this stage it is anticipated that cut-off drains and re-grading are likely to be required for proposed Lots 2 and 3.
Recommended Buffer Distances	Buffer distances should be generally compliant with those in the Northland Regional Plan and the Far North District Plan.

Figure 3. Photo of Proposed Lot 2

Photo taken from the North-west portion of lot 2 looking South-east. Photo taken by VISION

Figure 4. Photo of Proposed Lot 3

Photo taken from the south-east portion of lot 3 looking North. Photo taken by VISION

4 Soils

The site soils have been assessed for their suitability for onsite wastewater disposal by a combination of soil survey and desktop review of published soil survey information, as outlined in this section.

4.1 Published Soil Information

The 1:250,000 geological map, Geology of the Whangarei Area (Ed Brooke and Brook et al, 2009), indicates that the property is underlain by the Kerikeri Volcanic Group, comprising basalt lava, volcanic plugs, and minor tuff.

Landcare Research have mapped the property as being underlain by a complex of Waiotu friable clay (YO), being soils of the rolling and hilly land, well to moderately well drained, and Waimate North friable clay (WM), being soils of the rolling and hilly land, well to moderately well drained.

4.2 Soil Survey and Analysis

A soil survey was undertaken at the site to determine the suitability for the application of treated effluent. The soil survey was carried out based on two hand auger boreholes, carried out on proposed Lot 2 (INV1) and Lot 3 (INV2). The approximate locations of the hand auger boreholes are presented on the wastewater feasibility plan included in Appendix B, and logs are included in Appendix B.

Borehole INV1 carried out on proposed Lot 2 encountered topsoil (Clayey SILT) to a depth of 0.2m, which was underlain by Clayey SILT to a depth of at least 1.2m below ground level (bgl).

Borehole INV2 indicates that proposed Lot 3 is underlain by topsoil (Clayey SILT) to a depth of 0.2m, which was underlain by Clayey SILT and Silty CLAY to a depth of at least 1.2m bgl.

Borehole logs are included in Appendix B.

5 Assessment of Environmental and Public Health Effects

To assess the impact of the proposed activity, site investigation and design procedures include the risk evaluation of the actual and potential environment and public health effects. This assessment ensures that the onsite system will produce effluent that complies with the public health and environmental quality requirements of the Northland Regional Soil and Water Plan.

The following sub-sections outline the assessed effects and measures mitigating any potential effects.

5.1 Actual Effects

No negative actual effects are perceived. The level of treatment and application rate is such that the receiving soils will be able to receive and further treat any residual contaminants in a sustainable manner with no net offsite effects.

Noise will be virtually undetectable as all pumps (if required) are small and submersible, and odours during normal operation are expected to be negligible.

5.2 Potential Effects

5.2.1 Effects on the Environment Within the Property

5.2.1.1 Surface Water

Sufficient land is available for the onsite wastewater treatment system, including appropriate setbacks from surface water and concentrated flow paths. Interception cut-off ditches are proposed upslope of the application areas to hydrologically isolate them.

5.2.1.2 Groundwater

Groundwater was not observed in the boreholes (progressed up to a depth of 1.2m). It is anticipated that groundwater is lower than 1.2m, providing the proposed lots with sufficient setback distances for effluent disposal. During detailed design, this is typically checked as part of the design process, and a suitable system can be achieved given the groundwater depths measured at the site. Groundwater separation distances from ARC TP58:2004 should be adopted to ensure that suitable treatment is achieved.

5.2.2 Effects on the Environment Beyond the Property

The majority of potential effects on the environment and public health are contained within the property boundary.

5.2.2.1 Surface Water

As described in Section 5.2.1, appropriate setback distances from surface water flow paths and interception ditches are to be included and it is considered unlikely that there will be effects on the environment beyond the boundary.

5.2.2.2 Groundwater

Groundwater outside the property is not anticipated to be infiltrated by treated effluent so long as the setbacks from groundwater within the property are achieved. The proposed lots are greater than 900m from the nearest groundwater borehole outside of the property mapped by the NRC. This distance exceeds the minimum setback required by ARC TP58.

5.2.2.3 Amenity Values

Most items related to effluent disposal via drip irrigation will be installed sub-surface below a mulch layer with only small plastic lids and the surface mounted drip lines exposed at low-level to the ground. The 150mm mulch layer will also provide a natural looking cover to mitigate the visibility of the drip lines.

5.2.3 Cumulative Effects

Due to appropriate setback distances, it is not expected to be an adverse effect from cumulative hazards.

The main impacts related to this development will result from building works during the construction phase. The works for the wastewater treatment and disposal system is expected to be minimal. Installers are required to work within working hour limitations set out in the District Plan.

5.3 Summary of Design Responses Required

Mitigation measures to protect public health and the environment include the following:

- Treatment system selection shall ensure that the minimum level of treatment, prior to land application, is at a Secondary Treatment standard.
- Provision of a sustainable disposal land treatment system (sub-surface drip irrigation).
- Minimum setback distances from surface water, drains, and boundaries must be maintained at all times, as detailed in Section 7.5.
- Re-grading of ponding areas on Lot 3 to ensure positive drainage.
- Installation of cut-off drains upslope of the disposal areas to prevent stormwater run-on.

6 Performance of Existing Systems (Proposed Lot 1)

The scheme plan (Donaldsons, Ref. 8638 – Appendix A) identifies an existing dwelling, associated outbuildings, and a septic tank on Proposed Lot 1. A review of the FNDC property file found no as-built drawings or consent details for the existing wastewater disposal field.

VISION met with the client onsite. The client confirmed the existing disposal field is located north of the existing dwelling (downhill). A visual inspection of this area was undertaken, which identified no signs of surface breakout, effluent ponding, blockages, or odours. The system appears to be performing adequately.

This assessment confirmed the existing septic tank and disposal field are fully contained within the boundaries of Proposed Lot 3 and are at a sufficient setback from the proposed new lot boundaries.

7 Treatment System Selection (Proposed Lots 2 and 3)

An appropriate land-application system and the treatment option to precede it are outlined in this section based upon a review of the physical site constraints and the assessment of environmental & public health effects.

7.1 Alternatives Considered

For the purposes of feasibility, we have considered secondary aerated wastewater treatment systems only. Detailed design during the building consent stage may consider alternatives available for each proposed lot based on the soil type, environmental constraints, location and size of the proposed dwelling.

7.2 Treatment System

The treatment system suitable for the proposed subdivision is a Secondary Treatment system with a 120-micron filter, or as recommended by the manufacturer. Should the activities at the site generate a large volume of grease, the owner may wish to install a grease trap on the kitchen drainage.

7.3 Land Application

It is anticipated that sub-surface mounted pressure compensating drip lines covered with topsoil or mulch will be suitable for the proposed future activities. We have assumed a soil category of 5 with a conservative loading rate of 3 litres per square meter per day and a 50% reserve area.

The reserve area appropriate for subsurface secondary treated effluent is 50% in accordance with Table 5.3 of Auckland Council Technical Publication 58. This is considered appropriate given the conservative application rate adopted for this report and a likely allowance for a household with standard fixtures (including 11 litre flush water cisterns; washing machine and dishwasher).

Table 3. Summary of land application area

Proposed Lots	Area Required for Disposal of Effluent (using the assumed proposed development with 50% Reserve)(m^2)
2 and 3	360m^2 (active) + 180 m^2 (reserve) = 540 m^2

Proposed Lots 2 and 3 were found to have sufficient area available for an onsite wastewater treatment system.

7.4 Siting and Configuration of the Land Application Area

The Wastewater Disposal Feasibility Plan (Reference J15954, Appendix A) presents the excess area available after setbacks have been applied, generally in accordance with the Northland Regional Plan.

The excess area available is an estimate based on the existing ground contours and condition. At this time, the future development of the site is unknown, and it is likely that the excess area available will decrease due to site re-contouring associated with constructing a dwelling and access on each lot.

7.5 Factors of Safety and Buffer Distances

The design process includes a risk assessment approach in which constraints are identified and addressed by various mitigation measures. The mitigating measures include:

- Assuming an indicative 4-bedroom dwelling wastewater production volume and a conservative loading rate (3 L/m²/day).
- Applying standard setbacks as per the Northland Regional Plan, including 1.5m from property boundaries and buildings/houses, and 5m from surface water and overland flow paths.
- Applying a conservative 15m setback for the disposal field on Proposed Lot 2 from the 'Right to drain water' easement along its eastern boundary.
- Applying a conservative 15m setback for the disposal field on Proposed Lot 3 from the 'Right to drain water' easement along its western boundary and from the open drain adjacent to Okokako Road along its eastern boundary and Concrete kerb and drain presenet adjacenet to sealed Waimate North Road along southern boundary.
- A minimum 10m buffer area down-slope of the lowest irrigation line is included as part of the disposal area, near the southern boundary of the proposed lots 2 and 3 as per the Northland Regional Plan.

8 Monitoring, Operation and Maintenance

VISION recommend that the TP58 reports at the time of Building Consent require the inclusion of an operation and maintenance list for the homeowner.

If it is deemed that a treatment plant (Aerated, textile filter, etc) is to be used, a service contract shall be entered into between the owner and a service provider approved by the FNDC. The service contract will involve regular inspections of the system.

9 Area Available

Taking into consideration the Assessment of Environmental and Public Health Effects as well as the Treatment System Selection, areas suitable for onsite disposal have been identified on the proposed lots. Table 4 provides a summary of the areas identified as being available (suitable) for wastewater disposal, the area required for disposal of effluent, and the excess area available.

Table 4. Summary of Area Available

A summary of the land area available for effluent disposal.

Proposed Lots	Area Available	Area Required for Disposal of Effluent with 50% Reserve[a]	Excess Area Available[b]
	(m^2)	*(m^2)*	*(m^2)*
2	1701	540	1161
3	1957	540	1417

Notes

[a]The reserve area appropriate for sub-surface secondary treated effluent is 50% in accordance with Table 5.3 of Auckland Council Technical Publication 58. This is considered appropriate given the conservative application rate adopted for this report and a likely allowance for household fixtures.

[b]The excess area available is an estimate based on the existing ground contours. At this time, the future development of the site is unknown, and it is likely that the excess area available will decrease due to site re-contouring associated with constructing a dwelling and access on each lot.

As can be seen in Table 4, the proposed lots 2 and 3 have excess area available for future dwellings and amenities.

10 Recommendations and Discussion

To ensure that the proposed onsite wastewater treatment and land application systems continue to perform to a high standard and not contribute to an accumulated adverse effect on the environment, it is recommended that the proposal be given Resource Consent for the subdivision based upon the following conditions:

- TP58 reports at the time of Building Consent shall include an operation and maintenance list for the homeowner.
- A site-specific investigation and design at the Building Consent stage may identify a suitable alternative design to that assumed in this report. Such systems should be designed by a suitably qualified and experienced person.

We have demonstrated that proposed Lots 2 and 3 can accommodate a Secondary Treatment system discharging to sub-surface mounted pressure compensating drip lines consisting of a land application area of 360 square metres (m^2). A reserve of 50% has also been accommodated.

11 Conclusions

As evidenced in this onsite wastewater feasibility report, provided the recommendations are adhered to, the proposed Lots 2 and 3 have suitable area available for the disposal of domestic wastewater under typical loading conditions.

Appendix A
Scheme Plan and VISION Wastewater Disposal Feasibility Plan

Lot 1
8.00 ha

Lot 2
4000m²

Lot 3
4200m²

2
DP 516974

3
DP 434880

OLC 158

haybarn 34m²
yards
water tank
shed 63²
shed 286m²
PP Transformer
fence
shed 5m²
water tanks
shed 4m²
shed 30m²
garage 53m²
septic tank concrete 97m²
house 231m²
power meter
water tanks
metalled drive 878m²
shed 32m²
telecom
sheds 126m²
pp
OH Power
Okokako Road metalled
PP Transformer
gate
steep, mixed pines & scrub
Waimate North Road sealed
eb
fence
325.23
273.59
84
70
60
40
(22)
63
122
34
46
56
49
50
10
7
20

IMPERMEABLE SURFACES

Lots 1 & 2- nil

Lot 3
Buildings 864m²
Concrete 97m²
Metalled driveway 878m²
Total 1839m² (2.3%)

PROPOSED EASEMENTS

Purpose	Shown	Burdened	Benefited
Right to drain water	Ⓐ	Lot 2	Lots 1 & 2

Applicant : PW Cook

Title : NA121C/845

Total Area : 8.8221ha

Zone : Rural Production

Notes:
Areas and measurements are subject to survey
For resource consent purposes only.

0 15 30 45 60 75 150

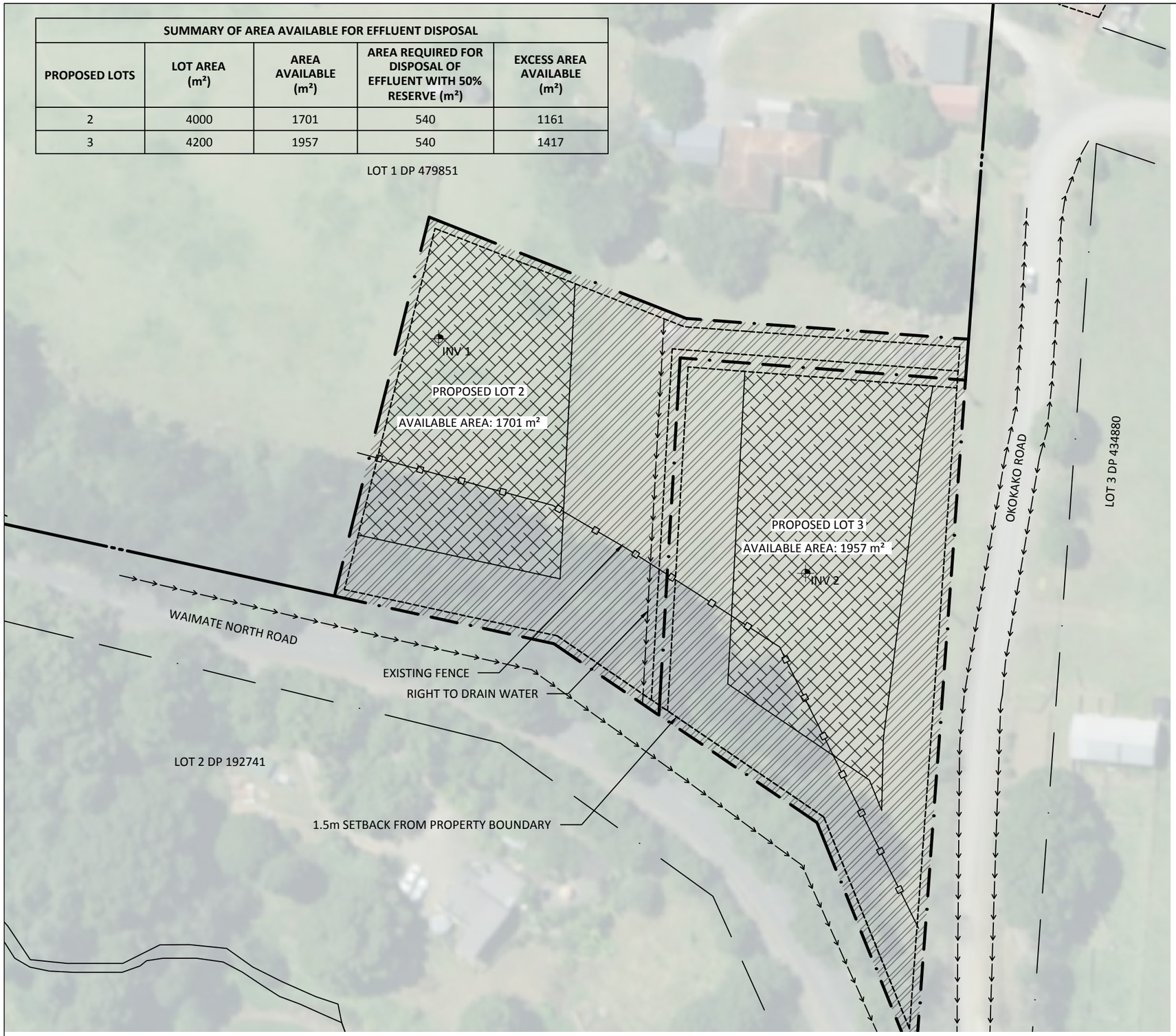
DONALDSONS
REGISTERED LAND SURVEYORS

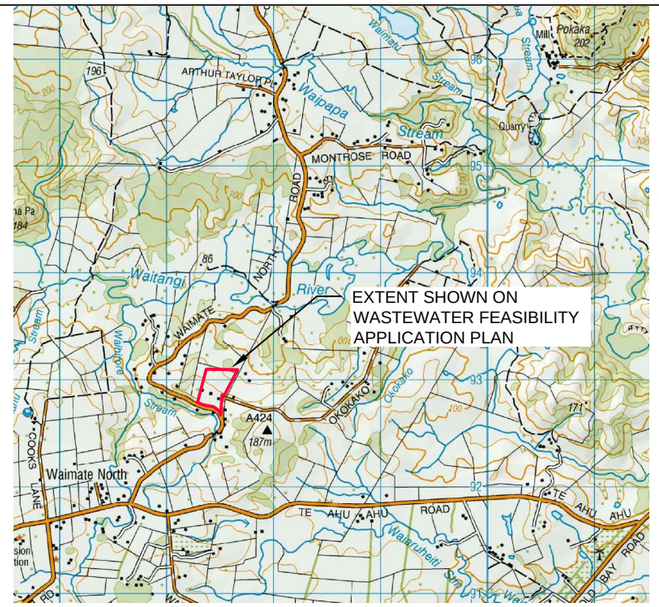
LOTS 1-3 BEING A SUBDIVISION OF LOT 1 DP 195275

Contour interval : 0.5m
Scale @ A3 : 1:1000

Date :October 2025 REF : 8638

SUMMARY OF AREA AVAILABLE FOR EFFLUENT DISPOSAL				
PROPOSED LOTS	LOT AREA (m^2)	AREA AVAILABLE (m^2)	AREA REQUIRED FOR DISPOSAL OF EFFLUENT WITH 50% RESERVE (m^2)	EXCESS AREA AVAILABLE (m^2)
2	4000	1701	540	1161
3	4200	1957	540	1417





LOCALITY MAP

SCALE A3 NTS

LEGEND	
AVAILABLE AREA	
BUFFER EXCLUSION ZONE	
WW SETBACK DISTANCE BOUNDARY	
OPEN DRAIN/CONCRETE KERB AND CHANNEL	
SITE BOUNDARY	
ADJOINING BOUNDARY	
PROPOSED LOTS BOUNDARY	
EXISTING FENCE	
INVESTIGATION BOREHOLE	INV

NOTE:
1. FOR ON-SITE FEASIBILITY PURPOSE AREA REQUIRED BASED ON 6 PERSON (EQUIVALENT TO A 4 BEDROOM) HOUSE WITH TANK WATER AND STANDARD FIXTURES WITH 180 LITRES PER PERSON PER DAY ALLOWANCE, A DESIGN IRRIGATION RATE OF 3 LITRES PER METER SQUARED PER DAY.
2. 1.5m SETBACK FROM PROPOSED LOT BOUNDARIES ACHIEVED.
3. 15m SETBACK ACHIEVED FROM OPEN DRAIN/RIGHT TO DRAIN WATER.
4. 10m BUFFER AREA ACHIEVED DOWN-SLOPE OF THE LOWEST IRRIGATION LINE.

0 7.5 15 22.5 30 37.5

Scale 1:750 (m)

NOTE:
1. ALL STRUCTURES AND FEATURES ARE APPROXIMATE IN LOCATION AND SIZE AND HAVE BEEN BASED FROM A SITE PLAN BY DONALDSONS SURVEY DATED OCTOBER 2025, REF 8638, SITE WALKOVER AND USE OF AERIAL IMAGE
2. LINZ BASEMAP AERIAL IMAGE

FOR RC

VISION CONSULTING ENGINEERS

CLIENT: DONALDSONS SURVEYOR

PROJECT: PROPOSED LOTS 2 AND 3
21 OKOKAKO ROAD, WAIMATE NORTH
LOT 1 DP 195275

DRAWING TITLE: ONSITE WASTEWATER FEASIBILITY PLAN

SURVEY		
DESIGN	SW	5/11/2025
DRAWN	SW	5/11/2025
CHECKED	BCP	10/11/2025
APPROVED	BCP	10/11/2025

No	REVISION	BY	DATE
A	FOR RESOURCE CONSENT	BCP	5/11/2025

SCALE 1:750
SHEET S-01
PROJECT J15954
REV A

Appendix B
VISION Field Logs

BOREHOLE LOG - INV1

Client: Donaldsons Surveyors	**Project: On-site Wastewater Feasibility**	**Project No.: J15954**	
Project Location: 21 Okokako Road, Waimate North	**Borehole Location:** See Wastewater Plan	**Drilled by:**	SW
		Logged by:	SW
Hole started: 7/11/2025	**Drill method:** 50mm handauger		
Hole completed: 7/11/2025			

VISION CONSULTING ENGINEERS

Depth (m)	Graphic	Moisture	Soil Description	**Geology** & other notes
0.00		D	Clayey SILT, with some fine sand, trace fine subrounded gravel; brown, trace rootlets	TOPSOIL
0.05				
0.10				
0.15				
0.20		D-M	Clayey SILT, with some fine sand, with some fine subrounded gravel; brown	KERIKERI VOLCANIC GROUP
0.25				
0.30				
0.35				
0.40			becoming light brown, trace pale orange, with lenses of white silt	
0.45				
0.50			light brown	
0.55				
0.60				
0.65				
0.70				
0.75				
0.80				
0.85				
0.90				
0.95				
1.00				
1.05				
1.10				
1.15				
1.20			End of hole at 1.2 m	
1.25			Groundwater not encountered	
1.30			Target depth achieved	
1.35				
1.40				
1.45				
1.50				
1.55				
1.60				
1.65				
1.70				
1.75				
1.80				
1.85				
1.90				
1.95				
2.00				
2.05				
2.10				
2.15				
2.20				
2.25				
2.30				
2.35				
2.40				
2.45				
2.50				
2.55				
2.60				
2.65				
2.70				
2.75				
2.80				
2.85				
2.90				
2.95				

BOREHOLE LOG - INV2

VISION CONSULTING ENGINEERS

Client: Donaldsons Surveyors	**Project:** On-site Wastewater Feasibility	**Project No.:** J15954	
Project Location: 21 Okokako Road, Waimate North	**Borehole Location:** See Wastewater Plan	**Drilled by:**	SW
		Logged by:	SW
Hole started: 7/11/2025	**Drill method:** 50mm handauger		
Hole completed: 7/11/2025			

Depth (m)	Graphic	Moisture	Soil Description	Geology & other notes
0.00		D-M	Clayey SILT, with some fine sand, trace fine subrounded gravel; brown, trace rootlets	TOPSOIL
0.05				
0.10				
0.15				
0.20		M	Clayey SILT, with some fine sand, with some fine subrounded gravel; brown	KERIKERI VOLCANIC GROUP
0.25				
0.30				
0.35				
0.40				
0.45				
0.50			becoming Silty CLAY	
0.55				
0.60		M	Silty CLAY; trace fine sand, trace fine subangular gravel, brown	
0.65				
0.70				
0.75				
0.80				
0.85				
0.90				
0.95				
1.00			dark brown	
1.05				
1.10				
1.15				
1.20			End of hole at 1.2 m	
1.25			Groundwater not encountered	
1.30			Target depth achieved	
1.35				
1.40				
1.45				
1.50				
1.55				
1.60				
1.65				
1.70				
1.75				
1.80				
1.85				
1.90				
1.95				
2.00				
2.05				
2.10				
2.15				
2.20				
2.25				
2.30				
2.35				
2.40				
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2.60				
2.65				
2.70				
2.75				
2.80				
2.85				
2.90				
2.95				

Top Energy Limited
Level 2, John Butler Centre
60 Kerikeri Road
P O Box 43
Kerikeri 0245
New Zealand
PH +64 (0)9 401 5440
FAX +64 (0)9 407 0611

23 October 2025

Micah Donaldson
Donaldsons Surveyors Limited
PO Box 211
KERIKERI

Email: micah@donaldsons.net.nz

To Whom It May Concern:

RE: PROPOSED SUBDIVISION
PW Cook – 21 Okokako Road, Waimate North. Lot 1 DP 195275.

Thank you for your recent correspondence with attached proposed subdivision scheme plans.

Top Energy's requirement for this subdivision is that -

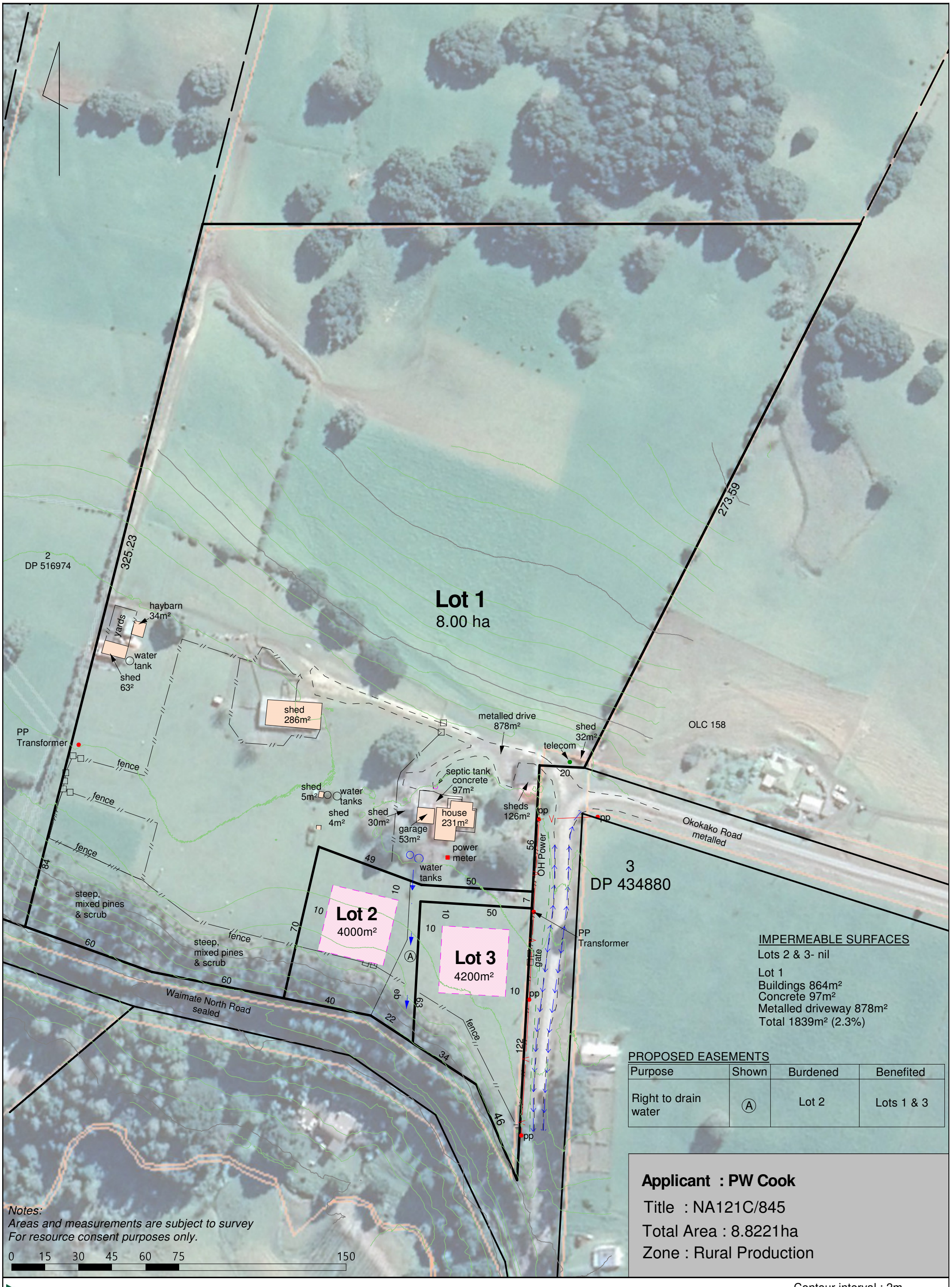
1) Either a consent notice be registered on the titles of Lots 2 & 3 noting that "electricity was not a requirement of the subdivision approval", OR that power be made available for the additional lots.
2) That the existing overhead line be removed from Lots 2 & 3.

Design and costs to provide a power supply to proposed lots 2 & 3 and remove the overhead line could be provided after application and an on-site survey have been completed.
Link to application: Top Energy | Top Energy

In order to get a letter from Top Energy upon completion of your subdivision, a copy of the resource consent decision must be provided.

Yours sincerely

Aaron Birt
Planning and Design
T: 09 407 0685
E: aaron.birt@topenergy.co.nz



IMPERMEABLE SURFACES

Lots 2 & 3- nil

Lot 1
Buildings 864m²
Concrete 97m²
Metalled driveway 878m²
Total 1839m² (2.3%)

PROPOSED EASEMENTS

Purpose	Shown	Burdened	Benefited
Right to drain water	Ⓐ	Lot 2	Lots 1 & 3

Applicant : PW Cook

Title : NA121C/845

Total Area : 8.8221ha

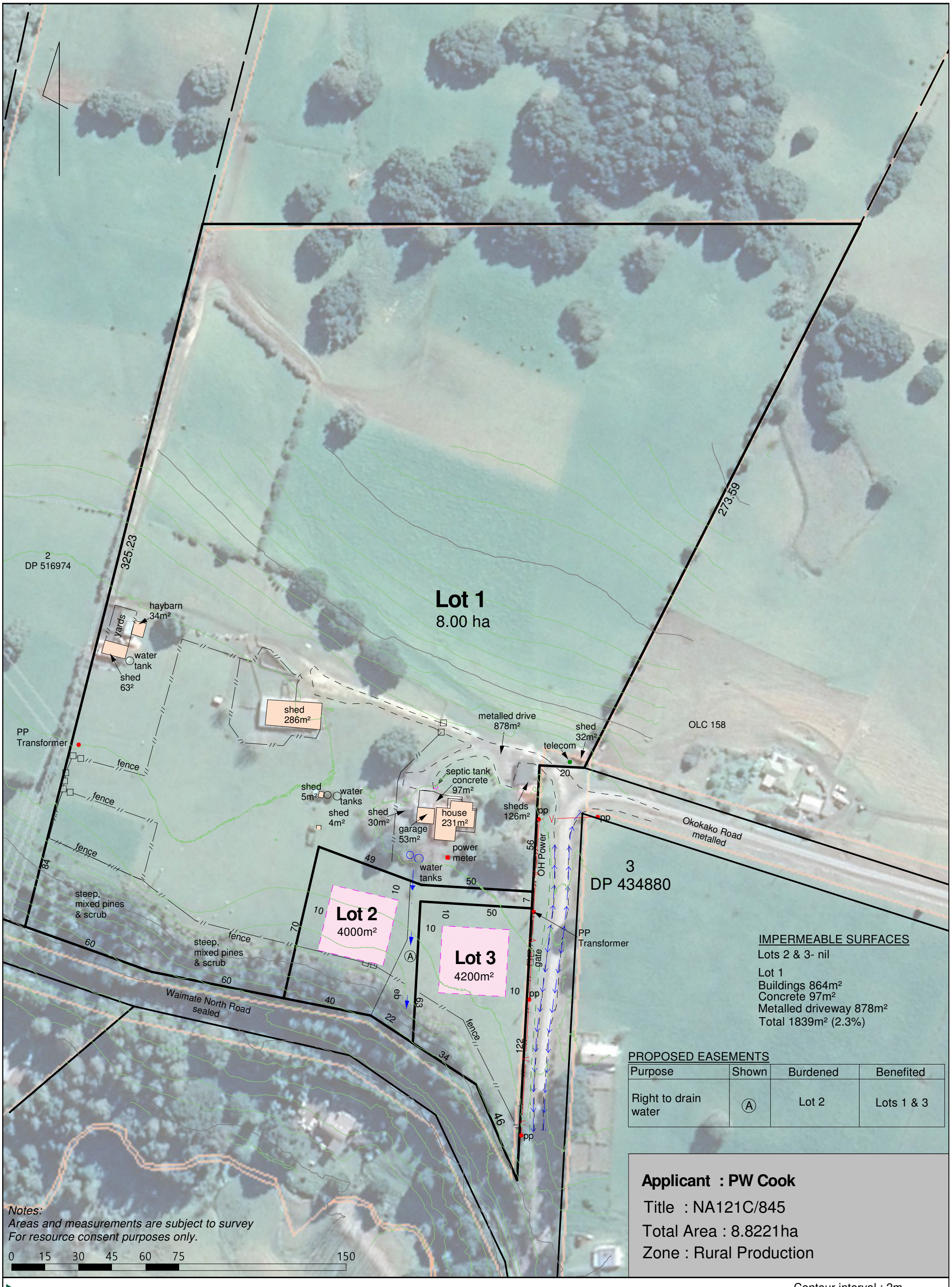
Zone : Rural Production

DONALDSONS
REGISTERED LAND SURVEYORS

LOTS 1-3 BEING A SUBDIVISION OF LOT 1 DP 195275

Contour interval : 2m
Scale @ A3 : 1:1000

Date :October 2025 REF : 8638



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Total 1839m² (2.3%)

PROPOSED EASEMENTS

Purpose	Shown	Burdened	Benefited
Right to drain water	Ⓐ	Lot 2	Lots 1 & 3

Applicant : PW Cook

Title : NA121C/845

Total Area : 8.8221ha

Zone : Rural Production

DONALDSONS
REGISTERED LAND SURVEYORS

LOTS 1-3 BEING A SUBDIVISION OF LOT 1 DP 195275

Contour interval : 2m
Scale @ A3 : 1:1000

Date :October 2025 REF : 8638