THOMSON SURVEY LIMITED

SURVEYORS AND RESOURCE PLANNERS

Our Reference: 10375.1 (FNDC)

18 November 2024

Resource Consents Department
Far North District Council
JB Centre
KERIKERI

Dear Sir/Madam

RE: Proposed 2 lot (one additional) subdivision at 201 Stanners Road, Kerikeri – Edward Lock

I am pleased to submit application on behalf of Edward Lock, for a proposed subdivision of land at Stanners Road, Kerikeri, zoned Rural Production. The application is a discretionary activity.

The application fee of $2,967 has been paid separately via direct credit.

Regards

Lynley Newport
Senior Planner
THOMSON SURVEY LTD

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Background picture represents a New Zealand surveying trig station, used to beacon control survey marks

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

Office Use Only
Application Number:

Application for resource consent or fast-track resource consent

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

1. Pre-Lodgement Meeting

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

2. Type of Consent being applied for

(more than one circle can be ticked):

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

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

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

✔ **Yes** ◯ **No**

4. Consultation

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

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

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

5. Applicant Details

Name/s: Edward Lock

Email: [redacted]

Phone number:

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

6. Address for Correspondence

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

Name/s: Lynley Newport

Email: [redacted]

Phone number:

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

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

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

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

Name/s: Edward and Robin Lock

Property Address/ Location: As per applicant details above

Postcode

8. Application Site Details

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

Name/s: Edward Lock

Site Address/ Location: 201 Stanners Road
Kerikeri

Postcode

Legal Description: Lot 3 DP 551277 **Val Number:** 00211-15807 00211 15807

Certificate of title: 1117294

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

Site visit requirements:

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

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

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

9. Description of the Proposal:

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

Subdivision in the Rural Production Zone to create one additional lot as a discretionary activity.

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) EDWARD LOCK

Email: [redacted]

Phone number:

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

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

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

Name: (please write in full)

Signature: [redacted]
(signature of bill payer)

MANDATORY

Date 15/11/24

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) EDWARD LOUR

Signature: [redacted] Date 15/11/24

application is made by electronic means

Checklist (please tick if information is provided)

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

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

Edward Lock

PROPOSED SUBDIVISION PURSUANT TO FNDC OPERATIVE DISTRICT PLAN

201 Stanners Road, Kerikeri

PLANNER'S REPORT & ASSESSMENT OF ENVIRONMENTAL EFFECTS

Thomson Survey Ltd
Kerikeri

1.0 THE PROPOSAL

The applicant proposes to subdivide their property to create one additional 5.96ha lot, leaving balance Lot 2 of 31.904ha. The property is zoned Rural Production in the Operative District Plan and has frontage to Stanners Road, sealed Council road. The lots will have separate side by side entrances off public road.

The proposed lots will not have access to any Council 3 waters reticulated services and will be reliant on on-site water supply; wastewater treatment and disposal; and stormwater management. A Site Suitability Report supports this application.

A copy of the scheme plan(s) is attached in Appendix 1 and location map in Appendix 2. The Scheme Plan shows an Amalgamation Condition holding Lot 2 on the Scheme Plan with adjacent Lot 2 DP 568811. This carries over an existing amalgamation affecting the application site title, and will keep the amalgamation with the large balance allotment.

1.2 Scope of this Report

This assessment and report accompanies the Resource Consent Application made by the applicant, and is provided in accordance with Section 88 and Schedule 4 of the Resource Management Act 1991. The application seeks consent to subdivide an existing site to create a total of two lots (one additional), as a discretionary activity.

The information provided in this assessment and report is considered commensurate with the scale and intensity of the activity for which consent is being sought. Applicant details are contained within the Application Form 9.

2.0 PROPERTY DETAILS

Location:	201 Stanners Road, Kerikeri
Legal description & RT's:	Lot 3 DP 551277 (& Lot 2 DP 586811); held in Record of Title 1117294, copy attached in Appendix 3.

3.0 SITE DESCRIPTION

3.1 Site Characteristics

The site is zoned Rural Production in the Operative District Plan (ODP) and Horticulture in the Proposed District Plan (PDP). No resource features apply in either the ODP or PDP. The site is located on the west side of Stanners Road, approximately 2km from its intersection with State Highway 10.

The site is currently in grazing with areas of vegetation at the rear north west and north east corners (mixed species, indigenous and exotic). The eastern (front) part of what is proposed Lot 1 features a row of gum trees, and road side screening vegetation.

The site is gently rolling over the pasture land before dropping off downslope in the northwest corner. There is a central raceway from Stanners Road into the middle of the site.

LUC maps show the site as containing LUC 3 & 4 soils *(Far North Maps, Soil layer)*. This aspect is discussed in more detail later in this report.

There are no features as mapped in the Regional Policy Statement for Northland, or the PDP, that affect the property. The property lies within a large area notated as potentially having kiwi present.

The site is not subject to any flood hazard other than along the southern boundary of the balance lot. The land is not erosion prone.

The Far North Maps' Historic Site layer does not show any heritage or cultural features present on the site.

3.2 Legal Interests

The property has an appurtenant right of way in Easement 776785.5, and is also subject to right of way, and electricity supply rights specified in that same instrument. The property is also subject to rights in gross in favour of Kerikeri Irrigation Company, via two existing instruments, Gazette Notice C073868.1 and Transfer 5505704.3.

A part of the property is subject to an electricity right in gross in favour of Top Energy via Transfer C943017.5; and telecommunications right in gross in favour of Telecom NZ in C943017.6. That same part of the property is also subject to a right of way and a right to convey water, electricity and telecommunications in Easement Certificates D067843.5, D248257.5, and more recently imposed Easement Instrument 12670503.4.

A number of previously imposed easements appurtenant to Lot 2 DP 586811 (part of application site), were cancelled via a s243(e) resolution 12670503.3.

Consent Notice 12066030.2 was registered on the title in 2021, affecting Lot 2 DP 586811 only.

Easements and instruments relevant to the subdivision form part of Appendix 3. Easements relevant to the subdivision are shown on the Scheme Plan(s) in Appendix 1.

3.3 Consent History

Building consent history shows only the one building consent – BP1149723, issued in 1981 for a haybarn.

Subdivision consent history shows:

RC 2000365-RMASUB, issued in 1999 for the creation of one additional lifestyle allotment, where the balance lot in that subdivision contains the majority of the application site; and
RC 2200342-RMASUB, issued in February 2020 for the creation of two additional large lots, where the balance is now the application site.

4.0 SCHEDULE 4 – INFORMATION REQUIRED IN AN APPLICATION

Clauses 2 & 3: Information required in all applications

(1) An application for a resource consent for an activity must include the following:	
(a) a description of the activity: *.*	Refer Sections 1 and 5 of this Planning Report.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6 of this Planning Report.
(b) a description of the site at which the activity is to occur:	Refer to Section 3 of this Planning Report.
(c) the full name and address of each	This information is contained in the Form 9 attached to the

owner or occupier of the site:	application.
(d) a description of any other activities that are part of the proposal to which the application relates:	No other activities are part of the proposal. The application is for subdivision pursuant to the FNDC's ODP.
(e) a description of any other resource consents required for the proposal to which the application relates:	None are required.
(f) an assessment of the activity against the matters set out in Part 2:	Refer to Section 7 of this Planning Report.
(g) an assessment of the activity against any relevant provisions of a document referred to in section 104(1)(b), including matters in Clause (2): (a*) any relevant objectives, policies, or rules in a document; and* *(b) any relevant requirements, conditions, or permissions in any rules in a document; and* *(c) any other relevant requirements in a document (for example, in a national environmental standard or other regulations).*	Refer to Sections 5 and 7 of this Planning Report.
(3) An application must also include any of the following that apply:	
(a) if any permitted activity is part of the proposal to which the application relates, a description of the permitted activity that demonstrates that it complies with the requirements, conditions, and permissions for the permitted activity (so that a resource consent is not required for that activity under section 87A(1)):	Refer to section 5.
(b) if the application is affected by section 124 or 165ZH(1)(c) (which relate to existing resource consents), an assessment of the value of the investment of the existing consent holder (for the purposes of section 104(2A)):	There is no existing resource consent. Not applicable.
(c) if the activity is to occur in an area within the scope of a planning document prepared by a customary marine title group under section 85 of the Marine and Coastal Area (Takutai Moana) Act 2011, an assessment of the activity against any resource management matters set out in that	The site is not within an area subject to a customary marine title group. Not applicable.

planning document (for the purposes of section 104(2B)).	
(4) An application for a subdivision consent must also include information that adequately defines the following:	
(a) the position of all new boundaries: *(b) the areas of all new allotments, unless the subdivision involves a cross lease, company lease, or unit plan:* *(c) the locations and areas of new reserves to be created, including any esplanade reserves and esplanade strips:* *(d) the locations and areas of any existing esplanade reserves, esplanade strips, and access strips:* *(e) the locations and areas of any part of the bed of a river or lake to be vested in a territorial authority under section 237A:* *(f) the locations and areas of any land within the coastal marine area (which is to become part of the common marine and coastal area under section 237A):* *(g) the locations and areas of land to be set aside as new roads.*	Refer to Scheme Plans in Appendix 1.

Clause 6: Information required in assessment of environmental effects

(1) An assessment of the activity's effects on the environment must include the following information:	
(a) if it is likely that the activity will result in any significant adverse effect on the environment, a description of any possible alternative locations or methods for undertaking the activity:	Refer to Section 6 of this planning report. The activity will not result in any significant adverse effect on the environment.
(b) an assessment of the actual or potential effect on the environment of the activity:	Refer to Section 6 of this planning report.
(c) if the activity includes the use of hazardous installations, an assessment of any risks to the environment that are likely to arise from such use:	Not applicable as the application does not involve hazardous installations.
(d) if the activity includes the discharge of any contaminant, a description of— *(i) the nature of the discharge and the sensitivity of the receiving environment to adverse effects; and* *(ii) any possible alternative methods of discharge, including discharge into any other receiving environment:*	The subdivision does not involve any discharge of contaminant.

(e) a description of the mitigation measures (including safeguards and contingency plans where relevant) to be undertaken to help prevent or reduce the actual or potential effect:	Refer to Section 6 of this planning report.
(f) identification of the persons affected by the activity, any consultation undertaken, and any response to the views of any person consulted:	Refer to Section 8 of this planning report. No affected persons have been identified.
g) if the scale and significance of the activity's effects are such that monitoring is required, a description of how and by whom the effects will be monitored if the activity is approved:	No monitoring is required as the scale and significance of the effects do not warrant it.
(h) if the activity will, or is likely to, have adverse effects that are more than minor on the exercise of a protected customary right, a description of possible alternative locations or methods for the exercise of the activity (unless written approval for the activity is given by the protected customary rights group).	No protected customary right is affected.

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

(1) An assessment of the activity's effects on the environment must address the following matters:	
(a) any effect on those in the neighbourhood and, where relevant, the wider community, including any social, economic, or cultural effects:	Refer to Sections 6 and 8 of this planning report and also to the assessment of objectives and policies in Section 7.
(b) any physical effect on the locality, including any landscape and visual effects:	Refer to Section 6. The site has no high or outstanding landscape or natural character values.
(c) any effect on ecosystems, including effects on plants or animals and any physical disturbance of habitats in the vicinity:	Refer to Section 6. The subdivision has no effect on ecosystems or habitat.
(d) any effect on natural and physical resources having aesthetic, recreational, scientific, historical, spiritual, or cultural value, or other special value, for present or future generations:	Refer to Section 6. The site has no aesthetic, recreational, scientific, historical, spiritual or cultural values that I am aware of, that will be adversely affected by the act of subdividing.
(e) any discharge of contaminants into the environment, including any unreasonable emission of noise, and options for the treatment and disposal	The subdivision will not result in the discharge of contaminants, nor any unreasonable emission of noise.

of contaminants:	
(f) any risk to the neighbourhood, the wider community, or the environment through natural hazards or hazardous installations.	The subdivision site is not subject to hazard. The proposal does not involve hazardous installations.

5.0 ACTIVITY STATUS

5.1 Operative District Plan

The site is zoned Rural Production and has no resource features.

Table 13.7.2.1: Minimum Lot Sizes

(i) RURAL PRODUCTION ZONE

Controlled Activity Status (Refer also to 13.7.3)	**Restricted Discretionary Activity Status (Refer also to 13.8)**	**Discretionary Activity Status (Refer also to 13.9)**
The minimum lot size is 20ha.	1. The minimum lot size is 12ha; or 2. The minimum lot size is 12ha; or 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; or 4. A maximum of 5 lots in a subdivision (including the parent lot) where the minimum size of the lots is 2ha, and where the subdivision is created from a site that existed at or prior to 28 April 2000; Option 5. N/A as the proposal does not utilise remaining rights.	**1. The minimum lot size is 4ha**; or 2. A maximum of 3 lots in any subdivision, provided that the minimum lot size is 2,000m² and there is at least 1 lot in the subdivision with a minimum size of 4ha, and provided further that the subdivision is of sites which existed at or prior to 28 April 2000, or which are amalgamated from titles existing at or prior to 28 April 2000; or 3. A subdivision in terms of a management plan as per Rule 13.9.2 may be approved. Option 4 N/A

The Title is younger than April 2000 and lots are 4ha in area or greater. The subdivision is therefore a **discretionary** subdivision activity.

Other Rules:

Zone Rules:

The proposal does not result in any breaches of Rural Production Zone rules. The land in both lots is largely vacant apart from farm buildings, all but one of which are 10m or more from

any new proposed boundary. The exception is a small shed at the road frontage that is located where a proposed new boundary is to run. This shed is to be removed.

District Wide Rules:

Chapter 12.1 Landscapes and Natural Features does not apply as there is no landscape or natural feature overlay applying to the site.

Chapter 12.2 Indigenous Flora and Fauna does not apply as no clearance of indigenous vegetation is proposed.

Chapter 12.3 Soils and Minerals does not apply/ is complied with. No subdivision earthworks will be required other than minor works at the access. No earthworks internal to the lots will be required as part of subdivision site works.

Chapter 12.4 Natural Hazards does not apply as the site is not subject to any coastal hazard as currently mapped in the Operative District Plan (the only hazards with rules). There are no areas of bush from which a 20m buffer is required.

Rules in Chapters 12.5, 5A and 5B Heritage do not apply as the site contains no heritage values or sites, no notable trees, no Sites of Cultural Significance to Maori and no registered archaeological sites. The site is not within any Heritage Precinct.

Chapter 12.7 Waterbodies does not apply as the subdivision does not include any buildings or other impermeable surfaces, nor on-site wastewater system, breaching the setback requirements specified in this chapter and there is no indigenous wetland within which works are being proposed.

Chapter 12.8 Hazardous Substances does not apply as the activity being applied for is not a hazardous substances facility.

Chapter 12.9 does not apply as the activity does not involve renewable energy.

Chapter 14 Financial Contributions (esplanade reserve) is not relevant as there is no qualifying water body.

<u>Chapter 15.1 Traffic, Parking and Access</u>

Rules in Chapter 15.1.6A are not considered relevant to the proposal. This is because the traffic intensity rules apply to land use activities, not subdivisions. Similarly rules in Chapter 15.1.6B (parking requirements) also relate to proposed land use activities, not subdivisions. Notwithstanding this, no breaches of either traffic intensity, or parking, rules have been identified.

Chapter 15.1.6C (access) is the only part of Chapter 15.1 relevant to a subdivision. I have not identified any breaches. Stanners Road is sealed council road, to the appropriate standard. Access into the subdivision can be formed to the required standard.

In summary, I have not identified any land use breaches, and the subdivision remains a discretionary subdivision activity.

5.2 Proposed District Plan

The FNDC publicly notified its PDP on 27th July 2022. Whilst the majority of rules in the PDP will not have legal effect until such time as the FNDC publicly notifies its decisions on submissions, there are certain rules that have been identified in the PDP as having immediate legal effect and that may therefore need to be addressed in this application and may affect the category of activity under the Act. These include:

Rules HS-R2, R5, R6 and R9 in regard to hazardous substances on scheduled sites or areas of significance to Maori, significant natural areas or a scheduled heritage resource.

There are no scheduled sites or areas of significance to Maori, significant natural areas or any scheduled heritage resource on the site, therefore these rules are not relevant to the proposal.

Heritage Area Overlays – N/A as none apply to the application site.

Historic Heritage rules and Schedule 2 – N/A as the site does not have any identified (scheduled) historic heritage values.

Notable Trees – N/A – no notable trees on the site.

Sites and Areas of Significance to Maori – N/A – the site does not contain any site or area of significance to Maori.

Ecosystems and Indigenous Biodiversity – Rules IB-R1 to R5 inclusive.

No indigenous vegetation clearance is proposed.

Subdivision (specific parts) – only subdivision provisions relating to land containing Significant Natural Area or Heritage Resources have immediate legal effect. The site contains no scheduled or mapped Significant Natural Areas or Heritage Resources.

Activities on the surface of water – N/A as no such activities are proposed.

Earthworks – Only some rules and standards have legal effect. These are Rules EW-R12 and R13 and related standards EW-S3 and ES-S5 respectively. EW-R12 and associated EW-S3 relate to the requirement to abide by Accidental Discovery Protocol if carrying out earthworks and artefacts are discovered. EW-R13 and associated EW-S5 refer to operating

under appropriate Erosion and Sediment Control measures. The only earthworks required to give effect to the subdivision is the formation or upgrade of access to the boundary of the proposed new lots. This can be carried out in compliance with the above referenced rules/standards.

Signs – N/A – signage does not form part of this application.

Orongo Bay Zone – N/A as the site is not in Oronga Bay Zone.

There are no zone rules in the PDP with immediate legal effect that affect the proposal's activity status.

6.0 ASSESSMENT OF ENVIRONMENTAL EFFECTS

6.1 Allotment Sizes and Dimensions

The proposed lots are large and can easily accommodate 30m x 30m square building envelopes. They are suitable for residential development associated with rural and lifestyle activities.

The Site Suitability Report in Appendix 5 confirms that the proposed 5.9ha lot is suitable for its intended use, in regard to onsite wastewater and stormwater.

6.2 Natural and Other Hazards

The site is not mapped as being subject to any hazard apart from along the southern boundary of the balance lot. Development on Lots 1 & 2 can occur well clear of this area. The Site Suitability Report confirms the site is not mapped as being susceptible to:

- Landslide;
- Erosion;
- Coastal Hazard; or
- Flooding.

There was no evidence of unconsolidated fill, nor any soil contamination. Given the location of the site and its topography, there is no risk from:

- Rock fall;
- Deposition of alluvium;
- Subsidence;
- Fire risk.

6.3 Water Supply

There is no Council reticulated water supply available to the property and the Council can impose its standard requirement in regard to potable and fire fighting water supply for the lots.

6.4 Energy Supply & Telecommunications

Power and phone is not a requirement for rural subdivision. Council can impose a consent notice advising future lot owners that the provision of power and telecoms to the lot boundaries was not a requirement of the subdivision and remains the responsibility of the lot owner. With power running along Stanners Road this will not be an issue.

6.5 Stormwater Disposal

Refer to the Site Suitability Report in Appendix 5, specifically Section 9 of that report. This focuses on Lot 1 given the size of Lot 2. It confirms the likelihood of future development being able to be well within the permitted activity threshold for impermeable surface coverage. The report emphasises the need for a future lot owner to assess effects of stormwater runoff on upstream and downstream properties and has recommended suitable wording for a consent notice.

6.6 Sanitary Sewage Disposal

Refer to Section 10 of the Report in Appendix 5. For the purposes of feasibility the report considered secondary aerated wastewater treatment systems only. This is not to say that alternatives are not available. In any event, at over 5ha in area, Lot 1 has abundant space for on site wastewater treatment and disposal, whether utilising primary or secondary treatment.

6.7 Easements for any purpose & Amalgamation conditions

The property is subject to existing easements in gross as listed in the Existing Easements in Gross Schedule on the face of the Scheme Plan in Appendix 1. It is also subject to an existing easement for right of way and electricity as shown on the Scheme Plan.

The existing title incorporates Lot 3 DP 551277, held with small Lot 2 DP 586811. The latter will remain with Lot 2 (the balance) on the Scheme Plan. Refer to the Scheme Plan for the proposed amalgamation wording.

6.8 Property Access

Property access into the lots will be directly off Stanners Road at the north corner. There is already an expansive crossing in this location. To access proposed Lot 1, one would turn left from the crossing, into the lot. To access the balance lot one would use the existing access into the site.

6.9 Earthworks & Utilities

The subdivision will not require any on site earthworks. Minor earthworks may be required for vehicle crossings into the lots, with volumes well within the ODP's permitted activity standards. No above ground utilities are proposed as part of the subdivision.

6.10 Building Locations

There are no restrictions in regard to natural hazard as to where dwellings/buildings can be located. There is no need to impose minimum floor levels. Both proposed lots have abundant area within their proposed boundaries to enable development clear of any indigenous vegetation or wet areas.

6.11 Preservation and enhancement of heritage resources (including cultural), vegetation, fauna and landscape, and land set aside for conservation purposes

Vegetation, fauna and landscape

The site has no resource feature overlays. It contains no features mapped in the Regional Policy Statement (or PDP) as having any high or outstanding landscape or natural values and there are no mapped biodiversity wetlands. The site does contain areas of mixed species indigenous & exotic vegetation, all within the large balance Lot 2 and not affected by the subdivision or future development.

The property is mapped as 'kiwi present'. The title is not subject to any restriction on the keeping of cats and dogs, and neither are any of the immediately adjacent titles. I believe no restriction is necessary. An Advice Note can advise that any cats or dogs on the lots should be kept inside at night.

Heritage/Cultural

The site does not contain any historic sites, nor any archaeological sites. Neither does the site contain any Sites of Cultural Significance to Maori (as scheduled in the ODP or PDP).

6.12 Soil

The soils on the property are mapped as being a mixture of LUC 3 & 4. This is using the broad brush and large scale Land Use Capability Maps forming the Far North Maps' land cover map layer. This is known to be at a scale not suitable for site specific assessment of soil classification and capability. The applicant has own the land for quite some time. It has never been in commercial horticultural use because the soils are not good quality, being heavily leached and bouldery.

The applicant has commissioned a report from a land management specialist that refutes the inclusion of any land in the LUC 3 category, instead considering the soils to be LUC 4 (at best) & LUC 6. This specialist analysis is discussed in more detail later in this report. In any event, given the size of the lots, I do not believe the proposal adversely affects the life supporting capacity of soil. The subdivision in itself does not sterilise or damage soils and will not result in any built development beyond what is permitted by the District Plan.

6.13 Access to, and protection of, waterbodies

There is no qualifying water body along which, or around which, public access is required to be provided. Water quality will not be adversely impact by the act of subdivision. On site wastewater treatment and disposal systems can be established in compliance with permitted activity standards in the Regional Plan.

6.14 Land use compatibility (reverse sensitivity)

The proposal is consistent with rural character where residential living is interspersed with larger holdings. There is an operating pit quarry (in ground) across Stanners Road. This has been operating for some time now. The bunded edge is 150-200m from a likely house site within Lot 1, with Stanners Road in between. Both sides of the road are planted. There are already 10 or 11 residential dwellings in the vicinity. I do not believe this subdivision unduly increases any risk of reverse sensitivity effects in regard to the quarry. Neither do I foresee any increased risk of reverse sensitivity effects in regard to horticultural activity in the wider area, where no such activity is adjacent to the proposed smaller lot.

6.15 Proximity to Airports

The site is outside of any identified buffer area associated with any airport.

6.16 Natural Character of the Coastal Environment

The site is not within the coastal environment.

6.17 Energy Efficiency and renewable Energy Development/Use

The proposal has not considered energy efficiency. This is an option for future lot owners

6.18 National Grid Corridor

The National Grid does not run through the application site.

6.19 Effects on Rural Character and Amenity

The lots are rural in nature/character. The size of the lots means that rural amenity will be maintained. In my opinion, the proposal will have no adverse effects on rural character.

6.20 Effects on Landscape & Natural Values

The site does not have any high or outstanding landscape or natural values.

6.21 Cumulative and Precedent Effects

Cumulative Effect:

The proposal will create one additional lot, quite large at nearly 6ha, and easily able to internalise potential effects of any future built development. The proposal does not create an adverse cumulative effect.

Precedent Effect:

Precedent effects are a matter for consideration when a consent authority is considering whether or not to grant a consent. Determining whether there is an adverse precedent effect is, however, generally reserved for non complying activities, which this is not. In any event, the proposed subdivision does not set an adverse precedent effect and does not threaten the integrity of the ODP or those parts of the PDP with legal effect.

7.0 STATUTORY ASSESSMENT

7.1 Operative District Plan Objectives and Policies

Objectives and policies relevant to this proposal are considered to be primarily those listed in Chapter 8.6 (Rural Production Zone); and 13 (Subdivision), of the District Plan. These are listed and discussed below where relevant to this proposal.

Subdivision Objectives & Policies

Objectives

13.3.1 To provide for the subdivision of land in such a way as will be consistent with the purpose of the various zones in the Plan, and will promote the sustainable management of the natural and physical resources of the District, including airports and roads and the social, economic and cultural well being of people and communities

This is an enabling objective. The Rural Production Zone is predominantly, but not exclusively, a working productive rural zone. The site is 38ha in area. It has not been utilised for horticulture crops because of soil and climate limitations, despite land around it being in crops. Its productivity has been restricted to grazing, and this can continue on both lots. The creation of one small rural / large lifestyle lot, with frontage to Council maintained public road is considered a sustainable use of the land.

13.3.2 To ensure that subdivision of land is appropriate and is carried out in a manner that does not compromise the life-supporting capacity of air, water, soil or ecosystems, and that any actual or potential adverse effects on the environment which result directly from subdivision, including reverse sensitivity effects and the creation or acceleration of natural hazards, are avoided, remedied or mitigated.

The Assessment of Environmental Effects and supporting report conclude that the proposed subdivision is appropriate for the site and that the subdivision can avoid, remedy or mitigate any potential adverse effects.

Objectives 13.3.3 and 13.3.4 refer to outstanding landscapes or natural features; and scheduled heritage resources; and to land in the coastal environment. The site exhibits none of these features.

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

Both lots will be required to be self sufficient in terms of on-site water storage and appropriate stormwater management. The supporting Site Suitability Report confirms this is achievable.

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.

This objective is likely intended to encourage Management Plan applications, and does not have a lot of relevance to this proposal.

13.3.7 To ensure the relationship between Maori and their ancestral lands, water, sites, wahi tapu and other taonga is recognised and provided for.

And related Policy

13.4.11 That subdivision recognises and provides for the relationship of Maori and their culture and traditions, with their ancestral lands, water, sites, waahi tapu and other taonga and shall take into account the principles of the Treaty of Waitangi.

The site is not known to contain any sites of cultural significance to Maori, or wahi tapu. The subdivision will have minimal, if any, impact on water quality. I do not believe that the proposal adversely impacts on the ability of Maori to maintain their relationship with ancestral lands, water, sites, wahi tapu and other taonga.

13.3.8 To ensure that all new subdivision provides an electricity supply sufficient to meet the needs of the activities that will establish on the new lots created.

The provision of power is not a requirement for rural allotments.

13.3.9 To ensure, to the greatest extent possible, that all new subdivision supports energy efficient design through appropriate site layout and orientation in order to maximise the ability to provide light, heating, ventilation and cooling through passive design strategies for any buildings developed on the site(s).

13.3.10 To ensure that the design of all new subdivision promotes efficient provision of infrastructure, including access to alternative transport options, communications and local services.

The subdivision has not considered energy efficiency, however, both lots can provide building sites with a northerly orientation and abundant access to sunlight. The subdivision adjoins Council road.

Objective 13.3.11 is not discussed further as there is no National Grid on or near the subject site.

Policies

13.4.1 That the sizes, dimensions and distribution of allotments created through the subdivision process be determined with regard to the potential effects including cumulative effects, of the use of those allotments on:
(a) natural character, particularly of the coastal environment;
(b) ecological values;

(c) landscape values;
(d) amenity values;
(e) cultural values;
(f) heritage values; and
(g) existing land uses.

The values outlined above, where relevant to the proposal, have been discussed earlier in this report. I believe regard has been had to items (a) through (g) in the design of the subdivision.

13.4.2 That standards be imposed upon the subdivision of land to require safe and effective vehicular and pedestrian access to new properties. And

13.4.5 That access to, and servicing of, the new allotments be provided for in such a way as will avoid, remedy or mitigate any adverse effects on neighbouring property, public roads (including State Highways), and the natural and physical resources of the site caused by silt runoff, traffic, excavation and filling and removal of vegetation.

Access to both lots is to be directly off Stanners Road. This will require minor works to upgrade and construct crossings. The construction will not require any removal of indigenous vegetation and can be subject to sediment control and traffic management measures. On site wastewater treatment and disposal and stormwater management is achievable.

13.4.3 That natural and other hazards be taken into account in the design and location of any subdivision.

The site is not identified as being subject to any hazard.

13.4.4 That in any subdivision where provision is made for connection to utility services, the potential adverse visual impacts of these services are avoided.

Power and telecommunications are not a requirement for rural allotments.

13.4.6 That any subdivision proposal provides for the protection, restoration and enhancement of heritage resources, areas of significant indigenous vegetation and significant habitats of indigenous fauna, threatened species, the natural character of the coastal environment and riparian margins, and outstanding landscapes and natural features where appropriate.

The site does not contain any heritage resources. There are no areas of indigenous vegetation affected. The site is not in the coastal environment and there are no riparian margins. The site contains no outstanding landscape or natural features.

Policy 13.4.7 is not relevant as there is no qualifying water body to which esplanade requirements apply.

13.4.8 That the provision of water storage be taken into account in the design of any subdivision.

This is discussed earlier. Each lot will require on-site water supply and storage.

Policies 13.4.9 and 13.4.10 are not discussed further. The former relates to bonus development donor and recipient areas, which are not contemplated in this proposal; whilst the latter only applies to subdivision in the Conservation Zone.

13.4.12 That more intensive, innovative development and subdivision which recognises specific site characteristics is provided for through the management plan rule where this will result in superior environmental outcomes.

The application is not lodged as a Management Plan application.

13.4.13 Subdivision, use and development shall preserve and where possible enhance, restore and rehabilitate the character of the applicable zone in regards to ***s6 matters****. In addition subdivision, use and development shall avoid adverse effects as far as practicable by using techniques including:*
(a) clustering or grouping development within areas where there is the least impact on natural character and its elements such as indigenous vegetation, landforms, rivers, streams and wetlands, and coherent natural patterns;
(b) minimising the visual impact of buildings, development, and associated vegetation clearance and earthworks, particularly as seen from public land and the coastal marine area;
(c) providing for, through siting of buildings and development and design of subdivisions, legal public right of access to and use of the foreshore and any esplanade areas;
(d) through siting of buildings and development, design of subdivisions, and provision of access that recognise and provide for the relationship of Maori with their culture, traditions and taonga including concepts of mauri, tapu, mana, wehi and karakia and the important contribution Maori culture makes to the character of the District (refer Chapter 2 and in particular Section 2.5 and Council's "Tangata Whenua Values and Perspectives" (2004);
(e) providing planting of indigenous vegetation in a way that links existing habitats of indigenous fauna and provides the opportunity for the extension, enhancement or creation of habitats for indigenous fauna, including mechanisms to exclude pests;
(f) protecting historic heritage through the siting of buildings and development and design of subdivisions.
(g) achieving hydraulic neutrality and ensuring that natural hazards will not be exacerbated or induced through the siting and design of buildings and development.

S6 matters (National Importance) are addressed later in this report.

In addition:

(a) The proposal subdivides off a large rural/lifestyle block from a larger farmed rural block, and provides for an appropriate type and scale of activity for the zone;
(b) The proposal is in an area not displaying high or outstanding natural values;
(c) The site contains no significant indigenous vegetation;
(d) The site is not within the coastal environment;
(e) The proposal enables the maintenance of amenity and rural character values;
(f) The proposal is not believed to negatively impact on the relationship of Maori with their culture;
(g) There are no identified heritage values within the site; and
(h) The site is not subject to any natural hazards.

I consider the proposal to be consistent with Policy 13.4.13.

13.4.14 That the objectives and policies of the applicable environment and zone and relevant parts of Part 3 of the Plan will be taken into account when considering the intensity, design and layout of any subdivision.

The subdivision has had regard to the underlying zone's objectives and policies – see below.

13.4.15 That conditions be imposed upon the design of subdivision of land to require that the layout and orientation of all new lots and building platforms created include, as appropriate, provisions for achieving the following: (a) development of energy efficient buildings and structures; (b) reduced travel distances and private car usage; (c) encouragement of pedestrian and cycle use; (d) access to alternative transport facilities; (e) domestic or community renewable electricity generation and renewable energy use

The subdivision layout has taken the above matters into account.

Policy 13.4.16 is not considered relevant as it only relates to the National Grid.

In summary, I believe the proposal to be more consistent than not with the above Objectives and Policies.

Rural Production Zone Objectives and Policies

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.

8.6.3.3 To promote the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

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

8.6.3.6 To avoid, remedy or mitigate the actual and potential conflicts between new land use activities and existing lawfully established activities (reverse sensitivity) within the Rural Production Zone and on land use activities in neighbouring zones.

8.6.3.7 To avoid remedy or mitigate the adverse effects of incompatible use or development on natural and physical resources.

8.6.3.8 To enable the efficient establishment and operation of activities and services that have a functional need to be located in rural environments.

8.6.3.9 To enable rural production activities to be undertaken in the zone.

And 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 on the environment, including any reverse sensitivity effects, on the

environment resulting from these activities are avoided, remedied or mitigated and are not to the detriment of rural productivity.

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.

8.6.4.4 That the type, scale and intensity of development allowed shall have regard to the maintenance and enhancement of the amenity values of the Rural Production Zone to a level that is consistent with the productive intent of the zone.

8.6.4.5 That the efficient use and development of physical and natural resources be taken into account in the implementation of the Plan.

8.6.4.7 That although a wide range of activities that promote rural productivity are appropriate in the Rural Production Zone, an underlying goal is to avoid the actual and potential adverse effects of conflicting land use activities.

8.6.4.8 That activities whose adverse effects, including reverse sensitivity effects cannot be avoided remedied or mitigated are given separation from other activities

8.6.4.9 That activities be discouraged from locating where they are sensitive to the effects of or may compromise the continued operation of lawfully established existing activities in the Rural production zone and in neighbouring zones.

Objective 8.6.3.5 and Policy 8.6.4.6 are not considered relevant as they are solely related to Kerikeri Road.

The proposed subdivision promotes an efficient use and development of the land (Objective 8.6.3.2). Amenity values can be maintained (8.6.3.3). Reverse sensitivity effects are not considered to be a significant risk (Objectives 8.6.3.6-8.6.3.9 inclusive and Policies 8.6.4.8 and 8.6.4.9).

Policy 8.6.4.7 anticipates a wide range of activities that promote rural productivity, and that the underlying goal is to avoid any actual and potential adverse effects of conflicting land use activities. I believe in the case of this proposal, given the site's location, and the existing and proposed land uses around it, that additional adverse reverse sensitivity effects are unlikely. The site does not contain highly versatile soils (refer to report in Appendix 4).

The proposal provides for sustainable management of natural and physical resources (8.2.4.1). Off site effects can be avoided, remedied or mitigated (8.6.4.2 and 8.6.4.3). Amenity values can be maintained and enhanced (8.6.4.4). The proposal enables the efficient use and development of natural and physical resources (8.6.4.5).

In summary, I believe the proposal to be consistent with the objectives and policies as cited above.

7.2 Proposed District Plan Objectives and Policies

An assessment against the relevant objectives and policies in the Subdivision section of the Proposed District Plan (PDP) follows:

SUB-O1
Subdivision results in the efficient use of land, which:
a. achieves the objectives of each relevant zone, overlays and district wide provisions;
b. contributes to the local character and sense of place;
c. avoids reverse sensitivity issues that would prevent or adversely affect activities already established on land from continuing to operate;
d. avoids land use patterns which would prevent land from achieving the objectives and policies of the zone in which it is located;
e. does not increase risk from natural hazards or risks are mitigates and existing risks reduced; and
f. manages adverse effects on the environment.

SUB-O2
Subdivision provides for the:
a. Protection of highly productive land; and
b. Protection, restoration or enhancement of Outstanding Natural Features, Outstanding Natural Landscapes, Natural Character of the Coastal Environment, Areas of High Natural Character, Outstanding Natural Character, wetland, lake and river margins, Significant Natural Areas, Sites and Areas of Significance to Māori, and Historic Heritage.

SUB-O3 *Infrastructure is planned to service the proposed subdivision and development where:*
a. there is existing infrastructure connection, infrastructure should provided in an integrated, efficient, coordinated and future-proofed manner at the time of subdivision; and
b.where no existing connection is available infrastructure should be planned and consideration be give n to connections with the wider infrastructure network.

SUB-O4
Subdivision is accessible, connected, and integrated with the surrounding environment and provides for:
a. public open spaces;
b. esplanade where land adjoins the coastal marine area; and
c. esplanade where land adjoins other qualifying water bodies

I consider the subdivision to achieve the objectives of the relevant zone, and district wide provisions. Local character is not affected; significant additional reverse sensitivity issues will not result; risk from natural hazards will not be increased, as there are none. Adverse effects on the environment are considered to be less than minor and not requiring mitigation (SUB-O1).

The site contains land that is mapped as meeting the definition of 'highly productive land' but site specific analysis and mapping has shown this not to be the case. The site contains no ONF's or ONL's, nor any areas of high or outstanding natural character. There are no wetlands affected and no lakes or rivers, nor Sites and Areas of Significance to Maori and no Historic Heritage areas. There are no areas of significant indigenous vegetation (SUB-O2).

The proposal is consistent with SUB-O3 and SUB-O4 does not apply.

SUB-P1
Enable boundary adjustments that:

a. do not alter:
i. the degree of non compliance with District Plan rules and standards;
ii. the number and location of any access; and
iii. the number of certificates of title; and
b. are in accordance with the minimum lot sizes of the zone and comply with access, infrastructure and esplanade provisions.

Not relevant – application is not a boundary adjustment.

SUB-P2
Enable subdivision for the purpose of public works, infrastructure, reserves or access.

Not relevant – application does not involve public works, infrastructure, reserves or access lots.

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 subdivision results in lots that are consistent with the Horticulture Zone discretionary minimum lot size even though the land has never been considered suitable for supporting productive horticultural use because of poor quality soils. In any event the subdivision provisions have no legal effect and are the subject of multiple submissions. The allotments will be of size that is consistent with the purpose, characteristics and qualities of the zone, where the expectation is for limited residential use on productive holdings (in this case grazing as opposed to horticulture crops). The lots can accommodate building platforms and have legal and physical access.

SUB-P4
Manage subdivision of land as detailed in the district wide, natural environment values, historical and cultural values and hazard and risks sections of the plan

The subdivision has had regard to all the matters listed, where relevant.

SUB-P5
Manage subdivision design and layout in the General Residential, Mixed Use and Settlement zoneto provide for safe, connected and accessible environments by.....:

Not relevant. The site is not zoned any of the zones referred to.

SUB-P6 *Require infrastructure to be provided in an integrated and comprehensive manner by:*
a. demonstrating that the subdivision will be appropriately serviced and integrated with existing and planned infrastructure if available; and
b. ensuring that the infrastructure is provided is in accordance the purpose, characteristics and qualities of the zone.

The subdivision is rural with no nearby Council administered or operated infrastructure except for the road.

SUB- P7
Require the vesting of esplanade reserves when subdividing land adjoining the coast or other qualifying water bodies.

No qualifying water body and no lot less than 4ha in area.

SUB-P8 *Avoid rural lifestyle subdivision in the Rural Production zone unless the subdivision:*
- *a. will protect a qualifying SNA in perpetuity and result in the SNA being added to the District Plan SNA schedule; and*
- *b. will not result in the loss of versatile soils for primary production activities.*

Not relevant. Site is not zoned Rural Production in the PDP.

SUB-P9
Avoid subdivision [sic] rural lifestyle subdivision in the Rural Production zone and Rural residential subdivision inthe Rural Lifestyle zone unless the development achieves the environmental outcomes required in the management plan subdivision rule.

Not relevant as the site is not zoned Rural Production or Rural Lifestyle in the PDP.

SUB-P10
To protect amenity and character by avoiding the subdivision of minor residential units from Principal residential
units where resultant allotments do not comply with minimum allotment size and residential density.

Not relevant. No minor residential units exist.

SUB-P11
Manage subdivision to address the effects of the activity ***requiring resource consent*** *including (but not limited to) consideration of the following matters where relevant to the application:*
a.consistency with the scale, density, design and character of the environment and purpose of the zone;
b. the location, scale and design of buildings and structures;
c.the adequacy and capacity of available or programmed development infrastructure to accommodate the proposed activity; or the capacity of the site to cater for on-site infrastructure associated with the proposed activity;
d. managing natural hazards;
e. Any adverse effects on areas with historic heritage and cultural values, natural features and landscapes, natural character or indigenous biodiversity values; and
f. any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

The subdivision does not require resource consent under the PDP. Notwithstanding that, the subdivision has considered the above matters, where relevant.

In summary I believe the proposed subdivision to be consistent with the PDP's objectives and policies in regard to subdivision.

The site is zoned Horticulture in the Proposed District Plan.

Objectives

HZ-O1
The Horticulture zone is managed to ensure its long-term availability for horticultural activities and its longterm protection for the benefit of current and future generations.

HZ-O2

The Horticulture zone enables horticultural and ancillary activities, while managing adverse environmental effects on site.

HZ-O3

Land use and subdivision in the Horticulture zone:
a.avoids land sterilisation that reduces the potential for highly productive land to be used for a horticulture activity;
b. avoids land fragmentation that comprises the use of land for horticultural activities;
c.avoids any reverse sensitivity effects that may constrain the effective and efficient operation of primary production activities;
d. does not exacerbate any natural hazards;
e. maintains the rural character and amenity of the zone;
f. is able to be serviced by on-site infrastructure.

The site has not ever proven to be productive in terms of any horticultural crop, largely due to the poor quality of the soils. The site does not share the soil characteristics of some of the other land in the general area. Notwithstanding this, a 6ha and a 32ha property would both remain 'available' for horticultural activities should a future owner wish to invest heavily in soil and productivity improvements (HZ-O1 and O2). Site specific analysis has shown that the land is not "highly productive land", i.e. not LUC class 1, 2 or 3. Should a future lot owner wish to continue with grazing on the lots, they can. Should a future lot owner wish to pursue a horticultural activity they can, albeit there are limitations to this being a likely viable option. The subdivision does not exacerbate natural hazards, maintains the rural character and amenity of the zone and is able to be serviced by onsite infrastructure (HZ-O3).

Policies

HZ-P1

Identify a Horticulture zone in the Kerikeri/Waipapa area using the following criteria:
a. presence of highly productive land suitable for horticultural use;
b. access to a water source, such as an irrigation scheme or dam able to support horticultural use; and
c. infrastructure available to support horticultural use.

This policy applies to the consent authority, not an individual property owner. Information is provided with this application showing 'highly productive land' is not present.

HZ-P2

Avoid land use that: ....

Not relevant as the application is a subdivision, not a land use.

HZ-P3

Enable horticulture and associated ancillary activities that support the function of the Horticulture zone, where:
a. adverse effects are contained on site to the extent practicable; and
b. they are able to be serviced by onsite infrastructure.

Not relevant as the subdivision does not include a horticulture or associated ancillary activity.

HZ-P4
Ensure residential activities are designed and located to avoid, or otherwise mitigate, reverse sensitivity effects on horticulture activities, including adverse effects associated with dust, noise, spray drift and potable water collection.

The application does not include residential activities, but does provide for future residential use on two lots. The 32ha lot can accommodate residential activity well inside any of its boundaries, creating minimal, if any, reverse sensitivity effects on horticulture activities. The proposed, and most likely house site to be within the 6ha Lot 1, can also be set well back from boundaries. The nearest historic horticultural activity was to the north, with intervening vegetation and access road. This was a small scale citrus block, since removed (according to recent Google aerial imagery). A residential dwelling on Lot 1 can be well away from horticultural activity the south, and there are 3 or 4 intervening properties in any event.

HZ-P5
Manage the subdivision of land in the Horticulture zone to:
a.avoid fragmentation that results in loss of highly productive land for use by horticulture and other farming activities;
b.ensure the long-
term viability of the highly productive land resource to undertake a range of horticulture uses;
c. enable a suitable building platform for a future residential unit; and
d. ensure there is provision of appropriate onsite infrastructure.

Site specific analysis of the soils shows that there are no LUC class 1, 2 or 3 soils present on the site. Notwithstanding this, the lots are both larger than the discretionary minimum lot size applying in the zone. The proposal is consistent with parts (c) & (d).

HZ-P6
Encourage the amalgamation or boundary adjustments of Horticulture zoned land where this will help to make horticultural activities more viable on the land.

This is not considered a viable or practical alternative given the poor quality soils present on the site.

HZ-P7
Manage land use and subdivision to address the effects of the activity ***requiring resource consent****, including (but not limited to) consideration of the following matters where relevant to the application:*
a. whether the proposal will increase production potential in the zone;
b. whether the activity relies on the productive nature of the soil;
c. consistency with the scale and character of the rural environment;
d. location, scale and design of buildings or structures;
e. for subdivision or non-primary production activities:
i. scale and compatibility with rural activities;
ii. potential reverse sensitivity effects on primary production activities and existing infrastructure;
iii. the potential for loss of highly productive land, land sterilisation or fragmentation
f. at zone interfaces:
i. any setbacks, fencing, screening or landscaping required to address potential conflicts;

ii.the extent to which adverse effects on adjoining or surrounding sites are mitigated and internalised within the site as far as practicable;

g.the capacity of the site to cater for on-
site infrastructure associated with the proposed activity, including
whether the site has access to a water source such as an irrigation network supply, dam or aquifer;
h. the adequacy of roading infrastructure to service the proposed activity;
i.Any adverse effects on historic heritage and cultural values, natural features and landscapes or indigenous biodiversity;
j.Any historical, spiritual, or cultural association held by tangata whenua, with regard to the matters set out in Policy TW-P6.

The subdivision does not require any consent under the PDP and the above policy is therefore of limited relevance. I consider the subdivision to maintain rural character and amenity and the lots are suitable for their intended use.

7.3 Part 2 Matters

5 Purpose

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

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

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

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

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

The proposal provides for peoples' social and economic well being, and for their health and safety, while sustaining the potential of natural and physical resources, safeguarding the life-supporting capacity of air, water, soil and the ecosystems; and avoiding, remedying or mitigating adverse effects on the environment. Whilst the land has been zoned for Horticultural use it needs to be noted that the land has never proven to be suitable for this use. Historic photos (Retolens), dating back as far as 1944, show no horticultural use. There will have been a reason for this, likely less productive soils than required for horticultural use.

6 Matters of national importance

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

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

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

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

(d) the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers:
(e) the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga:
(f) the protection of historic heritage from inappropriate subdivision, use, and development:
(g) the protection of protected customary rights:
(h) the management of significant risks from natural hazards.

The site does not exhibit the features listed above.

7 Other matters
In achieving the purpose of this Act, all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to—
(a) kaitiakitanga:
(aa) the ethic of stewardship:
(b) the efficient use and development of natural and physical resources:
(ba) the efficiency of the end use of energy:
(c) the maintenance and enhancement of amenity values:
(d) intrinsic values of ecosystems:
(e) [Repealed]
(f) maintenance and enhancement of the quality of the environment:
(g) any finite characteristics of natural and physical resources:
(h) the protection of the habitat of trout and salmon:
(i) the effects of climate change:
(j) the benefits to be derived from the use and development of renewable energy.

Regard has been had to any relevant parts of Section 7 of the RMA, "Other Matters". These include 7(b), (c), (d), (f) and (g). Proposed layout and lot size, along with appropriate waste water and stormwater management, will ensure the maintenance of amenity values and the quality of the environment. The proposal has had regard to the values of ecosystems. The subdivision does not materially affect the productive capacity of any rural zoned land.

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

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

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

7.4 National Policy Statement – Highly Productive Land

The National Policy Statement for Highly Productive Land is relevant given that (a) the site is zoned Rural Production; and (b) the application site is mapped, in part only, as containing LUC 3 soils (in part only) - according to the 1:50,000 LUC maps used by the Council.

Clause 3.5(7) reads:

Until a regional policy statement containing maps of highly productive land in the region is operative, each relevant territorial authority and consent authority must apply this National Policy Statement as if references to highly productive land were references to land that, at the commencement date:

(a) is

(i) zoned general rural or rural production; and

(ii) LUC 1, 2, or 3 land; but

(b) is not: (i) identified for future urban development; or

(ii) subject to a Council initiated, or an adopted, notified plan change to rezone it from general rural or rural production to urban or rural lifestyle.

The site therefore falls within the definition of "highly productive land" as outlined in 3.5(7) above. However, the site has never been economically productive in terms of horticultural use. A report was commissioned from Bob Cathcart of AgFirst Northland Ltd to do a site specific investigation of the soils. The investigation concluded that the property does not have Class 3 LUC soils, and at best, contains some Class 4 LUC soils, which are low fertility, unsuited to horticulture, and seasonally limited for pastoral farming. This report is in Appendix 4. This report was prepared for an alternative subdivision layout that the applicant is no longer pursuing, but remains pertinent to the current layout being applied for.

The NPS HPL does not limit classification to the Land Use Capability Class 1, 2 or 3 as mapped by the NZ Land Resource Inventory, but also provides for "more detailed mapping that uses the Land Use Capability classification". This is what has been done via the report supporting this application. The report highlights the caution that needs to be exercised when using the digital database that the NPS HL, and therefore Council, is relying on – both in terms of scale and currency of the data.

The application site is on old lava flow which has eroded over thousands of years such that the volcanic soil has been removed from the surface of the basalt lava flow, leaving behind exposed boulders of more resistant basalt rock. The report assesses the area along the stream at the southern boundary of Lot 2 to be LUC 6s and/or 6w. A part of Lot 2 in the north western corner, is similarly assessed as LUC 6, this time 6e.

The balance of the application site, including land in proposed Lot 1 (the 6ha lot) is assessed as LUC 4e12 for the most part, with the roadside portion of Lot 1 assessed as LUC 4s2. This flattish land, along the Stanner's Road frontage has Otaha clay, in places gravelly clay loam, formed on the lava flow and on sediment. It too has large boulders scattered through it and, soil has eroded off its surface, resulting in that surface now being lower than it would have

been a few thousand years ago. This land is not suited to commercial horticulture, hence its assessment as 4s2.

The 4e12 classification applies to the vast majority of the application site where there is podzolised soil formed on greywacke, tending towards the mature podzol Wharekohe silt loam – which has a dense silica pan.

In summary I consider the analysis provided with the application, utilising the same methodology as used in deriving the mapping utilised in the NPS HL, but on a site specific level, to show that the proposal does not subdivide highly productive land and is therefore not required to have any further regard to the NPS HPL.

7.5 Other National Policy Statements and National Environmental Standards

NES Freshwater

The site does not contain any 'natural inland wetlands', nor any waterbodies in the vicinity of any future works.

NES Assessing and Management Contaminants in Soil to Protect Human Health

To my knowledge the land to be within Lots 1 & 2 has not historically supported any activity to which the NES CS applies.

NPS Indigenous Biodiversity

The site contains indigenous vegetation, none of which is mapped as having any significance. No clearance is required. I consider the proposal is consistent with the NPS IB.

7.6 Regional Policy Statement

The Regional Policy Statement for Northland contains objectives and policies related to infrastructure and regional form and economic development. These are enabling in promoting sustainable management in a way that is attractive for business and investment. The proposal is consistent with these objectives and policies.

Objective 3.6 Economic activities – reverse sensitivity and sterilisation

The viability of land and activities important for Northland's economy is protected from the negative impacts of new subdivision, use and development, with particular emphasis on either:

(a) Reverse sensitivity for existing:

(i) Primary production activities; .....

The associated Policy to the above Objective is ***Policy 5.1.1 – Planned and coordinated development***.

Subdivision, use and development should be located, designed and built in a planned and co-ordinated manner which: ....

(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; ...

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

(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 ...

Policy 5.1.1 seeks to ensure that subdivision in a primary production zone does 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*".

This has been discussed at length elsewhere in this planning report. The subdivision does not involve highly versatile soils and does not "*materially reduce the potential for soil-based primary production on land with highly versatile soils*".

5.1.3 Policy – Avoiding the adverse effects of new use(s) and development

Avoid the adverse effects, including reverse sensitivity effects of new subdivision, use and development, particularly residential development on the following:

(a) Primary production activities in primary production zones (including within the coastal marine area);.....

In regard to this subdivision, it is considered that no additional adverse reverse sensitivity issues are likely to arise as a result.

8.0 s95A-E ASSESSMENT & CONSULTATION

8.1 S95A Public Notification Assessment

A consent authority must follow the steps set out in s95A to determine whether to publicly notify an application for a resource consent. Step 1 specifies when public notification is mandatory in certain circumstances. No such circumstances exist. Step 2 of s95A specifies the circumstances that preclude public notification. No such circumstance exists and Step 3 of s95A must be considered. This specifies that public notification is required in certain circumstances.

The application is not subject to a rule or national environmental standard that requires public notification. This report and AEE concludes that the activity will not have, nor is it likely to have, adverse effects on the environment that are more than minor. In summary public notification is not required pursuant to Step 3 of s95A.

Step 4 of s95A states that the consent authority is to determine if there are any special circumstances under which public notification may be warranted. I do not consider any such circumstances exist.

8.2 S95B Limited Notification Assessment

A consent authority must follow the steps set out in s95B to determine whether to give limited notification of an application for a resource consent, if the application is not publicly notified pursuant to s95A. Step 1 identifies certain affected groups and affected persons that must be notified. None exist in this instance.

Step 2 of s95B specifies the circumstances that preclude limited notification. No such circumstance exists and Step 3 of s95B must be considered. This specifies that certain other affected persons must be notified. The application is not for a boundary activity. The s95E assessment below concludes that there are no affected persons to be notified. There is no requirement to limited notify the application pursuant to Step 3.

Step 4 of s95B states that the consent authority is to determine if there are any special circumstances under which limited notification may be warranted. I do not consider any such circumstances exist.

8.3 S95D Level of Adverse Effects

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

8.4 S95E Affected Persons

A person is an 'affected person' if the consent authority decides that the activity's adverse effects on the person are minor or more than minor (but are not less than minor). A person is not an affected person if they have provided written approval for the proposed activity.

The activity is a discretionary activity and within the expected outcomes of subdivision and development of the Rural Production Zone. Built development can occur within the proposed new lots in compliance with all bulk and location rules applying to the zone. The proposal does not unduly increase reverse sensitivity effects. No dispensation is being sought in terms of access standards and appropriate consent notices will ensure no downstream impact as a result of future development on Lot 1. I have reached the conclusion that the proposal will not have any minor or more than minor effects on adjacent properties.

The site does not contain any heritage or cultural sites or values and no areas of significant indigenous vegetation. The site is not accessed off state highway. No pre lodgement consultation has been considered necessary with tangata whenua, Heritage NZ, Department of Conservation or Waka Kotahi.

9.0 CONCLUSION

The site is considered suitable for the proposed subdivision. Effects on the wider environment are no more than minor. The proposal is not considered contrary to the relevant objectives and policies of the Operative and Proposed District Plans, and is considered to be consistent with relevant objectives and policies of National and Regional Policy Statements. Part 2 of the Resource Management Act has been had regard to.

There is no District Plan rule or national environmental standard that requires the proposal to be publicly notified. No affected persons have been identified.

It is requested that the Council give favourable consideration to this application and grant consent.

Signed Dated 15th November 2024
Lynley Newport,
Senior Planner
Thomson Survey Ltd

10.0 LIST OF APPENDICES

Appendix 1 Scheme Plan(s)

Appendix 2 Location Plan

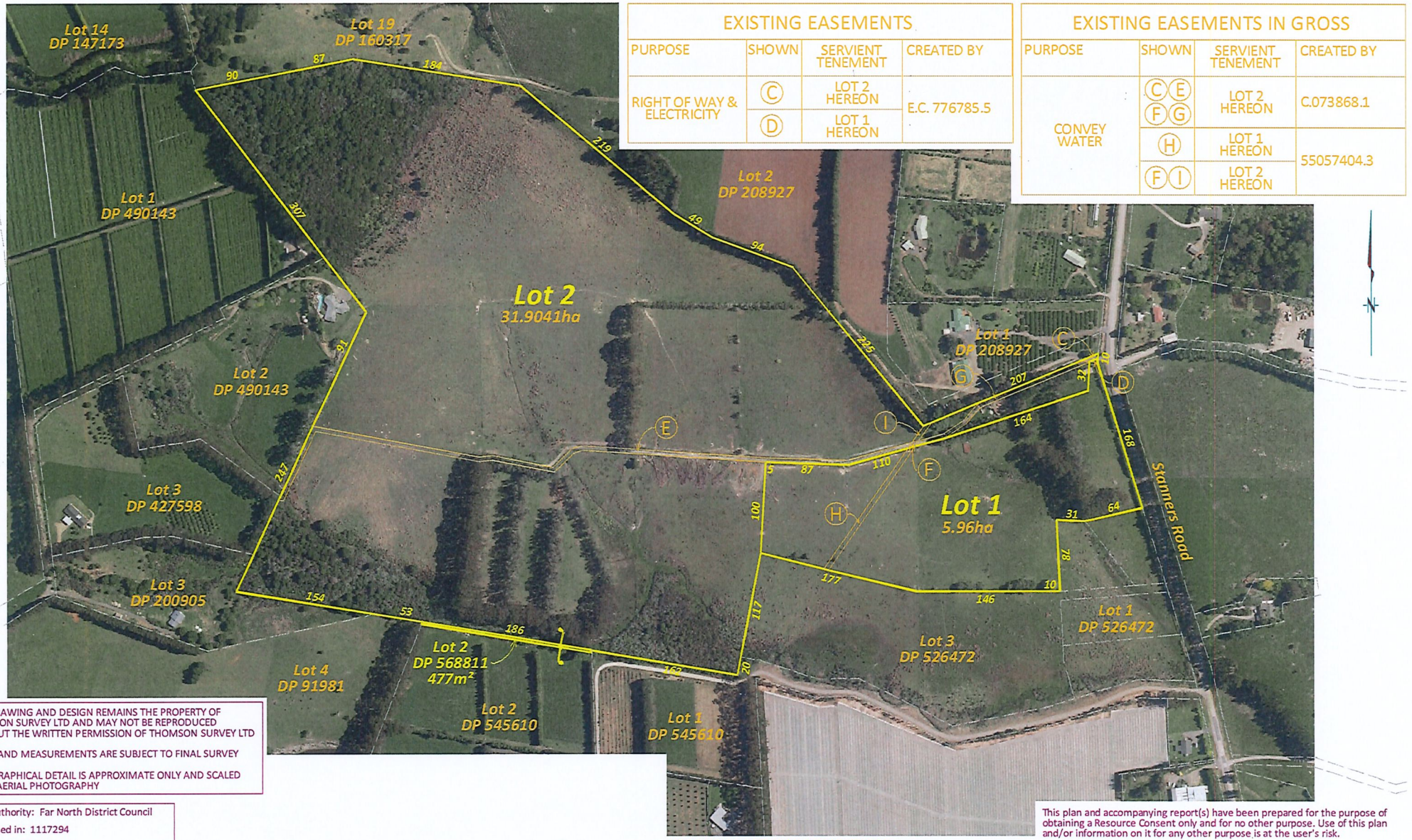
Appendix 3 Records of Title & Relevant Instruments

Appendix 4 Land Use Capability Assessment

Appendix 5 Site Suitability Report

Appendix 1

Scheme Plan(s)



EXISTING EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY & ELECTRICITY	C	LOT 2 HEREON	E.C. 776785.5
	D	LOT 1 HEREON	

EXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
CONVEY WATER	C E F G	LOT 2 HEREON	C.073868.1
	H	LOT 1 HEREON	55057404.3
	F I	LOT 2 HEREON	

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
Comprised in: 1117294
Total Area: 37.9118ha
Zoning: Rural Production
Resource features: NIL

AMALGAMATION CONDITION:
THAT LOT 2 HEREON &
LOT 2 DP 568811 ARE TO BE HELD IN
THE SAME CERTIFICATE OF TITLE

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

0 40 200 400m

Bar Scale 1:4000 @ A3

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

PROPOSED SUBDIVISION OF LOT 3 DP 551277 & LOT 2 DP 586811

STANNERS ROAD, WAIPAPA

PREPARED FOR: LOCK

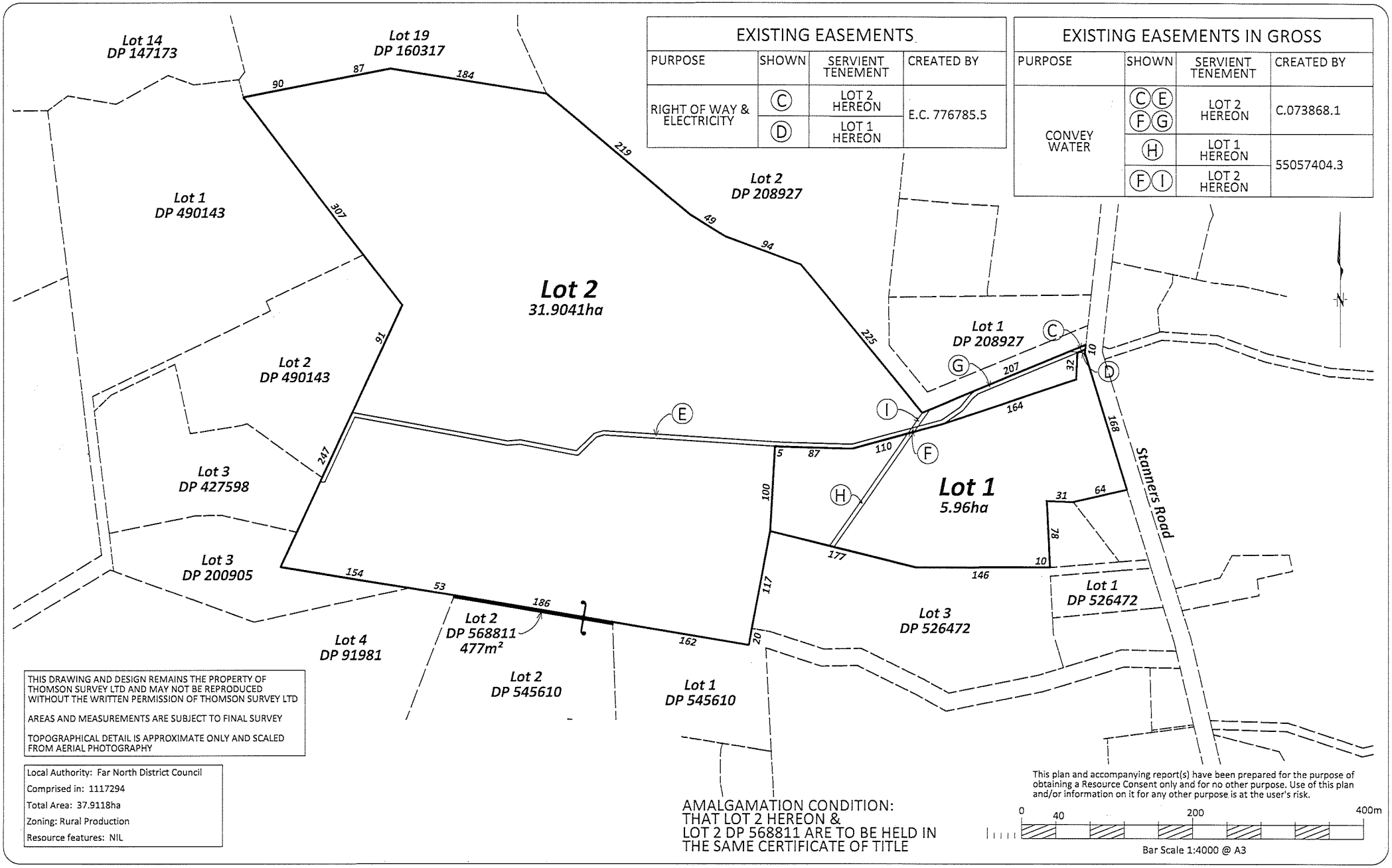
	Name	Date
Survey		
Design		
Drawn	KY	18.11.22
Approved		
Rev	KY	07.11.24

10375 Scheme 20241107.lcd

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 10375

Sheet 1 of 1



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PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
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Rev	KY	07.11.24

10375 Scheme 20241107.lcd

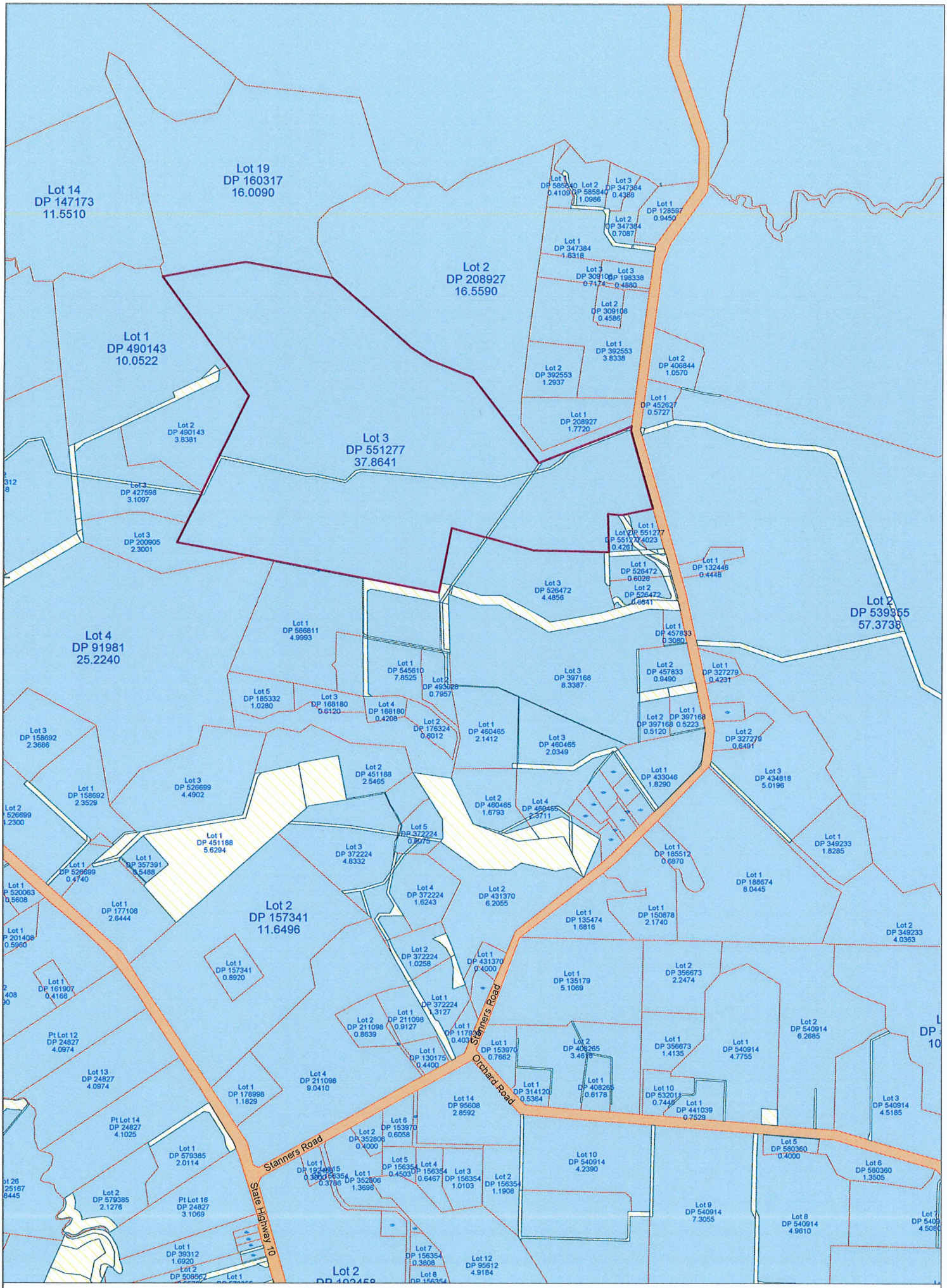
ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 10375

Sheet 1 of 1

Appendix 2

Location Plan



0 200 400 600 800 1000 1200m

QuickMap
Custom Software Ltd

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

Scale 1:10000 Topographical and Cadastral map derived from LINZ data. Printed: 11-Nov-2024 12:14.

Appendix 3

Records of Title &

Relevant Instruments

RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD

Search Copy

R.W. Muir
Registrar-General
of Land

Identifier	**1117294**
Land Registration District	**North Auckland**
Date Issued	31 March 2023

Prior References
926856 952228

Estate	Fee Simple
Area	37.9118 hectares more or less
Legal Description	Lot 2 Deposited Plan 586811 and Lot 3 Deposited Plan 551277

Registered Owners
Edward Martin Wilberforce Lock and Robin Wilberforce Lock

Interests

Subject to Section 59 Land Act 1948 (affects Lot 2 DP 586811)

Subject to Section 8 Mining Act 1971 (affects Lot 3 DP 551277)

Subject to Section 168A Coal Mines Act 1925 (affects Lot 3 DP 551277)

Appurtenant to Lot 3 DP 551277 is a right of way and electricity supply rights specified in Easement Certificate 776785.5 - 17.10.1980 at 11.42 am

Subject to a right of way and an electricity supply right over part Lot 3 DP 551277 marked C and D on DP 551277 specified in Easement Certificate 776785.5 - 17.10.1980 at 11.42 am

Subject to a right (in gross) to convey water for irrigation purposes over part Lot 3 DP 551277 marked C, E, F and G on DP 551277 in favour of Kerikeri Irrigation Company Limited created by Gazette Notice C073868.1 - 28.11.1989 at 1.46 pm

Subject to a right of way and a right to convey water over part Lot 2 DP 586811 marked HC on DP 586811 specified in Easement Certificate C943017.4 - 16.1.1996 at 2:58 pm

Some of the easements specified in Easement Certificate C943017.4 are subject to Section 243 (a) Resource Management Act 1991 (See DP 168180)

Appurtenant to Lot 2 DP 586811 herein are rights of way, rights to convey water, rights to drain water and rights to transmit electricity and telecommunications specified in Easement Certificate C943017.4 - 16.1.1996 at 2:58 pm

Subject to a electricity right (in gross) over part Lot 2 DP 586811 marked HC on DP 586811 in favour of Top Energy Limited created by Transfer C943017.5 - 16.1.1996 at 2:58 pm

The easements created by Transfer C943017.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to a telecommunications right (in gross) over part Lot 2 DP 586811 marked HC on DP 586811 in favour of Telecom New Zealand Limited created by Transfer C943017.6 - 16.1.1996 at 2:58 pm

The easements created by Transfer C943017.6 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right of way and a right to convey water over part Lot 2 DP 586811 marked HC on DP 586811 specified in Easement Certificate D067843.5 - 14.11.1996 at 2:41 pm

The easements specified in Easement Certificate D067843.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right of way and a right to convey water over part Lot 2 DP 586811 marked HC on DP 586811

specified in Easement Certificate D248257.5 - 3.3.1998 at 12:58 pm

The easements specified in Easement Certificate D248257.5 are subject to Section 243 (a) Resource Management Act 1991

Subject to a right to convey water easement in gross over part Lot 3 DP 551277 marked H and I on DP 551277 in favour of Kerikeri Irrigation Company Limited created by Transfer 5505704.3 - 3.3.2003 at 9:00 am

12066030.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 23.4.2021 at 12:35 pm (affects Lot 2 DP 586811)

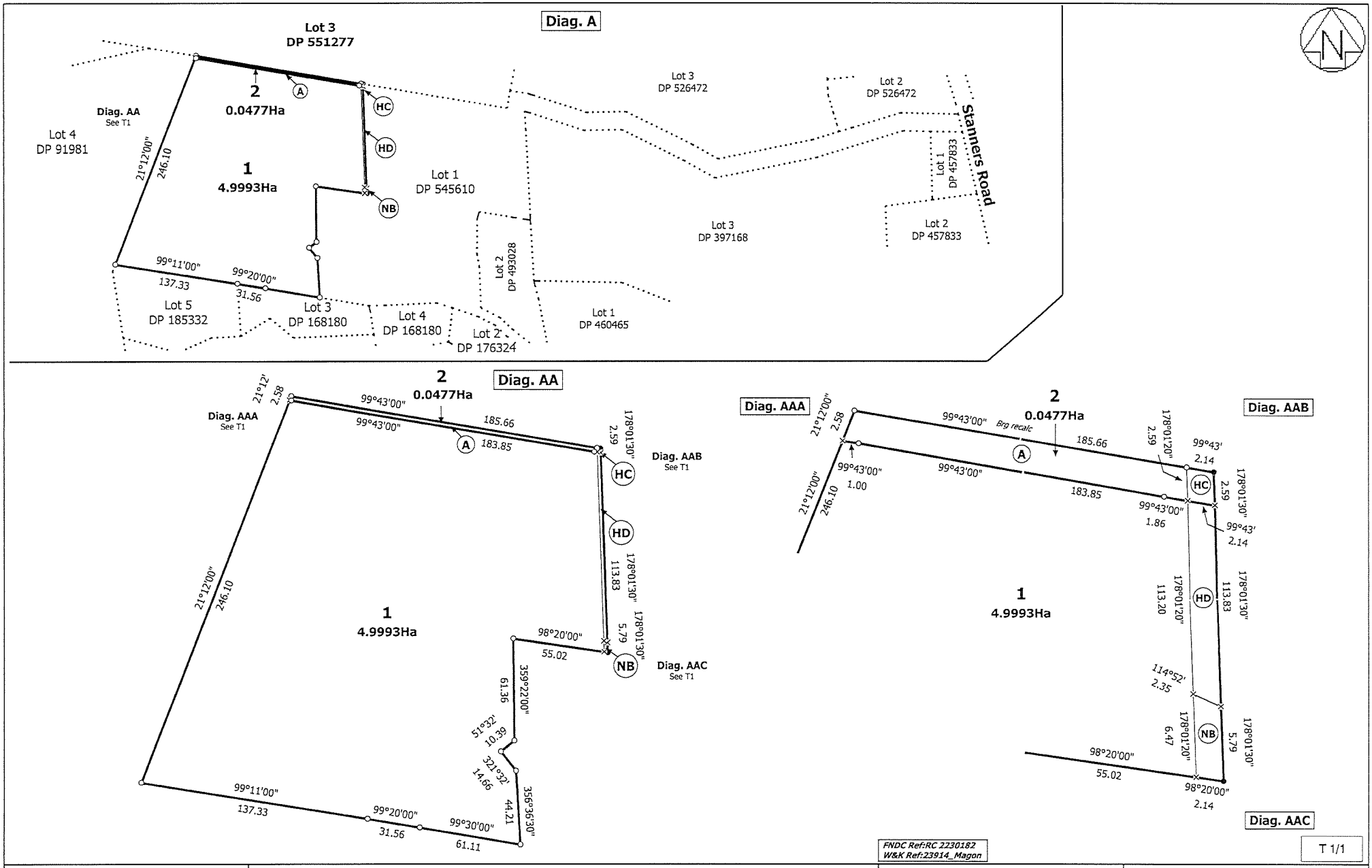
Appurtenant to Lot 2 DP 586811 is a right of way, right to convey water, electricity and telecommunications created by Easement Instrument 12066030.3 - 23.4.2021 at 12:35 pm

12670503.3 Resolution pursuant to Section 243(e) Resource Management Act 1991 cancelling the easement conditions imposed on DP 545610 and DP 186180 over Lot 1 DP 545610 appurtenant to Lot 2 DP 586811 (see DP 586811) - 31.03.2023 at 2:11 pm

Subject to Section 241(2) Resource Management Act 1991 (affects DP 586811)

Subject to a right of way and a right to convey water, electricity and telecommunications over part Lot 2 DP 586811 marked A & HC on DP 586811 created by Easement Instrument 12670503.4 - 31.3.2023 at 2:11 pm

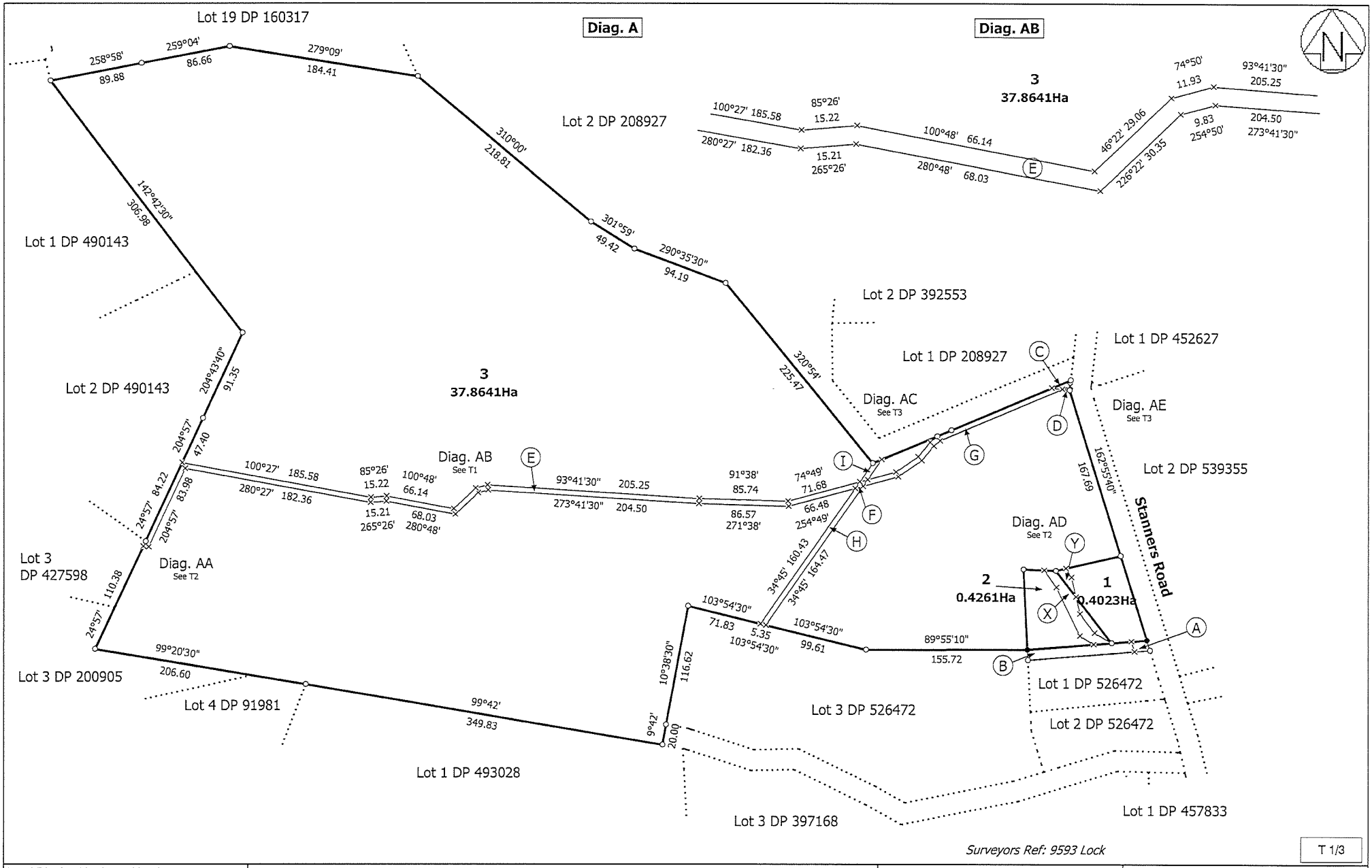
The easements created by Easement Instrument 12670503.4 are subject to Section 243 (a) Resource Management Act 1991



FNDC Ref:RC 2230182
W&K Ref:23914_Magon

T 1/1

Land District: North Auckland Digitally Generated Plan Generated on: 02/05/2023 4:16pm Page 3 of 3	LOTS 1 & 2 BEING A SUBDIVISION OF LOT 2 DP 545610	Surveyor: Boon Leong Kam Firm: Survey & Planning Solutions (2010) L	Title Plan DP 586811 Deposited on: 31/03/2023



Surveyors Ref: 9593 Lock

T 1/3

Land District: North Auckland Digitally Generated Plan Generated on: 16/02/2021 2:01pm Page 3 of 5	Lots 1, 2 and 3 being a Subdivision of Lot 2 DP 201987 and Easement over Lot 3 DP 526472.	Surveyor: Denis McGregor Thomson Firm: Thomson Survey Limited	Title Plan LT 551277 Approved on: 16/02/2021

776785.5 EC

Approved by the District Land Registrars: North Auckland 422/175, South Auckland H.008116/1974, Canterbury 957768, Marlborough 75776, Gisborne 112239.9, Hawkes Bay 303051, Taranaki 217464.1, Wellington A038045, Westland 45629.

EASEMENT CERTIFICATE

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

I, NEIL WILLIAM RONALDSON of Kerikeri, Farmer

being the registered proprietor of the land described in the Schedule hereto hereby certify that the easements specified in that Schedule, the servient tenements in relation to which are shown on a plan of survey deposited in the Land Registry Office at Auckland on the 25th day of June 19 80 under No. 90373 are the easements which it is intended shall be created by the operation of section 90A of the Land Transfer Act 1952.

SCHEDULE

DEPOSITED PLAN NO. 90373

Nature of Easement (e.g., Right of Way, etc.)	Servient Tenement		Dominant Tenement Lot No.(s) or other Legal Description	Title Reference
	Lot No.(s) or other Legal Description	Colour, or Other Means of Identification, of Part Subject to Easement		
Right of Way	Part Section 30 Block VI Kerikeri Survey District	Shown marked B	Lot 1	48C/268 (Servient Tenement) 47D/171 (Dominant Tenement)
Electricity Supply Easement	Part Lot 1	Shown marked C	Part Section 30 Block VI Kerikeri Survey District	47D/171 (Servient Tenement) 48C/268 (Dominant Tenement)

N.B. On no account should this margin be used

N.B. On no account should this margin be used

LT31

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

1. Rights and powers: As more particularly set out in the Seventh Schedule to the Land Transfer Act 1952.

N.B. On no account should this margin be used

N.B. On no account should this margin be used

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

N.B. On no account should this margin be used

N.B. On no account should this margin be used

Dated this 13th day of August 19 80

Signed by the above-named

NEIL WILLIAM RONALDSON

in the presence of

Witness .....

Occupation ..... Solicitor

Address ..... KAITAIA

EASEMENT CERTIFICATE

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

Correct for purposes of the Land Transfer Act

(Solicitor for) the registered proprietor

N.B. On no account should this margin be used

N.B. On no account should this margin be used

Particulars entered in the Register as shown in the schedule of land herein on the date and at the time stamped below

.....

District Land Registrar

Assistant

of the District of .....

DISTRICT LAND REGISTRY AUCKLAND NO. 1

OCT 17 11.42 AM '80

AUCKLAND, N.Z. DISTRICT LAND REGISTRAR

7.1.6785.S

484/268

FOUNTAIN MANNING & HARBORNE
SOLICITORS
KAITAIA

View Instrument

Instrument Type	Gazette Notice/Order in Council/Proclamation
Instrument Number	C073868.1
Status	Registered
Completion Date	
Date & Time Lodged	28/11/1989 13:46:00
Lodged By	
Lodged For	
Approved By	

Affected Computer Registers	Land District
NA130C/106	North Auckland
NA130C/107	North Auckland

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

E 5505704.3 Grant of Ea
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DocID: 310765221

TRANSFER
Land Transfer Act 1952

If there is not enough space in any of the panels below, cross-reference to and use the approved Annexure Schedule: no other format will be received.

Land Registration District

NORTH AUCKLAND

Certificate of Title No.	All or Part?	Area and legal description -- *Insert only when part or Stratum, CT*
NA130C/106 NA130C/107	All All	

Transferor *Surnames must be underlined or in CAPITALS*

Peter Wilberforce LOCK and Joanne Alma LOCK

Transferee *Surnames must be underlined or in CAPITALS*

KERIKERI IRRIGATION COMPANY LIMITED

Estate or Interest or Easement to be created: *Insert e.g. Fee simple; Leasehold in Lease No .....; Right of way etc.*

Right to convey water in gross as described on page 2 Annexure Schedule

Consideration

$1.00

Operative Clause

For the above consideration (receipt of which is acknowledged) the TRANSFEROR TRANSFERS to the TRANSFEREE all the transferor's estate and interest described above in the land in the above Certificate(s) of Title and if an easement is described above such is granted or created.

Dated this 20th day of February 2003

Attestation

Peter Lock Joanne A. Lock Signature, or common seal of Transferor	Signed in my presence by the Transferor Signature of Witness Witness to complete in BLOCK letters *(unless typewritten or legibly stamped)* Witness name Occupation ALLAN DUNCAN McLEOD Address SOLICITOR KERIKERI

Certified correct for the purposes of the Land Transfer Act 1952

Solicitor for the Transferee

REF: 4135 /1

Annexure Schedule

TRANSFER Dated [ ] Page [2] of [2] Pages

Registrar-General of Land Approval 95/1004EF ADLS

Continuation of "Estate or Interest or Easement to be created"

1. The Transferee shall have the right to convey a reticulated water supply through those parts of the land in Certificates of Title NA130C/106 and NZ130C/107 (hereinafter called "the servient lands") marked "A", "B" and "D" on Deposited Plan 201987 (hereinafter called "the reticulated area") together with the additional rights and powers incidental thereto set out in the following clauses:

   (a) to dig construct and lay pipes through the reticulated area;
   (b) to inspect repair cleanse dig up alter enlarge renew or replace those pipes;
   (c) to maintain water meters along the pipes to service allotments adjacent to the reticulated area and to enter upon the reticulated area to repair replace and read the same;
   (d) for the purposes of this grant for the Transferee's agents servants workmen and employees with or without vehicles to enter upon the servient lands by such route as is reasonable in the circumstances and generally to do anything necessary or convenient for the full exercise of the rights granted by this instrument.

2. The Transferee covenants with the Transferors that upon exercising of any of the rights of the Transferee the Transferee shall:

   (a) cause as little damage as possible to the servient lands and occupiers thereof;
   (b) restore the servient lands as near as reasonably possible to its previous condition;
   (c) make good at the transferee's expense any damage done by the actions of the Transferee to buildings erections crops or plantings and fences of the Transferors.

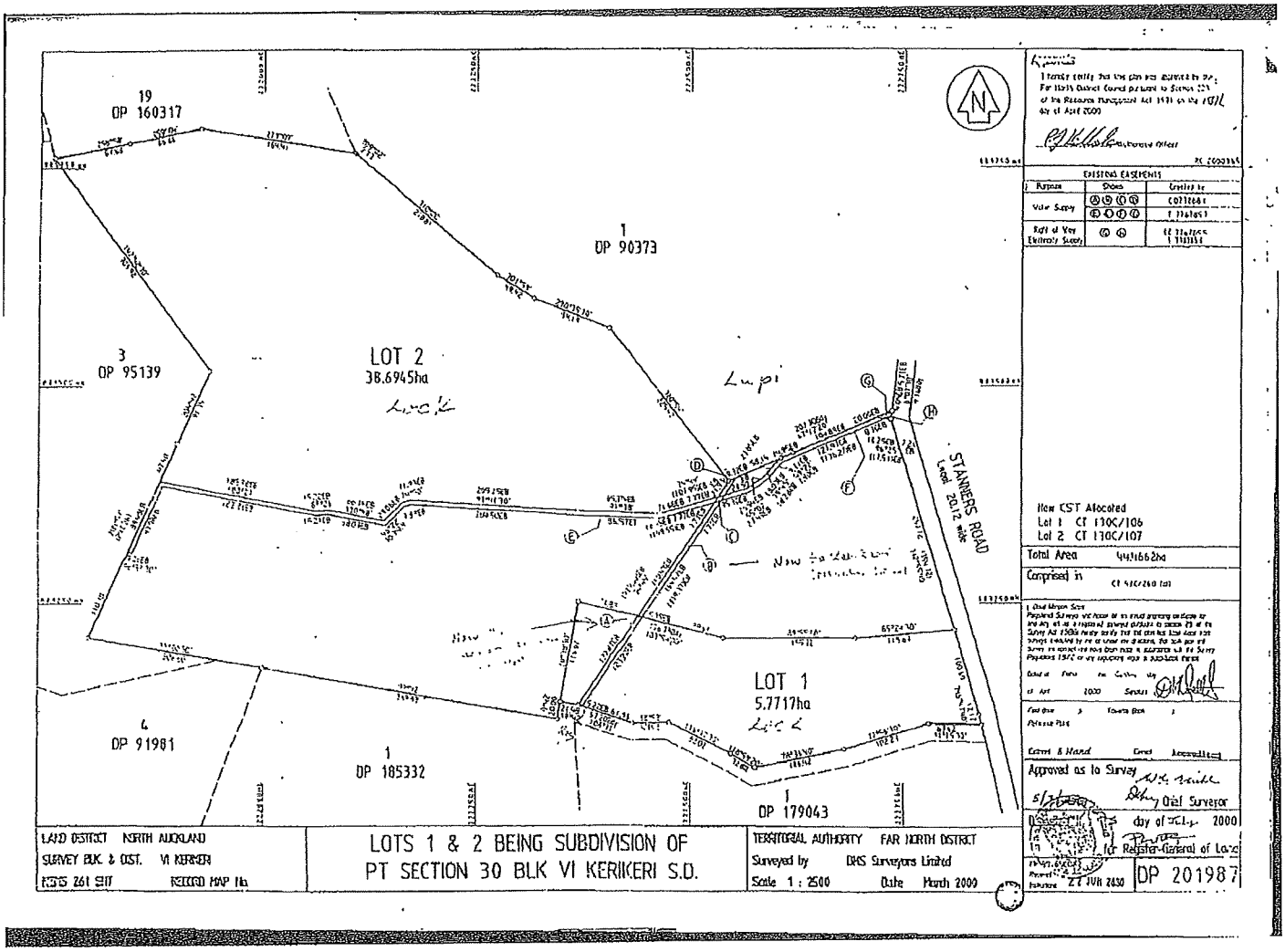
3. The Transferors covenant with the Transferee that the Transferors shall not at any time do anything which will prevent or interfere with the free passage of water through pipes or prevent or interfere with the full use and enjoyment by the Transferee of the rights created by this instrument.

Executed by the Transferee
KERIKERI IRRIGATION COMPANY LIMITED
by its Director in the presence of:

Witness name: W. Hunter
Occupation: Manager
Address: Kerikeri

If this Annexure Schedule is used as an expansion of an instrument, all signing parties and either their witnesses or their solicitors must put their signatures or initials here.

REF: 4136 /3


19
DP 160317
1
DP 90373
3
DP 95139
LOT 2
38.6945ha
LOT 1
5.7717ha
4
DP 91981
1
DP 185332
1
DP 179043
STANNERS ROAD
Land 20.12 wide
N
EXISTING EASEMENTS
Purpose
Shown
Water Supply
Right of Way
Electricity Supply
New CST Allocated
Lot 1 CT 130C/106
Lot 2 CT 130C/107
Total Area 44.4166ha
Comprised in CT 42C/260 (all)
Approved as to Survey
Chief Surveyor
day of July 2000
for Registrar-General of Land
LAND DISTRICT NORTH AUCKLAND
SURVEY BLK. & DIST. VI KERIKERI
RESTS 261 SHT RECORD MAP No.
LOTS 1 & 2 BEING SUBDIVISION OF
PT SECTION 30 BLK VI KERIKERI S.D.
TERRITORIAL AUTHORITY FAR NORTH DISTRICT
Surveyed by DHS Surveyors Limited
Scale 1 : 2500 Date March 2000
DP 201987

Approved by Registrar-General
of Land under No. 1995/1003EF

TRANSFER

Land Transfer Act 1952

Law Firm Acting
McLEOD & PARTNERS SOLICITORS KERIKERI

Auckland District Law Society
REF: 4130 /2

This page is for Land Registry Office use only.
(except for "Law Firm Acting")

View Instrument Details

Instrument No.	12066030.2
Status	Registered
Date & Time Lodged	23 Apr 2021 12:35
Lodged By	McGee, Carmen Sheila
Instrument Type	Consent Notice under s221(4)(a) Resource Management Act 1991

Affected Records of Title	Land District
926856	North Auckland

Annexure Schedule Contains 2 Pages.

Signature

Signed by Dennis John McBrearty as Territorial Authority Representative on 23/04/2021 09:42 AM

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

Far North District Council

[illegible]

Te Kaunihera o Te Tai Tokerau Ki Te Raki

[illegible]

THE RESOURCE MANAGEMENT ACT 1991

SECTION 221: CONSENT NOTICE

REGARDING **RC-2190263**
Being the Subdivision of Lot 1 DP 493028
North Auckland Registry

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

SCHEDULE

Lot 2 DP 545610

(i) Water: An adequate water supply is to be provided for the future dwelling on proposed Lot 2 for domestic and firefighting purposes. Firefighting water supplies are to comply with the requirements of the FENZ Firefighting Water Supply Code of Practice SNZ PAS 4509:2008

(ii) Land within Lot 2 has been identified as land that will potentially be covered by the National Environmental Standards for Contaminated Soil. As it was production land at time of subdivision, and the subdivision did not remove the land from being production land, the developer did not address the regulations at time of subdivision. It will be the responsibility of the lot owner to address the regulations if proposing any development on the site. Activities covered by the regulations include the removing or replacing of a fuel storage system; soil sampling, disturbance and/or removal; subdivision; and changing the use of the land

(iii) Reticulated power supply or telecommunication services are not a requirement of this subdivision consent. The responsibility for providing both power supply and telecommunication services will remain the responsibility of the property owner

Far North District Council

[illegible]

Te Kaunihera o Tai Tokerau Ki Te Raki

[illegible]

SIGNED: P J Killalea

Mr Patrick John Killalea - Authorised Officer
By the FAR NORTH DISTRICT COUNCIL
Under delegated authority:
PRINCIPAL PLANNER – RESOURCE MANAGEMENT

DATED at **KERIKERI** this 16th day of February 2021

View Instrument Details

Instrument No.	12670503.3
Status	Registered
Date & Time Lodged	31 Mar 2023 14:11
Lodged By	Stokes, Belinda Susan
Instrument Type	Order for New Certificate of Title

Head Records of Title	**Land Districts**
926856	North Auckland
952228	North Auckland

Registered Owners

Edward Martin Wilberforce Lock and Robin Wilberforce Lock

New titles(s)	Legal description
1117294	Lot 2 Deposited Plan 586811 and Lot 3 Deposited Plan 551277

Magon Horticulture Limited

New titles(s)	Legal description
1117288	Lot 1 Deposited Plan 586811

Annexure Schedule: Contains 3 Pages.

Signature

Signed by Lisa Jane Maxwell as Registered Owner Representative on 29/03/2023 09:41 AM

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

Edward Martin Wilberforce Lock &
Robin Wilberforce Lock as trustees of Edward Lock Family Trust
Kerikeri

23rd March 2023

Land Information New Zealand
Edealing 12670503

Appurtenant Easement Rights
Created by Easement Instruments 12066030.3 and C943017.4

The below signatories will be the registered proprietors of RT 1117294 which is an amalgamation of their existing land being Lot 3 Deposited Plan 551277 with a new Lot 2 on Deposited Plan 586811.

Ordinarily, the new Lot 2 DP 586811 would have the benefit of certain appurtenant easement rights created by the above Easement Instruments as they follow the new titles from the existing RT 926856. It is a condition of the Far North District Council Resource Consent that these appurtenant easement rights do not follow Lot 2.

We request that the above appurtenant easement rights created by Easement Instruments 12066030.3 and C943017.4 are not brought down onto Lot 2 DP 586811 (RT 1117294).

Edward Lock

Edward Martin Wilberforce Lock

Robin Wilberforce Lock

Form 46

ANNEXURE SCHEDULE - CONSENT FORM[1]

(Regulation 6 Land Transfer Regulations 2018)

Person giving consent *Surname must be underlined*	**Capacity and Interest of Person giving consent** *eg. Mortgagee under Mortgage no.)*
Bank of New Zealand	**Mortgagee under Mortgage No 12402306.1**

Consent
Delete words in [ ] if inconsistent with the consent
State full details of the matter for which consent is required

[Without prejudice to the rights and powers existing under the interest of the person giving consent,]

the **Person giving consent hereby consents** to:

A boundary adjustment per LT Plan 586811

Dated this 22nd day of February 2023

Attestation

signed for and on behalf of BANK OF NEW ZEALAND By its Attorney kim stockman Digitally signed by kim stockman Date: 2023.02.22 12:01:24 +13'00'	**Signed in my presence by the Person giving consent** Signature of Witness: Katrina Rodgers Digitally signed by Katrina Rodgers Date: 2023.02.22 12:06:02 +13'00' *Witness to complete in BLOCK letters (unless legibly printed):* **Witness name** Katrina Rodgers **Occupation** Bank Officer **Address** Auckland

[1] An Annexure Schedule in this form may be attached to the relevant instrument, where consent is required by the Land Transfer Regulations 2018 to enable registration under the Land Transfer Act 2017.

CERTIFICATE OF NON-REVOCATION

OF POWER OF ATTORNEY

I, Kim Stockman, Lending Services Security Release Team Member of Auckland, New Zealand certify:

1. That by deed dated 8 May 2015, Bank of New Zealand, of Level 4, 80 Queen Street, Auckland, New Zealand, appointed me its attorney.

2. A copy of the deed is deposited in the Hamilton registration district of Land Information New Zealand as dealing No. 10097085.2

3. That I have not received notice of any event revoking the power of attorney.

SIGNED at Auckland this 22 FEBRUARY 2023

kim stockman

Digitally signed by kim stockman
Date: 2023.02.22 12:02:00 +13'00'

View Instrument Details

Instrument No.	12670503.4
Status	Registered
Date & Time Lodged	31 Mar 2023 14:11
Lodged By	Stokes, Belinda Susan
Instrument Type	Easement Instrument

Affected Records of Title	Land District
1117288	North Auckland
1117294	North Auckland

Annexure Schedule Contains 2 Pages.

Grantor Certifications

I certify that I have the authority to act for the Grantor and that the party has the legal capacity to authorise me to lodge this instrument	☑
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	☑
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	☑
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	☑
Mortgage 12402306.1 does not affect the burdened land, therefore the consent of the Mortgagee is not required	☑

Signature

Signed by Simon David Dominick as Grantor Representative on 27/03/2023 03:15 PM

Grantee Certifications

I certify that I have the authority to act for the Grantee and that the party has the legal capacity to authorise me to lodge this instrument	☑
I certify that I have taken reasonable steps to confirm the identity of the person who gave me authority to lodge this instrument	☑
I certify that any statutory provisions specified by the Registrar for this class of instrument have been complied with or do not apply	☑
I certify that I hold evidence showing the truth of the certifications I have given and will retain that evidence for the prescribed period	☑

Signature

Signed by Lisa Jane Maxwell as Grantee Representative on 29/03/2023 09:41 AM

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

Easement instrument to grant easement or *profit à prendre*

(Section 109 Land Transfer Act 2017)

Grantor

Edward Martin Wilberforce Lock and Robin Wilberforce Lock

Grantee

Magon Horticulture Limited

Grant of Easement or *Profit à prendre*

The Grantor being the registered owner of the burdened land set out in Schedule A **grants to the Grantee** (and, if so stated, in gross) the easement(s) or *profit(s) à prendre* set out in Schedule A, with the rights and powers or provisions set out in the Annexure Schedule(s)

Schedule A

Purpose of Easement, or *profit*	Shown (plan reference)	Burdened Land (Record of Title)	Benefited Land (Record of Title) or in gross
Right of Way Right to Convey Water Right to Convey Electricity Right to Convey Telecommunications	"A", "HC" DP 586811	Lot 2 DP 586811 RT 1117294	Lot 1 DP 586811 RT 1117288

Easements or *profits à prendre* rights and powers (including terms, covenants and conditions

Delete phrases in [ ] and insert memorandum number as required; continue in additional Annexure Schedule, if required

Unless otherwise provided below, the rights and powers implied in specified classes of easement are those prescribed by the Land Transfer Regulations 2018 and/or Schedule 5 of the Property Law Act 2007

The implied rights and powers are hereby **[varied] [negatived] [added to]** or **[substituted]** by:

~~[Memorandum number , registered under section 209 of the Land Transfer Act 2017]~~

[the provisions set out in Annexure Schedule]

ANNEXURE SCHEDULE

1. The Grantor and the Grantee agree that that Grantor will bear no costs or responsibilities in respect of the formation, maintenance and repair of the easements **UNLESS** that repair is required solely due to the actions of the Grantor. For the sake of clarity, this clause shall enure to any successors or assigns of the grantor named in this easement instrument.

Appendix 4

Land Use Capability Assessment

AgFirst Northland
1a Douglas Street, PO Box 1345
Whangarei 0140, New Zealand
Mobile: 027 2818823
northland@agfirst.co.nz | www.agfirst.co.nz

Land Use Capability Assessment, Proposed Subdivision of Lot 3 DP551277, Stanner's Road, Waipapa

Report by Bob Cathcart
Land and Environmental Management Consultant
AgFirst Northland
3February 2024

Contents

1. Background

The National Policy Statement for Highly Productive Land 1922[1], which came into effect in October 2022, is a regulation under the Resource Management Act 1989 aimed at protecting New Zealand's most productive land, actually or potentially productive, to grow food and fibre. Until a database at a more detailed scale is available, identification of 'highly productive land' is by reference to the New Zealand Land Resource Inventory – Land Use Capability (nzlri-luc) database[2], a digital database with national coverage, maintained by Manaaki Whenua (Landcare Research Ltd). Land identified as Land Use Capability Classes 1, 2 or 3 on this database is considered 'highly productive land' and councils, regional and district, are instructed to protect this land to produce food and fibre.

With only 11.75% of the land north of Auckland (Northland and the former Rodney County) being assessed as Classes 1, 2 and 3[3], it is extremely important to protect what little potentially highly productive and versatile land remains. This percentage is now outdated as most of what was assessed as Class 1 and some Class 2 around Whangarei and Class 2 land in Kerikeri has been lost to urban expansion.

2. Land Use Capability and the New Zealand Land Use Capability Database (nzlri-luc database)

'Highly Productive Land,' in the context of the National Policy Statement **is not**:

i. a measure of the current level of primary production from that land; nor is it

ii. determined by soil 'testing,' measuring its nutrient status or similar attributes.
It is based on an assessment of Land Use Capability (LUC).

The Land Use Capability Classification is ***a systematic arrangement of different kinds of land according to those properties that determine its capacity for long-term sustained production***. ***Capability*** is used in the sense of ***suitability for productive use or uses*** after considering the physical limitations of the land.

Land Use Capability(LUC) has been assessed for the whole of New Zealand and is published at a 1:50,000 scale on the New Zealand Land Resource Inventory - Land Use Capability database[2], a digital database maintained by Manaaki Whenua Landcare Research. Until regional councils introduce more detailed maps pf 'highly productive land' in their regional plans, it is this database that is being used to delineate areas of 'highly productive land.' While some of this LUC Class1, 2 or 3 land may not currently be used for intensive market gardening, horticulture, arable and/or pastoral farming that is either, it has the potential to be used that way by application of known technology and management practices, using irrigation, for example.

Land Use Capability, as described in the 3rd Edition of the Land Use Capability Survey Handbook[4], the recognised manual for assessing land use capability in New Zealand, is an 8-Class method of ranking New Zealand land according to its capability for sustained primary production. The system uses four arable classes, Classes 1 to 4, with Class 1 being the most versatile and potentially productive land, and Class 4 suited to much fewer crops or horticultural uses, only marginally suited to arable use. Classes 5, 6 and 7 are not suited to arable uses but are suited to pastoral farming, some tree crops, and to forestry. Class 8 land, by definition, has no productive value, being too steep, stony wet or erosion-prone, but may have important watershed protection or biodiversity values.

The 8 Land Use Capability (LUC) Classes are further subdivided into 'subclasses' according to their dominant limitations, whether that be '**e**' (erosion), '**w**' (wetness), '**s**' (a soil limitation such as stoniness or some other inherent characteristic of the soil) or '**c**' (climate). As more detailed land use capability mapping is undertaken at farm and horticultural unit scale, new subclasses may be introduced.

The most detailed level of LUC assessment is the LUC Unit. This level identifies land types that have the same potential level of production, other attributes and limitations, and require the same forms of management. While an attempt was made initially, to place the LUC Units within a region in some order of productivity, that is Class 4e1 has the potential to produce more primary products than Class 4e2, and so on, this has proven impractical, and even more so to attempt a national 'order of merit'. Unfortunately, LUC Unit numbers in one class do not necessarily match Unit numbers in another class, that is, Class 2e1 does not lead on to Class 3e1 and then 4e1 as the land becomes steeper. It is, therefore, very important to read the Unit descriptions and take note of the LUC succession shown in extended legends as LUC 'sub-suites'. **A detailed description of Northland LUC units is found in Harmsworth[3], but the unit number needs to be correlated with the latest national nzlri-luc (nzcu) unit numbers.**

Assessment of Land Use Capability involves delineating 'polygons,' often landscape units, areas of land with the same or very similar soil type(s), similar aspect, slope, erosion risk, soil water and drainage characteristics, potential productivity, current vegetation/land use, etc. An inventory of land features and attribute, land resource inventory, is recorded for each polygon including rock type, soil type(s), slope, active and potential erosion and the seriousness of active erosion, and the current land use and vegetation cover. Other information measured or assessed in the field, by research of records and by consultation, particularly with those who have lived and worked on the land, experiencing in all seasons, and includes susceptibility to flooding (depth, duration and velocity), soil drainage characteristics, evidence of boulders or a soil pan, exposure to salt-laden winds – anything which influences the potential use and sustainability of use of this land.

Using this land resource inventory data, the land is assessed as to its land use capability (LUC) Class and Sub-Class and, at the most detailed level, an LUC Unit. As noted above, the land use capability units recorded in the survey of Northland (North Auckland Peninsula) are described in detail in an extended legend by Harmsworth. Since the publication of the extended legend:

1. Land Resource Inventory and land use capability surveys, first published as hard-copy maps between 1973 and 1976 as the Ministry of Works and Development Land Use Capability Worksheets, have been digitised to create national coverage in the nzlri-luc database;

2. the 3rd Edition of the Land Use Capability Survey Handbook has been published (2009), updating earlier handbooks and establishing a consistent method/standard of LUC assessment across the whole of New Zealand;

3. whereas the eight LUC classes were previously written as Roman numerals (I, II, III, IV, etc), the Handbook now requires the eight capability classes to now be written as Arabic numerals (1, 2, 3, 4 etc.);

4. Harmsworth's extended legion was published prior to the change to Arabic numerals, that is, it still has the LUC Classes in Roman numerals – Class IVe1, rather than 4e1;

5. Whereas Class 5 was rarely used because of previous very restricted definitions, the Handbook provides an opportunity to record, for example, Class 5e. Class 5e is land too steep to cultivate or too erodible when under cultivation, providing a logical progression from Class 3e to 4e to 5e, 6e and 7e as the land becomes progressively more erodible; and

6. Consultants working in the Auckland and Northland Regions have introduced several new land use capability Units to fill gaps in Harmsworth's legend. These include LUC Units to subdivide some of Harmsworth's Units, Units able to be defined by more detailed farm and orchard scale mapping, and so on. [See surveys in Northland by Cathcart[5], Hicks[6] and Hanmore[7] - each have mapped and described new LUC units when working at a 'farm scale' or 'orchard scale' in the Auckland, Northland and Waikato Regions.]

3. Caution with respect to the nzlri digital database

Scale of Map Data- As a rule, LRI and LUC information in the nzlri-luc database should not be enlarged beyond the scale at which it was originally collected. As is explained in the Handbook, problems will arise when personnel untrained in resource inventory and luc assessment use Geographic Information Systems (GIS) seek information on small areas of land by enlarging the imaging beyond the scale at which it was originally captured/mapped. Significantly enlarging the scale can produce unreliable and misleading results or result in information that is at best nonsense.

The minimum size of a polygon or discrete parcel of land that can be safely delineated on a 1:50,000 scale map is 10 hectares. 1:50,000 rural reconnaissance maps should not be used to definitively assess the soil type, geology or land use capability, on 800m^2 urban sections.

Date on which the data was collected – While there have been some minor changes to the nzlri – luc online data, these changes have largely relied on the original resource inventory data on which LUC assessments were made. The data does not, for example, identify land use changes or significant modifications to the land or its use in recent years. Around Kerikeri-Waipapa, for example, the author of this report has previously assessed three properties where there has been significant excavation. In each case, the whole soil profile to a depth of 2.0 or more metres has been removed from a significant area of the property. While still recorded as Class 2s1 (nz2s-16) and Class 3s2 (nz3s-1) land on the nzlri database, this land is no longer 'highly productive land'. It has no soil, instead exposed weathered rock, clay, aggregate fill or a paved surface, and any primary production from the land would need to be by hydroponics or similar non-soil growing techniques. Because any future use of the land is not dependent on the intrinsic properties of soil, this land has not been assessed as to Land Use Capability.

4. Proposed Subdivision of Lot 3 DP551277 and ROW over Lot 1 DP545610, Stanner's Road, Waipapa

4.1 Landform - This property occupies a south and east-facing slope with soils formed on the greywacke basement rock which lies under the eastern part of the Northland Peninsula. Lava from an old basalt volcano, with an eroded cone between Takou Bay Road and Sandy's Road, flowed southwards immediately west of this property, spilling eastwards and across the Stanner's Road-Kapiro area towards Kerikeri Inlet. The stream along the southern edge of Lot 3 DP551277 follows the edge of the lava flow.

Erosion over thousands of years has removed soil from the surface of the basalt lava flow, leaving behind exposed boulders of more resistant basalt rock.

Lava flows also filled in a basin along and under Stanner's Road, immediately east of Lot 2 and a few sections north along Stanner's Road. The quarry east of Stanner's Road is in the basalt rock, and the flat land along Stanner's Road frontage of the subject land is on soils developed on sediment washed off the volcanic and greywacke soils mixed with the weathered lava flow basalt. Boulders scattered across the Stanner's Road edge of Lot 2, neighbouring residential sections and along either side of the stream on the southern boundary of proposed Lots 1 and 2, are remnants of the lava flow, even though many of them are imbedded in soils formed on greywacke and sediment washed off the greywacke, their surrounding volcanic soils long eroded from the site.

4.2 Soil Types and Land Use Capability - The 3rd Edition of the New Zealand Land Use Capability Survey Handbook advises that at a scale of 1:50,000, the scale at which the nzlri-luc data was recorded, and a similar handbook for soil surveys warn against enlarging the national database maps as the smallest parcel of land or land type that can be recorded at that scale is 10 hectares. Proposed Lot 1 is 1.2ha, well below the 10ha cutoff. A survey of the property has been conducted, following the procedures set out in the Handbook and this survey identifies several anomalies in the nzlri-luc data.

Otaha clay, with grey colour and nodules

The boundaries of land use capability classes shown on the nzlri-luc digital database, particularly of soils formed on basalt lava flows and sediment washed of those flows are, at best, diagrammatic, in this area. NZ Soil Bureau soil maps[8] are more accurate but still show Pungaere gravelly friable clay extending further onto the eastern side of Proposed Lot 2 than it does in reality.

As noted, the stream, which flows along the southern boundary of Proposed Lot 2 and around the northern edge of Proposed Lot 1 before meandering through Lot 3 DP526472, is the boundary between soils formed on the basalt lava flow (Okaihau gravelly friable clay) and soils formed on greywacke and sediment washed off the greywacke (Hukerenui silt loam and Wharekohe silt loam).

The immediate, very narrow, floodplain of this stream has soil formed on the lava flow and sediment washed, mainly, off the volcanic soils. The soil type on the edges of the lava flow is Pungaere gravelly friable clay, while the soil formed primarily on sediment washed off the basalt soils is Otaha clay. Both are strongly to very strongly leached Red Loams ('ironstone soils'), in places having nodules of iron and aluminium in the

subsoil. Both are very bouldery in this locality and the Otaha soil will have seepages coming in from both banks, from the volcanic and from the greywacke.

Boulders at the surface on Proposed Lot 1

The area with old shelterbelts immediately west of proposed Lot 1 and the forested area in the southwest corner of Lot 2 is a mix of Otaha clay adjacent to the stream and podzolised Hukerenui and Wharekohe silt loam to the north. These areas, too, will have seepages flowing out of the greywacke. The valley bottom with Otaha clay and its immediate sides with Pungaere gravelly friable clay, in places overlying weathered and strongly leached greywacke soils, has been assessed as Class 6w5*, an LUC unit first described by Cathcart[3]. In this case, it has seepages around the edges, parts of it will flood and most of it has large basalt boulders.

Lot 1, which is within the area assessed as Class 6w5* is on a slight mound, and lateral drainage to the roadside drain and into the stream channel has resulted in the soil shrinking and exposing boulders over most of the Lot. Most of Lot 1 has been assessed as Class 6s2, as described by Harmsworth[4] as while it would be possible to find small areas on which vegetables could be grown for home use, the land is too bouldery to be used for commercial gardening or orcharding. This valley bottom of seepages, some podzolised soils and volcanic alluvium strewn with large basalt boulders continues downstream of Lot 1, in a section already subdivided from the land subject of this application.

Basalt boulders removed from Pungaere and Otaha soils and edge of Hukerenui soils alongside the Stanner's Road frontage of Proposed Lot 2

The flat land along the Stanner's Road frontage of Proposed Lot 2 has Otaha clay, in places gravelly clay loam, formed on the lava flow and on sediment from both basalt soils and podzolised soils on greywacke. It too has large boulders scattered through it and, because soil has eroded off its surface and its surface is now lower than it would have been a few thousand years ago, there is a fringe of basalt boulders around the lower edge of the adjoining greywacke slopes with basalt boulders lying on the surface and imbedded in podzolised Hukerenui silt loam. While it is possible to remove some of the boulders and lower the watertable enough on the Otaha clay flats, this land is not suited to commercial horticulture and is recorded as Class 4s2 on the nzlri-luc database.

The southern 75% of Proposed Lot 2 has Hukerenui silt loam (yellow subsoil phase), a moderately podzolised soil formed on greywacke, tending towards the mature podzol Wharekohe silt loam. The Wharekohe silt loam has a dense silica pan on the lower and easier slopes. This easy to gently rolling gumland is assessed as Class 4e12.

Podzolised Hukerenui silt loam with yellow subsoil

The steeper slopes on the northern-most part of Proposed Lot 2,reverting to scrub and bush, is assessed as Class 6e9.

5.0 This land in respect of the National Policy Statement for Highly Productive Land

The findings of a survey at a more appropriate scale and correction of polygon boundaries to reflect the true landform, geology and soil types, and land use capability assessment based on this more accurate land resource inventory data finds that there is no land of Land Use Capability 1, 2 or 3 on Lot 3 DP551277. That is, there is no Highly Productive Land in terms of the National Policy Statement for Highly Productive Land 2022.

The subdivision proposed will sever Proposed Lot 1, which is already separated from the Proposed Lot 2 by being on the opposite side a stream and not farmed as a part of the property. Severing Proposed Lot 1 from Proposed Lot 2 will not, in any way, affect the use and productivity of Proposed Lot 2 as a grazing unit.

6.0 Summary

1. The maps in the nzlri-luc digital database are not only of an inadequate scale to accurately record the soil type on a 1.2 ha property like Proposed Lot 1, they are, in this case, inaccurate, both in respect of polygon boundaries and in assessing land use capability.

2. A detailed survey of the property shows there is no Class 3s1 land (Class 3s2 as described by Harmsworth) on this property. Instead, there is a mix of Class 4s2 (4s1 as shown on Far North Maps), 4e12, 6s2, 6e9 and 6w5*.

3. That is, my assessment of Land Use Capability did not identify any soils suited to intensive food production and while parts of the 4s2 land in Proposed Lot 2, fronting Stanner's Road, may be used for an occasional field or vegetable crop, it is too wet in most years and is also very bouldery. It's fluctuating soil water table makes it unsuitable for vine or orchard crops.

4. The land is not Highly Productive Land in terms of the National Policy Statement for Highly productive land and, anyway, subdividing Proposed Lot 1 from Lot 3 DP 551277 will not affect the primary production potential of either proposed Lot 1 or 2 as it is, in effect an island, already severed by the stream flowing along the southern boundary of Lot 3 DP551277.

7.0 References:

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

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

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

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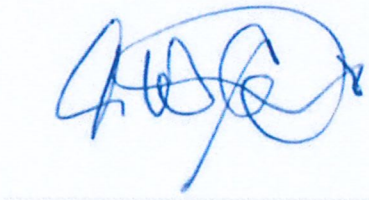
6. Dr Douglas (Laidlaw) Hicks, retired soil scientist, New Zealand (dlhicks@xtra.co.nz)

7. Ian Hanmore, Hanmore land Management (ian@hlm.co.nz Mobile: 021 201 3441

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

Appendix - Land Resource Inventory Map Lot DP551277



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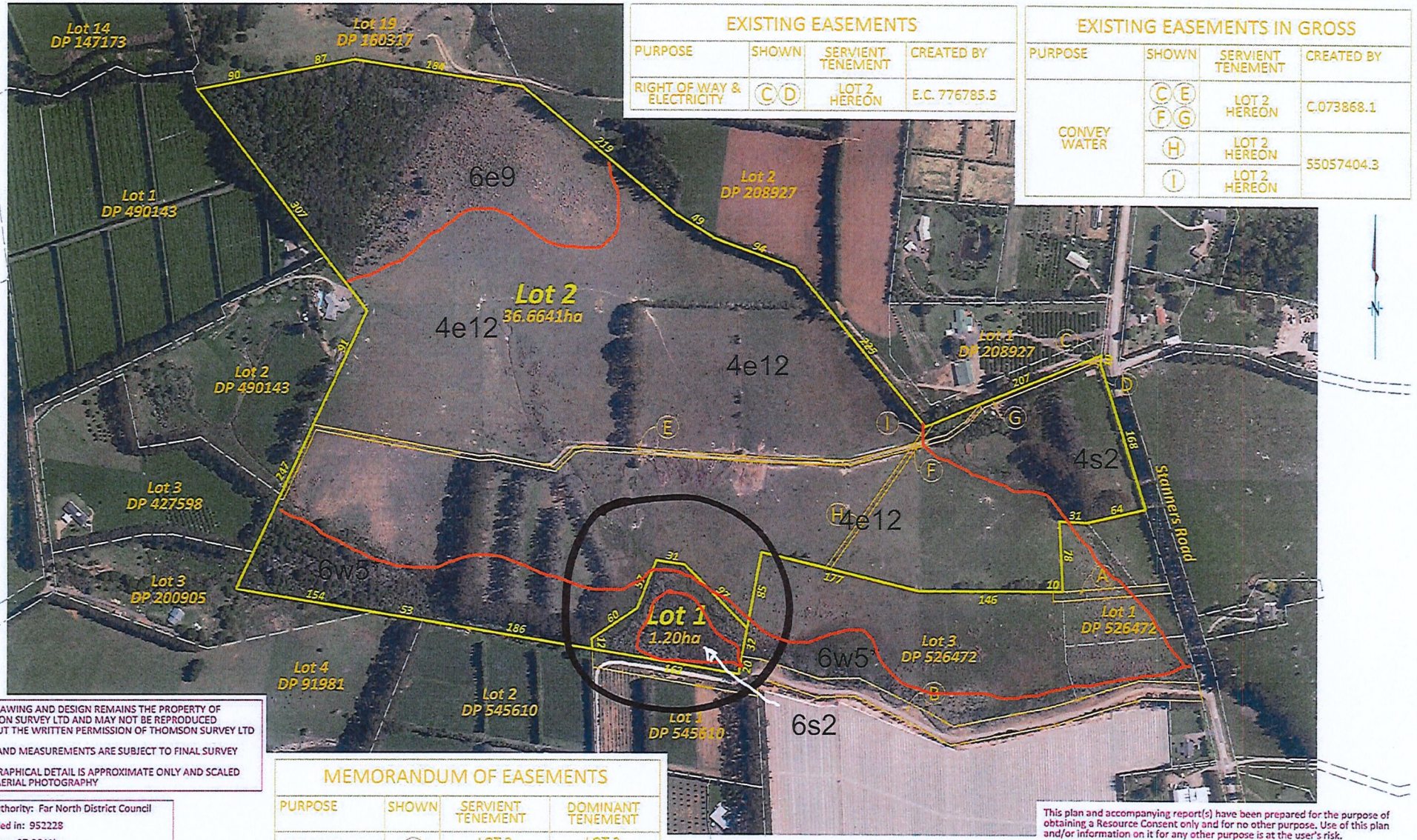

EXISTING EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY & ELECTRICITY	C D	LOT 2 HEREON	E.C. 776785.5

EXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
CONVEY WATER	C E F G	LOT 2 HEREON	C.073868.1
	H	LOT 2 HEREON	5505740 4.3
	I	LOT 2 HEREON	

MEMORANDUM OF EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY	A	LOT 3 DP 526472	LOT 2 HEREON
	B	LOT 1 DP 545610	LOT 1 HEREON

AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
Comprised in: 952228
Total Area: 37.8641ha
Zoning: Rural Production
Resource features: NIL

0 40 200 400m

Bar Scale 1:4000 @ A3

Land Use Capability Assessment
Bob Cathcart, AgFirst Northland
3 February 2024

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Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOT 3 DP 551277 & RIGHT OF WAY OVER LOT 1 DP 545610

STANNERS ROAD, WAIPAPA

PREPARED FOR: LOCK

	Name	Date
Survey		
Design		
Drawn	KY	18.11.22
Approved		
Rev	KY	17.01.24

10375 Scheme 20240117.lcd

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 10375
Sheet 1 of 1

Appendix 5

Site Suitability Report

VISION CONSULTING ENGINEERS

SITE SUITABILITYREPORT

Proposed Subdivision of Lot 3 DP 551277, Stanners Road, Waipapa

Prepared for

Edward Lock

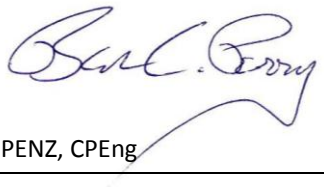
30/10/2024

Report Information Summary

Job no.	J15713
Report Author	Jonathan Cousins
Report Reviewer	Ben Perry
Version No.	2
Status	Final
Date	30/10/2024

Version No.	Date	Description
1	18/10/2024	Final Issued to Client
2	30/10/2024	Revised document issued to client

Document Acceptance

Action	Name	Signed	Date
Author	Jonathan Cousins	 MEng (Civil)	30/10/2024
Reviewer	Ben Perry	 MIPENZ, CPEng	30/10/2024

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VISION CONSULTING ENGINEERS

Vision Consulting Engineers Ltd
Level 1, 62 Kerikeri Road
Kerikeri 0230

Contents

Appendices

Tables

Figures

1 Introduction

Vision Consulting Engineers Limited (VISION) was commissioned by Edward Lock to provide a site suitability report for proposed Lot 1 to accompany a Resource Consent application to the Far North District Council (FNDC) for a proposed subdivision of Lot 3 Deposited Plan (DP) 551277, Stanners Road, Waipapa, Far North District, owned by Edward Lock.

It is proposed to subdivide the existing property into two lots (Lot 1 and 2) as shown in the Thompson Survey Limited Proposed Subdivision Plan dated 08/07/2024, (Figure 1) and included in Appendix A. Due to the size of the parent Lot 3 DP 551277 (37.86 ha), this report only covers the proposed Lot 1 (5.96 ha), with the main focus being on the proposed building area situated on the eastern side of the Site adjacent to Stanners Road referred to as (the "Site").

This report draws on information provided for previous approved sub-divisions by Edward Lock on land immediately to the south (Lot 1 and 3 DP 526472) which included extensive reporting on stormwater and wastewater management.

Figure 1: Proposed Subdivision Plan

2 Scope of Work

The scope of work for this report is to assess the site suitability covering:

- Natural hazards
- Ground conditions
- Wastewater
- Stormwater

The site suitability report is supported by a desktop study and a site walkover to review existing site conditions and hydrology. Soil type and suitability for wastewater management have also been assessed using intrusive soil coring.

3 Industry Guidance

This report has been prepared in accordance with the requirements of the FNDC Engineering Standards & Guidelines 2004 - Revised March 2009, the District Plan, and Section 106 of the Resource Management Act (RMA) relating to natural hazards.

4 Site Description & Details

The proposed Lot 1 Site totals 5.96 ha and is located on the western side of Stanners Road, Waipapa (Figure 2). The property is bounded by rural lots with Stanners Road running along the eastern boundary. The site is zoned Rural Production with respect to the FNDC District Plan. The access is provided from the eastern boundary via a right of way through Lot 3 DP 526472.

Proposed Lot 1 is an undeveloped section, covered in grass, scrub and trees, some of which were recently felled. The Site generally slopes towards an open ditch that bisects the Site running north to south from roughly 119m NZVD on the western boundary to 99m NZVD around the open ditch. The building area to the east of Lot 1 sits between 104m and 100m NZVD sloping to the south and west. General site details are provided in Table 1.

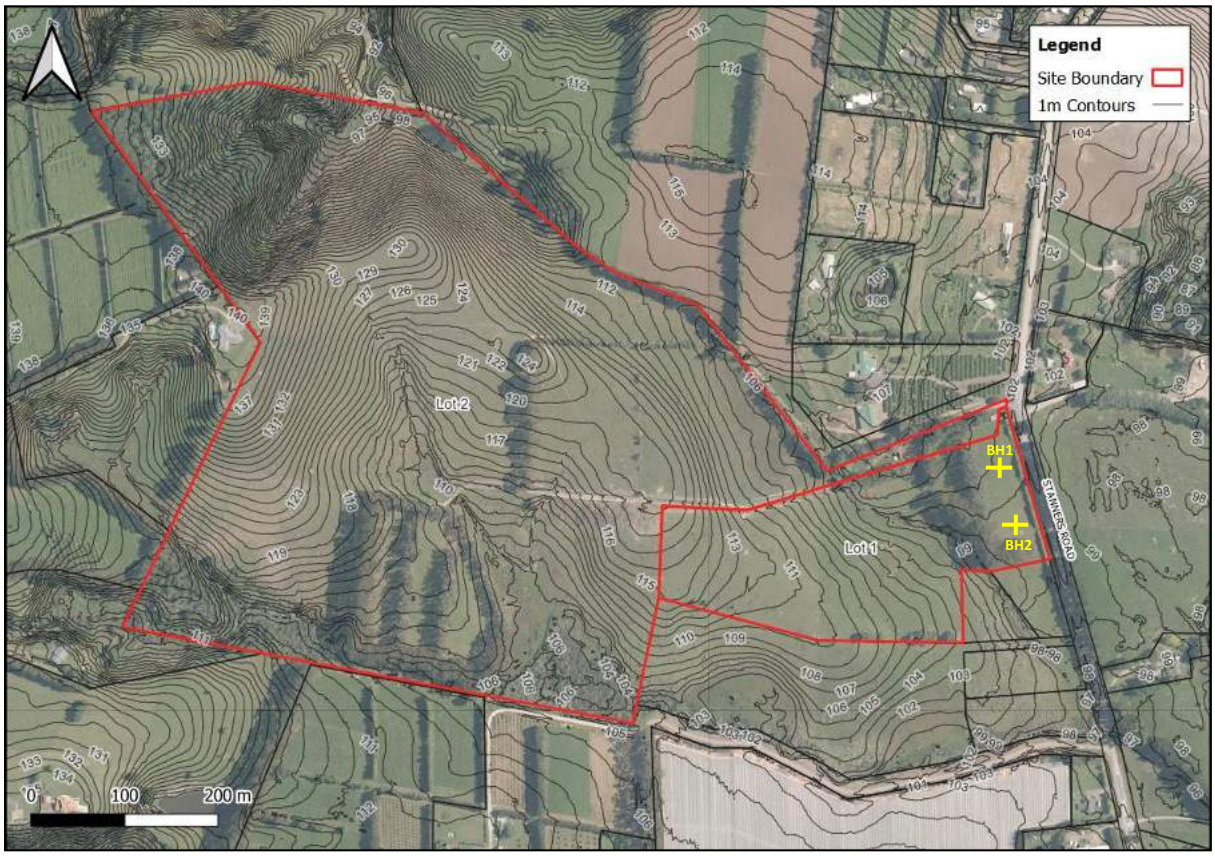


Figure 2: Locality Plan

Table 1: Site Details

Specific details about the site.

Item	Description
Property Address	Lot 3 Deposited Plan (DP) 551277, Stanners Road, Waipapa, Far North District
Owner	Edward Lock
Legal Description	Lot 3 Deposited Plan (DP) 551277
Territorial Authority	Far North District Council
Zoning	Rural Production
Engaged By	Edward Lock
Lot Size	Lot 3 = 37.8641 ha; e
Proposed Lot sizes	Proposed Lot 1 = 5.96 ha Proposed Lot 2 = 31.9041 ha
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.
Availability of Sewer	The area is unsewered and unlikely to be sewered in the long term.

5 Site Evaluation

VISION undertook site suitability investigations on 1st October 2024 and a summary provided in Table 2. The weather was fine at the time of the investigation. A panoramic photograph over the general building area with the proposed Lot 1 is provided in Figure 3.

Table 2: Site Evaluation Summary

Feature	Description
Site Evaluation Area	Eastern portion of Proposed Lot 1 ≈ 1.0 ha
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 are moderately exposed providing them with medium sun and wind exposure.
Vegetation	Proposed Lot 1 is covered in grass, scrub and trees, with some boulders present. Several non-native trees have recently been felled.
Slope	The proposed building area in Lot 1 (adjacent to Stanners Road) generally slopes towards the south and west towards the open ditch with slope angles typically ranging from approximately 1 to 4 degrees.
Fill	There were no obvious signs of fill on the proposed Lots 1 site.
Erosion Potential	No signs of erosion were noted on proposed Lots 1 during the site walkover assessment. The erosion potential is slight, sheet, rill (when cultivated) based on the Land Use Capability maps.
Surface Water	The following are located on or near proposed Lot 1: • Open drain running north to south bisecting the site (see Section 7). Roadside ditch running north to south along Stanners Road. These all have the potential for surface water diversion or

Feature	Description
	interception, therefore setbacks have been adopted suitably.
Flood Potential	The NRC flood level report mapping shows that the 1 in 100 year + CC fluvial flooding encroaches within the site boundaries; however, this is generally contained within the channel of the open ditch away from the proposed building location.
Stormwater run-on and upslope seepage	The proposed systems should include surface water cut-off drains where appropriate.
Groundwater	Subsurface conditions were logged from the boreholes performed on the site. Groundwater was not observed to be present in the boreholes which extend to a depth of up to 1.2m below ground level.
Site Drainage and Subsurface Drainage	Site drainage will need to be addressed at the time of Building Consent. At this stage no subsurface drainage is recommended.
Recommended Buffer Distances	All buffer distances recommended in NRC's Regional Plan, the District Plan and ARC TP58:2004 are achievable and do not appear to significantly limit the positioning of a new wastewater system.

Figure 3: Site panoramic photograph looking west over the proposed Lot 1

5.1 Council Hazard Mapping

According to the NRC and FNDC hazard layers the site is not located in an area susceptible to:

- Landslide
- Erosion
- Coastal Hazards
- Flooding (refer Section 7)
- Coastal Flooding

6 Site Earthworks and Geotechnical Requirements

6.1 Earthworks

Earthworks will be required in portions of the site to create a new building area, driveway and proposed access.

It is recommended that earthworks undertaken at the site be carried out in accordance with Auckland Council Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

6.1.1 Site Fills

It is recommended that fill slopes are constructed on land sloping at less than 1V:5H at a maximum batter slope of 1V:2.5H to a maximum height of 1.0m. All fill slopes greater than 1.0m in height are to be engineer assessed by a Chartered Professional Engineer experienced in geotechnical engineering.

Where the proposed filling is to support the loads of a building it will need to be certified by a Chartered Professional Engineer in accordance with NZS4431:2022.

6.1.2 Site Cuts

It is recommended that cut slopes are constructed at a maximum slope angle of 1V:3H to a maximum height of 1.0m. All cut slopes greater than 1.0m in height are to be engineer assessed by a chartered professional engineer experienced in geotechnical engineering.

6.2 Infrastructure

Basalt cobbles and boulders are anticipated during trenching for buried infrastructure. While groundwater depth is generally expected to be greater than 1.2m below ground level (bgl), ponding may occur in natural depressions. Perched water is more likely during winter and following severe storm events. Sumps and submersible pumps are likely to be required to remove water from the base of excavations following periods of intensive rain events.

6.3 Land Stability

A formal land stability assessment is not included in this report. Due to the flat to gently sloping topography, most of the site is considered at low risk of slippage. It is recommended that any proposed structures or fills placed within 8m of the open ditch's top bank require a stability assessment by a Chartered Professional Engineer specialising in geotechnical engineering.

6.4 Foundations

It is recommended that site specific geotechnical investigations are carried out for proposed structures, because the near-surface soils exhibit expansive characteristics, failing to meet the "good ground" criteria defined in NZS3604(2011). While deepened foundations might be a solution for constructing of light weight timber framed structures, the presence of the cobbles within the underlying soil complicates excavation. This could lead to over-excavation, requiring backfilling with compacted hardfill.

An alternative approach, subject to further geotechnical investigation, could involve constructing hardfill platforms and placing rib-raft foundations on top.

7 Soils

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

7.1 Published Soil Information

The 1:250,000 geological map, Geology of the Whangarei Area (Edbrooke et al 2009) indicates that the site is generally underlain by the Kerikeri Volcanic Group with the Waipapa Group present in the western and south-western portion of the property.

The soils have been mapped by Landcare Research which describes soils under the New Zealand Revised Soil Classification. The soil mapped at proposed Lot 1 is Oxidic Soils which are clayey soils dominated by crystalline aluminium and iron oxides.

Oxidic Soils occur in clayey materials derived by strong weathering of ancient volcanic rocks or ash. Their fertility is very low as they are extremely weather and leached. They do however have stable structure and good aeration, and they may be highly productive when fertilised.

7.2 Soil Survey and Analysis

A soil survey was undertaken at the site to determine the suitability for application of treated effluent. The soil survey was carried out based on two 1.2m boreholes (see BH1 and BH2 in Figure 2) drilled on proposed Lot 1.

BH1 showed that the soils overlying proposed Lot 1 building area generally consist of a layer of topsoil (silty clay), which is underlain by clayey silt to a depth of at least 1.2m below ground level. BH2 showed the southern area near the open drain to consist of topsoils over darker silty clay.

Groundwater was not encountered during the survey.

Borehole logs are included in Appendix B.

8 Local Hydrology and Flooding

The local hydrological network has been mapped in Figure 4 based on LiDAR and site observations.

The site currently drains via overland flows into the open ditch running north to south through the site (Figure 5) and towards the open drain along Stanners Road (Figure 6). The open ditch passes through neighbouring sub-divisions and discharges into unnamed tributaries of the Wairawarawa Stream via an online storage pond. The open drain alongside Stanners Road discharges water east via 300mm diameter culverts under the road. No existing formal drainage infrastructure was identified onsite other than the open ditch and it is anticipated that shallow sheet flow will occur towards the open ditches. Overland flows would generally enter the site from the north (upslope) and flow overland until intercepted by the drainage ditches.

The NRC Flood Level Report (see Figure 7and Appendix C) mapping shows that the 1 in 100 year + CC fluvial flooding encroaches within the site boundaries; however, this is generally contained within the channel of the open ditch away from the proposed building location. Ground elevations further support the flood mapping as the building area generally sits at around 102m NZVD, whereas Flood Level Point 1 in the figure suggests that flood water would be at approximately 100m NZVD. Downstream flooding is known to occur in the vicinity of the site; however this does not directly impact the subject property and proposed building area.

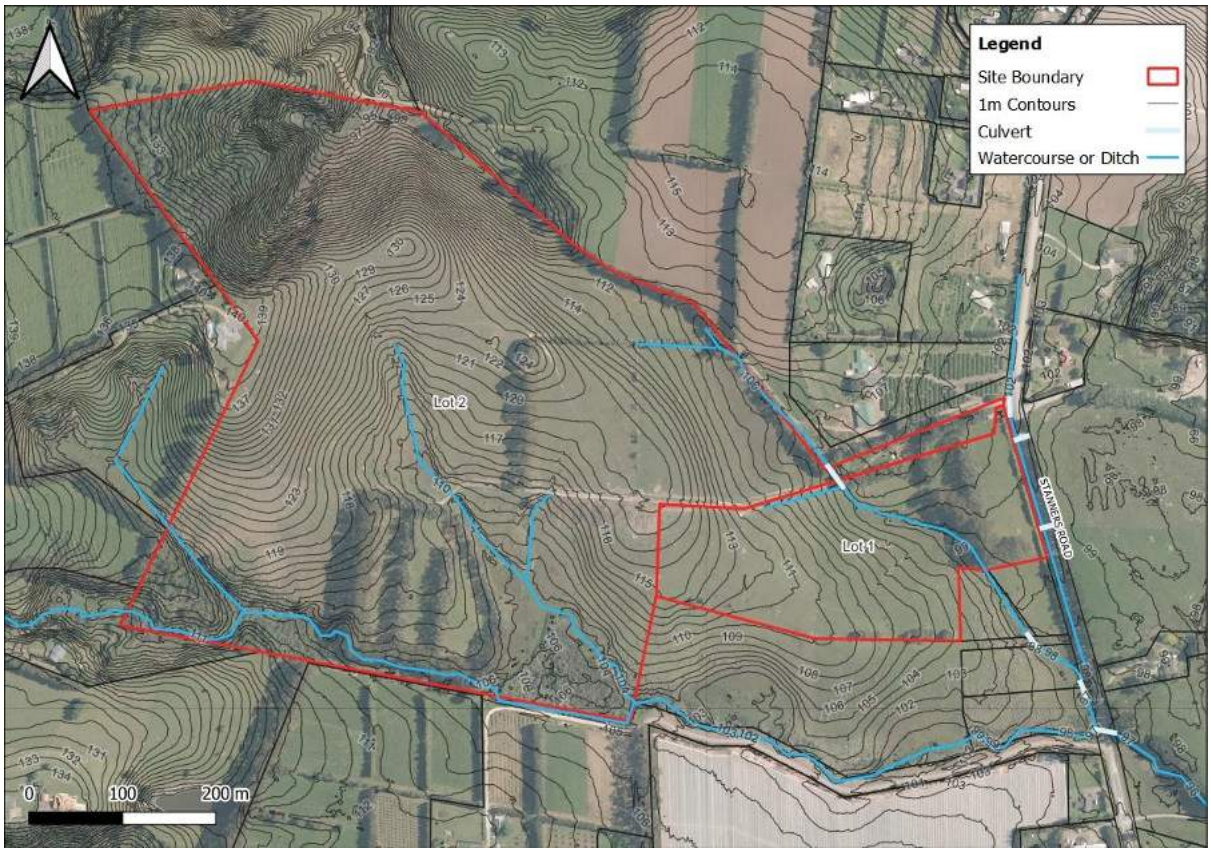


Figure 4: Local Hydrology and Site Observations

Figure 5: Photograph looking south from upstream of the open drainage ditch at the proposed Lot 1 property boundary

Figure 6: Photograph looking south along Stanners Road from the northeast corner of the Proposed Lot 1

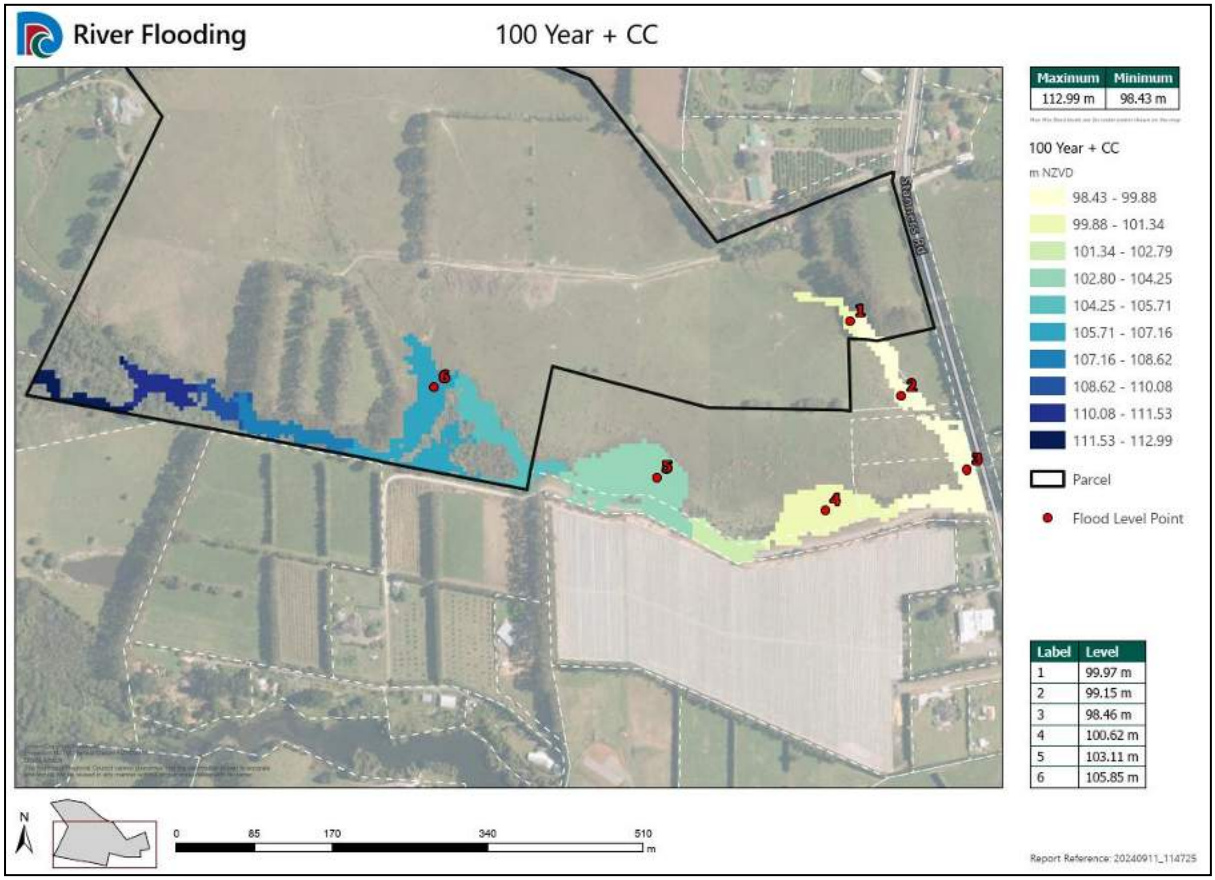


Figure 7: NRC Flood Level Report Excerpt for the 1 in 100 year River Flooding Event

8.1 Hydraulic Assessment

VISION previously completed a stormwater management report for the subdivision of the land immediately to the south of the site, reference J13510, dated 09/11/2018 included in Appendix D. The report included a detailed flood assessment that provided recommendations for the installation of four culverts below the access way downstream of the neighbouring Lot to the south. The installation of the culverts resulted in a minor increase in water levels within the open ditch upstream of the culverts. Within the open ditch, the previous stormwater report modelled the water depth at the downstream property boundary of the proposed Lot 1 as 0.47m deep (98.76m NZVD).

The estimated peak flow rate at the inlet to the four culverts, located near the southern boundary of subject property was calculated to be 2.49m^3/s. This peak value was previously used to estimate flood parameters and flooding extent on the proposed Lot 1 and was considered a conservative approach as it is likely to over-predict flood levels.

It should be noted that the access way over the four large culverts has a finished elevation of approximately 99m NZVD which forms the spill crest invert level should the culverts block and water backs up behind them. It is very unlikely that backwater in a blocked culvert flood event would encroach into the proposed Lot 1 building area. This is supported by the NRC Flood Level Report mapping.

9 Attenuation and Stormwater Management

9.1 Far North District Plan

The Far North District Plan (DP) provides rules relating to stormwater management at a site. The DP provides thresholds for permitted activities on a site which are deemed to have a no more than minor effect on the receiving environment. The permitted requirement for this site is defined in rule 8.6.5.1.3 of the DP as follows:

8.6.5.1.3 STORMWATER MANAGEMENT (Rural Production Zone)

"The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%."

Table 2 shows the permitted impermeable surface area for proposed Lot 1:

Table 2. Permitted Impermeable Surfaces

Allowable impermeable surfaces per each proposed lot

Proposed Lot	Area (m^2)	Permitted impermeable surfaces (15%) (m^2)
Lot 1	59,600	8,940

Where impermeable surfaces are between 15 - 20% of the gross site area, stormwater management and attenuation will be required and classed as a controlled activity.

Above 20%, it is classed as a discretionary activity under the DP.

9.2 FNDC Engineering Standards & Guidelines

The FNDC Engineering Standards & Guidelines (ESG) (revised 2009) provides guidance on the requirements of FNDC's infrastructure department. Generally, the design storm return period for Rural and Rural Residential Areas shall be 10 years.

Section 4.2.4 is relevant for subdivisions relating to stormwater catchment management and off-site effects as follows:4.2.4 Catchment management planning and off-site effects

The developer must take into account catchment-wide issues at the concept design stage. The implications of future development upstream of the site and the cumulative effects of land development on water quality and flooding downstream are important considerations. The larger the scale of the development the more significant catchment management planning issues are likely to be. The developer must show how these issues are to be addressed and the effects dealt with. Where the discharge is to be into council's system and/or is to be incorporated into council's existing or future discharge consent, then the developer must demonstrate that consent conditions, including quality requirements, will be met.

All stormwater systems shall provide for the collection and controlled disposal of stormwater from within the land being developed together with any runoff from upstream catchments. In designing downstream facilities the upstream catchment shall be considered as being fully developed to the extent defined in the current District Plan. For all land development works (including projects involving changes in land use or coverage) the design of the stormwater disposal system shall include the evaluation of stormwater runoff changes on upstream and downstream properties.

Upstream flood levels shall not be increased by any downstream development unless any increase is small and can be shown to have no detrimental effects on the upstream properties. Downstream impacts investigated shall include (but are not limited to) changes in flow peaks and patterns, flood water levels, contamination levels and erosion or silting effects, and effects on the existing stormwater drainage system. Where such impacts are considered detrimental mitigation measures (e.g. Peak flow attenuation, velocity control, contamination reduction facilities) on or around the development site, or the upgrading of downstream stormwater disposal systems at the developers expense are likely to be required.

9.3 On-site Attenuation

Given the known flood hazard downstream of the site, the requirement for on-site attenuation shall be controlled by the following two-gate system that is structured in accordance with the FNDC ESG.

- Gate 1: As per Section 9.2 of this report, "*the design of the stormwater disposal system shall include the evaluation of stormwater runoff changes on upstream and downstream properties"* and future owners will need to assess their impact on upstream and downstream flood levels at the time of their building consent.
- Gate 2: If the item 1 assessment confirms that "*upstream flood levels shall not be increased by any downstream development unless any increase is small and can be shown to have* ***no detrimental effects*** *on the upstream properties"* then no attenuation is required, provided that they are within the permitted impermeable surfaces threshold (Section 9.1).
- Gate 2: If the answer to item 1 above is that they will have detrimental impacts upstream or downstream of their property, then attenuation is required with specific design.

It is recommended that at the time of the Building Consent, the potential impacts on flood levels are assessed by a Chartered Professional Engineer or suitably qualified professional to the satisfaction of Councils' Development Engineer or delegate representative to confirm the requirement for onsite attenuation. Should attenuation be required, it must reduce post development runoff back to pre-development rates for the 10% AEP storm event with an RCP of 6.0 to allow for the potential effects of climate change. This is in keeping with the FNDC ESG.

9.4 Secondary Surface Flow Paths

All stormwater systems shall provide for the collection and controlled disposal of stormwater from within the land being developed together with any runoff from upstream catchments. Secondary

surface flow paths must also be provided to convey primary system overflows. These surface flow paths should be designed to convey up to the 1 in 100 year event.

All areas where no secondary flow path or secondary protection is available shall be 100 years. Secondary protection shall be satisfied by a combination of the primary protection system and appropriately designed secondary flow paths, controlled flood plains and setting of appropriate building levels. Suitable freeboards must be provided above water levels in secondary overland flow paths. Additionally, for secondary flow path safety, the maximum allowable product of velocity and depth (in metres) shall be 0.4 m^2/s.

Given the available space with in the proposed Lot 1 site, incorporation of secondary surface flow paths is not considered a constraint.

10 Wastewater Treatment System Selection

An appropriate land-application system and the treatment option to precede it is outlined in this section based upon a review of the physical site constraints and the assessment of environmental & public health effects. A disposal total design load of 1080 L/day is assumed.

10.1 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.

10.2 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.

10.3 Land Application

It is anticipated that surface mounted pressure compensating drip lines covered with mulch will be suitable for the proposed future activities. We have assumed a soil category of 6 (in accordance with TP58) from onsite soil testing with a loading rate of 3 litres per square meter per day and a 100% reserve area.

Table 3. Summary of land application area

Proposed Lots	Area Required for Disposal of Effluent (using the assumed proposed development with 100% Reserve)(m^2)
1	360m^2 (active) + 360 m^2 (reserve) = 720 m^2

Proposed Lot 1 was found to have sufficient area available for an on-site wastewater treatment system as outlined in this report and shown in Figure 8. The figure incorporates the required setbacks from watercourses and boundaries; however, the plan is indicative and the wastewater disposal arrangement must be confirmed during design by a suitably qualified person.

Figure 8: Indicative effluent application areas

10.4 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, adopting an indicative dwelling and driveway location on proposed Lot 1 basing the volume of effluent produced for a 4-bedroom dwelling and for the lots and providing setbacks.

11 Summary of Recommendations

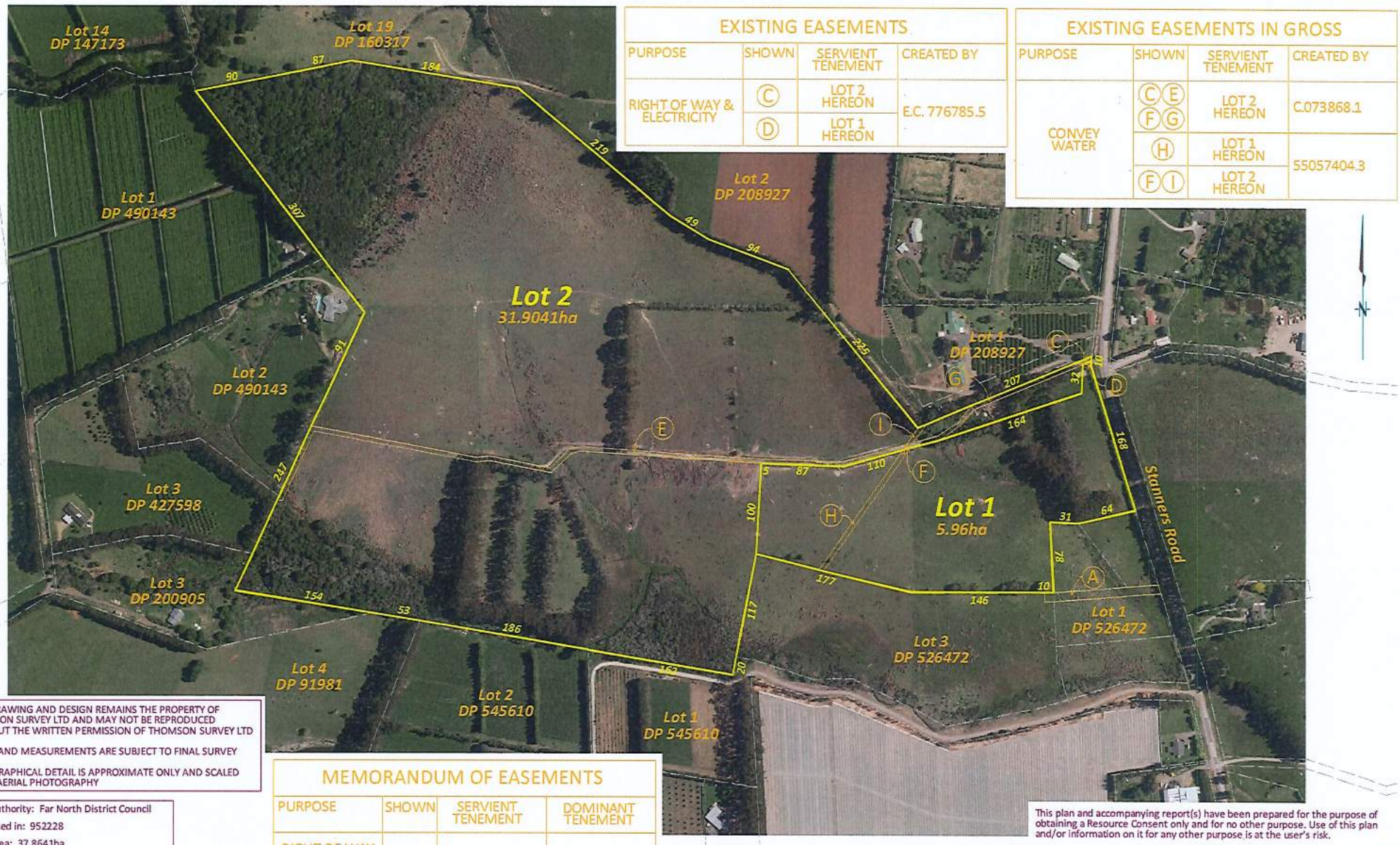
The following recommendations are provide for the proposed subdivision of Lot 3 DP 551277, Stanners Road, Waipapa:

- Site specific geotechnical investigations are to be carried out for proposed structures at the site by a Chartered Professional Engineer experienced in geotechnical engineering.
- Earthworks are to be carried out in accordance with Auckland Council Guidance Document 2016/005: Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).
- Any proposed site filling is to be assessed by a Chartered Professional Engineer experienced in geotechnical engineering prior to undertaking the works or issue of a Building Consent.
- Cut slopes are to be constructed at a maximum slope angle of 1V:3H to a maximum height of 1.0m. All cut slopes greater than 1.0m in height are to be engineer assessed by a chartered professional engineer experienced in geotechnical engineering.
- Any building consent, which increases impermeable surfaces beyond the permitted threshold of 8,940m^2 are to attenuate flows to the permitted levels for rainfall events up to a 10% Annual Exceedance Probability (10% AEP) with an allowance for the RCP6.0 scenario of climate change.
- The design of the on-site wastewater disposal is undertaken by an FNDC approved TP58 report writer experienced in on-site wastewater disposal. The final system design and layout will be dependent on the size and location of the building platform and associated structures (water tanks, driveways, etc.).

12 Conclusion

Provided the recommendations given in this report are adhered to, the subject site is considered to be suitable for the proposed subdivision depicted on the attached Thompson Survey Limited Proposed Subdivision Plan dated 08/07/2024.

Appendix A
Supplied Drawings



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	D	LOT 1 HEREON	

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CONVEY WATER	C E F G	LOT 2 HEREON	C.073868.1
	H	LOT 1 HEREON	55057404.3
	F I	LOT 2 HEREON	

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TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
Comprised in: 952228
Total Area: 37.8641ha
Zoning: Rural Production
Resource features: NIL

MEMORANDUM OF EASEMENTS			
PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY	A	LOT 3 DP 526472	LOT 2 HEREON

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

0 40 200 400m

Bar Scale 1:4000 @ A3

THOMSON SURVEY LIMITED
315 Kerikeri Rd
P.O. Box 372 Kerikeri
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Ph: (09) 4077360
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Registered Land Surveyors, Planners & Land Development Consultants

PROPOSED SUBDIVISION OF LOT 3 DP 551277 & RIGHT OF WAY OVER LOT 3 DP 526472

STANNERS ROAD, WAIPAPA

PREPARED FOR: LOCK

	Name	Date
Survey		
Design		
Drawn	KY	18.11.22
Approved		
Rev	KY	08.07.24

10375 Scheme 20240807.lcd

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 10375

Sheet 1 of 1

Appendix B
Soil Profile Logs

Borehole Log BH1

Client: Edward Lock	**Project: Site Suitabilty**	**Project No.: J15713**	
Project Location: Lot 3 DP 51277 Stanners Road, Kerikeri	**Borehole Location:** See Wastewater Plan	**Drilled by:**	DA
		Logged by:	DA
Hole started: 11/03/2019	**Drill method:** 50mm handauger		
Hole completed: 11/03/2019			

VISION CONSULTING ENGINEERS

Depth (m)	Graphic	Moisture	Soil Description	**Geology** & other notes
0.00		D	Clayey SILT; black, trace rootlets	TOPSOIL
0.05				
0.10				
0.15				
0.20				
0.25				
0.30		D	Clayey SILT; brown, trace ornage, trace fine sub-angular gravel	KERIKERI VOLCANIC GROUP
0.35				
0.40				
0.45				
0.50				
0.55				
0.60		D-M	orange brown, trace brown, trace grey	
0.65				
0.70				
0.75				
0.80				
0.85				
0.90				
0.95				
1.00		M	trace fine angular gravel	
1.05				
1.10				
1.15				
1.20			End of hand auger at 1.2m bgl	
1.25			Target depth achieved	
1.30			Groundwater not encountered	
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 BH2

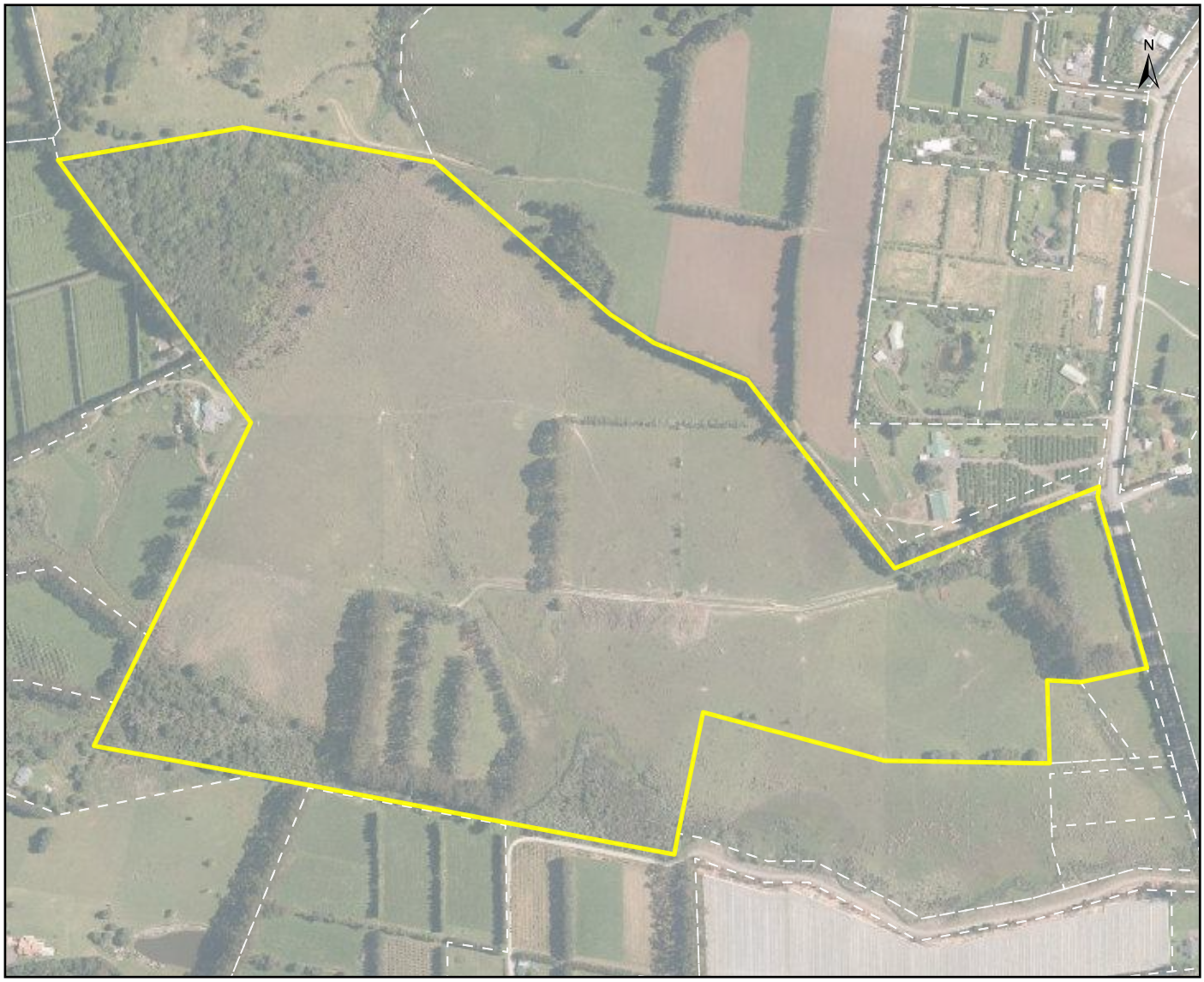
Client: Edward Lock	**Project: Site Suitabilty**	**Project No.: J15713**	
Project Location: Lot 3 DP 51277 Stanners Road, Kerikeri	**Borehole Location:** See Wastewater Plan	**Drilled by:**	DA
		Logged by:	DA
Hole started: 11/03/2019	**Drill method:** 50mm handauger		
Hole completed: 11/03/2019			

VISION CONSULTING ENGINEERS

Depth (m)	Graphic	Moisture	Soil Description	**Geology** & other notes
0.00		D	Clayey SILT; black, trace rootlets	TOPSOIL
0.05				
0.10				
0.15				
0.20		M	Silty CLAY; brown	KERIKERI VOLCANIC GROUP
0.25				
0.30				
0.35				
0.40			trace fine to medium sub-angular gravel	
0.45				
0.50			dark brown, high plasticity	
0.55				
0.60				
0.65				
0.70				
0.75				
0.80				
0.85				
0.90				
0.95				
1.00			pale brown	
1.05				
1.10				
1.15				
1.20			End of hand auger at 1.2m bgl	
1.25			Target depth achieved	
1.30			Groundwater not encountered	
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				

Appendix C
NRC Flood Level Report

Flood Level Report



Parcel ID: 8152557

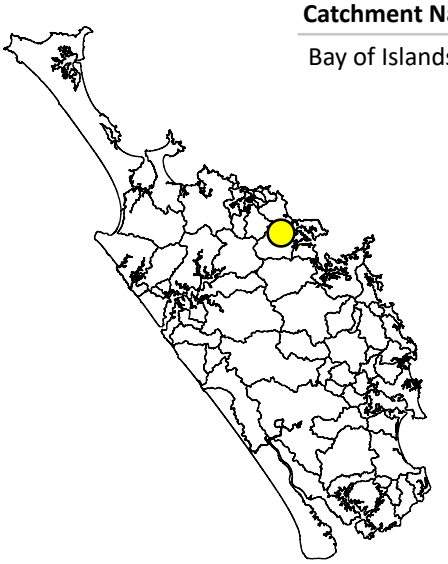
Title: 1117294

Appellation: Lot 3 DP 551277

Survey Area: 378,641 m²

Catchment Name(s)

Bay of Islands Coast



Date Exported: 11/09/2024

Report Reference: 20240911_085019

Useful Flood Information Definitions

Annual Exceedance Probability (AEP) - The probability of a flood event of a given size occurring in any one year, usually expressed as a percentage annual chance.

1% AEP - A flood of this size or larger has a 1 in 100 chance or a 1% probability of occurring in any year.
2% AEP - A flood of this size or larger has a 1 in 50 chance or a 2% probability of occurring in any year.
5% AEP - A flood of this size or larger has a 1 in 20 chance or a 5% probability of occurring in any year.
10% AEP - A flood of this size or larger has a 1 in 10 chance or a 10% probability of occurring in any year.

NZVD2016 - New Zealand Vertical Datum - The reference level used in our flood models to define ground level.
Flood Levels - Flood levels are used from our modelled flood level rasters. The flood levels are calculated above NZVD 2016 Datum.
Climate Change (CC) - NZCPS (2010) requires that the identification of coastal hazards includes consideration of sea level rise over at least a 100-year planning period. Climate change impacts, such as increased rain intensity, have been included in the flood scenarios. You can read more about the Climate Change forecasts included in each flood model in the technical reports on the NRC website.
Mean high water spring (MHWS) - describes the highest level that spring tides reach, on average.

Coastal Flood Hazard Zones (CFHZ)

Coastal flood hazard zones are derived using a range of data including tide gauge analysis, wind and wave data and models, and use empirical calculations to estimate extreme water levels around the coastline. The calculations include projected sea level rise scenarios based on the latest Ministry for the Environment guidance.

CFHZ 0 Coastal Flood Hazard Zone 0 - area currently susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event
CFHZ 1 Coastal Flood Hazard Zone 1 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-50 year storm event, taking into account a projected sea-level rise of 0.6m over the next 50 years
CFHZ 2 Coastal Flood Hazard Zone 2 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event, taking into account a projected sea-level rise of 1.2m over the next 100 years
CFHZ 3 Coastal Flood Hazard Zone 3 - an area susceptible to coastal inundation (flooding by the sea) in a 1-in-100 year storm event, taking into account a projected sea-level rise of 1.5m over the next 100 years (rapid sea level rise scenario)

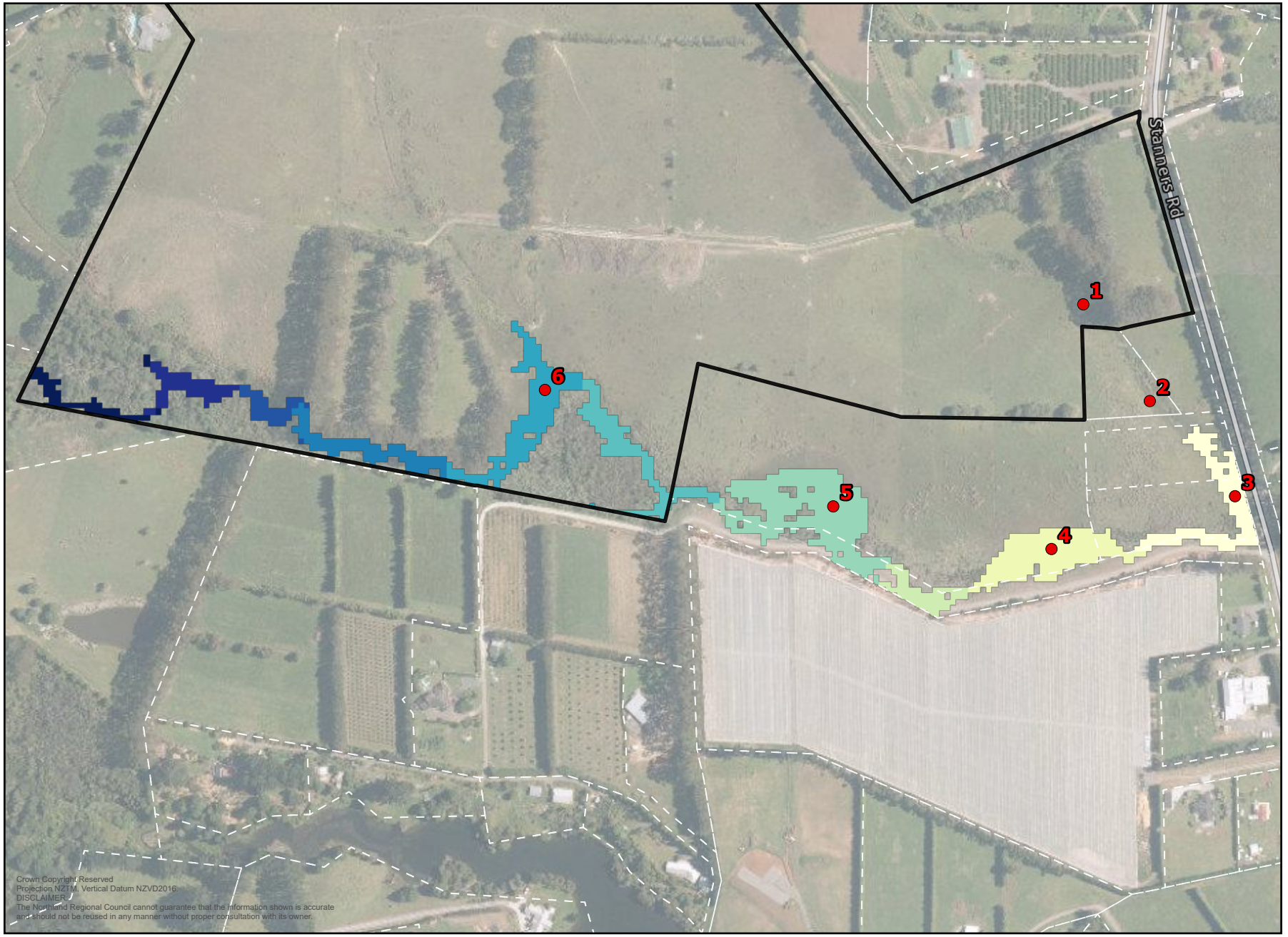
REGIONWIDE and PRIORITY - RIVER FLOOD HAZARD ZONES (RFHZ)

River flood hazard zones are created to raise awareness of where flood hazard areas are identified, inform decision-making and to support the minimisation of the impacts of flooding in our region. The river flood hazard zones have been created using an assessment of best current available information, engaging national and international experts in the field, using national standards and guidelines and has been peer reviewed. This will provide a good indication of the areas at potential risk of flooding from a regional perspective. However, flood mapping is a complex process which involves some approximation of the natural features and processes associated with flooding.

River Flood Hazard Zone 1 – 10% AEP flood extent: an area with a 10% chance of flooding annually
River Flood Hazard Zone 2 – 2% AEP flood extent: an area with a 2% chance of flooding annually
River Flood Hazard Zone 3 – 1% AEP flood extent: an area with a 1% chance of flooding annually with the inclusion of potential Climate Change (CC) impact

River Flooding

10 Year



Maximum	Minimum
112.65 m	98.12 m

Max Min flood levels are for the raster extent shown on the map

10 Year

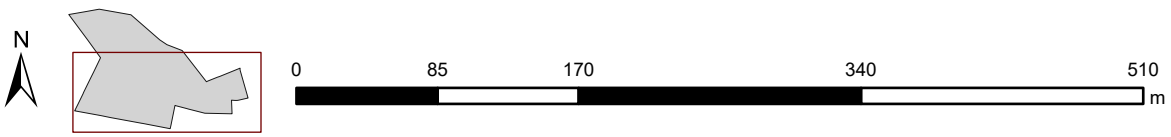
m NZVD

- 98.12 - 99.57
- 99.57 - 101.03
- 101.03 - 102.48
- 102.48 - 103.93
- 103.93 - 105.39
- 105.39 - 106.84
- 106.84 - 108.29
- 108.29 - 109.75
- 109.75 - 111.20
- 111.20 - 112.65

Parcel

Flood Level Point

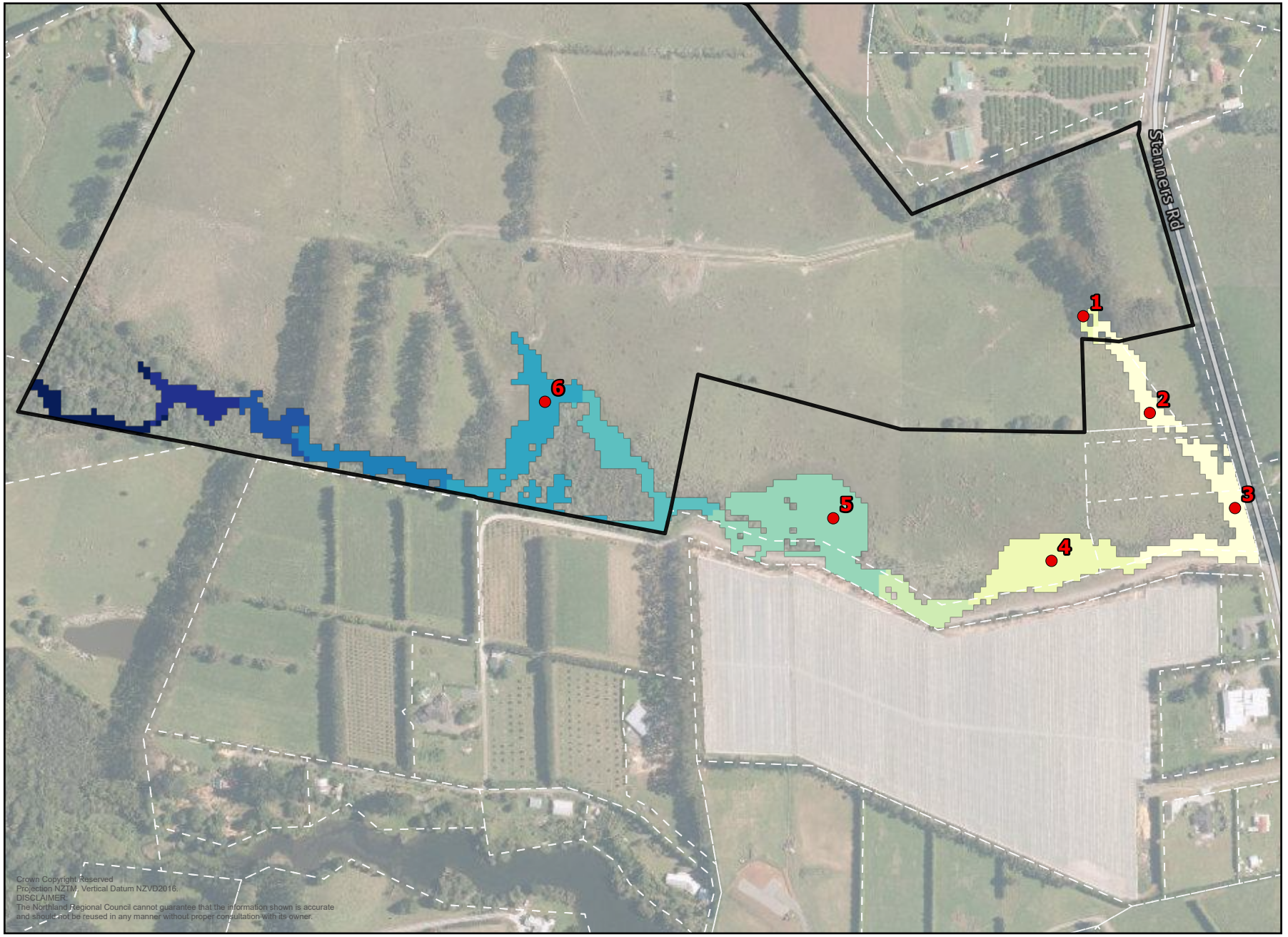
Label	Level
1	0 m
2	0 m
3	98.2 m
4	100.04 m
5	102.69 m
6	105.64 m



Report Reference: 20240911_114725

River Flooding

50 Year



Maximum	Minimum
112.68 m	98.28 m

Max Min flood levels are for raster extent shown on the map

50 Year

m NZVD

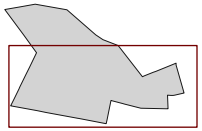
- 98.28 - 99.72
- 99.72 - 101.16
- 101.16 - 102.60
- 102.60 - 104.04
- 104.04 - 105.48
- 105.48 - 106.92
- 106.92 - 108.36
- 108.36 - 109.80
- 109.81 - 111.24
- 111.25 - 112.68

Parcel

Flood Level Point

Label	Level
1	99.9 m
2	99.05 m
3	98.32 m
4	100.27 m
5	102.86 m
6	105.72 m

N

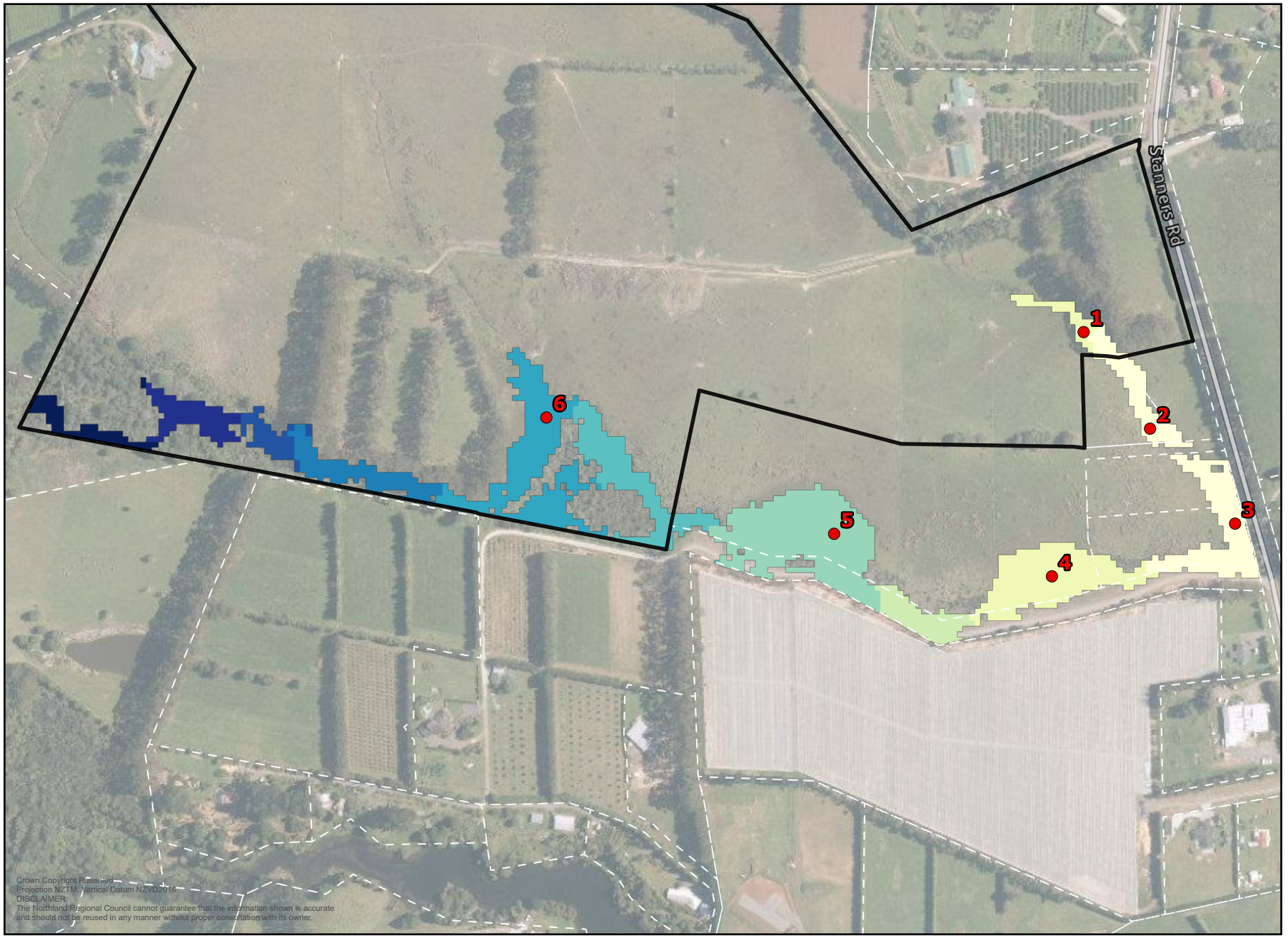


0 85 170 340 510 m

Report Reference: 20240911_114725

River Flooding

100 Year + CC



Maximum	Minimum
112.99 m	98.43 m

Max Min flood levels are for raster extent shown on the map

100 Year + CC

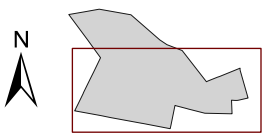
m NZVD

- 98.43 - 99.88
- 99.88 - 101.34
- 101.34 - 102.79
- 102.80 - 104.25
- 104.25 - 105.71
- 105.71 - 107.16
- 107.16 - 108.62
- 108.62 - 110.08
- 110.08 - 111.53
- 111.53 - 112.99

Parcel

Flood Level Point

Label	Level
1	99.97 m
2	99.15 m
3	98.46 m
4	100.62 m
5	103.11 m
6	105.85 m



0 85 170 340 510 m

Report Reference: 20240911_114725

Appendix D Stormwater Management Report

VISION CONSULTING
Engineers & Planners

FEASIBILITY STORMWATER REPORT

Proposed Subdivision of Lot 2 DP 201987, Stanners Road, Kerikeri

Prepared for

Edward Lock

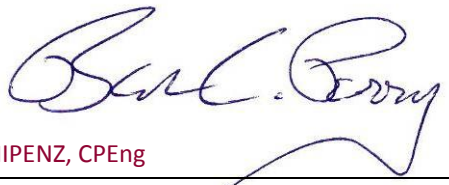
29/11/2019

Report Information Summary

Job no.	J14245
Report Author	Lidija Plantev
Report Reviewer	Ben Perry
Version No.	1
Status	Final
Date	29/11/2019

Version No.	Date	Description
1	29/11/2019	Final Issued to Client

Document Acceptance

Action	Name	Signed	Date
Author	Lidija Plantev	 DipEng (Civil)	29/11/2019
Reviewer	Ben Perry	 MIPENZ, CPEng	29/11/2019

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. VISION should be contacted immediately if variations are encountered. It is possible that further investigation or modification of recommendations is required.

VISION CONSULTING
Engineers & Planners

Vision Consulting Engineers Ltd
Level 1, 62 Kerikeri Road
Kerikeri 0230

Contents

Appendices

Tables

Figures

1 Introduction

Vision Consulting Engineers Limited (VISION) was commissioned by Edward Lock to provide a feasibility stormwater report to accompany land use and subdivision Resource Consent applications to the Far North District Council (FNDC) for a proposed subdivision at Stanners Road, Waipapa, Far North District, Lot 2 Deposited Plan 201987.

It is proposed to subdivide Lot 2 DP 201987 into three allotments with Lot 3 remaining a farm as shown on the Thomson surveyors scheme plan titled "Proposed subdivision of Lot 2 DP 201987, Stanners Road, Waipapa" dated 20/08/2019, ref. 9593, included in Figure 2 and Appendix A.

2 Scope of Work

The scope of work for this report is to assess stormwater management at the site including primary and secondary flows for the proposed development as defined on the Thomson surveyors scheme plan titled "Proposed subdivision of Lot 2 DP 201987, Stanners Road, Waipapa" included in Appendix A.

The stormwater management report is based on published and unpublished information about the site, including:

- Desk Study: Review published and unpublished information about the site
- Site walkover assessment
- Assess stormwater management
  - Measure 4 site specific cross sections with tape and abney level
  - Site specific flood depth and extent calculations
  - Mapping flood extents
- Preparation of factual report addressing subdivision feasibility in relation to stormwater

3 Site Description & Details

The site is located on the western side of Stanners Road, Waipapa. The property is bounded by rural lots to the northeast and southeast, Stanners Road to the east and rural properties in all other directions.

The access is provided from the southern boundary and provides access to all 3 proposed Lots.

Proposed Lot 1 is an undeveloped section, covered in grass. The site generally gently slopes towards the southwestern boundary. An open drain runs along the north-western boundary and along Stanners Road.

Proposed Lot 2 is an undeveloped section, covered in grass. The site generally gently slopes towards the northeastern boundary. An overland flow path is present near the proposed eastern property boundary that flows in a general north to south direction.

Proposed Lot 3 is going to remain as farm land and is excluded from this assessment. Three open drains are present on the lot that generally flow from the northwest towards southeast.

The locality of the site is shown in Figure 1 and general site details are provided in Table 1:

Table 1. Site Details

Specific details about the site.

Item	Description
Property Owner	Edward Martin Wilberforce Lock, Robin Wilberforce Lock
Site Address	Stanners Road, Waipapa, Far North District
Legal Description	Lot 2 Deposited Plan 201987
Certificate of Title	NA 130C/107
Site Area	386,945 m2
Territorial Authority	Far North District
Zoning	Rural Production
Permitted Impermeable Cover	8.6.5.1.3 -The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%.

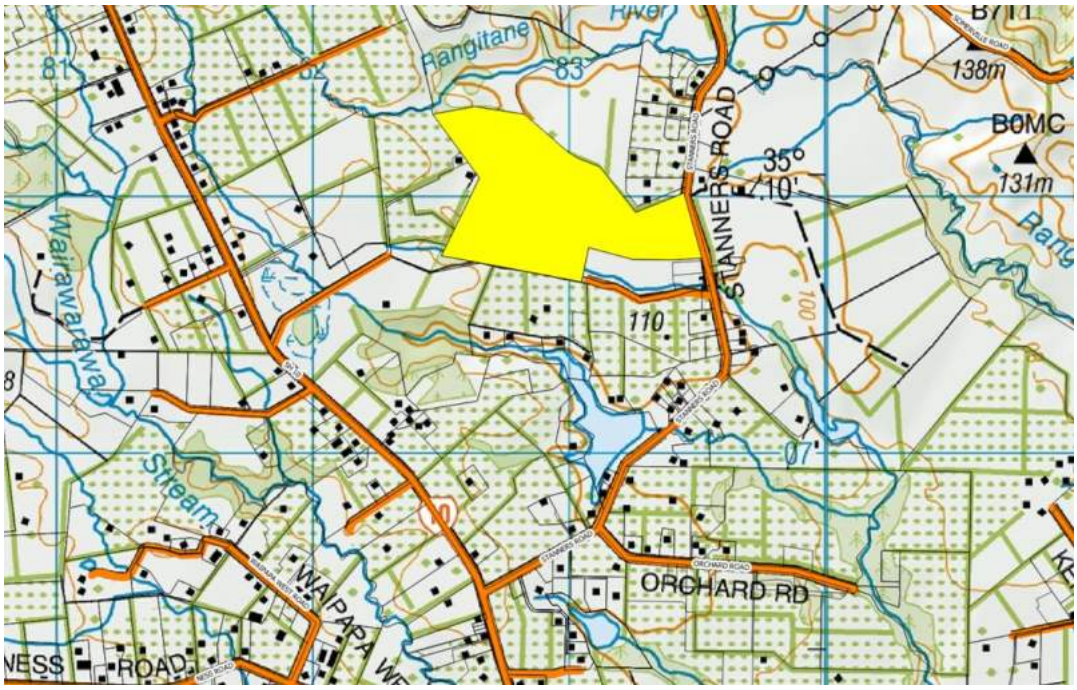


Figure 1. Locality Plan

Site location is highlighted yellow in the image, north is up the page.

4 Geology

The 1:250,000 geological map, Geology of the Whangarei Area (Edbrooke et al 2009) indicates that the site is generally underlain by the Waipapa Group, with the Kerikeri Volcanic Group present in the eastern and southwestern portion of the property. Proposed Lots 1 and 2 are mapped as being underlain by the Kerikeri Volcanic Group.

The soils have been mapped by Landcare Research which describes soils under the New Zealand Revised Soil Classification. The soil mapped at the proposed Lot 1 and Lot 2 is as Otaha gravelly clay loam being soils of the rolling and hilly land, imperfectly to very poorly drained.

5 Downstream Flooding

This title land does not intersect with any flood layers published by the Northland Regional Council or Far North District Council. However, this area has not been modeled by Northland Regional Council, so flood levels for the 100-year flood are not readily available.

Downstream flooding is known to occur in the vicinity of the site, however this does not directly impact the subject property.

6 Attenuation Requirements

6.1 Far North District Plan

The Far North District Plan (DP) provides rules relating to stormwater management at a site. The DP provides thresholds for permitted activities on a site which are deemed to have a no more than minor effect on the receiving environment. The permitted requirement for this site is defined in rule 8.6.5.1.3 of the DP as follows:

8.6.5.1.3 STORMWATER MANAGEMENT (Rural Production Zone)

"The maximum proportion of the gross site area covered by buildings and other impermeable surfaces shall be 15%."

Table 2 shows the permitted impermeable surface area for proposed Lots 1 and 2:

Table 2. Permitted Impermeable Surfaces

Allowable impermeable surfaces per each proposed lot

Proposed Lot	Area (m^2)	Permitted impermeable surfaces (15%) (m^2)
Lot 1	4010	601.5
Lot 2	4010	601.5

Where impermeable surfaces exceed 15% of the gross site area, stormwater management and attenuation will be required as a controlled or restricted discretionary activity under the DP.

6.2 Far North District Council Engineering Standards & Guidelines

The FNDC Engineering Standards & Guidelines (ESG) provide guidance on the requirements of FNDC's infrastructure department. Section 4.2.4 is relevant for subdivisions relating to stormwater catchment management and off-site effects as follows:

> 4.2.4 Catchment management planning and Off-Site Effects
>
> The developer must to take into account catchment-wide issues at the concept design stage. The implications of future development upstream of the site and the cumulative effects of land development on water quality and flooding downstream are important considerations. The larger the scale of the development the more significant catchment management planning issues are likely to be. The developer must show how these issues are to be addressed and the effects dealt with. Where the discharge is to be into council's system and/or is to be incorporated into council's existing or future discharge consent, then the developer must demonstrate that consent conditions, including quality requirements, will be met.

All stormwater systems shall provide for the collection and controlled disposal of stormwater from within the land being developed together with any runoff from upstream catchments. In designing downstream facilities the upstream catchment shall be considered as being fully developed to the extent defined in the current District Plan. For all land development works (including projects involving changes in land use or coverage) the design of the stormwater disposal system shall include the evaluation of stormwater runoff changes on upstream and downstream properties.

Upstream flood levels shall not be increased by any downstream development unless any increase is small and can be shown to have no detrimental effects on the upstream properties. Downstream impacts investigated shall include (but are not limited to) changes in flow peaks and patterns, flood water levels, contamination levels and erosion or silting effects, and effects on the existing stormwater drainage system. Where such impacts are considered detrimental mitigation measures (e.g. Peak flow attenuation, velocity control, contamination reduction facilities) on or around the development site, or the upgrading of downstream stormwater disposal systems at the developers expense are likely to be required.

7 Stormwater Management

Stormwater management at the site can be broken into three components; primary flows, secondary flows, and attenuation.

Primary and secondary flows have been assessed generally following the methodology set out in the New Zealand Building Code Acceptable Solutions section E1/VM1 Surface Water.

A drawing set is attached in Appendix A showing the plans and details forming the basis of this assessment and calculations are shown in Appendix C. The following sections provide a summary of the findings of this work.

7.1 Existing Situation

The existing situation for Proposed Lots 1 and 2 in regard to stormwater flows is as follows:

- Minor sheet flows enter proposed Lot 1 from the north-east and exit the proposed lot to the south-west. An existing open drain along Stanners Road acts as a cut off drain.
- Minor sheet flows enter proposed Lot 2 from the north-west and flow towards the open drain/overland flow path that is present in the eastern portion of the proposed lot.
- An open drain/overland flow path is present in the eastern portion of proposed Lot 2.
- To the south of the proposed lots, a new access for the neighbouring subdivision has been constructed. Four culverts are present to convey stormwater flows from the open drain/overland flow path beneath the access way.

7.2 Existing Overland Flow Path Assessment

7.2.1 Hydrology Assessment

VISION previously completed a stormwater management report for the subdivision of the land immediately to the south of the site, reference J13510, dated 09/11/2018 included in Appendix D. The report included a detailed flood assessment that provided recommendations for the installation of four culverts below the access way immediately to the south of the subject site. The installation of the culverts resulted in a minor increase in water levels upstream of the culverts, land within the subject site of this report.

The estimated peak flow rate at the inlet to the four culverts, located near the southern boundary of subject property was calculated to be 2.49m^3/s. This peak value has been used, within this report, to estimate flood parameters and extent on the subject site. This is a conservative approach, as it is likely to over-predict flood levels.

7.2.2 Hydraulic Assessment

Manning's Equation has been used as part of the hydraulic assessment. This work was undertaken in general accordance with the methods outlined in E1/VM1 of the New Zealand Building Code.

Based on the prior report, the water surface elevation for a 100 year event was calculated to be 97.69m One Tree Point Datum (OTPD). This was to allow for the headwater effect and subsequent ponding at the culverts' inlet.

Several cross sections have been modeled using Manning's Equation to determine the predicted extent of flooding in the overland flow path during a 100 year storm event. The results of the assessment are summarised in Table 3 below. The predicted extent of flooding is presented on the stormwater management drawings included in Appendix B.

Table 3. Hydraulic Design Output

Outputs:	***Drain flow depth***	Cross Section 1	0.47	m
		Cross Section 2	0.58	m
		Cross Section 3	1.052	m
		Cross Section 4	0.57	m

7.2.3 Discussion

Based on the hydraulic assessment carried out, flood water is anticipated within all proposed lots. It should be appreciated that proposed lot 3 makes up some 437 hectares and has been excluded from this investigation. Detailed analysis of the extend of flooding within proposed lots 1 & 2 has been undertaken using flows calculated for a prior assessment. These flows were used to estimate the depth and extent of flooding at four measured cross sections. The extent of the 100-year flood is then interpolated between sections to show the flood extent, see sheet 4 in Appendix B. The area available on lots 1 & 2 which lies outside the predicted flood extent is summarised in Table 4. It is recommended that the floodway is protected to prevent obstructions from altering the flood levels.

Table 4. Summary of predicted 1 in 100 year flood extent

Proposed Lot	Total Lot Size (m^2)	Area affected by 1 in 100 yr event (m^2)	Unaffected Area Available (m^2)
1	4010	272	3738
2	4010	949	3091

7.3 On-site Attenuation

Due to the presence of the open drain and downstream flooding in the vicinity of the proposed lots, it is recommended that at the time of the Building Consent, onsite attenuation is designed by a Chartered Professional Engineer to reduce post development runoff back to pre-development (greenfield) rates for the 10% AEP storm event with an RCP of 6.0 to allow for the potential effects of climate change.

8 Conclusion & Recommendations

Opinions and recommendations given in this report are based on a desktop study and site visit on 5 November 2019. Provided that the recommendations within this report are adopted, it is anticipated that the proposed development is unlikely to have a negative effect on the downstream receiving environment.

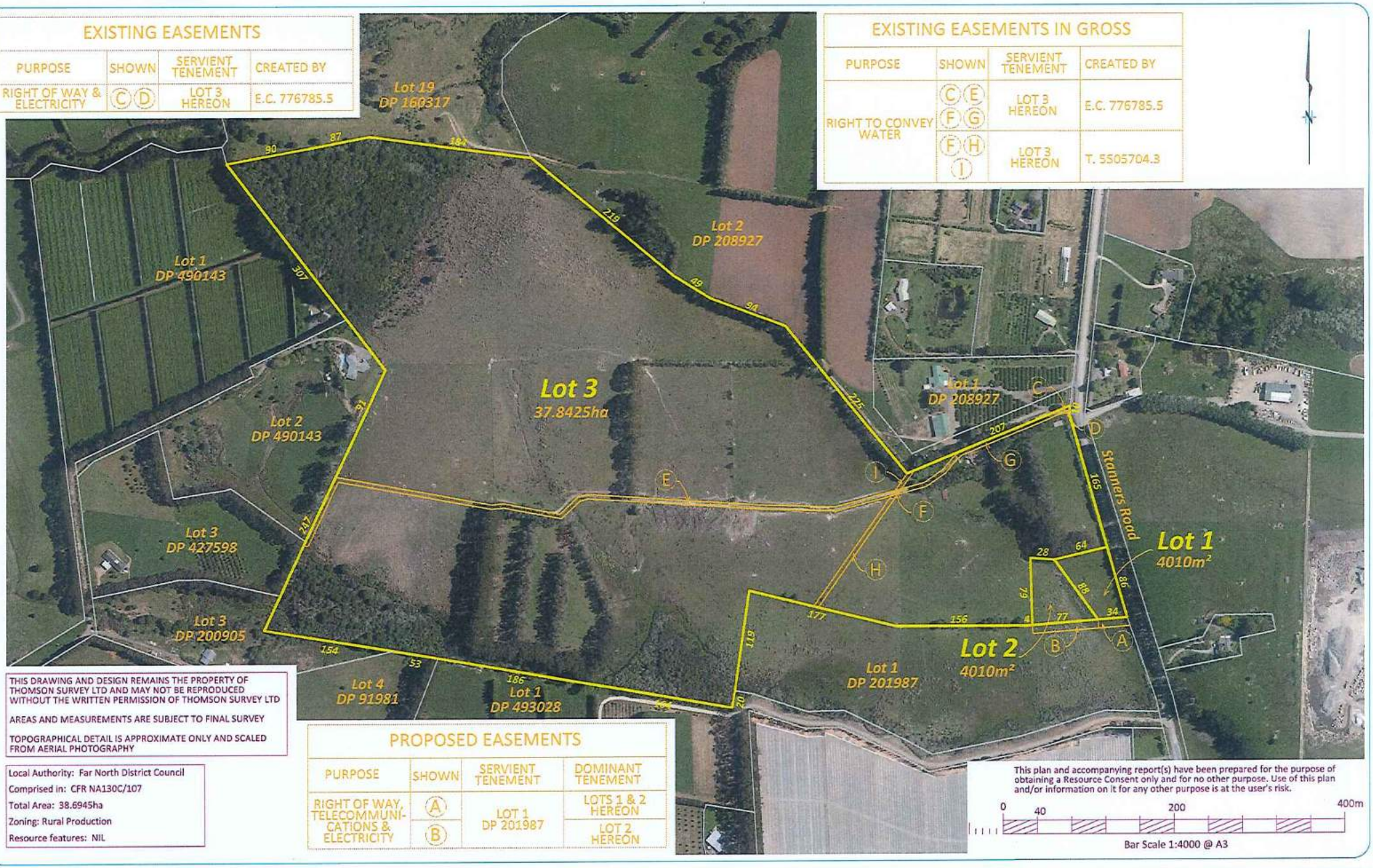
Appendix A
Supplied Drawings

EXISTING EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT OF WAY & ELECTRICITY	C D	LOT 3 HEREON	E.C. 776785.5

EXISTING EASEMENTS IN GROSS

PURPOSE	SHOWN	SERVIENT TENEMENT	CREATED BY
RIGHT TO CONVEY WATER	C E F G	LOT 3 HEREON	E.C. 776785.5
	F H I	LOT 3 HEREON	T. 5505704.3



AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

Local Authority: Far North District Council
Comprised in: CFR NA130C/107
Total Area: 38.6945ha
Zoning: Rural Production
Resource features: NIL

PROPOSED EASEMENTS

PURPOSE	SHOWN	SERVIENT TENEMENT	DOMINANT TENEMENT
RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY	A	LOT 1 DP 201987	LOTS 1 & 2 HEREON
	B		LOT 2 HEREON

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

0 40 200 400m

Bar Scale 1:4000 @ A3

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

PROPOSED SUBDIVISION OF LOT 2 DP 201987

STANNERS ROAD, WAIPAPA

PREPARED FOR: E LOCK

	Name	Date
Survey		
Design		
Drawn	KY	20.08.19
Approved		
Rev		

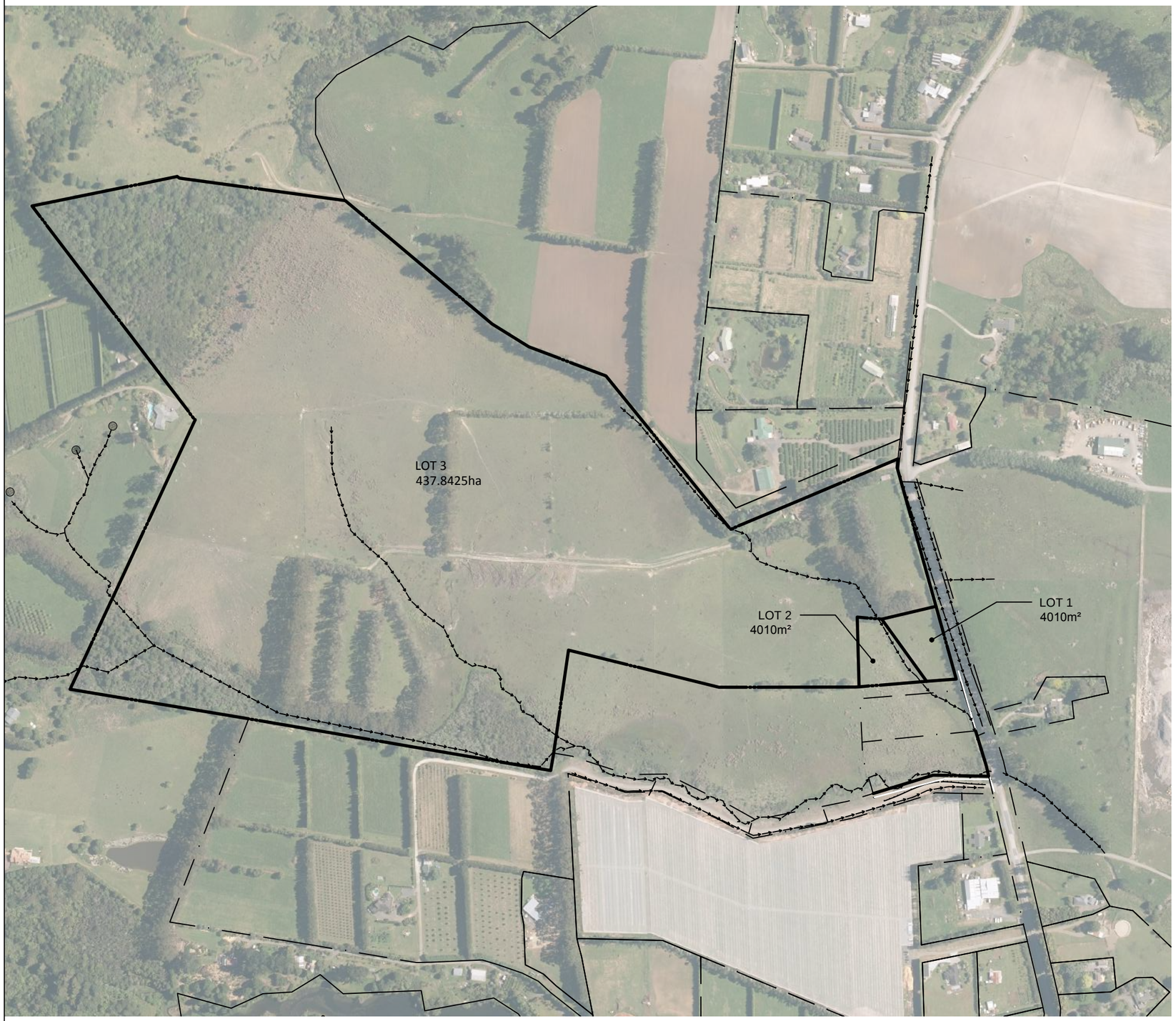
9593 Scheme.lcd

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 9593

Sheet 1 of 1

Appendix B
VISION Stormwater Feasibility Plan



STORMWATER FEASIBILITY PLAN
PROPOSED LOTS 1, 2 AND 3

SCALE A3 1:5000

0 50 100 150 200 250
Scale 1:5000 (m)

north

LOCALITY PLAN

SCALE A3 NTS

SITE INFORMATION:

Lot 2 DP 201987 Stanners Road, Kerikeri

Area: 386,945m²

Rural Production (FNDC Zone)

LEGEND	
OPEN DRAIN	
SITE BOUNDARY	
ADJOINING BOUNDARY	

VISION CONSULTING
Engineers & Planners

CLIENT	EDWARD LOCK
PROJECT	PROPOSED SUBDIVISION OF LOT 2 DP201987 STANNERS ROAD, WAIPAPA
DRAWING TITLE	STORMWATER FEASIBILITY PLAN PROPOSED LOTS 1, 2 & 3

			No	REVISION	BY	DATE
SURVEY						
DESIGN	LP	27/11/2019				
DRAWN	LP	27/11/2019				
CHECKED	BCP	27/11/2019				
APPROVED	BCP	29/11/2019				

SCALE AS SHOWN
SHEET 1 of 04
PROJECT 14245
REV

north

LOCALITY PLAN

SCALE A3 NTS

SITE INFORMATION:

Lot 2 DP 201987 Stanners Road, Kerikeri

Area: 386,945m²

Rural Production (FNDC Zone)

LEGEND	
OPEN DRAIN	
SITE BOUNDARY	
ADJOINING BOUNDARY	

STORMWATER FEASIBILITY PLAN PROPOSED LOTS 1 AND 2

SCALE A3 1:5000

0 5 10 15 20 25

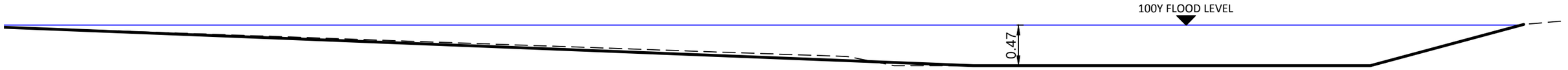
Scale 1:500 (m)

VISION CONSULTING
Engineers & Planners

CLIENT	PROJECT	DRAWING TITLE
EDWARD LOCK	PROPOSED SUBDIVISION OF LOT 2 DP201987 STANNERS ROAD, WAIPAPA	STORMWATER FEASIBILITY PLAN PROPOSED LOTS 1 AND 2

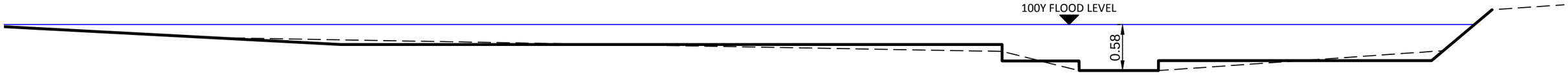
			No	REVISION	BY	DATE
SURVEY						
DESIGN	LP	27/11/2019				
DRAWN	LP	27/11/2019				
CHECKED	BCP	27/11/2019				
APPROVED	BCP	29/11/2019				

SCALE AS SHOWN
SHEET 2 of 04
PROJECT 14245
REV



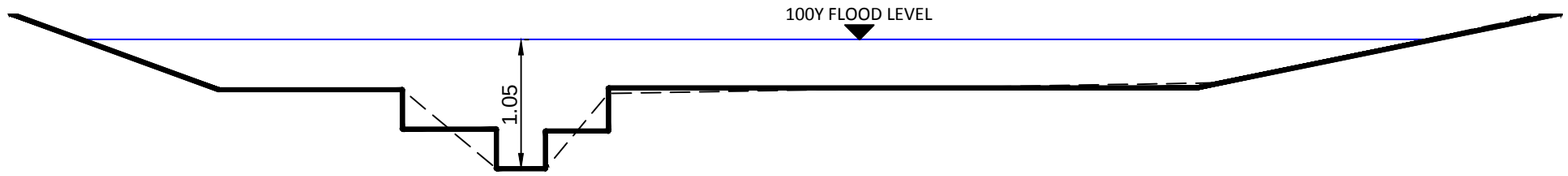
1/02 DRAIN SECTION 1

SCALE A3 1:50



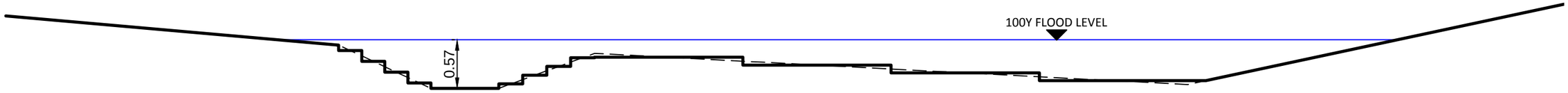
2/02 DRAIN SECTION 2

SCALE A3 1:50



3/02 DRAIN SECTION 4

SCALE A3 1:50



4/02 DRAIN SECTION 4

SCALE A3 1:50

LEGEND	
MEASURED GROUND LEVEL	– – – – –
CALCULATION PROFILE	———
ESTIMATED 100-YEAR FLOOD	———

0 0.5 1 1.5 2 2.5

Scale 1:50 (m)

VISION CONSULTING
Engineers & Planners

CLIENT: EDWARD LOCK

PROJECT: PROPOSED SUBDIVISION OF LOT 2 DP201987 STANNERS ROAD, WAIPAPA

DRAWING TITLE: STORMWATER FEASIBILITY PLAN PROPOSED LOTS 1 AND 2

			No	REVISION	BY	DATE
SURVEY						
DESIGN	LP	27/11/2019				
DRAWN	LP	27/11/2019				
CHECKED	BCP	27/11/2019				
APPROVED	BCP	29/11/2019				

SCALE (A3) 1:50

SHEET 3 of 04

PROJECT 14245

REV

north

LOCALITY PLAN

SCALE A3 NTS

SITE INFORMATION:

Lot 2 DP 201987 Stanners Road, Kerikeri

Area: 386,945m²

Rural Production (FNDC Zone)

STORMWATER FEASIBILITY PLAN
PROPOSED LOTS 1 AND 2

SCALE A3 1:5000

0 5 10 15 20 25

Scale 1:500 (m)

LEGEND	
OPEN DRAIN	
SITE BOUNDARY	
ADJOINING BOUNDARY	
100y FLOOD EXTENT	

VISION CONSULTING
Engineers & Planners

CLIENT	EDWARD LOCK
PROJECT	PROPOSED SUBDIVISION OF LOT 2 DP201987 STANNERS ROAD, WAIPAPA
DRAWING TITLE	STORMWATER FEASIBILITY PLAN PROPOSED LOTS 1 AND 2 SECONDARY FLOWPATH

			No	REVISION	BY	DATE
SURVEY						
DESIGN	LP	27/11/2019				
DRAWN	LP	27/11/2019				
CHECKED	BCP	27/11/2019				
APPROVED	BCP	29/11/2019				

SCALE	1:500
SHEET	4 of 04
PROJECT	14245
REV	