**Before the Far North District Council Hearings Committee**

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| **In the Matter** | of the Resource Management Act 1991 |
| **And** | |
| **In the Matter** | of the Proposed Far North District Plan. |

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**Evidence of Joseph Brady Henehan on behalf of Meridian Farm Ltd (Submitter number S403.001)**

**Dated 9 June 2025**

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## 1. Introduction

1.1 My name is Joseph Brady Henehan. I am a planning consultant working for Reyburn and Bryant in Whangarei. I hold a Bachelor of Environmental Planning from the University of Waikato. I am a full member of the New Zealand Planning Institute (MNZPI).

1.2 I have 11 years of experience as a planning consultant in the Northland region. My role has typically been to lead project teams through various resource consent, notice of requirement, and plan change processes, and to provide environmental and strategic planning advice for these projects.

1.3 Most of my work has been in the Northland Region, and so I am very familiar with the history, content, and structure of the Far North District Plan and the higher-level planning documents.

## 2. Code of conduct

2.1 I have read and agree to abide by the Environment Court's Code of Conduct for Expert Witnesses (2023). This evidence is within my area of expertise. I have not omitted to consider any material facts known to me that might alter or detract from the opinions expressed.

## 3. Background and context

Site description

3.1 The submitter, Meridian Farm Ltd (MF), own a farm located at 119 Redcliffs Road, Kerikeri. The farm is held in two separate titles referenced RT 1152198 (Lot 3 DP 596251) and RT 309510 (Lot 2 DP 376997). The farm has a combined area of 68.0907ha.

3.2 A plan showing the location of the MF land is provided at Figure 1 below:

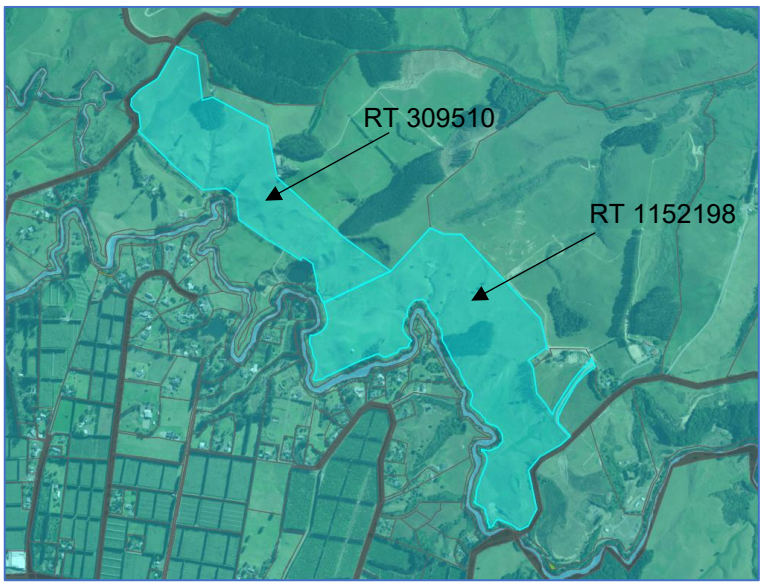



*Figure 1: Site location (Source: FNDC GIS)*

3.3 RT 1152198 was recently created under an approved subdivision consent referenced 2220308-RMASUB. This consent approved the subdivision of the underlying parcel (Lot 1 DP 94462) into five lots. This subdivision included four rural lifestyle lots ranging between 2-4ha in size and one larger balance site with an area of 37.3260ha. Copies of the 2220308-RMASUB decision and approved plans are included in **Attachment 1**. The approved scheme plan is shown in Figure 2 below:

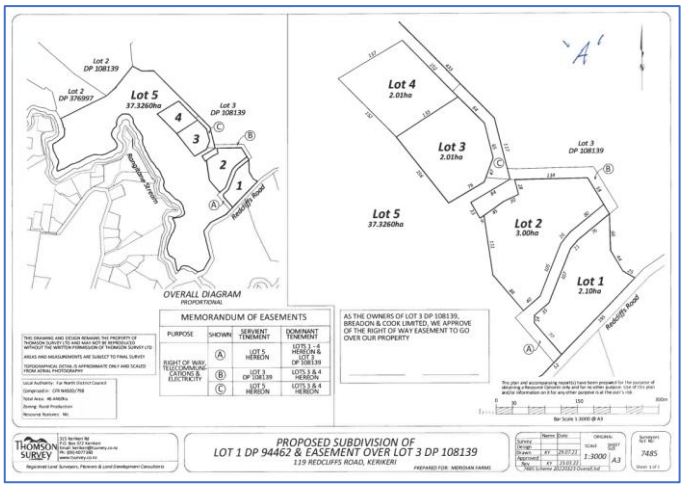



*Figure 2: Approved subdivision scheme plan*

3.4 Stage 1 of this subdivision has been completed, resulting in the creation of Lots 1, 2 and 3 DP 596251. Stage 2 of the subdivision, which will result in the creation of Lots 3, 4 and 5 as shown above, is yet to be completed under Section 224c of the RMA, 1991.

3.5 RT 309510 (Lot 2 DP 376997) has also recently been approved to be subdivided into three lots under reference 2230005-RMASUB. Copies of the 2230005-RMASUB decision and approved plans are included in **Attachment 1**. The approved scheme plan is provided in Figure 3 below:

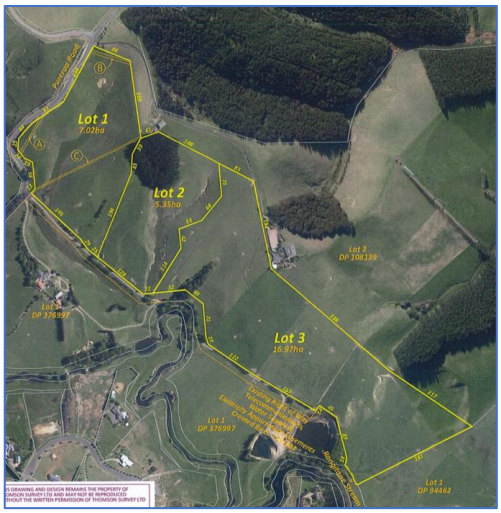



*Figure 3: Scheme plan showing proposed subdivision of Lot 2 DP 376997*

3.1 A plan has been prepared showing the approved allotments across the two titles subject to this submission. This plan is enclosed in **Attachment 2**.

Soil composition and land use capability

3.2 Two geotechnical reports have been prepared for the above subdivisions and these are included in **Attachment 3**. Highlighted in each report are reference to soil types. These soil investigations identify topsoil depths of only 0.25m (max). Natural greywacke residual soils were encountered underlying topsoil consisting of "silty clay, clayey silt, and sandy clay, light grey mottled grey, light grey mottled yellowish brown, moist to wet, highly plastic and stiff to hard".

3.3 Significant portions of the sites are also encumbered by volcanic rocks, which inhibits the land for productive use. See Figure 4 below:

*Figure 4: Image of site from Redcliffs Road*

3.4 The National Policy Statement for Highly Productive Land (NPS-HPL) identify Highly Productive Land (HPL) as being those soils mapped in the New Zealand Land Resource Inventory (NZLRI) as Land Use Capability (LUC) classes 1-3.

3.5 The NZLRI maps[1] identify the sites as containing class 4 and 6 soils. An excerpt from the NZLRI soil type maps are provided in Figure 5 below:

[1] https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Land%20Capability/lri_luc_hpl

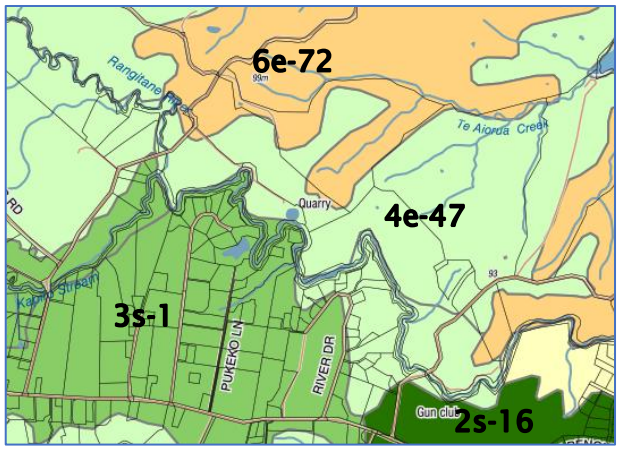



*Figure 5: NZLRIS LUC soil classes*

Ground cover

3.6 Considering the predominant agricultural use of the sites, much of the land is held in pasture. There are also small pockets of native and exotic vegetation scattered throughout the sites, particularly along fencelines and watercourses. Some low-lying gullies on the sites contain potential wetlands.

Operative and Proposed District Plan zoning

3.7 The operative zone that applies to the sites is the 'Rural Production Zone'.

3.8 As shown in Figure 6 below, the sites are both proposed to be located within the 'Rural Production Zone' under the Proposed Far North District Plan (PDP). The sites will border the notified Horticultural Zone (HZ)[2] to the south-west and the Rural Lifestyle Zone (RLZ) to the south-east:

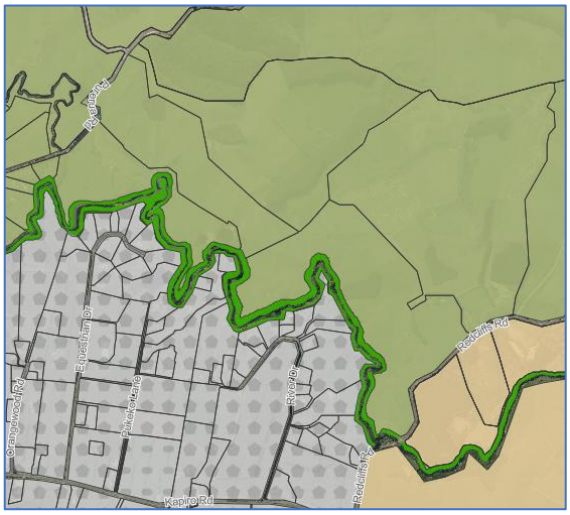



*Figure 6: PFNDP notified zoning*

[2] The FNDC Rural Chapter Section 42A report recommends that the Horticultural Zone is abandoned, in favour of a new Horticultural Precinct.

## 4. Scope of evidence

4.1 This evidence relates to submission number S403.001 and is focussed on the zoning applied to the land owned by the submitter.

## 5. Original MF submission

6.1 The original MF submission sought to rezone the subject sites (being titles RT 1152198 and RT 309510) **Rural Lifestyle Zone** (RLZ).

## 6. Reasons for the request

6.1 There are currently two approved subdivisions for the subject sites, referenced as 2220308-RMASUB and 2230005-RMASUB. As shown in **Attachment 2**, both of these subdivisions propose to create rural-residential (lifestyle) allotment sizes. The proposal is to align the District Plan zoning of the sites with existing and approved development patterns, thereby ensuring consistency between the actual use of the land and the regulatory framework governing it.

6.2 The site does not contain land identified as Highly Productive Land (HPL) under the NPS-HPL. The site's soil profile comprises only a thin layer of topsoil underlain by heavy clay and interspersed with brown rock. In addition, much of the site is burdened with volcanic rock deposits, which significantly limit its suitability for productive agricultural use. These physical characteristics make the site impractical for ongoing horticultural or agricultural activities.

6.3 The land benefits from its proximity to the Kerikeri town centre, located approximately five kilometres to the south/south-west. It also has convenient access to key infrastructure and services, including the main road to town, the marina, and a school bus route. This connectivity enhances its appropriateness for rural-residential development and makes it a logical extension of the existing settlement pattern.

6.4 Neighbouring properties also support the proposed rezoning. Specifically, land on the eastern side of Redcliffs Road is proposed to be rezoned as RLZ under the Proposed Far North District Plan (PFNDP). Additionally, land across the Rangitane River is currently used for a mix of rural-residential and horticultural purposes, further supporting the case for rezoning in this area to reflect the evolving land use trends.

6.5 Another important consideration is the environmental impact of attempting to cultivate the land. The underlying clay soil is poor in quality and requires significant fertilisation to support growth, which would likely result in runoff into the adjacent Rangitane River. This runoff could lead to adverse ecological effects and increase the risk of reverse sensitivity issues, particularly for downstream water users and the local environment.

6.6 From a development perspective, rezoning the land to RLZ would not result in a significant increase in subdivision capacity. Beyond those lots already approved to be created under 2220308-RMASUB and 2230005-RMASUB, the plan enabled capacity (PEC) of the land (including existing titles) would be 19 sites under the controlled activity minimum lot size and 33 sites under the discretionary activity minimum lot size of 2ha[3]. It is noted however that the feasible capacity (FC) of the site may be much less than what is enabled under the District Plan, considering the sloping nature of the land and underlying soil composition.

6.7 Kerikeri's existing wastewater treatment plant is operating under known capacity constraints. These limitations are hindering the council's ability to rezone residential land within the Kerikeri/Waipapa area – this also limits FNDC's ability to give effect to the Kerikeri/Waipapa Spatial Plan, which at the time of writing is in its consultation phase. Given these infrastructure constraints, there is a clear need to supply land for additional housing outside of the serviced area – specifically in locations where properties can be fully serviced on-site. The proposed rezoning of additional RLZ land supports this approach and provides a viable solution to address the current limitations.

6.8 Overall, rezoning the site to RLZ will more appropriately manage expectations for future subdivision, development, and land use by providing a framework that reflects both the physical characteristics of the land and the actual development trajectory already underway.

6.9 Retaining the currently notified zoning would result in a mismatch between the District Plan and the existing or approved development patterns. This would undermine the coherence and effectiveness of the planning framework and could lead to unnecessary regulatory challenges for landowners and developers.

## 7. Alignment with FNDC 'general guidance criteria for rezoning submissions' (Minute 14)

Strategic direction

7.1 The Strategic Direction section of the PFNDP sets out the overarching direction for the District Plan as expressed through Strategic Direction chapters. Of most relevance to the proposal are those objectives contained in the Rural Environment Chapter:

7.2 The objectives of the Rural Environment chapter generally aim to ensure that primary production activities are able to operate efficiently and effectively (SD-RE-O1) and that HPL is protected from inappropriate development (SD-RE-O2). In this case, the site is identified as

[3] The FNDC Rural Chapter Section 42A report recommends that the minimum lot sizes for subdivision in the Rural Lifestyle Zone be decreased to 2ha as a controlled activity and 1ha as a discretionary activity. If this recommendation is adopted, the plan enabled density will double.

containing LUC class 4 and 6 soils, which are not considered to be HPL under higher order planning documentation (the NPS-HPL).

7.3 The objectives of the Historic and Cultural Wellbeing Chapter apply to all zones. So the proposed rezoning is unlikely to result in any areas of inconsistency. In this regard, it is noted that the site is not subject to any identified sites of significance to Maori. Likewise, the site is not subject to any identified archaeological sites, see the below excerpt from the FNDC Historic Sites GIS maps below:

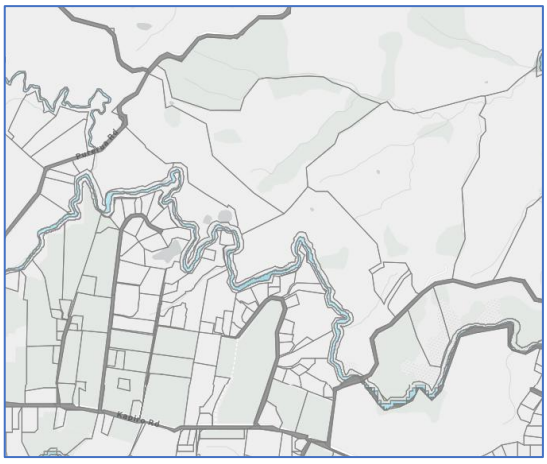


*Figure 7: FNDC Historic Sites GIS Map*

7.4 The proposal is consistent with the Natural Environment Chapter as it proposes a zone that reflects existing and approved lot sizes for the site. Due to historical productive/agricultural activities on the site, its natural character/value is limited. The submission is also assessed to align with both the Economic and Social Wellbeing and Infrastructure and Development Chapters, as it provides for further development options in suitable locations that are able to be adequately serviced on site.

7.5 The Urban Form and Development Chapter relates predominantly to urban areas, so is irrelevant to this submission.

<u>Alignment with zone outcomes</u>

7.6 According to the PFNDP, "*the role of the Rural Lifestyle zone is to provide an area specifically for rural lifestyle living. Accommodating the demand for rural lifestyle living in appropriate areas of the district, close to transport routes with good access to services in urban areas and settlements, is intended to reduce ad-hoc or sporadic rural lifestyle development throughout the Rural Production zone that adversely impacts on primary production activities*". The proposed zoning is consistent with this intention and the associated objectives and policies for the Rural Lifestyle Zone. With specific reference to the RLZ Chapter's objectives and policies, which aim to give

effect to the intended outcome for the zone, the proposed zonings alignment is discussed in the following paragraphs:

7.7 The objectives and policies of the Rural Lifestyle Zone aim to provide for low density residential activities and small-scale farming activities that are compatible with the rural character and amenity of the zone (RLZ-O1, RLZ-O2 RLZ-P1 and RLZ-P4).

7.8 The proposed rezoning aligns with the above referenced objectives and policies for the following reasons:

- The existing and approved rural lifestyle lots are between 2–8ha in size, supporting a low-density rural living pattern. This is consistent with the notified minimum lot sizes for subdivision in the RLZ. A plan showing the approved lot sizes has been prepared and is enclosed in **Attachment 2**.

- There is no loss of highly productive land – the land has not been identified under the NPS-HPL mapping.

- The existing rural character is maintained due to large setbacks, extensive vegetation, and low levels of building coverage.

- No urbanisation (i.e., dense lot patterns or infrastructure-intensive development) is proposed.

7.9 Importantly, the subdivision consents granted by FNDC already reflect a development intensity appropriate for the RLZ. The rezoning merely brings the zoning into alignment with approved and anticipated land use.

7.10 The objectives and policies also aim to avoid the introduction of incompatible land use activities into this environment (RLZ-O3, RLZ-O4, RLZ-P2 and RLZ-P3).

7.11 The proposed zoning aligns with these provisions as the proposed RLZ enables small-scale agricultural activities that will serve as an effective buffer between the more productive rural land to the north and the existing rural-residential activities to the south. In addition, the larger lifestyle lot sizes will provide adequate separation between potentially incompatible land uses, reducing the risk of conflict. As a result, no reverse sensitivity effects are anticipated from the proposed rezoning.

Non-statutory direction assessment

7.12 Te Pātukurea Kerikeri Waipapa Spatial Plan (Te Pātukurea) is currently proceeding through a non-statutory notification/consultation process[4]. FNDC consider this document relevant to the

[4] The expected date of adoption is 18 June 2025.

PFNDP process as it indicates locations in the Kerikeri/Waipapa area where growth is anticipated. Notably, Te Pātukurea "*directs 95% of future growth within and around the existing built-up areas of Kerikeri and Waipapa*". To do this, rural lifestyle development on the outskirts of Kerikeri/Waipapa is recommended to be restricted.

7.13 Notwithstanding the above aspirations, limited weight should be applied to Te Pātukurea at this stage. This is because:

1) Te Pātukurea is a non-statutory document and is not required (under the RMA) to be considered through District Plan change processes.
2) Te Pātukurea was still in its preparation phase at the original outset of notification of the PFNDP. The PFNDP therefore did not consider this document at the time of preparation/notification. Submitters were also not able to consider this document as part of their original submissions.
3) The outcomes sought by Te Pātukurea are ambitious, but in my view, unrealistic over in the next 10 year period (District Plan term). The document outlines that 95% of future growth will occur within or around existing residential areas. This relies heavily on the following two assumptions:

    a) Firstly, the expectation that market conditions will improve substantially over the next 10 years, making infill and redevelopment of existing residential land economically feasible.

    In the current market, this type of development does not typically yield a return on investment sufficient to attract or incentivise private developers. For example, Kerikeri's most comparable market is Whāngarei. The Whāngarei District Council's Urban and Services Plan Change (which became operative in March 2023) introduced a suite of permissive subdivision and development rules aimed at enabling medium-density housing (such as multi-unit developments). Despite this, uptake of such development has, in my experience, been limited. The reality is that only a small number of entities – typically larger and more well-resourced social housing providers (including Kainga Ora and Habitat for Humanity) have the capacity to deliver these types of projects. While there are occasional exceptions, the high costs associated with medium-density development largely place it beyond the reach of most developers in the current (and projected) economic climate.

    b) Secondly, the assumption that capacity will be available in reticulated servicing networks (particularly wastewater) to cater for new development.

    While funding is set aside in Council's Long Term Plan (LTP) for upgrades to Council's wastewater network over the next 2-6 years (see page 72 of the LTP 2024-2027[5] and

[5] FNDC-Te-Pae-Tata-Three-Year-Long-Term-Plan-2024-27.pdf

page 72 of the LTP 2021-2031[6]), these works are unlikely to be delivered in the short term. This will result in a significant shortfall of housing across the Kerikeri/Waipapa area. Therefore, there is a clear need to supply land for additional housing outside of the serviced area – specifically in locations where properties can be fully serviced on-site.

7.14 Having considered the above, Council needs to consider providing further rural lifestyle zoning options to allow for realistic development options within the Kerikeri area. The subject site is ideal for this as it is positioned strategically close to Kerikeri, in an area already characterised by this type of development.

Higher order direction

7.15 The alignment of the proposed rezoning against relevant higher order planning documents is assessed as follows:

**National Policy Statement for Highly Productive Land (NPS-HPL)**

7.16 The land is not classified as LUC 1, 2, or 3, and is not mapped as HPL under the NPS-HPL. This document is therefore not relevant to the proposal.

**National Environmental Standard for Freshwater (NES-FW)**

7.17 The National Environmental Standard for Freshwater (NES-FW) aims to protect and manage freshwater resources, including wetlands. Given that there are wetlands in the low-lying gullies on the site, compliance will need to be achieved with the NES-FW at future development stage, particularly clause 54, which sets out a 10m setback from wetlands for any building activities.

7.18 Notwithstanding this, the identified wetlands on the sites are confined to low-lying gullies onlyand building sites are available outside the 10m setback required by clause 54 of the NES-FW.

7.19 Overall, the proposed zoning aligns with the NES-FW, ensuring that building activities will not encroach upon the protected wetland areas.

**Regional Policy Statement for Northland (RPS)**

7.20 The Regional Policy Statement for Northland provides a framework for managing the region's natural and physical resources. The following objectives and policies are relevant to the proposed rezoning:

- Objective 3.10 Regional Form

[6] fndc_long_term_plan_2021-31_wv.pdf

- Policy 5.1.1: Regional Form Policy – Planned and coordinated development
- Policy 5.1.3: Regional Form Policy – Avoiding the adverse effects of new use(s) and development

7.21 The proposal aligns with the above objectives and policies for the following reasons:

- The site is identified as containing LUC class 4 and 6 soils, which are not considered highly productive. The rezoning will not compromise rural productivity.
- The proposed RLZ aligns with existing and approved subdivision patterns, promoting consolidated rural living.

**National Policy Statement on Urban Development (NPS-UD):**

7.22 The NPS-UD primarily addresses urban areas and is not directly applicable to rural lifestyle zoning. Therefore, the NPS-UD is not relevant to the proposed rezoning.

**National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NES-CS):**

7.23 Based on available information, there are no indications of soil contamination on the subject site. If there are any historical activities on the site that may have led to soil contamination, the NES-CS would apply and would need to be complied with at subdivision/development stage.

**Conclusion**

7.24 The proposed rezoning from the RPROZ to the RLZ aligns with the objectives and policies of the above relevant higher order planning documents. The rezoning will facilitate rural residential living while protecting environmental values and ensuring sustainable land use.

<u>Assessment of site suitability and potential effects of rezoning</u>

*Natural Hazards:*

7.25 The enclosed geotechnical assessments (**Attachment 3**) for both properties (prepared recently to support subdivision consent applications) confirm that the land is stable and suitable for rural-residential development. No identified flood hazard or other significant natural hazard overlays affect the subject sites. Any instability issues are able to be dealt with through specific foundation/floor type design prepared at development stage.

7.26 It is also noted that the sloping nature of the site may result in the total feasible capacity of the land being limited at the subdivision stage. This is a consideration that will require further investigation at the subdivision and development stage.

*Natural Environment and Overlays:*

7.27 No operative or proposed Sites of Significance to Māori, Outstanding Natural Landscapes, or Significant Natural Areas apply to the subject sites.

7.28 There are also no mapped historic heritage or archaeological sites within or adjacent to the properties.

*Compatibility and Reverse Sensitivity:*

7.29 The proposed RLZ enables small-scale agricultural activities that will serve as an effective buffer between the more productive rural land to the north and the existing rural-residential activities to the south. In addition, the larger lifestyle lot sizes will provide adequate separation between potentially incompatible land uses, reducing the risk of conflict. As a result, no reverse sensitivity effects are anticipated from the proposed rezoning.

Infrastructure (three waters) servicing

7.30 The sites are not located within proximity to any FNDC reticulated three-water service networks and as such will need to be serviced entirely on site. The following paragraphs explain how each future sites can be serviced, and why this is appropriate in this location.

*Water Supply:*

7.31 Future allotments are able to be self-serviced via individual rainwater harvesting and storage systems. Tank-based systems for potable and fire fighting supply are consistent with rural-residential servicing expectations and have been confirmed as suitable through the attached subdivision engineering reports.

*Wastewater Disposal:*

7.32 Each lot will provide for on-site wastewater treatment and disposal, consistent with the relevant New Zealand Standards and Proposed Regional Plan requirements. The attached geotechnical reports confirm suitable soils and site conditions for conventional on-site effluent systems.

*Stormwater Management:*

7.33 Stormwater will be managed through on-site attenuation and soakage methods. Due to the large lot sizes and low impervious surface coverage, adverse stormwater effects are able to be managed entirely on site. Measures for disposing of stormwater on site are already consented for the approved subdivision lots within the two sites and these are explained in the attached engineering reports. These measures are expected to be easily replicated for other (future) rural lifestyle properties facilitated by this proposal.

Transport infrastructure

7.34 Access is available via existing legal roads (publicly maintained by Council).

7.35 Internal accessways for subdivision have been/will be designed to Council standards at the development stage. Suitable sight distances are available at site entrances from both Redcliffs and Purerua Roads. As compliance with Council's standards is easily achieved, no consultation with Council's roading department or expert input is considered necessary.

7.36 No direct access to a State Highway is proposed. Accordingly, engagement with the New Zealand Transport Agency is not required.

Consultation and further submissions

6.2 Consultation has primarily occurred through the statutory PFNDP submissions process. While no direct engagement with tangata whenua has occurred (given the absence of sites of significance overlays or registered archaeological sites), no submissions have been received expressing an interest in the site.

7.37 I have reviewed the five further submissions relating to the proposed rezoning request. These are summarised and addressed as follows:

7.38 Audrey Campbell-Frear (FS172.402) and Breadon and Cook Ltd (FS366.001) have indicated their support for the proposed rezoning.

7.39 The Kapiro Conservation Trust 2 (FS566.023), Vision Kerikeri 2 (FS569.050) and Vision Kerikeri 3 (FS570.013) submissions seek that the MF submission is not allowed on the basis that the submissions are "inconsistent" with their original submissions. Upon reviewing these submissions, the specific nature of this inconsistency is not immediately clear. Broadly speaking, the following conclusions are made:

- The Kapiro Conservation Trust 2 submission appears to oppose the submission on the basis that it does not align with their conservation objectives.

- Vision Kerikeri's submissions appears to oppose the submission on the basis that the proposed rezoning conflicts with their emphasis on preserving agricultural land and preventing urban sprawl.

7.40 While the broad concerns of these submissions are acknowledged, there does not appear to be any acknowledgement of the fact that the site is subject to two existing subdivision consents, which have already approved the establishment of lifestyle blocks in this area. Nor do they comment on the merits of keeping the site in productive use (which as mentioned earlier, is not viable given soil composition and land use capability).

7.41 On balance, the further submissions do not appear to raise any new, site-specific matters that would warrant further comment.

Section 32AA evaluation

7.42 This section presents an evaluation under Section 32 of the RMA in relation to the proposed submission. The evaluation has been prepared to assist the Hearings Panel in determining whether the rezoning proposed by MF is the most appropriate way to achieve the purpose of the RMA and the objectives of the PFNDP.

7.43 Section 32 of the RMA requires a council evaluate the purpose of the proposal along with the proposed polices and methods, including rules. The evaluation must:

- Examine whether the objectives of the plan change are the most appropriate way to achieve the purpose of the RMA;[7]
- Examine whether the proposed approach is the most appropriate way of achieving the objective, including identifying other reasonably practicable options;[8]
- Examine the efficiency and effectiveness of the provisions (including identifying and assessing the benefits and costs of new provisions);[9]
- Assess the risks of acting or not acting if there is uncertain or insufficient information.[10]

7.44 A Section 32AA evaluation is provided in the following tables:

***Table 2**: Appropriateness in achieving the purpose of the Act*

| Section | Alignment |
|---|---|
| Section 5 – Purpose of the Act | The purpose of the RMA is to promote the sustainable management of natural and physical resources. This involves enabling people and communities to provide for their social, economic, and cultural well-being while sustaining the potential of natural resources for future generations, safeguarding the life-supporting capacity of air, water, soil, and ecosystems, and avoiding, remedying, or mitigating any adverse effects on the environment. |

[7] s32(1)(a)
[8] s32(1)(b)(i)
[9] s32(1)(b)(ii) and s32(2)
[10] S32(2)(c)

| | |
|---|---|
| | In this case, the proposed rezoning to RLZ aligns with promoting social and economic well-being by providing opportunities for rural living close to Kerikeri, enhancing the community's quality of life.<br><br>The proposed rezoning also supports the need for further housing in the Kerikeri/Waipapa area. Given existing wastewater capacity constraints, there is a clear need to supply land for additional housing outside of the serviced area – specifically in locations where properties can be fully serviced on-site.<br><br>The site is not suitable for productive agricultural use due to poor soil quality and volcanic rocks. Rezoning to RLZ would prevent the need for intensive fertilization, which could lead to runoff into the Rangitane River leading to effects on water quality and local ecosystems. |
| Section 6 – Matters of National Importance | This section requires the recognition and provision for matters of national importance, including the preservation of the natural character of coastal environments, wetlands, lakes, rivers, and their margins, the protection of outstanding natural features and landscapes, and the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna.<br><br>In this case, the site does not contain any identified outstanding natural features or landscapes. The rezoning would maintain the character of the area with low-density rural lifestyle development.<br><br>There are no significant indigenous vegetation or habitats identified on the site. The rezoning would not adversely affect any areas of national importance. |
| Section 7 – Other Matters | This section requires particular regard to be given to various factors, including kaitiakitanga (guardianship), the efficient use and development of natural and physical resources, the maintenance and enhancement of amenity values, and the intrinsic values of ecosystems.<br><br>The rezoning to RLZ is an efficient use of the land, given its unsuitability for productive agricultural use. It aligns with the existing and approved uses of the sites.<br><br>The proposed rezoning would enhance amenity values by providing rural residential living with large setbacks from boundaries, |

| | |
|---|---|
| | extensive vegetation, and low building coverage, maintaining rural character.<br><br>The rezoning would avoid intensive agricultural practices that could harm local ecosystems, thus preserving the intrinsic values of the environment. |
| Section 8 Treaty of Waitangi | This section requires that the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) are taken into account in the management of natural and physical resources.<br><br>The proposal does not identify any sites of significance to Māori or archaeological sites. No specific concerns have been raised through the statutory consultation phase of this plan change. |

7.45 The proposed rezoning from RPROZ to RLZ to enable rural lifestyle development on the MF site strongly aligns with the purpose and principles of Part 2 of the Resource Management Act. It promotes sustainable management, enables efficient and appropriate development, and gives effect to Treaty principles.

7.46 For the reasons stated in paragraphs 7.1-7.11, the proposed rezoning is also the most appropriate way to achieve the objectives of the District Plan, noting specifically the existing and approved development patterns and the underlying soil composition of the site, which result in the RLZ Zoning having better alignment with the Strategic Direction Chapter of the PFNDP than the notified RPROZ zoning.

***Table 3**: Costs and benefits*

| **Category** | **Benefits** | **Costs** |
|---|---|---|
| Environmental | No significant effects – the land is pastoral, and without sensitive overlays. On-site infrastructure avoids pressure on public networks. | None identified. |
| Social and Cultural | Responds directly to the need for further housing and supports wellbeing. | None identified. |

| | | |
|---|---|---|
| Economic | Supports population growth, rates take, unlocks under-utilised land. | Minor administrative costs of plan change process. Loss of low-productivity rural land is not considered significant. |

***Table 1**: Efficiency and effectiveness*

| Matter | Assessment |
|---|---|
| Efficiency | Rezoning the land from RPROZ to RLZ provides a more efficient use of the land. In this case, the sites are subject to two existing subdivision consents. This, combined with the fact that the land is not viable for productive farming, ensures that its use for lifestyle development better reflects its highest and best use. Sites created through subdivision can be serviced independently with wastewater, water, and stormwater infrastructure. |
| Effectiveness | The proposal will effectively implement the relevant RLZ objectives and policies by providing for low density residential activities and small-scale farming activities. There is no loss of highly productive land – noting that the land has not been identified under the NPS-HPL mapping. |

*Risk of Acting or Not Acting*

7.47 There is sufficient information to determine the potential effects of the rezoning. Not acting may result in the continued underutilisation of the land, and a missed opportunity to provide needed housing options in the Kerikeri area where properties can be fully serviced on-site. The risk of acting is low, given the site's capacity, accessibility, and the consistency of the proposal with planning objectives. Additionally, the site's current use as agricultural land is limited due to poor soil quality and volcanic rocks, which further supports the need for rezoning to better utilize the land.

*Overall Conclusion*

7.48 Relative to the RPROZ, the RLZ is a more appropriate zoning given the site's soil composition and the existing and consented development pattern. The submission responds directly to the need to supply land for additional housing outside of the serviced area – specifically in locations where properties can be fully serviced on-site.

7.49 Rezoning the site from RPROZ to RLZ is an efficient, effective, and appropriate planning response under Section 32AA of the RMA. The proposal enables the land to meet its highest potential use. It is consistent with the surrounding environment, does not generate adverse environmental effects, and responds to an identified housing need in the area. The rezoning also aligns with the objectives and policies of the PFNDP, ensuring that the land is used in a manner that is sustainable and beneficial to the community.

## 8. Relief sought

8.1 The following relief is sought:

(1) To rezone the subject sites Rural Lifestyle Zone, or;

(2) Any other relief with a similar effect.

……

Joseph Henehan (Planner)

9 June 2025

**Attachments**

1. Subdivision consents 2220308-RMASUB and 2230005-RMASUB and approved plans
2. Site plan showing approved lots [Geologix]
3. Geotechnical reports [Reyburn and Bryant]

**FAR NORTH DISTRICT COUNCIL**

**FAR NORTH OPERATIVE DISTRICT PLAN**
**DECISION ON RESOURCE CONSENT APPLICATION (SUBDIVISION)**

**Resource Consent Number: 2220308-RMASUB**

**Pursuant to section 104C of the Resource Management Act 1991 (the Act), the Far North District Council hereby grants resource consent to:**

**Meridian Farm Limited**

**The activity to which this decision relates:**

Subdivision to create 4 additional allotments in two stages in the Rural Production zone including Right of Way easement over Lot 3 DP 108139.

**Subject Site Details**

| | |
|---|---|
| Address: | 119 Redcliffs Road, Kerikeri 0294 |
| Legal Description: | LOT 1 DP 94462 |
| Record of Title reference: | NA-50D/798 |

**Pursuant to Section 108 of the Act, this consent is issued subject to the following conditions:**

**Stage One – Lot 1 & 2:**

1. The subdivision shall be carried out in general accordance with the approved plan of subdivision prepared by Thomson Survey Limited, referenced Proposed Subdivision of Lot 1 DP 94462, version dated 03/05/2022, and attached to this consent with the Council's "Approved Stamp" affixed to them.

2. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:

   (a) All easements in the memorandum to be duly granted or reserved.

3. Prior to the approval of the survey plan pursuant to Section 223 of the Act, the consent holder shall:

   (a) Provide evidence that a preferred road name and two alternatives for Right of Way (A) has been supplied to the Community Board for approval. The applicant is advised that in accordance with Community Board policy, road names should reflect the history of the Area.

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

   (a) Upgrade the existing vehicle crossing entrance onto Red Cliffs Road (From ROW A) to provide a double width entrance which complies with the Councils

Engineering Standard FNDC/S/6 and 6B, Seal the entrance plus splays for a minimum distance of 6m from the existing seal edge. An adequately sized culvert (minimum diameter 375mm) is to be installed under the new crossing with grouted rock headwalls on both sides.

(b) Provide formed and metalled access on ROW easement (A) to 3m finished metalled carriageway width with passing bays provided to comply with Rule 15.1.6.1.2 of the Far North District Plan. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.

(c) Provide evidence that a road name sign approved in Condition 3(a) has been installed for the Private Right of Way.

(d) Secure the conditions below by way of a Consent Notice issued under Section 221 of the Act, to be registered against the titles of the affected allotment. The costs of preparing, checking and executing the Notice shall be met by the Applicant.

(i) 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.

[Lot 1]

(ii) Any building erected on the lot shall have foundations specifically designed by a suitably qualified chartered professional engineer. The details of design shall be submitted in conjunction with the Building Consent application.

[Lots 1 & 2]

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

[Lots 1 & 2]

(iv) At the time of lodging an application for building consent for any building on the lot, which requires a wastewater treatment & effluent disposal system, the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall reference the wastewater disposal report titled: Wastewater Site Suitability prepared by Geologix, ref: C0022-S-01-R01, dated October 2021, and submitted with RC2220308-RMASUB. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.

[Lots 1 & 2]

(v) The site is identified as being within a kiwi present zone. Any cats and/or dogs kept onsite must be kept inside and/or tied up at night to reduce the risk of predation of North Island brown kiwi by domestic cats and dogs. No more than two dogs shall be introduced or kept on the lot at any time. Any dog must have a current kiwi aversion trained certification.

[Lot 1 & 2]

**Stage Two – Lots 3, 4 & 5**

5. The subdivision shall be carried out in general accordance with the approved plan of subdivision prepared by Thomson Survey Limited, referenced Proposed Subdivision of Lot 1 DP 94462, version dated 03/05/2022, and attached to this consent with the Council's "Approved Stamp" affixed to them.

6. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:

(a) All easements in the memorandum to be duly granted or reserved.

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

(a) Upgrade ROW easement (A) to a 5m wide carriageway complying with Rule 15.1.6C.1.1 of the Far North District Plan.

(b) Provide formed and metalled access on ROW easement (B) to 3m finished metalled carriageway width, with passing bays provided to comply with Rule 15.1.6C.1.1 of the Far North District Plan. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.

(c) Provide formed and metalled access on ROW easement (C) to 3m finished metalled carriageway width. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.

(d) Secure the conditions below by way of a Consent Notice issued under Section 221 of the Act, to be registered against the titles of the affected allotment. The costs of preparing, checking and executing the Notice shall be met by the Applicant.

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

[Lot 3, 4 & 5]

(ii) At the time of lodging an application for building consent for any building on the lot, which requires a wastewater treatment & effluent disposal system, the applicant shall submit for Council approval a TP58 Report

prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall reference the wastewater disposal report titled: Wastewater Site Suitability prepared by Geologix, ref: C0022-S-01-R01, dated October 2021, and submitted with RC2220308-RMASUB. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.

[Lot 3, 4 & 5]

(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.

[Lot 3, 4 & 5]

(iv) Any building erected on the lot shall have foundations specifically designed by a suitably qualified chartered professional engineer. The details of design shall be submitted in conjunction with the Building Consent application.

[Lot 3, 4 & 5]

(v) The site is identified as being within a kiwi present zone. Any cats and/or dogs kept onsite must be kept inside and/or tied up at night to reduce the risk of predation of North Island brown kiwi by domestic cats and dogs. No more than two dogs shall be introduced or kept on the lot at any time. Any dog must have a current kiwi aversion trained certification.

[Lot 3 & 4]

(vi) The site is identified as being within a kiwi present zone. Any cats and/or dogs kept onsite must be kept inside and/or tied up at night to reduce the risk of predation of North Island brown kiwi by domestic cats and dogs.

[Lot 5]

**Advice Notes**

1. The consent holder is advised that at time of subdivision approval there is land just within the 100m radius of the subdivision zoned Mineral zone. Please be aware that any development within the 100m setback may require resource consent.

2. The consent holder shall provide evidence that a Traffic Management Plan (TMP) has been approved by Council's Corridor Access Engineer and a Corridor Access Request (CAR) obtained prior to vehicle crossings being constructed or upgraded. Application for TMP and CAR are made via https://www.fndc.govt.nz/Our-Services/Transport/Roads/Road-closures-and-restrictions.

3. Erosion and sediment control measures in accordance with Auckland Council GD05 requirements are to be implemented prior to any earthworks and construction activities commencing within the approved allotments.

4. This consent has been granted on the basis of all the documents and information provided by the consent holder, demonstrating that the new lot(s) can be appropriately serviced (infrastructure and access).

5. Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.

**Reasons for the Decision**

1. The Council has determined (by way of an earlier report and resolution) that the adverse environmental effects associated with the proposed activity are no more than minor and that there are no affected persons or affected customary rights group or customary marine title group.

2. The application is for a Restricted Discretionary resource consent, as such under 104C only those matters over which council has restricted its discretion have been considered, these matters are:

    - 13.8 for Restricted Discretionary Subdivision Activities

    The following objectives and policies of the District Plan have been considered:

    Chapter 13 – Subdivision

    Objectives: 13.3.1, 13.3.2, 13.3.5, 13.3.11
    Policies: 13.4.1, 13.4.2, 13.4.4, 13.4.6, 13.4.8

    The proposal is not contrary to the relevant objectives and policies of the District Plan.

3. In accordance with an assessment under s104(1)(b) of the Act the proposal is consistent with the relevant statutory documents.

    - The Northland Regional Policy Statement 2018
    - The Northland Regional Plan 2019
    - Operative Far North Plan 2009
    - Proposed Far North District Plan

    For this resource consent application, the relevant provisions of both an operative and any proposed plan must be considered. Weighting is relevant if different outcomes arise from assessments of objectives and policies under both the operative and proposed plans.

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

4. In accordance with an assessment under s104(1)(c) of the Act no other non – statutory documents were considered relevant in making this decision.

5. No other matters considered relevant in making this decision.

6. Part 2 Matters

   The Council has taken into account the purpose & principles outlined in sections 5, 6, 7 & 8 of the Act. It is considered that granting this resource consent application achieves the purpose of the Act.

7. In summary it is considered that the activity is consistent with the sustainable management purpose of the RMA.

**Approval**
This resource consent has been prepared by Jo Graham, Resource Planner and is granted under delegated authority (pursuant to section 34A of the Resource Management Act 1991) from the Far North District Council by:

**Pat Killalea, Principal Planner**

**Date: 02/08/2022**

**Right of Objection**
If you are dissatisfied with the decision or any part of it, you have the right (pursuant to section 357A of the Resource Management Act 1991) to object to the decision. The objection must be in writing, stating reasons for the objection and must be received by Council within 15 working days of the receipt of this decision.

**Lapsing of Consent**
Pursuant to section 125 of the Resource Management Act 1991, this resource consent will lapse 5 years after the date of commencement of consent unless, before the consent lapses.

The consent is given effect to; or

An application is made to the Council to extend the period of consent, and the council decides to grant an extension after taking into account the statutory considerations, set out in section 125(1)(b) of the Resource Management Act 1991.

**DETERMINATION AS TO WHETHER A RESOURCE CONSENT APPLICATION SHOULD BE NOTIFIED OR NON-NOTIFIED UNDER SECTIONS 95A-95G, OF THE RESOURCE MANAGEMENT ACT 1991 (the Act)**

## 1. Application details

| | |
|---|---|
| Council Reference: | 2220308-RMASUB |
| Reporting Planner: | Jo Graham |
| Applicant: | Meridian Farm Limited |
| Description of Application: | Subdivision to create 4 additional allotments in two stages in the Rural Production zone including Right of Way easement over Lot 3 DP 108139. |
| Property Address: | 119 Redcliffs Road, Kerikeri 0294 |
| Legal Description/ CT: | LOT 1 DP 94462 |
| Date Received: | 29 October 2021 |
| Site Visit: | 30 November 2021 |
| Further Information Requested: | 02 December 2021 |
| Further Information Received: | 12 July 2022 |
| Suspended pursuant to 88E: | No |
| Extension pursuant to section 37: | Yes – 28 October 2021 |
| Is this site HAIL: | No |
| Pre lodgement consultation by Applicant: | No |
| Pre-Application meeting: | No |

## 2. Distributions

| Internal: | Date sent: | Comments Received: |
|---|---|---|
| RC Engineer: | 18/11/2021 | 18/07/2022 |
| IAM: | 18/11/2021 | 23/11/2021 |

| External: | Date sent: | Comments Received: |
|---|---|---|
| Iwi: | 26/11/2021 | 07/11/2021 |
| HNZPT: | 26/11/2021 | None |

## 3. District Plan and other notations of relevance

**Zone:** Rural Production **Notations:** None
**Other Notations of Relevance:** Kiwi Present

## 4. Description of site

Area: 46.45ha
Contour: Moderate to steep slopes.
Vegetative cover: In pasture and currently used for grazing.
Waterbodies/wetlands: The Rangitane Stream runs parallel to the site on the western side and the stream is separated from the property by Conservation land.
Road frontage: The site has road frontage to Rangitane Road.

Existing built development: Proposed Lot 2 has an existing dwelling and farm sheds on site, all other proposed lots are vacant.
Relevant historic RCs/BCs:

119 Redcliffs Road, Kerikeri 0294

- Property Applications: 78994-TCPPA, SUBDIVISION YARBOROUGH FARMS HISTORICAL FILE
- Property Applications: 791374-TCPBIC, SUBDIVISION YARBOROUGH FARMS HISTORICAL FILE
- Property Applications: 792397-TCPBIC, SUBDIVISION A J & R J HARPER HISTORICAL FILE
- Property Applications: 2090295-RMASUB, to create a total of two lots in the rural production zone
- Property Applications: DCF-5163-SUB, RC2090295 - Subdivide to create 1 additional lot
- Property Applications: BC-2010-1342/0, Freestanding Fireplace - Metro Ltd Xtreme Ltd
- Property Applications: CCC-2010-1342/1, Freestanding Fireplace - Metro Ltd Xtreme Ltd
- Property Applications: BP-503475, HAYBARN DONALD SPICER 40/471 (213-409-00)
- Property Applications: BP-54464, DWELLING YARBOROUGH FARMS 40/471 (213-409-00)
- Property Applications: BP-1049289, GARAGE YARBOROUGH FARMS 40/471 (213-409-00)
- Property Applications: BP-54474, 10,000 GAL WATER TANK YARBOROUGH FARMS 40/471 (213-409-00)
- Property Applications: BP-6023633, Garage extension to dwelling. AJ & RJB Harper. Lot 1 DP 94462.
- Property Applications: BC-1994-147/0, IMPLEMENT SHED MURRAY CHAPEL LOT 1 DP 94462 00213-409-00
- Property Applications: 2220308-RMASUB, Subdivision to create 4 additional allotments in two stages in the Rural Production zone.

Existing Consent Notices and encumbrances: None.

## 5. Full Description of proposed activity

The proposed activity is to subdivide to create 4 additional allotments in two stages in the Rural Production zone.

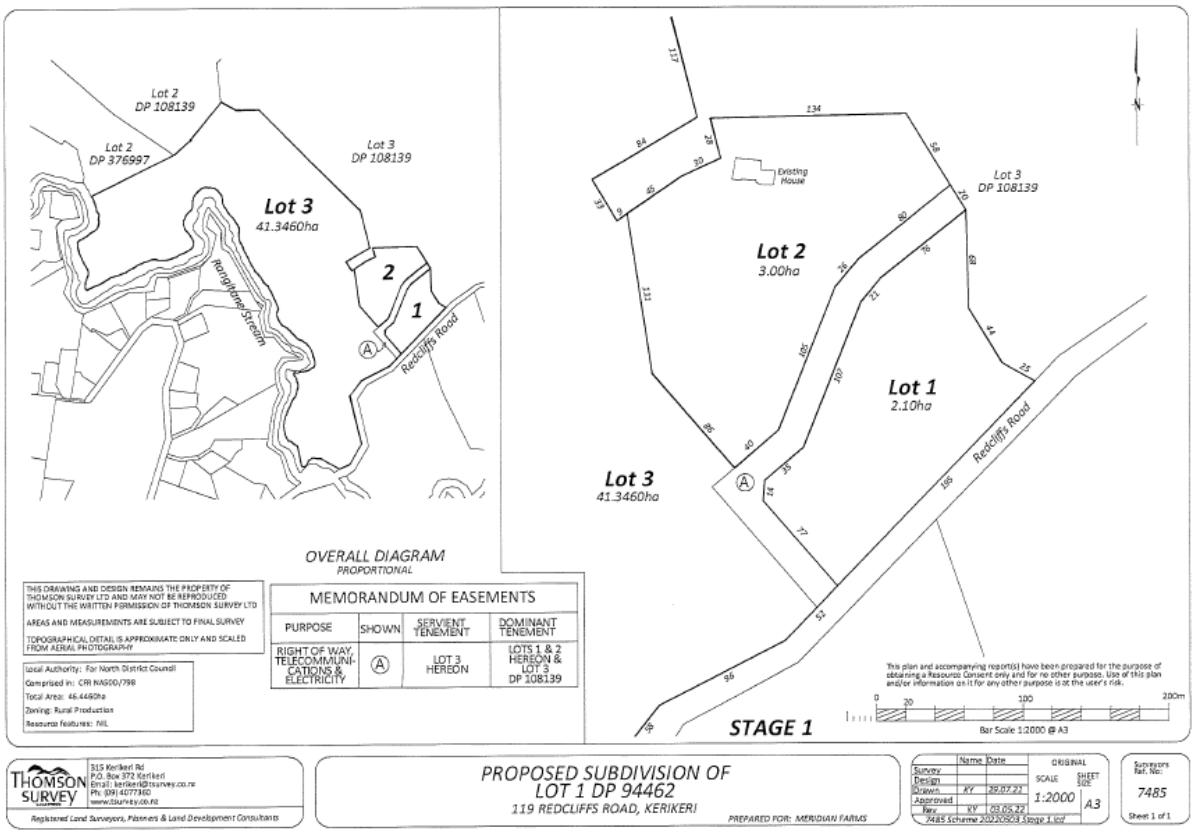



Fig 1: Proposed Stage 1 Subdivision of Lot 1 DP 94462.

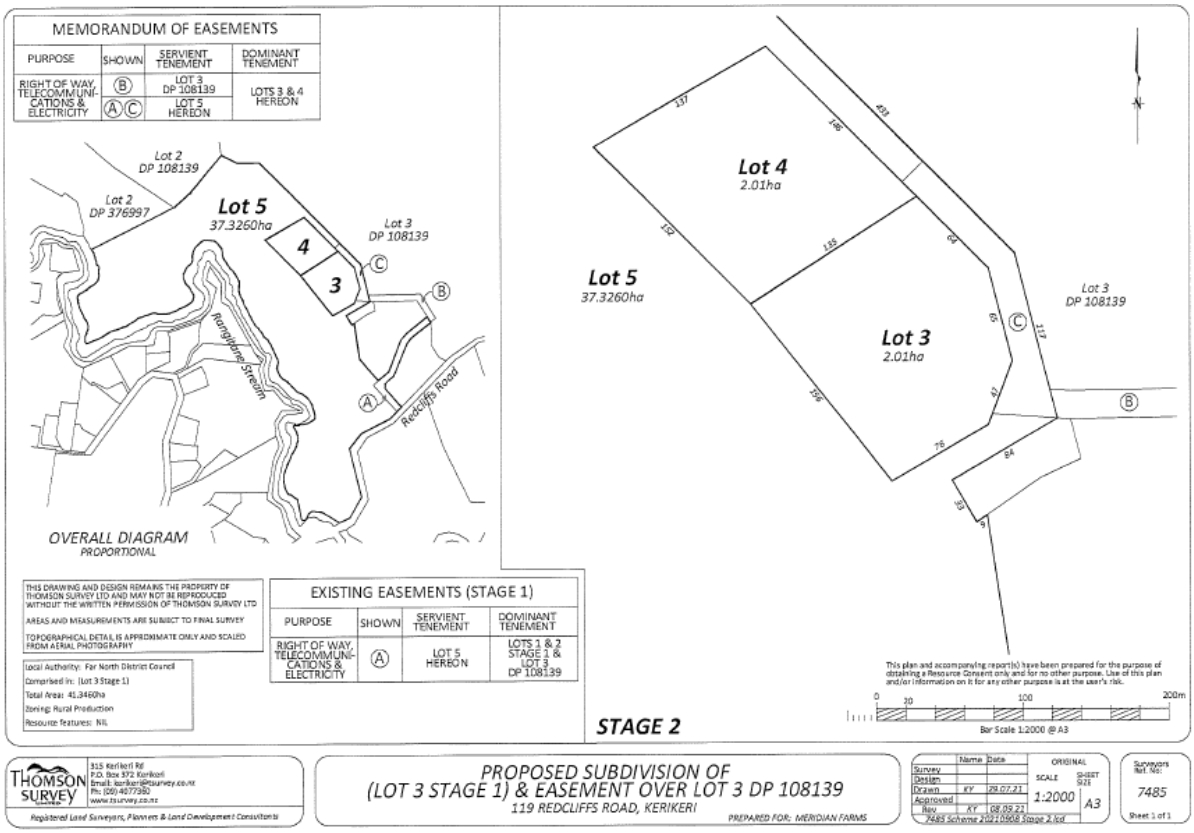



Fig 2: Proposed Stage 2 subdivision of Lot 3 Stage 1.

## 6. Reasons for the application

| Rule # & Name | Non-Compliance Aspect | Activity Status |
|---|---|---|
| **13.7.2.1 MINIMUM AREA FOR VACANT NEW LOTS AND NEW LOTS WHICH ALREADY ACCOMMODATE STRUCTURES**<br><br>(i) Rural Production Zone - Restricted Discretionary:<br><br>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. | Cannot comply with Controlled activity in the Rural Production zone as the minimum lot size does not comply with 20ha.<br>Complies with Restricted Activity as the proposed application is for 5 allotments and the minimum lot size is 2ha.<br>The Record of Title existed prior to 28 April 2000. | Restricted Discretionary Activity. |

## 7. Status of the Application

The overall application is a Restricted Discretionary activity.

## 8. National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (NES Contaminated Soils)

The Resource Management NES Contaminated Soils was gazetted on 13th October 2011 and took effect on 1st January 2012. Council is required by law to implement this NES in accordance with the Resource Management Act 1991 (RMA). The standards are applicable if the land in question is, or has been, or is more likely than not to have been used for a hazardous activity or industry and the applicant proposes to subdivide or

change the use of the land, or disturb the soil, or remove or replace a fuel storage system.

The NESCS is not relevant to this application as the site is not known to be used for any activities on the HAIL register.

**National Environmental Standard for Freshwater Regulations 2020**
The Resource Management NES Freshwater Regulations was gazetted on 5th August 2020 and took effect on 3 September 2020. Council is required by law to implement this NES in accordance with the Resource Management Act 1991 (RMA). The standards are applicable if the land in question has Natural Wetlands and Freshwater sources on it, or there is an application for the reclamation or rivers, or the Passage of Fish will be affected by structures as the result of an application.

The proposal does not require any earthworks, vegetation clearance or new stormwater discharges within wetlands. It has no implications in terms of the Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (Freshwater NES).

**9. Request for further information**
Council has requested further information or a report pursuant to section 92 of the Act. (Section 95C).

On 02 December 2021, the following information was requested:

1. Councils Consultant Engineer has visited the site and has requested a Geotechnical Investigation Report about the general suitability of the land for subdivision.

It shall particularly make comment to and evaluate:

a) Slope stability - especially over the proposed ROW where there is evidence of land slippage.

b) Confirmation that a suitable building site will be available on each lot along with a feasible and stable access drive, of grade specified in Section 15 – Transportation.

   i. Where the building site proposed does not satisfy the requirements of 'good ground' a description of feasible founding methods necessary to enable a building to be built on the lots shall be included in the report.

2. Easement 'E' relies on Lot 3 DP 108139 to provide right of way, telecommunications, and electricity. I note that written approval from the owner of this property was not provided in the application, and this has not been addressed in the application.

The above information was provided to the satisfaction of Councils Engineer on 12 July 2022.

**10. Notification: Public Notification**
**Section 95A – Public notification of consent applications**

| **Step 1** | ***Mandatory public notification in certain circumstances*** | |
|---|---|---|
| S95A(3)(a) | Has the applicant requested that the application be publicly notified? | No |
| S95A(3)(b) | Is public notification required under section 95C? (After a request for further information) | No |

| | | |
|---|---|---|
| S95A(3)(c) | Has the application been made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977? | No |
| **Step 2** | ***if not required by step 1, public notification precluded in certain circumstances*** | |
| S95A(5)(a) | Is the application for a resource consent for 1 or more activities and each activity is subject to a rule or national environmental standard that precludes public notification? | No |
| S95A(5)(b) | Is the application for a resource consent for 1 or more of the following, but no other activities?<br>(i) a controlled activity<br>(iii) a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity; | No |

## 11. Assessment of Environmental Effects (sections 95A(8)(b) and 95D)

**Effects that must be disregarded**

The Council must disregard any effects on the land in, on, or over which the activity will occur, and on persons who own or occupy any adjacent land (s95D(a)). The land adjacent to the subject site is:

| Legal Description | Property | Registered Owners |
|---|---|---|
| Crown Land Survey Office Plan 18562 | Redcliffs Road, Kerikeri | Crown Land Reserved from Sale (Marginal Strip) |
| Lot 2 DP 376997 | Lot 2, Purerua Road, Kerikeri | Meridian Farm Limited |
| Lot 2 DP 108139 | 252 Purerua Road, Kerikeri | Harold D'arcy Corbett, Mark Allan Turner, Susan Elizabeth Corbett |
| Lot 3 DP 108139 | 121 Redcliffs Road, Kerikeri | Breadon & Cook Limited |
| Lot 1 DP 388171 | Lot 1, Redcliffs Road, Kerikeri | Te Toka Tu Limited |
| Lot 2 DP 388171 | 54A Redcliffs Road, Kerikeri | Te Toka Tu Limited |
| Lot 1001 DP 532487 | Lot 1001, Kapiro Road, Kerikeri | Neil Construction Limited |

Fig 3: Identified adjacent properties.

Council must disregard any effect on a person who has given written approval to the application. In this instance, no written approvals have been provided.

**Assessment of Environmental Effects:**
The application has been assessed as a Restricted Discretionary activity as such Council can take into account any relevant matter within its restricted discretion when assessing the environmental effects.

**Subdivision:**

**Adverse effects assessment:**
In considering whether to grant consent on applications for Restricted Discretionary subdivision activities under 13.8.1(c) the Council will restrict the exercise of its discretion to the matters listed in 13.7.3 and the matters listed in 13.8.1(ii):

The subject site is not within the Coastal environment as defined by the Northland Regional Council in the Regional Policy Statement update in 2018.

Proposed Lot 5 is adjacent to a Department of Conservation managed marginal strip along the Rangitane River along the western boundary. The proposed allotments are proposed along the eastern portion of the site approximately 250m from the marginal strip. The proposal does not affect DOC's ability to manage and administer the land.

There are no areas of significant flora or fauna near the site that would be affected by the proposed subdivision.

Fire hazard mitigation on rural lots away from reticulated water supply can be adequately provided for through the provision of dedicated water supply tanks. A consent notice will be required to be added to the proposed new lots and will be discussed under Water Supply in below assessment. There is ample space on each lot for a building platform to be placed away from any trees, or woodlot areas to meet fire risk to residential units permitted standards.

**Allotment Sizes and Dimensions**
Proposed Lots 1 and 3-5 can provide for a 30m x 30m square building envelope complying with boundary setback requirements. Proposed Lot 2 has an existing residential dwelling. All proposed lots are of a size and dimension appropriate for the intended activities of the Rural Production zone.

**Property Access**
Access to all proposed lots will be off Redcliffs road from the same vehicle crossing and shared right of way. The access is existing but not formed, therefore the following conditions are recommended, should consent be granted:

*Stage one:*

*Prior to 224:*

- *Upgrade the existing vehicle crossing entrance onto Red Cliffs Road (From ROW A) to provide a double width entrance which complies with the Councils Engineering Standard FNDC/S/6 and 6B, Seal the entrance plus splays for a minimum distance of 6m from the existing seal edge. An adequately sized culvert (minimum diameter 375mm) is to be installed under the new crossing with grouted rock headwalls on both sides.*

- *Provide formed and metalled access on ROW easement (A) to 3m finished metalled carriageway width with passing bays provided to comply with Rule 15.1.6.1.2 of the Far North District Plan. The formation*

*is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.*

*Stage two:*

*Prior to 224:*

- *Upgrade ROW easement (A) with passing bays provided to comply with Rule 15.1.6.1.2 of the Far North District Plan].*
- *Provide formed and metalled access on ROW easement (B) to 5m finished metalled carriageway width, with passing bays provided to comply with Rule 15.1.6.1.2 of the Far North District Plan]. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.*
- *Provide formed and metalled access on ROW easement (C) to 3m finished metalled carriageway width. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.*

**Natural and Other Hazards**
The Northland Regional Council Maps show that the subject site is not known to be subject to natural hazards nor any land hazards.

**Water Supply**
Proposed Lot 2 has an existing dwelling which has their own existing water supply by way of roof collection of rainwater to water tanks. The other proposed lots are vacant.

It is recommended that the Council's standard consent notice be applied to the proposed lots should consent be granted so that any future development will be required to supply firefighting water additional to domestic supply.

**Stormwater Disposal**
Councils Engineer has commented that all proposed lots are of substantial size and of appropriate gradient to allow for infiltration/soakage, in a controlled manner. There is no flooding mapped, and except internal roading (that will be managed as a condition of consent) no new impervious surfaces are proposed.

There are no further requirements in regard to stormwater.

**Sanitary Sewage Disposal**
The application contains a Wastewater Site Suitability Report prepared by Geologix Consulting Engineers, referenced C0022-S-01-R01, dated October 2021.

The report confirms that the existing system on proposed Lot 2 appeared to be in good working order with a septic tank draining to trenches in front of the property and associated disposal areas fully contained within the boundary of the proposed allotment.

Councils Engineers commented that he is satisfied land disposal can occur on the vacant proposed allotments safely with a 100% reserve disposal area. Each lot has been provided with a wastewater treatment concept design in accordance with NZS1547:2012 with the supplied Wastewater Site Suitability Report.

The following consent notice is recommended, should consent be granted:

*Consent Notice*

*At the time of lodging an application for building consent for any building on the lot, which requires a wastewater treatment & effluent disposal system, the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall reference the wastewater disposal report titled: Wastewater Site Suitability prepared by Geologix, ref: C0022-S-01-R01, dated October 2021, and submitted with RC2220308-RMASUB. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards.*

**Energy Supply and Telecommunications**

Energy supply and Telecommunications are not a requirement for a subdivision application in the Rural Production zone. Proposed Lot 2 has an existing dwelling with power and telecommunications. Even so, the applicant has contacted both suppliers seeking their requirements for the proposed subdivision.

The following consent notice is recommended, should consent be granted:

*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.*

**Easements for Any Purpose**

Easements A, B & C for right of way, Telecommunications and Electricity.
Easement B is over Lot 3 DP 108139 for which written approval has been obtained.

**Preservation of Heritage Resources, Vegetation, Fauna and Landscape, and Land Set Aside for Conservation Purposes**

The subject site does not contain any significant indigenous flora or fauna, outstanding landscapes or sites of cultural or archaeological significance. The subject site is not located within or near a coastal environment. The site is located within a kiwi present zone. The applicant has requested a consent notice limiting each smaller proposed allotment to two dogs, locked up a night and to have kiwi aversion training. This will be added as a consent notice, should consent be granted. Councils standard consent notice is recommended for proposed Lot 5.

**Access to Reserves and Waterways**

The subject site does not contact any reserves or waterways for which public access is required.

**Land Use Compatibility**

The area is characterised by similar sized rural residential and lifestyle lots and larger farming blocks. The proposal will create four rural residential sites and a balance larger block. To the southeast are mineral zoned allotments, and there is adequate space to allow for the 100m setback requirements on proposed Lot 1, however it is noted that these allotments are proposed to be rezoned to Rural Lifestyle in the proposed District Plan, so a consent notice is not considered necessary. An advice note is recommended advising the consent holder of setback requirements, should consent be granted. Overall, the proposal is not considered to be incompatible with the surrounding environment.

**Adverse effects conclusions**

In conclusion, it is considered that the proposal will have less than minor adverse effects on the wider environment.

**Step 4: Public Notification in Special Circumstances**

If and application has not been publicly notified as a result of any of the previous steps, then the Council is required to determine whether special circumstances exist that warrant it being publicly notified (s95A(9)).

In this instance there is nothing exceptional or unusual about the application, and that the proposal has nothing out of the ordinary to suggest that public notification should occur.

**Recommendation as to Public Notification or Non-Notification**
It is recommended that, pursuant to s95A of the Act, this application proceeds on a **non-notified** basis for reasons as assessed above and in summary that:

- Under step 1, public notification is not mandatory.
- Under step 2, there is no rule or NES that specifically precludes public notification of the activities, and the application is for an activity other than those specified in s95A(5)(b).
- Under step 3, public notification is not required as the application is for an activity that is not subject to a rule that specifically requires it, and it is considered that the activity will have or is likely to have adverse effects on the environment that are less than minor.
- Under step 4, there are no special circumstances that warrant the application being publicly notified.

## 12. Limited Notification (sections 95B, 95E-95G)

| **Step 1** | ***certain affected groups and affected persons must be notified*** | |
|---|---|---|
| S95B(2)(a) | Are there any affected protected customary rights groups? | No |
| S95B(2)(b) | Are there any affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity)? | No |
| S95B(3)(a) | Is the proposed activity on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11? | No |
| S95B(3)(b) | Is the person to whom the statutory acknowledgement is made is an affected person under section 95E? | No |
| **Step 2** | ***if not required by step 1, limited notification precluded in certain circumstances*** | |
| S95B(6)(a) | the application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification: | No |
| S95B(6)(b) | the application is for a controlled activity (but no other activities) that requires a resource consent under a district plan (other than a subdivision of land) | No |

**Adversely Affected Persons Assessment (s95B(7) and (8) and s95E)**
The following assessment addresses whether there are any affected persons that the application is required to be limited notified to pursuant to s95B(7) and (8) in accordance with 95E:

The application is supported with written approval from Lot 3 DP 108139 for easement B for Right of Way, therefore, it is considered that this landowner is not affected in terms of increased traffic from the proposed subdivision.

Iwi and Heritage New Zealand have been notified of the proposal. No comments were received from Heritage New Zealand. Iwi responded with wanting to discuss the

application with the applicant, however, the applicant has tried multiple times to get in touch with them to no avail. The site is not located within an area noted as a Site of Significance to Māori.

The proposed subdivision is appropriate and in keeping within the surrounding environment, therefore, it is considered there are no affected person/s.

**Step 4: Further Notification in Special Circumstances**
In addition to the findings of the previous steps, the Council is also required to determine whether special circumstances exist in relation to the application that warrant it being notified to any other persons not already determined as eligible for limited notification.

In this instance I have turned my mind specifically to the existence of any special circumstances under s95B(10) and conclude that there is other exceptional or unusual about the application, and that the proposal has nothing out of the ordinary to suggest that notification to any other persons should occur.

**13. Limited Notification Conclusion**

It is recommended that, pursuant to s95A-95G of the Act, this application proceeds on a **non-notified** basis for reasons as assessed above and in summary that:

- Under step1, limited notification is not mandatory.
- Under step 2, there is no rule or NES that specifically precludes limited notification of the activities, and the application is for an activity other than those specified in s95B(6)(b).
- Under step 3, limited notification is not required as it is considered that the activity will not result in any adversely affected persons.
- Under step 4, there are no special circumstances that warrant the application being limited notified to any person.

It is therefore recommended that this application be processed without limited notification.

**14. Notification Recommendation:**

For the above reasons under section 95A of the Act, this application may be processed without public notification.

In addition, under section 95B of the Act, limited notification is not required.

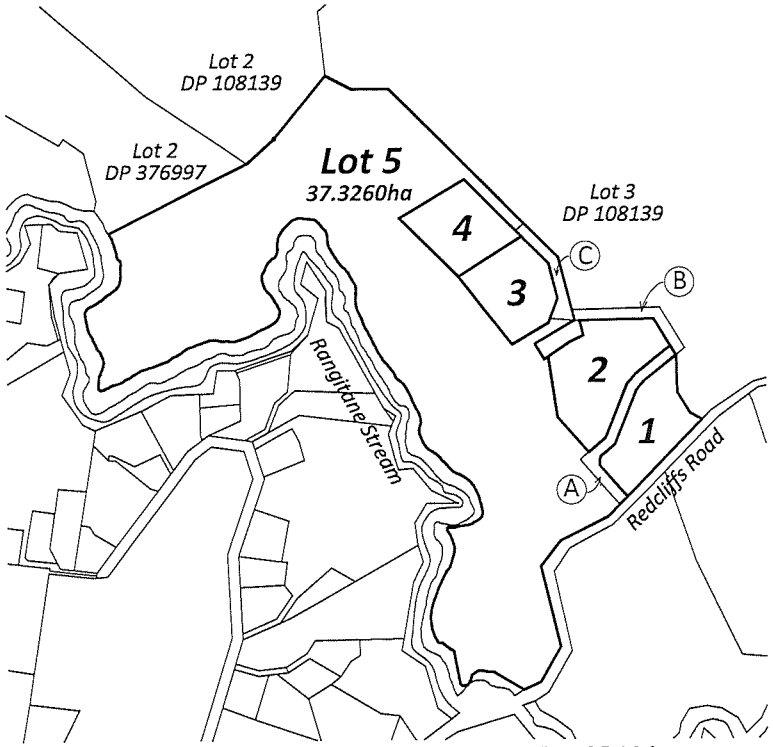
Accordingly, I recommend that this application is processed non notified.

**Jo Graham** **Date: 21/07/2022**
**Resource Planner**

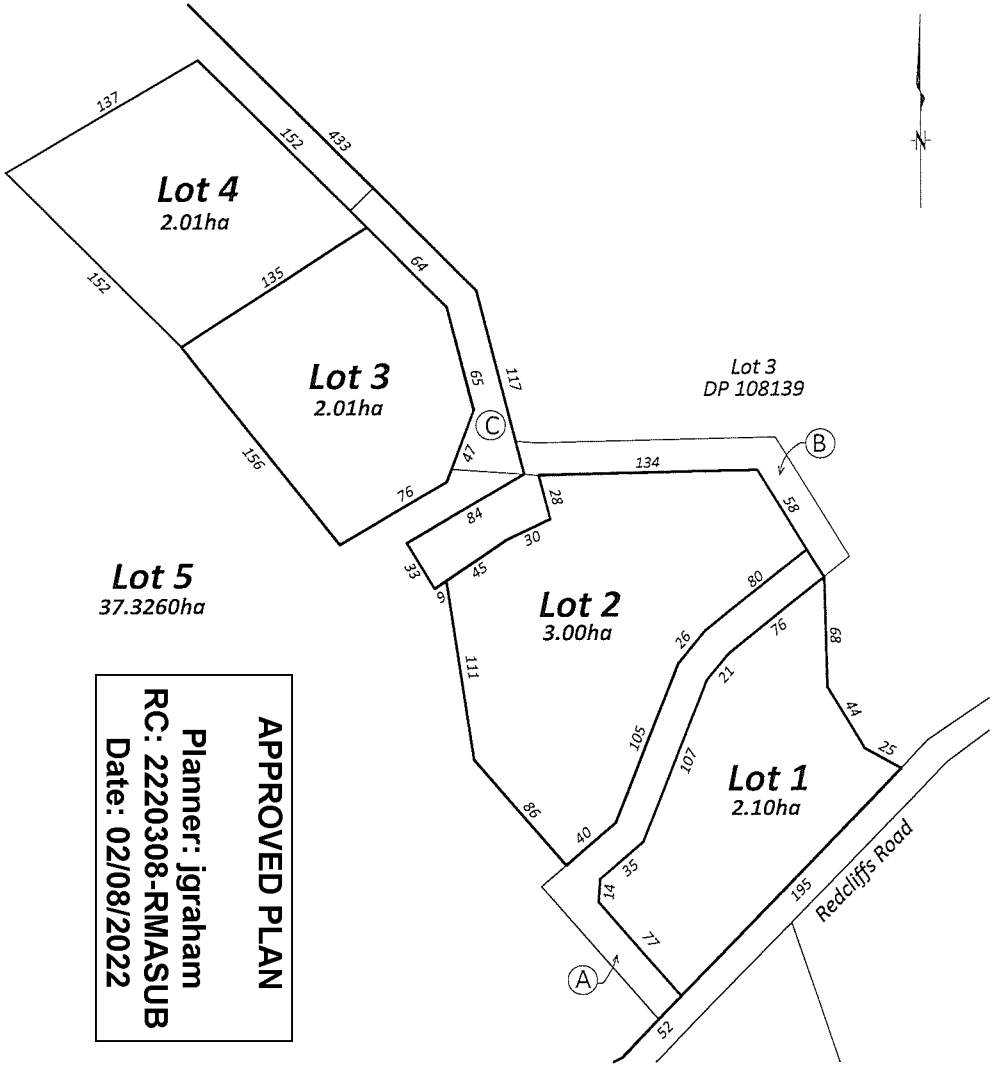
**15. Notification determination**

Acting under delegated authority, and for the reasons set out in the above assessment and recommendation, under sections 95A and 95C to 95D, and 95B and 95E to 95G of the RMA this application shall be processed as non-notified.

**Pat Killalea** **Date: 2/08/2022**
**Principal Planner**




OVERALL DIAGRAM
PROPORTIONAL




APPROVED PLAN
Planner: jgraham
RC: 222308-RMASUB
Date: 02/08/2022

| MEMORANDUM OF EASEMENTS | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
| RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY | A | LOT 5 HEREON | LOTS 1 - 4 HEREON & LOT 3 DP 108139 |
| | B | LOT 3 DP 108139 | LOTS 3 & 4 HEREON |
| | C | LOT 5 HEREON | LOTS 3 & 4 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: CFR NA50D/798
Total Area: 46.4460ha
Zoning: Rural Production
Resource features: NIL



0 30 150 300m

Bar Scale 1:3000 @ A3

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

# PROPOSED SUBDIVISION OF LOT 1 DP 94462 & EASEMENT OVER LOT 3 DP 108139

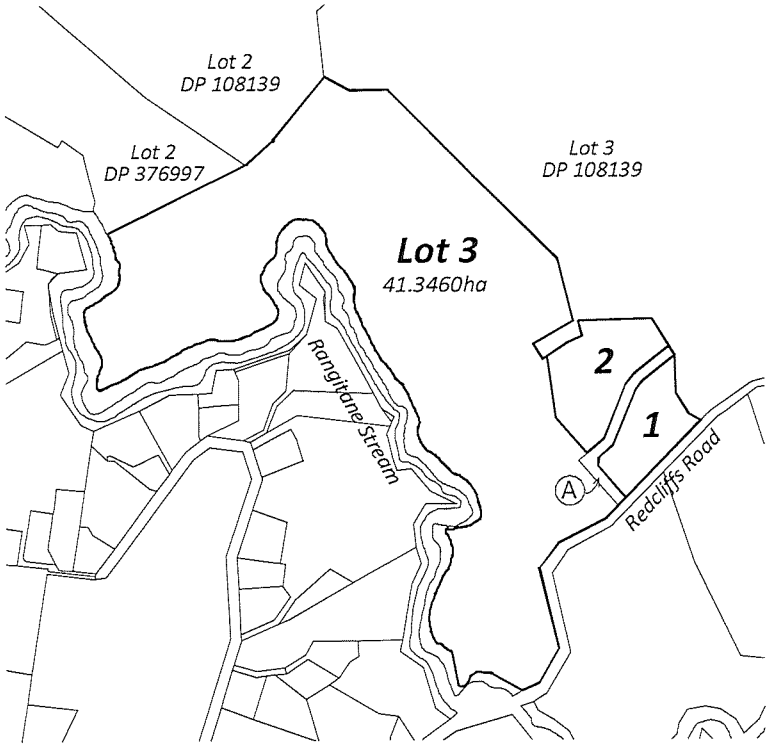
119 REDCLIFFS ROAD, KERIKERI

PREPARED FOR: MERIDIAN FARMS

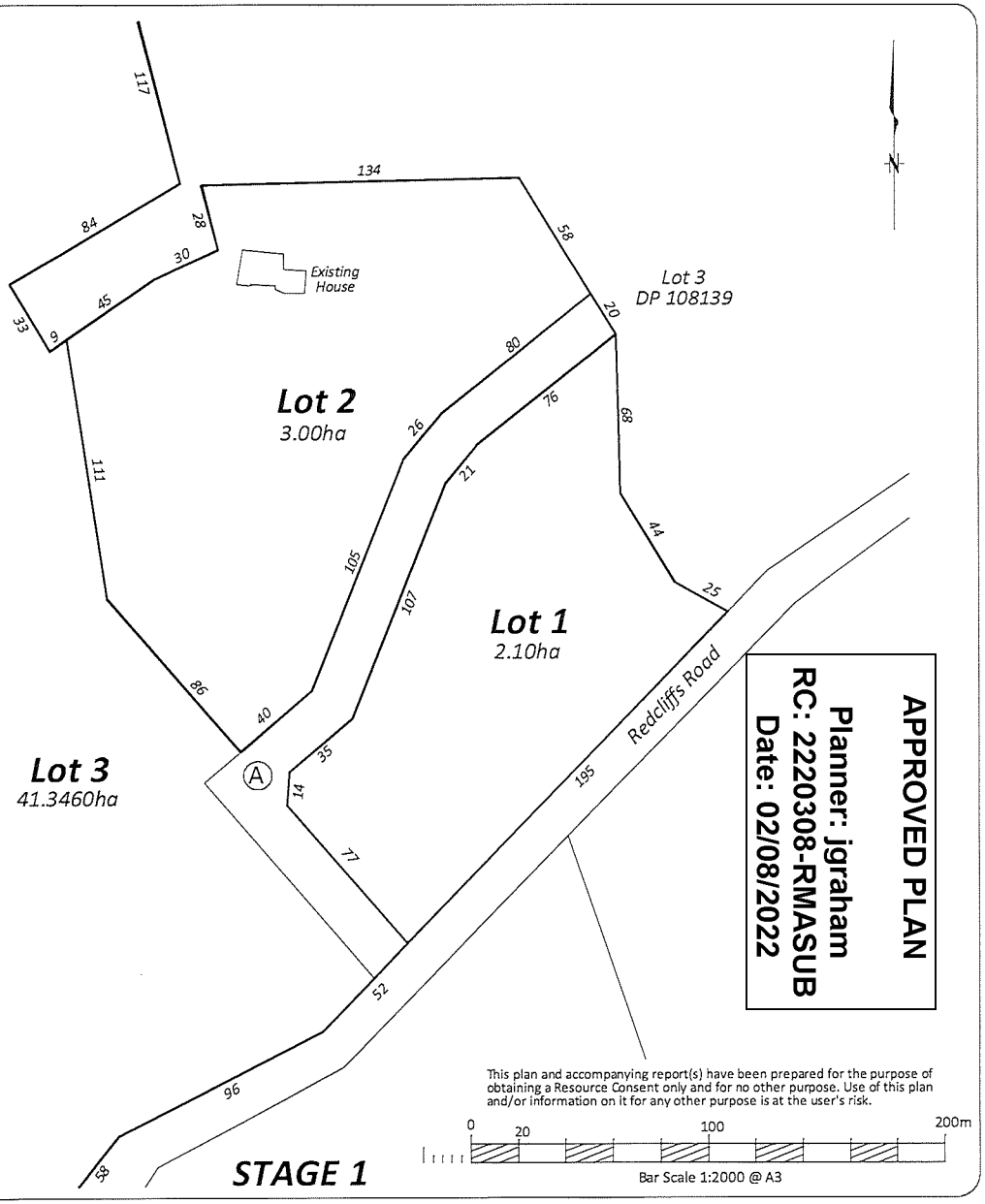
| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY | 29.07.21 |
| Approved | | |
| Rev | KY | 23.03.22 |

ORIGINAL
SCALE 1:3000
SHEET SIZE A3
7485 Scheme 20220323 Overall.lcd

Surveyors Ref. No: 7485
Sheet 1 of 1




*OVERALL DIAGRAM*
*PROPORTIONAL*




**APPROVED PLAN**
**Planner: jgraham**
**RC: 2220308-RMASUB**
**Date: 02/08/2022**



Local Authority: Far North District Council
Comprised in: CFR NA50D/798
Total Area: 46.4460ha
Zoning: Rural Production
Resource features: NIL

**MEMORANDUM OF EASEMENTS**

| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
|---|---|---|---|
| RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY | (A) | LOT 3 HEREON | LOTS 1 & 2 HEREON & LOT 3 DP 108139 |

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 20 100 200m

Bar Scale 1:2000 @ A3

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Ph: (09) 4077360
www.tsurvey.co.nz
*Registered Land Surveyors, Planners & Land Development Consultants*

# *PROPOSED SUBDIVISION OF LOT 1 DP 94462*

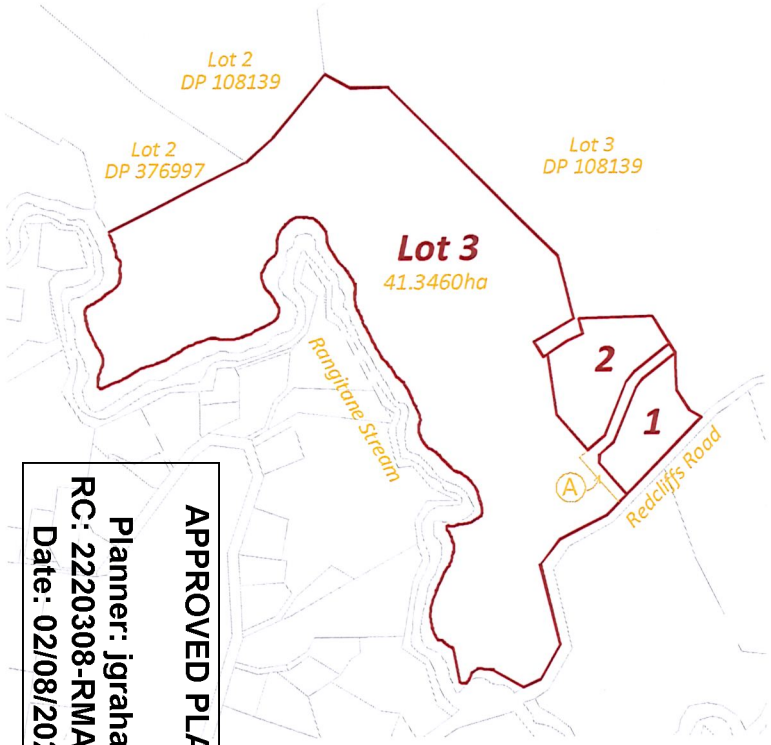
*119 REDCLIFFS ROAD, KERIKERI*

*PREPARED FOR: MERIDIAN FARMS*

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY | 29.07.21 |
| Approved | | |
| Rev | KY | 03.05.22 |

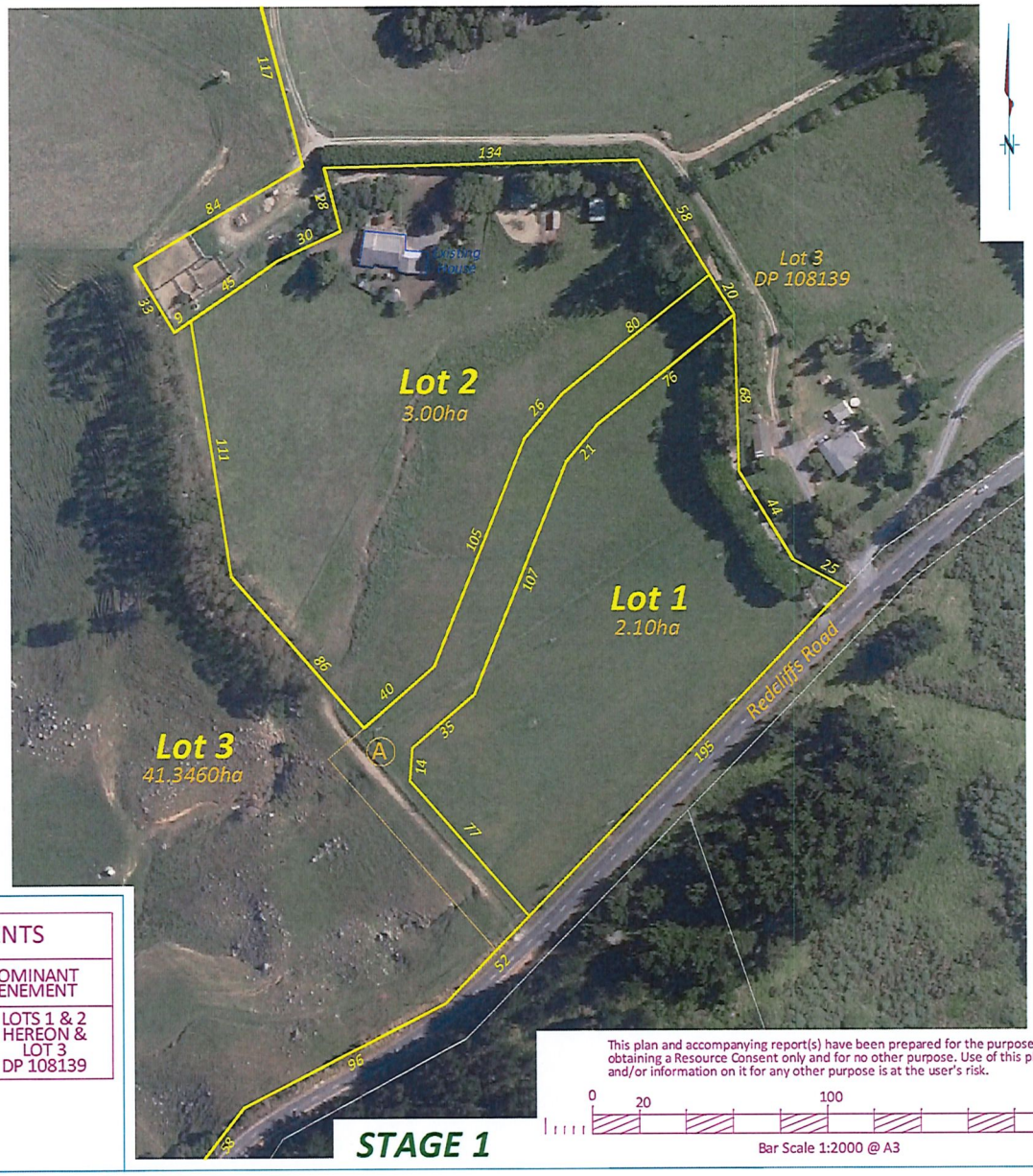
ORIGINAL
SCALE 1:2000
SHEET SIZE A3
*7485 Scheme 20220503 Stage 1.lcd*

Surveyors Ref. No: 7485
Sheet 1 of 1




**APPROVED PLAN**

Planner: jgraham
RC: 2220308-RMASUB
Date: 02/08/2022




## OVERALL DIAGRAM
*PROPORTIONAL*



Local Authority: Far North District Council
Comprised in: CFR NA50D/798
Total Area: 46.4460ha
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Resource features: NIL

**MEMORANDUM OF EASEMENTS**

| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
|---|---|---|---|
| RIGHT OF WAY, TELECOMMUNICATIONS & ELECTRICITY | (A) | LOT 3 HEREON | LOTS 1 & 2 HEREON & LOT 3 DP 108139 |



0 20 100 200m

Bar Scale 1:2000 @ A3

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# PROPOSED SUBDIVISION OF LOT 1 DP 94462

*119 REDCLIFFS ROAD, KERIKERI*

*PREPARED FOR: MERIDIAN FARMS*

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY | 29.07.21 |
| Approved | | |
| Rev | KY | 03.05.22 |

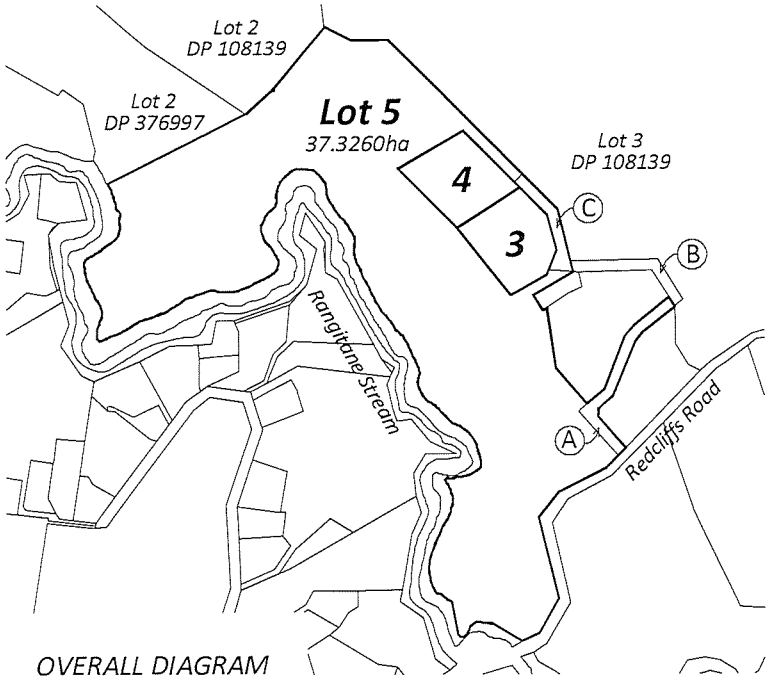
ORIGINAL
SCALE 1:2000
SHEET SIZE A3

7485 Scheme 20220503 Stage 1.lcd

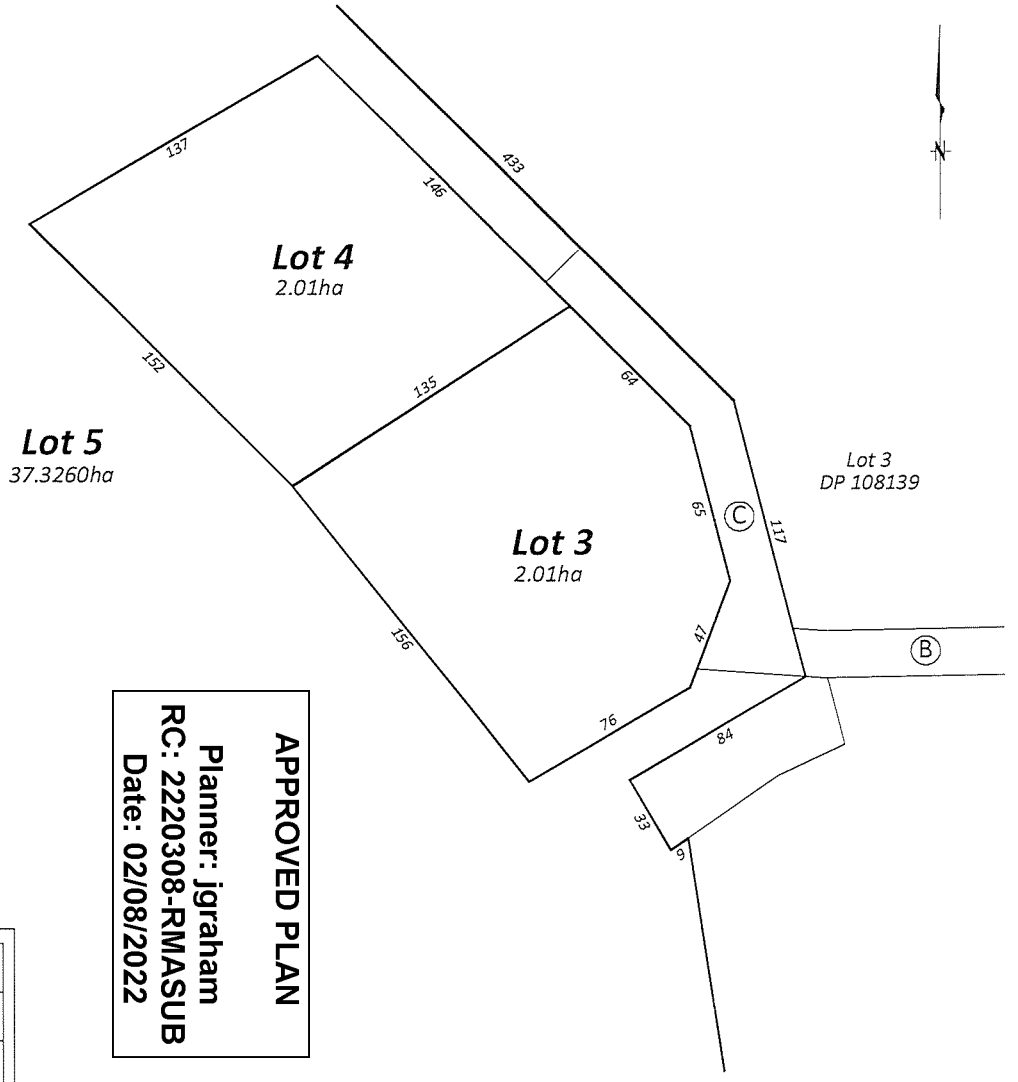
Surveyors Ref. No: 7485

Sheet 1 of 1

| MEMORANDUM OF EASEMENTS | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
| RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY | (B) | LOT 3 DP 108139 | LOTS 3 & 4 HEREON |
| | (A) (C) | LOT 5 HEREON | |




OVERALL DIAGRAM
PROPORTIONAL




APPROVED PLAN
Planner: jgraham
RC: 222308-RMASUB
Date: 02/08/2022



AREAS AND MEASUREMENTS ARE SUBJECT TO FINAL SURVEY

TOPOGRAPHICAL DETAIL IS APPROXIMATE ONLY AND SCALED FROM AERIAL PHOTOGRAPHY

| EXISTING EASEMENTS (STAGE 1) | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
| RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY | (A) | LOT 5 HEREON | LOTS 1 & 2 STAGE 1 & LOT 3 DP 108139 |

Local Authority: Far North District Council
Comprised in: (Lot 3 Stage 1)
Total Area: 41.3460ha
Zoning: Rural Production
Resource features: NIL



0 20 100 200m
Bar Scale 1:2000 @ A3

**STAGE 2**

THOMSON SURVEY LIMITED
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www.tsurvey.co.nz
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# PROPOSED SUBDIVISION OF (LOT 3 STAGE 1) & EASEMENT OVER LOT 3 DP 108139

119 REDCLIFFS ROAD, KERIKERI

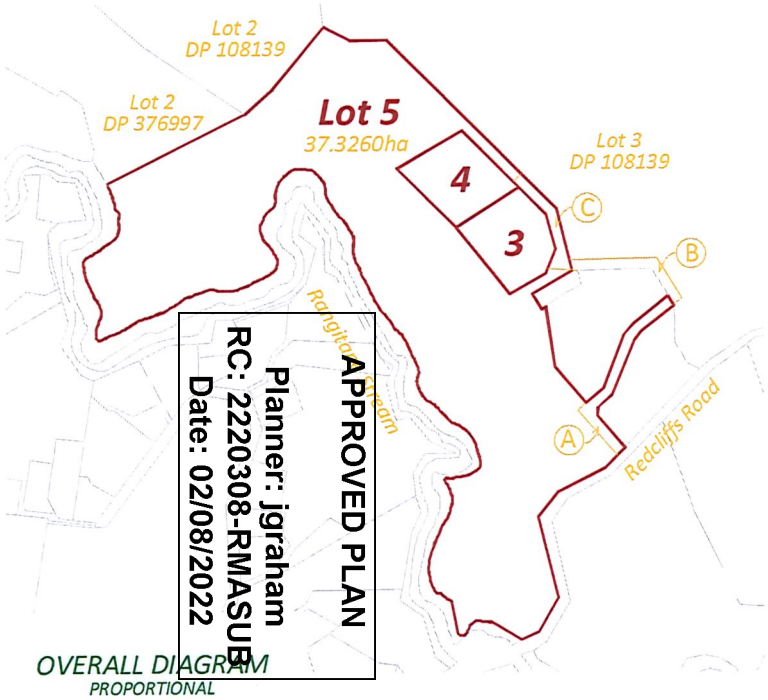
PREPARED FOR: MERIDIAN FARMS

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY | 29.07.21 |
| Approved | | |
| Rev | KY | 08.09.21 |

ORIGINAL
SCALE 1:2000
SHEET SIZE A3
7485 Scheme 20210908 Stage 2.lcd

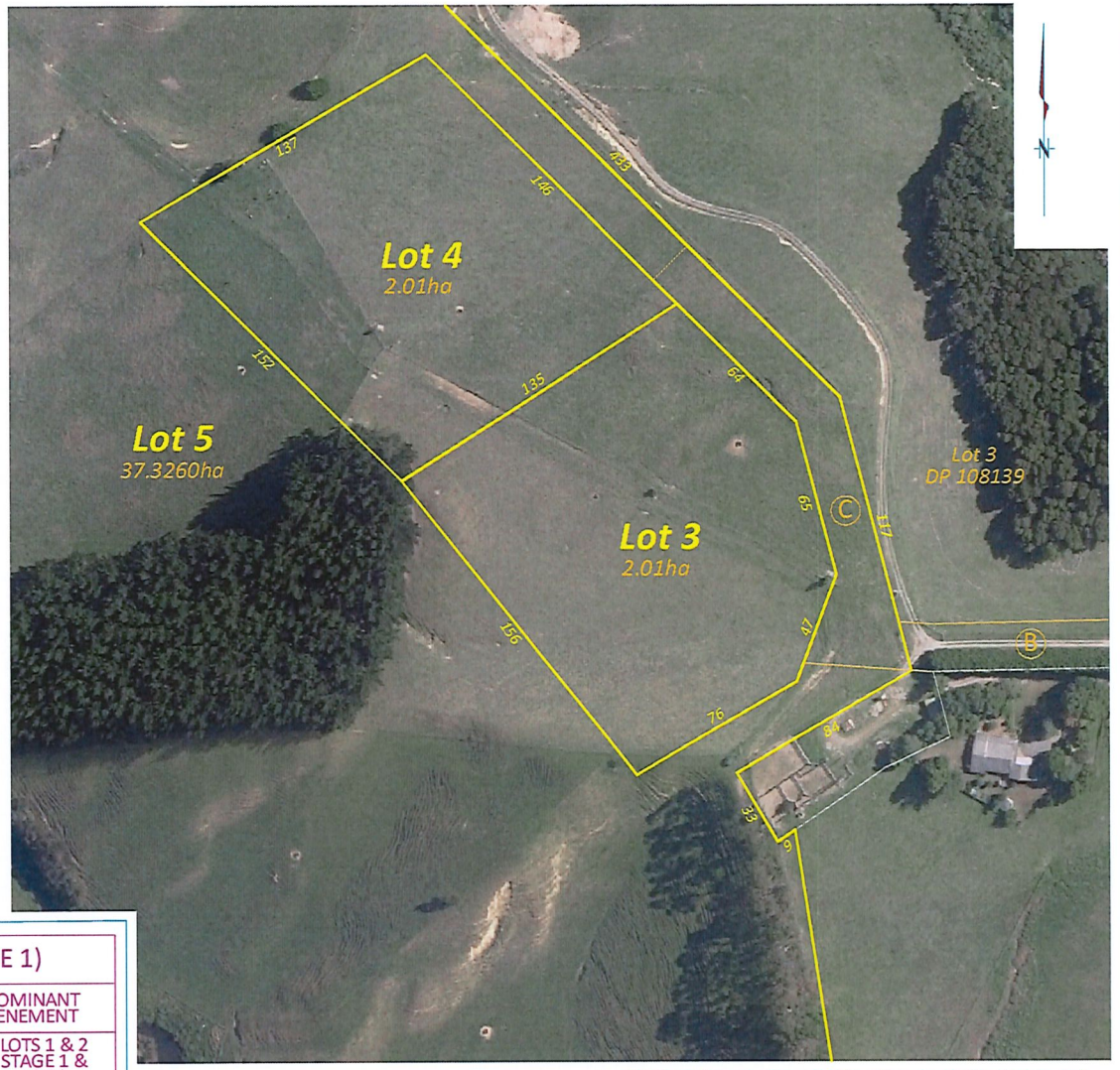
Surveyors Ref. No: 7485
Sheet 1 of 1

| MEMORANDUM OF EASEMENTS | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
| RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY | (B) | LOT 3 DP 108139 | LOTS 3 & 4 HEREON |
| | (A) (C) | LOT 5 HEREON | |




APPROVED PLAN
Planner: jgraham
RC: 222308-RMASUB
Date: 02/08/2022

OVERALL DIAGRAM
PROPORTIONAL






| EXISTING EASEMENTS (STAGE 1) | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | DOMINANT TENEMENT |
| RIGHT OF WAY, TELECOMMUNI-CATIONS & ELECTRICITY | (A) | LOT 5 HEREON | LOTS 1 & 2 STAGE 1 & LOT 3 DP 108139 |

Local Authority: Far North District Council
Comprised in: (Lot 3 Stage 1)
Total Area: 41.3460ha
Zoning: Rural Production
Resource features: NIL



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# PROPOSED SUBDIVISION OF (LOT 3 STAGE 1) & EASEMENT OVER LOT 3 DP 108139

119 REDCLIFFS ROAD, KERIKERI

PREPARED FOR: MERIDIAN FARMS

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY | 29.07.21 |
| Approved | | |
| Rev | KY | 08.09.21 |

ORIGINAL
SCALE 1:2000
SHEET SIZE A3
7485 Scheme 20210908 Stage 2.lcd

Surveyors Ref. No: 7485
Sheet 1 of 1

Far North District Council

# DECISION ON SUBDIVISION CONSENT APPLICATION

# UNDER THE RESOURCE MANAGEMENT ACT 1991

## Decision

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

| | |
|---|---|
| **Council Reference:** | 2230005-RMASUB |
| **Applicant:** | Meridian Farm Limited |
| **Property Address:** | Lot 2, Purerua Road, Kerikeri |
| **Legal Description:** | LOT 2 DP 376997 |
| **Description of Application:** | To create 2 additional Rural Production Lots Discretionary Activity in the Rural Production Zone |

## Conditions

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

1. The subdivision shall, subject to any modification required by Condition 2 below, be carried out in accordance with the approved plan of subdivision prepared by Thomson Survey Limited, referenced Proposed Subdivision of Lot 2 DP 376997, Job #10148, dated 11.06.24, and attached to this consent with the Council's "Approved Stamp" affixed to it.

### Survey plan approval (s223) conditions

2. Prior to approval pursuant to s223 of the Act, the consent holder shall:

a. Provide evidence that approval has been given such that an appropriate legal instrument can be executed for Area Z on LT 596438 over DoC administered Crown Land, SO 18562, in favour of the application site Lot 2 DP 376997. Such evidence may take the form of correspondence confirming that the legal instrument has been granted; or legal instrument duly signed by the Crown's representative; or a copy of the title for the application site with the legal instrument already executed.

If not already executed on the application site, provide a solicitor's undertaking that the necessary legal instrument will be executed on the affected title. If already executed on the application site title at time of application for s233 survey plan approval, update the survey plan, as presented to Council, to reflect the executed legal instrument.

OR

b. Provide plans and details of proposed vehicle crossing and associated access into Lot 3 from existing appurtenant Easement, for Council's approval. If the original effluent disposal area and the building platform as recommended by the Subdivision Site Suitability Engineering Report by Geologix Consulting

Engineers (ref C0110-S-01, dated June 2022) are not viable, the consent holder shall identify a suitable alternative effluent disposal area and an alternative building platform, subject to Council approval.

c. Submit plans and details of works for the approval of Far North District Council, for the works specified in conditions 3(a)-(c) below, including options for a crossing and suitable access to a viable building platform within Lot 3 dependent on whether condition 2(a) is satisfied. It is to be noted that certain works may need to be carried out or certified by a Suitably Qualified Person (IQP) or Chartered Professional Engineer (CPEng) working within the bounds to their assessed competencies. All plans needing design/certification by Council approved IQP/CPEng will require completion of a design producer statement (PS1).

Plans are to include but are not limited to:
(i) Works required by conditions 3(a)-(c);
(ii) Proposed stormwater control works to be in place prior to and during construction/upgrade works;
(iii) Erosion and sediment control measures which are to be in place for the duration of the works in accordance with Erosion and Sediment Control Guide for Land Disturbing Activities in the Auckland Region (GD05).

## Section 224(c) compliance conditions

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

a. Provide/upgrade a formed double width entrance to the existing appurtenant Right of Way, from Purerua Road, which complies with the Councils Engineering Standard FNDC/S/6, 6B, and section 3.3.7.1 of the Engineering standards and NZS4404:2004. The crossing is to be sealed or concreted back for a minimum distance of 5 metres from the existing seal edge. Culverts, if any, should be a minimum of 375mm RCP.

b. Provide a formed single width entrance to each lot which complies with the Councils Engineering Standard FNDC/S/6 and FNDC/S/6B and section 3.3.7.1 of the Engineering standards and NZS4404:2004. Culverts should be a minimum of 375mm RCP.

c. Provide formed and metalled access for the length of the ROW to Lot 1, Lot 2 and Lot 3 to 3m finished metalled carriageway width with passing bays provided to comply with Rule 15.1.6.1.2 of the Far North District Plan. The formation is to consist of a minimum of 200mm of compacted hard fill plus a GAP 30 or GAP 40 running course and is to include water table drains and culverts as required to direct and control stormwater runoff.

4. Following completion of the above works, the consent holder shall provide evidence by way of a Producer Statement (PS3) from a suitably qualified and experienced engineer; an independent qualified person, or confirmation from Council's RC Engineer that the works have been completed in accordance with plans and details approved under condition 2(c).

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

a. At the time of lodging an application for building consent for a residential dwelling, the building applicant is to provide a report from a Chartered Professional engineer with recognised competence in relevant geotechnical and structural matters, which addresses the site's investigation undertaken, sets out the specific design of the building's foundations and indicates the programme of supervision of the foundation construction. The report shall reference the Subdivision Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dated June 2022) [Lots 1, 2 and 3]

b. In conjunction with the construction of any habitable buildings or sheds greater than 110m$^2$ and other impermeable surfaces, the lot owner shall install stormwater retention tank/s with flow attenuated outlet/s, or similar devices. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater than the predevelopment flow from the site for rainfall events up to a 10% AEP plus allowance for climate change. The details of the on-site retention storage and flow attenuation shall be prepared by a suitably qualified engineer and shall reference the recommendations of the Subdivision Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dated June 2022). Alternatively, stormwater runoff from the Lots can be discharged directly to ground via engineered soakage devices with prior Council approval.

Overland/secondary flowpaths that can accommodate the 1% AEP storm event shall also be provided on the proposed Lots and are to be unobstructed by new buildings, other structures or landscaping [Lot 1, 2 and 3]

c. In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus an appropriately sized reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Plan Permitted Activity Standards and shall reference the recommendations made within the Subdivision Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dated June 2022).

The consent holder shall enter into a maintenance contract with a suitably qualified and experienced person to maintain the wastewater treatment system so that it works effectively at all times. At a minimum, all maintenance shall be in accordance with the recommendations of the Operation and Maintenance Manual prepared by the system supplier. [Lots 1, 2 & 3]

d. In conjunction with the construction of any dwelling, and in addition to a potable water supply, a water collection system with sufficient supply for firefighting purposes is to be provided by way of tank or other approved means and to be positioned so that it is safely accessible for this purpose. These provisions will be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509. [Lot 1, 2 & 3]

e. Electricity supply is not a condition of this consent and power has not been reticulated to the boundary of the lot. The lot owner is responsible for the provision of a power supply to operate the on-site aerobic wastewater treatment

plant and any other device which requires electrical power to operate. [Lot 1, 2 & 3]

f. No cats, and no more than one domestic dog, may be kept on the lot. A maximum of two working farm dogs as defined in the Dog Control Act 1996 are exempt from this condition. Any dogs kept on the lot shall be:
(i) micro-chipped;
(ii) kept within a dog proof fence area, on a lead or under effective control at all times when outside the fenced area;
(iii) kept in a kennel, inside, or tied up at night.

**[Lots 1, 2 and 3]**

# Advice Notes

**Lapsing of Consent**

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

**Right of Objection**

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

**Archaeological Sites**

3. *Archaeological sites are protected pursuant to the Heritage New Zealand Pouhere Taonga Act 2014. It is an offence, pursuant to the Act, to modify, damage or destroy an archaeological site without an archaeological authority issued pursuant to that Act. Should any site be inadvertently uncovered, the procedure is that work should cease, with the Trust and local iwi consulted immediately. The New Zealand Police should also be consulted if the discovery includes koiwi (human remains). A copy of Heritage New Zealand's Archaeological Discovery Protocol (ADP) is attached for your information. This should be made available to all person(s) working on site.*

**General Advice Notes**

4. *This consent has been granted on the basis of all the documents and information provided by the consent holder, demonstrating that the new lot(s) can be appropriately serviced (infrastructure and access).*
5. *Earthworks must for their duration be controlled in accordance with the Erosion and Sediment Control Guidelines for Land Disturbing Activities in the Auckland Region 2016 (Auckland Guideline Document GD2016/005).*
6. *Any encroachment of the road onto private property shall be surveyed off and vested in Council, such that the legal road boundary along the road frontage of the subject site is at least 6m from the centreline of the carriageway or 2m from the edge of the carriageway (Whichever is the greater).*
7. *Provide evidence that a Traffic Management Plan (TMP) has been approved by Council's Corridor Access Engineer and a Corridor Access Request (CAR) obtained prior to vehicle*

*crossings being constructed or upgraded. Application for TMP and CAR are made via https://www.fndc.govt.nz/Our-Services/Transport/Roads/Road-closures-and-restrictions*

8. *On the site visit it was observed that the subject site contains wetlands and is in close proximity to the Rangitane Stream. The consent holder and future Lot owners are advised that further consent from Far North District Council as well as the Northland Regional Council may be required prior to any earthworks or development as part of this subdivision under the District Plan and/or the National Environmental Standard for Freshwater Regulations 2020*

# Reasons for the Decision

1. By way of an earlier report that is contained within the electronic file of this consent, it was determined that pursuant to sections 95A and 95B of the Act the proposed activity will not have, and is not likely to have, adverse effects on the environment that are more than minor, there are also no affected persons and no special circumstances exist. Therefore, under delegated authority, it was determined that the application be processed without notification.

2. The application is for a Discretionary activity resource consent as such under section 104 the Council can consider all relevant matters.

District Plan Rule Affected:

| Rule Number and Name | Non Compliance Aspect | Activity Status |
|---|---|---|
| 13.7.2.1(i) – Minimum Lot Sizes | The smallest of the proposed Lots is 5.35 | Discretionary |

3. In regard to section 104(1)(a) of the Act the actual and potential effects of the proposal will be acceptable as:
    a. The assessment by the applicant and Council's Resource Consent Engineer (as per RC Engineer Memo contained in the electronic file) and the assessment of effects in pages 5 to 12 of the AEE is comprehensive and considered to address all relevant matters are adopted as part of this assessment to address stormwater disposal, water supply, sanitary sewage disposal, energy and telecommunications, provision of access, earthworks and utilities, water supply, Building Coverage, Setback from Boundaries, sunlight and natural and other hazards. Adverse effects of the above are foreseen to be less than minor when adopting the appropriate conditions as discussed in the S95 report contained in the electronic file of this Resource Consent.
    b. The issue of the physical accessway encroaching into DoC administered Crown Land is proposed to be solved by either obtaining DoC approval or an alternative accessway option. These are imposed as part of the conditions.

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

5. In regard to section 104(1)(b) of the Act the following statutory documents are considered to be relevant to the application:
    a. National Environmental Standard for Freshwater,
    b. National Policy Statement for Freshwater Management,
    c. Operative Far North District Plan 2009,
    d. Proposed Far North District Plan 2022

The activity is consistent with these documents for the reasons set out in pages 12 to 18 of the Assessment of Environmental Effects submitted with the application. In particular the National Policy Statement for Freshwater Management (NPS-FM) and National Environmental Standard for Freshwater applies here due to the presence of wetlands being on the site. Future development on the Lots and RoW has been addressed by the applicant who has been granted Resource Consent to undertake the necessary works. I conclude with NRCs assessment that the proposed works, with the relevant condition of consent, is not foreseen to have effects that are minor or more than minor on the nearby stream or wetland on and near the site.

*Operative Far North District Plan*

Objectives: 13.3.1, 13.3.2, 13.3.3, 13.3.8, 13.3.9,

Policies: 13.4.1, 13.4.2, 13.4.3, 13.4.4, 13.4.5, 13.4.6, 13.4.8, 13.4.13, 13.4.14, 13.4.15

The activity is consistent with the relevant objectives, policies and assessment criteria of the Operative District Plan because the site has an existing vehicle crossing which can be upgraded (as per a condition of consent) enabling the safe and efficient use of the current and future transport network.

The site contains no known areas of significant biodiversity, historical or cultural values. The proposed subdivision is consistent with the scale, density and character of the surrounding environment. The lots can be serviced on site. Stormwater management for each Lot can be addressed at building consent stage once the building site for the lots are confirmed.

*Proposed Far North District Plan*

Objectives: SUB-O1, SUB-O3, SUB-O4

Policies: SUB-P4, SUB-P5, SUB-P6, SUB-P11

The activity is consistent with the relevant objectives, policies and assessment criteria of the Proposed District Plan and has no breaches of rules with immediate legal effect.

For this resource consent application the relevant provisions of both an operative and any proposed plan must be considered. Weighting is relevant if different outcomes arise from assessments of objectives and policies under both the operative and proposed plans.

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

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

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

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

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

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

# Approval

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

**Name: Pat Killalea** Date: 18th October 2024

**Title: Independent Commissioner**

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

## 1 Application Details

| | |
|---|---|
| **Council Reference:** | 2230005-RMASUB |
| **Applicant:** | Meridian Farm Limited |
| **Property Address:** | Lot 2, Purerua Road, Kerikeri 0294 |
| **Legal Description:** | LOT 2 DP 376997 |
| **Description of Application:** | Subdivision in a Rural Production zone to subdivide lot 2 into 3 additional lots as a Discretionary Activity |
| **Reporting Planner:** | Fern Harpham |
| **Operative District Plan Zoning:** | Rural Production |
| **Operative District Plan Notations:** | Kiwi Present Zone, Secondary Collector road |
| **Other Notations of Relevance:** | Nil |
| **Proposed District Plan Zoning:** | Rural Production |
| **Proposed District Plan Overlays:** | River Flood Hazard Zone (100 year ARI Event), River Flood Hazard Zone (10 Year ARI Event) |
| **Proposed District Plan Designations:** | Nil |

## 2 Procedural Details

| | |
|---|---|
| **Date Received:** | 07-July-2022 |
| **Date of Site Visit:** | 25-October-2022 |
| **Further Information Requested:** | N/A |
| **Further Information Received:** | N/A |
| **Suspended under section 88E:** | Nil |
| **Extension Pursuant to section 37:** | 17-October-2022 |
| **Pre-application Meeting Held:** | No |
| **Pre-lodgement Consultation by Applicant:** | NA |

***Locality Plan***

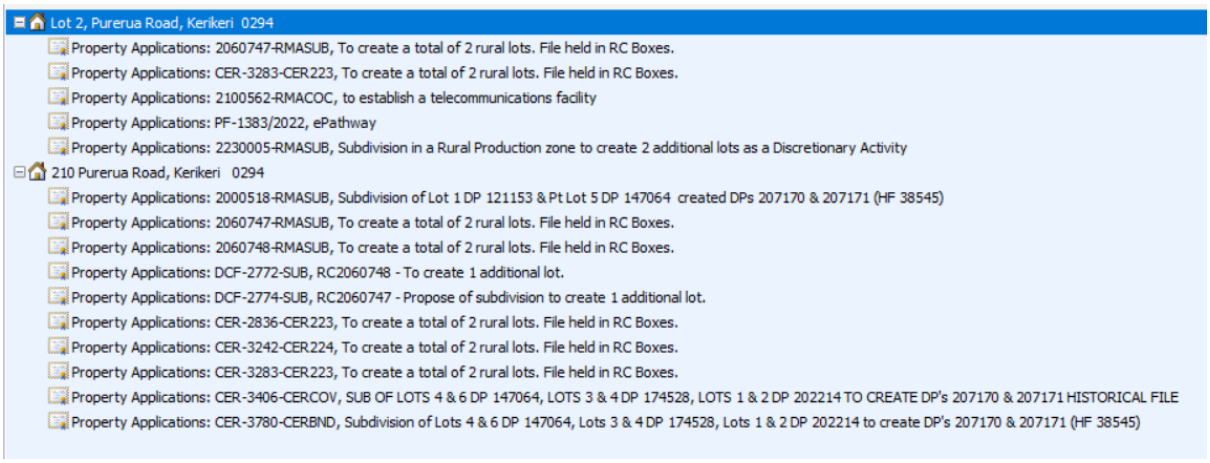

***Figure 1: The location of the site***

# 3 Description of Site

The site is as described in the application documents being the Assessment of Environmental Effects (AEE) titled "Planning report and assessment of environmental effects" prepared by Thomson Survey Ltd, dated July 2022.

I concur with this description and have no further comment.

The application has the following consent history on the subject site:




RC 2060747-RMASUB, 2 lot subdivision, issued 13 April 2006 (lapsed).

RC 2100562-ROMCOC, consent for telecommunications facility, issued 2 June 2010.

### *Record of Title*

The Record of Title has the following interests/consent notices:

**Interests**

Appurtenant hereto is a water supply right specified in Easement Certificate B559069.5

Subject to a water supply right over part marked G on DP 376997 specified in Easement Certificate B559069.5

Subject to Section 8 Mining Act 1971

Subject to Section 168A Coal Mines Act 1925

Subject to a right to transmit electricity (in gross) over parts marked C and D on DP 376997 in favour of Top Energy Limited created by Easement Instrument 6483183.1 - 5.7.2005 at 9:00 am

Appurtenant hereto is a right of way, telecommunications, water supply, electricity and computer media easements created by Easement Instrument 7291003.3 - 23.3.2007 at 9:00 am

The easements created by Easement Instrument 7291003.3 are subject to Section 243 (a) Resource Management Act 1991

7336182.1 Variation of the conditions of the easement created by Easement Instrument 7291003.3 - 24.4.2007 at 9:00 am

7336182.3 Mortgage to ASB Bank Limited - 24.4.2007 at 9:00 am

# 4 Description of Proposed Activity

The activity is as described in the application documents being the Assessment of Environmental Effects (AEE) titled “Planning report and assessment of environmental effects” prepared by Thomson Survey Ltd, dated July 2022 at pages 4. In summary the applicant is seeking to carry out a subdivision of Lot 2 DP 37 6997 to create three lots. Lot 1 will be 7.02ha, Lot 2 will be 5.35ha and Lot 3 will be the balance farm lot of 16.97ha. All lots will be accessed via the existing right of way off Purerua Road, which currently services the property and the neighbouring property Lots 1 and 2 DP 578190, as shown on Figure 2 below.

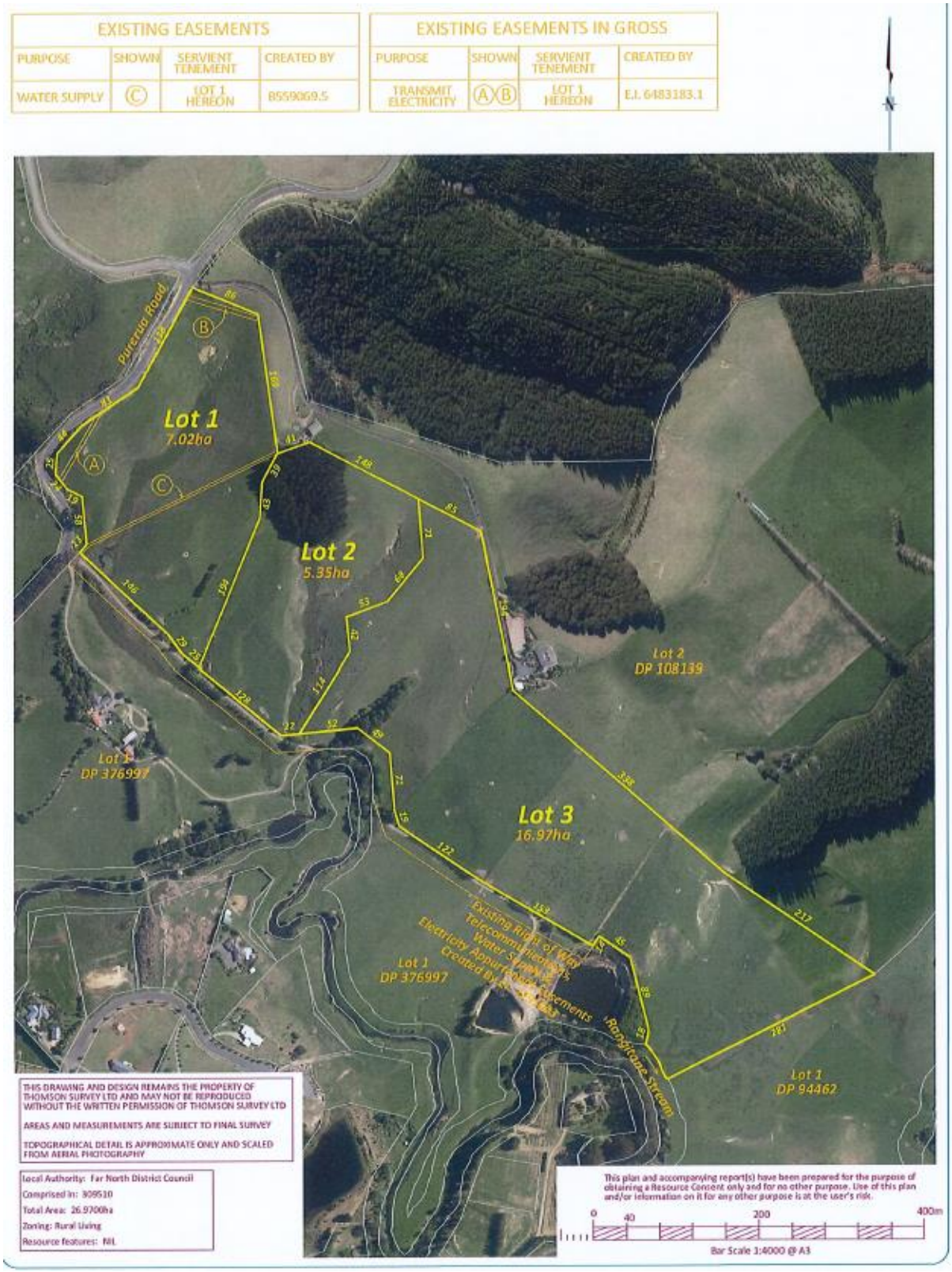



***Figure 2: Proposed site plan***

***Technical Note:***

It is noticed that the southern neigbour of the site has been subdivided into two lots recently, from Lot 1 DP376997 to Lots 1 and 2 DP 578190. As this will not really affect the existing easements for the site, the proposed scheme plan is not required for an update.

# 5 Distribution and Correspondence

## *Internal Specialists*

The proposal has been reviewed and assessed by the following Council specialist/s and the matters within the scope of this application have been taken into account in the assessment below.

| Internal Specialist | Date Sent | Date Received |
|---|---|---|
| RC Engineer | 7th October 2022 | 20th October 2022 |
| IAM | 7th October 2022 | 7th October 2022 |
| NTA / Roading | 7th October 2022 | 25th October 2022 |
| Reserves | 18th October 2022 | 25th October 2022 |

# 6 Reasons for the Application

## *Rule Assessment*

The proposal requires resource consent(s) for the following reasons:

## Operative Far North District Plan

**section 11 – Subdivision**

| Rule Number and Name | Non Compliance Aspect | Activity Status |
|---|---|---|
| 13.7.2.1(i) – Minimum Lot Sizes | The minimum proposed Lot size is 5.35 | Discretionary |

## Proposed Far North District Plan

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

the submission period on the PDP has now closed, however submissions are not yet summarized. Therefore, only rules in the PDP with immediate legal effect are relevant. These rules are identified with a 'hammer' in the plan. Rules that do not have immediate legal effect do not trigger the need for a resource consent under the PDP.

An assessment of the proposal against the rules with immediate legal effect has been undertaken. In this case there are none that are relevant to the proposal. Therefore, no consideration needs to be given to any of the rules under the PDP.

### *Overall Activity Status*

Overall, the application is a Discretionary activity.

## 7 National Environmental Standards

The following National Environmental Standards are considered relevant to the site; however, resource consent is not required under the standard as addressed below.

### *National Environmental Standard for Assessing and Managing Contaminants in Soils to Protect Human Health 2011 (NESCS)*

Based on the applicants review of Council records and my review of Northland Regional Councils selected land use register and historical imagery available on Retrolens, the piece of land to which this application relates is not a HAIL site, and therefore the NESCS does not apply.

### *National Environmental Standards for Freshwater 2020 (NESFW)*

While the NESFW is enforced by the regional council, it is still relevant to consider whether the activities subject of this application may have implications in terms of the NESFW regulations.

The National Environmental Standards for Freshwater is relevant to this application due to the presence of wetlands within Lots 1 and 2, and potentially Lot 3. A small, tree-lined watercourse is also present within Lot 3. Built development can be made well clear of watercourses, and at least 30m from wetlands. As the 100m setback from wetlands for built development cannot be achieved, an application has been made to NRC for breach of setback rules. APP.044004.01.01 with Northland Regional Council has been approved for the required works (decision and plans provided by applicant and contained in the electronic file of this application for reference). Wastewater and stormwater can be appropriately managed as to not affect the quality of watercourses and wetlands. Sediment controls during development will prevent runoff into the wetlands.

## 8 Notification Assessment

### *Section 95A – Public Notification Assessment*

Section 95A requires a decision on whether or not to publicly notify an application and sets out a step by step process by which to make this decision.

**Step 1: Mandatory public notification in certain circumstances**

| | | |
|---|---|---|
| s95A(3)(a) | Has the applicant requested that the application be publicly notified? | No |
| s95A(3)(b) | Is public notification required under section 95C? | No |

| | | |
|---|---|---|
| s95A(3)(c) | Has the application been made jointly with an application to exchange recreation reserve land under section 15AA of the Reserves Act 1977? | No |

**Step 2: If not required by step 1, public notification in certain circumstances.**

| | | |
|---|---|---|
| s95A(5)(a) | Is the application for a resource consent for one or more activities and each activity is subject to a rule or national environmental standard that precludes public notification? | No |
| s95A(5)(b) | Is the application for a resource consent for 1 or more of the following, but no other, activities; a controlled activity; a restricted discretionary, discretionary, or non-complying activity, but only if the activity is a boundary activity? | No |

**Step 3: If not precluded by step 2, public notification required in certain circumstances not**

| | | |
|---|---|---|
| s95A(8)(a) | Is the application for a resource consent for one or more activities, and any of those activities is subject to a rule or national environmental standard that requires public notification? | No |
| s95(8)(b) | In accordance with section 95D, does that the activity will have or is likely to have adverse effects on the environment that are more than minor?<br>The assessment below addresses this matter. | No |

## Effects that must be Disregarded

### *Adjacent Land*

Pursuant to section 95D(a) the consent authority must disregard any effects on the land in, on, or over which the activity will occur, and on persons who own or occupy any adjacent land. The land adjacent to the subject site is identified in Table 1 and Figure 3 below.

**Table 1: Adjacent Land**

| Legal Description | Address | Key |
|---|---|---|
| Lot 2 Deposited Plan 108139 | 252 Purerua Road, Kerikeri | |
| Lot 3 DP 596251 | Lot 3, Meridian Drive, Kerikeri 0294 | |
| Lot 1 Deposited Plan 578190 | 210 Purerua Road, Kerikeri | |
| Lot 4 Deposited Plan 445792 and Section 1, 3 Survey Office Plan 437677 | 95 Somerville Road, Kerikeri | |
| Lot 2 DP 578190 | Lot 2, Purerua Road, Kerikeri | |

***Figure 3: Adjacent Land***

### *Restricted Discretionary Activities*

The application is not for a restricted discretionary activity and therefore the consent authority can take into account any relevant matter when assessing the environmental effects.

### *Written Approvals*

Pursuant to section 95D(e) the consent authority must disregard any effect on a person who has given written approval.

In this instance, no written approvals have been provided.

### *Trade Competition*

Pursuant to section 95D(e) the consent authority must disregard trade competition and the effects of trade competition.

There are no known trade competition matters.

### *Permitted Baseline*

Pursuant to section 95D(b) the Council has the discretion to disregard effects of an activity if a rule or national environmental standard permits an activity with that effect, this is known as the permitted baseline.

There is no relevant permitted baseline as all subdivision activities require resource consent under the Operative District Plan.

## Assessment

### *Receiving Environment*

The receiving environment beyond the subject site includes permitted activities under the relevant plans, lawfully established activities (via existing use rights or resource consent) and any unimplemented resource consents that are likely to be implemented. The effects of any unimplemented consents on the subject site that are likely to be implemented (and which are not being replaced by the current proposal) also form part of this reasonably foreseeable receiving environment. This is the environment within which the adverse effects of the application must be assessed.

The site is located on Purerua Road, a legal sealed road, and is approximately 7km from Waipapa. There is no built environment on the property. There is, however, a consented Vodafone New Zealand Ltd cell tower situated beside the northwest boundary of Lot 1, adjacent to Purerua Road. The lot is access of a RoW that runs parallel (and over in spots) the Rangitane Stream and includes areas of wetlands. The lowest contours exist at the bottom of the lots, with the lowest contours in the bottom of Lot 3, next to a refilled quarry on the neighbouring property.

The surrounding environment is standard Rural Production with adjacent lots being large farm lots. The wider area includes some smaller Rural Production lots that have been developed to accommodate Rural Lifestyle lots with single family dwellings and ancillary buildings.

This is the environment within which the adverse effects of the application must be assessed.

## *Adverse Effects Assessment*

Taking into account the above, the following assessment determines whether the proposed activity will have, or is likely to have, adverse effects on the environment that are more than minor.

To determine whether the activity will have or will be likely to have adverse effects on the environment that are more than minor, an assessment of environmental effects carried out in accordance with section 95D of the Act is required.

The assessment of effects in pages 5 to 12 of the AEE is comprehensive and considered to address most relevant matters, except the access issue discussed below. I agree and adopt this assessment for the purposes for this assessment.

The assessment by the applicant and Council's Resource Consent Engineer (as per RC Engineer Memo contained in the electronic file) are adopted as part of this assessment to address stormwater disposal, water supply, sanitary sewage disposal, energy and telecommunications, provision of access, earthworks and utilities, water supply, Building Coverage, Setback from Boundaries, sunlight and natural and other hazards. Adverse effects of the above are foreseen to be less than minor when adopting the appropriate conditions, should consent be granted.

### Allotment Dimensions

All lot sizes can accommodate a 30m x 30m building envelope, whilst respecting the 10m boundary setback required for the Rural Production Zone. They also respect the 30m

setback from watercourses over 3m wide and the setback from watercourses under 3m in width. However, due to the size, shape and landscape of proposed lots 1 and 2, building setback requirements from wetlands cannot be met. The applicant has made an application to NRC for breach of setback rules which has been granted.

Due to the proximity to Ranigtane Stream, flood susceptible areas and wetlands, it is considered that any development on the proposed Lots may require further resource consent from Far North District Council and/or Northland Regional Council. Should consent be granted, it is recommended that this be included in the decision document by way of an advice not for the consent holder and/or future Lot owners.

**Access**

Waka Kotahi One Network Road Classification classifies Purerua Road as a Secondary Collector with an average estimate AADT of 903 VPD. Vehicle crossing from Purerua Road complies with FNDC/S/6 and 6B, including sight distances. The Development Engineer has advised that the vehicle crossing to the RoW will require upgrading and additionally the vehicle crossings from the ROW to the lots are to be constructed as per FNDC/S/6 single width with a minimum 375mm diameter RCP culvert, as per the Subdivision Site Suitability Engineering Report. Additionally, as per 15.1.6C.1.3, passing bays are required and shall be constructed prior to 224.

**Further Access Issues**

The application has been processed over two years and allocated to several planners before. According to the letter response received from Thomson Survey Limited dated 03/07/2024, about a year ago, during the review stage of the application process, the issue of the physical accessway encroaching into Crown Land Reserved from Sale, known as the Marginal Strip, was discovered. This strip is administered by the Department of Conservation (DoC). Specifically, the portion of the access that leads into Lot 3 was found to be infringing on the Marginal Strip, leading to the suspension of the application until this issue could be resolved.

To resolve the access issue, the applicant initiated discussions with DoC. They commissioned survey plans aimed at securing an easement over the Marginal Strip to legalize the existing accessway. While the conversations with DoC showed positive signs, DoC informed the applicant that the process of securing the necessary easement would take time. Even after the necessary information had been submitted, it was expected to take several months to receive confirmation.

On 1st May 2024, the Council informed the applicant that the application had been on hold for too long and advised them to withdraw and re-lodge it. Thomson Survey Ltd was notified of this on 13th May 2024, but they disagreed with withdrawing the application. They communicated with the council, expressing their intent to keep the application active and work toward resolving the easement issue while maintaining progress on the subdivision. The council agreed to continue processing the application.

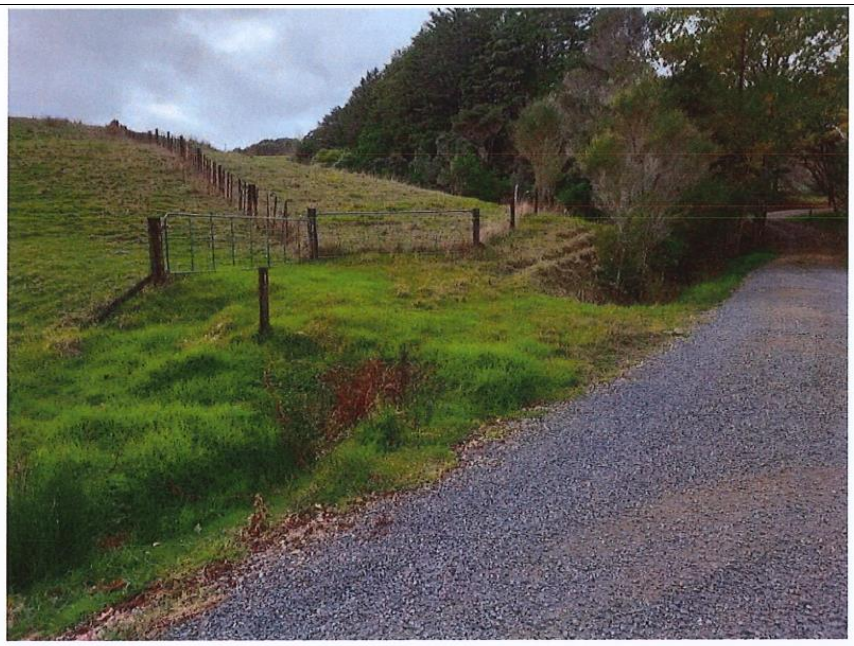
The easement process is ongoing, but alternative access options are feasible according to the letter response. One alternative involves creating an internal driveway within Lot 3 without using the portion of the accessway encroaching on the Marginal Strip. The agent

confirmed that alternative access is physically possible. An existing culvert crossing leads uphill from the current accessway and into Lot 3. Once inside Lot 3, an internal driveway can be formed to provide access to a future building site. The Subdivision Site Suitability Report submitted with the application showed the potential for various house sites on Lot 3, further supporting the viability of internal access.

A s223 condition is suggested by the agent as following:

> Survey plan approval (s223) conditions
>
> 2. Prior to approval pursuant to s223 of the Act, the consent holder shall:
>
> (a) Provide evidence that approval has been given such that an appropriate Easement can be registered for Area Z on LT 596438 over DoC administered Crown Land, SO 18562, in favour of the application site Lot 2 DP 376997. Such evidence may take the form of correspondence confirming that the easement has been granted; or Easement Instrument duly signed by the Crown's representative; or a copy of the title for the application title with the Easement Instrument already registered.
>
> If not already registered on the application site, provide a solicitor's undertaking that the necessary easement instrument will be registered on the affected title. If already registered on the application site title at time of application for s233 survey plan approval, update the survey plan, as presented to Council, to reflect the registered easement.
>
> OR
>
> (b) Provide plans and details of proposed vehicle crossing into Lot 3 from existing appurtenant Easement, for Council's approval.

Considering Crown land has no title, it is unsure how an easement can be registered as per the recommended condition above. Therefore, the wording ‘easement’ is suggested to be changed to ‘legal instrument’ and the wording ‘registered’ is changed to ‘executed’ for Cond. 2(a).



*Above and below: metal carriageway in foreground is within existing appurtenant right of way. Existing culvert crossing upslope (also within easement) leads to two gates. Proposed Lot 3 can gain access directly off and upslope of the culvert. The fence is not on proposed boundary, which is further to the left – so there is ample scope for formation of internal driveway.*

***Figure 4: Suggested alternative access for Lot 3. Source from: The response letter dated 03/07/2024***

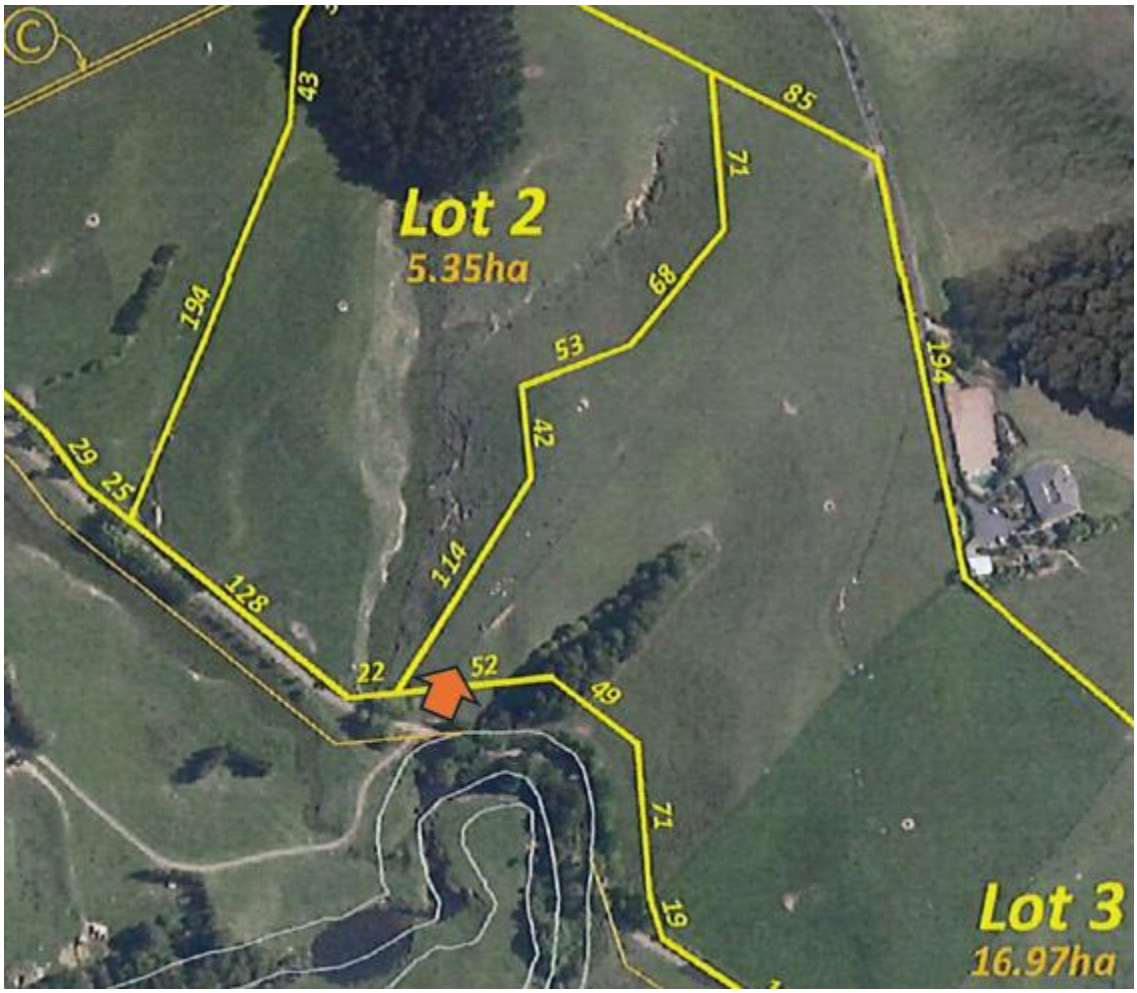



***Figure 5: Alternative access roughly indicated on the scheme plan***

**Natural and Other Hazards**

NRC GIS Maps indicate this property is subject to the River Flood Hazard Zone – Priority Rivers – 100yr CC extent, along the southwest boundaries where the Rangitane River travels adjacently to the Lot. The proposed lot may be susceptible to flooding in some places, including a section of the proposed access and some ground movement is visible in the gully sections of the overland flow paths. Due to the characteristics of the soil, this presents risk of soil that are not considered good ground; therefore, foundations should be designed by a Chartered Professional Engineer.

The site would not warrant action under Section 71(1) of the Building Act 2004. Likewise, the natural hazards do not contain a significant risk for Section 106 of the Resource Management Act to apply.

**Water Supply**

The applicant has advised that the proposed Lots and any future development can be self-sufficient in terms of water supply.

The Resource Consent Engineer has advised that a potable and firefighting water supply will need to be provided for by way of water tanks or another approved means at development stage, and that provisions will need to be in accordance with the New Zealand Fire Fighting Water Supply Code of Practice SNZ PAS 4509:2008. Should consent be granted, it is recommended that a consent notice be imposed which reflects this advice.

**Stormwater Disposal**

The applicant has advised that stormwater management can be dealt with at the time of development stage given that the lots are vacant, additionally as the Applicant has not proposed any developments on the lots at this stage, natural overland flow paths shall remain unchanged. The Resource Consent Engineer has advised that due to the low-lying nature of the access and susceptibility to flooding, a stormwater design should be submitted to council and constructed prior to 224. Upon completion of the works a Producer Statement (PS4) shall confirm the works is in accordance with the design and that for future development, a stormwater management plan shall be provided to and approved by council for each lot prior to development, for any habitable building or shed greater than 110m$^2$, in accordance with the recommendations within the suitability report. Should consent be granted, it is recommended that a consent notice be imposed which reflects this advice.

**Wastewater Disposal**

As per the Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dt June 2022), no development proposals are available at this stage, as such the design parameters are based on future probable development. All sites are large enough to contain a wastewater system and reserve disposal area.

The Resource Consent Engineer has recommend that if future construction is to take place on proposed Lot 1, 2, or 3, a site-specific ARC TP58 at the time of Building Consent is required, in reference to the recommendations of the Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dt June 2022). Should consent be granted, it is recommended that a consent notice be imposed which requires this.

**Energy and Telecommunications Supply**

Energy and Telecommunication Supply is not a requirement within the Rural Production Zone. Should consent be granted, it is recommended that a condition of consent should be imposed requiring future Lot owners to take responsibility of the provision of these services.

The applicant has provided a Letter from Top Energy, dated 11 March 2022, which advises the requirements from Top Energy are nil. The provision for power supply for proposed Lots 1, 2 & 3 are to be made at the time of development.

**Easements**

The application site contains an easement for power under 6483183.1, and water supply easement under B559069.5.

**Preservation of Heritage Resources, Vegetation, Fauna and Fauna, and Land Set Aside for Conservation Purposes**

The applicant has advised that there are no features of this nature on the subject site, based on my review I agree with their assessment.

However, the site is identified as being in a Kiwi Present Zone, as such it is considered that a consent notice should be imposed restricting the ownership of cats and dogs on each of the proposed Lots due to the presence of Kiwi. Given that proposed Lot 3 is still of a size which is able to be used for productive purposes, it is considered that working dogs may be allowed on this site, subject to conditions.

***Technical Notes (Changes to the original draft conditions):***

There are multiple changes suggested by the agent to the original draft conditions:

In regard to condition 1, the agent advised that (refer to the response letter dated 03/07/2024):

> Condition 1 reflects the latest scheme plan sent to Council, as Appendix 4 to this letter. The Council had previously erroneously 'required' that the Scheme Plan show ROW easement in favour of all lots. This is totally unnecessary given that the application site has existing *appurtenant* easement, over land outside the land being subdivided, that will automatically carry over, providing easement in favour of Lots 1-3 hereon. It is standard survey practice to simply rely on wording to show Council that an existing appurtenant easement exists – and this easement instrument was provided in the original application.

As outlined in the original S95 report:

*Prior to 224, the applicant shall also provide to council for approval a stormwater design for the ROW, particularly within the section that is prone to flooding as indicated by the NRC GIS maps. This section of the access also falls outside the easement boundary in some places. Prior to 223, the Scheme Plan should be updated and a cadastral surveyor should confirm it is within the boundary.*

There are two relevant original draft conditions:

1. Original draft condition 2. (a) – (d) under s223 conditions:

> Survey plan approval (s223) conditions
>
> 2. The survey plan, submitted for approval pursuant to Section 223 of the Act shall show:
>    a. Provide an updated scheme plan and schedule of easements showing access to Lot 1, Lot 2 and Lot 3.
>    b. Provide an updated Scheme Plan that indicates the access carriageway is fully contained within the easements provided for access.
>    c. Provide to Council written confirmation from a Licensed Cadastral surveyor that the access carriageway is fully contained within the easements provided for access.
>    d. All easements in the memorandum to be duly granted or reserved.

2. Original draft condition 3.e.i under the s224(c) conditions requires:

> *i. Stormwater mitigation design for the section(s) of access indicated by NRC GIS as susceptible to flooding. The system shall be designed such that the total stormwater discharged from the site, after development, is no greater than the predevelopment*

*flow from the site for rainfall events up to a 10% AEP plus allowance for climate change.*

This condition was suggested to be revised as follows:

*(ii) Proposed stormwater control works to be in place prior to and during construction/upgrade works;*

In regard to draft cond. 2, the agent advised that (refer to the response letter dated 03/07/2024):

> Condition 2 does not require that any easements in a Memorandum be duly granted or reserved, because *there is no Memorandum* and all easements are existing. Parts (a) and (b) attempt to provide for the option of showing evidence that the easement over the Marginal Strip is or will be granted, or that an alternative crossing into Lot 3 be designed and constructed. Part (c) is loosely based on what has previously been circulated.

In regard to Cond. 3.e.i, the agent advised that these requirements are excessive because the accessway is exisitng and well-formed and requires only minor upgrades *"to achieve the 3m carriageway width required, passing bays and one crossing in the area in question – which incidentally is a very short portion of the existing accessway"* (refer to the email received on 26/09/2024).

I accept the suggested amendments to those two conditions.

Couple of orginal stormwater conditions were removed from the suggested version as well. Incluidng original draft conditions under s224(c) 3.f. and g. and original draft Condition 4.b. under s221.

f. Upon approval from Council for condition 3(e)(i) and 3(e)(ii), provide and install stormwater mitigation in the accordance with the approved design. Upon completion of the works, provide to the satisfaction of Council Resource Consents Engineer a PS4 containing as-built certification from a suitably qualified and experienced engineer.

g. The ESP referred to in condition 3(e)(ii) and any other stormwater diversion and silt control measures are to be in place prior to the commencement of bulk earthworks. Photographic evidence of ESP measures being in place are to be emailed to FNDC Team Leader Monitoring and Compliance RCmonitoring@fndc.govt.nz referencing RC 2230005-RMASUB.

b. In conjunction with any future development on proposed Lot 1-3, the Lot owner shall submit a stormwater management report that is prepared by a Chartered Professional Engineer or suitably qualified person in accordance with the FNDC Engineering Standards for Council approval.
The report shall reference the recommendations of the Geologix Consulting Engineers "Subdivision Site Suitability Engineering Report (Revision 1)" dated June 2022 and submitted with the application.

Considering revised Cond. 4 already requires PS3 to be provided, I accept the removal of original Cond. 3.f.

Considering only small-scale of earthworks is anticipated from the application, I accept the removal of original Cond. 3.g.

Considering revised Cond 5.b. already contains requriements to future stormater management, I accept the removal of original Cond. 4.b.

Furthermore, in regard to original Draft Condition 4.d. under s221, the wording '*plus a 100% reserve disposal area'* was suggested to be changed to *'plus an appropriately sized reserve disposal area'.*

d. In conjunction with the construction of any building which includes a wastewater treatment & effluent disposal system the applicant shall submit for Council approval a TP58 Report prepared by a Chartered Professional Engineer or an approved TP58 Report Writer. The report shall identify a suitable method of wastewater treatment for the proposed development along with an identified effluent disposal area plus a 100% reserve disposal area. The report shall confirm that all of the treatment & disposal system can be fully contained within the lot boundary and comply with the Regional Water & Soil Plan Permitted Activity Standards and shall reference the recommendations made within the Site Suitability Engineering Report by Geologix Consulting Engineers (ref C0110-S-01, dated June 2022). **[Lot 1, 2 & 3]**

The agent advised that the 100% requirement was seen as unnecessarily high, especially when secondary treatment systems only require a 30% reserve under the regional regulations. This change is meant to avoid overburdening the lot owner with excessive space and design requirements. (refer to the email received on 26/09/2024). I accept the reason for the suggested change and amended this condition accordingly.

Apart from the above, the original draft contains a condition prohibiting the keeping or introduction of any carnivorous or omnivorous animals that could pose a threat to kiwi, including cats and dogs. A maximum of two working farm dogs were allowed, but information (e.g. written confirmation that the dog(s) have been micro-chipped) needs to be provided to Council Monitoring officer. The revised condition allows for no more than one domestic dog to be kept on the lot, and still prohibits cats. It allows for a maximum of two working farm dogs as the original condition. Considering the site is not within kiwi high area, I accept the suggested amendments.

## *Adverse Effects Conclusion*

In conclusion, subject to conditions of consent, I consider that the proposal will not have and is not likely to have more than minor adverse effects on the wider environment.

**Step 4: Public notification in special circumstances**

| | | |
|---|---|---|
| s95A(9) | Do special circumstances exist in relation to the application that warrant the application being publicly notified?<br>The assessment below addresses this matter. | No |

Special circumstances are those that are:

- Exceptional or unusual, but something less than extraordinary;
- Outside of the common run of applications of this nature, or;

- Circumstances which make notification desirable, notwithstanding the conclusion that the adverse effects will be no more than minor.

In this instance there is nothing exceptional or unusual about the application, and the proposal has nothing out of the ordinary to suggest that public notification should occur.

## *Section 95B – Limited Notification Assessment*

Where an application is not publicly notified under section 95A, section 95B requires a decision on whether there are any affected persons (under section 95E) and sets out a step by step process by which to make this decision.

**Step 1: Certain affected groups and affected persons must be notified**

| | | |
|---|---|---|
| s95B(2)(a) | Are there any affected protected customary rights groups? | No |
| s95B(2)(b) | Are there any affected customary marine title groups (in the case of an application for a resource consent for an accommodated activity)? | No |
| s95B(3)(a) | Is the proposed activity on or adjacent to, or may affect, land that is the subject of a statutory acknowledgement made in accordance with an Act specified in Schedule 11? | No. |
| s95B(3)(b) | Is the person to whom the statutory acknowledgement is made is an affected person under section 95E? | No |

**Step 2: If not required by step 1, limited notification precluded in certain circumstances**

| | | |
|---|---|---|
| s95B(6)(a) | The application is for a resource consent for 1 or more activities, and each activity is subject to a rule or national environmental standard that precludes limited notification. | No |
| s95B(6)(b) | The application is for a controlled activity (but no other activities) that requires a resource consent under a district plan (other than a subdivision of land). | No |

**Step 3: If not precluded by step 2, certain other affected persons must be notified**

| | | |
|---|---|---|
| s95B(7) | In the case of a boundary activity, determine in accordance with section 95E whether an owner of an allotment with an infringed boundary is an affected person. | No |
| s95B(8) | In the case of any other activity, determine whether a person is an affected person in accordance with section 95E.<br>The assessment below addresses this matter. | No |

## Affected Persons Assessment

The following assessment addresses whether there are any affected persons that the application is required to be limited notified to, pursuant to s95B(7) or (8), in accordance with 95E. A person is affected if the activity's adverse effects on a person are minor or more than minor (but not less than minor).

Pursuant to section 95E(2)(c) the consent authority must have regard to every relevant statutory acknowledgement made in accordance with an Act specified in Schedule 11.

## Effects that must be Disregarded

### *Controlled or Restricted Discretionary Activities*

Pursuant to section 95E(2)(b) the activity is a restricted discretionary activity and the consent authority must disregard any adverse effect of the activity on the person if the effect does not relate to a matter for which a rule or a national environmental standard restricts discretion.

The application is for a Discretionary activity and therefore a full consideration of effects can be made.

### *Written Approvals*

Pursuant to section 95E(3)(a) a person is not an affected person if they have given written approval to the application (and not withdrawn it).

No persons have given their written approval.

### *Permitted Baseline*

Pursuant to section 95D(b) the permitted baseline may be taken into account and the Council has the discretion to disregard those effects.

The permitted baseline has not been taken into account as addressed in the section 95A Assessment above.

## Assessment

Taking into account the above, including the assessment of environmental effects on the wider environment there are no affected persons because the subdivision's proposed building platforms are isolated from development on neighbouring lots and are able to be located a sufficient distance away from neighbouring lots to be screened from farming activities. Screening includes the RoW and Rangitane stream on the Southern boundary and the natural typography of the land on the northern boundary.

The size and layout of the proposed lots is such that I believe future built development can be readily absorbed into the landscape so as not to create adverse effects on visual amenity. The proposal will add an additional two lots to the ROW and is in keeping with the eight lot limit. Consultation with the burdened neighbour over which the ROW is located has not been deemed necessary. Additionally, with appropriate conditions of consent, neither NTA nor the Resource Consents Engineer has raised concerns with the impact of the potential additional traffic generated by the subdivision.

With less than minor effects on any habitat, including water bodies (as assessed in the assessment of effects on the wider environment and by NRC in their own consent application), and the effects of run off and stormwater able to be accommodated on site, it is foreseen that the potential effects on neighbouring parties will be less than minor and not merit limited notification.

**Further Issues**

During my processing, I realised that there is a written opposition from Kapiro Residents Association community group to this proposal (dated August 2022). Another related submission was received on April 2023.

The agent from Thomson Survey Limited provided a response letter on 22/07/2024. In summary

1. Agricultural Land Fragmentation: The agent dismisses concerns about the fragmentation of agricultural land, clarifying that the site in question is not classified as “highly productive” land and is not subject to the protections of the National Policy Statement for Highly Productive Land (NPS HPL).

3. Built Structures: The site already has existing infrastructure, and the ODP allows additional structures. The current absence of buildings is irrelevant since the site can accommodate future development under the existing regulations.

4. Rural Lifestyle Properties: The area already contains subdivided rural lifestyle blocks, so the proposed development is consistent with the character of the surrounding area.

5. Visual Impact: Concerns about the visibility of proposed dwellings are addressed by noting that the Rural Production Zone has no visual amenity rules requiring landscaping or screening.

6. Riparian Setback and Wetlands: The writer rejects the need for additional setback protection between the site and the riparian margin, noting that the marginal strip is already sufficient. Consent for stormwater management near wetlands has been obtained, and further consent is not required.

7. Kiwi Protection: Concerns about the protection of kiwi birds are acknowledged, with a draft condition being considered to restrict dog ownership to a single domestic dog, with exceptions for working dogs.

8. Lot 3 Access Encroachment: The proposed access encroaches on public land and the riparian margin, but as advised by the agent, the Department of Conservation has reviewed the site and is satisfied with the existing access track, pending easement registration.

The KRA's claim that a change of land use consent is required is dismissed. The application does not involve a change from farming to residential land and is not required to do so.

No additional setback protection between the riparian margin and the southwest boundary of the site is needed, as the marginal strip is already sufficient. Inland wetlands on the property are protected under existing legislation, and the necessary consent for stormwater management near wetlands has already been obtained. No further consent is required since the development will not impact wetland water levels.

A draft condition to protect kiwi birds is being discussed, which includes banning cats and limiting dog ownership to a single domestic dog, with working dogs exempt.

The KRA's references to the Proposed District Plan (PDP) are dismissed as irrelevant, as the relevant PDP rules are not yet legally effective.

I generally concur with the assessment. The KRA's concerns are considered either addressed or not significant enough to impact the non-notification conclusion.

### *Adverse Effects Conclusion*

In conclusion, subject to conditions of consent, I consider that the proposal will not have and is not likely to have more than minor adverse effects.

**Step 4: Further notification in special circumstances**

| | | |
|---|---|---|
| s95B(10) | Do special circumstances exist in relation to the application that warrant notification of the application to any other persons not already determined to be eligible for limited notification under this section (excluding persons assessed under section 95E as not being affected persons)?<br>The assessment below addresses this matter. | No |

The effects on all persons were able to be considered in Step 3 above. As such there are no additional persons that need to be considered in this assessment and therefore consideration of special circumstances is not required.

## 9 Notification Recommendation

Based on the assessment above under section 95A of the Act, this application may be processed without public notification. In addition, under section 95B of the Act, limited notification is not required.

I therefore recommend that this application is processed non notified.

**Yuna Zhou**

**Intermediate Resource Planner**

Date: 15/10/2024

## 10 Notification Determination

Acting under delegated authority, and for the reasons set out in the above assessment, under sections 95A and 95B this application shall be processed on a non-notified basis.

**Name: Pat Killalea** Date: 18/10/2024

**Title: Independent Commissioner**

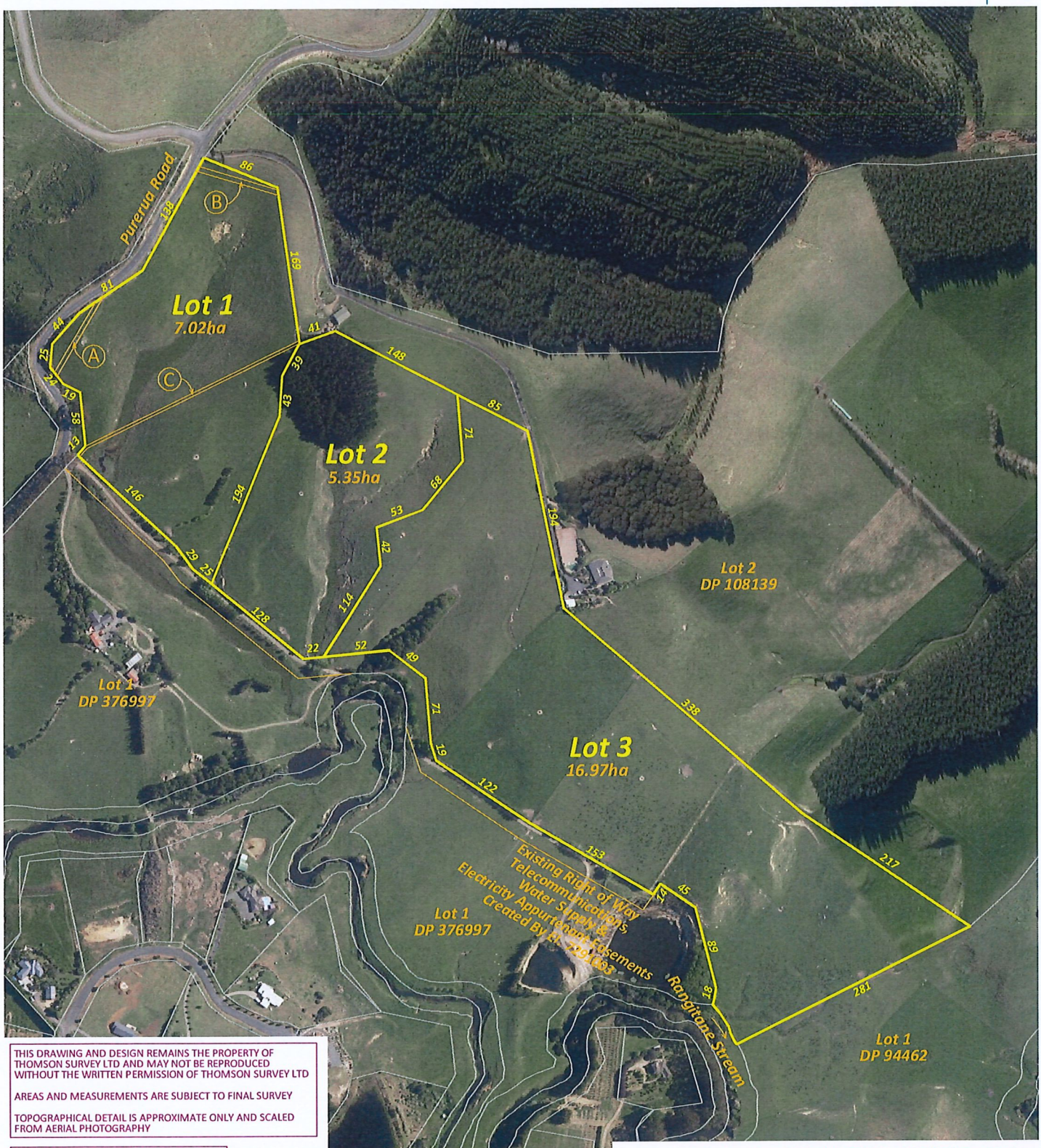
4

| EXISTING EASEMENTS | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | CREATED BY |
| WATER SUPPLY | Ⓒ | LOT 1 HEREON | B559069.5 |

| EXISTING EASEMENTS IN GROSS | | | |
|---|---|---|---|
| PURPOSE | SHOWN | SERVIENT TENEMENT | CREATED BY |
| TRANSMIT ELECTRICITY | ⒶⒷ | LOT 1 HEREON | E.I. 6483183.1 |

**APPROVED PLAN**

**Planner: YZhou**
**RC: 2230005-RMASUB**
**Date: 18/10/2024**

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Local Authority: Far North District Council
Comprised in: 309510
Total Area: 26.9700ha
Zoning: Rural Living
Resource features: NIL

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


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Registered Land Surveyors, Planners & Land Development Consultants


# PROPOSED SUBDIVISION OF LOT 2 DP 376997

PREPARED FOR: MERIDIAN FARMS

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY/GB | 01.10.21 |
| Approved | | |
| Rev | KY | 11.06.24 |

10148 Scheme 20240611.lcd

ORIGINAL
SCALE 1:4000
SHEET SIZE A3

Surveyors Ref. No: 10148

Sheet 1 of 1

| EXISTING EASEMENTS | | | |
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| WATER SUPPLY | Ⓒ | LOT 1 HEREON | B559069.5 |

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|---|---|---|---|
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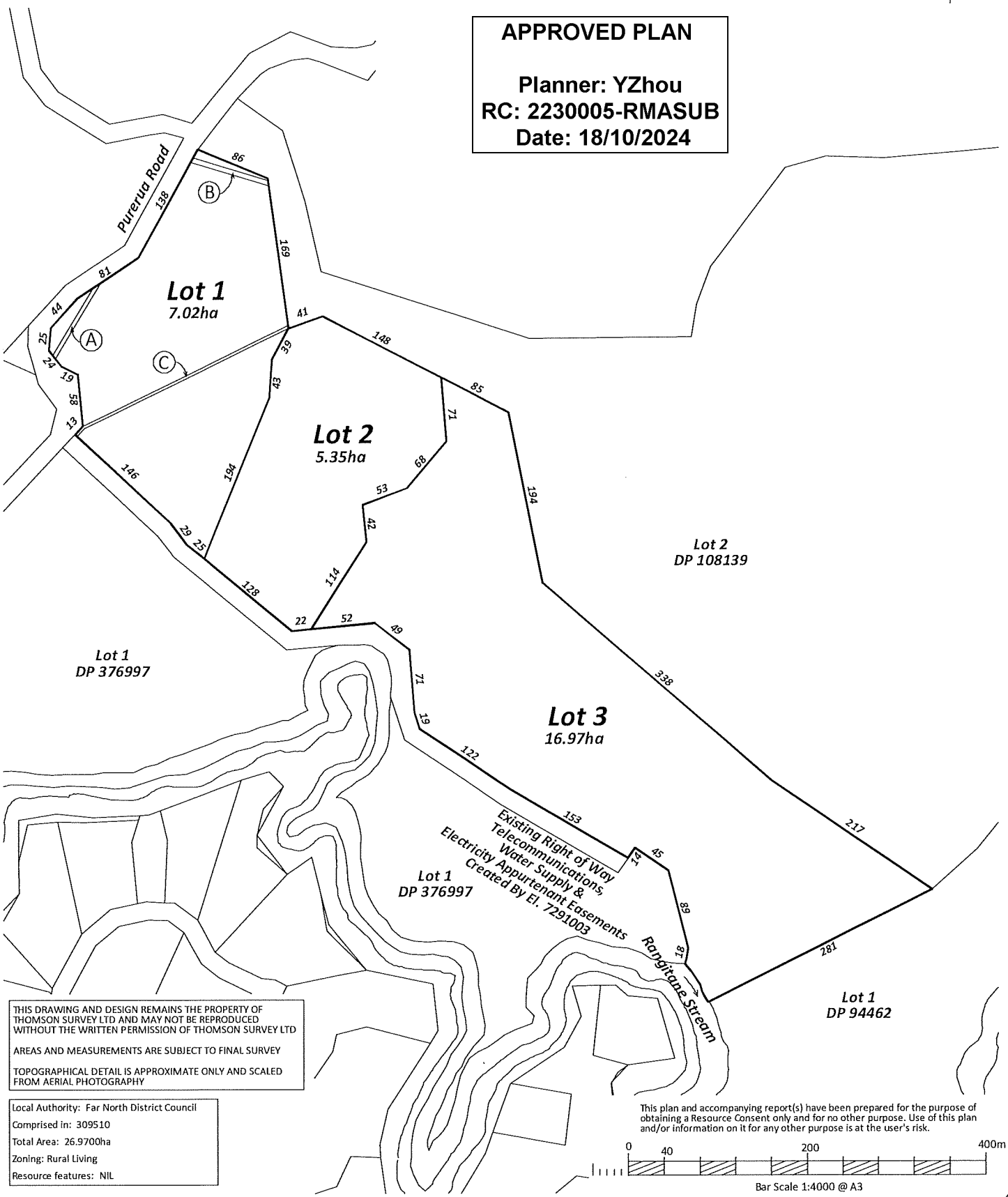
| TRANSMIT ELECTRICITY | ⒶⒷ | LOT 1 HEREON | E.I. 6483183.1 |

**APPROVED PLAN**

**Planner: YZhou**
**RC: 2230005-RMASUB**
**Date: 18/10/2024**






Local Authority: Far North District Council
Comprised in: 309510
Total Area: 26.9700ha
Zoning: Rural Living
Resource features: NIL



0 40 200 400m

Bar Scale 1:4000 @ A3

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# PROPOSED SUBDIVISION OF LOT 2 DP 376997

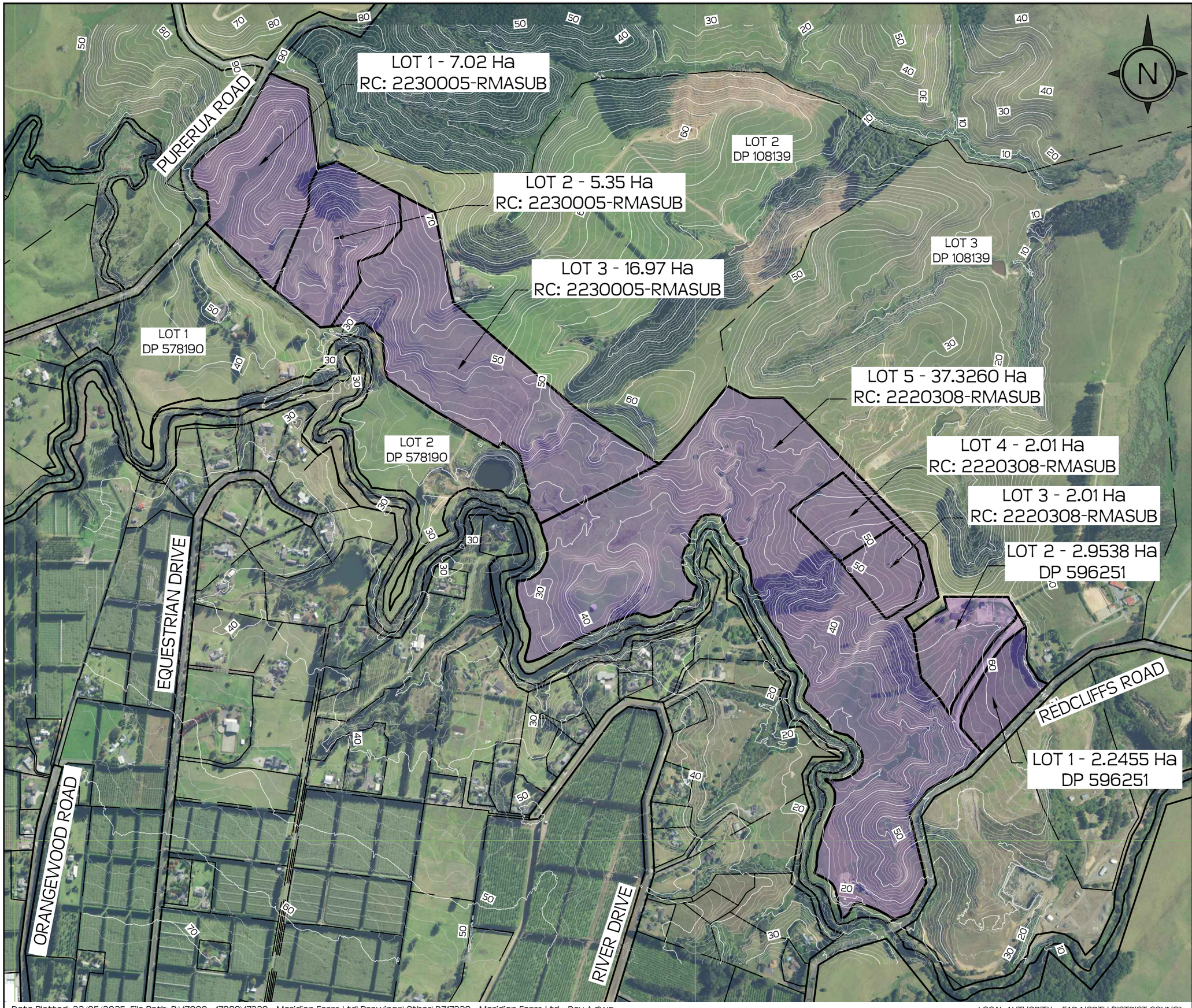
PREPARED FOR: MERIDIAN FARMS

| | Name | Date |
|---|---|---|
| Survey | | |
| Design | | |
| Drawn | KY/GB | 01.10.21 |
| Approved | | |
| Rev | KY | 11.06.24 |

ORIGINAL
SCALE 1:4000
SHEET SIZE A3
10148 Scheme 20240611.lcd

Surveyors Ref. No: 10148

Sheet 1 of 1

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9. 2018-2020 2m LiDAR CONTOUR INFORMATION SOURED FROM LTD INFORMATION AVAILABLE ON LINZ DATA SERVICE.
10. BOUNDARIES SOURCED FROM QUICKMAP. COORDINATES IN TERMS OF MOUNT EDEN 2000.

MAJOR CONTOURS @10m INTERVALS
MINOR CONTOURS @2m INTERVALS

| REV | DATE | DESCRIPTION |
|---|---|---|
| | | |
| | | |
| A | 16.05.25 | FIRST ISSUE - JH/MW |

REF. DATA:

reyburn & bryant
Ph: 09 438 3563
7 Selwyn Ave, Whangarei
PO Box 191, Whangarei 0140
www.reyburnandbryant.co.nz

CLIENT

MERIDIAN FARMS LTD
PURERUA ROAD & REDCLIFFS ROAD
KERIKERI

TITLE

# PROPOSED REZONING PLAN

| DATE | SCALE | DRAWING REF. | SHEET | REV |
|---|---|---|---|---|
| MAY 2025 | 1:7500 @A3 | RZ17329 | 01 OF 01 | A |

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# SUBDIVISION SITE SUITABILITY ENGINEERING REPORT

## LAND OFF PURERUA ROAD, KERIKERI

## MERIDIAN FARMS

**C0110-S-01**
**JUNE 2022**
**REVISION 1**

www.geologix.co.nz 09 392 0007 Auckland | Northland

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# DOCUMENT MANAGEMENT

| | |
|---|---|
| **Document Title** | Subdivision Site Suitability Engineering Report |
| **Site Reference** | Land off Purerua Road, Kerikeri |
| **Client** | Meridian Farms |
| **Geologix Reference** | C0110-S-01 |
| **Issue Date** | June 2022 |
| **Revision** | 01 |
| **Prepared** | Tonny Saini<br>Graduate Civil Engineer, BE Civil |
| **Approved** | Edward Collings<br>Managing Director, CEnvP Reg. 0861, CPEng Reg. 1033153, CMEngNZ |
| **File Reference** | *C:\Users\ Geologix Consulting Engineers Ltd\Geologix Files - Documents\Projects\2022\Purerua Road, Kerikeri (LOT 2 DP 376997) - C0110\05 - Reports* |

# REVISION HISTORY

| Date | Issue | Prepared | Approved |
|---|---|---|---|
| June 2022 | First Issue | TS | EC |

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# TABLE OF CONTENTS

# TABLES

# 1 INTRODUCTION

This Site Suitability Engineering Report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for Meridian Farms Ltd as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

Our scope of works has been undertaken to assist with Resource Consent application in relation to the proposed subdivision of a large rural property (Lot 2 DP 376997) off Purerua Road, Kerikeri, the 'site'. Specifically, this assessment addresses engineering elements of natural hazards, wastewater, stormwater, internal roading and associated earthwork requirements to provide safe and stable building platforms with less than minor effects on the environment as a result of the proposed activities outlined in Section 1.1.

## 1.1 Proposal

A proposed scheme plan was presented to Geologix at the time of writing, prepared Thomson Survey Ltd[1] and reproduced within Appendix A as Drawing No. 300. It is understood the Client proposes to subdivide the site to create three new residential lots with an existing Right of Way (RoW) to facilitate access. The above is outlined in Table 1. Amendments to the referenced scheme plan may require an update to the recommendations of this report which are based on conservative, typical rural residential development concepts.

*Table 1: Summary of Proposed Scheme*

| Proposed Lots | Size Range | Purpose |
|---|---|---|
| 1 | 7.02 ha | New residential |
| 2 | 5.35 ha | New residential |
| 3 | 16.97 ha | New residential |

Site access will be provided from Purerua Road at the southwestern boundary to the site. A specific Traffic Impact Assessment (TIA) is outside the scope of this report. Input by a suitably qualified traffic engineer may be required as part of Resource Consent application.

# 2 DESKTOP APPRAISAL

The site is located to the southeast face of Purerua Road and is irregular in shape, featuring a total area of 29.97 ha. The site is currently mostly in pasture with some areas of vegetation and mature trees.

Topographically the site area is moderate and steep slope in places and gently to moderate sloping at the proposed building envelopes. The site levels reducing to low-lying areas to the southern boundary. Access to the proposed lots is via Purerua road and an existing RoW off Purerua road.

Proposed lot 1 generally dips over moderate to locally steep slopes towards a gully system that trends roughly through the centre of the proposed site, forming a small stream which

[1] *Thomson Survey Ltd Scheme Plan Reference 10148, dated 4 October 2021.*

flows out of the site boundary to the southwest. Proposed lot 2 is similar in topographic profile with a network of gullies that adjoin and exit the site along the southern boundary.

Proposed lot 3 represents a larger, broad slope feature with gently to moderately sloping terrain.

No existing structures or infrastructure are present within the site boundaries. A detailed review of existing watercourses and overland flow paths is presented as Section 3. In brief, the site is intersected by multiple overland flow paths and gully systems.

### 2.1 Existing Reticulated Networks

Far North District Council (FNDC) GIS mapping indicates that no existing 3 water infrastructure or reticulated networks are present within Purerua Road or the site boundaries. This report has been prepared with the goal of the subdivision being self-sufficient for the purpose of wastewater, stormwater, and potable water management.

### 2.2 Geological Setting

Available geological mapping[2] indicates the site to be immediately underlain by Permian to Jurassic aged metamorphosed sedimentary rocks comprising thin bedded, fine grained sandstone and argillite, massive, poorly bedded, or laminated argillite and massive Greywacke.

Typically, these soils are known for generally moderate to poor drainage performance for wastewater disposal.

### 2.3 Existing Geotechnical Information

Existing subdivision and/ or Building Consent ground investigations were not made available to Geologix at the time of writing. Additionally, a review of available GIS databases, including the New Zealand Geotechnical Database[3] did not indicate borehole records within 500 m of the site.

## 3 SURFACE WATER FEATURES AND OVERLAND FLOWPATHS

During our site walkover and desktop appraisal of the supplied topographic data, Geologix have developed an understanding of the surface water features and overland flow paths influencing the site. The developed understanding summarised in the following sections is shown schematically on Drawing No. 300 with associated off-set requirements.

### 3.1 Surface Water Features

In general, the subdivision area is presented over a gentle to moderate sloping areas with occasional steeply sided gullies. The site includes network of overland flow paths that are fed from small valley and erosion gully catchments. These are drawn down through the site

---

[2] *Geological & Nuclear Science, 1:250,000 scale Geological Map, Sheet 2, Whangarei, 2009.*
[3] https://www.nzgd.org.nz/

forming watercourses at the southwestern boundary of the site where they discharge to an existing watercourse.

The CMA is not identified within close proximity to the site.

### 3.2 Sensitive Receptors

Based on GIS data, national topographic maps and survey data provided at the time of writing there is one environmentally sensitive wetland receptor within the site boundaries. The wetlands are associated with the on-site overland flow path and gully and are to the southwest corner of proposed lot 1, refer Drawing No. 300.

### 3.3 Overland Flow Paths

Clearly defined flow paths are evident within the site boundaries generally trending north east to south west across the site and fed through a series of minor overland flow paths from the head of the local catchment roughly at the north eastern site boundary. The minor overland flow paths are approximately 50 to 100 m in length attributing to a two major overland flow paths that trend roughly north east to south/ south west through the site to discharge points at the south western boundary.

Our walkover survey was undertaken in a wet period and noted a minor flow through the major overland flow path only. The above is on Drawing No. 300.

## 4 GROUND INVESTIGATION

A site-specific walkover survey and intrusive ground investigation was undertaken by Geologix on 28 April 2022. The ground investigation was scoped to confirm the findings of the above information and to provide parameters for wastewater assessment. The ground investigation comprised:

- Five hand augered boreholes designated BH01 to BH03 and BH1A to BH2A, inclusive formed within suitable areas of wastewater disposal fields on each proposed residential lot with a target depth of 1.2 m to 3.0 m below ground level (bgl).

### 4.1 Site Walkover Survey

A visual walkover survey of the property confirmed:

- Topography of the site is in general accordance with that outlined in Section 2 and observed site conditions.
- Most of the site is currently in rough pasture..
- The site is bound in all directions by similar farming or rural lifestyle block properties.
- Purerua Road defines the north-western boundary and the access point for the site via a RoW. The RoW does include existing grassed swale drains.

- No structures or suitably formed roads are present within the site boundary. A small culvert crossing of the major overland flow path is currently in place as outlined by this report.
- A small wetland is identified within the proposed lot 1 boundary towards to the southwestern corner of the proposed lot boundary. Assessment of the wetland should be sought by others, if required.

## 4.2 Ground Conditions

Arisings recovered from the exploratory boreholes were logged by a suitably qualified geotechnical engineering professional in general accordance with New Zealand Geotechnical Society guidelines[5]. Engineering borehole logs are presented as Appendix B to this report and approximate borehole positions recorded on Drawing No. 300 within Appendix A. Strata identified during the ground investigation can be summarised as follows:

- **Topsoil encountered ranging between 0.1 and 0.2 m bgl.** Described as generally dark brown silty or sandy clay.
- **Greywacke residual soil to depths >3.0 m bgl.** This stratum generally comprised reddish brown mottled orange or grey, very stiff silty clay with minor inclusions of sand, gravel and of varying plasticity, generally becoming low with depth. In general, sandy and gravelly inclusions generally became apparent below 1.0 m bgl.

  A total of twenty in-situ field vane tests were undertaken within residual greywacke soils, recording vane shear strengths ranging from 116 to >180 kPa. Generally, it was noted that soil strengths increased to >180 kPa from 0.6 m bgl.

  Locally, within BH1, the surface of harder/ dense strata which is equivalent to completely weathered rock was identified at depth within the borehole, from 3.8 m bgl. Due to the nature of Scala penetrometer probing, no physical sample was retrieved for logging purposes. The indication of a hard/ dense layer has been taken as blow counts of 10 or more per 50 mm penetration.

Based on the above shallow ground profile, the group of soil were determined to be equivalent to a slowly draining soils for the wastewater appraisal.

A summary of the above strata horizons and wastewater properties is presented as Table 2.

*Table 2: Summary of Ground Investigation*

| Hole ID | Proposed Lot | Hole Depth | Topsoil Depth | Groundwater | Hard Strata | Wastewater Category |
|---|---|---|---|---|---|---|
| BH01 | 1 | 3.0 m | 0.1 m | NE | 3.8 m | 6 – slowly draining |

[5] *New Zealand Geotechnical Society, Field Description of Soil and Rock, 2005.*

| | | | | | | |
|---|---|---|---|---|---|---|
| BH1A | 1 | 1.2 m | 0.2 m | NE | NE | 6 – slowly draining |
| BH2A | 2 | 1.2 m | 0.2 m | NE | NE | 6 – slowly draining |
| BH03 | 3 | 3.0 m | 0.2 m | NE | NE | 6 – slowly draining |
| BH3A | 3 | 1.2 m | 0.2 m | NE | NE | 6 – slowly draining |

1. *All depths recorded in m bgl unless stated.*
2. *Groundwater measurements taken on day of drilling.*
3. *NE – Not Encountered.*
4. *Wastewater category in accordance with Auckland Council TP58[6].*

# 5 GEOTECHNICAL ASSESSMENT

Based on the results of the desktop appraisal, a site walkover survey, and the ground investigation, Geologix have undertaken a site-specific geotechnical assessment relevant to the potential future development concepts within the proposed building envelopes.

## 5.1 Geotechnical Design Parameters

Geotechnical design parameters are presented in Table 3 below. They have been developed based on our ground investigation, the results of in-situ testing and experience with similar materials.

*Table 3: Geotechnical Effective Stress Parameters*

| Geological Unit | Unit Weight, kN/m$^3$ | Effective Friction Angle, ° | Effective Cohesion, kPa | Undrained shear strength, kPa |
|---|---|---|---|---|
| Residual Greywacke Soil | 18 | 32 | 5 | 90* |

** Adopting Bjerrum correction factor of 0.8 from lowest vane shear strength.*

## 5.2 Site Subsoil Class

The site has been designated as Site Subsoil Class C according to the provisions of NZS1170:2004[7]

## 5.3 Seismic Hazard

The seismic hazard in terms of Peak Ground Acceleration (PGA) has been assessed based on NZGS Module 1[8]. Table 2 presents the return periods for earthquakes with ULS and SLS 'unweighted' PGAs and horizontal coefficients for the corresponding magnitude. The PGAs were determined using building Importance Level (IL) 2, defined by NZS1170.5:2004. Reference should be made to the structural designer's assessment for the final determination of building importance level.

[6] *Auckland Council, Technical Publication 58, On-site Wastewater Systems: Design and Management Manual, 2004, Table 5.1.*

[7] *NZS1170.5:2004, Structural Design Actions Part 5: Earthquake Actions Clause 3.1.3.*

[8] *New Zealand Geotechnical Society, Earthquake Geotechnical Engineering Practice, Module 1, November 2021, Appendix A, Table A1.*

*Table 4: Summary of Seismic Hazard Parameters*

| Limit State | Effective Magnitude | Return Period (years) | Unweighted PGA |
|---|---|---|---|
| ULS | 6.5 | 500 | 0.19 g |
| SLS | 5.8 | 25 | 0.03 g |

## 5.4 Site Stability

At the time of writing, no obvious indications of major deep-seated instability were identified at the site, and the risk of such deep-seated instability developing as a result of the development proposal is low.

Areas of shallow instability have been identified around the site, particularly upon steep sided slopes associated with the on-site gullies where the natural topography exceeds approximately 20 °. This is consistent with our experience in the local area and underlying geology. Typically, the residual greywacke soils are known for shallow instabilities and landslides occurring between an upper clayey mantle and underlying silty, sandy or gravelly horizons. Landslides generally occur as non-circular features where the upper clayey layer evacuates downslope. An example of where the natural equilibrium balance has been exceeded and where a small landslide has occurred is evident to the northern corner of proposed lot 1, well away from any proposed building envelope.

Proposed building envelopes within our assessment have been selected based on the geotechnical findings and assessment of this report. Specifically, all house sites have been selected with a natural topography <15 °. Within or adjacent to the proposed building envelopes no obvious indications of shallow instability including relic, or more recent evidence was noted during the Geologix ground investigation. The gently to moderately sloping natural terrain is considered to lie within the natural equilibrium balance of the very stiff shallow greywacke residual soils.

To reduce the potential of shallow instability occurring within the future development concepts, it is recommended that a site-specific geotechnical investigation is performed at the Building Consent stage. Until proven otherwise in specific geotechnical investigation, the following general recommendations are recommended to maintain site stability:

- All proposed cuts and fills are to be retained and constructed in accordance with approved temporary works as recommended by this report.
- Permanent batter slopes may be appropriate for the site based on a suitable geotechnical assessment at the Building Consent stage.

## 5.5 Soil Expansivity

Clay soil may undergo appreciable volume change in response to changes in moisture content and be classed as expansive. The reactivity and the typical range of movement that can be expected from potentially expansive soils underlying any given building site depends

on the amount of clay present, the clay mineral type, and the proportion, depth, and distribution of clay throughout the soil profile. Clay soils typically have a high porosity and low permeability causing moisture changes to occur slowly and produce swelling upon wetting and shrinkage upon drying. Apart from seasonal moisture changes (wet winters and dry summers) other factors that can influence soil moisture content include:

- Influence of garden watering and site drainage.
- The presence of mature vegetation.
- Initial soil moisture conditions at the time of construction.

Based on our experience with residual Greywacke soils, laboratory analysis within the strata on other projects in the local area and site observations, the shallow soils are conservatively expected to meet the requirements of a highly expansive or Class H soil type. In accordance with AS2870:2011[9] and New Zealand Building Code[10], Class H or Highly Expansive soils typically have a soil stability index ($I_{ss}$) range of 3.8 to 6.5% and a 500-year design characteristic surface movement return ($y_s$) of 78 mm.

A quantification of the expansive soil class assumptions can be made by geotechnical laboratory analysis. It is recommended that this is undertaken during detailed design once final development levels are known.

## 5.6 Liquefaction Potential

Liquefaction occurs when excess pore pressures are generated within loose, saturated, and generally cohesionless soils (typically sands and silty sands with <30 % fines content) during earthquake shaking. The resulting high pore pressures can cause the soils to undergo a partial to complete loss of strength. This can result in settlement and/ or horizontal movement (lateral spread) of the soil mass.

The Geologix ground investigation indicates the site to be predominantly underlain by fine-grained, Greywacke residual soils. Based on the materials strength and consistency, and our experience with these materials, there is no liquefaction potential / risk in a design level earthquake event.

## 5.7 Concept Foundations

These recommendations have been developed anticipating concept future development platforms will be formed by shallow cut/ fill processes exposing natural undisturbed soils.

However, the gently to moderately sloping land could be subject to no cut and fill to form a development platform with pole houses. In this scenario, it is recommended that foundations are subject to specific engineering design comprising deep, end bearing piles.

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[9] *AS2870, Residential Slabs and Footings, 2011.*

[10] *New Zealand Building Code, Structure B1/AS1 (Amendment 19, November 2019), Clause 7.5.13.1.2.*

If encountered, non-engineered fill and/ or colluvium should not be used as a bearing stratum to minimise the potential for excessive total and/ or differential settlement. It is recommended that non-engineered fill, any underlying soft spots (Su <75 kPa) and any other unsuitable or deleterious materials are sub-excavated and replaced with suitably selected and compacted materials such as GAP65 hard fill.

Based on the natural formation having an average undrained shear strength of >100kPa then it is expected that either shallow standard raft or strip footing foundations can be adopted for the proposed house sites. Such foundations may be designed by a professional structural engineer adopting an Ultimate Bearing Capacity of 300 kPa for a highly expansive soil type.

It is recommended that geotechnical requirements are developed further with a lot specific geotechnical investigation report at the time of Building Consent.

# 6 WASTEWATER ASSESSMENT

The scope of this wastewater assessment comprised a ground investigation to ascertain a lot-specific wastewater disposal classification for concept design of suitable systems for a probable future rural residential development. Relevant design guideline documents adopted include:

- Auckland Council, Technical Publication 58, On-site Wastewater Systems: Design and Management Manual, 2004.
- NZS1547:2012, On-site Domestic Wastewater Management.

The concept rural residential developments within this report assume that the proposed new lot may comprise up to a five-bedroom dwelling with a peak occupancy of eight people[11]. This considers the uncertainty of potential future Building Consent designs. The number of usable bedrooms within a residential dwelling must consider that proposed offices, studies, gyms or other similar spaces maybe considered a potential bedroom by the Consent Authority.

## 6.1 Existing Wastewater Systems

No existing wastewater treatment or disposal systems have been identified or surveyed within the site boundaries.

## 6.2 Wastewater Generation Volume

In lieu of potable water infrastructure servicing the site, roof rainwater collection within on-lot tanks has been assumed for this assessment. The design water volume for roof water tank supply is estimated at 160 litres/ person/ day[12]. This assumes standard water saving

[11] *TP58 Table 6.1.*
[12] *TP58 Table 6.2, AS/ NZS 1547:2012 Table H3.*

fixtures[13] being installed within the proposed future developments. This should be reviewed for each proposed lot at the Building Consent stage.

For the concept wastewater design this provides a total daily wastewater generation of 1,280litres/ day per proposed lot.

## 6.3 Treatment System

Selection of a wastewater treatment system will be provided by future developers at Building Consent stage. This will be a function of a refined design peak occupancy. It is recommended that to meet suitable minimum treated effluent output, secondary treatment systems are accounted for across the site based on the building envelopes identified within our assessment In Building Consent design, considering final disposal field topography and proximity to controlling site features, particularly the on-site wetland within proposed lot 1 a higher treated effluent output standard such as UV disinfection to tertiary quality maybe required.

No specific treatment system design restrictions and manufacturers are currently in place. However, the developer will be required to specify the treatment system proposed at Building Consent.

## 6.4 Land Disposal System

To provide even distribution, evapotranspiration assistance and to minimise effluent runoff it is recommended that treated effluent is conveyed to land disposal via Pressure Compensating Dripper Irrigation (PCDI) systems, a commonplace method of wastewater disposal.

The proposed PCDI systems may be surface laid and covered with minimum 150 mm mulch and planted with specific evapotranspiration species with a minimum of 80 % species canopy cover or subsurface laid to topsoil with minimum 200 mm thickness and planted with lawn grass. Site-won topsoil during development from building and/ or driveways footprints may be used in the area of land disposal systems to increase minimum thicknesses. Specific requirements of the land disposal system include the following which have been complied with for this report.

*Table 5: Disposal Field Design Criteria*

| Design Criteria | Site Conditions |
|---|---|
| Topography at the disposal areas shall not exceed 25°. Exceedances will require a Discharge Consent. | Concept design complies |
| On shallower slopes >10 ° compliance with Northland Regional Plan (NRP) rule C.6.1.3(6) is required. | Concept design complies, all disposal fields sited on slopes <10 °. |
| On all terrain irrigation lines should be laid along contours. | Concept design complies |

[13] *Low water consumption dishwashers and no garbage grinders.*

| | |
|---|---|
| Disposal system situated no closer than 600 mm (vertically) from the winter groundwater table (secondary treated effluent). | Concept design complies |
| Separation from surface water features such as stormwater flow paths (including road and kerb channels), rivers, lakes, ponds, dams, and natural wetlands according to Table 9, Appendix B of the NRP. | Concept design complies |

### 6.4.1 *Soil Loading Rate*

Based on the results of the ground investigation, conservatively the shallow soils are inferred to meet the drainage characteristics of TP58 Category 6, slowly draining, described as sandy clay, non-swelling clay and silty clay. This transposes to NZS1547 Category 5, poorly drained described as light clays. For a PCDI system, a soil loading rate of 3 mm/ day is recommended within NZS1547 Table 5.2.

### 6.4.2 *Disposal Areas*

The sizing of wastewater system disposal areas is a function of soil drainage, the loading rate and topographic relief. For each proposed lot a primary and reserve disposal field is required as follows. The recommendations below are presented on Drawing Nos. 131 and 132.

- **Primary Disposal Field.** A minimum PCDI primary disposal field of 427 $m^2$ laid parallel to the natural contours.
- **Reserve Disposal Field.** A minimum reserve disposal field equivalent to 30 % of the primary disposal field is required under NRP rule C.6.1.3(9)(b) for secondary or tertiary treatment systems. This concept design therefore allows for a 128 $m^2$ reserve disposal area to be laid parallel to the natural contours.

Topography at the proposed wastewater disposal fields has been measured as ranging from gentle to moderate level and level to <10 °. Surface water cut-off drains are not considered necessary to meet the provisions of NRP rule C.6.1.3. However, these have been provisioned for proposed lots 1 and 2 taking into account runoff from steeper slopes above. In addition, no Discharge Consent is required. These requirements should be reviewed at the Building Consent stage.

## 6.5 Summary of Concept Wastewater Design

Based on the above design assumptions a concept wastewater design is presented as Table 6 and presented schematically upon Drawing No. 300. It is recommended that each lot is subject to Building Consent specific review and design amendment according to final development plans.

*Table 6: Concept Wastewater Design Summary*

| Design Element | Specification |
|---|---|
| Concept development | Five-bedroom, peak occupancy of 8 (per lot) |
| Design generation volume | 160 litres/ person/ day |

| | |
|---|---|
| Water saving measures | Standard. Combined use of 11 litre flush cisterns, automatic washing machine & dishwasher, no garbage grinder[1] |
| Water meter required? | No |
| Min. Treatment Quality | Secondary |
| Soil Drainage Category | TP58 Category 6, NZS1547 Category 5 |
| Soil Loading Rate | 3 mm/ day |
| Primary disposal field | Surface/ subsurface laid PCDI, min. 427 $m^2$ |
| Reserve disposal field | Surface/ subsurface laid PCDI, min. 30 % or 128 $m^2$ |
| Dosing Method | Pump with high water level visual and audible alarm. Minimum 24-hour emergency storage volume. |
| Stormwater Control | Divert surface/ stormwater drains away from disposal fields. Cut off drains not required. Stormwater management discharges downslope of all disposal fields. |

*1. Unless further water saving measures are included.*

### 6.6 Assessment of Environmental Effects

An Assessment of Environmental Effects (AEE) is required to address two aspects of wastewater disposal. These include the effect of treated wastewater disposal for an individual lot and the cumulative or combined effect of multiple lots discharging treated wastewater to land as a result of subdivision.

The scale of final development is unknown at the time of writing and building areas, impervious areas including driveways, ancillary buildings, landscaped gardens, and swimming pools may reduce the overall area for on-site wastewater disposal. For the purpose of this report the above features are likely to be included within a designated 30 x 30 m square building site area as required by FNDC District Plan Rule 13.7.2.2.

It is recommended that the AEE is reviewed at the time of Building Consent once specific development plans, final disposal field locations and treatment systems are established. The TP58 guideline document provides a detailed AEE for Building Consent application. Based on the proposed scheme, ground investigation, walkover inspection and Drawing Nos. 131 and 132, a site-specific AEE is presented as Appendix C to demonstrate the proposed wastewater disposal concept will have a less than minor effect on the environment.

## 7 STORMWATER ASSESSMENT

Considering the nature of rural subdivision and residential development, increased storm water runoff occurs as pervious surfaces such as pasture are converted to impervious features such as roads or future on-lot buildings and driveways.

## 7.1 Regulatory Requirements

Stormwater management for the proposed activity is controlled by the FNDC Operative District Plan[14] and NRC Proposed Regional Plan[15]. The requirement for subdivision and probable future development under these legislations is summarised below.

### *7.1.1 Regional Provisions*

The Proposed Regional Plan states the diversion and discharge of stormwater into water or onto or into land where it may enter water from an impervious area or by way of a stormwater collection system, is a permitted activity, provided the criteria of Rule C.6.4.2(1) to (8) are met. The proposed activity is considered to meet the requirements of a Permitted Activity. Assessment of the consent status is summarised in Section 7.7.2 and in full within Appendix C.

### *7.1.2 District Wide Provisions*

Subdivision activity and provisions for probable future development within both urban and rural environments is controlled by District Plan Rule 13.7.3.4. In relation to rural subdivision the following apply which this concept design provisions for:

*(a) All allotments shall be provided, within their net area, with a means for the disposal of collected stormwater from the roof of all potential or existing buildings and from all impervious surfaces, in such a way so as to avoid or mitigate any adverse effects of stormwater runoff on receiving environments, including downstream properties. This shall be done for a rainfall event with a 10% Annual Exceedance Probability (AEP).*

*(c) The provision of grass swales and other water retention devices such as ponds and depressions in the land surface may be required by the Council in order to achieve adequate mitigation of the effects of stormwater runoff.*

*(d) All subdivision applications creating sites 2ha or less shall include a detailed report from a Chartered Professional Engineer or other suitably qualified person addressing stormwater disposal.*

*(d) Where flow rate control is required to protect downstream properties and/or the receiving environment then the stormwater disposal system shall be designed in accordance with the onsite control practices as contained in "Technical Publication 10, Stormwater Management Devices – Design Guidelines Manual" Auckland Regional Council (2003).*

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[14] *https://www.fndc.govt.nz/Your-Council/District-Plan/Operative-plan*
[15] *Proposed Regional Plan for Northland July 2021 – Appeals Version*

### 7.1.3 *Environmental Zone Provisions*

Permitted activity status for proposed impervious surface areas within the rural production zone is determined by Rule 8.6.5.1.3 which is presented below.

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

Anticipated future residential activities are considered to meet this criterion which allows for 500 $m^2$ of impermeable surfaces according to the proposed smallest lot size of 53,500 $m^2$. This considers conservative typical rural residential roof areas with associated driveways and car parking.

## 7.2 Stormwater Management Concept

The stormwater management concept considered in this report has been prepared to meet the requirements of the local and regional consent authorities considering the design storm event as follows:

- **Probable Future Development.** The proposed lots are large in size, ranging from approximately 5 to 17 ha. However, mapped flood hazard potential is identified within lower areas of the site and on-site gullies and the immediate downstream environment associated with the adjacent watercourse. Therefore, the future residential developments provide an opportunity to reduce peak on-lot flows to pre-development levels with simple attenuation measures. This in turn benefits the surrounding sensitive environmental receptors, watercourses and the overland flow paths leading to them.

  A conservative model of probable future on-lot attenuation discharging to suitably sized dispersion devices has been developed for this concept assessment considering the variation of scale in typical rural residential developments. The probable future development concept includes up to 300 $m^2$ potential roof area and up to 200 $m^2$ potential driveway or parking areas. The latter has been modelled as an offset within lot specific attenuation devices.

- **Subdivision Development.** Access to each proposed lot will be established by the existing RoW. As only minor upgrading of the existing RoW is required without significantly increased impermeable surface areas, no specific attenuation of the RoW is proposed to provide access to the proposed house sites.

## 7.3 Design Storm Event

For the purpose of this assessment and considering the absence of downstream properties and potential flood hazard within the site boundaries, this assessment has been modelled to provide stormwater attenuation, where required, up to and including the 10 % AEP storm event. Attenuation modelling under this scenario avoids exacerbating downstream flooding and correctly sized discharge devices reduce scour and erosion at discharge locations which

may otherwise result in concentrated discharge. The 10 % AEP attenuation scenario has been selected over the 1 % AEP model due to the size of the proposed lots.

Relevant design rainfall intensity and depths have been ascertained for the site location from the NIWA HIRDS meteorological model[16]. NIWA provides guidelines for modelling the effects of potential climate change effects of rainfall intensity increase by applying a potential change factor to historical data. This report has adopted potential change factors to account for a 2.1 °c climate change increase scenario. NIWA HIRDS and climate change factor data is presented in full within Appendix D.

## 7.4 Probable Future Development Management

As detailed above, it is recommended that future residential developments provide on-lot stormwater attenuation for all impervious surface areas to the pre-development peak runoff condition. This is achievable by installing specifically sized low-flow orifices into the roof runoff attenuation tank which will attenuate the concept development additional runoff volume from the pre-development condition as detention, releasing the accumulated volume slowly.

This assessment should be subject to verification and an updated design at Building Consent stage on each lot once final development plans are available. This is typically applied as a notice to the applicable titles. The rational method has been adopted by Geologix with run-off coefficients as published by Auckland Council TP108[17] and FNDC Working Draft Engineering Standards[18] to provide a suitable attenuation design to limit post development peak flows to pre-development conditions. A summary of the concept design assumptions is presented as Table 7: Summary of Probable Future Development Concept

| Item | Pre-development Impervious Area | Post-development Impervious Area | Proposed Concept Attenuation Method |
|---|---|---|---|
| **Future Concept Developments** | | | |
| Potential buildings | 0 m2 | 300 m2 | Detention within roof water tanks |
| Potential driveways | 0 m2 | 200 m2 | Off-set detention in roof water tanks |
| **Total** | **0 m2** | **500 m2** | |

Calculations to support the concept design are presented as Appendix D to this report. A summary of the proposed on-lot stormwater attenuation design is presented as Table 8. As above, it is recommended that this concept design is refined at the Building Consent stage once final development plans are available. A Consent notice may be required to be applied to each title to ensure this is undertaken.

*Table 8 Probable Future Development Attenuation Concept*

| Event | Pre-development | Post-development | Total Storage Volume Req. | Concept |
|---|---|---|---|---|

[16] *NIWA High Intensity Rainfall Data System, https://hirds.niwa.co.nz.*

[17] *Auckland Regional Council Technical Publication 108, Guidelines for stormwater runoff modelling in the Auckland Region, April 1999.*

[18] *FNDC Working Draft Engineering Standards 2021, Issue 0.3 – May 2021.*

| | | | | |
|---|---|---|---|---|
| 50 % AEP Peak Flow | 6.6 l/s | 10.02 l/s | | 25,000 litre tank with 24 mm orifice 0.89 m below overflow |
| 10 % AEP Peak Flow | 10.14 l/s | 15.39 l/s | 8.532 m3 | |

and a typical schematic retention/ detention tank arrangement is presented as Drawing No. 401.

*Table 7: Summary of Probable Future Development Concept*

| Item | Pre-development Impervious Area | Post-development Impervious Area | Proposed Concept Attenuation Method |
|---|---|---|---|
| **Future Concept Developments** | | | |
| Potential buildings | 0 $m^2$ | 300 $m^2$ | Detention within roof water tanks |
| Potential driveways | 0 $m^2$ | 200 $m^2$ | Off-set detention in roof water tanks |
| **Total** | **0 $m^2$** | **500 $m^2$** | |

Calculations to support the concept design are presented as Appendix D to this report. A summary of the proposed on-lot stormwater attenuation design is presented as Table 8. As above, it is recommended that this concept design is refined at the Building Consent stage once final development plans are available. A Consent notice may be required to be applied to each title to ensure this is undertaken.

*Table 8 Probable Future Development Attenuation Concept*

| Event | Pre-development | Post-development | Total Storage Volume Req. | Concept |
|---|---|---|---|---|
| 50 % AEP Peak Flow | 6.6 l/s | 10.02 l/s | | 25,000 litre tank with 24 mm orifice 0.89 m below overflow |
| 10 % AEP Peak Flow | 10.14 l/s | 15.39 l/s | 8.532 $m^3$ | |

### 7.4.1 *On-Lot Discharge*

The direct discharge of water tank overflow in a concentrated manner can cause scour and erosion in addition to excessive saturation of shallow soils. It is recommended that overflow from rainwater detention tanks is conveyed in sealed pipes to a designated discharge point downslope of proposed building footprints and wastewater disposal fields. A concept design accommodating this is presented within Appendix A on Drawing No. 300.

It is recommended that the conceptually sized dispersion devices are subject to specific assessment at the Building Consent stage to limit scour and erosion from tank overflows.

Typical rural residential developments construct either above or below ground discharge dispersion pipes. Feeding pipes can be either buried or pinned to the surface as desired. It is recommended that all pipes are designed to accommodate the design storm event peak flows from the attenuation tank and including minimum 100 mm dia. PVC piping. A concept dispersion pipe or trench length is presented as Table 9. Calculations to derive this are presented within Appendix D, based on the NIWA HIRDS Depth-Duration data. Typical details of these options are presented within Appendix A as Drawing No. 401.

*Table 9: Summary of Concept Dispersion Devices*

| Concept Impervious | Tank Outlet | Dispersion Pipe/ | Concept |
|---|---|---|---|

| Area to Tank | Velocity | Trench Length | |
|---|---|---|---|
| 300 $m^2$ | 4.17 m/s | 6.8 m | Above ground dispersion device or in-ground dispersion trench. |

## 7.5 Subdivision Development Management

The above stormwater concept does not provide specific attenuation of subdivision RoW impermeable surface areas as only minor upgrading above the existing impervious areas is required. However, all stormwater management devices must be suitably sized to accommodate peak run-off flows from the design storm event. Stormwater management of the subdivision development is proposed as follows:

- Vehicle crossings formed for each proposed lot with minimum 375 mm diameter RCP culvert.

The above measures are indicated, where applicable on the drawing set included within Appendix A.

## 7.6 Stormwater Quality

The proposed application is for a rural residential subdivision and future development. The key contaminant risks in this setting include:

- Sediments and minor contaminants washed from impervious surfaces.
- Leaf matter, grass, and other organic debris.

Stormwater treatment requirements are minor to maintain good quality stormwater discharge. However, additional measures of stormwater filtration have been adopted due to the proximity to sensitive surface water receptors. Stormwater quality will be provided by:

- Leaf guards on roof guttering/ first flush devices on roof guttering and downpipes.
- Rainwater tank for potable use onsite only to be filled by roof runoff.
- Room for sedimentation (minimum 150 mm according to Auckland Council GD01) within the base of the stormwater attenuation pond and roof runoff tanks as dead storage volume.
- Stormwater discharges directed towards roading swale drains where possible.
- Grassed swale drains from rainwater inception (road surfaces) to discharge points.
- All grassed swales with check dams to increase stormwater quality subject to specific engineering design.

The above measures have been determined to avoid disturbance of ground within 10 m of identified wetlands on the proposed scheme plan supplied to us.

The risk of other contaminants being discharged out of the site boundaries (hydrocarbons, metals etc.) as a result of the proposed activities once stormwater has been processed through the above measures that will affect the downstream water quality is considered low.

## 7.7 Assessment Criteria and Consent Status

### *7.7.1 District Plan*

The proposed activity has been assessed as a **Restricted Discretionary Activity** according to Table 13.7.2.1. No assessment criteria are presented within the District Plan for this activity classification.

### *7.7.2 Regional Plan*

The proposed activity is determined to meet the requirements of a **Permitted Activity** according to the provisions of Proposed Regional Plan Rule C.6.4.2. Assessment criteria are presented in full within Appendix C.

# 8 POTABLE WATER & FIRE FIGHTING

In the absence of potable water infrastructure within Purerua Road or within the site it is recommended that roof runoff water tanks are adopted for potable water supply with appropriate filtration and UV disinfection at point of use. The volume of potable water supply on each lot should consider the required stormwater detention volume identified within the concept design. On these properties a second tank may be required for sufficient potable water volumes.

Furthermore, the absence of potable water infrastructure and fire hydrants within Purerua Road require provision of the on-lot roof water supply tanks to be used for firefighting purposes, if required. Specific analysis and calculation for firefighting is outside the scope of this report and may require specialist input. Supply for firefighting should be made in accordance with SNZ PAS4509:2008.

# 9 EARTHWORKS

As part of the subdivision application, earthworks are required as follows:

- **Vehicle Crossings.** Minor cut/ fill earthworks are required to form three new vehicle crossings into the proposed lots and the upgrading of the existing site entrance.

Proposed earthwork volumes are well within a 5,000 $m^3$ Permitted Activity volume limit outlined by FNDC District Plan Rule 12.3.6.1.1(a) and the maximum cut and fill height is <3 m to comply with 12.3.6.1.1(b).

Rule C.8.3.1, Table 13 of the Proposed Regional Plan outlines a Permitted Activity as 100 $m^3$ of moved or placed earth in any 12-month period for 'flood hazard areas', i.e. with a probably of river flood hazard under the 1 % AEP scenario and 50 $m^3$ for move or placed earth in any 12 month period for 'high-risk flood hazard areas'.

Proposed earthwork areas to form the subdivision, are anticipated to comply with the Permitted Activity standard for both flood hazard and high-risk flood hazard areas. However, should a realignment of the existing RoW be required as outlined in Section 11.2, further specific assessment will be required.

### 9.1 General Recommendations

Bulk fill with site-won earth can be moderately sensitive to disturbance when exposed to rain or runoff which may cause saturation or vehicle movements and trafficking during earthworks. Accordingly, care should be taken during construction, including probable future developments to minimise degradation of any earth fill due to construction traffic and to minimise machinery on site.

Any areas of proposed bulk fill which are required to meet specific subgrade requirements within should be subject to a specific earthwork specification prepared by a professional Engineer such as Geologix.

Due to the topography of the site, significant excavations are not anticipated. However, to reduce the risk of instability of excavations during construction, it is recommended that **temporary** unsupported excavations have a maximum vertical height of 1.0 m. Excavations >1.0 m should be battered at 1V:1H or 45 °. Permanent batter slopes may require a shallower angle to maintain long term stability and if proposed these should be assessed at the Building Consent stage within a specific geotechnical investigation report.

Temporary batters should be covered with polythene sheets secured to the surface with pins or batons to prevent saturation. All works within close proximity to excavations should be undertaken in accordance with Occupational Safety and Health regulations.

All earthworks should be carried out in periods of fine weather within the typical October to April earthwork season. Consent conditions commonly prescribe working restrictions.

## 10 NATURAL HAZARD ASSESSMENT

To satisfy the Resource Management Act, 1991 the proposed subdivision must plan for and manage the risk from natural hazards to reduce the potential adverse effects to less than minor. Regulatory assessment of natural hazards at the site location are managed under the jurisdiction of the FNDC District Plan[19], Northland Regional Council (NRC) Proposed Regional Plan for Northland[20] and Regional Water and Soil Plan for Northland. Following our ground investigation and considering the measures presented in this report, a summary of the proposed activities against defined natural hazards is presented as Table 10.

*Table 10: Summary of Natural Hazards*

| Natural Hazard | Applicability | Mitigation & Effect on Environment |
|---|---|---|
| Erosion | NA | No mitigation required, less than minor. |

[19] *Operative District Plan Rule 13.7.3.2.*

[20] *Proposed Regional Plan for Northland, Appeals Version, July 2021, Chapter D.6.*

| | | |
|---|---|---|
| Overland flow paths, flooding, inundation | NA | No mitigation required, less than minor, mapped flood hazard potential has been taken into account for our assessment. |
| Landslip | NA | No mitigation required, less than minor for proposed house sites which have been located upon gently sloping land. |
| Rockfall | NA | No mitigation required, less than minor. |
| Alluvion | NA | No mitigation required, less than minor. |
| Avulsion | NA | No mitigation required, less than minor. |
| Unconsolidated fill | NA | No mitigation required, less than minor. |
| Soil contamination | NA | No mitigation required, less than minor. |
| Subsidence | NA | No mitigation required, less than minor. |
| Fire hazard | NA | No mitigation required, less than minor. |
| Sea level rise | NA | No mitigation required, less than minor. |

*NA – Not Applicable.*

# 11 INTERNAL ROADING AND VEHICLE CROSSINGS

It should be noted that we are not traffic engineers, and no specific Traffic Impact Assessment is included within the scope of these works. If required, it is recommended that advice is sought from a chartered traffic engineer.

## 11.1 Traffic Intensity Factor and Household Equivalents

According to Appendix 3A of the Operative District Plan, providing for one standard residential unit per lot, each accounting for up to 10 traffic movements per unit per day the following Traffic Intensity Factors (TIF) and Household Equivalents have been developed for each proposed RoW.

- **Existing Row Condition:** TIF of 10 from one HE.
- **Row of Condition after the Proposed lots:** TIF of 30 from three HE.

The above has been calculated based on the former quarry to the south-eastern extent of the RoW being inactive and decommissioned.

## 11.2 Right of Ways

Existing RoW at this time will provide internal access to all proposed lots as summarised in Table 11. It is noted that the alignment of the existing RoW passes outside the boundary of the associated easement and into the watercourse boundary around the watercourse meander. It is recommended that discussions are initiated with Council at an early stage as to whether the RoW should be realigned through this area.

Noting the north-eastern face of the RoW here is restricted by a steep bank, should upgrading be required it is recommended that detailed engineering drawings and assessment are provided for the RoW upgrade. As part of these works, if required, a specifically sized RCP culvert will be required through at the intersection point of the RoW with an overland flow path exiting proposed lot 3.

*Table 11: Summary of Proposed RoW Specification*

| Location | Lots | Current H.E. | Min. Legal Width | Min. Carriageway Width |
|---|---|---|---|---|
| RoW | 3 | 1 | 7.5 m to entrance of lot 1, 5.0 m thereafter | 3.0 m with no passing bays. Refer Drawing No. 300. |

H.E – Household Equivalents

### 11.3 Vehicle Crossings

Access to each of the proposed lots is recommended by standard domestic crossings according to current FNDC Engineering Standards. The access points to proposed lots may be determined at the Building Consent Stage according to NZS4404 Clause 3.3.17.2. However, the entrance to proposed lot 1 is required at subdivision stage, within 100 m of the site entrance from Purerua Road to negate a passing bay requirement. A summary of proposed vehicle crossings is presented as Table 12.

*Table 12: Summary of Proposed Vehicle Crossings*

| Location | Type | Detail | Formation |
|---|---|---|---|
| Site/ RoW entrance from Purerua Road | Domestic crossing, rural/ unkerbed. | FNDC/S/6 and FNDC/S/6B[1] double width with concrete sealed entrance, upgrade of existing culvert as required to RCP minimum 375 mm dia. | At subdivision formation |
| Lot entrances | Domestic crossing, rural/ unkerbed. | FNDC/S/6 and FNDC/S/6B single width with minimum 375 mm dia. RCP culvert. | At subdivision formation |

*RCP – Reinforced Concrete Pipe*

## 12 LIMITATIONS

This report has been prepared for Meridian Farms as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this report and accompanying plans.

The recommendations and opinions in this report are based on arisings extracted from exploratory boreholes at discrete locations and any available existing borehole records. The nature and continuity of subsurface conditions, interpretation of ground condition and models away from these specific ground investigation locations are inferred. It must be appreciated that the actual conditions may vary from the assumed ground model.

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# GEOTECHNICAL INVESTIGATION REPORT

## 119 REDCLIFFS ROAD, KERIKERI

## MERIDIAN FARMS

**C0022-G-01**
**JUNE 2022**
**REVISION 1**

www.geologix.co.nz 09 392 0007 Auckland | Northland

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# DOCUMENT MANAGEMENT

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# REVISION HISTORY

| Date | Issue | Prepared | Reviewed |
|---|---|---|---|
| June 2022 | First Issue – For Consent | HB | EC |

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# FIGURES



# TABLES

# 1 INTRODUCTION

This Geotechnical Investigation Report has been prepared by Geologix Consulting Engineers Ltd (Geologix) for Meridian Farms as our Client in accordance with our standard short form agreement and general terms and conditions of engagement.

The purpose of this report is to assist with Resource Consent application in relation to the proposed subdivision and future residential development of a rural property at 119 Redcliffs Road, Kerikeri to create four residential lots, proposed lots 1 to 4, inclusive and a large balance lot, proposed lot 5. The supplied scheme plan indicates the size and location of the proposed lots following subdivision to aid our geotechnical investigation.

This report provides interpretation of a site-specific ground investigation and geotechnical assessment to provide recommendations in relation to the stability of proposed house sites and future potential development. This report may be used to assist with detailed design. Further geotechnical investigation and specific design of foundations will be required for all future dwellings at Building Consent stage, following a review of architectural plans once they are available, confirming the final location and construction nature of any future dwellings.

## 1.1 Proposed Subdivision

A subdivision scheme plan was available at the time of writing. We have not been supplied with any development plans confirming the layout of any future dwellings. The supplied scheme plan indicates the rough size and location of the proposed lots following subdivision to aid our geotechnical investigation within Lots 1 to 5.

This understanding has been established from proposed subdivision scheme plans[1] supplied to Geologix at the time of writing and reproduced within Appendix A as Drawing No. 110. Amendments to the referenced development plans may require an update to the scope and/ or recommendations of this report.

# 2 SITE DESCRIPTION

## 2.1 Legal Description and General Location

The subject property is known as 119 Redcliffs Road, Kerikeri and is legally described as Lot 1 DP 94462 (Figure 1) with a total area of 46.446 ha. The property is accessed off a common driveway that leads onto the property off Redcliffs Road to the south-east corner. The property is bordered by rural countryside living residential

[1] *Thomson Survey Ltd., Proposed Subdivision Of Lot 1 DP 94462 & Easement Over Lot 3 DP 108139 119 Redcliffs Road, Kerikeri, Rev KY, Ref No. 7485, 8 September 2021.*

properties to the north and east, Kapiro Stream to the west, and Redcliffs Road to the south.

The site is currently in pasture with some areas of trees. An existing dwelling is located on proposed Lot 2 along with a number of sheds and structures.

The topography comprises moderate to steep slopes and, depending on underlying geology, moderate or gentle gullies. At the time of writing, we were not presented with accurate survey contours and our drawings are based on the LINZ 8 m Digital Elevation Model (DEM)[2] and hand tool measurements for general indication of ground profile only. All of the proposed new residential sites are currently in pasture for grazing with part of proposed lot 2 currently developed with an existing residential dwelling.

The property is hilly and dipping into erosion gullies and stream channels, the ground elevation varies from east to west. The area was covered with grass and some trees in the east boundary.

A description of each proposed lot that is given below. The proposed subdivision is shown in Figure 1 below.

## 2.2 Lot 1

The subject property of Lot 1 is situated to the south-east of the property with a proposed total area of 2.1 ha. Proposed Lot 1 is to be located in the south-eastern part of the lot. Lot 1 is accessed via a driveway from Redcliffs Road to the south-west.

## 2.3 Lot 2

Proposed lot 2 is to be located in the central part of the site. The proposed total area of Lot 2 is 3.0 ha and relatively flat with the area of placed existing house and sheds, however a moderately steep gully is presented to the south-west. Proposed lot 2 includes an existing consented development.

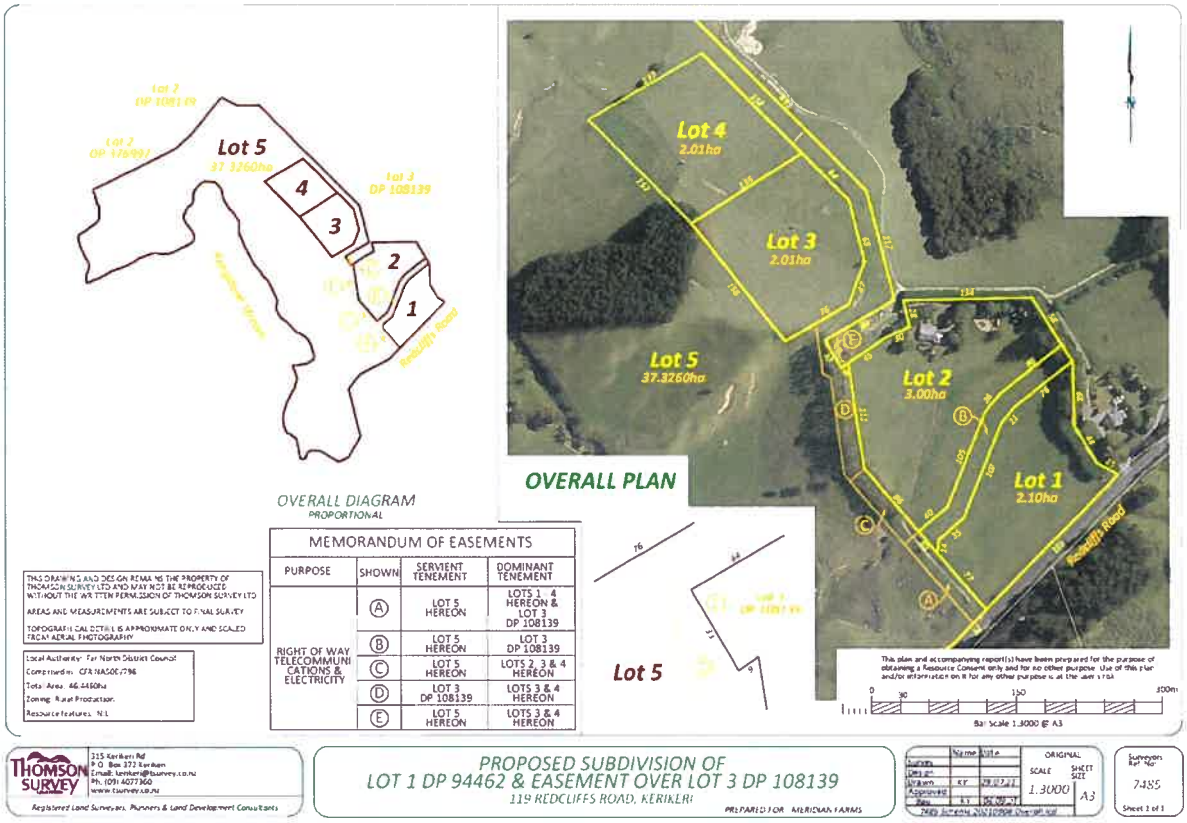
## 2.4 Lot 3 and Lot 4

Proposed lot 3 and 4 are formed upon moderately sloping land which dips at between 10° to 15 °. These Lots will be situated to the north-east of the property with a total area of each Lot of 2.01 ha. The overall topography is a moderate slope down to the north west. The sites have a ridge to the south and west proposed boundaries. Lot 3 is a concave feature, draining through an overland flow path to the south-western boundary. Lot 4 includes a small spur suitable for a building site,

[2] https://data.linz.govt.nz/layer/51768-nz-8m-digital-elevation-model-2012/

dipping away to the north, east and west. The site covered by pasture.

*Figure 1: Site Setting*[3]




## 3 DESKTOP APPRAISAL

To assist with our geotechnical appraisal, we have undertaken a detailed desktop review of available information with a specific focus upon geotechnical influences.

### 3.1 Geology

Available geological mapping[4] indicates the site to be underlain by Waipapa Group sandstone and siltstone (Waipapa terrane) greywacke described as massive to thin bedded, lithic volcaniclastic metasandstone and argillite, with tectonically enclosed basalt, chert and silceous.

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[3] *Proposed Subdivision Of Lot 1 DP 94462 & Easement Over Lot 3 DP 108139 119 Redcliffs Road, Kerikeri, Rev KY, Ref No. 7485, 8 September 2021, Surveyors*

[4] *Geological & Nuclear Science, 1:250,000 scale Geological Map, Sheet 2, Whangarei, 2009.*

Typically, the local Greywacke geology is subject to weathering to residual soils, and this can be up to 10 m thick to highly weathered rock. Residual Greywacke soils tend to form an upper firm to stiff clay layer overlying a lower very stiff to hard silt layer. Undisturbed residual soils are generally stable however, on steep slopes (>20 °), the transition between these weathered layers can experience shallow surface failures commonly triggered by extreme rainfall events.

### 3.2 Existing Geotechnical Information

Existing subdivision and/or Building Consent ground investigations were not made available to Geologix at the time of writing. A review of available GIS databases, including the New Zealand Geotechnical Database[5] (NZGD) did identified borehole records within approximately 200 m of the site. To improve the NZGD, exploratory records from our ground investigation were uploaded to the system.

An existing borehole (NZGD ID: BH_169650) is located at 54a & 54b Redcliffs Road, Kerikeri approximately 200 m of the eastern of the site. This borehole log was drilled to a depth of 17.0 m below existing ground level (bgl) prepared by Hawthorn Geddes Engineers & Architects Ltd. with drilling contractor DS Geotechnical Serv, dated 20 September 2021 to 21 September 2021, project no. 12545.

The key observations from the test are summarised below:

- The soil profile consists of fill materials to the depth of approximately up to 4.5 m then interbedded layer of clay and siltstone, yellow brown, orange brown, high plasticity clay material, highly fractured siltstone material, and moist up to the test termination (16 m bgl).
- Groundwater was not encountered during of site investigation.
- Blow counts (N-Value) was recorded between 5 and 32.

## 4 GROUND INVESTIGATION

A site-specific walkover survey and intrusive ground investigation was undertaken by Geologix on 29 September 2021 and 1 March 2022. The ground investigation was scoped to confirm the findings of the above information and to provide site-specific parameters for this geotechnical assessment and ground model. The ground investigation comprised:

[5] https://www.nzgd.org.nz/ARCGISMapViewer/mapviewer.aspx

- Ten hand augered boreholes designated BH1 to BH10, with a target depth of 3.0 m below ground level (bgl). However, refusals were encountered upon dense strata at depth 1.2 m bgl.
- Regular shear vane testing within the boreholes were undertaken within cohesive soils.
- Dynamic Cone (Scala) Penetrometer tests at the base of hand auger borehole BH6, to extend testing depth and to determine the depth of harder/denser materials.
- The measurement of groundwater levels in the boreholes.

## 4.1 Site Walkover Survey

A visual walkover survey of the property confirmed:

- Topography is in general accordance with that outlined in Section 2 and the available survey data. The site slopes moderately steeply away from Redcliffs Road over the proposed developments platform and surrounding terrain.
- The site is undeveloped at the time of writing presented Redcliffs Road defines the eastern site boundary. The site is currently in pasture with some areas of trees.
- A recent footpath has been constructed parallel to the western side of proposed Lot 1 parallel.
- External observations of the existing dwelling do not suggest any distress in the form of obvious movement or settlement has occurred.
- Topography at the boundaries was noted to be consistent with surrounding land. No existing retaining structures are present in the property.
- The entire proposed lots area are currently in grassed pasture.

## 4.2 Ground Conditions

Arisings recovered from the exploratory boreholes were logged by a qualified geotechnical engineering professional in accordance with New Zealand Geotechnical Society guidelines[6]. Engineering borehole logs are presented as Appendix B to this report and approximate borehole positions recorded on Drawing No. 110 within

[6] *New Zealand Geotechnical Society, Field Description of Soil and Rock, 2005.*

Appendix A. A detailed ground model has been derived from the investigation and locally available GIS data, presented as Drawing No. 111.

Strata identified during the ground investigation can be summarised as follows:

- **Topsoil encountered up to 0.25 m bgl.** Recovered as a thin surface veneer.
- **Residual Greywacke Soil to depths ranging from 0.2 to 3.0 m bgl.** Natural Greywacke residual soils were encountered underlying topsoil. This unit was found to comprise a typical horizon arrangement of silty clay, clayey silt, and sandy clay, light grey mottled brown, yellowish mottled grey, light grey mottled yellowish brown, moist to wet, highly plastic and stiff to hard.

  Locally, within BH1 to BH10 the upper clay layer was absent and may have evacuated downslope during historic events.

  In-situ field vane tests undertaken within Greywacke residual soils recorded vane shear strengths ranging from 87 kPa to >180$^{+}$ kPa, or very stiff to hard soils. BH5 recorded the slightly reduced vane shear strengths of 87 kPa within a wet zone above the weathered rock interface. Characteristic unit vane shear strength has been determined to be 140 kPa at 95% confidence.

  The hard/dense completely weathered rock was confirmed by Scala penetrometer testing in BH6. Blows > 10 per 50 mm penetration were recorded at the depth of 3.7 m bgl.

A summary of the above information is presented as Table 1.

*Table 1: Summary of Ground Investigation*

| Hole ID | Hole Depth | Topsoil Depth | Groundwater[2] | CW Greywacke Rock | Hole Location |
|---|---|---|---|---|---|
| BH1 | 1.2 m | 0.20 | NE | NE | Eastern face of the proposed Lot 1 |
| BH2 | 1.2 m | 0.20 | 0.6 | NE | south-western face of proposed Lot 2 |
| BH3 | 1.2 m | 0.20 | NE | NE | Central of the proposed Lot 3 |
| BH4 | 1.2 m | 0.20 | 0.5 | NE | south-eastern face of proposed Lot 4 |
| BH5 | 3.0 m | 0.25 | NE | NE | North-eastern face of proposed Lot 1 |
| BH6 | 3.0 m | 0.20 | NE | 3.7 m | Central of the proposed Lot 2 |
| BH7 | 3.0 m | 0.20 | NE | NE | Eastern face of proposed Lot 3 |
| BH8 | 3.0 m | 0.20 | NE | NE | Central of proposed Lot 3 |
| BH9 | 3.0 m | 0.20 | NE | NE | Northern face of the proposed Lot 3 |
| BH10 | 3.0 m | 0.20 | NE | NE | North face of proposed Lot 4 |

1. All depths recorded in m bgl unless stated.
2. Groundwater measurements taken on day of drilling.
3. NE – Not Encountered.

### 4.2.1 *Groundwater*

Groundwater levels were monitored utilising a Solinist dip meter on the day of drilling. Groundwater was encountered during this monitoring event on 28 September 2021 in BH2 and BH4 at the depth 0.6 m and 0.5 m bgl, respectively. However, groundwater was not recorded during of site investigation on 1 March 2022, the moist / wet horizon at the base of the residual soils suggest groundwater may perch and seep downslope at this depth during intense rainstorm events.

Groundwater levels commonly fluctuate according to the season and rainfall events. As such, groundwater levels may vary and be identified at higher levels than monitored during this ground investigation. It is recommended that during earthworks should any water ingress be noted that further advice is sought from Geologix which may require amendments to the recommendations of this report.

# 5 GEOTECHNICAL ASSESSMENT

Based on the results of the desktop appraisal, a site walkover survey, and the ground investigation, Geologix have undertaken a site-specific geotechnical assessment relevant to the proposed development concepts.

## 5.1 Geotechnical Design Parameters

Geotechnical design parameters are presented in Table 2 below. They have been developed based on our ground investigation, the results of in-situ testing and experience with similar materials.

*Table 2: Geotechnical Effective Stress Parameters*

| Geological Unit | Unit Weight, kN/m$^3$ | Effective Friction Angle, ° | Effective Cohesion, kPa | Undrained shear strength, kPa |
|---|---|---|---|---|
| Residual Greywacke Soil | 18 | 32 | 7 | 110* |
| CW Greywacke Parent Rock | 20 | 32 | 10 | 180+ |

CW – Completely Weathered.
* Adopting Bjerrum correction factor of 0.8 from characteristic vane shear strength.

## 5.2 Site Subsoil Class

The site has been designated as Site Subsoil Class C according to the provisions of NZS1170:2004[7]

[7] *NZS1170.5:2004, Structural Design Actions Part 5: Earthquake Actions Clause 3.1.3.*

## 5.3 Seismic Hazard

The seismic hazard in terms of Peak Ground Acceleration (PGA) has been assessed based on the the NZGS Module 1[8]. Table 2 presents the return periods for earthquakes with ULS and SLS 'unweighted' PGAs and horizontal coefficients for the corresponding magnitude. The PGAs were determined using building Importance Level (IL) 2, defined by NZS1170.5:2004. Reference should be made to the structural designer's assessment for the final determination of building importance level.

*Table 3: Summary of Seismic Hazard Parameters*

| Limit State | Effective Magnitude | Return Period (years) | Unweighted PGA |
|---|---|---|---|
| ULS | 6.5 | 500 | 0.19 g |
| SLS | 5.8 | 25 | 0.03 g |

## 5.4 Site Stability

At the time of writing, no obvious indications of major deep-seated instability were identified at the site, and the risk of such deep-seated instability developing as a result of the development proposal is low. Within the scope of this ground investigation Geologix have undertaken a computer modelled slope stability analysis through multiple critical sections of the site topography and proposed house sites. The cross-sections alignment is presented on Drawing No. 110 within Appendix A and developed ground models as Drawing No. 111.

The slopes were analysed within propriety software Slide 2 Version 9.02, developed by RocScience Inc. The purpose of the stability assessment was to:

- Provide a working, accurate ground model in relation to the proposed house site stability, refined according to observed conditions and the results of this ground investigation.
- Inform the requirements of Consent and further engineering works.
- Identify any stability control measures and conceptual sizing to provide safe and stable building platforms and access, if required.

The stability analysis process was undertaken by calibrating the model to observed conditions by refining the ground investigation data to develop the effective stress parameters presented in Table 2 and applying them to the proposed condition. In

[8] *New Zealand Geotechnical Society, Earthquake Geotechnical Engineering Practice, Module 1, November 2021, Appendix A, Table A1.*

summary, the key aspects of ground instability identified in the walkover survey include:

Limit equilibrium stability analysis was adopted in the analysis to express the results as a Factor of Safety (FS). When FS = 1.0, the represented mechanism is in equilibrium with the disturbing, active forces equal to the resisting, stabilising forces. A lower FS indicates that instability could occur under the modelled scenario whereas a higher FS demonstrates a margin of safety in respect of stability. Minimum FS criteria have been developed for use in residential development by Auckland Council[9] which are widely adopted in the Far North region. Modelling three separate event scenarios the accepted minimum FS are summarised as follows:

- Minimum FS = 1.5 for static, normal groundwater conditions.
- Minimum FS = 1.3 for elevated groundwater conditions (storm events).
- Minimum FS = 1.2 for dynamic, seismic events.

### 5.4.1 *Stability Analysis Results*

Slope stability analysis results are presented in full as Appendix C and summarised below as Table 4.

*Table 4: Summary of Stability Analysis Results*

| Profile | Scenario | Global Min. | Development Footprint (min FS) | Result |
|---|---|---|---|---|
| **Cross Section A-A** | | | | |
| LOT 1 | Static[1] | | 3.341 | Pass. |
| | Elevated GW[2] | | 3.088 | |
| | Seismic[3] | | 1.281 | |
| **Cross Section B-B** | | | | |
| LOT 3 | Static[1] | | 3.512 | Pass. |
| | Elevated GW[2] | | 2.748 | |
| | Seismic[3] | | 1.386 | |
| **Cross Section C-C** | | | | |
| LOT 4 | Static[1] | | 4.122 | Pass. |
| | Elevated GW[2] | | 3.735 | |
| | Seismic[3] | | 1.451 | |

1. *Static, normal groundwater minimum FS = 1.5*
2. *Static, elevated groundwater minimum FS = 1.3*
3. *Dynamic, seismic conditions minimum FS = 1.2*

[9] *Auckland Council, Code of Practice for Land Development and Subdivision, Section 2 Earthworks and Geotechnical Requirements, Version 1.6, September 2013.*

### 5.4.2 *Stability Analysis Conclusions*

The developed slope stability model is considered to be a reasonable representation of the observed conditions on site. In addition, no obvious indications of shallow instability including relic, or more recent evidence were noted during the Geologix ground investigation within the proposed approximate building envelopes of future houses and/ or across adjacent land to the proposed house sites. The gently sloping natural terrain in these areas (up to 15 °) is considered to lie within the natural equilibrium balance of the greywacke residual soils.

Specific, digitally modelled slope stability analyses was undertaken within the scope of our engagement. However, based on our quantitative analysis, it is considered the proposed platform for lots 1 to 4, the approximate location of the proposed house sites and the existing road of way represents a generally stable land feature.

Based on the available results from the slope stability analysis, the approximate proposed house sites, existing road of way at the crest of slopes and the critical slopes met the adequate stability requirements. Hence, the proposed house sites and the proposed RoW road alignment appear to be performing satisfactorily.

No stability control measures are considered necessary to achieve safe and stable building platforms for development. However, further development specific geotechnical investigation should be undertaken at the Building Consent stage.

## 5.5 Soil Expansivity

Clay soil may undergo appreciable volume change in response to changes in moisture content and be classed as expansive. The reactivity and the typical range of movement that can be expected from potentially expansive soils underlying any given building site depends on the amount of clay present, the clay mineral type, and the proportion, depth, and distribution of clay throughout the soil profile. Clay soils typically have a high porosity and low permeability causing moisture changes to occur slowly and produce swelling upon wetting and shrinkage upon drying. Apart from seasonal moisture changes (wet winters and dry summers) other factors that can influence soil moisture content include:

- Influence of garden watering and site drainage.
- The presence of mature vegetation.
- Initial soil moisture conditions at the time of construction.

Based on our experience with residual Greywacke soils, laboratory analysis within the

strata on other projects in the local area and site observations, the shallow soils are conservatively expected to meet the requirements of a highly expansive or Class H soil type. In accordance with AS2870:2011[10] and New Zealand Building Code[11], Class H or Highly Expansive soils typically have a soil stability index ($I_{SS}$) range of 3.8 to 6.5% and a 500-year design characteristic surface movement return ($y_s$) of 78 mm.

If any shallow foundations are proposed within the development and to ensure the foundation designs comply with the Building Code requirements a quantification of the expansive soil class assumptions can be made by geotechnical laboratory analysis. It is recommended that this is undertaken during detailed design once final development levels are known.

### 5.6 Liquefaction Potential

Liquefaction occurs when excess pore pressures are generated within loose, saturated, and generally cohesionless soils (typically sands and silty sands with <30 % fines content) during earthquake shaking. The resulting high pore pressures can cause the soils to undergo a partial to complete loss of strength. This can result in settlement and/ or horizontal movement (lateral spread) of the soil mass.

The Geologix ground investigation and laboratory analysis indicates the site to be predominantly underlain by fine-grained, Greywacke residual soils. Based on the materials strength and consistency, and our experience with these materials, there is no liquefaction potential / risk in a design level earthquake event.

## 6 GEOTECHNICAL RECOMMENDATIONS

### 6.1 General

The location of the proposed house sites on Lots 1 to 4 is not nominated specifically; however, it should be noted that it would likely be possible to construct the dwelling or dwellings at different locations subject to confirmation by a Chartered Professional Geotechnical Engineer, familiar with the contents of this report and any further investigations completed on those sites.

### 6.2 Concept Foundations

These recommendations have been developed anticipating concept future development platforms will be formed by shallow cut/ fill processes exposing natural undisturbed soils.

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[10] *AS2870, Residential Slabs and Footings, 2011.*

[11] *New Zealand Building Code, Structure B1/AS1 (Amendment 19, November 2019), Clause 7.5.13.1.2.*

However, the proposed house sites in the different lots, gently to moderately sloping land could be subject to no cut and fill to form a development platform with pole houses. In this scenario, it is recommended that foundations are subject to specific engineering design comprising deep, end bearing piles.

If encountered, non-engineered fill and/ or colluvium should not be used as a bearing stratum to minimise the potential for excessive total and/ or differential settlement. It is recommended that non-engineered fill, any underlying soft spots (Su <75 kPa) and any other unsuitable or deleterious materials are sub-excavated and replaced with suitably selected and compacted materials such as GAP65 hard fill.

Therefore, based on the natural formation having an average undrained shear strength of >100kPa then it is expected that either shallow standard raft or strip footing foundations can be adopted for the proposed house sites. Such foundations may be designed by a professional structural engineer adopting an Ultimate Bearing Capacity of 300 kPa for a highly expansive soil type. The use of deep piled foundations is not considered necessary.

Refer to Table 2 for anticipated depths of the founding strata according to the results of our ground investigation. This will be subject to further geotechnical investigation at the Building Consent stage. Construction monitoring requirements of the above recommendations are detailed in Section 6.5 of this report.

## 6.3 Earthworks and Methodology

Although we are not aware of any specific earthworks planned for the site, it is expected that some excavations and fills would be required to establish the right-of-way access along the intended route.

Where conventional timber post and rail retaining solution is considered, temporary excavations should not be left unsupported for any length of time. Where the retained height extends above 0.5 m, poles must be installed and backfilled against the excavated face immediately to ensure the cut face is not left unsupported.

Any earthworks would require regular observation and testing during placement and formation.

It is recommended that permanent cut batters are formed to maximum graded angles of 1V: 3H.

Specific recommendations for any earthworks (cuts or fills) at the site will need to be confirmed by the Engineer experienced in geomechanics at the Building Consent stage, following a review of architectural plans confirming the nature and extent of any proposed earthworks for any specific development at the site.

All earthworks should be carried out when there is a fine weather forecast for the following days. All work undertaken within or in close proximity to excavations should be undertaken in accordance with Occupational Safety and Health regulations.

### 6.3.1 *Temporary Works*

To reduce the risk of temporary excavation instability, it is recommended that unsupported excavations have a maximum vertical height of 1.0 m. No temporary unsupported excavations > 1.0 m, specifically referring to propose any cuts are recommended at the site due to the risk of developing instabilities on the slopes.

To reduce the risk of temporary excavation instability, it is recommended that unsupported excavations have a maximum vertical height of 1.0 m in this area. Temporary unsupported excavations above this height shall be battered at 1V:1H or 45 °. The temporary batters should be covered with polythene sheets secured to the surface with pins or batons to prevent saturation. All works within proximity to excavations should be undertaken in accordance with Occupational Health and Safety regulations. In addition, it is recommended that all earthworks are carried out in periods of fine weather within the typical October to April earthwork season. Consent conditions commonly prescribe working restrictions.

### 6.3.2 *Retaining Walls*

In general, it is recommended that all retaining walls are designed by a professional engineer with geotechnical input to accommodate the stability control requirements. Timber pole cantilever or soldier pile retaining walls are considered the most feasible solution for the site.

Based on the results of the ground investigation and for a natural topography of 15°, earth pressure parameters for design are presented within Table 5.

*Table 5: Earth Pressure Parameters*

| Strata | At Rest Pressure Coefficient, $K_O$ | Active Pressure Coefficient, $K_A$ | Passive Pressure Coefficient, $K_P$ |
|---|---|---|---|
| Greywacke Residual Soil | 0.47 | 0.338 | 20 |
| CW Greywacke Parent Rock | 0.47 | 0.338 | 20 |

1. *Adopts soil/ wall friction coefficient of 0.67 for timber according to NZBC B1/VM4 Table 2.*
2. *Considers a 15° backslope.*

3. *Kp values derived from Caquot and Kerisel charts.*

### 6.4 Driveways

Driveway and car parking are expected within conceptual developments within the proposed lots. It is recommended that all unsuitable materials such as topsoil, vegetation, shallow fill, and localised soft spots are removed from the driveway area prior to filling. By doing so, it is expected that the shallow greywacke residual soils will achieve a typical subgrade CBR value of 4 % or greater according to Austroads Standards.

For driveway and parking areas it is recommended that carriageways include a minimum total thickness of 250 mm, comprising a minimum 150 mm sub-basecourse, typically AP65 or approved similar and minimum 100 mm basecourse, typically finer AP40 or approved similar.

### 6.5 Construction Monitoring

During site development works it is recommended that specific construction monitoring is undertaken by a professional engineer in accordance with the recommendations of this report and consent conditions. It is anticipated that a professional Geotechnical Engineer will be required to provide inspection of:

- Subgrade at the base of excavations within the footprint of buildings, driveways, and any other areas of structural or vehicle loading.
- Inspection of hard fill compaction where placed >300 mm in thickness and/ or within the footprint of imposed surcharges such as buildings and/ or driveways.
- Inspection of any retaining structures proposed.
- General geotechnical stability of proposed future building platform earthworks.

The above items are considered to be capable under CM2 level construction monitoring accompanied by appropriate Producer Statements. Monitoring should be undertaken or supervised by a chartered professional engineer.

## 7 LIMITATIONS

This report has been prepared for Meridian Farms as our Client. It may be relied upon by our Client and their appointed Consultants, Contractors and for the purpose of Consent as outlined by the specific objectives in this report. This report and associated recommendations, conclusions or intellectual property is not to be relied upon by any other party for any purpose unless agreed in writing by Geologix

Consulting Engineers Ltd and our Client. In any case the reliance by any other party for any other purpose shall be at such parties' sole risk and no reliability is provided by Geologix Consulting Engineers Ltd.

The opinions and recommendations of this report are based on plans, specifications and reports provided to us at the time of writing, as referenced. Any changes, additions or amendments to the project scope and referenced documents may require an amendment to this report and Geologix Consulting Engineers should be consulted. Geologix Consulting Engineers Ltd reserve the right to review this report and accompanying plans.

The recommendations and opinions in this report are based on arisings extracted from boreholes at discrete locations and any available existing borehole records. The nature and continuity of subsurface conditions, interpretation of ground condition and models away from these specific ground investigation locations are inferred. It must be appreciated that the actual conditions may vary to the assumed ground model. Differences from the anticipated ground conditions may require an amendment to the recommendations of this report.